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WILLEM JANSZ BLAEU

(WILLIAM IOHNSON)

THE LIGHT OF NAVIGATION

AMSTERDAM 1612

64662

WITH AN INTRODUCTION BY R. A. SKELTON



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Frontispiece: engraved portrait of Willem Jansz Blaeu by J. Falck *(courtesy Nederlandsch Historisch Scheepvaart Museum, Amsterdam)*

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BIBLIOGRAPHICAL NOTE

IN 1599 WILLEM JANSZOON BLAEU ESTABLISHED himself in Amsterdam as a maker of nautical instruments, globes and maps. At this time the standard guides used by seamen on the coasts of western and northern Europe were the pilot-books of Lucas Janszoon Waghenaer published by the Amsterdam bookseller Cornelis Claesz., supplemented by those of Aelbert Haeyen and (for the Mediterranean) Willem Barentsz. Blaeu's first pilot-book, *Het Licht der Zeevaert*, of which the earliest known edition is dated 1608, was reprinted in Dutch, English and French editions until it was superseded by his larger *Zeespiegel* (first published in 1623), with its English version; and between them these two 'Books of Seacardes' by Blaeu held their own until about the middle of the century, when a number of other Amsterdam map-sellers entered this profitable market and the energies of the house of Blaeu were engaged in different fields of cartographic publication. Thus a whole generation of seamen was served by the successive editions of Blaeu's guides to navigation, and the hard use which they suffered is reflected in the rarity of surviving copies.

About the circumstances in which *Het Licht der Zeevaert* was first published there is a certain obscurity. The earliest extant Dutch edition has the date 1608 both on its general titlepage and on the secondary titlepages of Parts I and II, and Blaeu's dedicatory epistle to the States General and Prince Maurice of Nassau is dated 1 March 1608; but internal evidence suggests that the book had been prepared, and perhaps printed, somewhat earlier. The copyright privilege of the States General (an extract from which is printed at the end of the book) for 'a certain Zeecaert-boeck' was granted on 27 February 1606; the leap-year table is for the years 1605–1628, and the almanach of the moon for 1607–1616. The only dated chart, no. 20, has the year 1607 in its title; and Burger (1908) associated with this the expansion of the text which minute bibliographical analysis enabled him to detect in Part I, chapters 1 and 2, and in Part II, chapter 1. These revisions of the text and of the relevant chart he ingeniously referred to the passage in Blaeu's address to the reader about changes in the navigable channels of the Vlie. Moreover, while in this address Blaeu refers to Waghenaer as already dead, the dedicatory epistle cites him in terms which give the impression that Waghenaer was still alive when Blaeu first sought, and obtained, a privilege for the book. The privilege (he writes) was granted on the production of certificates from experienced pilots and on the testimony of Lucas Jz. Waghenaer himself regarding 'the usefulness of this book and of all other books on the matter for seamen who are eager to learn'. This suggests that Blaeu may have planned his work and discussed it with Waghenaer before the latter's death towards the end of 1606.

The principal external evidence on the publication of *Het Licht der Zeevaert* lies in the Resolutions of the States General, printed by Baudet (1871). As early as 19 March 1605 Blaeu received a 6-years' privilege for 'een bouxken' entitled 'Nieuw graetbouck, nae de ouden style vuyt de aldercorrecste observatien van de vermaerden astronomo Tycho Brahe, gecalculeert ende gestelt op ten meridiaen deser Nederlanden' (New degree-book, in the old style, calculated from the very correct observations of the renowned astronomer Tycho Brahe and

adapted to the meridian of these our Netherlands). This evidently refers to declination tables for the sun and stars, to be published as a pamphlet; no copy is known, but in the introduction to *Het Licht der Zeevaert* of 1608, cap. XVIII, Blaeu cites 'het Graedboecxken Anno 1605 van ons uytgegaen'. Next, on 27 February 1606, comes the 7-years' privilege for a 'Zeecaert-boeck'; and on 25 April 1608 Blaeu was awarded 200 guilders for his dedication and presentation of *Het Licht der Zeevaert*. In the same year he complained to the States General about piracy of his 'land maps, sea charts, terrestrial and celestial globes', and he was granted the sole right to engrave, print and publish his 'works or inventions' for ten years, with the penalty of a heavy fine for anyone who infringed it. This applied both to previously published works and to those to be produced in the future, but (as we shall see) it does not seem to have deterred the pirates.

There is thus considerable circumstantial evidence to support Burger's suggestion that the 'graetbouck', published in 1605 (just as, 20 years later, Blaeu was to issue his solar declination tables as a separate duodecimo pamphlet), was reworked and incorporated in the introduction to the 'Zeecaert-boeck', of which both parts (or one or the other part) may have been printed with an earlier date – perhaps 1606 – on the titlepage and later revised for the known edition of 1608. This is not impossible; and we need not be surprised if the hypothetical earlier edition has entirely disappeared, since of a 1610 edition of *Het Licht der Zeevaert* only the titlepage has survived.

In form and content, *Het Licht der Zeevaert* closely follows its prototype, Waghenaer's *Thresoor der Zeevaert*, of which six Dutch and two French editions were published between 1592 and 1608. Blaeu adopted the format of the *Thresoor*, a small oblong folio. Like Waghenaer, he planned his work as a series of chapters, each providing sailing-directions for a particular section of coast and accompanied by the appropriate chart, engraved on one side of a folded leaf, the reverse side being blank. As in the *Thresoor*, the titles of the engraved charts are in Dutch and French, and woodcut profiles are interspersed through the text of the chapters.

In his title and address to the reader, Blaeu handsomely acknowledges his debt to Waghenaer; but the 'Institution touching the Art of Navigation' prefixed to his work is considerably more than 'an expanded and revised version of Waghenaer's treatise on navigation', as suggested by Waters (1958). In this introduction, the pupil of Tycho Brahe set out to show 'what knowledge of Astronomie is necessarie for a Seafaring man'. It contains practical advice on the identification of stars, on observation of their transit for timekeeping, on computing latitude from declination of sun and stars, and on taking star-sights. Blaeu, who had already used Brahe's star-lists in his celestial globes, compiled his declination tables from the Danish astronomer's observations and reproduced his tables of solar and stellar refraction, which (as remarked by Taylor 1954) 'he believed to differ'. Blaeu points out, however, that he has deliberately omitted 'unnecessarie things'; and among these he excludes, 'as not onely unprofitable but also (if a man should trust thereunto) both hurtfull and deceitfull', any discussion of the determination of longitude 'by direction of the Needle or altering of the Compass'.* Here he is repudiating the theory, borrowed from the Portuguese by Petrus Plancius and by Simon Stevin (in his *Hafenvinding*, 1599), which supposed magnetic variation to be related to change in longitude. Like Waghenaer, Blaeu emphasises the importance of experience, or 'expertness at sea', in the training of a pilot; and at the close of his 'Institution' he controverts the prejudice of 'manie Pilots', who 'had rather use written mappes, then such as are printed, esteeming the printed mappes to be imperfect'.

* This and later quotations are from the English edition published in 1612

The real originality of *Het Licht der Zeevaert* lies in Blaeu's improvement in the representation of hydrographic data. As he explains to the reader, changes in the sea-bed and channels quickly render a pilot-book out-of-date and likely to place navigators in jeopardy; and he took particular pains to 'better' the representational technique and usefulness of the charts 'for the good of seafaring men'. The characteristics of design of Blaeu's chartwork have been well analysed by Waters (1958), although this author's assumption that the *Spieghel*, rather than the *Thresoor*, was the model for *Het Licht der Zeevaert* leads him to credit Blaeu with innovations which were not his. Thus the delineation of coasts by a linear convention, instead of the somewhat archaic method of elevations used in the *Spieghel*, had already been adopted by Waghenaer (in the *Thresoor*) and by Haeyen (in his *Amstelredamsche Zeecaerten* of 1585); Haeyen's charts had shown leading lines and marks for entering and leaving harbours; and in his second pilot-book Waghenaer had transferred the coastal profiles from the charts to the text.

Nevertheless the claims to novelty made in Blaeu's address to the reader were justified. By enlarging the scale of his charts and increasing their number, he was able to draw estuaries and harbours on the same scale as the rest of the coastline, whereas Waghenaer had represented them on a larger scale. The charts of the 'West Seas' are graduated for latitude in the margin; Blaeu was unable to do this for the 'East Seas' (the Baltic and Arctic), since 'in these high latitudes the errors of the plane chart become so exaggerated that it was impossible to reconcile courses and distances with latitude' (Waters). Blaeu is careful to warn his readers about the limitations of the plane chart for oceanic voyages, referring to (now lost) printed charts of the West Indies 'made by us', evidently on the Mercator projection. (Blaeu's first Mercator charts appeared in 1606; but the earliest surviving edition of his 'West-Indische Paskaert', on this projection, seems to be of about 1628.) At the same time, as Waters points out, the greater density of the rhumb lines in the charts of *Het Licht der Zeevaert*, compared with those of Waghenaer, point to their 'increased navigational as distinct from pilotage importance'.

The sources from which Blaeu obtained his hydrographic information, apart from the printed pilot-books of his predecessors, are indicated in his address to the reader, where he acknowledges 'the aide and furtherance of manie expert and skilfull Sailers, Pilots, and Masters'. In this period Dutch seamen were capturing the carrying trades of the North Sea and the Baltic, fishermen of the Netherlands were operating in all the seas of northern and western Europe, and a new Amsterdam was rising 'on foundations of herring-bones'. Thirty years earlier, when Waghenaer was collecting data for the *Spieghel*, an English writer had complained of the hydrographic activity of 'foreign' (doubtless Dutch) fishermen, 'the Privy Sownders and Serchers of our Channells, flats, banks, Pyts, &c. And so, very diligently, deciphring our Sea-Coasts: Yea, and in the Ryver of Thames also...' These interlopers (he went on) 'by collour and pretence of comming about their feat of fishing, doo subtilly and secretly use [i.e. make] Sowndings, and Serchings, of our Channels, Deeps, Showles, Banks, or Bars, along the Sea Coasts, and in our Haven Mowthes allso... Taking good Marks... And allso trying good Landings. And (so, making perfect Chartes of all our Coasts, rownd about England, and Ireland) are become (allmost) perfecter in them, then the most parte of our Maisters, Loadmen, or Pylots, are' (John Dee, *General and Rare Memorials*, London 1576, pp. 4–5, 7). This could hardly be bettered as an account of the undocumented sources of information, largely oral, from which the hydrographers of the Netherlands compiled their charts and sailing-directions. It is easy to see why (in Waters's words) the Dutch 'waggoners had become standard works in the chest of every ship-

master with pretensions to some learning', and why Dutch pilot-books and treatises on navigation were quickly translated into English. We may visualise the fishing skippers whom, on their return from a voyage, Blaeu invited into his shop 'op't Water', as (perhaps over a dram of geneva) they corrected his charts, described the transit into some harbour, or laid down the position of buoys, beacons and sailing marks.

The earliest edition of *Het Licht der Zeevaert* known to us was printed before 25 April 1608, when Blaeu received the award from the States General. Its preliminary matter, on four unsigned leaves, comprises an engraved titlepage, an engraved frontispiece, the dedication to the States General and Prince Maurice, and the address to the reader; since the dedication is dated 1 March 1608, it may be taken that the remainder of the book was already in print by this date, and the preliminary matter printed last. The whole of the titlepage, including the title and imprint, is engraved; and this plate was used for all Dutch editions up to 1630, with the imprint date altered, and for the English and French editions, in which a label bearing the title and imprint, printed from type, is pasted over the engraved Dutch title and imprint in the central panel. (In the British Museum copy of the English edition of 1612, however, the central panel of the engraved plate has been masked in printing and is blank.) Of the two figures flanking the title, that on the left, with a cross-staff and compasses, was conjectured by Burger to represent Blaeu, from the similarity to his portraits. The frontispiece, after a drawing by David Vinckeboons now in an English private collection, depicts a teacher of navigation giving instruction in the use of instruments; the identification with Plancius, commonly made, was thought unlikely by Burger, who suggested that Robbert Robbertsz. may be represented. The body of the book is made up of the Introduction, Book I (with charts 1–19), and Book II (with charts 20–41). Books I and II have separate secondary titlepages, printed from type. (See the Collation below.)

Blaeu's general title promises two further parts. Book III (the Mediterranean) was published in 1618, but the fourth part (Guinea) never appeared.

The publication of *Het Licht der Zeevaert* doubtless increased Blaeu's reputation as an authority on navigation; in 1610 he was a member of a committee appointed to advise the College of Admiralty of Amsterdam on a device of the Englishman Thomas Leamer for determining longitude. It also evidently drove the older pilot-books out of the market; after 1608, only two further editions of Haeyen's *Amstelredamsche Zeecaerten* appeared (in 1609 and 1613), and of Waghenaer's works there were only reprints of the *Spieghel* in 1615 (German) and 1620 (Dutch).

There can be no doubt about the commercial success of *Het Licht der Zeevaert*, as the list of editions below indicates. Of Books I and II, Blaeu is known to have put out, from 1608 to 1634, seven editions in Dutch; in 1612 and 1622, two English editions; and in 1619 and 1625, two French editions. Of Book III, four Dutch editions were published by Blaeu and his son from 1618 to 1646; this book was never translated into another language. In addition, there were a number of counterfeit editions by Jan Jansson: of Books I and II, three in Dutch, two in English, and three in French, together with one edition of Book III, are recorded.

It is curious that a work so well known in its own day should have fallen into oblivion in the succeeding centuries and that its virtual rediscovery was not made until less than half a century ago, with the publication of Burger's paper in 1908. Thus P. J. H. Baudet, the careful biographer of Blaeu, writing in 1871, had never seen any copy of Books I and II, and knew only Book III; only in his 'Naschrift' of 1872 could he describe the first two books from Jansson's edition of 1627,

discovered by Tiele at Leiden. The extreme scarcity of all editions provides a partial explanation. Of the first English edition, here reproduced in facsimile, only two copies are known; and the census by Koeman (1961) shows that, of all editions of Blaeu's book, only 14 copies are to be found in libraries of the Netherlands, five editions being totally unrepresented. Not until 1886 did a copy of the long sought edition of 1608, predicated by the bibliographers, come to light in an Italian bookshop, to be acquired by the University Library, Amsterdam (Tiele 1886).

The importance of the English market for navigation books is demonstrated by the fact that the English version of *Het Licht der Zeevaert* appeared in print only four years after the Dutch edition of 1608 and (although the chart-titles had been engraved in Dutch and French) seven years before the French version. The English translations of earlier Dutch works on navigation – Waghenaer's *Spieghel*, Stevin's *Hafenvinding* – had been published at the expense of undertakers and booksellers in London; but Blaeu himself put out the English editions of his own pilot-book. *The Light of Navigation*, issued over his imprint in 1612, was the first English version of a Dutch navigation book to be published in the Netherlands, and it set a precedent for the long series of such works produced for the English market by Amsterdam map- and booksellers during the 17th century.

The Light of Navigation published in 1612 closely follows the original Dutch edition in arrangement and contents. Over the centre panel of the engraved Dutch titlepage (the imprint of which, in a copy described by Burger, has the date '1610') is pasted a label with the English title, exactly rendered from the Dutch, and the imprint of William Johnson, 1612, all printed from type. 'William Johnson' is the anglicised equivalent adopted by Blaeu for the form of his name, 'Willem Jansz.' (i.e. Christian name and patronymic), which he used


HET
Licht der Zee-vaert
DOOR WILLEM IANS ZOON.
TOT AMSTERDAM
Anno 1608

Title-page of Het Licht der Zee-vaert. Amsterdam 1608.
Courtesy Dr W. A. Engelbrecht, Rotterdam

exclusively until 1619 and occasionally thereafter. Of the other preliminary matter, only the dedicatory epistle is omitted from the English edition. The translator is not named. At this time there must have been many persons in Amsterdam competent in the English language and connected with the map- and book-trade and with sea-matters – either Netherlanders, such as Lenaert Terwoort, Jodocus Hondius and Pieter van den Keere, who had lived in London, Englishmen who (like Emery Molyneux and Thomas Leamer) came to sell their ideas to the Dutch, or English pilots in Dutch service like Henry Hudson. Blaeu's translator was certainly literate and a stylist who understood the sense of his text.

The 'Introduction for the understanding of the Celestiall Sphaere' is unchanged apart from the leap-year table, which is for 1612–1631, and the almanach, for 1611–1620. In Books I and II there are only minor differences between the English

and Dutch texts, as noted by Burger (1908); the most important is a substantial addition to the directions for the Gulf of Finland. A striking typographical difference is the replacement of the gothic letter (Fraktur), used in the Dutch editions, by roman in the English and French. The 41 charts of the English edition are exactly as in the Dutch, and similarly placed.

After three further Dutch editions of Books I and II had appeared, Book III, dealing with the Mediterranean, was published in 1618, a 6-years' privilege being granted on 13 August. In this same year Blaeu's most dangerous rival emerged. Jan Jansson, son of an Arnhem bookseller and son-in-law of Jodocus Hondius, was admitted to the booksellers' guild at Amsterdam in 1618 and set up in business 'op't Water', at the sign of 'de Pascaerte', not far from the shop at 'de guldne Sonnewyzer' which Blaeu had occupied since 1605. The commercial relationship between the two publishers is undocumented, but it is generally, and perhaps correctly, assumed that Jansson's reprints of Blaeu's pilot-books were issued without the authority of the original publisher, although Blaeu is named as author on the titlepages of the Jansson editions. It is nonetheless curious that, if this were so, no action by Blaeu in defence of his copyrights against their infringement by Jansson is recorded; that, of Schouten's *Iournal* (accepted as Jansson's first 'piracy'), Blaeu put out only the first Dutch edition (1618), and one Latin edition (1619), whereas numerous editions were printed, from 1618 onward, by Jansson and his associate Pieter van den Keere; and that, between 1620 and 1630, two counterfeit Dutch editions of *Het Licht der Zeevaert*, Books I and II, are known with Jansson's imprint, but none with Blaeu's. About the commercial relationship – perhaps one of 'love-hate' – between the houses of Blaeu and of Jansson-Hondius, a good deal of obscurity still remains. After 1619 Blaeu took to using his surname Blaeu, or its latinised form Caesius, to avoid confusion with his competitor who had the same patronymic (implying 'no connection with the firm next door').

In 1620 Jansson published four editions of *Het Licht der Zeevaert*, Books I and II – in Dutch, English and French (the last in two variants with different titles), with the text reset page-for-page and chart-plates precisely copied from Blaeu's. After this date Blaeu's editions of Books I and II numbered only four: his second in English (1622) and second in French (1625), and two in Dutch (1630 and 1634), besides three further editions of Part III (1621, 1623, 1646). He never revised either the charts (one new one, unnumbered, being added in 1620) or the sailing-directions, although he kept the tables in the introduction up-to-date. In the 1622 text of *The Light of Navigation*, we find only minor literal or verbal changes of a stylistic character; the leap-year table is for 1620–1639, and the almanach for 1622-1626.

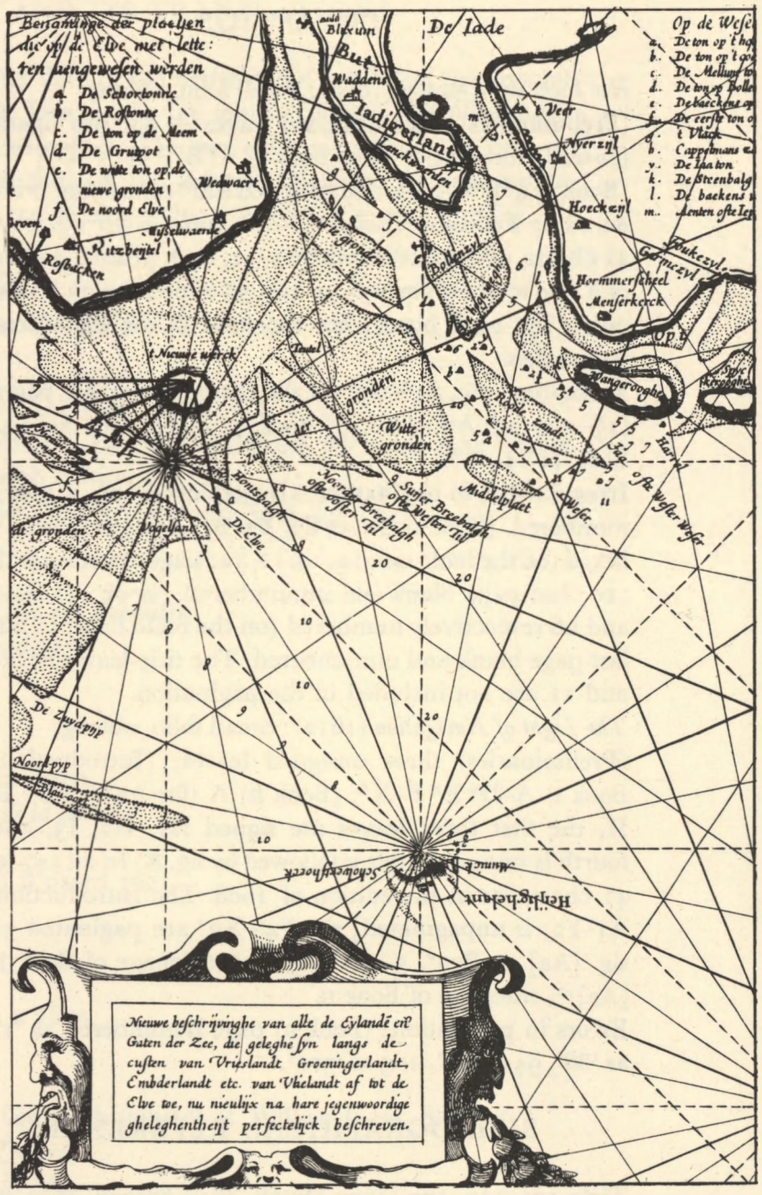
By this date Blaeu was planning a new and enlarged pilot-book to replace *Het Licht der Zeevaert*. The *Zeespiegel*, with 108 charts and considerably fuller sailing-directions, appeared over the imprint of Willem Jz. and his successor Joan Blaeu in no fewer than eleven Dutch editions, from the first in 1623 to the last in 1658. Willem Jz. produced two English editions (1625 and 1635) under the title *The Sea-mirrour*, translated by Richard Hynmers, and Joan two more (1643 and 1653) entitled *The Sea-beacon*. This work was never issued by Jansson.

To his second pilot-book Blaeu prefixed an address commending its improvements to 'expert farre travelling worthy Sea-men'. Their experience, he could claim, testified 'how fruitfull and profitable... my former Seacard-booke... hath beene unto many'.

October 1964 R. A. SKELTON



Map no 20 from *The Light of Navigation.* Amsterdam, W. J. Blaeu, 1612 (detail)



Map no 20 from *Het Licht der Zee-vaert.* Amsterdam, J. Janssonius, 1620 (detail)
Courtesy Nederlandsch Historisch Scheepvaart Museum Amsterdam

COLLATION

Het Licht der Zeevaert (1608): Small folio, oblong.
(Preliminaries) three unsigned leaves + one leaf signed *3; (Introduction) A–F^4 G^2; (Book I) A^4 B$^{8-1}$ C–N^4 O^6; (Book II) a^4 b^6 c–q^4 + one unsigned leaf (containing privilege, dated 27 February 1606, and epilogue). In all 158 leaves.
41 charts, with plate-numbers 1–41, each printed on one side of a folded sheet (except 35 and 38 which are on half sheets only), the back blank; not included in the signatures and pagination.
Pagination: sig. A1^r–G2^v (of the Introduction) are paginated [1]–52; sig. A2^r–O6^r (of Book I) 1–115; sig. a2^r–q4^r (of Book II) 1–127.
Irregularities in pagination: (Introduction) pp. 1 and 4 unnumbered. (Book I) leaves B2, B3, B4, B5 respectively numbered (on the recto only) 9, 10, 11, 12; page 110 misnumbered 100; last page blank and unnumbered. (Book II) leaves b5 and b6 respectively numbered (on the recto only) 15 and 16; last page blank and unnumbered. The title-leaves of Books I and II are not included in the pagination.
The Light of Navigation (1612): Small folio, oblong.
(Preliminaries) three unsigned leaves; (Introduction and Book I) A–D^4 E^8 F–X^4; (Book II) A (for Aa) – Pp^4. In sig. H, the first three leaves are signed H1, H2, I3, and the fourth is unsigned; this is followed by sig. K. In all 147 leaves.
41 charts, as in the edition of 1608. The Introduction (sig. A1–F2) is unpaginated; sig. F4^r–X3^v are paginated 3–114; sig. [Aa] 2^r–Pp3^v, 3–118. Sig. F3^r, titlepage of Book I; sig. [Aa]1^r, titlepage of Book II.
Errors in pagination: (Book II) page 9 numbered as '11', 88 as '86', 94 as '49', 103 as '301'.

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[Two works now in preparation may be expected to throw fresh light on the bibliographical history of Blaeu's pilot-books. These are Dr C. Koeman's projected bibliography of Dutch atlases and the comprehensive work on W. Jz. Blaeu completed by the late J. Keuning before his death in 1957].

EDITIONS OF *HET LICHT DER ZEEVAERT* AND ITS TRANSLATIONS

This list, compiled in part from secondary sources, is provisional. The date in the first column is that on the general titlepage. In the third column, an asterisk * denotes an edition by Jan Jansson. In the fourth column, the publisher's name is transcribed as printed; the place of publication is always Amsterdam. The last column records *(a)* new or variant titles, *(b)* the dates on secondary titlepages, if different from that on the general titlepage, *(c)* other data relevant to the printing- and publication-history, with references to the Bibliographical Note above and to STC.

Date	*Books*	*Language of text*	*Publisher's name in imprint*	*Notes*
1608	I, II	Dutch	Willem Ianszoon	*Het Licht der Zee-vaert.* Bibl. Note, pp. V, VI, VIII.
1610	„	„	„	No copy known to survive. Engraved titlepage with this date occurs in a copy of the English edition of 1612.
1612	„	English	William Iohnson	*The Light of Navigation.* STC 3110. Bibl. Note, pp. IX. X.
1613	„	Dutch	Willem Ianszoon	
1617	„	„	„	
1618	III	Dutch	Will. Iansz.	*'t Derde Deel van 't Licht der Zee-vaert.*
1619	I, II	French	Guilliaume Ieansz.	*Le Flambeau de la Navigation.*
1620	„	Dutch	Willem Ianszoon	
1620	„	*Dutch	Ian Ianssoon	
1620	„	*English	Iohn Iohnson	STC 3111.
1620	„	*French	Ian Ieansson	*Le Flambeau de la Navigation.*
1620	„	* „	„	Var. title: *Le Phalot de la Mer.*
1621	III	Dutch	Will. Iansz.	
1622	I, II	English	William Iohnson	STC 3112. Bks I and II dated 1621.
1623	III	Dutch	Will. Iansz. [*Zeespiegel* published, 1623]	
1625	I, II	*English	Iohn Iohnson	
1625	„	French	Guilaume Ieansz.	Bk I dated 1624.
1627	„	*Dutch	Ian Ianssoon	Bk I dated 1626; Bk II 1625.
1627	III	*Dutch	Ian Ianssoon	
1629	I, II	*Dutch	Ian Ianssoon	
1630	„	„	Willem Ianszoon	Bks I and II dated 1629, with imprint of 'Willem Iansz. Blaeuw'.
1634	„	„	Willem Iansz. Blaeuw	*Het nieuwe Licht der Zeevaert.*
1637	„	*French	Ian Iansson	*Le Nouveau Phalot de la Mer.*
			[Death of W. Jz. Blaeu, 1638]	
1646	III	Dutch	Ioh. Blaeu	*Vierde deel der Zeespiegel.*



THE LIGHT OF NAVIGATION.

VVHEREIN ARE DECLARED AND LIVELY POVRtrayed, all the Coasts and Havens, of the VVest, North and East Seas.

COLLECTED PARTLY OVT OF THE BOOKS OF the principall Authors which have written of Navigation, (as Lucas Iohnson VVaghenaer and divers others) partly also out of manie other expert Seafaring Mens writings and verball declarations: corrected from manie faults, and inlarged with manie newe Descriptions and Cardes.

Divided into two Books.

HEERVNTO ARE ADDED (BESIDE AN INSTITVTION in the Art of Navigation) newe Tables of the Declination of the Sonne, according to Tycho Brahes Obscrvations, applied to the Meridian of Amsterdam. Together with newe Tables and Instructions to teach men the right use of the North-starre, and other firme starres, profitable for all Seafaring men.

By William Iohnson.

AT AMSTERDAM

Printed by VVilliam Iohnson, dvvelling upon the VVater, by the Old Bridge, at the Signe of the Golden Son-dyal. Anno 1612.

Cum Privilegio.



To the Reader.

WHat great good and profit (gentle Reader) is procured unto all Seafaring men by Books of Seacardes/ which heeretofore have bin made and compoſed by Lucas Johnſon Waghenaer/ Albert Hayen/ William Barents and others/ wherein they with moſt great diligence have written the ſituation of the Streames/ Havens and Chancls of the Seas in divers Countreys/ it is impoſſible to declare/ for that thereby not onely manie Ships and Merchants goods/ but alſo manie Men have had their lives preſerved/ which is ſo manifeſt and well knowne unto everie man/ that it were altogether needeleſſe and in vaine to illuſtrate it by examples.

It is alſo well knowne to everie Seafaring man/ how much ſome Havens and Chancls in the Seas/ are and have beene in proceſſe of time cleane altered and changed/ ſpecially in theſe Countreys of Holland/ Zealand and Freeſland/ which alſo for the moſt part are ſo much altered/ ſince they were deſcribed by the ſaid Authors/ that ſome of them have now no likeneſſe nor ſimilitude thereof/ ſome are allmoſt ſpoyled/ and ſome wholly aboliſhed/ and cleane ſtopt up: for the North Chanel/ which by Waghenaer and Albert Hayen was deſcribed to be the beſt Chanel of the Vlie/ at this preſent reacheth out cleane contrarie/ and therewithall it is ſo much altered/ that it can not be uſed but by ſmall ſhips. The North Elve/ which by them is deſcribed to be a deepe and faire Chanel/ is alſo cleane ſpoyled/ but in ſteede thereof the South Elve is broken out againe with a faire deepe chanel. And the place where yet within theſe fewe yeeres the ſteeple of Huyſden did ſtand/ lyeth now ſo farre into the Sea/ that Ships full laden runne over it/ both entring into/ and comming out of the Texel: whereby ſuch deſcriptions at this time are not onely unfit/ but verie hurtfull/ if a man ſhould rule himſelf by them.

This conſidered/ I (according to my abilitie/ for the good and benefit of Seafaring men) have taken the Books of the aforeſaid Authors in hand/ to cleanſe/ correct and amende them of all their faults (beſides that which I have newely gotten and collected to adde unto them) as much as poſſible I can: wherein I have neither ſpared trouble/ labour nor charges/ that by the aide and furtherance of manie expert and ſkilfull Sailers/ Pilots and Maſters (of whoſe ſkil and knowledge I was well aſſured) I might deſcribe and declare the ſame/ in ſuch manner as the preſent worke/ and the neceſſitie and worthines thereof requireth. Lucas Johnſon Wagenaer himſelf (not long before he dyed) hath alſo by writing ſhewed manie notable faults/ which in his Book were neceſſarily to be corrected and amended. As touching the Cardes/ I have eſpecially much bettered them/ with the reaching of their Compaſſes verie neceſſarie to be uſed/ and alſo enlarged them/ and according to the examples of the beſt Cardes ſo corrected them/ that therein you not onely ſee/ how you may ſaile into/ and come out of all Havens and Chancls/ but alſo how farre they reach/ and are in wideneſſe and length diſtant from each other: which never heeretofore (be it ſpoken without boaſting) was ſo perfectly and ſo beneficially done for the good of Seafaring men. I have alſo placed all the places of the Weſt Seas under their right heigths: but touching the Eaſt Seas/ I could not bring that to paſſe before this time/ becauſe we wanted the true collection thereof/ for that the ſame which Lucas Wage-

naer writeth thereof/ is false/ and he contradicteth himself/ which may partly be perceived by that which ensueth. He writeth/ that the Sond lyeth under 56 degrees and 12 minutes/ and Schagen under 57 degrees and 48 minutes/ whereby it should followe/ (for that the said two places lye distant southeast and northwest) that they should be distant one from the other 33 or 34 Dutch myles: whereas notwithstanding he himself writeth/ that they are but 25 myles distant from each other: but that both these positions are false/ I prove it thus. The middle of the Ile of Ween lyeth just under 55 degrees and 54 minutes/ and seeing that the Sond is but a myle and an half or two myles distant from thence/ and rather westerlyer then north/ then of force the Sond can not lye higher/ then under 56 degrees: and so/ if wee (according to the common gessing) reckon/ from the Sond to Schagen 25 myles/ then the Point of Schagen must lye under 57 degrees and 11 or 12 minutes/ which differeth from Wagenaers position almost two third parts of a degree. Or if Schagen laye under such a heigth as Wagenaer writeth/ then Schagen and the Sond should be distant from each other about 38 myles/ which is not credible. Manie such like/ and (as I thinke) much greater faults should be seene/ if the certaine truth thereof could be found.

Besides this/ I have hereunto added a Brief Institution touching the Arte of Navigation: wherein is perfectly shewed/ what knowledge of Astronomie is necessarie for a Seafaring man: wherein hitherto there hath beene much abuse committed among them. But unnecessarie things/ wherewith some Seafaring men trouble themselves in vaine/ I have omitted and wholly left out: as/ what the Eccentricities/ Augeas and Apogeas/ the Longitude/ Latitude/ and the Paralaxes of the Planets are: all which things (as also manie other Astronomicall high Speculations) have no use in Seafaring/ nor can by anie meanes further a Seafaring man.

I have likewise omitted and forborne to write anie thing of the Lengths/ which men commonly call/ the East and West/ whereof some men boast and vaunt themselves/ to have found great matters/ and that a man may finde the waie from East to West so perfectly/ as from South to North: but all that which hitherto/ touching that matter is come to light/ is not onely unprofitable/ but also (if a man should trust thereunto) both hurtfull and deceitfull: whereof in the fourth part of this Book I thinke to write more at large/ as also/ what good and benefit a Pilot may have by the Direction of the Needle/ or altering of the Compas/ whereupon these newe found Lengths are built/ although without ground or true foundation.

A BREEF

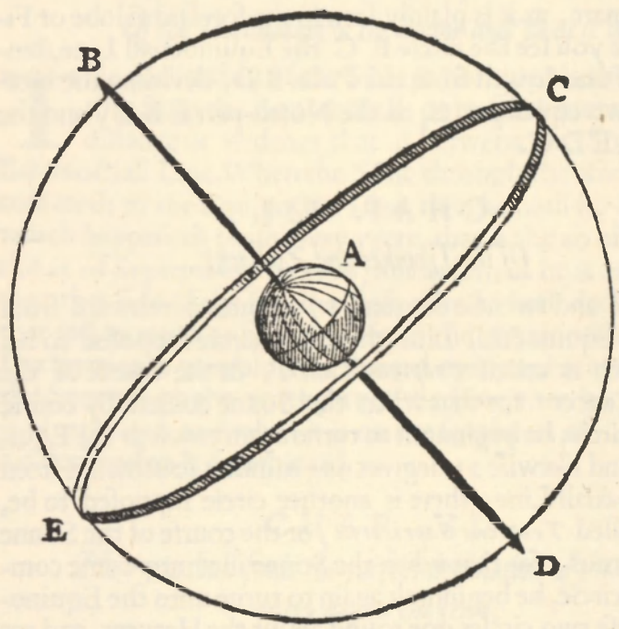
A BREEF AND SHORT INTRODVCTION FOR THE

vnderſtanding of the Celeſtiall Sphære, as farre as it concerneth the Art of Seafaring.

CHAPT. I.

Of the two Poles of the World.

THE Earth with the Waters making both together a perfect and juſt round Globe, the which all Mathematicians by good and infallible reaſons confirme, as alſo by experience it is found ſo to be. This Globe, the Everlaſting and Almightie God hath firmely placed in the middle of the world, as a center or middle point thereof, & hath ſo placed the Heavens as a hollowe Globe, with ſo unmeaſurable wydenes round about the ſame, that the diſtance thereof is equally ſet, and ſeparated from the earth in all places alike, like unto the compas of a circle which is equally drawne and ſeparated from the middle point thereof: and hath ſo ordayned, that every 24 howres it is caried about the world: by the which dayly motion, it draweth with it all the heavenly lights, as the Sonne, Moone, and all the ſtarres, the which alſo by that meanes everie 24 howres are carried round about the whole World, as it is dayly ſeen. This moveing or ſtirring of the heavens is performed upon two ſure faſt pointes, that ſtand directly each againſt other, in ſuch manner, as if a bale ſhould be turned round upon two pinnes, as upon an axeltree. So ſuppoſe that you ſee a ſtraight line ſtretching out from one of the aforeſayd pointes of the heavens to the other, like to an axeltree, the ſame is it that paſſeth right through the center, (that is through the middle of the earth) this line is called the Axeltree of the world, and the two pointes aforeſayd the Poles or Axeltree pointes of the World, the one named the North, the other the South Pole: Now that this may be the better underſtood, I wil declare it by this figure.



In this Figure A sheweth the Globe of the Earth, which unmoveably ſtandeth in the middle of the Heavens, which here by the Circle B C D E is figured out. The Line that reacheth from B to D going through the Earth, ſignifieth the Axeltree of the World, and the Pointes B and D are the Poles or Axeltree pointes, whereof the one at B is called the North Pole, and the other at D the South Pole, upon the which the Heavens (as I ſayd before) everie 24 howres are moved & borne round about the Earth.

CHAP. II.

Of the Equinoctiall Line.

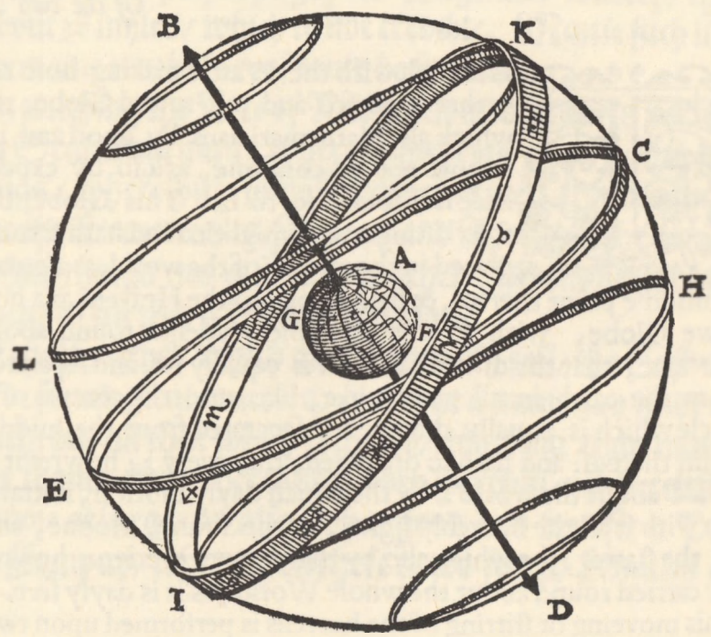
THe whole circle of the Heavens is devyded into 360 degrees or ſteppes, whereby, by the foreſayd Chapter wee may perceave, that the two poles are diſtant one from the other 180 degrees, that is half the circle of the Heavens. Right in the middle betwe n both the Poles we ſuppoſe a circle to be placed, which we call the Equinoctiall Line, or the Equator, and is ſo called for that whenſoever the Sonne cometh to this circle, the day and night is of one length throughout all the World. This circle is in all places equally diſtant from both the Poles of the World, to wit 90 degrees, & devideth the Heavens in two equal partes, whereof the one reacheth northward, and is called the North-part, the other ſouthward, and is called the South-part, as it is plainly ſeen in the foreſaid Globe or Figure, where you ſee the circle E C the Equinoctiall Line, ſtanding juſt of one length from the Poles B D, deviding the Heavens into two equall partes, as the North-part E B C, and the South-part E D C.

CHAP. III.

Of the Tropikes and Zodiacke.

THree and twentie degrees 31 ½ minutes northward from the Equinoctiall Line there is a circle ſuppoſed to be, which is called *Tropicus Cancri*, or the courſe of the Sonne in Cancer: for that when the Sonne cometh by courſe unto that circle, he beginneth to turne again towards the Equinoctiall. And likewiſe 23 degrees 31 ½ minutes ſouthward from the Equin ctiall Line, there is another circle ſuppoſed to be, which is called *Tropicus Capricorni*, or the courſe of the Sonne in Capricornus, for that when the Sonne in winter tyme cometh to this circle, he beginneth again to turne unto the Equinoctiall. Theſe two circles goe round about the Heavens, and are equally diſtant from the Equinoctiall. But how & in what manner toucheth the Sonne in his courſe (once in Sommer & another tyme in Winter) thoſe two circles? It happeneth thus: we ſuppoſe a great circle to be in the Heavens wherein the Sonne holdeth his courſe, which lyeth thwart-wiſe over the Equinoctiall, that is, the one half northward, the other half ſouthward, in ſuch manner, that in the place where he goeth moſt northward from the Equinoctiall Line, there he entreth into *Tropicus Cancri*, and where he goeth moſt ſouthward from the Equinoctiall Line, there he entreth into *Tropicus Capricorni*. The two pointes or places where he goeth or cutteth over the Equinoctiall, ſtand right over againſt each other, ſo that both the Equinoctiall and theſe two circles are devided into two equall parts, which pointes are called the one, the Equinoctall in Lent, and the other the Equinoctiall in Harveſt, which by the Figure enſeweing more playnely appeareth.

Example.



Let A be the Earth, B C D the Heaven, E F C G the Equinoctiall, B the North-pole, D the South-pole, and the Line B A D the Axeltree of the World, as aforeſayd: Then the Circle K L is *Tropicus Cancri*, lying northward from the Equinoctial Line, & the circle H I *Tropicus Capricorni* ſouthward from the Equinoctiall Line, K F I G is the great Circle, wherein the Sonne hath his continuall courſe, lying croſſe-wiſe over the Equinoctial, reaching northward beyond the Line to *Tropicus Cancri* in K and ſouthward beyond the Line to *Tropicus Capricorni* in I. The Equinoctiall in Lent is F, and the Equinoctiall in Harveſt is G, in the

in the places where this Circle & the Eqvinoctiall cutt or paſſe through each other. This Circle is commonly called the Zodiack,although the right name therof is the Eclipticke Line,or the paſſage of the Sõne, being the right middle part of the Zodiack, for the Zodiack it ſelf is a Circle almoſt 20 degrees broad,that is on each ſide of this Circle or paſſage of the Sonne, 10 degrees. This Circle aforeſayd is devided into 12 even partes, each part having a proper ſigne belonging unto it, & everie ſigne hath 30 degrees, ſo that the whole Circle (as all other Circles doe) conteyneth 360 degrees. The names of the ſignes are, *Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpius, Sagittarius, Capricornus, Aquarius,* and *Piſces,* and theſe are placed in this manner: Aries beginneth where the Equator & the Zodiack cut or paſſe through each other, in the Equinoctiall of Lent, and follow in order as aforeſayd, ſo that the beginning of Cancer is juſt at Tropicus Cancri. Libra on the other ſide, beginneth where the Equator & the Zodiack cut or paſſe through each other againe in the Equinoctiall of Harveſt: and the beginning of Capricornus is juſt where the Zodiacke or Eclipticke Line toucheth Tropicus Capricorni, and ſo forth.

CHAP. IIII.

Of the courſe of the Sonne.

IN this Zodiack or Ecliptick Line aforſayd, the middle point of the Sonne hath his courſe, without once going out of it, paſſing through it everie yeare once, that is everie moneth through one ſigne,and everie day almoſt a degree. Upon the 20 of March *ſtilo novo,* and the 10 of March *ſtilo vechio,* when the dayes & nights are juſt of one length throughout al the World, then the Sonne entreth into the Equinoctiall, that is to ſay, into *Aries,* the 20 or 10 of April he entreth into *Taurus,* the 20 or 10 of May into *Gemini,* the 21 or 11 of Iune into *Cancer,* upon *Tropicus Cancri,* and then he is at the fartheſt of his courſe northward frõ the Equinoctiall,then all thoſe that dwell northward from the Line have their longeſt day,and thoſe that dwell ſouthward from the Line their ſhorteſt day. The Sõne holding his courſe, then beginneth to turne again to the Line, and the 23 or 13 of Iulie entreth into *Leo,* the 23 or 13 of Auguſt into *Virgo,* and the 23 or 13 of September he commeth again on the Line, in the beginning of *Libra,* makeing the dayes and nights one again of one length throughout all the World, the 23 or 13 of October he entereth into *Scorpio,* the 22 or 12 of November into *Sagittarius,* and the 22 or 12 of December to *Tropicus Capricorni,* in the beginning of *Capricornus,* then are the dayes longeſt with them that dwell ſouthward from the Line. The 20 or 10 of Ianuarie, the Sonne commeth further, and entreth into *Aquarius,* about the 18 or 8 of Februarie into *Piſces,* and the 20 or 10 of March he entreth again into *Aries.* This ought alſo to be known and marked: that this Zodiack ſtandeth unmoveably with the fixed Starres, with the which everie day he is caried about from Eaſt to Weſt, without alteration:and that the Sõne doth the foreſayd yearely courſe contrariwiſe,from weſt to eaſt, whereby in his dayly courſe he is ſo much hindred, that in the yeare he goeth one time leſſe about then the fixed Starres.

CHAP. V.

Of the Declination of the Sonne and what it is.

THe declination of the Sõne is nothing els,then his departing from the Equinoctiall: or to ſpeak more plainly,the diſtance or widenes that is between the Sonne and the Equinoctiall Line. When the Sõne through the aforſayd courſe commeth to the Equinoctial Line, then he hath no declination, which happeneth twiſe every yeere, that is the 20 of March and the 23 of September *ſtilo novo,* but as ſone as he is on the one or the other ſide of the Equinoctiall, then he hath declination,and that juſt as much as he is gone from the Æquinoctial. And this Declination is twofold,Northward and Southward: for when the Sonne is on the northpart of the Line, then his declination is Northward, and when it is on the ſouthpart of the Line then his declination is Southward.

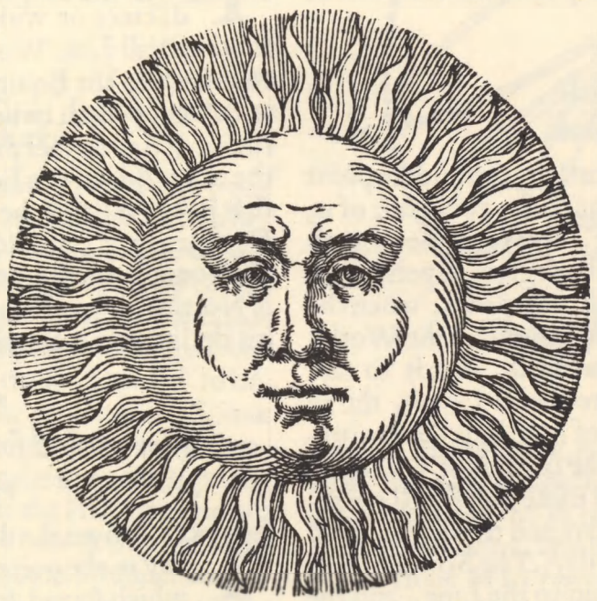
CHAP. VI.

How you ſhall finde the perfect declination of the Sonne every day in the yeere.

TO knowe the declination of the Sonne perfectly everie day in the yeere, in former tymes there were tables made which ſerved for foure yeeres, but they were gathered out of old and corrupt obſervations, ſo that at ſome tymes of the yeere they differed almoſt a fourthpart of a degree from the truth, as it appeareth by the true calculation thereof made by the Learned Aſtronomer *Tycho Brahæ.* And therefore for

the good of all Seafaring men, not without much labour & diligence I have collected a new book of degrees for foure yeares out of the aforesayd *Tycho Brahæ* brest corrected notes, just for the Meridian(that is)after the longitude of the Low-countries, which Tables of declinations may serve without any weightie alteratiõ(or that can be any hinderance unto Seafaring men)for the space of 20 yeres. Now to know how much theSõne in everie day of the yeare declineth from the Equinoctiall, first see in what yeare and moneth you are, and what day of the moneth it is, the same day seek in the first columne, and there against it in the second columne you shall finde how many degrees and minutes the Sonne is gone or declined from the Equator: but to know whether it be northward or southward, you must understand, that frõ the 10 of March to the 13 of September it goeth on the northside from the Line, and from the 13 of September again to the 10 of March southward frõ the Line. But to know whether it is a Leap-yeare, or the first,second,or third year from it, we have to that end placed a small Table under this Chapter, wherein without any labour you may finde it.

Leap yeares.	*First yeares.*	*Second yeares.*	*Third yeares.*
1612	1613	1614	1615
1616	1617	1618	1619
1620	1621	1622	1623
1624	1625	1626	6627
1628	1629	1630	1631



Here followe the Tables of the Declination of the Sonne after the New stile.

The Decli-

The Declination of the Sonne, ſerving (after the Newe ſtile) for the Leape Yeere.

da	Ianuarie. deg. mi.	Februarie. deg. mi.	March. deg. mi.	Aprill. deg. mi.	May. deg. mi.	Iune. deg. mi.
1	23 — 7	17 — 15	7 — 22	4 — 44	15 — 13	22 — 9
2	23 — 2	16 — 58	6 — 59	5 — 7	15 — 31	22 — 17
3	22 — 56	16 — 41	6 — 36	5 — 30	15 — 49	22 — 25
4	22 — 50	16 — 23	6 — 13	5 — 53	16 — 6	22 — 32
5	22 — 44	16 — 5	5 — 50	6 — 16	16 — 23	22 — 39
6	22 — 37	15 — 47	5 — 27	6 — 38	16 — 40	22 — 45
7	22 — 30	15 — 28	5 — 4	7 — 1	16 — 57	22 — 51
8	22 — 22	15 — 9	4 — 41	7 — 23	17 — 13	22 — 56
9	22 — 14	14 — 50	4 — 17	7 — 40	17 — 29	23 — 1
10	22 — 5	14 — 31	3 — 53	8 — 8	17 — 45	23 — 6
11	21 — 56	14 — 11	3 — 30	8 — 30	18 — 1	23 — 10
12	21 — 47	13 — 51	3 — 6	8 — 52	18 — 16	23 — 14
13	21 — 37	13 — 31	2 — 42	9 — 13	18 — 31	23 — 18
14	21 — 27	13 — 11	2 — 19	9 — 35	18 — 45	23 — 21
15	21 — 16	12 — 50	1 — 56	9 — 56	18 — 59	23 — 24
16	21 — 5	12 — 30	1 — 32	10 — 17	19 — 13	23 — 26
17	20 — 53	12 — 9	1 — 8	10 — 38	19 — 27	23 — 28
18	20 — 41	11 — 48	0 — 44	10 — 59	19 — 40	23 — 29
19	20 — 29	11 — 27	0 — 20	11 — 20	19 — 53	23 — 30
20	20 — 16	11 — 5	0 — 3	11 — 41	20 — 6	23 — 31
21	20 — 3	10 — 44	0 — 27	12 — 1	20 — 18	23 — 31½
22	19 — 49	10 — 20	0 — 50	12 — 21	20 — 30	23 — 31
23	19 — 35	10 — 0	1 — 14	12 — 41	20 — 42	23 — 30
24	19 — 21	9 — 38	1 — 38	13 — 1	20 — 53	23 — 29
25	19 — 7	9 — 16	2 — 1	13 — 21	21 — 4	23 — 28
26	18 — 52	8 — 53	2 — 24	13 — 40	21 — 14	23 — 26
27	18 — 36	8 — 31	2 — 48	13 — 59	21 — 24	23 — 24
28	18 — 21	8 — 8	3 — 12	14 — 18	21 — 34	23 — 21
29	18 — 5	7 — 45	3 — 35	14 — 37	21 — 43	23 — 18
30	17 — 49		3 — 58	14 — 55	21 — 52	23 — 15
31	17 — 32		4 — 21		22 — 1	

The De-

The Declination of the Sonne, ſerving (after the Newe ſtile) for the Leape Yeere.

Iulie.		Auguſt.		September.		October.		November.		December.	
da	deg. mi.	da	deg. mi.	da	deg. mi.	da	deg. mi.	da	deg. mi.	de	deg. mi.
1	23—11	1	18— 4	1	8—16	1	3—16	1	14—35	1	21—57
2	23— 7	2	17—49	2	7—54	2	3—40	2	14—55	2	22— 6
3	23— 2	3	17—33	3	7—32	3	4— 3	3	15—14	3	22—15
4	22—57	4	17—17	4	7—10	4	4—27	4	15—32	4	22—23
5	22—52	5	17— 1	5	6—48	5	4—50	5	15—51	5	22—31
6	22—46	6	16—45	6	6—25	6	5—13	6	16— 9	6	22—38
7	22—40	7	16—28	7	6— 2	7	5—36	7	16—27	7	22—45
8	22—33	8	16—11	8	5—40	8	5—59	8	16—44	8	22—51
9	22—26	9	15—53	9	5—17	9	6—22	9	17— 2	9	22—57
10	22—18	10	15—35	10	4—54	10	6—45	10	17—19	10	23— 2
11	22—10	11	15—18	11	4—31	11	7— 8	11	17—36	11	23— 7
12	22— 2	12	15— 0	12	4— 8	12	7—31	12	17—52	12	23—12
13	21—54	13	14—42	13	3—45	13	7—54	13	18— 8	13	23—16
14	21—45	14	14—24	14	3—22	14	8—16	14	18—24	14	23—19
15	21—36	15	14— 5	15	2—59	15	8—39	15	18—39	15	23—22
16	21—26	16	13—46	16	2—35	16	9— 1	16	18—54	16	23—25
17	21—16	17	13—27	17	2—12	17	9—23	17	19— 9	17	23—27
18	21— 6	18	13— 7	18	1—49	18	9—45	18	19—24	18	23—29
19	20—55	19	12—47	19	1—26	19	10— 7	19	19—38	19	23—30
20	20—44	20	12—28	20	1— 2	20	10—29	20	19—51	20	23—31
21	20—32	21	12— 8	21	0—38	21	10—50	21	20— 5	21	23—31½
22	20—20	22	11—48	22	0—15	22	11—11	22	20—18	22	23—31
23	20— 8	23	11—27	23	0— 8	23	11—33	23	20—31	23	23—30
24	19—55	24	11— 6	24	0—32	24	11—54	24	20—43	24	23—29
25	19—42	25	10—45	25	0—56	25	12—15	25	20—55	25	23—28
26	19—29	26	10—24	26	1—19	26	12—35	26	21— 6	26	23—26
27	19—16	27	10— 3	27	1—43	27	12—56	27	21—17	27	23—23
28	19— 2	28	9—42	28	2— 6	28	13—16	28	21—28	28	23—20
29	18—48	29	9—21	29	2—29	29	13—36	29	21—38	29	23—16
30	18—34	30	9— 0	30	2—53	30	13—56	30	21—48	30	23—12
31	18—19	31	8—38			31	14—16			31	23— 8

The

The Declination of the Sonne, ſerving (after the Newe ſtile) for the firſt Yeere after the Leap Yeere.

Ianuarie.		Februarie.		March.		Aprill.		May.		Iune.	
da	deg. mi.	da	deg. mi.	da	deg. mi.	da	deg. mi.	da	deg. mi.	da	deg. mi.
1	23 — 3	1	17 — 2	1	7 — 28	1	4 — 39	1	15 — 9	1	22 — 7
2	22 — 58	2	16 — 45	2	7 — 5	2	5 — 2	2	15 — 27	2	22 — 15
3	22 — 52	3	16 — 27	3	6 — 42	3	5 — 26	3	15 — 45	3	22 — 23
4	22 — 46	4	16 — 9	4	6 — 19	4	5 — 48	4	16 — 2	4	22 — 30
5	22 — 39	5	15 — 51	5	5 — 56	5	6 — 11	5	16 — 20	5	22 — 37
6	22 — 32	6	15 — 33	6	5 — 33	6	6 — 33	6	16 — 37	6	22 — 44
7	22 — 24	7	15 — 14	7	5 — 9	7	6 — 56	7	16 — 54	7	22 — 50
8	22 — 16	8	14 — 55	8	4 — 46	8	7 — 18	8	17 — 10	8	22 — 55
9	22 — 7	9	14 — 35	9	4 — 23	9	7 — 40	9	17 — 26	9	23 — 0
10	21 — 58	10	14 — 15	10	3 — 59	10	8 — 3	10	17 — 41	10	23 — 5
11	21 — 49	11	13 — 56	11	3 — 35	11	8 — 25	11	17 — 57	11	23 — 10
12	21 — 39	12	13 — 36	12	3 — 12	12	8 — 47	12	18 — 12	12	23 — 14
13	21 — 29	13	13 — 16	13	2 — 48	13	9 — 9	13	18 — 27	13	23 — 17
14	21 — 18	14	12 — 56	14	2 — 24	14	9 — 30	14	18 — 41	14	23 — 20
15	21 — 7	15	12 — 35	15	2 — 1	15	9 — 51	15	18 — 56	15	23 — 23
16	20 — 56	16	12 — 14	16	1 — 37	16	10 — 13	16	19 — 10	16	23 — 26
17	20 — 44	17	11 — 53	17	1 — 14	17	10 — 34	17	19 — 24	17	23 — 28
18	20 — 32	18	11 — 32	18	0 — 50	18	10 — 55	18	19 — 37	18	23 — 29
19	20 — 19	19	11 — 10	19	0 — 26	19	11 — 16	19	19 — 50	19	23 — 30
20	20 — 6	20	10 — 49	20	0 — 2	20	11 — 36	20	20 — 3	20	23 — 31
21	19 — 53	21	10 — 27	21	0 — 21	21	11 — 56	21	20 — 15	21	23 — 31½
22	19 — 39	22	10 — 5	22	0 — 45	22	12 — 17	22	20 — 27	22	23 — 31
23	19 — 25	23	9 — 43	23	1 — 8	23	12 — 37	23	20 — 39	23	23 — 31
24	19 — 10	24	9 — 21	24	1 — 32	24	12 — 57	24	20 — 50	24	23 — 30
25	18 — 55	25	8 — 59	25	1 — 55	25	13 — 16	25	21 — 1	25	23 — 29
26	18 — 40	26	8 — 36	26	2 — 19	26	13 — 35	26	21 — 12	26	23 — 27
27	18 — 25	27	8 — 13	27	2 — 42	27	13 — 54	27	21 — 22	27	23 — 25
28	18 — 9	28	7 — 51	28	3 — 6	28	14 — 13	28	21 — 32	28	23 — 22
29	17 — 53			29	3 — 29	29	14 — 32	29	21 — 41	29	23 — 19
30	17 — 36			30	3 — 53	30	14 — 50	30	21 — 50	30	23 — 16
31	17 — 19			31	4 — 16			31	21 — 59		

The De-

The Declination of the Sonne, ſerving (after the Newe ſtile) for the first Yeere after the Leap Yeere.

Iulie.		Auguſt.		September.		October.		November.		December.	
da	deg. mi.	da	deg mi.	da	deg. mi.	da	d g. mi.	da	deg. mi.	de	deg. mi.
1	23—12	1	18— 7	1	8—21	1	3—11	1	14—31	1	21—55
2	23— 8	2	17—52	2	7—59	2	3—34	2	14—50	2	22— 4
3	23— 3	3	17—37	3	7—37	3	3—58	3	15— 9	3	22—13
4	22—58	4	17—21	4	7—15	4	4—21	4	15—28	4	22—21
5	22—53	5	17— 4	5	6—53	5	4—44	5	15—46	5	22—29
6	22—47	6	16—48	6	6—31	6	5— 7	6	16— 4	6	22—36
7	22—41	7	16—32	7	6— 8	7	5—30	7	16—22	7	22—43
8	22—34	8	16—15	8	5—45	8	5—53	8	16—40	8	22—50
9	22—27	9	15—57	9	5—23	9	6—17	9	16—58	9	22—56
10	22—20	10	15—40	10	5— 0	10	6—40	10	17—15	10	23— 2
11	22—12	11	15—22	11	4—37	11	7— 3	11	17—32	11	23— 7
12	22— 4	12	15— 4	12	4—14	12	7—25	12	17—48	12	23—11
13	21—56	13	14—46	13	3—51	13	7—48	13	18— 4	13	23—15
14	21—47	14	14—28	14	3—28	14	8—11	14	18—20	14	23—19
15	21—38	15	14— 9	15	3— 5	15	8—33	15	18—36	15	23—22
16	21—28	16	13—50	16	2—41	16	8—55	16	18—51	16	23—25
17	21—18	17	13—31	17	2—18	17	9—17	17	19— 6	17	23—27
18	21— 8	18	13—12	18	1—55	18	9—40	18	19—20	18	23—29
19	20—57	19	12—52	19	1—31	19	10— 2	19	19—34	19	23—30
20	20—46	20	12—33	20	1— 8	20	10—23	20	19—48	20	23—31
21	20—35	21	12—13	21	0—44	21	10—45	21	20— 2	21	23—31½
22	20—23	22	11—52	22	0—21	22	11— 6	22	20—15	22	23—31
23	20—11	23	11—32	23	0— 3	23	11—28	23	20—28	23	23—31
24	19—58	24	11—12	24	0—26	24	11—49	24	20—40	24	23—30
25	19—46	25	10—51	25	0—50	25	12— 9	25	20—52	25	23—28
26	19—33	26	10—30	26	1—13	26	12—30	26	21— 3	26	23—26
27	19—19	27	10— 9	27	1—37	27	12—51	27	21—14	27	23—24
28	19— 5	28	9—48	28	2— 0	28	13—11	28	21—25	28	23—21
29	18—51	29	9—27	29	2—24	29	13—31	29	21—36	29	23—17
30	18—37	30	9— 5	30	2—47	30	13—51	30	21—46	30	23—13
31	18—22	31	8—43			31	14—11			31	23— 9

The

The Declination of the Sonne, ſerving (after the Newe ſtile) for the ſecond Yeere after the Leap Yeere.

Ianuarie.		Februarie.		March.		Aprill.		May.		Iune.	
da	deg. mi.	da	deg. mi.	da	deg. mi.	da	deg. mi.	da	deg. mi.	da	deg. mi.
1	23 — 4	1	17 — 7	1	7 — 34	1	4 — 33	1	15 — 4	1	22 — 5
2	22 — 59	2	16 — 49	2	7 — 11	2	4 — 56	2	15 — 22	2	22 — 13
3	22 — 53	3	16 — 32	3	6 — 48	3	5 — 19	3	15 — 40	3	22 — 21
4	22 — 47	4	16 — 14	4	6 — 25	4	5 — 42	4	15 — 58	4	22 — 28
5	22 — 41	5	15 — 56	5	6 — 2	5	6 — 5	5	16 — 15	5	22 — 35
6	22 — 34	6	15 — 37	6	5 — 39	6	6 — 28	6	16 — 32	6	22 — 42
7	22 — 26	7	15 — 18	7	5 — 15	7	6 — 50	7	16 — 49	7	22 — 48
8	22 — 18	8	14 — 59	8	4 — 52	8	7 — 12	8	17 — 5	8	22 — 54
9	22 — 9	9	14 — 40	9	4 — 29	9	7 — 35	9	17 — 21	9	22 — 59
10	22 — 0	10	14 — 21	10	4 — 5	10	7 — 57	10	17 — 37	10	23 — 4
11	21 — 51	11	14 — 1	11	3 — 42	11	8 — 19	11	17 — 53	11	23 — 9
12	21 — 42	12	13 — 41	12	3 — 18	12	8 — 41	12	18 — 8	12	23 — 13
13	21 — 32	13	13 — 21	13	2 — 55	13	9 — 3	13	18 — 23	13	23 — 16
14	21 — 21	14	13 — 1	14	2 — 31	14	9 — 25	14	18 — 38	14	23 — 20
15	21 — 10	15	12 — 40	15	2 — 7	15	9 — 46	15	18 — 52	15	23 — 23
16	20 — 59	16	12 — 19	16	1 — 43	16	10 — 7	16	19 — 6	16	23 — 25
17	20 — 47	17	11 — 58	17	1 — 20	17	0 — 29	17	19 — 20	17	23 — 27
18	20 — 35	18	11 — 37	18	0 — 56	18	10 — 50	18	19 — 37	18	23 — 29
19	20 — 22	19	11 — 16	19	0 — 32	19	11 — 10	19	19 — 47	19	23 — 30
20	20 — 9	20	10 — 54	20	0 — 8	20	11 — 31	20	20 — 0	20	23 — 31
21	19 — 56	21	10 — 32	21	0 — 15	21	11 — 52	21	20 — 12	21	23 — 31½
22	19 — 42	22	10 — 11	22	0 — 39	22	12 — 12	22	20 — 24	22	23 — 31½
23	19 — 28	23	9 — 49	23	1 — 2	23	12 — 32	23	20 — 36	23	23 — 31
24	19 — 14	24	9 — 27	24	1 — 26	24	12 — 52	24	20 — 47	24	23 — 30
25	18 — 59	25	9 — 4	25	1 — 50	25	13 — 11	25	20 — 58	25	23 — 29
26	18 — 44	26	8 — 42	26	2 — 13	26	13 — 31	26	21 — 9	26	23 — 27
27	18 — 29	27	8 — 19	27	2 — 37	27	13 — 50	27	21 — 19	27	23 — 25
28	18 — 13	28	7 — 57	28	3 — 0	28	14 — 9	28	21 — 29	28	23 — 23
29	17 — 57			29	3 — 23	29	14 — 28	29	21 — 39	29	23 — 20
30	17 — 40			30	3 — 46	30	14 — 46	30	21 — 48	30	23 — 17
31	17 — 24			31	4 — 10			31	21 — 57		

The De-

The Declination of the Sonne, ſerving (after the Newe ſtile) for the ſecond Yeere after the Leap Yeere.

Iulie.		Auguſt.		September.		October.		November.		December.	
da	deg. mi.	da	deg. mi.	da	deg. mi.	da	deg. mi.	da	deg. mi.	de	deg. mi.
1	23—13	1	18—11	1	8—27	1	3— 5	1	14—26	1	21—53
2	23— 9	2	17—56	2	8— 5	2	3—29	2	14—45	2	22— 2
3	23— 5	3	17—41	3	7—43	3	3—52	3	15— 4	3	22—11
4	23— 0	4	17—25	4	7—21	4	4—15	4	15—23	4	22—19
5	22—54	5	17— 9	5	6—58	5	4—38	5	15—42	5	22—27
6	22—48	6	16—53	6	6—36	6	5— 2	6	16— 0	6	22—34
7	22—42	7	16—36	7	6—14	7	5—25	7	16—18	7	22—41
8	22—36	8	16—19	8	5—51	8	5—48	8	16—36	8	22—48
9	22—29	9	16— 2	9	5—28	9	6—11	9	16—53	9	22—54
10	22—22	10	15—45	10	5— 5	10	6—34	10	17—10	10	23— 0
11	22—14	11	15—27	11	4—43	11	6—57	11	17—27	11	23— 5
12	22— 6	12	15— 9	12	4—20	12	7—20	12	17—44	12	23—10
13	21—58	13	14—51	13	3—57	13	7—43	13	18— 0	13	23—14
14	21—49	14	14—33	14	3—33	14	8— 5	14	18—16	14	23—18
15	21—40	15	14—14	15	3—10	15	8—28	15	18—32	15	23—21
16	21—31	16	13—55	16	2—47	16	8—50	16	18—47	16	23—24
17	21—21	17	13—36	17	2—24	17	9—12	17	19— 2	17	23—26
18	21—10	18	13—17	18	2— 0	18	9—34	18	19—17	18	23—28
19	21— 0	19	12—57	19	1—37	19	9—56	19	19—31	19	23—30
20	20—49	20	12—37	20	1—14	20	10—18	20	19—45	20	23—31
21	20—38	21	12—17	21	0—50	21	10—40	21	19—59	21	23—31½
22	20—26	22	11—57	22	0—27	22	11— 1	22	20—12	22	23—31
23	20—14	23	11—36	23	0— 3	23	11—23	23	20—24	23	23—31
24	20— 2	24	11—16	24	0—20	24	11—44	24	20—37	24	23—30
25	19—49	25	10—56	25	0—44	25	12— 4	25	20—49	25	23—29
26	19—36	26	10—35	26	1— 8	26	12—25	26	21— 1	26	23—27
27	19—23	27	10—14	27	1—31	27	12—46	27	21—12	27	23—25
28	19— 9	28	9—53	28	1—54	28	13— 6	28	21—23	28	23—22
29	18—55	29	9—32	29	2—18	29	13—26	29	21—33	29	23—19
30	18—41	30	9—10	30	2—41	30	13—46	30	21—43	30	23—15
31	18—26	31	8—49			31	14— 6			31	23—10

The Decli-

The Declination of the Sonne, ſerving (after the Newe ſtile) for the third Yeere after the Leap Yeere.

da	Ianuarie. deg. mi.	Februarie. deg. mi.	March. deg. mi.	Aprill. deg. mi.	May. deg. mi.	Iune. deg. mi.
1	23 — 6	17 — 11	7 — 40	4 — 27	15 — 0	22 — 3
2	23 — 1	16 — 53	7 — 17	4 — 50	15 — 18	22 — 11
3	22 — 55	16 — 36	6 — 54	5 — 13	15 — 36	22 — 19
4	22 — 49	16 — 18	6 — 31	5 — 36	15 — 53	22 — 27
5	22 — 42	16 — 0	6 — 8	5 — 59	16 — 11	22 — 34
6	22 — 35	15 — 42	5 — 44	6 — 22	16 — 28	— 40
7	22 — 28	15 — 23	5 — 21	6 — 44	16 — 45	22 — 46
8	22 — 20	15 — 4	4 — 58	7 — 7	17 — 1	22 — 52
9	22 — 12	14 — 45	4 — 34	7 — 29	17 — 17	22 — 58
10	22 — 3	14 — 26	4 — 11	7 — 51	17 — 33	23 — 3
11	21 — 54	14 — 6	3 — 47	8 — 14	17 — 49	23 — 7
12	21 — 44	13 — 46	3 — 23	8 — 36	18 — 4	23 — 11
13	21 — 34	13 — 26	2 — 59	8 — 58	18 — 19	23 — 15
14	21 — 24	13 — 6	2 — 36	9 — 19	18 — 34	23 — 19
15	21 — 13	12 — 45	2 — 13	9 — 41	18 — 49	23 — 22
16	21 — 2	12 — 24	1 — 49	10 — 2	19 — 3	23 — 25
17	20 — 50	12 — 3	1 — 25	10 — 23	19 — 17	23 — 27
18	20 — 38	11 — 42	1 — 2	10 — 44	19 — 30	23 — 29
19	20 — 25	11 — 21	0 — 38	11 — 5	19 — 43	23 — 30
20	20 — 12	11 — 0	0 — 14	11 — 26	19 — 56	23 — 31
21	19 — 59	10 — 38	0 — 9	11 — 46	20 — 9	23 — 31
22	19 — 46	10 — 16	0 — 33	12 — 7	20 — 21	23 — 31½
23	19 — 32	9 — 54	0 — 56	12 — 27	20 — 33	23 — 31
24	19 — 18	9 — 32	1 — 20	12 — 47	20 — 44	23 — 30
25	19 — 3	9 — 10	1 — 44	13 — 7	20 — 55	23 — 29
26	18 — 48	8 — 47	2 — 7	13 — 26	21 — 6	23 — 28
27	18 — 32	8 — 25	2 — 31	13 — 45	21 — 17	23 — 26
28	18 — 17	8 — 3	2 — 54	14 — 4	21 — 27	23 — 24
29	18 — 1		3 — 17	14 — 23	21 — 37	23 — 21
30	17 — 45		3 — 40	14 — 41	21 — 46	23 — 18
31	17 — 28		4 — 4		21 — 55	

The De-

The Declination of the Sonne, ſerving (after the Newe ſtile) for the third Yeere after the Leap Yeere.

Iulie.		Auguſt.		September.		October.		November.		December.	
da	deg. mi.	da	deg. mi.	da	deg. mi.	da	deg. mi.	da	deg mi.	de	deg. mi.
1	23 — 14	1	18 — 15	1	8 — 32	1	2 — 59	1	14 — 21	1	21 — 51
2	23 — 10	2	18 — 0	2	8 — 11	2	3 — 22	2	14 — 40	2	22 — 0
3	23 — 6	3	17 — 45	3	7 — 49	3	3 — 46	3	14 — 59	3	22 — 9
4	23 — 1	4	17 — 29	4	7 — 27	4	4 — 9	4	15 — 18	4	22 — 17
5	22 — 50	5	17 — 13	5	7 — 4	5	4 — 33	5	15 — 37	5	22 — 25
6	22 — 50	6	16 — 57	6	6 — 42	6	4 — 56	6	15 — 55	6	22 — 33
7	22 — 44	7	16 — 40	7	6 — 19	7	5 — 19	7	16 — 13	7	22 — 40
8	22 — 38	8	16 — 23	8	5 — 57	8	5 — 42	8	16 — 31	8	22 — 47
9	22 — 31	9	16 — 6	9	5 — 34	9	6 — 5	9	16 — 49	9	22 — 53
10	22 — 24	10	15 — 49	10	5 — 11	10	6 — 28	10	17 — 6	10	22 — 59
11	22 — 16	11	15 — 31	11	4 — 48	11	6 — 51	11	17 — 23	11	23 — 4
12	2 8	12	15 — 13	12	4 — 25	12	7 — 14	12	17 — 40	12	23 — 9
13	22 — 0	13	14 — 55	13	3 — 2	13	7 — 37	13	17 — 56	13	23 — 13
14	21 — 51	14	14 — 37	14	3 — 39	14	7 — 59	14	18 — 12	14	23 — 17
15	21 — 42	15	14 — 19	15	3 — 16	15	8 — 22	15	18 — 28	15	23 — 20
16	21 — 33	16	14 — 0	16	2 — 53	16	8 — 44	16	18 — 43	16	23 — 23
17	21 — 23	17	13 — 41	17	2 — 30	17	9 — 7	17	18 — 58	17	23 — 26
18	21 — 13	18	13 — 22	18	2 — 6	18	9 — 29	18	19 — 13	18	23 — 28
19	21 — 3	19	13 — 2	19	1 — 43	19	9 — 51	19	19 — 27	19	23 — 29
20	20 — 52	20	12 — 43	20	1 — 19	20	10 — 13	20	19 — 41	20	23 — 30
21	20 — 41	21	12 — 23	21	0 — 56	21	10 — 34	21	19 — 55	21	23 — 31
22	20 — 29	22	12 — 3	22	0 — 33	22	10 — 56	22	20 — 8	22	23 — 31
23	20 — 17	23	11 — 42	23	0 — 9	23	11 — 17	23	20 — 21	23	23 — 31
24	20 — 5	24	11 — 22	24	0 — 14	24	11 — 38	24	20 — 34	24	23 — 30
25	19 — 52	25	11 — 1	25	0 — 38	25	11 — 59	25	20 — 46	25	23 — 29
26	19 — 39	26	10 — 40	26	1 — 2	26	12 — 20	26	20 — 58	26	23 — 27
27	19 — 26	27	10 — 19	27	1 — 25	27	12 — 41	27	21 — 9	27	23 — 25
28	19 — 12	28	9 — 58	28	1 — 49	28	13 — 1	28	21 — 20	28	23 — 22
29	18 — 58	29	9 — 37	29	2 — 12	29	13 — 21	29	21 — 31	29	23 — 19
30	18 — 44	30	9 — 16	30	2 — 36	30	13 — 11	30	21 — 41	30	23 — 15
31	18 — 30	31	8 — 54			31	14 — 1			31	23 — 11

Of the

CHAP. VII.

Of the fixed Starres, their declination, and how they may alter in the declination, withall ſhewing how men may eaſily learne to knowe them.

THe Declination of the Starres is almoſt like unto that of the Sonne, and is twofold, that is Northward & Southward: thoſe that ſtand Northward from the Equinoctiall decline northward, and thoſe that ſtand Southward from the Equinoctiall decline ſouthward. But this is the difference between the declination of the Sonne and of the ſtarres, the declination of the Sonne altereth, and is increaſed or shortned everie day, and the one half yeere declineth northward, and the other half yeere ſouthward: but the declination of the fixed ſtarres is otherwiſe, for ſome of them that decline northward or ſouthward, are alwayes on the north or ſouth ſide of the Line: & ſome of them that decline northward, may decline ſouthward, and ſome that decline ſouthward may alſo decline northward: but that is verie long and in a great ſpace of tyme, though ſome of them do it with more ſpeed, and in shorter tyme then the reſt, according to their ſituations in the Heavens. Some of them increaſe or decreaſe a minute everie three yeeres, ſo that everie ten or twelve yeeres they need correction, and ſome cannot alter a minute of their declination in 40 or 50 yeeres, as may be proved by good reaſon drawne from the naturall courſe and moving of the fixed ſtarres. The brighteſt, and cheifeſt, and moſt fitte to be uſed at Sea, we have hereafter placed, with their right declination accordig to the yeere 1608, as they by the aforeſayd *Tycho Brahæ* are found and obſerved to be ſituated. How great cõmoditie & profit it is for a Sea-faring man to have the knowledge of the fixed Starres and their ordinarie courſe, ſpecially in ſtrange and long voyages, is well knowne unto all expert and skilfull Pilots. And for that in theſe dayes there are yet manie Sea-faring men, that have no knowledge of the fixed Starres, we will hereafter together with their declination, showe alſo an eaſie and convenient way, readily to learne to knowe them, and at all tymes perfectly to knowe when each of them enter into the ſouth or are at the higheſt, and are fitte to be uſed. In the fourth chapter it is shewed, that the fixed Starres, goe once a yeere about the Heavens more then the Sonne, ſo that everie day they come about 4 min. further ſouthward, which is everie weeke, about half an howre, and everie moneth two howres, which that it may the better be underſtood, we will make it evident by an example taken from the Starre called *Syrius*, or *Canis major* the great Dogge which alwayes followeth a little after the Image of the Gyant *Orion* & his Girdle, which is called the three Kinges, which appeare a little over the great Dogge, it is the greateſt & cleareſt of al the fixed Starres, which for the moſt part is known unto all Sea-faring men, his declination is ſouthward from the Line, 16 degrees, and 11 minutes,

The great Dogge.

Canis major.

Syrius

And it is ſouth upon the 24 of Ianuarie *ſtilo novo*, at ten of the clocke at night.

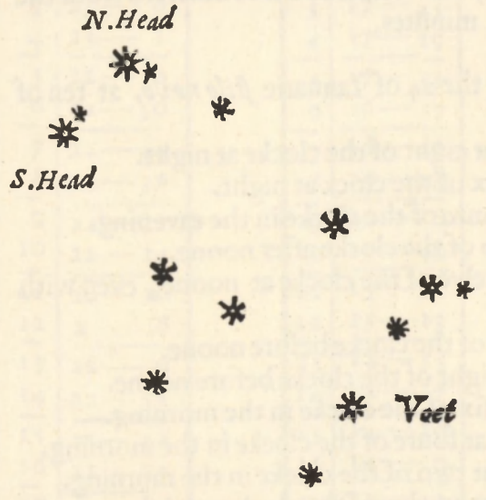
The 23 of Februarie at eight of the clocke at night.
The 28 of March at ſix of the clock at night.
The 30 of Aprill at foure of the clocke in the eavening.
The 30 of May at two of the clocke after noone.
The 28 of Iune at twelve of the clocke at noone, even with the Sonne.
The 28 of Iulie at ten of the clocke before noone.
The 29 of Auguſt at eight of the clocke before noone.
The 1 of October at ſix of the clocke in the morning.
The 2 of November at foure of the clocke in the morning.
The 1 of December at two of the clocke in the morning.
The 28 of December at twelve of the clocke at night.

Whereby everie man may eaſily reckon at what howre and tyme this Starre is ſouth everie day in the yeere, as well in the day tyme when you can not ſee it, as in the night when we may ſee it. And if you deſire to knowe the like touching all the reſt of the fixed Starres upon everie day in the yeere, then marke what was ſayd before, upon what howre of the day before ſet downe, the great Dogge commeth into the ſouth, and then by the tables hereafter following touching the declination of the Starres, marke how long tyme the Starre you ſeeke for cometh into the ſouth before or after the great Dogge, and by that meanes you ſhall finde the juſt and perfect tyme that you deſire.

Heere followeth the Table of the Declination of the fixed ſtarres, withall ſhewing at what tyme each of them comes into the ſouth, and how you ſhall knowe them.

The Twinnes.

GEMINI. The figure of the Twinnes ſtandeth right north frō the great Dogge, or *Canis major* in this manner, as it is heere figured, the north Head thereof cometh 40 minutes after the Dogge into the ſouth, his declination is two-and-thirtie degrees, & fortie minutes northward from the Line.

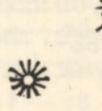


The ſouth or loweſt Head thereof cometh 54 minutes after the great Dogge into the ſouth, and is declined northward 28 degrees, & 54 min.

The cleareſt in the Foote commeth a quarter of an houre before the great Dogge into the ſouth, his declination is ſixteene degrees and 40 minutes northward.

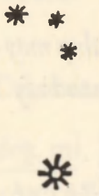
Canis minor, or the Litle Dogge, called Canicula. Procyon.

Canicula. Procyon. The litle Dogge called *Canicula*, hath three Starres in forme as they are heere figured: the cleareſt of them, commeth 50 minutes after the great Dogge into the ſouth, his declination is 6 degr. & 11 min. northward from the Line.



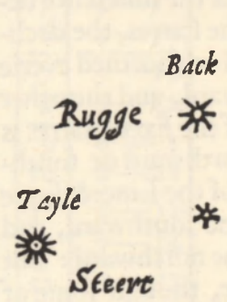
The Water Snake, Hydra.

The Harte or the cleareſt of the Water-ſnake commeth after *Syrius* or the great Dogge two houres, & 40 minutes into the ſouth, his declination is ſouthward from the Line ſixe degrees, and nine-and-fiftie minutes, and sheweth it ſelf with ſuch ſmale Starres as are here figured, whereby he is eaſily knowne. Cor Hydra.



The Lyon.

LEO. The Lyon hath foure faire Starres fit for uſe, and sheweth it ſelf with others as is here figured, the formoſt and firſt whereof is named *Regulus, Baſiliſcus*, or the Harte of the Lyon, which cōmeth three houres, & 30 minutes after the great Dog into the ſouth his declination is 13 degrees, and 51 minutes northward from the Line. Cor Leonis. Regulus.



The ſecond or the Neck of the Lyon commeth three houres thirtie minutes after the great Dogge into the ſouth, and is declyned northward from the Line one-and-twentie degrees, and 48 minutes.

The Backe of the Lyon commeth after the great Dogge into the ſouth, 4 houres 26 minutes: his declination is northward from the Line, 22 degrees and 40 minutes.

The Tayle of the Lyon cōmeth foure houres after the great Dogge into the ſouth, his declination is 16 degrees, and 46 minutes northward from the Line. Cauda Leonis.

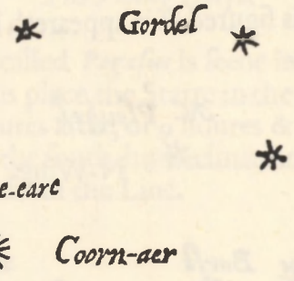
Virgo, or the Maide.

VIRGO. After that followeth *Virgo*, wherof the moſt principal & cleareſt Starres shewe themſelves as they are here figured: the Virgins Gerdle commeth into the ſouth ſix houres and 12 minutes after the Cingulum Virginis.

after the great Dogge, his declination is five degrees, and 34 minutes northward from the Line.

That in the north Wing is called *Vindemiatrix*, & commeth sixe howres and sixteene minutes after the great Dogge into the south, his declination is northward from the Line 13 deg. 5 min.



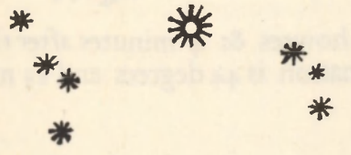


Spica-Virginis. The Corne-eare *Spica Virginis*, commeth 6 houres and 36 minutes after the great Dogge into the south, his declination is 9 degrees and 4 minutes southward from the Line.

Bootes, the Clowne.

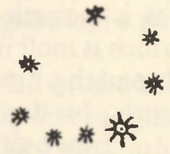
Seaven houres 30 minutes after *Syrius*, the cleerest Starre of the Clowne *Bootes* commeth into the south, and standeth between his thighes, in forme with some others as in this figure is declared, and is called *Arcturus*, his declination is one-and-twentie degrees, and sixteene minutes northward.

Arcturus.



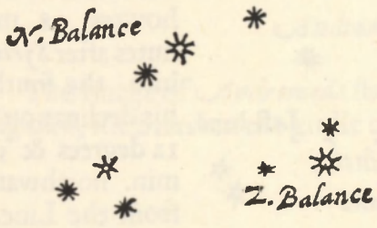
North Crowne.

After *Bootes* followeth the North Crowne, having the forme almost of a circle as it is here set down in figure, & by Sea-faring men is called the Hospital, & when in clear weather there are certaine cleare Starres seen therein, they are called Sicke-men: the greatest & clearest of them commeth 8 houres & 48 minutes after *Canis major* into the south, his declinatiō is 28 deg. & 4 min. northward from the Line. Corona Ariadne



The Waightes, Libra.

The Ballance or Waightes followe the signe of *Virgo* as it is here figured. LIBRA.



The South-ballance cōmeth 8 houres after the great Dog into the south, his declinatiō is southward frō the Line 14 degreees & 20 minutes.

The North-ballance commeth 8 houres 48 minutes after the great Dogge into the south, his declination is 7 degrees 52 minutes southward from the Line.

The Scorpion, Scorpius.

After that followeth the Scorpiō as this figure sheweth: the Starre most northward in the Fore-head cōmeth 9 houres 15 min. after the great Dog into the south, his declination is eighteene degrees and fortie minutes southward. SCORPIVS.

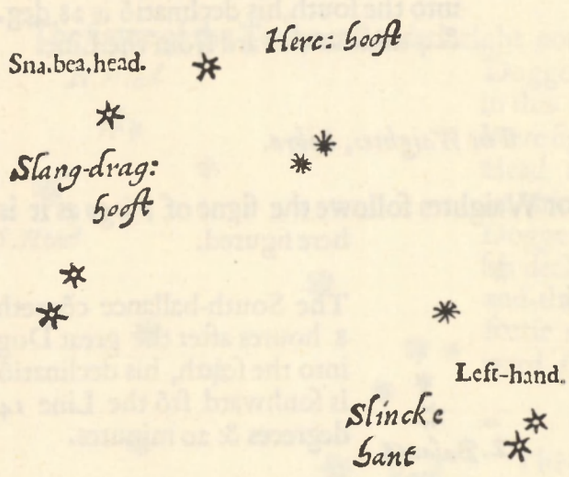


The Hart of the Scorpion called *Antares* commeth nine houres eight-and-thirtie minutes after *Syrius* into the south: his declination is five-and-twentie degrees, & seven-and-twentie minutes southward from the Line. Cor Scorpii. Antares

The Snake-

The Snake bearer and Hercules.

Serpentarius. THe Snake-bearer showeth himself as it apeareth in this figure: the formoſt ſtarre and that which is moſt north of the two that ſtand on the left hand cometh 9 howres 25 minutes after the great Dogge into the South, his declination is two degrees & eight and thirtie minutes ſouthward from the Line.

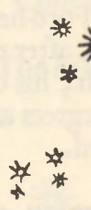


The head of the Snake-bearer commeth tenne howres 48 minutes after *Syrius* into the ſouth, his declination is 12 degrees & 56 min. northward from the Line.

Caput Herculis Hercules head ſtanding by the Snake-bearers head, cometh 20 minutes before it into the ſouth, and is declined northward fourteen degrees & 55 minutes.

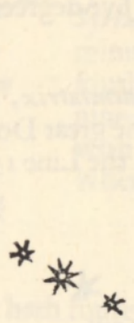
Lyra.

Vultur cadens. After that followeth *Lyra*, as you ſee it figured in this place, the greateſt with 2 ſmale ones by it, by Seafaring men is called the Threeſtale, the lighteſt and cleareſt Starre of *Lyra* cometh 11 howres and 55 minutes after the great Dogge, or (which is all one) 12 howres and 5 minutes before him into the ſouth, his declination is eight and thirtie degrees and eight and twentie minutes northward from the Line.



The Eagle.

The Eagle sheweth himself as this figure declareth: the clearest of them, that is the middlemoſt of the three cometh therteen houres after the great Dogge, or eleven howres before him into the ſouth, his declination is ſeven degrees five and fiftie minutes northward from the Line. Vultur volans. Aquila.



The Swanne.

The Swanne is figured as it appeareth hereby, the ſtarre that is the moſt north of the two in the breſt cometh 13 howres, and 40 minutes after, or tenne howres and 20 minutes before the great Dog into the ſouth, and is declined northward frō the Line nine-and-thirtie degrees and two minutes. The ſtarre that is moſt ſouth of the two in the breſt is a new ſtarre, & was firſt ſeen in Anno 1600. Cygnus.



The north Wing cometh 13 howres & 4 minutes after the Dogge into the ſouth, his declination is 44 degrees and 13 minutes northward.

The ſouth Wing cometh 14 howres after the great Dogge into the ſouth, his declination is 32 degr. & 32 min. northward.

The lighteſt and cleareſt of the Swanne, which ſtandeth in the tayle cometh 14 howres after the great Dogg, or 10 howres before Cauda Cygni.

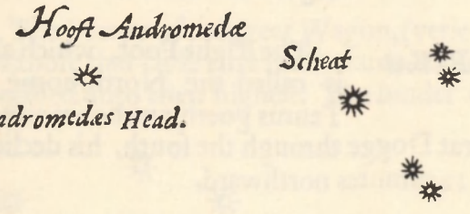
before him into the ſouth, his declination is 43 degrees and 55 minutes, northward from the Line.

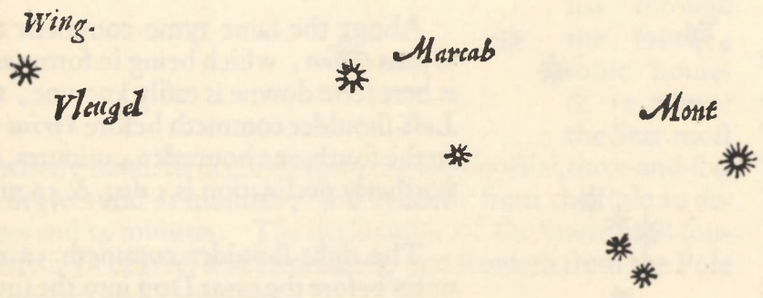
Capricornus.

Capricornus. The Starre moſt ſoutherly and cleareſt of the two that haue moſt light in the Hornes of *Capricornus*, ſtanding as is here shewed in the figure, commeth 13 houres & 30 minutes after the great Dog into the ſouth, his declination is ſouthward from the Line 15 degrees & 56 minutes.

The Flying Horſe.

Pegaſus. The Flying-horſe called *Pegaſus* is ſeene in the Heavens as it ſtandeth figured in this place, the Starre in the mouth commeth 14 houres and 56 minutes after, or 9 houres & 4 minutes before the great Dogge into the ſouth: his declination is 8 degrees, and 7 minutes northward from the Line.





Scheat. That which ſtandeth upō the right Hippe, or the right Legge called *Scheat*, commeth 16 houres, & 16 minutes after the great Dogge, or 7 houres and 44 minutes before him into the ſouth, his declinatiō is 26 deg. leſſe one min. northward from the Line.

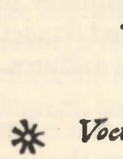
Even at the ſame tyme alſo the firſt or formoſt Starre in the Wing called *Marcab*, commeth into the ſouth: his declination is 13 degrees and 8 minutes northward. Marcab.

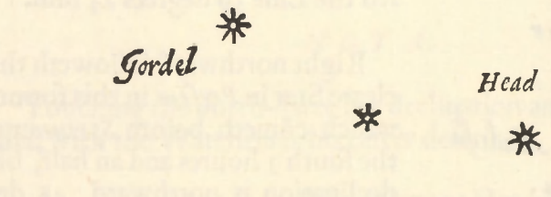
The laſt in the Wing of *Pegaſus* commeth 16 houres and 44 minutes after the great Dogge, or 7 houres and 16 minutes before it into the ſouth: his declination is 13 degrees and 1 minute northward from the Line.

The Head of Andromeda. Andromedaes Head with Pegaſus ſtarres making a great quadrangle or ſquare, (whereby it is eaſie to be knowne) commeth after the great Dogge into the ſouth, 17 houres and 24 minutes, or 6 houres & 36 minutes before him: his declination is 26 degrees, and 57 minutes northward from the Line.

Andromeda.

Andromeda. The Image of *Andromeda* ſtandeth in the Heavens as is here figured, the Starre in the girdle cōmeth before the great Dogge into the ſouth 5 houres & 40 minutes, it is declined northward 33 degrees & 35 minutes.





That in the ſouth foot commeth 4 houres 48 minutes before the great Dogg into the ſouth: his declination is fortie degrees & ſixe-and-twentie minutes northward from the Line.

Fomohant. The Starre called *Fomahant* ſtandeth a great diſtance full ſouth from the Flying-horſe, in the uttermoſt part of the water running from Aquarius: it is a great and a cleare Starre, & commeth 16 houres and 6 minutes after *Syrius*, or ſeven houres and 44 minutes before into the ſouth: his declination is 31 degrees and 36 minutes ſouthward from the Line.

Cætus, the Whale.

Cætus.

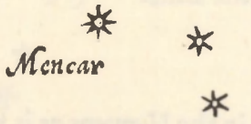


After that followeth the Whale, which hath two faire Starres in the Tayle, as here in the figure is to be ſeen. The Starre moſt northerly of them cõmeth before the great Dogge into the ſouth 6 houres & 28 min. his declination is 10 degrees, & 28 minutes ſouthward from the Line.



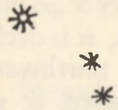
24 min. after that cõmeth the Starr that is moſt ſouthward into the ſouth, his declination is ſouthward from the Line 20 deg. & 12 minutes.

Menkar.



The cleareſt in the mouth called *Mencar*, sheweth it ſelf with 2 others in this forme: his declination is northward from the Line 2 deg. & 30 min.

ARIES.



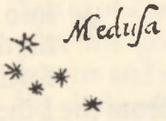
In the Fore-head of *Aries* or the Ram, there ſtandeth a cleare Starre, shyning with that in the Horne, in forme as this figure declareth, and commeth 4 houres 43 minutes before the great Dogge into the ſouth and ſtandeth northward from the Line 21 degr. & 26 minutes.

Caput Meduſæ.



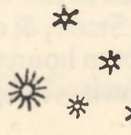
Somewhat northerly followeth Meduſaes Head, as it is here figured, the cleareſt Starre of them commeth before the great Dogge into the ſouth 3 houres & 46 minutes, & ſtandeth northward frõ the Line 39 degrees 24 min.

Perſeus.



Right northward followeth the cleare Star in *Perſeus* in this forme, which cõmeth before *Syrius* into the ſouth 3 houres and an half, his declination is northward 48 degrees and 24 minutes.

TAVRVS.



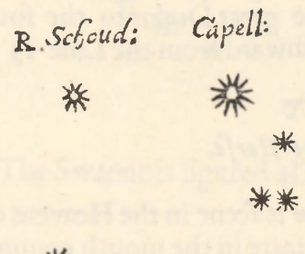
After that followeth the Bull, in the Head thereof ſtand ſome Starres like unto a Bee-hive lying aſide, the greateſt, brighteſt, and moſt eaſterly Starre called the Bulles Eye, *Aldebaran*, or *Oculus Tauri*, commeth two houres and fourteene minutes before the great Dogge into the ſouth, his declination is 15 deg. & 39 minutes northward from the Line.

Auriga, Erichthonius.

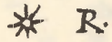
Auriga.

The Image of *Auriga* or the Wagon-man, ſheweth it ſelf a litle after Taurus in the ſouth, in forme as it ſtandeth heere, the greateſt and cleareſt Starre called *Hircus* or *Capella*, commeth one houre, and 40 minutes before the great Dogge into the ſouth, his declination is 45 degrees & 31 minutes northward from the Line.

Capella.



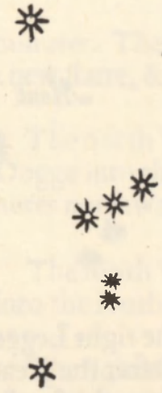
The right Shoulder goeth ſeven-and-fiftie minutes before the great Dogge into the ſouth, and is declined northward 44 degrees and fiftie minutes.



The Right Foot, which alſo is called the North-horne of Taurus goeth one houre and 22 minutes before the great Dogge through the ſouth, his declination is 28 degrees and 12 minutes northward.

The Gyant.

Orion.



About the ſame tyme commeth the Gyant *Orion*, which being in forme as it is here ſette downe is eaſily knowne, the Left-ſhoulder commeth before *Syrius* into the ſouth, one houre & 24 minutes, his northerly declination is 5 deg. & 56 min.

The right-ſhoulder commeth 58 minutes before the great Dog into the ſouth and hath 7 degrees and 16 minutes northerly declination.

Regel.



The great & cleare Starre in the Left-foot called *Regel* goeth one houre 32 minutes

nutes before the great Dogge through the ſouth: his declination is ſouthward from the Line 8 degrees and 42 minutes.

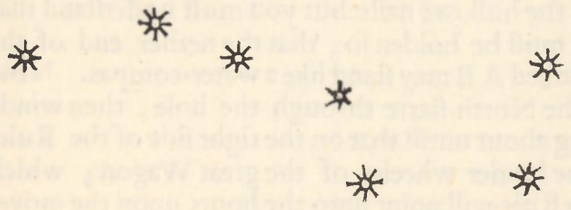
Three Kinges. The firſt of the three Starres in the Girdle, which are called the three Kinges, goeth one houre and 16 minutes before *Syrius* through the ſouth, his declination is 39 minutes ſouthward from the Line.

Foure minutes after that commeth the ſecond or middlemoſt into the ſouth, his ſoutherly declination is juſt a degr. & an half.

Nine minutes after the firſt commeth the third or the laſt of the three Kinges into the ſouth, his declination is ſouthward from the Line two degrees and 12 minutes. Theſe three Kinges ſtand alwayes and appeare a litle above the great Dogge, on the one ſide, whereby they are well to be knowne.

Heere after followe ſome Starres which ſhowe themſelves in the north, & therefore by ſome are called North-ſtarres.

Vrſa major The Starres of the great Wagon, (verie neceſſarie & fitt ſtarres for thoſe that ſayle farre ſouthward) come in the tyme hereafter ſpecified unto their higheſt. The hinder wheeles come into the north at the higheſt, after that *Syrius*, or the great Dogge is paſſed through the ſouth 4 foure houres & 12 minut: the Star moſt northerly ſtandeth declined from the Equinoctial, three-and-ſixtie degrees and 51 minutes, and ſtandeth from the Pole 26 degrees and 19 minutes. The declination of the Starre moſt ſoutherly is 58 degrees and 28 minutes, and ſtandeth from the Pole 31 degrees and 32 minutes.



The Starre moſt ſoutherly of the Fore-wheeles commeth into the north at the higheſt or right above the Pole five houres & five minutes after the great Dogge is paſt the ſouth, his declination five-and-fiftie degrees and 54 minutes northward from the Line, and ſtandeth from the Pole four-and-thirtie degrees and ſixe minutes.

The Fore-wheele that is moſt north followeth three-an-twẽtie minutes after the other to the higheſt, his declination is nine-and-fiftie degrees, and 12 minutes, and ſtandeth above the Pole 30 degrees and 48 minutes.

The Horſe next to the Wagon commeth at the higheſt into the north, ſix houres & eight minutes after that the great Dogge is paſt through the ſouth, and it is eight-and-fiftie degrees and ſeven minutes declined northward, & ſtandeth from the Pole 31 degrees and 53 minutes.

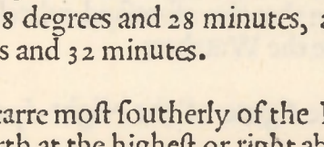
The middlemoſt Horſe cõmeth half an houre after the other to the higheſt: his declination is juſt ſeven-and fiftie degrees. It ſtandeth therefore 33 degrees from the Pole.

The formoſt or uttermoſt Horſe of the Wagon commeth to the higheſt 7 houres and 4 minutes after that *Syrius* is gone through the ſouth: his declination is one-and-fiftie degrees, and nineteene minutes, and ſtandeth from the Pole eight-and-thirtie degrees, and one-and-fortie minutes.

The middlemoſt and the cleareſt of the Wayters is declined northward five-and-ſeventie degrees and one-and-fiftie minutes, and ſtandeth from the Pole 14 degrees and 9 minutes.

NOTA.

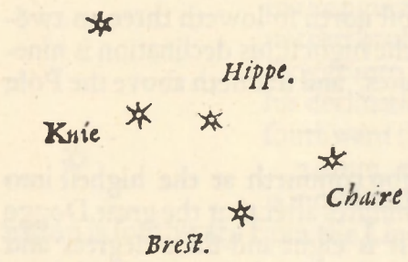
Touching the north-ſtarre her declination and how it is to be uſed with the Watchers is hereafter deſcribed.



Caput Dra. conis- The Dragons Head is formed as this figure declareth: the Starre moſt ſoutherly that is the cleareſt, cõmeth at the higheſt into the north 11 houres & 5 minutes after that *Syrius* is paſt ſouthward, his declination is 51 degrees, & 37 min. northward, and ſtandeth from the Pole 38 degrees and 23 minutes.

Cassiopea.

Cassiopea.



The Image of *Cassiopea* sheweth it self beneath the Pole in the north, as in the figure it is shewed: the first star standing in the Chaire commeth into the north, at the highest, 6 houres and 36 minutes before the great Dogg, his declination is even 57 degrees northward, and therefore standeth from the Pole 33 degrees.

Schedir. Half an houre after that followeth the Brest called *Schedir*, his declination is 54 degrees,& 24 minutes, it standeth therefore from the Pole,35 degrees and 36 minutes.

Fifteene minutes after that followeth the Starre upon the Hippe, which is declined 58 degrees and 36 minutes, so that it standeth from the Pole, 31 degrees, and 24 minutes.

Seven-aud-twentie minutes later followeth the Starre upon the Knee: his declination is 58 degrees, & 10 minutes, and standeth from the Pole 31 degrees and 50 minutes.

NOTA.

You must understand that whensoever these aforsayd North-starres come into the north at the highest above the Pole: that just 12 houres after, they come at the lowest right under it.

CHAP. VIII.

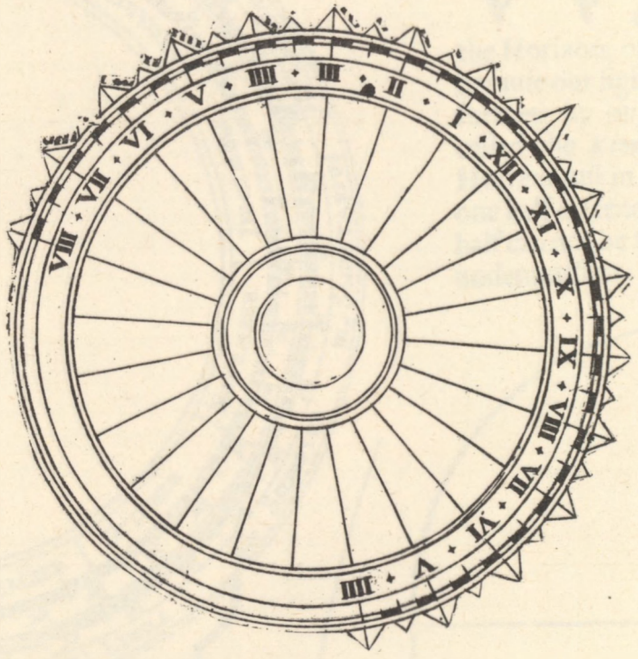
How to finde the houres of the night at all tymes of the Yeere.

IN the Chapter before it is shewed, how a man at all tymes of the yeere shall perfectly know at what houre the Starres, (as wel by day as by night) come into the south or the north Now it is necessarie with all to knowe, how a man by night shal knowe and finde out what houre it is. Whereunto such an Instrument as hereafter is set downe is verie requisite, whereof you may make the like, or els you may prepare this for the purpose in manner hereafter following: the undermost and greatest Rondel and peece whereon the twelve moneths are marked, you must cleave upon a plaine round bord, so that (as in this Figure) the first of September be set right under, and the 27 of Februarie right over, and right in the center or middle, make a round hole, wherin you may put a reasonable wodden pinne or coper nayle, which within must be hollowe like a pipe. The other Peece whereon the houres are marked you must cleave upon another board, or peece of pastboard, and in the middle thereof also make another hole, which may goe over the nayle, & winde about it. Lastly make a Ruler of woode or coper (as the figure sheweth you) with a hole also, that it may winde about the hollow nayle, but you must looke that the one end of the Rule doth reach or stand right upon the middle of the hole of the hollowe nayle, that is, upon the center of the whole Instrument. The Instrument being thus prepared, if you desire to knowe what houre it is of the night by the Starres, then set the tooth that pointeth out the twelfth houre in the moveable Rõdel where the houres stand, right upon the day of the yeere whereof you desire to knowe the houre,& hold it fast standing in that sorte: after that lift the whole Instrument uppe on high & bowe the uppermost part thereof so much towards you, untill you may see the north Starre through the hollowe naile: but you must understand that the Instrument must be holden so, that the nether end of the foot thereof marked A B may stand like a water-compas. Now when you see the North-starre through the hole, then winde the Rule so long about untill that on the right side of the Rule, you may see the hinder wheeles of the great Wagon; which donne, then the Rule will point unto the houre upon the moveable Rondell what tyme of the night it is. But if it chanceth, that by any lett or hinderance you cannot see the great Wagon, then in steed thereof take the middlemost and lightest of the Watchers, and do in all pointes as aforesayd: but then you must knowe that it will be foure houres and 15 minutes later then the Rule will shew it, by reason that the aforesayd wheeles of the Wagon goe so much before the Watchers.

Here after followeth the figure of the Night-dyall, or *Noctur!abium*

Of the

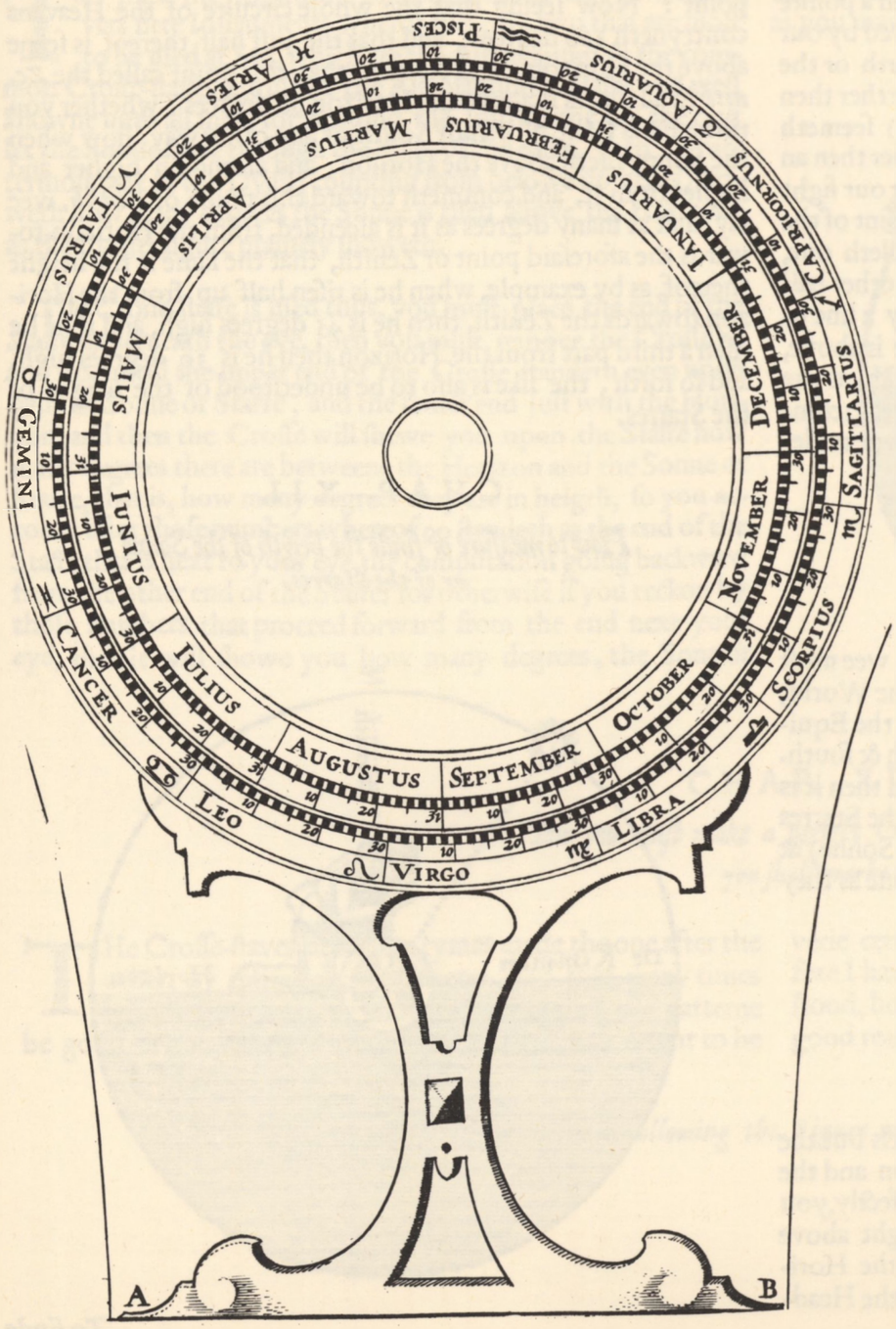
De achterſte wielen vanden grooten Wagen





Instructions for assembling the volvelle at leaf C 1 :

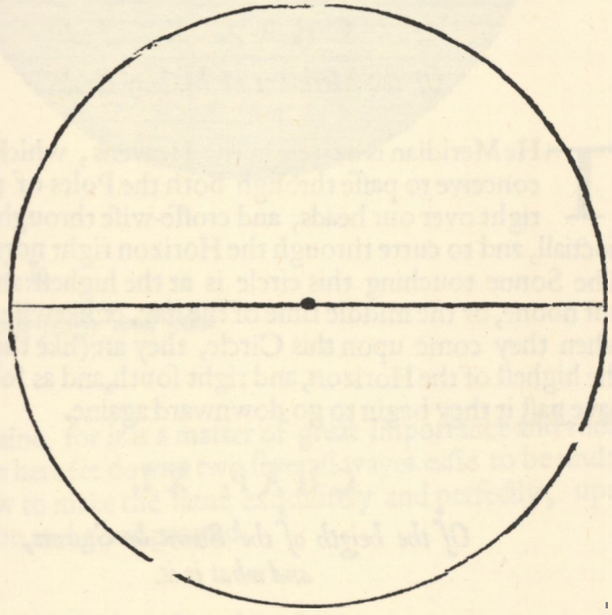
1. Cut out component parts and pierce at centre
2. Assemble in the following order:
   a. the circular segment showing the months
   b. the smaller circular segment showing the hours
   c. the pointer
3. Fasten by piece of twine through the centre of the parts to leaf C 1
   The parts should be able to rotate independently by fingertip pressure



CHAP. IX.

Of the Horizon, or the Circle that boundeth the ſight.

WHere the Heavens and the Earth, or the Waters ſeeme in our ſight to meete together, that is called the Horizon, or the Circle-boũding-the-ſight, becauſe our ſight endeth there, and can goe no further: by our Netherland Sea-farers it is alſo called the *Kimmen*. This Circle devideth the Heavens juſt in two even partes, ſo that juſt the one half is ſeene by us here above, and the other half can not be ſeene by us, becauſe it is hidden underneath us: which happeneth in this man-



ner. The Earth, (as in the firſt Chapter is shewed) ſtandeth as a Center in the middle of the Heavens, the which by reaſon of the unmeaſurable quantitie or largenes thereof, is ſo farre ſeparated from th Earth, that the whole thicknes of the

of the Earth in reſpect of the Heavens, is no more then a pointe or prick, or at leaſt ſo litle that it cannot be perceived by our ſight, and that which by our ſight, along upon the Earth or the Water we can comprehend (which can not reach further then about three Dutch myles, that is tenne Engliſh myles) ſeemeth in our eyes by reaſon the ſpace is ſo litle, to be no other then an halfe globe falling perpendicular upon a plaine,ſo that our ſight falleth in the Heaven, as if we ſtood in the middle point of the World, and ſawe right compaſſe-wiſe, whereby it falleth out, that juſt the half of the Heavens is ſeen by us, and the other half is not ſeene by us, in like manner as if a man ſhould lay a line over the center of a circle, then the one half of the circle is above, and the other half is juſt under. All the heavenly lights, as the Sonne,Moone,and Starres (by the turning of the Heavens) comming above the Horizon are ſeen by us,and going downe under it, goe out of our ſight.

CHAP. X.

Of the Meridian or Midday-circle.

THe Meridian is a circle in the Heavens, which wee muſt conceive to paſſe through both the Poles of the World, right over our heads, and croſſe-wiſe through the Equinoctiall, and to cutte through the Horizon right north & ſouth. The Sonne touching this circle is at the higheſt: and then it is juſt noone, or the middle time of the day, & likewiſe the Starres when they come upon this Circle, they are (like the Sonne) at the higheſt of the Horizon, and right ſouth,and as ſoone as they have paſt it they begin to go downward againe.

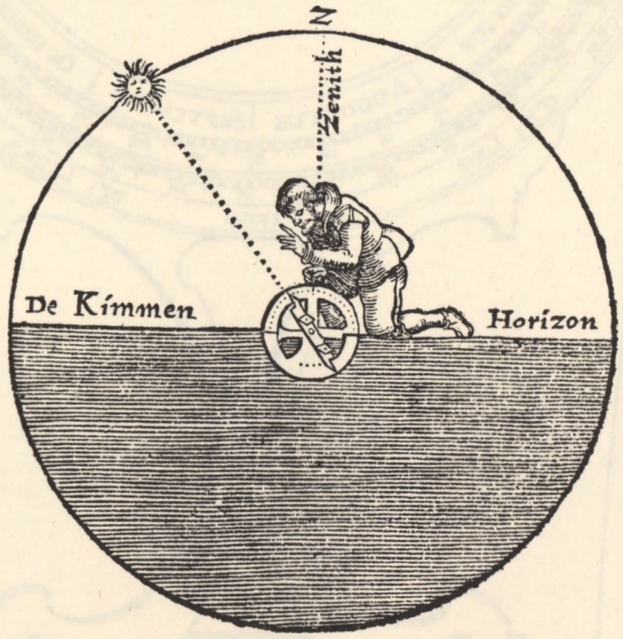
CHAP. XI.

Of the heigth of the Sonne or Starres, and what it is.

THe Heigth of the Snne or Starres is nothing els but the diſtance or ſpace, that is betweene the Horizon and the Sonne or Starr it ſelf: which to underſtand perfectly,you muſt marke, that we ſuppoſe a point or prick to be right above our heads in the Heavens, that is equally diſtant from the Horizon in all places, which point is called the *Zenith*, or the Head-point : Now ſeeing that the whole circuite of the Heavens conteyneth 360 degrees, and that the juſt half thereof is ſeene above the Horizon, it is certaine that this point called the *Zenith* in all places is above the Horizon 90 degrees, whether you turne Eaſt, Weſt,North,or South,or any other way: now when the Sonne riſeth above the Horiſon, and aſcendeth higher and higher from it, and commeth toward this point or *Zenith*, wee ſay that as many degrees as it is aſcended, from the Horizon,towards the aforeſaid point or Zenith, that the ſame is the height thereof, as by example, when he is riſen half up from the Horizon towards the Zenith, then he is 45 degrees high, and if he be riſen a third part from the Horizon then he is 30 degrees high, and ſo forth, the like is alſo to be underſtood of the height of the Starres.

CHAP. XII.

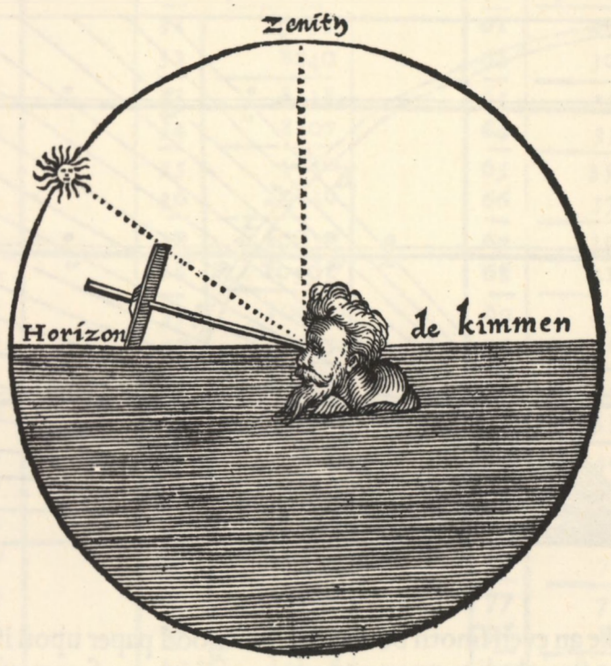
How to meaſure or finde the heigth of the Sonne or of the Starres.



To finde

TO finde the height, the Mathematicians have deviſed divers fitte Inſtruments, wherof there are two that are moſt to be uſed at Sea, which are the Aſtrolabium, & the common Croſſe-ſtaffe, the uſe of the Aſtrolabium is plaine and well knowne unto all men, for holding the Inſtrument by the ring let the Sonne ſhine through the holes of the eares, then the uttermoſt part of the Dyall (counting from belowe upwards) ſhoweth how many degrees the Sonne is riſen above the Horizon: as the former figure plainely ſhoweth.

The Croſſe-ſtaffe is uſed thus, you muſt place the end of the Staffe underneath the eye, then you muſt remove the Croſſe to and fro, untill the upper end of the Croſſe ſtandeth even upon half the Sonne or Starre, and the under end juſt with the Horizon, and then the Croſſe will ſhewe you upon the Staffe how many degrees there are betweene the Horizon and the Sonne or Starre, that is, how many degrees they are in heigth, ſo you account after thoſe numbers whereof 90 ſtandeth at the end of the Staffe that is next to your eye, the computation going backward from the other end of the Staffe: for otherwiſe if you reckon by thoſe numbers that proceed forward from the end next your eye, then it will ſhowe you how many degrees, the Sone or Starre ſtandeth from the Zenith, or Head-point to the Horizon, as you may ſee by the figure enſeuing.



CHAP. XIII.

How you muſt make a perfect Croſſe-ſtaffe and how you ſhall marke it.

THe Croſſe-ſtaves are often tymes made the one after the other, by imitation, or patterns, and that many times without judgment or knowledge whether the patterne be good or not, whereof notwithſtanding a man ought to be verie certaine, for it is a matter of great importance and therefore I have here ſet downe two ſeverall wayes eaſie to be underſtood, how to make the ſame exquiſitely and perfectly, upon good reaſon and good ground.

Behold in the page following the Figure with the deſcription thereof.

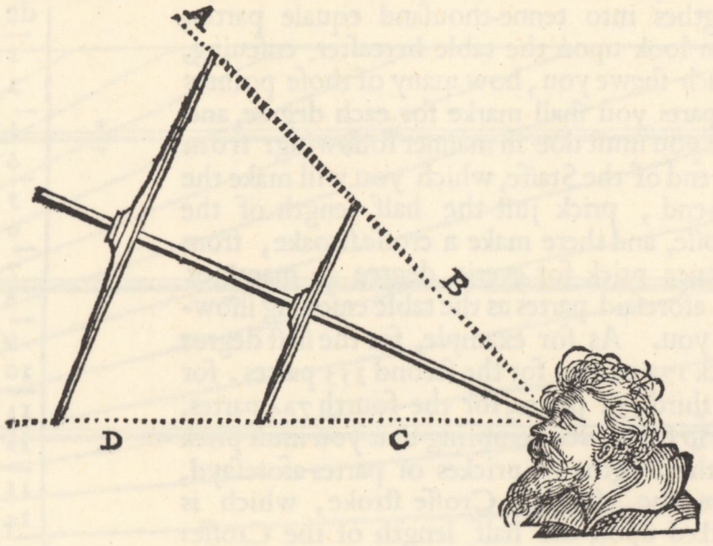
Make

CHAP. XIIII.

Of the cutting of the Croſſe-ſtaffe and how a man may help and prevent all the defects of the ſtaffe.

THere being a Croſſe-ſtaffe well and exquiſitely framed, according to the doctrine of the former chapter: it falleth out that certayne ignorant perſons cutt off a peece from the eye-end of the Staffe, about a degree, or a degree & an half, or two degrees long, and can give no other reaſon of that their doing but that it muſt be ſo, and that they have experience that it ought ſo to be. But queſtionleſſe ſeeing they prove by their experience that they do not finde their meaſuring with uncutt Staves perfect and right as it ſhould be, the fault thereof is not in the Croſſe-ſtaves uncutt, but in themſelves, for that they knowe not how to uſe the Staffe aright, nor underſtand not the true ground thereof. Others that will ſeeme wiſer then the former, give a reaſon thereof: to wit, that the Staffe muſt be cutte, becauſe of the hollownes of the eye, for that otherwiſe the Staff cannot come to ſtand ſo that the end thereof be conjoyned to the middle point or center of the eye or ſight: this reaſon hath ſome ſhowe of truth, but notwithſtanding is alike untrue & erroneus: for the Staffe may verie well be ſett, either on the innermoſt or outtermoſt corner of the eye, ſo that the ſight of the eye may fall to anſwer juſt to the end of the Staffe; that this is truth we will prove with good reaſon as followeth.

Sette the great Croſſe with the middlemoſt upon like degrees: to witte each upon ſuch as for that purpoſe are marked upon the Staffe; then applie the Staffe (the Croſſes ſo firmely remayning) unto your eye in ſuch manner, (whether it be on the innermoſt or uttermoſt corner it is all one) as that you diſcerne the endes of the Croſſes both above & beneath juſt over each other, in forme as this figure ſpecifieth. If then you drawe ſtraight lines by the endes of the Croſſes A B and D C they ſhall meete juſt in the middle point of your ſight. And inaſmuch as the Croſſes are placed upon like degrees, the lines aforeſaid ſhall meet juſt upon the end of the Staffe; ſeeing that that end of the Staffe repreſenteth the center of the quadrant whereby your ſtaffe is marked.



So then the foreſaid lines or endes of the Croſſes anſwer both juſt upon the ende of the Staffe, and alſo upon the ſight: ſo that it followeth neceſſarily and appeareth evidently, that the ende of the Staffe & the ſight meet in one; or to ſpeak properly, both of them ſtand juſt in the center of the quadrant.

Therefore whenſoever with the Croſſe-ſtaffe you wil take the height of the Sonne or of any Starre, then obſerve diligently: how many degrees it is elevated above the Horizon: and place the two Croſſes upon ſo many degrees: then applie the Staffe to your eye in ſuch manner as that you may ſee the endes of the Croſſes juſt over each other, according as is taught before: in ſuch forme then as you finde the Staffe to ſtand to your eye, ſhall you place the Staffe (taking away one of the Croſſes) when you deſire to meaſure according to ſuch height: this is a ſure rule which will never faile, neither can you poſſibly miſſe if you follow it.

CHAP. XV.

Of the breadth of the Landes.

THe beadth of Landes or Countreys is no other, then the diſtance or widenes that is betweene the ſaid Landes and the Equinoctiall Line, which is reckoned in a double manner

manner, that is northerly and ſoutherly, to the number of 90. Such Lands or Countries as lye right under the Equinoctiall Line have no breadth: but ſuch as lye northward from it, have northerly breadth, and they that lye ſoutherly, have ſoutherly breadth.

Example.

The Iland of *S. Thomas*, in the River *Gaban* in Guinea lyeth right under the Line, and therefore hath no breadth, neither northerly nor ſoutherly.

The *Cap S. Vincent* in Spaine lyeth northward from the Line 37 degrees, and therefore the northern breadth of *Cap S. Vincent* is 37 degrees.

The point of *Lezaret* in England lyeth northward from the Line 50 degrees, therefore the north breadth of *Lezaret* is 50 degrees.

The *Cap de bona Eſperance* lyeth ſouthward from the Line 34½ degrees, therefore the ſoutherly breadth of *Cap de bona Eſperance* is 34½ degrees. In like manner you muſt underſtand and reckon other Landes, Countryes and Townes.

CHAP. XVI.

Of the height of Landes and Countries, and what it is.

THe height and breadth of Landes & Countries although that in them ſelves they are divers thinges, yet they are alwaies one like unto the other: Any Countrie being ſituated under the breadth of 30 degrees, lyeth alſo in the heigth 30 degrees, which by Sea-faring men is taken without difference, but what it is, or what it hath in it or ſignifieth fewe men underſtand, and yet it behoveth a Sea-faring man, that ſeeketh for the height of any Countries, to be expert therein, for that no man without it can well underſtand how any Inſtrument (whether it be Aſtralabium, or Croſſe-ſtaffe, no nor the Sea-compaſſe it ſelf) ſhould wel be uſed: for that theſe things are al built upon one foundation, & like a chaine hang one upon the other. But it may be that ſome man will object and ſay, that there are many Pilots which do not well underſtand ſuch things, and yet are able to goe directly unto divers places, whither they deſire to ſayle: which I confeſſe to be true: but tell me, how many times are they deceived? how manie times are they in great doubt and fear? and how ſeldome dare they truſt unto the height which they have taken or reckoned, whē they are to ſeek out any countrie there by? how often tymes hath it heretofore happened, that for want of ſuch knowledge, ſhips have ſayled out of their way either behinde England or upon France, which thought to paſſe through the chanell between England and France, and that in ſo ſhort and well knowne, and common ſayled water, as to come out of Spaine or France? what would ſuch men doe, if they ſhould paſſe the Line, and were to ſeeke or finde out certaine Ilands? or that after they had ſayled up and downe the Seaes certaine moneths together, ſhould then ſeek out for Lande? but I am of this opinion which I knowe everie man will grant, that it is much better and more aſſured to goe a way being guided by his owne eye-ſight, then like a blinde man to be led by another, and knoweth not whether that other ſeeth well or not: but to come againe to our matter, touching the height of Countries, it is no other but the height of the Pole above the Horizon, that is to ſay, ſo many degrees as the Pole in any Land is lifted up above the Horizō, ſo much is the height of ſuch a Countrie: and this height agreeth alwaies with the breadth as aforeſaid. In the 10 chapter it is ſhewed, that whereſoever a man goeth or turneth, alwaies the one half of the Heavens ſheweth it ſelf above the Horizon and the other half is hidden from us: in the firſt Chapter it is ſaid that the two Poles ſtand right one againſt the other, whereby it is evidently to be underſtood, that whenſoever a man being upon the earth is right under the Equinoctiall Line, that then both the Poles of the World, lye right in the Horizon, one in the ſouth and the other in the north: & as much as a man travaileth northward from the Equinoctiall Line, and winneth breadth northerly, ſo much the north Pole riſeth above the Horizon: and the ſouth Pole contrarie wiſe goeth ſo much under: & on the contrarie, as many degrees as a man goeth from the Equinoctiall Line ſouthward, and winneth breadth ſouthward, ſo much the ſouth Pole riſeth above the Horizon, and the north Pole goeth ſo much under: which may eaſily be underſtood by the Figure hereafter following.

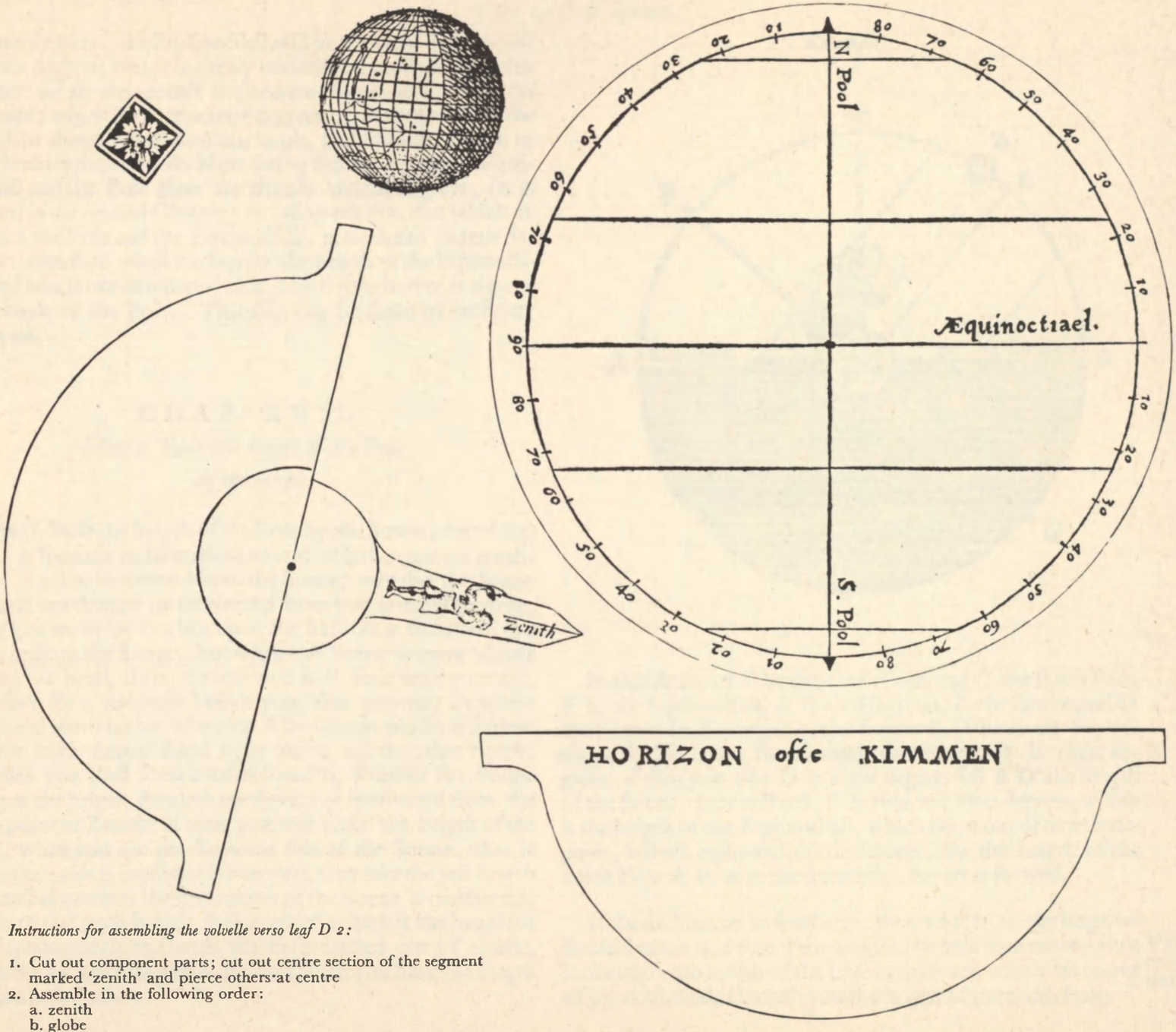
In this figure the undermoſt rondel that turneth about, ſignifieth the Heavens, N the north pole, S the ſouth Pole, Æ the Equinoctiall, the uppermoſt edge of the half moveable rundle, ſignifieth the Horizon, the one half of the Heavens is above it, and the other half juſt under it, the round bale in the middle ſignifieth the Earth, whereon you ſee a litle man, that may be turned upon the Earth ſouthward and northward.

Now perfectly to marke and perceive that which is before written, that is to knowe what heigth is, & that it alwaies agreeth with the breadth, bring the litle man upon the Earth-globe right under the Equinoctiall, that is to ſay, that it have no breadth, neither northward nor ſouthward, then you ſhal ſee that both the Poles lye juſt with the Horizon, & that neither of them both are elevated above it, nor depreſſed under it: and with all you ſhall ſee that they that dwell under the Equinoctial have no heigth or elevation of the Pole, nor yet any breadth. But if you remove the man ſo much northward that he goeth tenne degrees upon the Earth, that is, that he commeth tenne degrees upon the north beadth, you ſhall ſee that the north-Pole ſhall be raiſed or elevated tenne degrees above the Horizon in the north, and the ſouth Pole ſhall goe tenne degrees under the Horizon: and if you remove the man upon the Earth more northerly, as thirtie, fortie, or fiftie degrees, the north Pole will alſo be ſo much elevated, and the ſouth Pole to the contrarie ſo much depreſſed under the Horizon: ſo that if you turne the man upon the Earth to ninetie degrees, then the north Pole alſo will be elevated ninetie degrees, that is the Pole wil ſtand right above his head, and the Equinoctiall will joyne with the Horizon in one circle: that which thus is ſaid of the Elevating of the north Pole, is alſo in the ſame manner to be underſtood of the ſouth Pole: for if likewiſe you move the man upon the Earth in the figure toward the ſouth, the ſouth Pole will be elevated above the Horizon, as much as the man in breadth goeth ſouthward, and the north Pole will goe ſo much under the Horizon.

One thing is herein to be noted, that as much as the Pole riſeth above the Horizon juſt ſo much the Equinoctiall goeth under it, and when the Pole goeth under the Equinoctiall riſeth againe in equall proportion.

But above all you muſt marke, that the number of the Poles elevation added to the heigth of the Equinoctiall alwayes make even 90 degrees, ſo that when the Pole is elevated thirtie degrees in the north, the Equinoctiall is elevated ſixtie degrees in the ſouth: but if the ſouth Pole be elevated above your Horizon

twentie



Instructions for assembling the volvelle verso leaf D 2:

1. Cut out component parts; cut out centre section of the segment marked 'zenith' and pierce others at centre
2. Assemble in the following order:
   a. zenith
   b. globe
   c. horizon
3. Pass piece of twine through the parts and fasten to verso of leaf D 2

twentie degrees, the Equinoctiall will be elevated in the north ſeventie degrees, which is clearly underſtood and ſhewed in this manner: we alwaies ſee half the heavens above the Horizon, (as aforeſaid) which is twice ninetie degrees, from the ſouth to the Zenith or the point juſt over our heads, and from the Zenith to the Horizon in the north. Now ſeeing that betweene the Equinoctiall and the Pole there are alwaies ninetie degrees, (as is ſhewed in the ſecond Chapter) it followeth that that which is beneath the Pole and the Equinoctiall, maketh alſo ninetie degrees: therefore when we knowe the heigth of the Equinoctiall, and take it out of ninetie, that which reſteth over is alwaies the heigth of the Pole. This alſo may be ſeene in the figure aforeſaid.

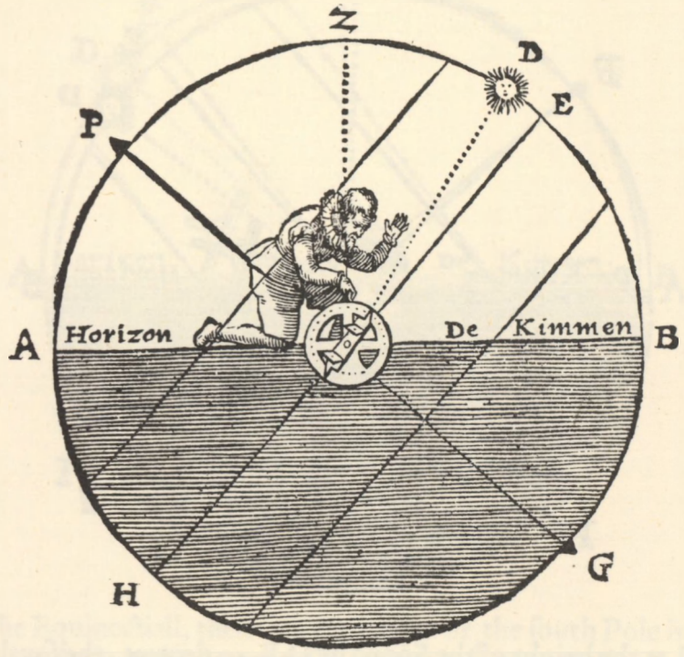
CHAP. XVII.

How to finde the heigth of the Pole by the Sonne.

TO finde the heigth of the Pole by the Sonne, one thing is ſpecially to be marked, to wit, whether you are northward or ſouthward from the Sonne, whether the Sonne ſtandeth northward or ſouthward from you is eaſily knowne, when you are in ſuch a place upon the Earth as is farre from the Line, or from the Sonne, but when the Sonne is neere almoſt above your head, then you can not well ſee it with your eye, therefore ſet a compaſſe before you, that you may ſee where north and ſouth is, then take your Aſtrolabium, and ſet it ſo that the one edge thereof ſtand right ſouth, and the other north, and then you ſhall ſee at a haires breadth, whether the Sonne being at the heigth, ſtandeth northward or ſouthward from the head-point or Zenith: if then you will ſeeke the heigth of the Pole, when you are on the nortn ſide of the Sonne, that is when the Sonn is ſouthward from you, then take the juſt heigth firſt, and as much as the declination of the Sonne is northward, take it out of your heigth & that which reſteth is the heigth of the Equinoctiall in the ſouth, which ſubtracted out of ninetie, (as in the former Chapter is declared) then you have the heigth of the north Pole.

With northerly declination.

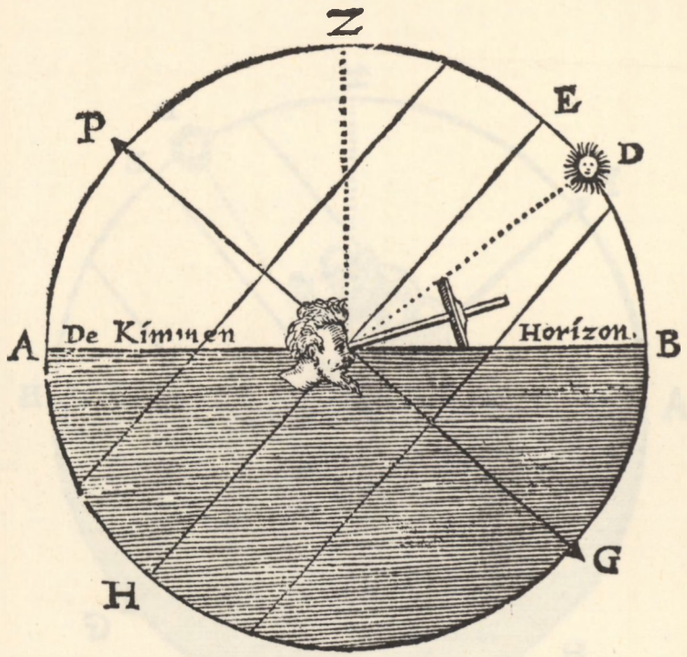
Example.



In this figure let P be the north Pole, and G the ſouth Pole, E H the Equinoctiall, A B the Horizon, Z the Zenith, and D the Sonne: let the heigth of the Sonne B D be ſixtie degrees above the Horizon: the northerly declination D E eight degrees: if then you take D E eight degrees frō B D the heigth of the Sonne, there will reſt B E two-and fiftie degrees, which is the heigth of the Equinoctiall, which taken out of ninetie degrees, reſteth eight-and-thirtie degrees, for the heigth of the north Pole A P, as in the ſixteenth Chapter is ſhewed.

If the declination be ſoutherly, then adde it to the heigth aforeſaid taken: and then if the addition be leſſe then ninetie, then looke upon the heigth of the Line in the ſouth which taken out of 90, as aforſaid, it leaveth you the heigth of the north Pole.

With ſoutherly declination.

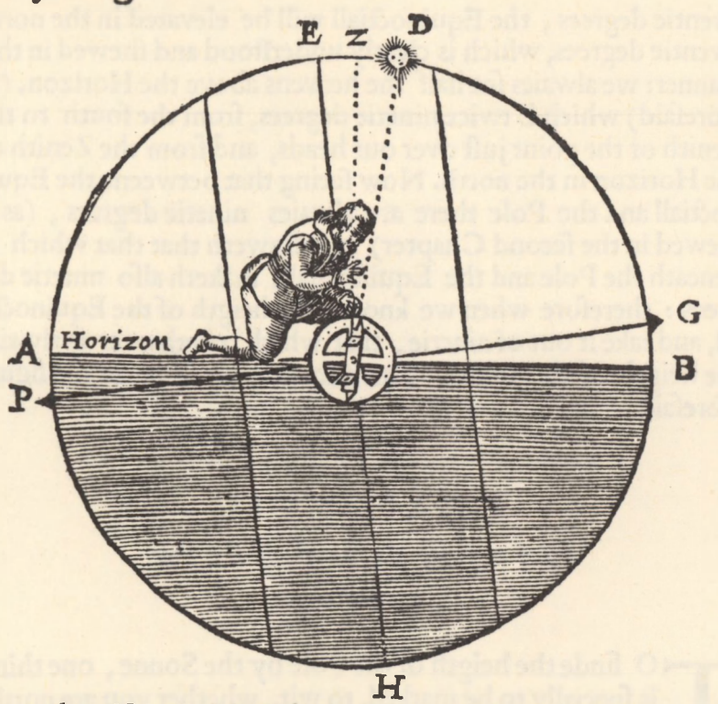


Let the height of the Sonne be D B 40 degrees, the ſouther-ly declination of the Sonne E D 20 degrees, then adde E D 20 degrees, to D B 40 degrees, it maketh E B 60 degrees, the height of the Equinoctiall, which ſubtracted from 90, as E G the diſtance betweene the Equinoctiall and the ſouth Pole, then there will reſt 30 for B G, that is, as much as the ſouth Pole is gone under the Horzion: as before is ſhewed, ſo much as the one Pole is under the Horizon, juſt ſo much is the other a-bove it, the north Pole P ſhall here be elevated 30 degrees.

But if the height of the Sonne being added unto the declina-tion, maketh more then 90 degrees, then you muſt underſtand, that the Equinoctiall is northward from your head juſt ſo much as the aforeſaid addition is more then 90 & ſo conſequently the ſouth Pole alſo ſhall be ſo much elevated.

Example.

Looke into the figure next following, wherein let the height be D B 80 degrees, and the ſoutherly declination E D 18 de-



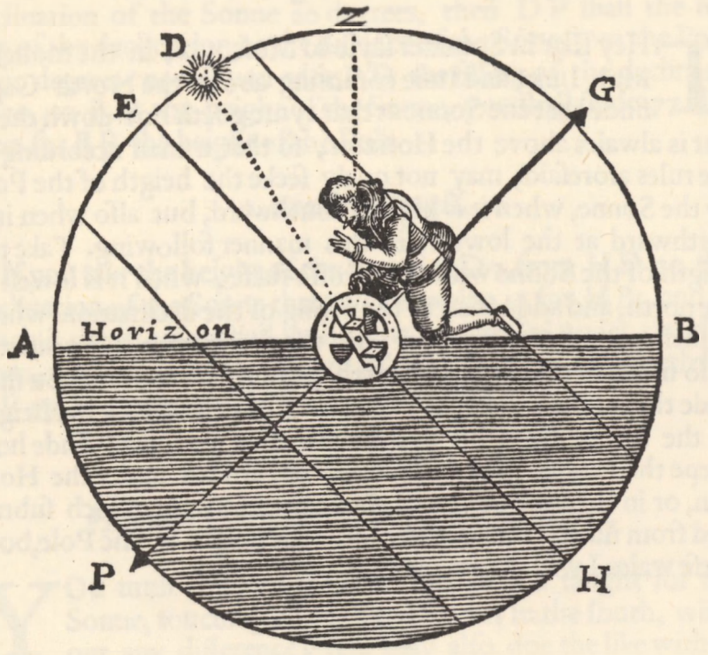
grees, then if you adde E D 18 degrees to B D 80 degrees, the height of the Sonne, there will be 98 degrees for B E, ſeeing then that from the Horizon B, to the Zenith Z (that is the point in Heaven right above our heads) is juſt 90 degrees, (as in the twelfth Chapter is taught) it followeth that E the Equinoctiall is eight degrees northward from the Zenith Z, and ſo 82 degrees elevated in the north, above the Horizon: when E A is taken out of 90, there reſteth 8 degrees for the heigth of the ſouth Pole G, above the Horizon B, then you muſt underſtand, that you are between the Line and the Sonne.

How you ſhall finde the height of the Pole, when you are ſouthward from the Sonne.

WHen you perceive that you are ſouthward from the Sonne, that is when the Sõne ſtandeth north-ward frõ you, firſt (as beforeſaid) take the height of the Sonne: then if the declination be ſouthward, take it out of your heigth which you have found, & then you ſhal have the height of the Equinoctiall, which ſubtracted from 90 it ſheweth under what height you are, ſouthward from the Line. With ſoutherly declination.

Example.

Example.



Behold the figure above ſtanding.

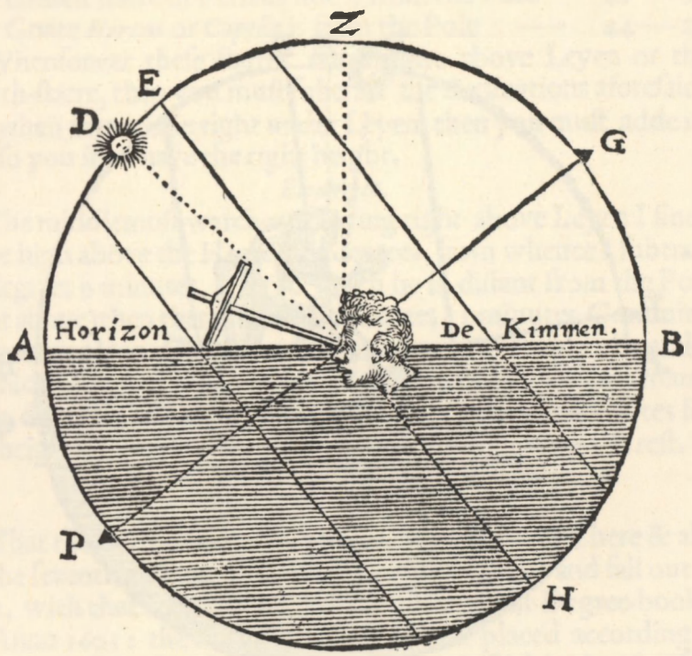
Let A D be the height of the Sonne in 64 degrees: the ſoutherly declination E D 16 degrees: which ſubtracted from AD the height of the Sonne, there remaineth for A E 48 degrees, the height of the Equinoctiall in the north, which ſubtracted out of 90, then the height of the ſouth Pole G B will be 42 degrees.

If the declination be northerly, then adde it to the height found out, if then the addition be leſſe then ninetie it ſheweth you the height of the Equinoctiall, which taken out of 90, you finde the height of the ſouth Pole.

Example.

With northerly declination.

Looke on the figure with his circles as it followeth hereafter, let A D the height of the Sonne in the north be 50 degrees, and D E the northerly declination 15 degrees, then adde E D 15 to D A 50 degrees, then you have 65 degrees, for A E the height of



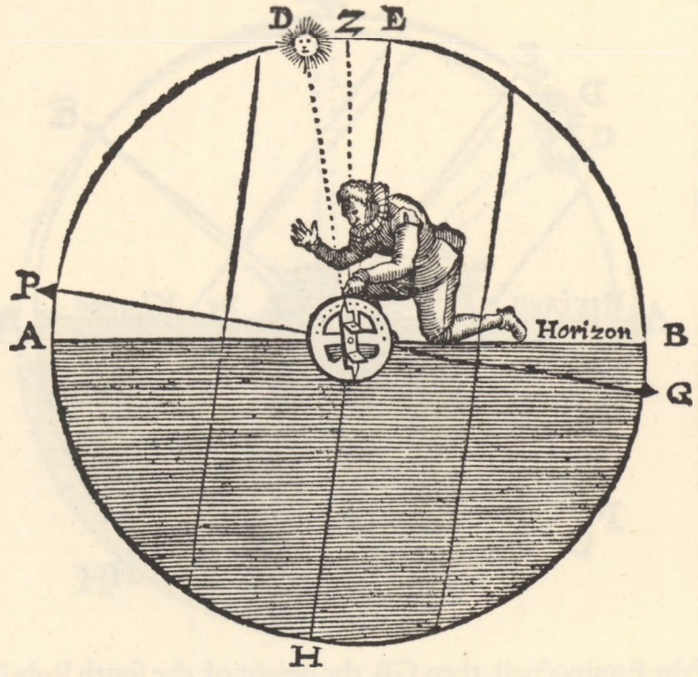
of the Equinoctiall, then GB the height of the ſouth Pole is 25 degrees, for as in the ſixteenth Chapter it is ſhewed, the height of the Equinoctiall E A with the height of the Pole G B alwaies make 90 degrees.

But if the height and the declination of the Sonne added together, make more then 90, you muſt then note that the Line is ſouthward frō your Zenith, as much as that number is above 90.

Example.

Looke on the figure in the page following, let the height of the Sonne AD in the north be 84 degrees, the declination E D 21 degrees, adde them together, then you have AE 105 degrees, which is the diſtance betweene the Equinoctiall E and the Horizon in the north: now marke that AE is 105, and P the Pole, and E the Equinoctiall are even 90 degrees from each other: then it followeth that P from A is 15 degrees, that is the height of the north Pole above the Horizon, and ſo much you muſt be northward from the line, and you muſt alſo marke that you are betweene the Line and the Sonne.

How you



How you ſhall finde the heigth when you are right under the Sonne.

Being juſt vnder the Sonne.

IF you vnderſtand the rules before going well then this is eaſie to be found. If you be right under the Sonne, that is, when the Sonne is elevated ninetie degrees, then you are even as many degrees northward or ſouthward from the Line, as the Sonne hath northerly or ſoutherly declination.

The explication thereof.

Suppoſe that you finde the heigth of the Sonne above the Horizon to be ninetie degrees, and that it is declined toward the north ſixteene degrees, then are you alſo ſixteene degrees northward from the Line, & the north Pole ſhall be ſo much elevated.

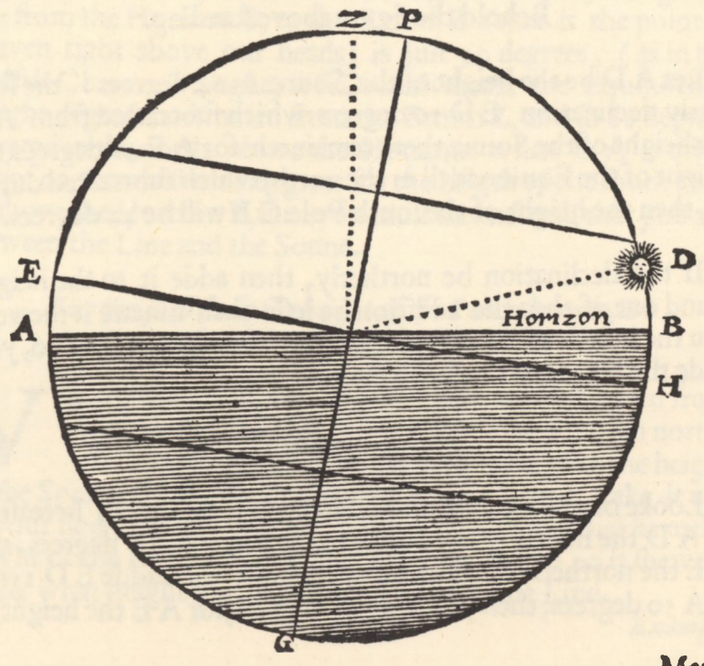
But if the Sonne hath no declination, that is when it ſtandeth even in the Line, then you muſt underſtand, that you are alſo right under the Line, and ſo both the Poles are on the Horizon without any elevation.

How you ſhal finde the heigth of the Sonne northward in ſuch places whereas it goeth not downe.

THey that in Sommer ſayle to Moſcovia, in the moneths May, Iune, and Iulie comming about the North Cape, finde that the Sonne at that tyme goeth not down there, but is alwaies above the Horizon, ſo that a man according to the rules aforeſaid, may not onely ſeeke the heigth of the Pole by the Sonne, when it is higheſt ſouthward, but alſo when it is northward at the loweſt, in this manner following. Take the heigth of the Sonne with the Croſſe-ſtaffe, when it is loweſt in the north, and adde thereto the filling of the declination (which is ſuch a number as together with the declination make ninetie, or ſo much as the Sonne ſtandeth from the Pole) and you ſhall finde the juſt heigth of the Pole: or if you ſubtract the heigth of the Sonne from his declination then you ſhall finde how deepe the Equinoctiall is depreſſed northward under the Horizon, or in the ſouth elevated above the Horizon, which ſubtracted from ninetie will likewiſe leave the heigth of the Pole, both theſe waies I will declare apart.

Where the Sonne goeth not downe.

Example.



Marke

Marke the Figure aforegoing, where let B D be the height of the Sonne above the Horizon, in the north 7 degrees, H D the declination of the Sonne 20 degrees, then D P ſhall the filling of the declination, or the diſtance of the Sõne from the Pole be 70 degrees: now if you adde P D the filling of the declination 70, to B D the height of the Sonne, you ſhall finde 77 degrees for B P the height of the Pole.

Another example.

If you take the height of the Sonne A D 7, from H D 20 the declination of the Sonne there will remaine 13 for H B, and ſo much is the Æquinoctiall in the north depreſſed under the Horizon, which if you ſubtract out of H P 90, there remaineth for A P 77, the height of the Pole as above ſaid.

CHAP. XVIII.

How you ſhall finde the height by the Starres.

YOu muſt followe the ſame rule that is taught for the Sonne, touching all the fixed Starres in the ſouth, without any difference, you may alſo doe the like with all Starres hard by the north, which goe round about the Pole, as the great Wagon, the Waiters, and ſuch like: but ſeeing you may do it with leſſe labour & trouble, I wil ſhew you the ſhorteſt & beſt way to doe it: firſt therefore it is neceſſarie for you to know, how many degrees they ſtand from the Pole, which in the table enſeuing you may ſee.

	deg. mi.
The hinder wheele of the Wagon that ſtandeth fartheſt north is ſituated from the Pole	26—9
The hinder wheele of the Wagon that ſtandeth fartheſt ſouth is from the Pole	31—32
The forewheele moſt north is from the Pole	30—48
The forewheele moſt ſouth is from the Pole	34—6
The neareſt horſe to the Wagon is from the Pole	51—53
The middle horſe of the Wagon is from the Pole	33—0
The foremoſt horſe of the Wagon is from the Pole	38—41
The middlemoſt or cleareſt watcher is from the Pole	14—9
The tayle of the Swanne is from the Pole	46—5
The breſt of Caſſiopea *Schedir*, is from the Pole	35—36
The cleareſt ſtarre in Perſeus ſide is from the Pole	41—36
The Goate *Hircus* or *Capella* is from the Pole	44—29

Whenſoever theſe ſtarres ſtand right above Leyen or the North-ſtarre, then you muſt ſubtract the declinations aforeſaid: but when they come right under Leyen, then you muſt adde it, and ſo you ſhall have the right height.

Example.

The middlemoſt watcher ſtanding right above Leyen I finde to be high above the Horizõ 52 degrees, from whence I ſubtract 14 degrees 9 minutes, (for ſo much he is diſtant from the Pole right above) then there reſteth 37 degrees 51 minutes. Comming to another place and finding the ſame Starre to ſtand right under the North-ſtarre, above the Horizon 43 degrees, I adde thereunto 14 degrees 9 minutes, & then I finde 57 degrees 9 minutes for the height of the Pole: in like ſort you muſt doe with the reſt.

Marke.

That the declinatiõ of the Starres, which we have here & alſo in the ſeventh chapter ſet downe, doe not agree, and fall out alike, with that which we have ſet downe in our Degree-bookes of Anno 1605: the reaſon is that theſe are placed according to the yeere of our Lord 1608 and 1609 as it is ſaid in the aforeſaid Chapter, but in the aforeſaid Degree-bookes, they are placed according to Anno 1600, whereby you may partly ſee the alteration of the declination of the fixed Starres.

An admonition how to take the height.

THe Sonne & the Starres cõming neare unto the Horizon ſhine and ſhewe themſelves alwaies to be higher then naturally they are, and you ſhall alwaies take them higher: which happeneth by meanes of the vapours & exhalatiõs, which by reaſon of the heat of the Sonne continually riſe up from the earth: and the nearer the heavenly lights approch unto the Horizon, the more are they marked of us, in regard that the aforeſaid vapours and exhalations the nearer they approch unto the Horizon the thicker they ſhewe, and by that meanes the heavenly lights ſeeme higher in our ſight. The Sonne ſtanding upon the Horizon ſhineth 34 min. higher in our ſight then naturally he is, & the ſtarres about half a deg, which they looſe by litle and litle by riſing up frõ the Horizõ, the Sõne to 30 deg, & the Starres to 20 deg. high: but how much that may import in ſeverall heights

as by long and much curious obſervation hath by the aforeſaid *Tycho Brahe* bene found out, you ſhall ſee by theſe Tables following.

A table of the Sonnes Refraction, or riſing up, by occaſion of vapours or exhalations.

The Sonne being high	0 degrees	ſhineth	34 minutes	higher then it is indeed.
	1 degrees	ſhineth	26 minutes	
	2 degrees	ſhineth	20 minutes	
	4 degrees	ſhineth	15 minutes	
	7 degrees	ſhineth	13 minutes	
	10 degrees	ſhineth	10 minutes	
	16 degrees	ſhineth	7 minutes	
	23 degrees	ſhineth	3 minutes	
	32 degrees	ſhineth	1 minutes	

A Table of the Starres refraction or riſing up, by occaſion of vapours or exhalations.

The fixed Starres being high	0 degrees	ſhine	30 minutes	higher then they are indeed.
	1 degrees	ſhine	22 minutes	
	2 degrees	ſhine	15 minutes	
	4 degrees	ſhine	11 minutes	
	7 degrees	ſhine	8 minutes	
	11 degrees	ſhine	5 minutes	
	15 degrees	ſhine	3 minutes	

This is requiſite to be well marked by them that ſayle farre northward, and finde the Sonne nere unto the Horizon: for it may differ half a degree, if you uſe it in the north at the loweſt, and in the ſouth at the higheſt.

This may peradventure by ſome (becauſe they never heard of it) be rejected, and not beleeved: but the proofe therof is eaſie to be made: he that will not beleeve it before he ſeeth it, let him take a payle or tubbe full of water, and thruſt a ſtaffe aſlope into it, and he ſhall ſee that the ſtaffe will ſhewe crooked, or as it were broken, as you ſee it figured here. The reaſon hereof is, that the ende of the ſtaffe which is under the water, by meanes of the water ſeemeth to lift it ſelf higher to our ſight then it is.



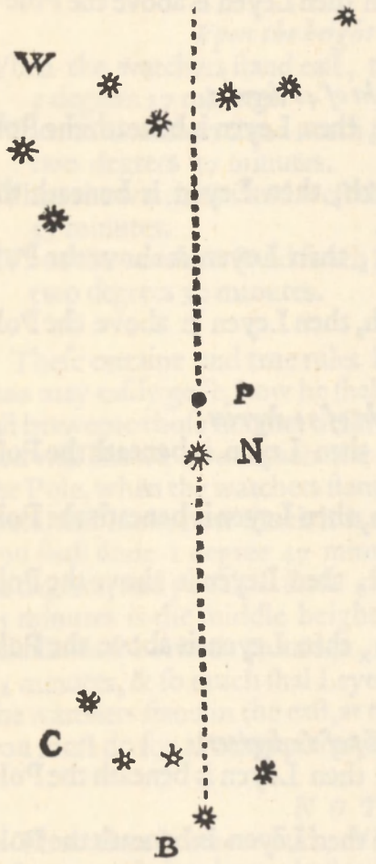
If you will ſee and marke it better in another manner, put a peece of mony, or ſome thing els in an emptie paile, or tubbe, & then goe or ſteppe ſo farre back, that you looſe the ſight of the mony, and ſtand ſtill there, then let another man fill the paile or tubbe full of water, and the peece of mony will be ſo much elevated or lifted up, that you ſhal ſee it a good waie above the ſide of the paile or tubbe, where as before you could not ſee it: and in ſuch ſorte the heavenly lights that are neere the Horizon, by meanes of the vapours and exhalations, are lifted up.

CHAP. XIX.

Of the North-ſtarre, and how you ſhall finde the Height thereby.

ALL fixed Starres as in the ſeventh Chapter is declared, with the tyme do alter their declination, ſome increaſe, and ſome deminiſh, one more thē the other, the North-ſtarre at this tyme is one of thoſe, which is moſt ſubject to changing, which in Anno 1600 ſtood from the Pole two degrees 50½ minutes, and in the yeere 1700 it wil ſtand two degrees and 16½ minutes, ſo that everie three yeeres it commeth a minute nearer unto the Pole, in Anno 1608 it ſtoode from the Pole two degrees 48 minutes, and thereon we have here made our reckoning, if then you will know the height by the North-ſtarre, when it is right under the Pole, then you muſt adde two degrees and 48 minutes, to the height which ſhall be found by the Croſſe-ſtaffe, ſo it be right above the Pole (that is at the higheſt) then you muſt ſubtract two degrees 48 minutes, and then you ſhall have the right height, but to knowe when it is right under the pole at the loweſt, then looke when the great Wagon ſtandeth right under the North-ſtarre or Leyen, if you take a lead or ſtick, and let it hang in your ſight right upon Leyen, and the ſaid line or ſtick alſo hangeth right between the Wagon and the horſes, then Leyen is right above the Pole at the higheſt: to the contrarie, when the Wagon ſtandeth above Leyen, and a Line is hanged betweene the Wagon and the horſes, & hangeth right over Leyen, then Leyen is right under the Pole at the loweſt. This alſo may be marked by the Starre that ſtandeth in the breſt of Caſſiopea

ſiopea, for when it ſtandeth right under Leyen, then Leyen is right under the Pole at the loweſt, and when it is right above Leyen, then Leyen is at the higheſt above the Pole. But to know the Starres that are in the breſt of Caſſiopea, you muſt underſtand, that it is the ſecond of five of the higheſt Starres that ſtand in Caſſiopea: or if you take a ſtaffe and hold it thwartwiſe, with one ende right between the Wagon & the horſes, & the middle part over the north Starre, then the other end will ſhow right upon the ſaid Starre, which ſtandeth in the breſt of Caſſiopea, which will eaſily be underſtood by this figure.



N is the north Starre: P, is the north Pole: W, is the Wagon: and C, are the Starres of Caſſiopea, whereof B, is the breſt.

This is a certaine and a generall rule which by no meanes can faile and in al places of the Earth (where we may ſee & uſe the north Star) is without any alteration.

How you muſt uſe the North ſtarre, when you take the Watchers upon the four chief ſtrokes in the Compaſſe.

ALL Seafaring men commonly uſe the north Starre when they take the Watchers upon one of the eight-quarter ſtrokes of the Compaſſe, whereunto they have certaine tables to knowe how much the north Starre ſtandeth upon everie ſtroke of the compaſſe either under or above the Pole, that is how many they ſhall adde or ſubtract to or from each Starre. In moſt part of the bookes made for Seafaring it is ſhewed, that when the Watchers ſtand in the eaſt, that then the North Starre ſtandeth beneath the Pole a degree and an half, ſome ſay a degree and 40 minutes: and again when the Watchers ſtand in the weſt, that then the North Starre ſtandeth as much (that is a degree & an half) above the Pole. Now if Eaſt and Weſt were uſed and underſtood by Seafaring men, when the middlemoſt Watcher is juſt Eaſt and Weſt with the North-ſtarre, & that generally in all heights & places without any difference, certainely they ſhould be much deceived by ſuch rule and cuſtome, for ſuch working is not generall, but in each height ſeverall, and ſo working in that manner they muſt uſe ſeverall tables. The North-ſtarre is alwaies more under the Pole when the Watchers ſtand in the eaſt, then he is above the Pole when the Watchers ſtand in the weſt, as in the table following you may ſee, being about the Equinoctiall it ſhould not differ much, but there a man can not uſe it: but as ſoone as you ſayle northward, & leave the Equinoctial Line, then it beginneth to alter, and the more northerly that you goe, the more it differeth, ſo that at laſt, before you come to the height of 80 degrees, and that the Watchers come to ſtand in the weſt, the North Starre is a great deale under the Pole, how much this may differ upon one ſtroke, it may be reckoned by this example. When you are under the height of 20 degrees, and that the Watchers ſtand in the weſt, that is when the middlemoſt Watcher in the weſt, ſtandeth juſt as high above the Horizon as the North-ſtarre, then the North-ſtarre ſhal ſtand above the Pole one degree and two minutes: but comeing under the height of 80 degrees, and that the middlemoſt Watcher ſtandeth in the weſt juſt as high as the North-ſtarre, then the North-ſtarre ſhall ſtand 35 minutes beneath the Pole, which with the former differeth verie neare two whole degrees, & that upon one ſtroke. And although two ſuch places are farre diſtant one from the other, notwithſtanding hereby it may eaſily be perceived and underſtood by men of judgment that this alteration, as you ſayle from the one place unto the other, by litle & litle encreaſeth. Many men herein note a great difference, becauſe thereby they cānot geſſe right, and yet can not underſtand what the cauſe therof is, ſo that ſome of them to mend it cutt off a peece of their Croſſe-ſtaffe, others make themſelves tables according to their owne fantaſies, one thus much, the other ſo much, yet without any ground or underſtanding, ſo that in their need, they dare not truſt to their owne doings. Others for this cauſe wholly reject the North-

ſtarr eſteeming it altogether unfit to take the height by: but that is done for want of underſtādiug, for having good tables to that purpoſe it is as fit for uſe as any other ſtarr,& to the end that mē ſhould uſe it with good ſecuritie, without any fault, I have (for the good of al ſeafaring men) to that end collected, & (notwithout great labour) perfectly made a new table, wherein men may truly ſee, how without any fault they may uſe the North-ſtar by the 4 chief points of the Compaſſe, that is, South, North, Eaſt & Weſt, the reſt of the points or ſtrokes, to wete, northweſt, ſouth-eaſt, ſouthweſt, and northeaſt, I leave out wittingly and willingly, for a man can not place any certaine marke, whereby they may make a juſt geſſe, whenſoever the watchers ſtand upō thoſe ſtrokes, ſo that for that cauſe they are ſubject to more falſhood, and therefore it is thought good that men ſhould not uſe them.

How much the North-ſtarre goeth under or above the Pole, when you ſet the Watchers upon the four principal points of the Compaſſe, and that upon different heights.

Vpon the height of 10 degrees.

VVhen the watchers ſtand in the eaſt, then the Northſtarre is under the Pole 1 degree 30 minutes.

When the watchers ſtand in the north then Leyen is beneath the Pole 2 degrees 23 minutes.

When the watchers ſtand in the weſt then Leyen is above the Pole 1 degree 25 minutes.

When the watchers ſtand in the ſouth then the North-ſtarre is above the Pole 2 degrees 24 minutes.

Vpon the height of 20 degrees.

When the watchers ſtand in the eaſt then the North-ſtarr is under the Pole 1 degree 33 minutes.

When the watchers ſtand north then Leyen is under the Pole 2 degrees 23 minutes.

When the watchers ſtand weſt then Leyen is above the Pole 1 degree 21 minutes.

When the Watchers ſtand ſouth then Leyen is above the Pole 2 degrees 24 minutes.

Vpon the height of 30 degrees.

When the watchers ſtand eaſt then Leyen is beneath the Pole 1 degree 37 minutes.

When the watchers ſtand north then Leyen is beneath the Pole 2 degrees 23 minutes.

When the watchers ſtand weſt, then Leyen is above the Pole 1 degree 16 minutes.

When the watchers ſtand ſouth then Leyen is above the Pole 2 degrees 24 minutes.

Vpon the height of 40 degrees.

When the watchers ſtand eaſt, then Leyen is beneath the Pole 1 degree 41 minutes.

When the watchers ſtand north, then Leyen is beneath the Pole 2 degrees 23 minutes.

When the watchers ſtand weſt, then Leyen is above the Pole 1 degree 11 minutes.

When the watchers ſtand ſouth, then Leyen is above the Pole 2 degrees 24 minutes.

Vpon the height of 50 degrees.

When the watchers ſtand eaſt, then Leyen is beneath the Pole 1 degrees 47 minutes.

When the watchers ſtand north, then Leyen is beneath the Pole 2 degrees 22 minutes.

When the watchers ſtand weſt, then Leyen is above the Pole 1 degrees 4 minutes.

When the watchers ſtand ſouth, then Leyen is above the Pole 2 degrees 25 minutes.

Vpon the height of 60 degrees.

When the watchers ſtand eaſt then Leyen is beneath the Pole 1 degrees 55 minutes.

When the watchers ſtand north then Leyen is beneath the Pole 2 degrees 21 minutes.

When the watchers ſtand weſt then Leyen is above the Pole 53 minutes.

When the watchers ſtand ſouth then Leyen is above the Pole 2 degrees 26 minutes.

Vpon the height of 70 degrees.

When the watchers ſtand eaſt, then Leyen is beneath the Pole 2 degrees 8 minutes.

VVhen the watchers ſtand north then Leyen is beneath the Pole 2 degrees 20 minutes.

VVhen

VVhen the watchers ſtand weſt then Leyen is above the Pole 32 minutes.

VVhen the watchers ſtand ſouth then Leyen is above the Pole 2 degrees 27 minutes.

Vpon the height of 80 degrees.

When the watchers ſtand eaſt, then Leyen is beneath the Pole 2 degrees 37 minutes.

VVhen the watchers ſtand north then Leyen is beneath the Pole two degrees 17 minutes.

VVhen the watchers ſtand weſt then Leyen is beneath the Pole 35 minutes.

VVhen the watchers ſtand ſouth, then Leyen is above the Pole two degrees 30 minutes.

Theſe certaine and true rules being well underſtood, everie man may eaſily geſſe, how he ſhall deale with other heights that fall betweene thoſe heights before ſet downe: as for example, if you will knowe how much the North-ſtarre ſtandeth beneath the Pole, when the watchers ſtand eaſt, at the height of 45 degrees, firſt looke how much it is at the height of 50 degrees, and you ſhall finde 1 degree 47 minutes, and then at the height of 40 degrees, and you ſhall finde 1 degree 41 minutes, & for that 45 minutes is the middle height betweene 50 and 40, take the middlemoſt between 47 and 41, and you ſhall have one degree 44 minutes, & ſo much ſhal Leyen ſtand beneath the Pole, when the watchers ſtand in the eaſt, at the height of 45 deg, in like ſort you muſt do for al other places, & you ſhal faile litle or nothing

NOTE.

That when it is here ſaid, VVhen the watchers ſtand in the eaſt, you muſt thereby underſtand, when the middlemoſt or cleareſt of the watchers ſtandeth eaſt, as high above the Horizon, as the North-ſtarre, as the like is ſaid of the watchers ſtanding in the weſt, you muſt thereby underſtand, when the middlemoſt of the watchers ſtandeth weſt even as high as Leyen: and when it is ſaid when the watchers ſtand north, thereby is meant, when the middlemoſt watcher ſtandeth right above Leyen: and in the ſouth, that is right under Leyen: for, for all ſuch meaſures and taking of heights, theſe tables are juſt and perfectly made, and 10 are they moſt aſſuredly to be reckoned upon the ſtrokes of the compaſſe.

CHAP. XX.

How manie leagues a man may ſayle upon everie ſtroke before he winne or looſe a degree in height, & alſo how many leagues you are then without the Meridian or ſouth and north line from which you ſayled.

VVhen you ſayle right ſouth or north, then you ſayle for a degree —— —— —— —— —— 20 leagues.

And you ſtay under the ſame Meridian, that is, you goe neither more eaſterly nor weſterly then at firſt you did.

Vpon the ſtroke of ſouth and by weſt, or north and by weſt, you ſayle for a degree —— —— —— 20½ leagues

And then you have left the Meridian or the ſouth and north Line, under which you were at the firſt —— 4 leagues.

South-ſouth-weſt, & n.n.e. you ſayle for a degree 21 leagues.
And then you are out of the aforeſaid Line —— 8 leagues.

South w. by ſouth, & n.e. by n. you ſayle for a deg. 24 leagues.
And without the Meridian —— —— —— 12½ leagues.

South-weſt & north-eaſt for one degree —— 28 leagues.
And without the Meridian —— —— —— 20 leagues.

S.w. by w. & n.e. by n. you ſayle for one degree 36 leagues.
Then you are without the Meridian —— —— 29 leagues.

W.ſ.w. & e.n.e. you ſayle for a degree —— 52½ leagues.
Then you are without the Meridian —— —— 48 leagues.

W. by ſouth, & eaſt by n. you ſayle for a degr ee 103 leagues.
And then you are without the Meridian —— 100 leagues.

Sayling eaſt or weſt you neither winne nor looſe, but you keepe alwaies in one height.

CHAP. XXI.

What is neceſſarie for a Seafaring man or Pilot further to know, together with an inſtruction to all young Seafaring men, that deſire to be good Pilots.

THeſe aforeſaid rules although that they are ſo neceſſarie & needefull for a Pilote to know, that without the knowledge of them he can be no good Pilot, to goe anie long voyage, yet are they not ſufficient to make a good Pilot, that is al are not good Pilots that underſtand them well. For firſt a good Pilot muſt beſides them be expert at Sea, as the principall thing, which no man can learne by any ſpeculation, but by his own experience, and dealing in tyme he ſhall obteine it, wherby he ſhall

know perfectly to diſpoſe al things that occurre in the art of Navigation. It is moſt neceſſarie and convenient for him to knowe the Landes, and how they lye to Sea-ward, how farre, and upon what ſtrokes of the compaſſe, the Pointes, Havens, and Rivers, are diſtant one from the other, and ſpecially he muſt be perfect in reckoning his Tydes, that he may knowe everie where what Moone maketh an high water in that place, that when he would enter into any Haven or place, where he can not get in at a lowe water, then he may ſtay till it be half flood, or till it be high water, as tyme ſerveth, that he may ſayle in, and ſave both ſhip and goods. It is alſo verie neceſſarie for him to knowe how the Ebbes and Floods fall out, whether it be along by, or againſt the Land, thereby to know when the winde is ſtrong, whether he may lye in the ſtreame, or goe againſt the ſtreame, thereby to know whether it will be any hinderance or furtherance unto him, whereon manie tymes there conſiſteth much. And alſo when a man is in the winde, whether it be in the North-ſea under England, Holland, Flanders, or in the Chanel of the ſea, under England, that he ſhould knowe how to ſet his tydes and courſe, that he might ſtoppe his tides. All theſe things old experienced Pilots, ought willingly to ſhewe and learne young men that are deſirous and zealous to learne the art of Seafaring, and not to hide any ſuch thing from them, as ſome men doe without reaſon, who goe out of the waie with their Inſtruments as Croſſe-ſtaves, Aſtrolabium and Compaſſes, and will not ſuffer the common ſaylers to ſee their work. This by ſome is done upon pride and unwillingnes, becauſe they would keepe the art & knowledge onely to themſelves, and by ſome becauſe they underſtand not their proceedings wel, & therfore are in feare to be ſhamed, but let not young Seafaring men, and ſuch as are deſirous to knowe the art & cunning of Seafaring, for that cauſe leave off their ſtudie therein, & to that end when you ſayle out of any river or haven, you muſt reckon everie courſe along the reach from tonne to tonne, or frō beacon to beacon, which you muſt keepe well and perfectly and write it in a booke, and ſome times drawe the ſituation in manner of a Carde, and when you begin to leave the Land, then you muſt take good heede, of the Capes, Points, Towres, and other markes, and how the mouth of the Haven reacheth into the Sea, what deapth is at the enterance of the Haven, and how deepe it is both within and without, caſt out your lead often tymes, and let it not reſt when you are in the Haven nor in the Streame, whereby in ſayling out and into the river, you ſhall knowe what countries are flattes, or ſhoring that you may beware of them, & when you are a comming without the Land, then you muſt earneſtly marke what hilles or downes lie there aboutes, what churches, towers, caſtels, or other markes ſtand upon them, and thoſe you muſt note and counterfeit with a pēne upon ſeverall ſtrokes of the compaſſe, as they change their forme of ſtanding by ſayling along by them, oftentymes uſing the lead, all which being perfectly noted, it will be a great help unto you to know the ſaid Landes, when you come thither again.

Likewiſe when you paſſe by any ſtrange Countrie, and ſayle along ſo near by it that you may plainly ſee it, then take the coūterfeit or forme thereof with a penne, to knowe in what manner they ſhewe themſelves upō ſuch ſtrokes of the compaſſe, & there let the lead fall, to ſee what depth and ground is there, which for your memorie you muſt alſo note, for that which you marke in that manner will ſtaye longer by you, then that which you have but ſimplie ſeen, and heard of of an other. But when you come againſt any Pointes or Havens, where you meane to lade or unlade, there you muſt take good heede unto your courſe, & marke how you ſayle by that Land or Haven, and when you ſee any markes or towres, you muſt note them with a penne, and bring the markes and pointes both well together, thereby to goe right into the river, & to guide you by the lead til you be in, & when you are within and at an anker, then viſite all the pointes of the Haven, and note them downe with a penne cardewiſe, how they reach outward and inward, that when you come thither againe, you might enter into the ſame place againe, and knowe the ſituation thereof, but when you are in the open Sea, and the winde againſt you ſo that you lye by the winde, both on the one ſide and the other, then you muſt marke how long you muſt lye on the one bought or on the other, and when you muſt turne. Beſides this you muſt ſpecially note how much the ſhip goeth forward, and what you may ſayle in one meale, & how the ſhip lyeth, to the which ende you ſhall ſome times let the lead, or the lead line with a peece of wood hang out behinde, to ſee how much the ſhip windeth, and how much the waves caſteth it out of the right courſe that it ſhould hold. This you muſt doe upon your compaſſe everie evening and morning, and note it in your memoriall, that you may caſt it over and peruſe it againe in the Cardes, whether in noting or marking it, you ſhould have chanced to have miſtaken your ſelf. You muſt likewiſe take heed to your ſteering, to ſee how much you muſt winde on either ſide in your

your Carde. And further when you finde a good & ſure height, by your Croſſe-ſtaffe or Aſtrolabium, that will give you a good ſecuritie of your right geſſing, ſo that your compaſſing agreeth alſo with it, and then you ſhall certainely ſee in your Carde how all pointes and Countries lye from you, but if your geſſing and your height agree not together, then you muſt warily correct your geſſing according to your height, and ſee as near as you can whether you faile either to litle or to much in your geſſing, and all this muſt be done with good skill and underſtanding in your Carde, and when you come to the place where you wil ſeeke for Land, then without doubt you ſhall land in ſuch a place as your Inſtrument & good geſſing ſhewe you.

To learne to knowe all courſes and ſtrokes perfectly by hart, to that end you muſt take the printed Carde and read it oftentymes over, and everie courſe & ſtroke which you finde to meet you muſt place togither: as from Cape Finiſtere to Ciſarga, the Weſt-coaſt of England, the Coaſt of Flanders, the Coaſt of Freeſland, of Hartſhals to Schagen and ſuch like. The like you muſt doe with the tydes, to wete, you muſt note all the places (where the Mone maketh a high water upon any point or ſtroke of the Compaſſe) by each other in a Regiſter, as in the table of the tydes hereafter enſeuing you may ſee: and he that doth ſo, without doubt ſhall doe all things right and perfectly, and ſhall beare about him al the experience, and knowledge of Seafaring, needful & neceſſarie, which no man in the world can take from, or bereave him of.

CHAP. XXII.

Of the Water-tydes and how a man ſhall reckon them perfectly by the Moone.

VVee have hereunto added certaine tables of the Water-tydes, as they are commonly uſed by Pilots, wherein is ſhewed upon what pointes or ſtrokes of the Compaſſe the Moone muſt be, before it maketh a high water in any of the places ſet down in the tables, but you muſt underſtand, that you muſt not take or reckon ſuch ſtrokes or pointes according to our common Compaſſe lying flat, or driving water-compaſſe, but onely the north & ſouth pointes, for they muſt be eſteemed not after the Horizon or Kimmen, but according to the flatte or ſuperficiall part of the Æquinoctiall. Therefore if you will take the Sonne or Moone by or with the common Compaſſe, then you muſt lift up the ſide of the Compaſſe ſo much, that the corner thereof may ſtand right againſt the Æquinoctiall, & that the pinne in the middle ſhoweth right to the Pole, and ſo you may take the Sonne or Moone thereafter, which will be a great difference from a Compaſſe that lyeth flatte: for at the height of fiftie degrees, or there aboutes, and the Sonne being in Cancer, in his higheſt ſigne, that is in the higheſt declination, it will be half an houre before eight of the clocke before it commeth into the Eaſt, and half an houre before five before it come into the Weſt. If you take it by a flatte Compaſſe, that is he goeth from Eaſt to Weſt in nine houres, and againe from Weſt to Eaſt in 15 houres. At the height of thirtie degrees, he commeth firſt a litle before half an houre paſt nine into the Eaſt, & a litle before half an houre paſt two into the Weſt, ſo that in leſſe then five houres and an half he goeth from Eaſt to Weſt, & full eighteene houres and an half before he commeth againe from Weſt to Eaſt: and ſeeing that the Moone ſome times makes his declination five degrees more northerly then the Sonne, ſo it may chance that the Moone may goe an houre & more faſter from the Eaſt into the Weſt then the Sonne, ſo that he that will alwaiſe take the Sonne or Moone by our cõmon Compaſſe, ſhall often tymes much deceive him ſelf if he ſhould reckon his tides thereafter, whether it were requiſite to ſtoppe any tides, or to enter into any havens: to prevent that, I have in the tables enſeuing noted upon what houre and minute the Moone cõmeth upon ſuch pointes, whereby the floodes are ruled, wherein onely it is neceſſarie to knowe the age of the Moone, that is how many tydes are paſt from the tyme of the new or ful Moone, for the firſt part of the table ſheweth the age of the Moone everie day, that is how many dayes are paſt ſince the new or full Moone. The ſecond part of the table ſheweth the houre and minutes when the Moone upon the ſame dayes commeth to the ſame ſtroke, as you may ſee on the toppe thereof, and right againſt it ſtandeth the places where the Moone then maketh a high Water. As for example the Moone being 8 dayes old, I would know when it will be ſouthweſt or northeaſt, then I looke for the point of ſouthweſt, and in the firſt columne of cyfers ſtanding under it, I tell eight downwards, or looke into the place where 8 ſtandeth, and againſt it in the ſecond columne I find 9 houres 24 minutes, and at ſuch a tyme it is then high water in the places that are noted downe right againſt it, as at Amſterdam, Rotterdam, &c. or there a ſouthweſt or northeaſt Moone makes a full Sea.

Heere

An Intruction for the vnderstanding

Heeree follow the tables of the Water-tydes.

South and North.

da	hou.mi.		Falling of ſtreames upon the ſame ſtroke.
0	12 — 0	*At the Iuttiſh Ilandes.*	
1	12 — 48	*Before the Hever, Eyder, and Elve.*	
2	1 — 36	*Before Emden & Delfziel.*	
3	2 — 24	*Before Enchuyſen, Horne and Vrck.*	
4	3 — 12	*Vpon all the coaſts of Flanders.*	*From the Neſſe to Beunen.*
5	4 — 0	*Vpon the Foreland.*	
6	4 — 48	*At Dover in the Pier.*	
7	5 — 36	*At Beveſier on the Land.*	
8	6 — 24	*At Hantom on the Kaye.*	
9	7 — 12	*Before Sierenbergh and the Ras of Blanckaert.*	
10	8 — 0	*At Olferſnes.*	
11	8 — 48	*In the Conduit.*	
12	9 — 36	*At Iubleter in the Rode.*	
13	10 — 24		
14	11 — 12		
15	12 — 0		

South-by-weſt, and North-by-eaſt.

da	hou.mi.		Falling of Streames upon the ſame ſtroke.
0	12 — 45		
1	1 — 33		
2	2 — 21		
3	3 — 9	*Within the Maſe.*	
4	3 — 57	*Within the Veer.*	
5	4 — 45	*At Fluſſhing.*	*From Beunen to the Sōme.*
6	5 — 33	*Near Beveſier in Sea.*	*Alſo frō Eſtaples to Beunen.*
7	6 — 21	*In the Chamber.*	
8	7 — 9	*At Winckle-Sea.*	
9	7 — 57	*In Garnzea.*	
10	8 — 45		
11	9 — 33		
12	10 — 21		
13	11 — 9		
14	11 — 57		
15	12 — 45		

South-ſouth-weſt, and North-north-eaſt.

da	hou.mi.		Falling of Streames upon the ſame ſtroke.
0	1 — 30	*Vnder Holy-land.*	
1	2 — 18	*Before the Maſe and Goeree.*	
2	3 — 6	*Before the Veere.*	
3	3 — 54	*At Armuyen.*	
4	4 — 42	*Vpon the Vlack before Rammekens.*	*From Grevelingen to Beunen.*
5	5 — 30	*Before the Wielings.*	
6	6 — 18	*On the Zeeuſe Coaſts.*	
7	7 — 6	*Before the Thames of London.*	
8	7 — 54	*Before Iarmouth*	
9	8 — 42	*In Duyns on the Rode.*	
10	9 — 30	*Neare the Cingle.*	
11	10 — 18	*On the Weſt ende of Wight.*	
12	11 — 6	*Without Calis and Swartenes.*	
13	11 — 54	*In Blavet.*	
14	12 — 42	*Bulline at the Land.*	
15	1 — 30		

South-weſt-by-ſouth, and North-eaſt-by-north.

da	hou.mi.		Falling of Streames upon the ſame ſtroke.
0	2 — 15		
1	3 — 3	*Without Fontenay.*	
2	3 — 51	*Without Blavet.*	
3	4 — 39	*Vnder Bulline.*	*Amidſt through the Hoofden.*
4	5 — 27	*Before the Wielinge.*	*Frō Dunkerck to Greveling.*
5	6 — 15	*Before the Maſe.*	*Frō Stapels to Fecam.*
6	7 — 3		*From Dortmout to Exmout.*
7	7 — 51		
8	8 — 39		
9	9 — 27		
10	10 — 15		
11	11 — 3		
12	11 — 51		
13	12 — 39		
14	1 — 27		
15	2 — 15		

South

South-weſt, and North-eaſt.

da	hou.mi.		Falling of ſtreames upon the ſame ſtroke.
0	3 — 0	*At Amſterdam, Rotterdam, Dort, & Zierickſea.*	
1	3 — 48	*Before Newcaſtle, the Teſe & Hartlepoole.*	*Frō Cape de Hagu to the Iland of Ornay.*
2	4 — 36	*In Robbenhoods bay.*	
3	5 — 24	*Without the Flemiſh bancks.*	*Through the Ras of Ornay.*
4	6 — 12	*In Pas de Calis.*	
5	7 — 0	*Before Conquet.*	*Frō Garnſea to Caſquets.*
6	7 — 48	*At Pleymarques, Groy, Armentiers, Heys, Kiliaets, Porthus, the river of Burdeaux.*	
7	8 — 36		*From Muylford to Ramſey.*
8	9 — 24	*On al the Southcoaſts of Bretaigne, Gaſcoigne, Poictou.*	
9	10 — 12		*At Fawyck in the Chanel.*
10	11 — 0	*On al coaſts of Biſcayen, Galiſſien Portugale & Spaine.*	
11	11 — 48		*At Portland in the Sack.*
12	12 — 36	*On the Weſt-coaſts of Irland.*	
13	1 — 24	*At Boeckenes, & Orkeneſſe.*	
14	2 — 12	*In Hitland & Fayerhil.*	
15	3 — 0		

South-weſt-by-weſt, and North-eaſt-by-eaſt.

da	deg. mi.		Falling of ſtreames upon the ſame ſtroke.
0	3 — 4	*Betweene Pas of Calis & the Maſe*	
1	4 — 33	*At Rouanen. In the Sorlis.*	*From Struſaert to Diepen.*
2	5 — 21	*Before S. Matthewes point.*	
3	6 — 9	*In Briſtowe & Croixdowne.*	*From Lezaert to Start.*
4	6 — 57	*In the Forde between Heyſat.*	
5	7 — 45	*Before the Bos. At S. Marten.*	*From Caep de Clare to Londey.*
6	8 — 33	*Before Rochell.*	
7	9 — 21	*Before Brouwaghe.*	
8	10 — 9	*At Rouaen.*	
9	10 — 57	*In the river of Burdeaux.*	
10	11 — 45	*Within the Chanels ſituated on the coaſts of Spaine, Portugale, Galiſſien, the Southſide of Bretaigne, Gaſcoigne, & the weſt-coaſts of Ireland.*	
11	12 — 33		
12	1 — 21		
13	2 — 9		
14	2 — 57		
15	3 — 45		

Weſt-ſouth-weſt, and Eaſt-north-eaſt.

da	hou.mi.		Falling of Streames upon the ſame ſtroke.
0	4 — 30	*Frō Teſſel to Pas of Calis in the Fareway.*	
1	5 — 18	*Before Humber.*	*From Oſtende to S. Catelines.*
2	6 — 6	*Before Flamborough & Scherenborough.*	
3	6 — 54	*Abruae.*	*From Barchfleur to Struſaert.*
4	7 — 42	*In Vaelmouth.*	
5	8 — 30	*In the Mouſhole.*	*The Breeſond out and in.*
6	9 — 18	*Seven Ilands.*	
7	10 — 6	*S. Paules without the Haven.*	*Frō Cap de Clare to the Iland Saltes*
8	10 — 54	*Betweene Garnſea and Sept Iſles in the Farewater*	
9	11 — 42		*Between Londey and Holmen ſo far as Bruſt*
10	12 — 30	*In the Breeſond.*	
11	1 — 18	*Without the Four.*	*From Sorlis to Englands ende.*
12	2 — 6	*All South-coaſts of Irland, as Kinſael, Corck, Iochel, Waterford & Cape de Clare.*	*Frō Start point to Portland.*
13	2 — 54		
14	3 — 42		
15	4 — 30		

Weſt-by-South, and Eaſt-by-north.

da	hou.mi.		Falling of Streames upon the ſame ſtroke.
0	5 — 15	*In Torbay and Dartmouth,*	
1	6 — 3	*In Plimmouth and Vawyck.*	*Frō Iſle Bas to the Four.*
2	6 — 51	*In the Sea of Galles.*	
3	7 — 39	*In Vaelmouth.*	*Frō Dorſey to Cap de Clare.*
4	8 — 27	*In Muylford.*	
5	9 — 15	*At Ramſey in Wales.*	*Frō the Sorlis to Lezard.*
6	10 — 3	*Before Linne in England.*	
7	10 — 51	*Againſt Londey.*	*Frō Portland to Wight.*
8	11 — 39	*In all Havens on the South-coaſt of Ireland.*	
9	12 — 27		*Frō Wight to Beach or Beveſier.*
10	1 — 15		
11	2 — 3		
12	2 — 51		
13	3 — 39		
14	4 — 27		
15	5 — 15		

West, and East.

da	hou.mi.		Falling of ſtreames upon the ſame ſtroke.
0	6 — 0		
1	6 — 48	*Before Hamborgh.*	
2	7 — 36	*Before Bremen.*	
3	8 — 24	*Before the Marſdiep or Teſſel.*	
4	9 — 12	*At Hull.*	
5	10 — 0	*At Blackney & Wells.*	*From the Kiſcaſſes to Berchfleur.*
6	10 — 48	*Before Antwerpe.*	
7	11 — 36	*Der Goes.*	
8	12 — 24	*Der Gouwe.*	*Frō Engladsende to Lezart.*
9	1 — 12	*At Concallo & S. Malo.*	
10	2 — 0	*S. Paules in the Haven.*	
11	2 — 48	*Without the Sorlis in the Chanell.*	
12	3 — 36		
13	4 — 24		
14	5 — 12		
15	6 — 0		

West-by-north, and East-by-ſouth.

da	hou.mi.		Falling of Streames upon the ſame ſtroke.
0	6 — 45		
1	7 — 33		
2	8 — 21		
3	9 — 9	*Betweene Fawÿck and Vaelmuyen in the Chanell.*	
4	9 — 57	*Amidſt in the Chanell.*	*From the Iſād Bas to Marwanen along the land.*
5	10 — 45	*At Briſtou at the Kaye*	
6	11 — 33	*Before S. Nicolas and Podeſſemſke.*	
7	12 — 21		
8	1 — 9		
9	1 — 57		
10	2 — 45		
11	3 — 33		
12	4 — 21		
13	5 — 9		
14	5 — 57		
15	6 — 45		

West-north-weſt, and East-ſouth-eaſt.

da	hou.mi.		Falling of Streames upon the ſame ſtroke.
0	7 — 30	*At the Neſſe by Wieringhen.*	
1	8 — 18	*In Teſſel in the Coopvaerders Rode.*	
2	9 — 6	*At Kilduyn.*	
3	9 — 54	*In the middle of the Chanell in the Fairway.*	
4	10 — 42	*Neare Goutſtert in the Chanel.*	*Frō the Iland Briack to S. Malo.*
5	11 — 30	*And betweene Mouſhole & Vaelmuyen in Sea.*	
6	12 — 18	*Neare Plimmouth in Sea.*	*From Berghfleur to Seynhooft.*
7	1 — 6	*At Lezart by the land.*	
8	1 — 54		
9	2 — 42		
10	3 — 30		
11	4 — 18		
12	5 — 6		
13	5 — 54		
14	6 — 42		
15	7 — 30		

North-weſt-by weſt, and South-eaſt-by-eaſt.

da	hou.mi.		Falling of Streames upon the ſame ſtroke.
0	8 — 15		
1	9 — 3		
2	9 — 51	*Without the Kiſcaſſes in the Chanell.*	
3	10 — 39	*By Wight in the Chanell.*	*Behinde Garnſea in the Farewater.*
4	11 — 27	*From Wight to Beveſier by the land.*	*Within the ſeven Ilands.*
5	12 — 15	*Vpon the Coaſt by weſt the Foreland.*	
6	1 — 3	*Without the Vlie.*	
7	1 — 51		
8	2 — 39		
9	3 — 27		
10	4 — 15		
11	5 — 3		
12	5 — 51		
13	6 — 39		
14	7 — 27		
15	8 — 15		

North-weſt, and South-eaſt.

da	hou. mi.		Falling of ſtreames upon the ſame ſtroke.
0	9 — 0	*Before the Eaſt and Weſt Eemſes.*	
1	9 — 48	*Before the Vlie.*	*In the Wyck of Bennyte.*
2	10 — 36	*Before the Scholbalgh.*	*between Morlaix and the Drieakelpots.*
3	11 — 24	*On all the Freeſe Coaſts.*	
4	12 — 12	*Vpon the Freeſe and Wieringer Vlack*	
5	1 — 0	*Before Crãmer, Winterduyn, and Yarmouth.*	
6	1 — 48	*Within the Seine.*	
7	2 — 36	*At the Eaſt ende of Wight.*	
8	3 — 24	*In the Raſſe of Poortland.*	
9	4 — 12	*Betweene Garnſea & the Kiſcaſſes.*	
10	5 — 0		
11	5 — 48		
12	6 — 36		
13	7 — 24		
14	8 — 12		
15	9 — 0		

North-weſt-by-north, and South-eaſt-by-ſouth.

da	deg. mi.		Falliug of ſtreames upon the ſame ſtroke.
0	9 — 45		
1	10 — 33	*The Needles of Wight.*	*Before Concallo.*
2	11 — 21	*In the Chanell by Wight.*	*Before the Iland of S. Michanel in the Wyck.*
3	12 — 9	*The Kiſcaſſes.*	
4	12 — 57	*At Garnſea in the Chanel.*	
5	1 — 45	*Nere Leytſtaffe & Yarmouth without the banckes.*	
6	2 — 33	*At Der Gouwe.*	
7	3 — 21	*At the Wolfſhorne.*	
8	4 — 9		
9	4 — 57		
10	5 — 45		
11	6 — 33		
12	7 — 21		
13	8 — 9		
14	8 — 57		
15	9 — 45		

North-north-weſt, and South-ſouth-eaſt.

da	hou. mi.		Falling of ſtreames upon the ſame ſtroke.
0	10 — 30	*At Olferſnes and Harwidgh, without the banckes.*	
1	11 — 18	*At Leytſtaffe in the Rode.*	*From Berghfleur to Alhonga.*
2	12 — 6	*Yarmouth in the Rode.*	*From Cape Dorſt to the Iland Dardan.*
3	12 — 54	*before the Thames of London.*	
4	1 — 42	*At Margat.*	
5	2 — 30	*At Wight within.*	
6	3 — 18	*At Beunen, Diepen, & Seynhooft.*	
7	4 — 6	*In the Foſſe of Caen.*	
8	4 — 54	*At Struyſaert, & al the coaſts of Normandie, & Picardie.*	
9	5 — 42	*At S. Helene & Calveroort.*	
10	6 — 30		
11	7 — 18		
12	8 — 6		
13	8 — 54		
14	9 — 42		
15	10 — 30		

North-by-weſt, and South-by-eaſt.

da	hou. mi.		Falling of ſtreames upon the ſame ſtroke.
0	11 — 15	*Betweene Crippleſand and the Kreyl.*	
1	12 — 3	*Within at Olferſnes.*	*From S. Matthewes point unto Backovens.*
2	12 — 51	*At Hantom.*	*From Fontenay to S. Matthewes point.*
3	1 — 39	*At Portchmouth, & at Wolferſhorne.*	
4	2 — 27	*At Calveroort in Wight.*	
5	3 — 15	*before the haven of Caen.*	
6	4 — 3	*Within the Thames of London.*	
7	4 — 51		
8	5 — 39		
9	6 — 27		
10	7 — 15		
11	8 — 3		
12	8 — 51		
13	9 — 39		
14	10 — 27		
15	11 — 15		

CHAP. XXIII.

How you ſhall finde the tyme of the new and ful Moone.

THe former Tables of the Water-tydes are unprofitable & not to be uſed, when the age of the Moone is not known, and therefore we have hereunto added, an Almanack for the next tenne yeeres, one enſeuing the other, wherein you may perfectly finde when it is a new or full Moone, and alſo the juſt tyme of the quarters.

Which to underſtand, you muſt firſt knowe, that all Aſtronomers reckon the day from one noone tyme to another, and to that ende reckon from one noone to the noone next after enſeuing 24 houres, which cuſtome alſo is obſerved in theſe Almanacks, thereby to ſhewe the difference betweene forenoone and afternoone. But to finde the tyme of the newe Moone or full Moone or of the quarters, then note firſt that there are two parts of the Almanacke noted with figures, the firſt ſhewing the daye of the Moneth ſtanding againſt it whereon the Moone is new, full or in the quarters. The ſecond ſheweth the houre and minutes of the ſame day: which perfectly to underſtand I will manifeſt by an example.

Example.

Anno 1612 I deſire to know in the moneth May, when it will be full Moone, to that ende I looke into the Almanack of Anno 1612, in the moneth May, & there I finde the full Moone, upon the 14 day, at 9 of the clock 38 minutes, that is at 9 in the night: but the new Moone in the ſame Month, is the 29 day, 22 houres and 33 minutes, that is ſo many houres after noone of that day, and therefore if you tell from the ſaid noone 22 houres 33 minutes, then you will finde that it ſhall be upon the 30 day at 10 of the clock and 33 minutes before noone. But to know upon what day of the weeke it is, you muſt firſt know the Sondayes letter for the yeere- and alſo with what letter everie moneth beginnes. the Sondayes letter you ſhall finde noted under everie ſeverall yeeres Almanack. The Leape yeeres have 2 Sondayes or Dominicall letters, the firſt is uſed untill the 25 day of Februarie, the other from the 25 of Februarie unto the ende of the yeere, but with what letter each moneth beginneth, that you ſhall finde in this table enſeuing.

Ianuarie	beginneth with	A	Iulie	beginneth with	G
Februarie		D	Auguſt		C
March		D	September		F
Aprill		G	October		A
May		B	November		D
Iune		E	December		F

If then you will know upon what day of the weeke the aforeſaid 14 day of May falleth, then reckon upon the line of letters ſtanding hereunder, beginning at the firſt B (becauſe May beginneth with B) to the number of 14, then your number that you reckon will ende upon A: but for that Anno 1612 is a Leap yeere, and hath 2 Dominicall letters, to wete, A & G. then (as aforeſaid) from the 25 of Februarie you ſhall uſe the laſt, which in this is G. and for that your reckoning falles upon A, that is a day after G which is Sonday, then the 14 of May will be upon a Munday. If you looke in the moneths of Ianuarie or October, you muſt reckon from the firſt A, for thoſe moneths begin with A, and Aprill and Iune with G, and ſo forth.

a, b, c, d, e, f, g, a, b, c, d, e, f, g, a, b, c, d, e, f, g, a, b, c, d, e, f, g, a, b, c, d, e, f, g, a, b.

Heere followeth the Almanack for 10 yeeres, calculated upon the Meridian of Amſterdam. Newe ſtile.

The Almanack for the Yeere 1611. Newe ſtile.

	Moone.	da	ho.m.
Ianuarie.	laſt quarter.	5	11. 2
	new moone	13	14.17
	firſt quarter	21	10.58
	full moone.	28	1.56
Februarie.	laſt quarter.	4	4.19
	new moone	12	8.43
	firſt quarter	19	21.19
	full moone.	26	12.48
March.	laſt quarter.	5	23.20
	new moone	14	0.49
	firſt quarter	21	4.43
	full moone.	28	0.22
Aprill.	laſt quarter.	4	18.43
	new moone	12	13.53
	firſt quarter	19	10.18
	full moone.	26	13. 0
May.	laſt quarter.	4	13. 2
	new moone	12	0.16
	firſt quarter	18	15.57
	full moone.	26	2.27
Iune.	laſt quarter.	3	5.37
	new moone	10	8.40
	firſt quarter	16	22.52
	full moone.	24	17.17

	Moone.	da	ho.m.
Iulie.	laſt quarter.	2	19.57
	new moone	9	15.54
	firſt quarter	16	8.15
	full moone.	24	8.20
Auguſt.	laſt quarter.	1	7.28
	new moone	7	23.12
	firſt quarter	14	20.42
	full moone.	22	23.43
	laſt quarter.	30	16.39
September.	new moone	6	7.15
	firſt quarter	13	12.19
	full moone.	21	15. 6
	laſt quarter.	29	5. 0
October.	new moone	5	16.48
	firſt quarter	13	6.37
	full moone.	21	5.39
	laſt quarter.	28	6.21
November.	new moone	4	5. 3
	firſt quarter	12	2.38
	full moone.	19	19. 0
	laſt quarter.	26	13.20
December.	new moone	3	20. 3
	firſt quarter	11	23. 5
	full moone.	19	7. 5
	laſt quarter.	25	22. 7

In this Yere 1611, the Golden number is 16. The circle of the Sonne 24. Dominical letter B. The Romane Indiction 9. The Epact 16. After-winter, 7 weekes 1 daye. Quadrageſima Februarie 20. Eaſter day 3 of April. Aſſention day the 12 of May. Whitſonday the 22 of May. Advent the 27 of November. This yeere there ſhall be 2 Eclipſes of the Sonne, which ſhall not be ſeene above our Horizon.

The Almanack for the yeere 1612. New ſtile.

	Moone.	da	ho.m.
Ianuarie.	new moone	2	13.45
	firſt quarter	10	18.10
	full moone.	17	17.58
	laſt quarter.	24	9.46
Februarie.	new moone	1	8.46
	firſt quarter	9	10.28
	full moone.	16	4. 1
	laſt quarter.	23	0. 0
March.	new moone	2	3.29
	firſt quarter	9	23.11
	full moone.	16	13.39
	laſt quarter.	23	16.24
	new moone	31	20.31
Aprill.	firſt quarter	8	8. 0
	full moone.	14	23.18
	laſt quarter.	22	10. 1
	new moon.	30	10.46
May.	firſt quart.	7	14. 0
	full moone.	14	9.38
	laſt quarter.	22	3.53
	new moone	29	22.33
Iune.	firſt quarter	5	18.33
	full moone.	12	21. 7
	laſt quarter.	20	21.12
	new moone.	28	8. 6

	Moone.	da	ho.m.
Iulie.	firſt quarter	4	23.24
	full moone.	12	10. 4
	laſt quarter.	20	13.15
	new moone	27	16.11
Auguſt.	firſt quarter	3	6.20
	full moone.	11	0.38
	laſt quarter.	19	3.41
	new moone	25	23.56
September.	firſt quarter	1	16.22
	full moone.	9	16.39
	laſt quarter.	17	16. 4
	new moone	24	8. 0
October.	firſt quarter	1	6. 0
	full moone.	9	9.29
	laſt quarter.	17	2.25
	new moone	23	17.10
	firſt quarter	30	23. 8
November.	full moone.	8	2.16
	laſt quarter.	15	10.49
	new moone	22	4.13
	firſt quarter	29	19. 2
December.	full moone.	7	17.57
	laſt quarter.	14	18.16
	new moone	21	17.47
	firſt quarter	29	16. 9

The Golden number for this Leap yeere is 17. The circle of the Sonne 25. Dominicall letter A G. The Romane Indiction 10. The Epact 27. After-winter 10 weekes juſt. Quadrageſima March 11. Eaſterday the 22 of April. Aſſention day 31 of May Whitſonday 10 of Iune. Advent 2 of December. In this yeere there ſhall be four Eclipſes, 2 of the Sonne, and 2 of the moone, whereof but two ſhal be ſeen above our Horizon: the firſt of the Moone May 14, 9 houres 48 min. after noone, the other of the Sonne the 30 of May, at 10 of the clock 42 min. before noone.

The Almanack of the yeere 1613, New ſtile.

	Moone.	da	ho.m.
Ianuarie.	full moone.	6	7.53
	laſt quarter.	13	1.53
	new moon.	20	9.44
	firſt quart.	28	13. 0
Februarie.	full moone.	4	19.52
	laſt quarter.	11	10.41
	new moon.	19	3.15
	firſt quarte.	27	7. 6
March.	full moone.	6	5.47
	laſt quarter.	12	21.47
	new moon.	20	21.10
	firſt quart.	28	22. 4
Aprill	full moone.	4	14.54
	laſt quarter.	11	11. 4
	new moon.	19	14.15
	firſt quart.	27	9. 0
May.	full moone.	3	23.15
	laſt quarter.	11	2. 0
	new moon.	19	5.34
	firſt quart.	26	16.35
Iune.	full moone.	2	7.48
	laſt quarter.	9	18.20
	new moon.	17	18.48
	firſt quart.	24	21.39

	Moone.	da	ho.m.
Iulie.	full moone.	1	17.19
	laſt quarter.	9	11.32
	new moon.	17	5.56
	firſt quart.	24	1.48
	full moone.	31	4.28
Auguſt.	laſt quarter.	8	4.44
	new moon.	15	15.42
	firſt quart.	22	7. 5
	full moone.	29	18. 0
September.	laſt quarter.	6	21.31
	new moon.	14	0.38
	firſt qnart.	20	14.55
	full moone.	28	9.39
October.	laſt quarter.	6	13. 1
	new moon.	13	9.24
	firſt quart.	20	2. 0
	full moone.	28	3.15
November.	laſt quarter.	5	2.45
	new moon.	11	18.41
	firſt quart.	18	17.36
	full moone.	26	21.40
December.	laſt quarter.	4	14. 8
	new moon.	11	5. 9
	firſt quart.	18	12.15
	full moone.	26	15.28

In this Yeere 1613, the golden number is 18: the circle of the Sonne 26. The dominicall letter F. The Romane Indiction 11. The Epact 8. The After-winter 7 weekes 5 dayes. Quadrageſima Februarie 24. Eaſter day the 7 of April. Aſſention day the 16 of May. Whitſonday the 26 of May. Advent 1 of December. This yeere there ſhall be 6 Eclipſes, four of the Sonne, and two of the Moone, whereof but one of the Moone ſhall be ſeene upon the 28 of October. 3 houres 37 minutes after noone, all the reſt ſhall be ſeen out of our Horizon.

The Almanack of the yeere 1614 New ſtile.

	Moone.	da	ho.m.
Ianuarie.	laſt quarter.	2	23.20
	new moone	9	17.13
	firſt quart.	17	8.55
	full moone.	25	7.18
Februarie.	laſt quarter.	1	6.50
	new moon.	8	6.48
	firſt quart.	16	5.50
	full moone.	23	20.37
March.	laſt quarter.	2	14. 2
	new moon.	9	22.23
	firſt quart.	18	1.17
	full moone.	25	7.18
	laſt quarter.	31	22. 0
Aprill.	new moon.	8	14.37
	firſt quarter	16	17.57
	full moone.	23	16. 6
	laſt quarter.	30	7.46
May.	new moon.	8	6.53
	firſt quart.	16	7.19
	full moone.	22	23.46
	laſt quarter.	29	19.40
Iune.	new moon.	6	22.31
	firſt quarter	14	17. 3
	full moone.	21	7.15
	laſt quarter.	28	9.49

	Moone.	da	ho.m.
Iulie.	new moon.	6	12.56
	firſt quart.	13	23.55
	full moone.	20	15.16
	laſt quarter.	28	1.51
Auguſt.	new moon.	5	2. 7
	firſt quart.	12	5. 2
	full moone.	19	0.54
	laſt quarter.	26	19.32
September.	new moon.	3	13.56
	firſt quart.	10	9.54
	full moone.	17	13. 0
	laſt quarter.	25	13.45
October.	new moon.	3	0.49
	firſt quarter	9	16.16
	full moone.	17	3.45
	laſt quarter.	25	7.55
November.	new moone	1	10.55
	firſt quarter	8	1.31
	full moone.	15	21.14
	laſt quarter.	24	0.53
	new moone	30	20.54
December.	firſt quarter	7	14.34
	full moone.	15	16.20
	laſt quarter.	23	15.24
	new moone	30	7. 8

This Yeere the Golden number ſhall be 19. The circle of the Sonne 27. Dominicall letter E. The Romane Indiction 12. The Epact 19. The After-winter 6 weekes 4 dayes. Quadrageſima the 16 of Februarie. Eaſter day 30 of March. Aſſention day 8 of May. Whitſonday 18 of May. Advent 30 December. Four Eclipſes ſhall thisyeere be ſeene, the firſt and laſt out of our Horizon, the ſecond of the Moone the 23 of Aprill, 16 houres 14 minutes: the third of the Sonne, the 3 of October 55 minutes after noone.

The Almanack for the Yeere 1615. Newe ſtile.

	Moone.	da	ho.m.
Ianuarie.	first quarter	6	7. 0
	full moone.	14	11.29
	laſt quarter.	22	3. 0
	new moone	28	18. 2
Februarie.	first quarter	5	2. 0
	full moone.	13	4.55
	laſt quarter.	20	11.39
	new moone	27	5.48
March.	first quarter	6	22. 0
	full moone.	14	19.35
	laſt quarter.	21	18.15
	new moone	28	18.42
Aprill.	first quarter	5	18. 0
	full moone.	13	7.15
	laſt quarter.	20	0. 9
	new moone	27	8.34
May.	first quarter	5	11.14
	full moone.	12	16.35
	laſt quarter.	19	7. 0
	new moone	26	23.24
June.	first quarter	4	2.17
	full moone.	11	0.18
	laſt quarter.	17	15.44
	new moone	25	14.31
Julie.	first quarter	3	14.56
	full moone.	10	7.24
	laſt quarter.	17	3.10
	new moone	25	5.50
Auguſt.	first quarter	2	0.29
	full moone.	8	14.51
	laſt quarter.	15	17.30
	new moone	23	20.41
	first quarter	31	7.46
September.	full moone.	6	23.25
	laſt quarter.	14	10.30
	new moone	22	10.52
	first quarter	29	13.45
October.	full moone.	6	10.11
	laſt quarter.	14	5.24
	new moone	22	0. 0
	first quarter	28	19.52
November.	full moone.	4	23.46
	laſt quarter.	13	1.19
	new moone	20	12. 0
	first quarter	27	3.38
December.	full moone.	4	16.17
	laſt quarter.	12	20.43
	new moone	19	23.10
	first quarter	26	14.13

In this Yeere 1615, the Golden number is 1. The circle of the Sonne 28. Dominical letter D. The Romane Indiction 13. The Epact 1. After-winter, 9 weekes 3 dayes. Quadrageſima the 8 of March. Eaſter day Aprill 19. Aſſention day the 28 of May. Whitſonday the 7 of Iune. Advent the 30 of November. This yeere there ſhall be 2 Eclipſes of the Sonne, the firſt the 29 of March, in the morning between 6 and 7 of the clock, which ſhal be beſt ſeene of them which inhabite Eaſt-India, the other ſhall not be ſeene by us.

The Almanack for the yeere 1616. New ſtile.

	Moone.	da	ho.m.
Ianuarie.	full moone.	3	11. 0
	laſt quarter.	11	14.10
	new moone	18	9.31
	first quarter	25	3.50
Februarie.	full moone.	2	6.21
	laſt quarter.	10	4.23
	new moone	16	19.37
	first quarter	23	20. 9
March.	full moone.	3	0.37
	laſt quarter.	10	14.56
	new moone	17	5.44
	first quarter	24	14. 8
Aprill.	full moone.	1	16.26
	laſt quarter.	8	22.17
	new moon.	15	16.25
	first quart.	23	8.41
May.	full moone.	1	5.28
	laſt quarter.	8	3.29
	new moone	15	4. 0
	first quarter	23	2.40
	full moone.	30	15.51
June.	laſt quarter.	6	8.22
	new moone	13	16.47
	first quarter	21	19.18
	full moone.	29	0.25
Julie.	laſt quarter.	5	14.33
	new moone	13	6.46
	first quarter	21	10. 0
	full moone.	28	7.54
Auguſt.	laſt quarter.	3	23.13
	new moone	11	22. 0
	first quarter	19	22.42
	full moone.	26	15.22
September.	laſt quarter.	2	11.21
	new moone	10	14. 5
	first quarter	18	9. 0
	full moone.	24	23.39
October.	laſt quarter.	2	2.51
	new moone	10	6.16
	first quarter	17	17.27
	full moone.	24	9.37
	laſt quarter.	31	21.25
November.	new moone	8	21.55
	first quarter	16	0.36
	full moone.	22	21.45
	laſt quarter.	30	17.54
December.	new moone	8	12. 9
	first quarter	15	7.52
	full moone.	22	12.47
	laſt quarter.	30	14.49

The Golden number for this Leap yeere is 2. The circle of the Sonne is 1. Dominicall letter C B. The Romane Indiction 14. The Epact 12. After-winter 7 weekes 2 dayes. Quadrageſima Februarie 21. Eaſterday the 3 of April. Aſſention day 12 of May Whitſonday 22 of May. Advent 27 of November. In this yeere there ſhall be four Eclipſes, 2 of the Sonne, and 2 of the moone, whereof one of the moone the 27 of Auguſt in the morning betweene 3 and 4 of the clock, ſhall be ſeen by us, the other ſhall be without our Horizon.

The

The Almanack of the yeere 1617, New stile.

	Moone.	*da*	*ho.m.*
Ianuarie.	new moon.	7	0.48
	first quart.	13	16.26
	full moone.	21	5.33
	last quarter.	29	10.23
Februarie.	new moon.	5	11.51
	first quarte.	12	3. 4
	full moone.	20	0.35
	last quarter.	28	3. 0
March.	new moon.	6	21.32
	first quart.	13	16. 9
	full moone.	21	18.50
	last quarter.	29	15.49
Aprill.	new moon.	5	6.29
	first quart.	12	7.15
	full moone.	20	11.16
	last quarter.	28	1.52
May.	new moon.	4	16.45
	first quart.	11	23.46
	full moone.	20	1.33
	last quarter.	27	6.44
Iune.	new moon.	3	0.50
	first quart.	10	17. 1
	full moone.	18	13.26
	last quarter.	25	11. 4

	Moone.	*da*	*ho.m.*
Iulie.	new moon.	2	11.31
	first quart.	10	10.15
	full moone.	17	23.26
	last quarter.	24	15. 6
August.	new moon.	1	0. 3
	first quart.	9	2.54
	full moone.	16	8. 7
	last quarter.	22	22.14
	new moon.	30	14.40
September.	first qnart.	7	18.16
	full moone.	14	16.23
	last quarter.	21	7.57
	new moon.	29	7. 0
October.	first quart.	7	7.55
	full moone.	14	0.51
	last quarter.	20	1.15
	new moon.	29	0.45
November.	first quart.	5	19.38
	full moone.	12	10.29
	last quarter.	19	15.38
	new moon.	27	18.26
December.	first quart.	5	5. 6
	full moone.	11	21.39
	last quarter.	19	10.37
	full moone.	27	10.55

In this Yeere 1617, the golden number is 3: the circle of the Sonne 2. The dominicall letter A. The Romane Indiction 15. The Epact 23. The After-winter 6 weekes. Quadragesima Februarie 12. Easter day 26 of March. Assention day the 4 of May. Whitsonday the 14 of May. Advent 3 of December. This yeere there shall be 5 Eclipses, three of the Sonne, and two of the Moone: of al which onely the last of the Moone can be here seen the 16 of August, at 8 of the clock and 7 minutes after in the evening.

The Almanack of the yeere 1618 New stile.

	Moone.	*da*	*ho.m.*
Ianuarie.	first quart.	2	13. 0
	full moone.	10	10.58
	last quarter.	18	7.48
	new moon.	26	1.22
Februarie.	first quart.	1	20.32
	full moone.	9	2.13
	last quarter.	17	4.23
	new moon.	24	15.43
March.	first quart.	3	4.34
	full moone.	10	18.52
	last quarter.	18	22.45
	new moon.	25	23. 8
Aprill.	first quarter	1	14.21
	full moone.	9	11.57
	last quarter.	17	13.31
	new moon.	24	7.32
May.	first quart.	1	2. 8
	full moone.	9	4.25
	last quarter.	17	1. 0
	new moon.	23	15.23
	first quarter	30	16. 2
Iune.	full moone.	7	19.34
	last quarter.	15	8.41
	new moone	21	23.18
	first quarter	29	7.41

	Moone.	*da*	*ho.m.*
Iulie.	full moone.	7	9. 4
	last quarter.	14	14. 9
	new moon.	21	8.17
	first quart.	29	0.35
August.	full moone.	5	20.56
	last quarter.	12	18.32
	new moon.	19	19.12
	first quart.	27	18.13
September.	full moone.	4	7.51
	last quarter.	10	23.47
	new moon.	18	8.34
	first quarter	26	11.46
October.	full moone.	3	17.10
	last quarter.	10	7.32
	new moone	18	0.36
	first quarter	26	4.40
November.	full moone.	2	2.39
	last quarter.	8	18.49
	new moone	16	18.53
	first quarter	24	19.37
December.	full moone.	1	12.26
	last quarter.	8	9.54
	new moone	16	13.45
	first quart.	24	8. 1
	full moone.	30	22.57

This Yeere the Golden number shall be 4. The circle of the Sonne 3. Dominicall letter G. The Romane Indiction 1. The Epact 4. The After-winter 8 weekes 6 dayes. Quadragesima the 4 of March. Easter day 15 of Aprill. Assention day the 24 of May. Whitsonday 3 of Iune. Advent the 2 December. There shall be seene upon the Globe of the Earth three Eclipses, 2 of the Sonne, and 1 of the Moone, but none of the three shall be seene above our Horizon.

The Almanack of the yeere 1619, New ſtile.

	Moone.	*da*	*ho.m.*
January.	laſt quarter.	7	4.11
	new moon.	15	8. 5
	firſt quart.	22	17.49
	full moone.	29	10.41
Februarie.	laſt quarter.	6	0.23
	new moon.	14	0.14
	firſt quarte.	21	1.14
	full moone.	27	23.40
March.	laſt quarter.	7	20.54
	new moon.	15	13.24
	firſt quart.	22	7.51
	full moone.	29	14. 0
April.	laſt quarter.	6	15.57
	new moon.	13	23.57
	firſt quart.	20	14 9
	full moone.	28	5.12
May.	laſt quarter.	6	8.30
	new moon.	13	8.22
	firſt quart.	19	23.18
	full moone.	27	20.39
Iune.	laſt quarter.	4	22. 8
	new moon.	11	15.46
	firſt quart.	18	10. 0
	full moone.	26	12. 5

	Moone.	*da*	*ho.m.*
Iulie.	laſt quarter.	4	8.30
	new moon.	10	23. 0
	firſt quart.	17	23.30
	full moone.	26	2.51
Auguſt.	laſt quarter.	2	16.11
	new moon.	9	6.55
	firſt quart.	16	15.23
	full moone.	24	16.46
	laſt quarter.	31	21.58
September.	new moon.	7	16.32
	firſt qnart.	15	9.11
	full moone.	23	5.35
	laſt quarter.	30	3.16
October.	new moon.	6	4.32
	firſt quart.	15	4.12
	full moone.	22	17.16
	laſt quarter.	29	9.55
November.	new moon.	5	19.32
	firſt quart.	13	23.24
	full moone.	21	4.21
	laſt quarter.	27	19. 0
December.	new moon.	5	13.14
	firſt quart.	13	17.22
	full moone.	20	14.49
	laſt quarter.	27	7.37

The Golden number of this yeere 1619 is 5: the Circle of the Sonne 4. The Dominical letter F. The Romane Indiction 2. The Epact 15. The After-winter 6 weekes & 5 dayes. Quadrageſima, or the firſt day of Lent, the 17 of Februarie. Eaſter-day the 31 of March. Aſſention day the 9 of May. Whitſonday the 19 of May. Advent the 1 of December. This yeere there ſhal be 5 Eclipſes, three of the Sõne, & two of the Moone: of which the firſt of the Moone the 26 of Iune, at 12 of the clock and 5 minutes at night, and the ſecond the 21 of December, in the morning at 2 of the clock 49 min. ſhall be ſeene: the other in the Sonne ſhall come to paſſe without our Horizon.

The Almanack of the yeere 1620 New ſtile.

	Moone.	*da*	*ho.m.*
January.	new moone	4	8.26
	firſt quart.	12	9. 0
	full moone.	19	1. 0
	laſt quarter.	25	23.11
Februarie.	new moon.	3	3.30
	firſt quart.	10	20.42
	full moone.	17	11.22
	laſt quarter.	24	17.29
March.	new moon.	3	21. 0
	firſt quart.	11	5.30
	full moone.	17	22.32
	laſt quarter.	25	12.36
April.	new moon.	2	11.33
	firſt quarter	9	11.55
	full moone.	16	10.28
	laſt quarter.	24	7.36
May.	new moon.	1	23.26
	firſt quart.	8	17.27
	full moone.	15	23.28
	laſt quarter.	24	1. 8
	new moon.	31	8.30
Iune.	firſt quarter	4	17.22
	full moone.	14	13.13
	laſt quarter.	22	16.29
	new moone	29	16.14

	Moone.	*da*	*ho.m.*
Iulie.	firſt quarter	6	7. 0
	full moone.	14	4. 0
	laſt quarter.	22	5.27
	new moon.	28	23.23
Auguſt.	firſt quart.	4	17.39
	full moone.	12	19.28
	laſt quarter.	20	16.11
	new moon.	27	6.57
September.	firſt quart.	3	7.42
	full moone.	11	11.14
	laſt quarter.	19	0.45
	new moon.	25	15.55
October.	firſt quarter	3	0.53
	full moone.	11	2.32
	laſt quarter.	18	7.44
	new moone	25	2.50
November.	firſt quarter	1	20.24
	full moone.	9	16.49
	laſt quarter.	16	14.16
	new moone	23	16.34
December.	firſt quarter	1	16.52
	full moone.	9	5.41
	laſt quarter.	15	21.52
	new moone	23	8.34
	firſt quart.	31	12.50

In this Leap-yeere the Golden number is 6. The circle of the Sonne 5. The Epact 26. Dominicall letter E D. After-winter 9 weekes and 4 dayes. Eaſter day the the 19 of Aprill. Aſſention day 28 May. Whitſonday the 7 of Iune. Advent the 29 of November. Two great Eccliſpes of the Moone ſhal come to paſſe this yeere: the firſt the 14 of Iune 13 houres, and 13 minutes after noone, the other the 9 of December at night, at five of the clock and 41 minutes.

CHAP. XXIIII.

How at all tymes you ſhall finde the New Moone, or her age, without help of any Almanack.

VVhereunto it is requiſite to know the Golden number, whereby you knowe the Epact or Keye of the yeere: the Golden number riſeth everie yeere one, that is with the beginning of the yeere to the number of 19, ſo that everie 19 yeeres it goeth about, or makes an ende; then againe it beginneth at 1, 2, 3, &c. To finde it in ſuch a yeere as you deſire, do thus: ſee how many yeeres are paſt ſince Anno 1500, which devide by 19, and that which reſteth is the Golden number, but if nothing reſteth, that is, that even 19 partes are produced out of it, then your Golden number is 19.

Example.

I deſire to knowe the Golden number Anno 1608, ſetting the 1500 aſide, I looke how many times 19 there is in 108 yeres, and I finde 5, and 13 remaining, which 13 is the Golden number for that yeere, the like muſt be done with al the other yeres.

Of the Epact.

THe Epact or Keye of the yeere, altereth everie yeere upon the 1 of March next after enſeuing, riſing everie yeere 11 to the number of 30, & when it is more then 30, then take 30 out of it, and the reſt is the Epact: and ſo everie yeere reckon 11 more as aforeſaid.

But the Epact of the Olde Stile is alwaies 10 more then the New Stile, becauſe the Olde Stile followeth 10 dayes after the Newe Stile: ſo that if you adde 10 to the Epact of the Newe Stile, then you have the Epact of the Olde Stile: but if the number riſeth higher then 30, then leave 30 and that which remaineth is the Epact of the Olde Stile, which you ſhall clearly ſee in the table enſeuing.

How much the Epact is in everie yeere, you may perceive by this table, namely right againſt the Golden number, which to know without looking in a booke, you muſt do thus. Count the Golden number upon the three joyntes of your thumb, beginning with one at the undermoſt joynte, and count ſo long until you come to the Golden number of the yeere that you require, and if it endes on the undermoſt joynt of your thūb then the Golden Number and the Epact is al one number; but if it endeth on the middle joynt of your thumb, thē adde 10 to your Golden number, & that will be the Epact; but if it endeth upon the ende of your thumb, then you muſt adde 20 to your Golden number, and then you ſhall finde the Epact.

Golden number.	*Newe Epact.*	*Olde Epact.*
1	1	11
2	12	22
3	23	3
4	4	14
5	15	25
6	26	6
7	7	17
8	18	28
9	29	9
10	10	20
11	21	1
12	2	12
13	13	23
14	24	4
15	5	15
16	16	26
17	27	7
18	8	18
19	19	29

Example.

I would knowe the Epact of Anno 1609, the Golden number for that yeere is 14: now when I tell this number upon the three joynts of my thumb it endeth upō the middlemoſt joynt of my thumb, for which cauſe I adde 10 thereunto, and it makes 24, which is the Epact of that yeere, agreeing with the table aforeſaid, this is to be underſtood after the new Stile.

Now if you will knowe when it is a new Moone, then take the number of the Epact of your yeere, and thereunto adde the number of the moneths ſince March to the moneth wherein you are, accounting that therein: if the number be juſt 30, then it will be a newe Moone upon the firſt day of the moneth, but if it be leſſe then 30, then knowe that there muſt want ſo many daies of the moneth as the number is leſſe then 30, before it ſhal be a newe Moone.

Example.

In Anno 1614 I deſire to knowe when it ſhall be a newe Moone, in the moneth of Iulie: the Epact of that yeere is 19, whereunto adde 5 for the moneths from March, which added together maketh 24, which wanteth 6 of 30, ſo that the newe Moone

Moone ſhall be upon the 6 day of the moneth of Iulie.

But if you deſire to knowe how olde the Moone is upon any daye, adde the Epact & the number of the moneths frō March, to the dayes that are paſt in the moneth that you are in, and if the number be leſſe then 30, then it will ſhewe the age of the Moone, but if it be more then 30, then ſubtract 30 out of it, and that which then remayneth, is the age of the Moone.

Example.

In the yeere 1614 aforeſaid, I deſire to know the age of the Moone the 28 of Iulie, the Epact is 19, whereunto I adde 5 for the moneths paſt from March, and 28 more for the dayes of the moneth that are paſt, which together maketh 52, from which I ſubtract 30, & there reſteth 22, and that is the age of the Moone upon that day: that which is here alledged concerneth the New Stile wholly.

CHAP. XXV.

Of the Sea-cardes.

IT is well knowne unto everie man, ſpecially to all thoſe that underſtand the groundes of Coſmographie, that the Earth and the Sea together is a round bodie or Globe, ſo that it is impoſſible in ſuch ſort to ſet downe and ſhewe the ſame, or the partes thereof in one plat forme, or carde, that they may be well diſtinguiſhed without error, for it is impoſſible to make a thing that is round to be like in all proportions with that which is flatte, ſo that the cōmon flatte Sea-cardes many tymes in ſome places are untrue, ſpecially thoſe that ſet forth great voyages, farre from the Equinoctiall: but the Sea-cardes that are cōmonly uſed here aboutes for the Eaſt & Weſt voyages by Sea, they are reaſonable true, or els the faults therin are ſo ſmale, that they cannot be any hinderance thereunto: they are moſt fitt Inſtruments to be uſed by ſea, and our old farefathers which firſt practiſed them did great pleaſure, & profit unto Seafaring men. The want that we finde in them, conſiſteth herein, & is thus found: If a man were to ſayle to a place with three points into the Sea, the two firſt points might be ſayled by their ſtrokes and diſtances, but from the ſecond to the third place (that is the third ſide of the triple point) it will fayle both in the ſtretching and the diſtance.

Example.

I ſayle from the Lezard with a right courſe to the Ilands of Canaria, and from thence againe to the Ilands of Corvo & Flores, for the which two ſtrokes and diſtances my Carde is well made, but if I wil ſayle again from Corvo to Lezard frō whence I firſt ſayled the Carde will ſhewe me an imperfect courſe, that is it will ſhew farther in the Carde then it is, and it ſhal differ alſo in the ſtretching, ſo that you muſt ſet your courſe more northerly then the Carde ſheweth.

In our ſhort wayes, as aforeſaid, this is not much marked, & is litle eſteemed, but they that ſayle to Weſt-India, they perceive it well ynough. When they ſayle outward, they hold their way farre ſouthward, and there finde their Cardes juſt with their due lengths, becauſe the Cardes are made for the purpoſe: but returning home againe, when they hold their courſe northerly, then they finde the way to be ſhorter then their Cardes ſhew it. The cauſe thereof is this, all the lines in flat Sea cardes from ſouth to north, are al over drawn juſt even each fom other, from the Equinoctiall to the Pole: but upon a round Globe, which is made in forme like the Earth, they are not of alike wideneſſe, but the more Northerly they are, the nearer they come one to the other, ſo that two ſtrokes of ſouth and north, at the breadth of 60 degrees, are but half ſo wide one from the other as upon the Equinoctiall Line, and under the Pole they fall cloſe together. Wherefore if two ſhips being under the Equinoctiall, diſtant from each other 200 leagues, both of them may ſayle right north without let or hinderance, & they would come to the height of 60 degrees, and be but 100 leagues one from the other, and if they ſhould hold on the ſame courſe, they would at laſt meet both together under the Pole, but if you ſhould prick the courſe of thoſe two ſhippes in a flat Sea-carde, the diſtances in the Carde would remaine alike, whereby it is playnely ſeene, that al places in the Sea-cardes lying farr northward are much to great, unles they be drawne leſſe, which cannot well be done, without making other places falſer, but how all ſuch places may be made even, and holpen you may ſee it in the Sea-cardes of Weſt India, which were printed and made by us.

Amongſt manie Pilots there is an opinion, that they had rather uſe the written Cardes, then ſuch as are printed, eſteeming the printed Cardes to be imperfect, and ſay that the written

Cardes are much better and perfecter, they meane the written Cardes that are dayly made by men, are everie day corrected,& the printed never: but herein they are not a litle deceived, for the printed Cardes in each reſpect are as good,yea & better then the written,for that the printed Cardes are once in everie point with al care and diligence made perfect,in regard that they ſerve for many, for that being once well made, all the reſt may with as litle labour be made good as wel as bad. But the Sea-cardes that are written can not be made ſo ſound nor with ſuch ſpeed, becauſe ſo much coſt for one peece alone were to much, but are all one after the other, with the leaſt labour copied out, and many tymes by ſuch perſons that have litle or no knowledge therein. Whatſoever there is yet reſting to be corrected or made better, is as eaſie to be corrected in the Cardes that are printed, as in them that are written, which wee alſo are readie to doe at our charge, if any man can by good pro ſhewe us any thing that is to be corrected in the Cardes that are printed by us.

The ende of the Introduction.

THE FIRST BOOKE
OF THE
LIGHT OF NAVIGATION

VVHEREIN ARE DESCRIBED AND DRAVVEN
all the Coaſts and Havens of the VVeſt Seas: as of Holland, Zealand,
Flanders, France, Spaine and Barbarie.

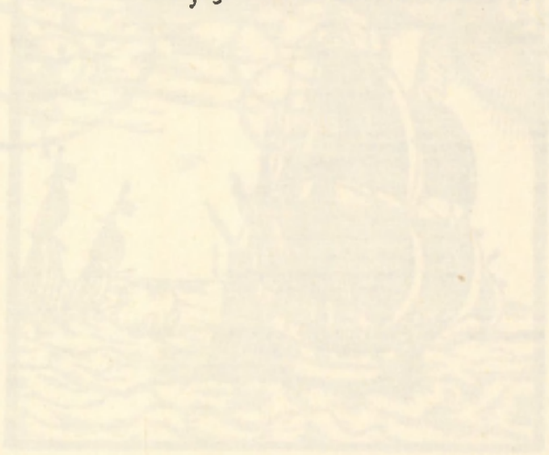
ALSO

Of the Ilands of Canaria, Madera, and the Flemiſh Ilands: together with the South and VVeſt
Coaſts of Ireland and England.



AT AMSTERDAM
Printed by VVilliam Iohnſon, dwelling upon the VVater, by the Old Bridge,
at the Signe of the Golden Son-dyall. Anno 1612.

Set heere the first Carde noted with N. 1.




Caarte vande Zuyder-Zee, en van de vermaerde Stromen ende Gaten van't Vlie ende Texel, wat zanden, platen, droogbten, diepten, ende ondiepten daer in gheleghen zÿn, ende hoemen die zoo in't op als afzeylen schouwen ende mÿden zal.
Description de la Zuyder-Zee, et des tresrenommez fleuves du Texel et Vlie, monstrant tous sables, bancqs, secheresses et autres inconveniens sur lesdictes fleuves, et par quel moyen on les peult eviter.
Friesland
Gelderland
Der Schelling
T'VLIE
Vlielandt
West Vlielander diep
Texel
Texel of Mars diep
Breesandt
Enckhuysen
Enckhuyser sandt
Urck
Memelick
Hoorn
Edam
Monickedam
Waterland
Amsterdam
Harlingen
Staveren
Worcum
Franicker
Wynaem
Arum
Midlum
Bolswaert
Pandragen
Harich
Mirnes
Hindelopen
Clif
Grind
Pieters sandt
Boomkens gat
Boomkens gronden
Cattegats gronden
Stortemelck
Westeynd
Robbesant
Eyerlandt
Burch
Hoorn
Noorder haecken
Spangiaerts gat
Keysers plaet
De Bos
De Balgh
De Waert
Repel
Wieringen
Cleverstee
Schaghen
Twisch
Almerdorp
Opperdoes
Scaerdam
Warder
Marcken
Muyersant
Muyerbergh
Muyen
Weesp
Oude Naerden
Naerden
Amersfoort
Elburgh
Harderwyck
Ens
Hem
Schellinchout
Warvertshoove
Lutkebroeck
Groote broeck
Leeck
Oude Zuyder gat
Zuyder gat
De Hoghe Boom
Schreysant
Hillegat
Wasgenpat
Het val van Urck
De hoghe horn
Het oude Vlie
Staert van Breesant
Monnicke sant
Duytsche mylen 15 in een graed
Spaensche mylen 17½ in een graed
Engelsche ende Fransche mylen 20 in een graed

CHAPTER I.

THE DESCRIPTION OF

the Streame running in the Flie, and the Teſsel, and hovv you muſt ſayle out of the Flie and the Teſſel.

I

To ſayle from Amſterdam and Enchuyſen to the Flie.

TO ſayle from Amſterdam to the fal of Urck, you muſt ſayle in the middle of the water to Tyort, and if you wil ſayle from thence over Pampus, with a ſhip that drawes much water, (that is at leaſt tenne foot or more) then keep Marker church without upon the Land of Udam, called Schyteldoecks haven, ſo long till the Steeple of Zuyderwou commeth even with Kinnigherbuert: which are the houſes that ſtand half way between Schyteldoecks haven & Diergerdam, then goe eaſtward to the Land, untill the New church of Amſterdam joynes with Diergerdam, & keepe the New-church ſtanding ſo, until the church of Weeſp is even with the houſe of Muyen, if that the church of Muyen ſtandeth nearer then the houſe, kepe Weeſp ſtanding ſo until you ſee Edam without the eaſt ende of Marcken. In this chanel it is almoſt a foot deeper then if you ſayle right through.

Markes of the deepeſt water of Pampus.

But to ſhunne Muyer-ſand Mariners were woont to bring the houſes that were woont to ſtand upon Tyort, ſouthward of the Heyliger-ſtee of Amſterdam, there by a man may make ſome geſſe, and they are good long markes: but when Monnikedam is about the weſt ende of Schiteldoecks haven, and the houſe of Muyen between Weeſp and Muyen church, then you are againſt Muyderſand. But to ſayle right through over Pampus, you muſt keepe Diemer ſteeple, above or againſt the point of Tyort, as long as you may ſee Tyort, for that is a right longmarke to ſayle over Pampus.

Markes of Muyderſand.

When you are right againſt the eaſt ende of Marken, then you muſt goe northeaſt, and ſomewhat more eaſterly to the fall of Urck, which is almoſt ſeven leagues from thence; but when you come within a league of Urck, then you come to a hard ſand called Houtrib, which ſtretcheth ſoutheaſt and northweſt croſſe over the water, which hath no moore water upon it, then is upon the flattes of Wieringen or Vrieſland, ſo that you can finde no deeper water upon it then right through. When Enchuyſen is northweſt, & northweſt-by-weſt from you then you are upon the Houtrib, when Urck lyeth more northerly, then northeaſt from you, & that you finde Sand that is certainly the Houtrib, for you can not ſayle ſo by Enchuyſen ſand, you are not at Enchuyſen ſand, before that Urck church is ſouthward of the buert of houſes that ſtand upon Urck: or when the walles of the old church ſtand right againſt the middle of the buert, then you are about Enchuyſen ſand, then ſayle northweſt & by weſt til Medenblick commeth without the point of Ven, then goe weſt-north-weſt to the tonne upon Hofſtede.

Markes of the Houtrib.

Markes of Enchuyſen ſand.

Betweene Urck and the Hofſtede tonne there lyeth a flatt of hard ſand, reaching to the ende of Enchuyſen ſand, which is no deeper then the Vrieſ-flatt: eaſtward about is the deepeſt water, & on the weſt ſide, (which by ſome men is called Cat-gat) you are ſooner about the High-horne or Enchuyſen ſand, and it is good for ſhips that goe not deep: when Enchuyſen ſteeple is ſouthweſt or more weſterly from you, then you are upon the flatte.

The flatte betweene Vrck and Hofſtede.

The Croſſe-markes of the tonnes both upon the Creupel & Hofſtede are Grootebroeck and Hem, which are two ſharp ſteeples comming right over againſt each other, then alſo if a ſharp ſteeple called Warnes cõmeth on the ſouth-ſide of Stavern clif, then you have the length of theſe tonnes, which lye both at 3 fathome, the one upon the eaſt banck, the other upon the point of the Creupel, the right chanel is here 4 fathomes and an half ſoft ground. When the ſteeple of Medenblick is northward of Medenblick howſe, as farr as the breadth of the houſe, then you have gone by and paſt Creupel ſand, then goe to the tonne that lyeth

Markes of the tonnes betweene Hofſtede and the Cripple.

Markes of Cripple-ſand.

lyeth by Kreil, north-weſt,& north-weſt-by-north,as the winde & the ſtreame is, the right Chanel here is ſcarſe 5 fathome. But when you come againſt the Kreil, in ſayling out, or about the Kreil ſayling in, there lyeth right within the Kreil,on the north ſide a hard ſand or flatte called South-Kreil, which reacheth along towards the tonne at the Hofſtede, there at a lowe water it is but 9 foot deep: but between this banck & the north wal it is 3 fathome deepe, ſoft ground, and ſouth or weſt it is 4 fathome and an half deepe. The markes of this flatt are, when Mirnes a flat ſteeple in Frieſland is right over a long Land-houſe, which ſtandeth ſouthward from Stavern church, then you are right againſt the ſaid flatt.

Markes of the flattes betweene the Kreil & the Hofſtede.

But the markes of the tonne that lyeth before Kreil are tehſe when the ſharp ſteeple of Twiſch, which ſtandeth weſtward from Memelick, is right againſt the Corne-mill, that ſtandeth weſtward from Memelick, and when the flatte Steeple of Mirnes is againſt the ſouth ſide or eaſt ſide of the Clif, then you are at the tonne which lyeth at the Kreil, and the Chanell is there 4 fathome and an half,and 5 fathome ſoft ground. But the tõne lyeth upon 4 fathome,and when neceſſitie compelleth you,you may ſayle a cables length eaſtward about, then from the tonne at the Kreil, to the tonne at the Freeſe Plaet, the courſe is north and by eaſt, when Twiſck is right north from Memelick, then keepe the ſteeple ſtanding ſo, as long as you can ſee it, & ſo you ſhall not ſayle upon any ſhallowes betweene the Plaet and the Kreil.

Markes of the ton at the Creil.

Betweene the tonne at the Kreil,and the Freeſe Plaet, on the weſt ſhore there lyeth a hard ſand called Monickſand, which you may ſhunne well,when you are ſome what out of the way, but when you are about the Kreil, then you muſt goe north & by eaſt, right through over the point of Breeſand, to the tonne lying weſt from Worcum, with a ſhip that draweth not much water, but the right Chanell is deeper as followeth.

Monickſãd.

If you ſayle with a ſhip that draweth much water, over the Freeſ-flatte, then ſet the flat ſteeple of Pandraghen (ſtanding weſt of Worcum)ſo, that it may ſtãd weſt from the houſes that lye weſtward from Worcum,that is a good Long-marke for the tonne that lyeth at the Freeſ-Plaet. If you have a ſhip that draweth much water, then goe eaſtward of the tonne about the Freeſe Plate, for there is more water then weſtward. When Warnes & Mirnes are right over againſt each other northward from Stavern then you have the length of this tonne, and when you are paſt this tonne, then goe north-north-eaſt, ſo long, till

Markes of the ton at the Freeſ-plaet.

Pandraghen commeth betweene the buert of houſes and Voorwold, if then the Cliffe ſtandeth right upon Stavern, there you have the deepeſt water upon the dryeſt place of the flatte, then goe ſome what more northerly to the tonne that lyeth at the bought,for eaſtward of this tõne it is al flatt water to Freeſland.

Deepeſt water at the Vlack.

The Long-marks of this Tõne at the bought are,when Pandraghen is right againſt Voorwolde, which is a ſteeple that ſtãdeth weſtward from Worcum on the water ſide, you may ſayle by this tonne on the eaſt ſide, and if you have a ſhip that draweth much water, then you muſt goe cloſe weſt by the tonne, that you may not ſayle by the point of Breeſand, which commeth from the weſt banck. Theſe are the Markes of the deepeſt water upon the dryeſt part of the flatt: when the Newland, which is a ſharp ſteeple ſtanding by Bolſweert, commeth betweene Voorwold aforeſaid, and the aforeſaid village or buert of houſes: the old Croſſe-markes of the tonne at the bought are, Mirnes,Molqueren, Hemelum, and ſome long buert of houſes, when theſe four ſtand together, then you have the length of this tonne, which lyeth upon 14 foot, and between theſe two tonnes, that is the tonne at the Freeſ-plaet,and that at the bought is the dryeſt of the flatte. Now when the tonne at the bought is ſidewaies on you, then goe north and by weſt, and ſome what more weſterly, to the tonne lying weſt from Worcum: which lyeth upon theſe markes. There ſtandeth a ſharp ſteeple farre within the Land called Harich, when it is right over certaine buert-houſes which lye northward of Hinloopen called Dertwiſch,there this tonne lyeth upon the eaſt wall,at 16 foot low water,& the right depth there againſt it, is full 3 fathome. The old markes are two villages neareſt to Macküm,which ſtand north-eaſt from you, & come through each other, and ſtand upon the water ſide, and when they are a litle through each other, then you ſhall ſee two litle ſteeples ſome what northerly from Bolſweert, which come within verie litle one hard by the other, in manner as the other ſtand ſeparated that ſtand upon the water ſide, the one is called Idſega houſes. The Croſ-marks are theſe, there ſtandeth a high houſe on the eaſt ende of Coudom, which commeth within a windbomes length neere to the ſouth ende of Hinlopen, and when that houſe commeth on the ſouth ende of Hinlopen,thẽ you are to near the eaſt banck, and when it ſtandeth the length of a cable or more from Hinlopen, then you are to neare to the weſt ſhore, theſe are the markes of the tonne,at weſt from Worcum. From thence to the tonne at Iglepoint the courſe is north: the markes thereof are theſe,there ſtandeth a ſharp ſteeple called

Markes of the deepeſt water on the Flat.

Markes of the ton beweſt Worcum.

Croſſemarkes.

Lutgeeſt

Markes of the ton at Iglehooke

Lutgeeſt, with a long village croſſe from you, when that ſteeple is within the innermoſt gap of the long village, then you are againſt the tonne, and that is a good croſſe marke, but the long-markes are, when the ſharp ſteeple of Pingom is right againſt the flat ſteeple of Corenwaert, ſtanding upon the water ſide, and Pandraghen is right againſt a litle houſe which ſtandeth northward from the village with the gap, or when the milles of Stavern ſtand betweene the towne and the bulwarke of Stavern, theſe are all good Long-markes of the tonne at Igelhooke, and this tonne when you ſayle outward, may be ſayled by on the eaſt ſide, and ſo you may come northward of the middle ground againe into the Vlie-ſtreame, but not with great ſhips.

From Iglehooke to the Middle ground, the courſe is north & ſouth, & the right depth in the Middle ground is 7 fathome, but in the chanell betweene weſtof Worcum and the Middle ground it is 4 fathome deepe good ground, and the eaſt wall is flat and the weſt is ſhoring. The tonne of the middle ground lyeth upon theſe markes, when the two ſharp ſteeples which ſtand northeaſt or there aboutes from you (that is Arum & Pingom) are both one againſt the other, then you have the length of this tonne, or when Bolſwert is right north with a houſe that ſtandeth north from Mackum, theſe are good Croſſe-markes of the middle ground: Long-markes are theſe, when Kinſwaert (that is the Looper) is right behinde Surich church, then you are right in the chanell. This Surich church ſtandeth on the water ſide upon a point of land about northeaſt and by north from you, or when the flat ſteeple of Wynaldum or Wynaem which ſtandeth north from Harlinghen, ſheweth betweene Mildum & Harlinghen, then you are right in the middle ground, and unto which ſide Winaldum ſtandeth neareſt, unto that ſhore are you neareſt: Wynaldum muſt ſtand betweene the eaſt ende of Harlinghen and Mildum, but Mildum neareſt: this is a right Long-marke. The right chanel in Middlegrond is 7 fathome as aforeſaid, and both the ſides or grounds are ſhoring.

Markes of the boye at the Middlegroud.

When you are through the Middleground & will ſayle outward to the Vlie, you muſt not ſayle by any pointes of ſand on the weſt along to Monick Slot, but you muſt not goe nearer to the weſt ſhore betweene the Middle ground and Swanebalgh, then three fathome deepe: and from Swanebalgh forward (going outward) you muſt not goe nearer then 4 fathome, and you muſt be diligent to caſt out your lead, ſpecially when you come againſt Schieringſhals, but whē you come out of the Sea homewards you may ſayle under the weſt ſhore, as it ſhall hereafter be declared.

Middle plaet.

When you come in out of the Sea, you may ſayle by the ton that lyeth at the Middleground, for there is a flatte called Middle flatte, which you may ſayle eaſtward about, and ſo come ſouthward of the ton to Iglehooke again into the Vlie-ſtreame but not with great ſhips, this Middle plaet lyeth on the eaſt ſhore, on the weſt ſhore alſo you ſayle by a flat, called Dominicus flatte, before you come to the Middle ground, which is alſo called the point of the Waert, or Doode balgh, & upon it there ſtandeth a rowe of beakons: northward from this Flatte there is a good Rode, right over againſt the tonne at Swanebalgh: for there you have ſhallowe water and litle ſtreames. When you are paſt the tonne or boye of Middle ground, then goe n. n. w. to the tonne at Swanebalgh. The Croſſe-markes of this tonne are, when Bolſwaert is right over a ſmale ſhort houſe, which ſtandeth ſouthward of Cornwaert, then you have the length of this tonne, and here you may ſayle by a point of ſand when you goe outward. This tonne lyeth at 3 fathome on the eaſt wall, & on the weſt wall you may caſt out your lead and finde 4 fathome water all along to Schieringſhals. When you are inward, then keepe on the eaſt ſhore with a fore-flood, for it would draw you into this ſhelf before you were aware of it. The markes to ſayle along by this long reach are theſe: you may ſee Mackum with a mill on the waterſide, which lyeth ſoutheaſt from you, & ſouthward from Mackum there is a village with a flatte ſteeple called Idſegahuyſen. Now when Pandraghen cōmeth betweene Mackum and this village, you neede not feare the point of ſand or Doodebalgh, but if Pandraghen be neareſt to Idſegahuyſen, thē you are to neare to the point of ſand aforeſaid, but if Pandragen be neareſt to Mackum then you are to neare the eaſt wall, theſe markes hold in this ſort, as long as you can ſee them.

Dominicus plaet.

Markes of the ton at Swanbalgh.

Markes of the long reach.

From the tonne at Swanbalgh to Schuyteſandt, the courſe is northweſt, and ſomething more northerly: When Wynaldum is right againſt the point of Harlingen, then you have the length of the tonne of Schuyteſand. The Long-markes are theſe, Bolſworth cōmeth northward of the Sluys which ſtandeth northward of Woens, and this tonne lyeth at ſixe fathome on the eaſt ſhore, and there it is verie ſhoring, the right depth is 7 and 8 fathome, you may found four or five fathome on the weſt ſhore, but the eaſt ground is ſhoring.

The tonne at Schuyteſand.

Frō Schuytſand to Kaeſhooke the courſe is weſt-north-weſt, & eaſt ſouth eaſt, and ſometimes northweſt and by weſt, as the

winde and ſtreame is: for in this long reach there goeth but half tydes along the deepe, & then they goe about with the Moone, and fall almoſt croſſe the deepe, or chanell. The markes of the tonne at Kaeſhooke are, when Franicker ſteeple commeth betweene the mille and the towne of Harlingen, and commeth alſo in the haven of Harlingen, or upon the maſtes of the ſhippes which lye in the haven. This tonne lyeth on the eaſt wall at 5 fathome, you muſt ſhunne the innermoſt point of Kaeſhooke a litle, both comming in and going out, the right chanell is heere aboutes 9 or 10 fathome deepe.

Markes of the tonne at Kaeſpoint.

Old Vlie

A litle weſtward from Kaeſhooke lyeth the old Flie, & ſtretcheth it ſelf towards the tõne at the Neſſe in the Teſſel ſtreame. The foreflood is verie hard at the entering into this chanel, and you may ſayle from the Sea inward at 4 fathome, it reacheth ſouthward in: when Franicker ſteeple is right north from the ſteeple of Harlingen then you are right againſt the old Flie, which lyeth on the weſt ſhore, and is ſhoring all along to the Flie.

Markes of the old Vlie.

Wolfſhook

From Kaeſhooke to Wolfſhooke the courſe is northweſt by north, the tonne lyeth at 4 fathome on the eaſt ſide, betweene them there lyeth a new ſhoring drye point, whereat there lyeth a tonne. To ſayle frõ Kaeſhooke to Wolfſhooke firſt goe northweſt and by north, or north-weſt to get above this tonne, and after that northweſt, or north-and-by-weſt, to the tonne at Wolfſhooke, here it is beſt that you keepe towards the weſt wal to ſhunne the ſhallowe point aforeſaid. When you are paſt the tonne at Wolfſhooke, take heede of the Inſchot or Creeke, for there the fore flood rũneth in very ſtrongly: it is wide & broad, and it is there as deepe as in the chanel, when you come in from the Sea, you may ſayle by it at 9 or 10 fathome, it goeth in northward from the tõne at Wolfſhooke: you muſt alſo beware of the fore-ebbe, for that commeth verie ſtrongly out of the Inſchot upon Schiernigſhals, whereby many a ſhip is caſt away.

The Inſchot.

From the tonne at Wolfſhooke to the tonne of Schieringſhals ſayle north-north-weſt, and north-weſt-by-north, as the winde and ſtreame ſerveth: for as I ſaid before, the fore-ebbe falleth out of the Inſchot verie ſtrongly upon Schieringſhals, and the fore flood verie ſtrongly from Schieringſhals into the Inſchot. Schiringſhals is a point of ſand which ſhooteth out from the weſt wal, which, as you come in from the Sea, you may ſayle by at 6 fathome, commonly there lyeth a white tonne at it: when you ſayle in this reach, looke well to the ſtreame, and to your courſe that you be not driven into the Inſchot nor upon Schieringſhals, the right deepe betweene Wolfſhooke & Schieringſhals is 10 11 & 12 fathome.

Scheringſhals.

From Schieringſhals to Longheſand the courſe is northweſt, & northweſt & by north. Betweene Schieringſhals and Longeſand is the beſt Rode in all the Flie ſtreame, you goe by the weſt wall at lowe water, and there goeth a litle ſtreame, the tonne lyeth at 5 fathome, the right depth is 6 and 7 fathome. When you come in from Sea, you may ſayle by Longeſand on the eaſt ſide, and by Schieringſhals on the weſt ſide, & if you keepe at 7 fathome, you can take no hurt on neither ſide.

Longſand.

Freeſe or Pompers Rode.

From Longheſand to the Monicke ſlote the courſe is north-north-weſt. Upon Vlieland there was wont to ſtand two Capes that were one againſt the other, & men were wont to ſayle that Reach up and downe to Wolfſhooke, but now they are broken off. The markes of the tonne at Longſand are theſe: when the high beakon of Iettingh cõmeth over the Iland of Grind, then you have the length of the tonne at Longſand.

The toune at Longſand.

When you come from Schieringſhals & will goe to Monickſlote, then you ſee the milles upon the Vlieland ſtand in the middle right againſt a lowe flat downe, which ſheweth ſome what black, for it is ful of heath. Keepe the milles ſtanding right againſt it, and ſayle upon it, and ſo you can not fayle: but if the milles ſtand on the eaſt ſide of the downes, then you are to neare the weſt wall, and when the milles are nearer the weſt ende of the downes, then you are to neare the eaſt wall: this is a right Long-marke from Schieringſhals to Monickſlote.

Markes to ſayle from Schieringſhals to Monickeſlote.

II.

How you muſt ſayle from Enchuyſen to the Vlie and to the Teſſel.

FRom the eaſt ende of Marcken to the ſouth chanell of Enchuyſen, the courſe is north and by eaſt five leagues. The chanel reacheth about ſouth and north. When you will enter into the ſouth chanell, then ſet the maſt with the tonne right upon the weſt blockehouſe or ſteeple, and ſayle right upon it, till Greatbrooke ſteeple be right againſt the mille, which is in the middle betweene Brookhaven and the Streecke, and then you are right againſt the uttermoſt tonne: then ſayle inward along by the tonne, to the ſouth Dyke, and from thence along before the towne. In the ſouth chanell you have 8 foot water, in the Rode before Enchuyſen it is 3 fathome and a foot deepe at lowe water. When Broocke is right againſt Broockehaven

The ſouth chanell of Enchuyſen

haven, then you are right againſt the north ende of the Trindel, which is a ſand of 3 foote deepe lowe water, which runneth along from the Dyke towards Leeck, and when Wyneſſer Wierdyke is without the point of Leeck, then you are at the ſouth ende of the Trindel. You may paſſe betweene the Dyke & this ſand at 5 foot lowe water.

The north chanel of Enchuyſen.

But to ſayle out through the north chanel, then goe from the Rode to the beakon north and by eaſt, and then you ſhall finde the innermoſt tonne, which lyeth upon theſe markes. Groatebrooke commeth upon the land houſe, which ſtandeth in the boucht of the Dyke, and the tower of the towne houſe is within a hand-ſtaffe of the eaſt ende of a great houſe, which ſtandeth in the Breeſtreet. From the innermoſt tonne to the middlemoſt the courſe is north, and north and by weſt: & lyeth upon theſe Markes: the ſame landhouſe is right againſt Boekarſpel, and the towre of the towne houſe is right upon the gavell ende of the great houſe, ſo that you may ſee juſt betweene them. From the middle tonne to the north tonne in Hillegat, the courſe is north and north and by weſt, and lyeth upon theſe markes: Greatbrooke is right againſt a lowe land houſe which ſtandeth north from the high Hayhill which ſtandeth upon the Dyke, and Enchuyſen ſteeple is right eaſt from a high houſe which is in the middle of the towne, in ſuch ſort as you may ſee juſt betweene them, and alſo when the ſteeple is right againſt a Cape which is placed there, that is the beſt marke, and by that you finde the uttermoſt tonne, when you come from the Sea, and ſeeke to goe in at the north chanell.

Markes of the uttermoſt ton in the north chanell.

To ſayle from the uttermoſt tonne from Hillegat to the tõne upon Creupel, your courſe is north and by weſt, and north-north-weſt, according to the winde and the ſtreame, which lyeth upon theſe markes: Brooke is right againſt Hem, two ſharp ſteeples, as before in the deſcription of the Vlie ſtreame is declared: and if you deſire then to ſayle to the Vlie, then ſayle from thence to Kreil, as in the aforeſaid deſcription I have ſhewed. In like ſort if comming from Amſterdam through the fall of Urck, you deſire to goe to the Teſſel, and are at the tonne at Creupel, as aforeſaid, then take the courſe hereafter ſet downe.

Markes of the tonne at Creupel

The tonne at Creupell lyeth at 3 fathome water upon the eaſt ende of Creupel ſand, and from thence to the beakon upon Creupel ſand, the courſe is northweſt, and northweſt and by weſt; when the blunt ſteeple of Lutkebrooke is right againſt the ſharp ſteeple of Hem, then you have the length of the beakon upon Creupel.

The beakon upon Creupelſand.

From the beakon upon Creupel ſand, to the ſouth tonne, upon Wieringer flattes, the courſe is weſt-north-weſt, and northweſt and by weſt, as the winde and ſtreame ſerveth. The markes are: Grootebrooke ſteeple is betweene two Hayehilles which ſtand eaſt from the milles upon the north Dyke, that is a Long-marke. When the ſquare ſteeple of Twiſch weſtward of Memelick is right over Almerdorp, which in tymes paſt had a blunt ſteeple, but now it is fallen downe, and therefore not ſo well to be knowne, that was a right Croſſe-marke. But upon Wieringhen there is a Cape ſet, bring that right upon the blunt ſteeple on the eaſt ende of Wieringhen, & ſayle towardes it, & you can not miſſe the ſouth tonne: and when Weſtlander ſteeple is over Cleverſtee, (which is three or four houſes ſtanding upon the weſt ende of Wieringhen) then you may ſee the ſouth tonne upon Wieringhen Flattes. If you will ſayle over Wieringhen flattes when you ſayle outward, then note, that if Twiſch firſt commeth upon Almerdorp, then you are to neare the Gammels, but if Cleverſtee firſt come upon Weſtlander church then you are to neare Breeſand. Theſe are ſure markes when there are no tonnes, to ſayle over the flattes.

South ton upon Wieringhen flattes.

How to ſhunn the Gammels.

But if you will Ancker before Wieringhen flattes, then goe no nearer the flattes, then when Twiſch is betweene Almerdorp and Opperdoes, for when Twiſch is right againſt Almerdorp, then you have the length of the ſouth tonne, as I ſayd before.

To ſayle from the ſouth tonne to Memelick keepe the five water milles the length of a ſhip on the eaſt or ſouth ſide of Memelick, and ſo ſayle right upon Memelick, and ſayling ſo, you ſhall not finde leſſe then 11 or 12 foot water at half flood.

To ſayle to Memelick.

From the ſouth tonne upon Wieringen flattes to the ſecond tonne, the courſe is northweſt, and northweſt and by north: but if you wil ſayle in the deepeſt water, then from the ſouth tonne you muſt firſt ſaile northweſt ſo long, til that Ipelſhover church is right againſt the water mill, called the Bolmill, and then goe northweſt and by north to the ſecond tonne. The ſecond tonne lyeth upon the ſouth ende of the flatt called Repel: the weſt chanell thereof is full 2 fathome deepe at lowe water, and hardly three fathome at high water. The markes of the ſecond tonne are theſe: when the Corne-mill of Wieringhen is right againſt the open of the Oever. Right weſt from the middle tonne upon Wieringhen flattes, there lyeth a hard ſand or flatt, called the Sowe, which reacheth to the north tonne, and upon it there alwaies ſtandeth a beakon. That flat at the eaſt ende is verie ſho-

The Sowe.

ring. When you ſayle outward you muſt leave it on the bagh-borde, and you muſt be verie circumſpect to looke unto it, for there it is not broad. When you have paſt by the middle tonne, then goe north-north-weſt to the north tonne upon the Flatte, and when you are right againſt it, then Ooſtlander church and the cornemill are both right againſt the litle chapel which ſtandeth upon the Oever, which is a chapel covered with red tyles: and right againſt it ſtandeth the beakon upon the Sowe. Vpon Wieringhen by the Oever there ſtandeth a watch-houſe, when you leave the middle tonne, keepe it ſtanding ſo, that you may ſee betweene the Oever and the watch-houſe, & then you ſhall not come neare the Sowe, that is a good Long-marke for ſuch as knowe it. When you come to the north tõne, then hold one courſe, until Ooſtlander church be north from Wierdyke of the Oever, becauſe of Iaepvaers Flatte, which you muſt leave on ſtarreborde, then goe north and north & by weſt to the beakon upon Vlieter, which ſtandeth upon the point of the Waert, where you may ſayle through the Wieringher ſhelf. But keepe the north tonne right againſt Memelick ſteeple, as long as you can ſee it, and goe north and by weſt, untill you ſee the tonne or the beakon upon the Neſſe on the weſt wall, for on it there ſtandeth a beakon, or els there lyeth a white tonne, but on the eaſt ſide a black tonne before the Balck, which in ſayling up a man may ſayle by at 4 or 5 fathome.

Markes of the North tonne.

To ſhũne the Sowe.

Iapevaers flatte.

The Vlieter.

The Nes.

If you will ſeeke the beſt Roade before Wieringhen Flattes, for ſhippes that muſt be lightned, then ſet Weſtlander church right againſt the broken church of Strew, and there you ſhall finde the beſt Rode.

When you are at the beakon or white tonne upon the Neſſe, then goe by degrees weſterly, that is, north-north-weſt, north-weſt and by weſt, & northweſt to the beakon upon Vogleſand, the weſt wal may be founded with the lead at 5 6 & 7 fathome. The markes of this reach are theſe, when the mill of Ooſtereynd (which is a buert houſe upon Teſſell) is right upon the cape which is made upon the dyke, then you are in the middle of the chanell, but when the milles are any thing ſouthward or weſtward from the cape, then you are by the ſouth wall, which is ſteepe, ſo that with lavering you can come no nearer unto it thẽ 8 or 9 fathome, the right deepe is 10, 11, and 12 fathome, but when you are upon Vogelſand, the ſouth wall is flatter, but the eaſt wall is altogether ſhoring, and as ſone as you perceive that it beginneth to drie, thẽ you muſt winde, otherwiſe you would preſently be upon the wall.

The Beakon upon Vogelſãd.

Markes of Vogelſãd to Copevaerders Rode.

When you are about Vogelſand, then keepe the cape and the mil one againſt the other, ſo long until the horne is right againſt certaine houſes, which ſtand a litle inward to the lãd northward from Skonſe, called South-haffell, let that ſtand ſo untill you be at Copevaerders Roade, and there ankor where you think good, before Ooſterende it is beſt for ſmale ſhips, for there it is flat water, and there runneth the leaſt ſtreame, but moſt ſhips ankor before Geeſt.

Copevaerders Rode.

III.

How a man ſhal ſayle from Coopevaerders Rode to Huyſduynen, and out of the mouth of the Teſſell.

IF you will ſayle from Copevaerders Rode to Huyſduynen, then goe ſouthweſt to the newe deepe, or goe along by Teſſel ſide at 9 and 10 fathome, till you come to the Helder, and if you will ſayle out at the Spaniards gat, then goe weſt cloſe by the ſhore, and ſometymes ſomewhat northerly, untill the capes ſtand right againſt Huyſduynen, then put to the north ſhore at 5 or 6 fathome water, and ſo goe forward, but when the Wambus is right againſt a high white downe, which Pilots cal Schelvis downes, there it is flatter water, and there you may goe nearer to the north ſhore, at 3 or 4 fathome water, and as neare as you will your ſelf, till you come out, for there the north points are altogether flat, but you muſt not goe near all the ſouth wal of the Spaniards gat with your lead, for it is verie ſhoring.

Schelvis downes.

If you wil ſayle out of the Slenck, then goe out by Huyſduynen, as I ſaid before, untill the capes be one againſt the other, then goe nortdweſt til the Wambus, or SintIohns Towre upon Teſſel are within a bow length of the cape, but not right againſt each other. As you ſayle in this manner from Huyſduynẽ, be verie warie (ſpecially with a fore ebbe) of the ſouth ſhore, for that is verie ſhallowe, and the fore-ebbe falleth verie ſtrong ſouth-ſouth-weſt, croſſe over the Grounds, and falleth not out at the Spaniards gat before the Moone is about eaſt north eaſt. When the lop or inner cape of Huyſduynen is even with the ſouth ende of the downes, which is called Wierendyke, then you are cloſe by the ſouth ſhore, which are good markes for thoſe that knowe them. When the cape upon Teſſell, and the Wambus are about a bow length one neare an other, there you ſhal have the innermoſt tõne of the Slenck, thẽ goe weſt-ſouth-weſt, and ſometymes ſomewhat more ſoutherly, as ſouthweſt and by weſt, then ſouthweſt (but yet do as you finde the winde and

To ſayle out at the Slenck.

Markes of the innermoſt ton.

and ſtreame to ſerve your turne) and leave all thoſe four tonnes on baghbords, for they lye all neare to the eaſt ſhore, you may eaſily ſee them one after the other, the walles on either ſide are indifferent flat, and in the Slenck you ſhall finde three fathome & an half or four fathome water at half flood. When the milles upon Huyſduynen are right againſt the old Kerckbuert, that is a fewe houſes ſtanding above north from Kickeduyn then you are right againſt the uttermoſt tonne and out of the chanel, then the Wambus is a bowe length weſtward from the cape of Teſſel.

Markes of the uttermoſt ton.

To ſayle out of the Lãddeepe.

But if you will ſayle out at the Land deepe chanel, then rũne along by the foot ſtrand of Huyſduynen about a bowe ſhoote from it, and then you ſhal not miſſe the innermoſt tonne, which lyeth upon the threſhold on the weſt wall at three fathome, and there it is not verie broad: Upon the Teſſell on the Newe land there ſtandeth a houſe with red tyles upon it, when the church of Burgh on Teſſell is a ſhippes length neare to that red tyled houſe, then you hold a good courſe, but if the Burgher church, and that red tyled houſe aforeſaid, are right over againſt each other, then you ſhould ſayle upon the weſt ſhore. Upon old Iaeps bollen, when you are right againſt the entrie, then the ground alters verie drie, for at one caſt of the lead you ſhal have 15 or 16 fathome, at the ſecond ſeven or eight fathome, and at the third three fathome, and when the winde bloweth ſomewhat, you may ſe the waves break on both ſides, which you may paſſe through betweene them, when you are over the entrie, which continueth about three or four caſtes of the lead, then you have three & an half, four, & four & an half fathome deepe. Upon Huyſduynen there ſtandeth a tonne upon a maſt, let that be ſomewhat weſterly from the inner cape, which then ſtandeth about north from you, hold it ſo, and then goe til you be cleane out of the chanell, and let the tonne lye to Seaward from you. When the myl upon Huyſduynen is right againſt the high Kickedownes, then you are by the third and uttermoſt tonne, and free of all ſhallowes, & then direct your courſe which way you will.

Markes of the deepeſt water.

IIII.

How you ſhall ſayle out of the Vlie.

A tonne upon the Flatte.

NOrth from the Monick-floot there lyeth a Flatte, and thereon there lyeth a tonne, from the Sloot to the tõne it is north-north-eaſt. The tõne lyeth at three fathome, and when you ſayle out you muſt leave it on the ſtarreborde, in the chanell betweene the Sloot and the tonne it is 10, 9, and 8 fathome deepe, and againſt that tonne five fathome, from this tonne upon the Flatte to the ſoutherlyeſt white tonne at Speckhooke the courſe is northeaſt, and it lyeth on the northwall, at twelve foot deepe at lowe water, but from the tonne upon the Flatte to the black tõne at Speckhooke, the courſe is eaſt-northeaſt, but yet as the winde and ſtreame ſerveth, for with an ebbe you muſt ſayle eaſt, to get above the white tonne. The black tonne at Speckhook lyeth at 3 fathome lowe water, or at three fathome and an half, half flood. The chanel betweene them both is right againſt the tonne upon the Flat three fathome, but further forward it is dryer, ſo that againſt the white tonne it is not deeper then thirteene or fourteene foote deepe at lowe water. But when you are paſt the white tonne, then againe it is deeper, as three, four, and againſt the black tonne at Speckhooke five fathome at lowe water, the ſouth wall betweene both is flatte, ſo that you may caſt out the lead and ſound it, the white tonne aforeſaid lyeth upon the ſouth ende of Peters ſand, & when you ſayle out you muſt leave it on baghborde, and the black tonne on ſtarreborde, a man with a ſhip that is ſomething flatte bottomed, may ſayle a litle northward from the white tonne over the aforeſaid point of Peters ſand, with twelve foot deepe lowe water, and a litle northerly from the northerlyeſt white tonne of Speckhooke enter againe into the chanell.

Speckhook

From the black tonne at Speckhooke, to the tonne at Hobbeſand, the courſe is north-north-weſt, the right depth there betweene them both is five, ſixe, ſeven, eight & nyne fathome. The tonne lyeth upon the point of Hobbeſand at five fathome deepe lowe water.

Hobbeſãd.

Right over againſt the tonne at Hobbeſand lyeth the moſt northerly white tonne at Speckhooke, you muſt leave the tonne at Hobbeſand on ſtarborde, and the white tonne on baghborde, on the weſt ſhore it is verie ſhoring, and right north from the aforeſaid white tonne on the weſt ſhore there lyeth a Flatte, which at lowe water is cleane drie. From the ton at Hobbeſand to the tonne at Bos, it is north-north-weſt, and that lyeth at five fathome at the ende of the Bos. The right depth betweene Hobbeſand & the Bos, is tenne, nyne, & eight fathome. The weſt wall is verie ſhoring, and you muſt not goe nearer then ſixe fathome to the eaſt wall, ſpecially with a foreflood, for it would eaſily carrie you behinde the Bos. From the tõne at the Bos, to the tonne at Feyhook the courſe is n. n. w.

The north white ton at Speckhooke.

The Bos.

Feyhe

That is a white tonne, and it lyeth at the eaſt ende upon the point of Peters ſand, at 3 fathome lowe water, when you will goe out at the north chanell, then you leave it on baghborde, and then you muſt goe ſouthward. But to goe out at Bomekens chanel, you muſt leave it on ſtarreborde, and againſt it Bomekens chanell is northweſt, it is there 7 or 8 fathome deepe lowe water, and on the weſt wall lyeth Peters ſand, alſo a drie flatte, north from the ſaid drie flatte. Right weſt-north-weſt from the tonne of Fayhooke there runneth a Slencke through Bomekens ground, which at lowe water is about 12 foot deep, but it is not marked or ſhewed. The weſt ende of Bomekens chanell is verie ſhoring, to the ende thereof, but the eaſt ſhore is flatte, which may be ſounded with the line northwarde from Feyehoocke at 3 fathome and an half, without any hurt. Betweene Feyhooke and the uttermoſt tonne in Bomekens chanell, there lyeth two tonnes more. From Feyhooke to the firſt of them it is north-north-weſt, & that lyeth on the eaſt ſhore, at 5 fathome, from thence to the other, or almoſt to the uttermoſt, the courſe is north and by weſt, and that lyeth in the middle of the chanell at 4 fathome and an half lowe water, from thence to the uttermoſt tonne, it is north-north eaſt, the uttermoſt tonne lyeth in the Sea, at 10 fathome, right without the point of the weſt land or of Bomekens ground, betweene the uttermoſt tonne and the ſecond tonne at the entrie of the chanell it is 3 fathome lowe water. When you are at the uttermoſt tonne, then the ſteeple of Brandaris, & the weſt cape of the Schellingh are one againſt the other, and ſtand about ſouth-eaſt, and ſome what more eaſterlie from you, when you ſayle out at that chanell, & that you come to the firſt tonne at Feyhooke, you may goe out along by the eaſt land, at 3 and 3 fathome and an half, moſt part north-north-eaſt, & leave the two uttermoſt tonnes a good way from you on baghbord, for the eaſt ſhore is altogether flat and good to be ſounded with the lead.

Slenck through Bomekens ground.

The uttermoſt ton,

To ſayle out at the north chanel.

TO ſayle out at the north chanel, ſayle juſt ſouth to the tõne at Feyhooke, n. and by eaſt, to the old Legger, which lyeth on the ſouth wall at 3 fathome, & the water is 4 fathome deepe. Betweene the tonne at Feyhooke & the Bos it is verie narrowe, and the Bos is there verie ſhoring, ſo that you cannot ſound it, all along to the old Legger, where it is flatter, & ſo it may there be ſounded, Peterſand, or the north wall alſo is verie ſhoring. From the old Legger to the new Legger the courſe is northeaſt and by eaſt, & eaſt north eaſt, that lyeth alſo on the ſouth ſhore at two fathome & an half, the right depth againſt it is 3 fathome and an half, when you come to the newe Legger, then Brandaris ſteeple lyeth ſouth-ſouth-eaſt from you. From the new Legger there runneth a Slencke croſſe through Peterſand, north-north-weſt into the Sea, upon the entrie at lowe water you have 12 foot deepe. There ſtandeth a cape upon the Schellingh a litle eaſtward by the cape of Bomekens chanel, which is right againſt Brandaris, when you come to the new legger, and then it ſtandeth with the ſteeple ſouth-ſouth-eaſt from you, you muſt hold the cape ſo right againſt Brandaris, and then goe n.n.w. into the Sea, It is a faire Slenck for flat bottomed ſhippes, the weſt wal is ſhoring, but the eaſt ſide is flatte, ſo that you may ſound it wel. But to goe out of the north chanel from the new Legger, then the courſe from the new Legger to the ſecond tonne frõ without inward is eaſt-north-eaſt, and that lyeth at the eaſt ende of the Bos, at 14 foot deep low water, & in the chanel right againſt it it is no deeper. From thence to the uttermoſt tõne, it is e.n.e. which lyeth in the Sea, right without the eaſt point of Peterſand, at 3 fathome: when you are at it, then the moſt northerly cape at the Schellingh is right againſt Brandaris, and then they are ſ. ſ. w. from you, & then you are out of the chanel.

A Slenck through Peterſand.

To ſayle out of the Land-deep of the Schellingh

BUt to goe out of the Land-deepe from the Schellingh with ſhips that goe not very deepe, then goe betweene the tõne at Hobbeſand and the tonne at Bos, northeaſt to the northweſt point of the Schellingh, then ſayle over the point of Ielmers Flat to 4 fathome, and being over it is againe 6 and 5 fathome deepe, then ſayle cloſe along by the ſtrand of the Schellingh, for ſo you cannot doe amiſſe, if you ſayle not bluntly upon the ſhore. The north ſhore or the Bos is fine and flatte, which you may ſound al along at 3 fathome or 2 fathome and an half, when you come to the ende of the Bos, that is right againſt the ſecõd tonne of the north chanel, there it is flat, and there is no more but 10 foot deepe, but ſayle along out by the fore ſtrand, til you get to deeper water, and from thence ſet your courſe whether you will.

Ielmers Flatte.

To ſayle out of Stortemelck.

IF you wil ſayle out at Stortmelck, when you are about Bootſhorne, goe along by the foot-ſtrand of the Vlieland n. and by w. for it is verie faire, or from the tõne upon the plaet, then goe n. n. w. to the innermoſt tonne of Stortemelck, which lyeth at 3 fathome lowe water, and it is there in the chanel between the plaet and the innermoſt tonne at Stortmelck 5 6 & 7 fathome deepe

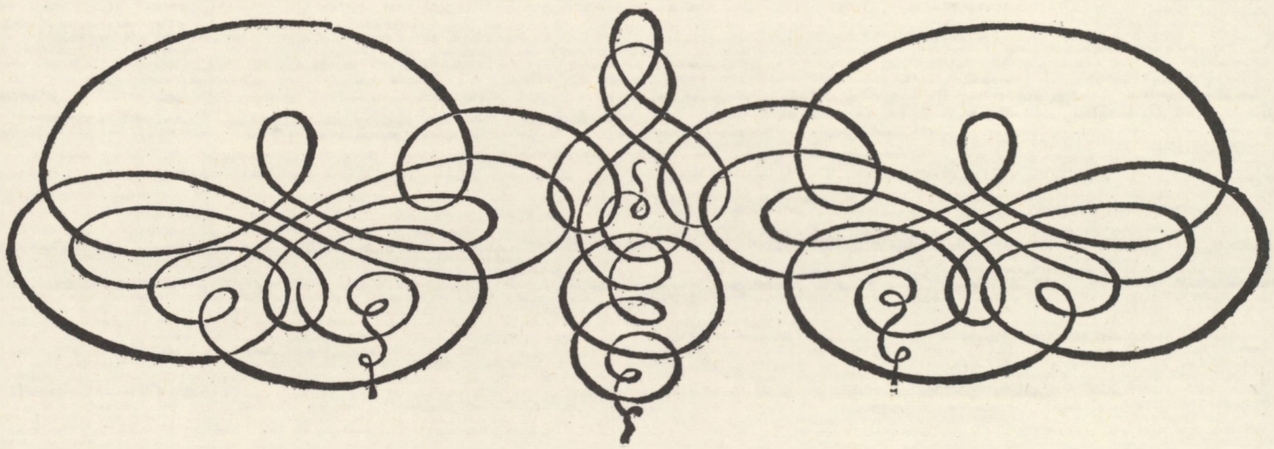
deepe. When you come to the innermoſt tonne then runne north about it, and leave it on baghborde, for on the ſouth ſide there lyeth the foot of the northeaſt point of the Vlieland unto that tonne: on the north ſide of that tonne in the chanell it is 4 fathome deepe. When you are paſt the innermoſt tonne, then goe weſt and by ſouth to the ſecond tonne, which lyeth on the north wall at 5 fathome. The right depth there on the ſouth ſide is 7 fathome. From thence outward you may ſayle by the ſtrand, for it is verie faire, you may runnne along by it at 3 fathome & an half from the ſecond tonne to the third, that is the uttermoſt but one, the courſe is weſt and by ſouth, that lyeth at 4 fadome on the north wall, the depth againſt it is four fadome, this tonne is called the tonne at the Droghe Drie. From thence to the uttermoſt tonne the courſe is weſt, and weſt & by north, that lyeth in the Sea at 5 fathome, neareſt to the north wal, but you may there goe ſomewhat northerly, for the north wall is reaſonable flatte, ſo that you may ſound it with your lead at 4 or 5 fadome. Betweene the uttermoſt tonne and the tonne upon the Droghe Drie, it is not deeper at the entrie then 16 foot lowe water: when you are at the uttermoſt tonne, then the cape and the mil upon Vlieland are one right againſt the other, & are then about eaſt-ſouth-eaſt,& ſoutheaſt from you.

A tonne at Droghe-drie.

Vttermoſt tonne.

NOTE.

All the depths here ſet downe, are underſtood and deſcribed to be ſo at lowe water: at half floode it is all over about half a fathome deeper, for there it floweth a fathome up & downe with a dayly tyde.



Heere followeth the Carde N. 2.

THE

mc/ Chapter II

CHAPTER II.

THE DESCRIPTION OF

the Sea-coasts and Havens of Holland, Sealand, and Flanders, from the Teſſell to Pas of Calis, and through it.

I.

To knowe the Teſſell and Huyſduynen, and how you ſhall reach and enter into the Spaniards gat, and other Chanels of the Teſſell.

Teſſell. THe Iland of Teſſell lyeth north from Huyſduynen and hath four churches: at the weſt ende thereof there is a high ſharp ſteeple called Wambus, ſomewhat more inward there is a ſharpe ſteeple called Hoorn, and more north from thoſe churches there is a great flatte ſteeple called Burch, and further eaſtward there ſtandeth a church without a ſteeple called the Oogh or the Koogh, which is covered with blewe ſlate, otherwiſe it is a long plaine Iland, the north pointes runne from the weſt ende a good waye into the Sea, on the ſouth ſide thereof the Spaniards gat or chanell goeth in, as hereafter it is ſhewed.

Eyerland. Eyerland is eaſtward cloſe by the Teſſel, & is faſt to the Teſſel, but with a high floode it is cut off by the Sea, (which then runneth over betweene them both) and made an Iland, it ſheweth outwardly lyke a lowe ſlight ſmall Iland with ſmall hilles, upon it there is but two houſes.

Thus the Iland of Teſſel ſheweth it ſelf when it lyeth about eaſt and by north from you.

VVambus.



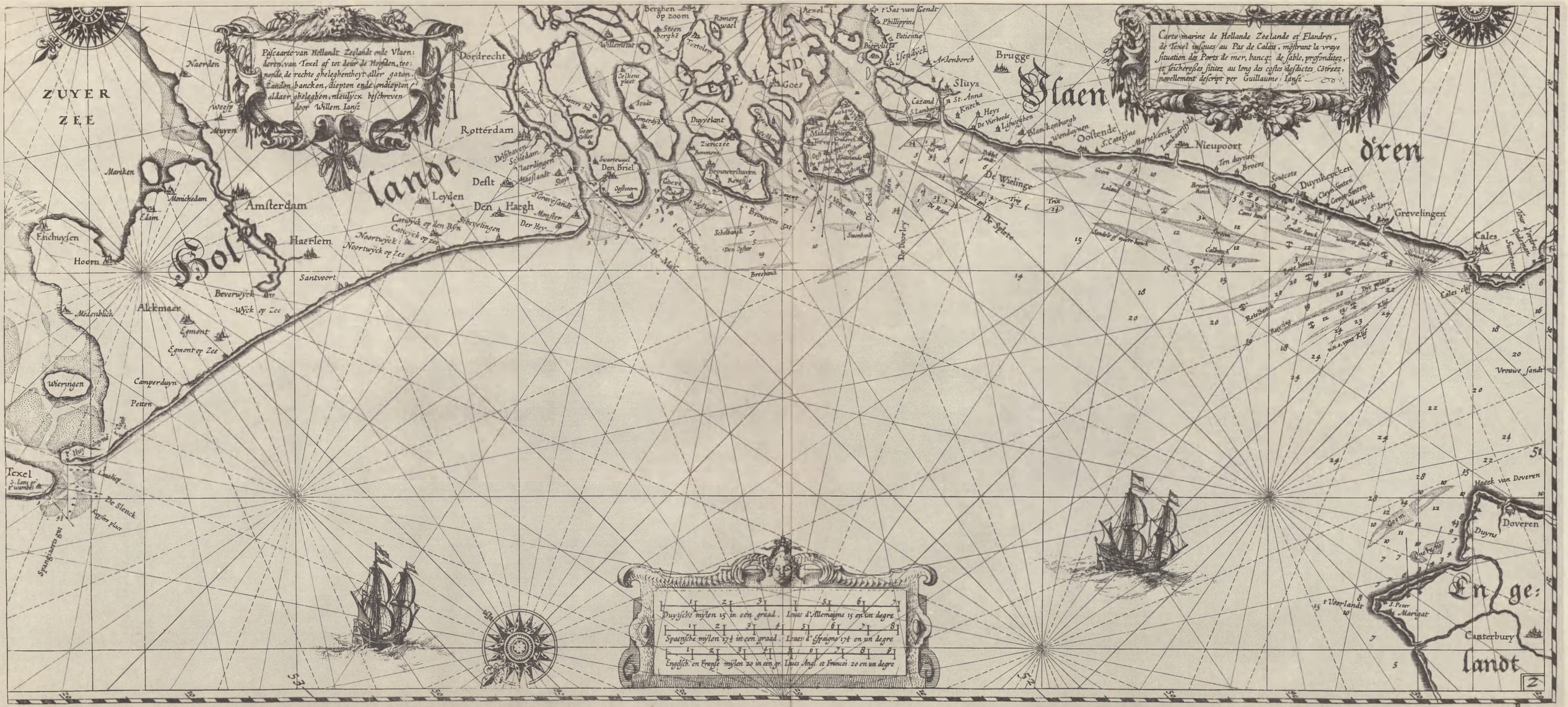
Huyſduynen. Huyſduynen is a ſhort point of Land with ſome white downes, whereof the greateſt is called Kyckeduyn, or Kyckerſduyn. Weſtward they are verie lowe & ſeeme nothing, ſo that at the laſt it is nothing but a playne ſand on the eaſt ende, called the Helder, there is alſo ſome downes: but betweene the Helder and the high downes it is for a long waye nothing els but a bare ſtrand, at the eaſt ende there ſtande two capes, and not many yeeres ſince there was a ſteeple, but that is gone, and the place where it ſtood ſo farre in the Sea, that now the ſhips ſayle over it. There is nothing els ſpecially to be marked upon it: the Teſſel lyeth north from it, as is ſaid before.

Thus the land of Huyſduynen ſheweth it ſelf when it lyeth about ſoutheaſt from you.



The chanels of Holland Sealand & Freeſland alter & change often tymes, as it is well knowne to all Seafaring men, yet ſome leſſe then others. The Spaniards gat continueth in a manner all at one ſtaye, and in long tyme hath altered but verie litle, onely that everie yeer it reacheth out further northerly. But the other chanels as the Slencke and the Land deepe alter oftentymes, and ſometymes verie much in a litle tyme, & therefore they are not to be deſcribed in ſuch ſort, as that they may ſerve for ever, I will heere ſhewe the ſituation which they now have, and thereby certefie the Reader that all thoſe chanels are to be uſed with Pilots.

To ſayle into the Spaniard gat. When you come from the weſt, and ſeeke to enter into the Spaniards gat with a weſt winde, then goe no nearer to Holland then at 15 or 16 fathome, as your tyde ſerveth, or as the capes ſtand one againſt the other, for not farre from Keyſers plaet, & right before Spaniards gat it is 15 or 16 fathome deepe, and at one caſt


Pascaarte van Hollandt Zeelandt ende Vlaenderen, van Texel af tot deur de Hoofden, toonende de rechte gheleghentheyt aller gaten, Zanden bancken, diepten ende ondiepten aldaer gheleghen, nieulycx beschreven door Willem Iansz
Carte marine de Hollande Zeelande et Flandres, de Texel iusques au Pas de Calais, mõstrant la vraye situation des Ports de mer, bancqz de sable, profonditez, et seicheresses situez au long des costes desdictes Cõtrees, nouvellement descript per Guillaume Iansz
ZUYER ZEE
Naerden
Weesp
Muyen
Marken
Monickedam
Edam
Enchuysen
Hoorn
Amsterdam
Haerlem
Santvoort
Beverwyck
Wyck op Zee
Alckmaer
Medenblick
Egmont
Egmont op Zee
Wieringen
Camperduyn
Petten
Texel
De Slenck
Spangiaerts gat
Dordrecht
Rotterdam
Leyden
Delft
Den Haegh
Schevelingen
Catwyck op den Ryn
Catwyck op Zee
Noortwyck op Zee
Noortwyck op Zee
Der Hey
Monster
Den Briel
Ogstvoorn
Goere
Berghen op zoom
Steenberghe
Willemstat
Romerswael
Tertolen
Oelkens plaet
Stadt
Somerdyk
Duyvelant
Zierickzee
Brouwershaven
Renesse
Goes
Middelburgh
Terver
Aexel
t'Sas van Gendt
Phillippine
Patientie
Isendyck
Ardenborch
Brugge
Sluys
Cazand
St. Anna
Knock
Heys
De Vierboede
Lisweghen
Blanckenburgh
Wenduynen
Oostende
Nieupoort
Ten duynen
Broers
Duynkercken
Grevelingen
Cales
Cales clif
Vrouwe sandt
Hoeck van Doveren
Doveren
Duyns
Canterbury
Marigat
t'Voorlandt
Slaen
dren
Hol
landt
ZEELAND
De Wielinge
De Splete
De Doorley
De Mase
Duyysche mylen 15 in een graad. Lieues d'Allemaigne 15 en un degre
Spaensche mylen 17½ in een graad. Lieues d'Espaigne 17½ en un degre
Engelsch. en Franse mylen 20 in een gr. Lieues Angl. et Francoi. 20 en un degre
En ge:
landt
2

one caſt with the lead you ſhal have 13 fathome, at another caſt 10 fathome, and at the third 7 fathome. For the Keyſers Plaet is all ſhoring without, and that depth of 15 and 16 fathome reacheth a league and an half into the Sea all at one depth. To ſaile above Keyſers Plaet, then marke the three higheſt downes upō the Teſſel, that which ſtandeth ſoutherly is a white downe, and the two northerly are ſomewhat rough: that which is moſt northerly is by Pilots called, the ſecond rough downe, when you keepe the Wambus, or S. Iohns ſteeple upon Teſſel right north with the rough downe that is moſt north, and ſo ſayle upon it, then you ſhall not ſayle upon Keyſers Plaet, but goe right without it, keepe the markes aforeſaid ſtanding ſo, til you have the capes upon Huyſduynen one upon another, ſo that the Looper or innermoſt cape ſtandeth a winde-beames length north from the uttermoſt, there you ſhall finde the firſt tonne of Spaniards gat. Kyckers downe ſhall then ſtand ſoutheaſt & by ſouth from you. The firſt or uttermoſt tonne lyeth at 4 fathome and an half with half flood, at the ende of Keyſers Plate, ſayle on the eaſt ſide of the tonne, and leave it on ſtarreborde, for Keyſers Plate is alſo within as well as on the outſide altogether ſhoring. In Spaniards gat there are four tonnes, all on the weſt wall, which you muſt leave all on ſtarborde as you ſayle into it: from the firſt to the ſecond, third, and fourth tonne it is all one courſe, that is ſouth-ſouth-eaſt, and from thence forward to Huyſduynen ſoutheaſt, but yet you muſt direct your courſe, as winde and ſtreame ſerveth. For if you will ſayle into the Spaniards gat with a fore flood, then you muſt have the winde at leaſt weſt and by ſouth, and you muſt ſayle ſouth before you can lye inward, for the fore flood falleth verie ſtrong n. n. e. croſſe over the pointes, til it be half flood, & ſo doth the fore ebbe fal ſ. ſ. w. croſſe over the pointes til half ebbe. An eaſt and weſt moone make a high water without the chanell, but by the land an eaſt-ſouth-eaſt, and weſt-north-weſt moone. But if it may be ſtaye for your tyde, till that the moone be weſt-ſouth-weſt, then you have a good tyde to ſayle in, for then the ſtreame runneth right into the chanel, and likewiſe the ebbe commeth firſt right out of the Spaniards gat, at the laſt or ende of the tyde. Then when you have the innermoſt cape ſtanding a capſtock beames length north from the uttermoſt, & are at the firſt tonne, then goe ſouth-ſouth-eaſt inward, and leave all the tonnes on ſtarborde, and when you are at the fourth tonne, then goe ſoutheaſt to the capes upon Huyſduynen, & cloſe by the footſtrand of Huyſduynen inwards. The north pointes are outward ſo ſhoring that at 8 or 9 fathome you ſhall not be a ſhips length from them, but on the innerſide they are verie flatte. When you have gotten to the Spaniards gat, then you may caſt your lead out upon the inner ſide of the north pointes, at three fathome without any hurt: but when the Wambus is right upon the aforeſaid high white downe, or eaſtward of it, then put ſomewhat off from the wall to five or ſixe fathome, for frō the north wall there ſhooteth out a point which in ſayling up you may paſſe by at four fathome water, then goe to the footſtrand of Huyſduynen and ſayle in cloſe by it, and if you will be at Cope vaerders Rode, then doe as it is ſhewed in the firſt Chapter.

Keyſers Plate.

Markes to ſhunne Keyſers Plate.

To finde the firſt tonne.

Falling of th'ſtreame

To ſayle in at the Lād deep.

To ſayle in at the Land deepe when you come frō the ſouth, then keepe from the wal five fathome, and ſo ſayle along by the land, but goe no nearer to the wal then 4 fathome & an half, for a little ſouth from the Kyckerſdowne, there cōmeth a peece or foot of a Sand frō the wal & reacheth inward to the Sea, which you may ſayle behinde at 4 fathome. The Depth that is after this point the Pilots call Ariaen Bergers Kille: but if you come out of the Sea with a ſtrong winde, then ſet and keep the higheſt of the Kyckerſdowns eaſt-north-eaſt from you, & ſayle upon it toward the wall, and comming againſt the wall you ſhall come into the viewe of the uttermoſt tonne, and ſo you ſhall not ſayle by Ariaen Bergers Kille: the uttermoſt tonne lyeth at five fathome, on the weſt wall, leave it lying Seaward from you, and goe right northeaſt all along the wall, and if it be any thing rough, then may you ſee the waves breake on both ſides. Let the ſecond tonne alſo lye on baghborde, the third tonne alſo lyeth on the weſt wall upon the entrie of the Land deepe, at the entrie it is not verie wide, but at lowe water it is ſixteene foote deepe. Upon the Teſſel on the newe land there ſtandeth a red tyled houſe, now when you come againſt the entrie, and that the Burgh church on Teſſell ſtandeth about a ſhips length eaſtward from that red tyled houſe, then you are in a good way: but if the Burgh church and the red tyled houſe ſtand one right againſt another, then you are too neare the weſt wall. So ſoone as you are over the entrie then you have deep water, that is ſeven, eight, and tenne fathome, and preſently after 15 and 16 fathome, then goe forward along by the footſtrand of Huyſduynen inward.

Markes of the firſt tonne.

Markes of the weſt wall.

To ſaile in at the Slenck.

The ſouth Slenck, as it was uſed the yeeres forepaſt, was Anno 1607 wholly ſpoyled, but to ſayle in at the Slenck, as it lyeth at this tyme, ſet the cape upon Teſſell a bowe length ſouthward or eaſtward from Wambus, and let them ſtand ſo, and

ſayle right upon them, and ſo you goe a litle weſtward from the firſt tonne right into the Slenck, when the mille upon Huyſduynen are right againſt the old Kerckbuert (which are certaine houſes which ſtand alone) then you are againſt the outmoſt tonne, which lyeth at 4 fathome half flood. In the Slenck there are four tonnes, you may eaſily ſee from the one to the other, ſayle along by the tonnes and leave them on ſtarborde, for they lye all on the eaſtwall, you ſhal finde no leſſe water in the Slenck then three fathome and an half, at half flood. The Land on either ſide is reaſonable flatte, ſo that you may eaſily ſound them with a lead. From the firſt tõne to the ſecond it reacheth north-eaſt in, after that northeaſt and by eaſt, and ſomewhat eaſterlyer, and laſtly eaſt-north-eaſt, but look well to your ſtreame, and direct your courſe according to the winde. When you are at the innermoſt tonne, then the cape upon Teſſell is a bowe length weſtward from the Wambus, then when you finde deeper water goe right to Huyſduynen, but beware of the ſouth wall for it is verie ſhoring, when you come to Huyſduynen, then goe in along by the foot ſtrand.

Markes of the firſt tonne.

By Teſſel ſtrand, there was a deepe alſo wont to runne in, but now it is gonne, for now there runneth a Slenck or Kill through the north pointes, where at a lowe water it is about 2 fathome water, but it is not well to be uſed, but by ſmall ſhips, and by ſuch as are verie well acquainted therewith. To ſayle into it take the Teſſell ſide at 4 fathome, and ſo runne along by it till you come to the north point, and then you ſhal perceive that Slenck by the waves, for they are on both ſides of it, as the winde bloweth ſomewhat hard, there you muſt runne in betweene them both, at the dryeſt you ſhall finde two fathome and an half, at half flood, when you are over the ſhallowe and finde deepe water againe, then you may runne along by the north pointes, at 3 or 4 fathome deepe, or right towards Huyſden. This chanell as I ſaid before, is not to be uſed but by ſuch as are wel skilled and acquainted therewith.

The Lãd-deepe of Teſſell.

To ſayle from Huyſden to Copevaerders deepe or Rode.

If you will goe from Huyſden to Coopvaerders chanell or Rode, then ſayle from the Newe chanel or deepe northeaſtward and ſo you ſhall not ſayle by the land on neither ſide, the land on either ſide is very ſhoring, yet you may ſound the Teſſel ſide with your lead at 8 and 9 fathome without any hurt: but the Wieringer ſide is ſo ſteepe that at one caſt of the lead you ſhall have 12 and 13 fathome water, and at the ſecond caſt you ſhall be on ground.

If you deſire to goe inward frõ Huyſden, then from the New deepe or chanel, ſayle northeaſt or rather more eaſterly, as winde and ſtreame ſerveth, or (as I ſaid before) along by Teſſell at 8 or 9 fathome, ſo long untill that Horne ſtandeth north from the rowe of houſes which ſtand north from the Sconce a litle within the Land, called South-haffel, keepe the markes ſtanding ſo, and ſo ſayle toward Vogelſand, ſo long till the cape on Teſſell and the mille of Ooſterender are one right againſt the other. then leave the aforeſaid markes of Horne, but enter into that reach with a large winde no nearer to the ſouth-ſide then at 7 fathome water, for weſtward by Vogelſand there reacheth a point of ſand outward, which you may ſayle by at five or ſixe fathome water, but with an eaſt winde, when you muſt laveere, or winde and turn, and that you goe croſſe to and fro, then you may goe within five fathome deepe of the wall. When the cape and Ooſterender milles are one againſt the other, keepe them ſo as long as you can ſee them, and then the corne mille and the water mille upon Wieringhen will be one againſt the other: when you keepe the aforeſaid milles upon Teſſel a bowe length ſouthward from the cape, then runne along by the ſouth ſide, but goe no nearer unto it, (when you are within the beakon upon Vogelſand) then at 8 fathome, for there it is verie ſteepe, and when the Ooſterender milles are a hand ſtaffe length northward from the cape, then you are on the north ſide, which is altogether ſhoring and ſteepe, and as ſoone as it beginneth to drie, you muſt turne as you laveere, otherwiſe you would preſently be upon the Land.

To ſayle from Huyſden to the Vlack.

Without the Land of the Teſſel, an eaſt & weſt Moone make a high water, and upon the Land or the ſhore an eaſt-ſouth-eaſt, & a weſt-north-weſt Moone, but in Copevaerders Rode a ſouth-eaſt and by eaſt, or a northweſt & by weſt Moone. The ſtreame runneth before the mouthes of the chanels about with the Sonne, ſo that when a ſhip is at Anckor without the chanel, and is out of daunger of the waves it ſhall have but a litle ſtill water.

VVhat Moone maketh a ful Sea before the Teſſel.

The foreflood and the after ebbe fall both together into the Sea to the Keyſers Flat north or ſomewhat more weſterly. To the contrarie againe the after flood and the fore ebbe, fal inward to the Land ſouth, and ſomewhat more eaſterly, & to conclude the ſtreames for the moſt part runne croſſe the chanels, the flood for half the tyde falleth northeaſt over the pointes, and then it runneth into the Spaniards gat, but without the Land the flood runneth northeaſt and the ebbe ſouthweſt, therefore look well to your ſtreames for it importeth you much.

The fal-ling of the ſtreames

The

II.

The deſcription of the Weſt coaſt of Holland betweene Huyſden and the Maſe, ſhewing what markes are thereon, & how you ſhall knowe them.

HUyſduynen or the Teſſel and the Maſe, lye one from the other ſouth-ſouth-weſt, and ſome what ſoutherlyer, & north-north-eaſt, and ſomewhat northerlyer about 24 leagues diſtant. Frō Huyſduynen to Petten it is 4 leagues ſouth and by weſt: Petten hath a ſmale church with a litle ſteeple, & about Petten you may ſee two other ſharp litle ſteeples in the North land, full ſouth there aboutes lyeth the Houtboſch. A league ſouth from Petten lyeth Camper Downe, which is the beſt land there aboutes to be knowne: the north ende is a ſlope ſteep white banck, which runneth ſlope downewards, but the ſouth part thereof is graye, and rough, overgrowne with heath, on the ſouth ſide thereof there are many rugged knottes or downes, and ſometymes there runneth a white blenck under it, whereby it is verie eaſily to be knowne. From Petten to Egmont upon the Sea, it is 3 leagues. Egmont upon the Sea, alſo is verie wel to be knowne, for it hath a thick flatte ſteeple which ſtandeth lyke a ſayle in the downes, and a litle to the ſouth from it there you may ſee Egmont within, which hath two high towres upō the Abbay, which ſtand one right againſt the other, whereof the one is ſharp, the other, to wete that which is moſt north is flat: for that one of the ſpeeres thereof fell downe not long ſince. On the north ſide of the Abbay there is yet a towre of the church, which yet ſtandeth upon the old wall, but it is not ſo high as that upon the Abbay: So that upon the whole coaſt of Holland, there is no place ſo well to be knowne as this. From Egmont upon the Sea to Wyck upon the Sea it is three leagues, which alſo hath a flatte ſteeple, when you are over againſt Wyck upon the Sea, then north from thence you may ſee the ſteeple of Beverwyck, which is a great high ſpeere ſteeple, & beſides this betweene Egmont & Wyke upon the Sea you may ſee Caſtricom and other ſpeere ſteeples. From Wyke upon the Sea to Sandvoort it is 3 leagues, Sandvoort hath a ſpeere ſteeple with a high beakon, which ſtandeth right ſouth from it in the black downes, which ſheweth like a ſteeple. North from Sandvoort there lyeth a high white downe, where you may ſee Haerlem over it, which is a high four ſquare croſſe church, with a high ſpere ſteeple, which ſtādeth in the middle of the church, and on the north ſide alſo an other long ſmall ſpere ſteeple, called Backeneſſer ſteeple. Heere aboutes the Coaſt of Holland hath a great Creeke or Inwyke. From Sandvoort to Nortwick upon the Sea it is 3 leagues, it is a flat ſteeple, and right againſt it there ſtandeth a beakon: north from Northwick upon the Sea, you may ſee Northwick within the land, which is a flat ſteeple, whereon there is a litle cape not verie high and in the middle of the church ther is a ſmal towre. Frō Northwick to Catwick upon the Sea, it is a league, which alſo hath a flat ſteeple, which in tymes paſt had a ſpere, right ſouth from it there ſtandeth a high beakō, which you may eaſily ſee before the ſteeple, there aboute alſo you ſee within the land (when you are not far frō the land) Catwick upon the Rhine, Rinſburgh, & Valckenburgh, which are all ſpere ſteeples. From Catwick to Scheveling are 3 leagues, the quier of Scheveling church is higher then the bodie of the church, as the Haeghes church is ful ſouth frō that church there ſtandeth alſo a beakon: about half a league within the land you may ſee the Haegh church, & it is verie wel to be known. From Scheveling to the Heyde it is two leagues, and from thence to Graveſand or the north point of the Maſe, it is a league, the Heyde is a village without a ſteeple, but a litle within the downs there ſtandeth a flat ſteeple called Monſter: But Graveſant is an high ſpere ſteeple, which is verie weil to be knowne, & ſtandeth on the north point of the Maſe. The Briel is a flatte ſteeple, and that ſtandeth upon the ſouth point of the Maſe, and this whole coaſt of Holland, from Huyſduynen to the Maſe, is altogether a faire ſtrand, you may goe as near unto it as you will, at four or five fathome water or thereaboutes.

Petten.

Camperdowne.

Egmont upon the Sea.

Egmont within.

VVyck upon the Sea.

Sandvoort

Haerlem.

Nordwyc.

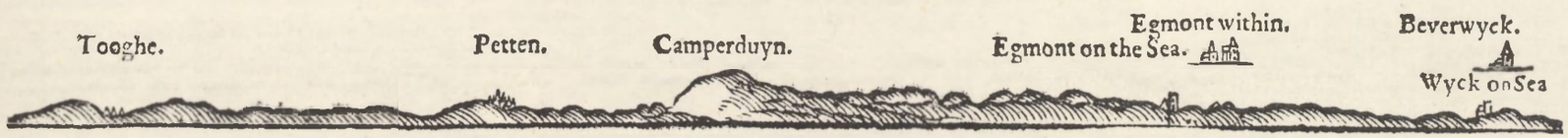
Catwick.

Scheveling.

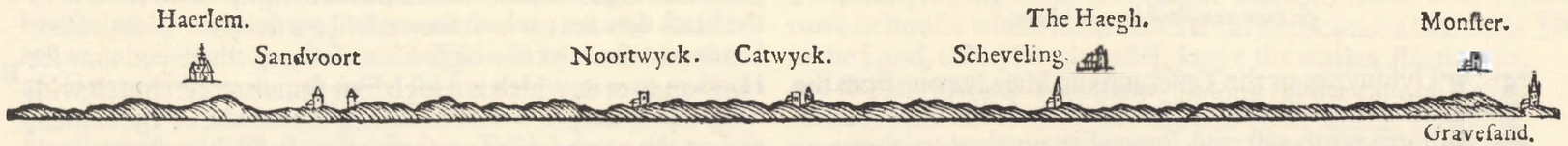
Graveſad.

The Briel.

Thus the coaſts of Holland lyeth and ſheweth, betweene Huyſduynen and Wyck upon the Sea, when you ſayle along by it about two leagues from the land.



Thus appeareth the coaſt of Holland betweene Wyck upon the Sea and the Maſe, as one ſayleth along by it about a league and an half from the land.



III.

How to knowe the land about the Maſe, and how you muſt ſayle into the Maſe, as the expert and skilfull Pilot of the Briel Iacob Bouwenſon gave me inſtruction at large in November 1607.

ON the north ſide of the Maſe lyeth Graveſand, which hath a high ſpeere ſteeple, which is called our Ladie ſteeple, which is the beſt to be knowne of all others in the Maſe, and a litle eaſtward from it there ſtandeth a flatte ſteeple called Monſter, on the ſouth ſide of the Maſe, upon the land of Vooren you ſhall ſee a great flatte ſteeple which is within the Briel. Weſtward from the Briel ſtandeth Eaſtvooren, which is a flattiſh ſteeple, with a ſmale ſpeere upon it, like to the Haeghs ſteeple.

Thus appeareth the land of Vooren, as you are about a league without the Maſe



To ſayle into the Maſe.

If you will ſayle into the Maſe, then ſayle til you bring both the capes which ſtand upon the land of the Briel, one right againſt the other, and then they will be about eaſt and by ſouth, and eaſt-ſouth-eaſt from you, and ſayle ſo upon them and you ſhall finde the uttermoſt tonne, which lyeth at four fathome & an half at lowe water, then the Haegh ſteeple is verie neare right againſt Monſter, which is a flatte ſteeple which ſtandeth a litle inward to the land from the Haye. From the firſt tonne to the ſecond, the courſe is eaſt-ſouth-eaſt, and ſo forward along to the fift tonne, ſo that from the firſt tonne to the fift you ſayle along by the markes of the cape, but then you muſt leave them. The ſecond tonne lyeth at three fathome and an half water, the third at the riſing of the threſhold, at three fathome, the fourth at the dryeſt of the entrie, at two fathome, but the fift tonne againe lyeth at three fathome, and being at it, you are paſt the ſhalloweſt: al the tonnes in the Maſe lye on the north ſide of the haven, and are ſo neare one unto the other, that a man may eaſily ſee from the one to the other, you muſt ſayle betweene the tonnes and the land, three or four ſhippes length ſouthward from the tonne it is the deepeſt water. From the fift to the ſixt tonne, & ſo forward to the ninth or laſt tonne, the courſe is eaſt, the ſixt tonne lyeth alſo upon the north ſide, at two fathome & an half, but the right depth betweene the ſixt tonne and the land is about 5 fathome, & the nearer to the wall the deeper, when you are paſt by the ninth or laſt tõne (which lyeth right againſt the Neſſe) then turne towards the Mayland of the Briel, where you ſhall ſee certaine boyes and ſome ſmale tonnes, you muſt ſayle through betweene them, and ſo along forward by the land, to the head, where you may caſt anckor, when you paſſe betweene the boyes and the tonnes, there you ſhall find tenne foot water at the loweſt, but there it is verie narrowe, ſo that you can not lavere or winde there. Therefore if it chance that as you enter into the Maſe you have a ſharp winde, then marke that when you come to the ſeventh tonne, Eaſtvooren being three or four ſhips length weſtward from the uttermoſt cape, & about ſouthweſt from you, that you keepe thoſe markes ſtanding ſo, and goe on northeaſt, and ſo you ſhall goe over a Flatte of nine foot water, which is wide and broad, when you are paſt it, you ſhall have three fathome water againe, but as ſoone as you perceive that it beginneth to be deepe water againe, then you muſt preſently ſayle ſoutheaſt, towards the land of the Briel without danger, and when you are at the head there you may caſt ankor, there you have five, ſixe, and ſeven fathome water. If you will goe farther up, there you may have a Pilot, and ſayle up the Maſe where you deſire to be.

If you

To ſayle frá northward into the Maſe.

If you come out of the north, and will enter into the Maſe, then ſayle along by the land of Holland at three fathome water, and goe along in that ſort within the mouth or entrie of the Maſe ſo long untill you have the capes upon the land of the Briel one right againſt the other, and ſo you ſhall fall upon the third tonne in the Maſe, and from thence you may ſayle forward into the Maſe, as I ſaid before.

By the footſtrand of Graveſand there is now againe a fair paſſage broken, called the Landdeepe, or Northgat or chanell, in the yeere 1608 marked at the charge of the Seatownes lying upon the Maſe, and now is ſigned with ſixe red tonnes.

To ſayle into the land deepe or Northchanel.

If you will ſayle in at the Northgat or chanell of the Maſe, comming from Sea, then ſet the beakons or capes that ſtand on the north ſide of the Maſe full one againſt another, hold them ſo ſtanding and ſayle right forward, and then you ſhall ſayle upon the body of the outmoſt tonne, which lyeth at 18 foot lowe water: the towre or ſteeple of Graveſand lyeth ſevered from the uttermoſt tonne full eaſt and by north, and the Briel lyeth from it almoſt ſoutheaſt and by ſouth, if then you ſet the towre or ſteeple of Graveſand eaſt and by north from you, and ſayle forward till the foreſaid beakons come one againſt the other, then can you not miſſe the uttermoſt tonne. From the firſt tonne to the ſecond and third is the courſe eaſt-ſouth-eaſt. The ſecond tonne lyeth upon twelve foot, comming thither let the capes be a capſtock-beame length each from other, and the Hey ſtand under the downe. The third tonne lyeth at eleven foot: then Graveſand is on the high downe. The fourth tonne lyeth at 11 foot alſo: then commeth Monſter upon the bores houſe. When you are paſt the fourth tonne then ſhal you finde deeper water, namely 15 and 16 foot, and there if occaſion require, it is fit to anckor. But againſt the fift tonne it is ſomewhat ſhallower, for it lyeth at 12 foot, then commeth Monſter through Graveſand. The ſixt tonne lyeth alſo at twelve foot, and when you come unto it then commeth Eaſtvooren, upon the land of the Briel within the uttermoſt or the moſt weſterly cape. From hence which is on the ſouthſide of the Maſe ſayle boldly forward to the head of the Briel ſouth-ſouth-eaſt, there are no ſhallowes nor dangerous places, and there anckor where you pleaſe. All the tonnes upon the north chanel are red tonnes and lye all on the ſouth wall, ſo that if you ſayle inward you muſt leave them all on ſtarborde, and ſayle northward along.

They that come from Scheveling or out of the north along the ſtrand, and will goe in at the north chanel of the Maſe, muſt keepe along the wall at eighteene foot, and then they ſhall fall upon the uttermoſt tonne, or if you ſayle nearer the ſhore at 11 or 12 foot, then you ſhall come to the ſecond tonne. The wall or ſhore is verie faire without daunger, ſo that (if there were no tonnes) you might wholly paſſe by the footſtrand, with the help and direction of the lead at 10, 11, or 12 foot, ſo deepe or ſhallowe as you thought good, or as the flood permitted, when you are come in by the direction of the lead ſo farre, that Eaſtvooren commeth through the uttermoſt cape on the ſouth wal, then you may ſayle right forward to the head of the Briel, as afore is ſaid.

This Situation of the North chanell was deſcribed to me in writing by the Pilots of the Briel in Ianuarie, in the yeere 1610.

All the depths here ſpecified touching the Maſe, are to be underſtood at lowe water, and the meaſure of the depth is to be underſtood of Maſe feet, which are ſo much greater then the North Holland feet, that they gayne one foot in 12. NOTA.

Before the Maſe a ſouthweſt and by weſt, and a northeaſt and by eaſt moone make a high water, and before the Briel a ſouthweſt, and a northeaſt moone, and it floweth there with a continuall daiely tyde 5 or 6 foot up and downe: a litle after that the flood beginneth to runne without before the Maſe, then it falleth alſo right into the Maſe, ſo that there is ſmall difference to be ſeene, whether it be without or within the chanell or mouth of the Maſe.

IIII.

How you ſhall ſayle into the Goree gat or chanell.

IF you will ſayle in at Goree gat or chanell, when you come out of the weſt, then let the cape that ſtandeth upon the land of Goree ſtand right againſt the ſteeple of Goree, and then it will ſtand eaſt and by ſouth from you, ſayle ſtraight upon it, to the land of Goree, and ſo you ſhall goe over a great Flatte, where at lowe water at the dryeſt, there is not leſſe then three fathome water, or a litle more. When you are over that Flat, & goe neare to the ſtrand of Goree, then you have deeper water again, 5, 6, 7, & 8 fathom, then goe forward cloſe by the footſtrād, until Goree ſtādeth ſ. w. frō you, & thē anckor where you think good, for ſo far inward it is good anckoring in every place. But if you come from the north or out of the Maſe, then runne along by the land of the Briel at 4 fathome, but goe no nearer unto it,

A Flat before the Goree gat.

How to go into the Goree channel, out of the north.

for in ſome places it is ſomewhat ſhoring, and when you are ſo farre ſouthward, that the ſteeple of Goree ſtandeth ſouth & by eaſt from you, or ſomewhat more eaſterly, then ſayle right upon the Land of Goree, and then alſo you ſhal ſayle over the Flat aforeſaid, but when you are near the Land of Goree, then beyond the Flat you enter into the deeper water, then goe in forward along by the Mayeland of Goree, (as I ſaid before) and ankor where you will. The Flat before ſpoken of is verie broad, and ſtretcheth croſſe over the chanell, it is verie even, and all of one depth. The chanel of Goree is verie broad & wide, for when

Markes of Goree gat or chanel.

the ſteeple of Goree ſtandeth betweene eaſt and by ſouth, and ſ. & by e. frō you, then you may without al fear ſayle to the foot-ſtrand of Goree, you muſt then ſtill runne over the Flatte aforeſaid, and ſhall not finde leſſe then three, and three fathome & an half water at lowe water, and when you come to the foot-ſtrand of Goree, you ſhall have deeper water, then goe in forward by the mayeland as aforeſaid.

To knowe Goree lād.

The Land of Goree is known by the great flat ſteeple of Goree, & by a ſharp litle ſteeple, which ſtandeth on the weſt ende called Outdorp, further alſo you ſee the cape there, whereof I ſpake before.

Thus the Land of Goree ſheweth when it is about a league croſſewiſe from you.



V.

To ſayle into the chanell of Brewers haven.

HE that deſireth to ſayle into Brewers haven, he muſt underſtand that there are three bankes lying before the land, which runne along by the ſtrand, the uttermoſt ly-

Breebanck

eth at leaſt a kenning from the land, which is called the Breebanck, upon it it is 7 fathome deepe but within it it is againe 19 fathome deepe. The ſecond lyeth nearer to the land, upon the

The Oeſter.

which it is five fathome deepe, and within it 7 fathome water.

Schelbāck

The third called the Schelbanck lyeth croſſe before the mouth of the haven, without the firſt tonne, and upon it at lowe water it is 3 fathome water.

If you will ſayle into the chanell of Brewers haven, then ſet the two capes that ſtand upon the Land of Schouwen one right againſt the other, and ſayle upon them to the ſtrand of Schouwen to four fathome water: and when you have gotten to four fathome water, then runne northeaſt in (yet as winde & ſtreame ſerveth you) & there you ſhall finde the uttermoſt tonne, which you muſt leave to ſeaward, or on the baghborde, ſayle forward in that ſort, ſo long untill that Reneſſe, ſtandeth eaſtward of the Elenck, that is the high downe which lyeth on the weſt ſide of Bruwers haven, then Goree will be right againſt Outdorp, or almoſt one uppon the other, keepe thoſe markes in that ſort, until you have deeper water, or that you have paſt the ſecond tonne, which as you enter in leave upon ſtarborde, when you wil keep in the depeſt water, but you may ſayle lower about. And then if you will ſayle to Brewers haven, then ſet Bommene without the point of Oſſeſteert, and ſayle upon it to the foot ſtrand of Schouwen: for the ſandes on baghborde are verie ſhoring, you muſt not goe nearer unto them when you lavere, then ſixe fathome, goe forward along by the ſtrand, to the head of the haven, and there anckor, there you ſhal have 8 & 9 fathome deepe, the tonnes in Brewers havens chanell are layd againſt the Buyſſes goe out to Sea, and taken in againe when they have done fiſhing.

To knowe the land of Schouwē.

When a man cōmeth out of the Sea, the Land of Schouwen when you fall upon it, ſheweth to your ſight with 3 or 4 high and long white downes, which are called the Woolſackes, that in the weſt is the higheſt and longeſt: upon the land alſo you may ſee ſome churches with ſmale ſperes, but on the ſouth ende towards Sealand, there is a high four ſquare flat church. Brewers haven hath a ſharpe ſteeple, and the land of Scouwen reacheth it ſelf out further eaſt then the other landes, whereby alſo it is well to be knowne. From the weſt ende of the Land of Schouwen there is a bad long Riffe, at leaſt two leagues and more into the Sea, which is called the Banjaert, from the uttermoſt ende of the Riffe to Botkil, it is ſouth-ſouth-weſt, and with ſuch a courſe you can not miſſe it.

The Banjaert.

Thus the land of Schouwen ſheweth when it lyeth about a league & an half thartwiſe from you.



VI.

How you ſhall ſayle into the Veer-chanel or Haven.

TO ſayle into the Veer-haven or gat (ſo called in Dutch) I counſell you not to enter into it, before half flood be paſt, for the latter ebbe, & the fore flood fall right croſſe over the Banjaert into the Roompot, to the land of Schouwen, but when the flood is half ſpent, then it runneth right into the Veer-haven, a ſouth and a north Moone make the higheſt water in Veerhaven: and an eaſt & weſt Moone the loweſt water therein: but when the Moone is ſoutheaſt or northweſt, then the water there is 2 thirdpartes flood.

How to ſayle into Veer haven comming out of the north.

If you will ſayle into the Veer-haven, comming out of the north, then goe no nearer to the land of Schouwen, or the Banjaert then ſeven fathome water: for upon the Banjaert in ſome places it is not above 4 or 5 foot deepe, and much dryer: but beyond it, it is 7, 8, and 9 fathome ſoft ground, ſayle about it on the outſide, untill that Eaſtchappell is half a ſhips length eaſtward from Middleburgh, ſayle with thoſe markes to Walcheren, ſo long untill that the ſteeples of Weſtkerck and Coortgeen be right upon each other, or that the ſteeple of Coortgeen ſtandeth a bowe length ſouthward of the flatte ſteeple of Weſtkerck, ſayle then upon it, and you ſhall finde the firſt tonne, but goe no nearer to the ſtrand of Walcheren then 7 or 8 fathome water, for if you doe you may chance to ſayle behinde a point of land called the Onruſt, which commeth off from Walcheren. You muſt alſo goe no nearer to the land of Schouwen or the Banjaert, then 8 fathome water, for it is verie ſteepe. The firſt tonne lyeth at 8 fathome, on the ſouth ſtrand, when you come to the firſt tonne, you may eaſily ſee the ſecond, & ſo forth from the one to the other, all the four tonnes muſt be left on ſtarborde when you goe in, and you muſt ſayle cloſe by them, for on both ſides it is verie ſteep and ſhoring, when you are at the innermoſt, then ſayle to the Mayland, and goe cloſe along by it at three or four fathome, if you ſayle not upon the heads, you can not goe amiſſe upon the Dykes.

Markes to enter the haven.

VII.

To ſayle into the Botkill

Steenbáck

TO ſayle into the Botkill, you muſt do it by day, and take heede of Stonebanck, which is a banck lying a league & an half from the Land of Walcheren, along in the Sea, ſtretching to the Botkill. The markes of this banck are theſe, there ſtandeth a ſteeple betweene Eaſtchappel, and Weſtchappel, called Domburgh, now when the ſteeple of Middleburgh ſtandeth juſt betweene Eaſtchappel & Domburgh, then you are at the eaſtende of this banck, and when Middleburgh and Domburgh are one againſt the other, then you are right over againſt the middle of that banck, but when Weſtchappel is eaſt-ſouth-eaſt from you or in a black valley in the downes, then you are againſt the weſt ende of that banck.

Markes thereof.

To ſayle about on the eaſt ſide of the Steenbáck to Botkill.

If you will goe within or ſayle eaſtward about that banck to enter into Botkill, then place Middleburgh ſteeple half way betweene Eaſtchappel & Domburgh, but let Eaſtchappell be nereſt, and ſo go towards the ſtrand at 4 fathome and an half, 5, & 5 fathome and an half, and caſt out your lead along by the wall, but when you come betweene Domburgh and Weſtchappell, there runneth a ſand off from the Wall called the Cloots, which take heede of: therfore ſayle ſouth-ſouth-weſt, or ſouth-weſt & by ſouth forward, ſo long untill that Weſtchappel ſtandeth ſoutheaſt from you, or in a black valley in the downes, keepe it ſtanding ſo, untill that the two ſteeples of Eaſtchappel & Domburgh be one againſt the other, and hold the Mayland ſide at 4 and an half, 5 and 6 fathome deepe. And the two towres aforeſaid, that is Eaſtchappell & S. Achten or Domburgh are a litle paſt each other, then preſently you finde deeper water, that is 9 or 10 fathome, then ſayle ſoutheaſt or ſoutheaſt & by ſouth, as the winde ſerves, along the ſtrand to Fluſhing.

To ſayle on the weſt-ſide of the ſtone-báck into the Botkill.

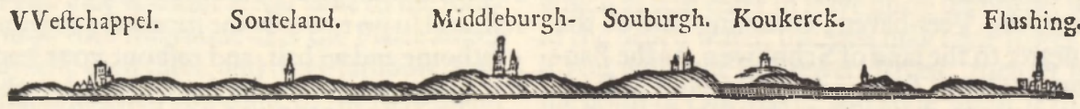
But if you will ſayle without or about on the weſt-ſide of the Stone banck to the Botkill, then runne ſo long about eaſt or weſt, (as you ſee your waie) untill that Weſtchappel be eaſt-ſoutheaſt from you, and then Weſtchappel ſtandeth in a black valley of the downes, ſayle ſo long towards it, untill the ſteeples aforeſaid of Eaſtchappel & Domburgh are one ſomewhat paſt the other, then (as aforeſaid) you get deeper water, then runne forward along by the land of Fluſhing, the Sea-coaſt there lyeth ſoutheaſt, and ſoutheaſt & by ſouth. When you are againſt Souteland, then rũne cloſe by the foot-ſtrand, for againſt Souteland there reacheth out a Flatte, and you muſt ſayle through betweene that Flatte and the ſtrand, and there it is not verie broad.

A Flatte againſt Souteland.

The land of Walcheren is a lowe plaine land to ſee to, but upon it there ſtandeth manie ſteeples, which for the moſt part in times paſt were ſharp ſteeples, but at this time the moſt part of them are flatte, Fluſhing hath a ſpier ſteeple, but Weſtchappel

pel hath a high flatte ſteeple. From Fluſhing to Weſtchappel it is three leagues, and betweene both there lyeth manie rough downes, the land betweene them reacheth northweſt and by north. Next to Fluſhing ſtandeth Koukerck which is a ſharpe ſteeple, but next to Weſtchappel ſtandeth Souteland, which is a flattiſh ſteeple. When you are in the Deurloy then Weſtchappel ſtandeth bare without downes. Frō Weſtchappel to Domburgh it is a league, that alſo is a ſharp ſteeple, and ſtandeth next the ſtrand, a quarter of a league eaſtward ſtandeth Eaſtchappel, which is a flat ſteeple. About a league eaſtward from the Hacken or Polder (which is the north ende of the land of Walcheren) there is a lowe downiſh land to behold. Southeaſt up from this Hacken lyeth the Polder, which alſo is a flatte ſteeple. By it alſo there ſtandeth another flatte ſteeple, called Sandwick. Veer alſo hath a ſhort thick flatte ſteeple, and upon that ſteeple there ſtandeth a ſmal ſpeere, ſo that it is verie eaſie to be known. But Middleburgh hath a high ſpeere ſteeple, which is higher then all the reſt.

Thus the land of Walcheren ſheweth it ſelf when you are in the Deurloy, or before the Splete.



VIII.

How you muſt ſayle in and out of the Deurloy.

The Raen

IF you wil ſayle into the Deurloy, then you muſt runne over the Raen with your lead, untill the ſconce is a maſts length from Weſtchappel, that is, that Weſtchappel ſtandeth a maſt length northward from the ſconce, ſayle towards it untill the caſtle of Sluys be right eaſt frō the high downs of Caſand, there at a foreflood you ſhall finde four fathome water, which is upon the threſhold of the chanel, where it will ſtrait be over, and then you ſhall finde it a great half fathome deeper. Now when the caſtle of Sluys ſtandeth on the eaſt corner of the high downes of Caſand, then goe in ſoutheaſt, and ſoutheaſt and by ſouth, untill that Middleburgh commeth to the high downes, which are betweene the Iſchooke and Souteland, then change your courſe, and goe eaſt towards Fluſhing, and you ſhall neither ſayle by Shallowes nor Sands.

If you deſire to come out of the Deurloy, then frō Fluſhing goe weſt ſo long, untill the caſtle of Sluys be eaſt from the high downes of Caſand, keepe thoſe markes ſtanding ſo, and goe northweſt and by north forward, but as winde and ſtreame ſerveth, and as you ſayle on this ſort out, then marke the caſtle of Sluys, and if it be eaſt from the downes of Caſand aforeſaid, then you muſt hold your courſe ſomewhat more weſterly, and if the caſtle ſtandeth weſtward, then you muſt hold your courſe more northerly, and hold it ſo ſtanding eaſt of the downes as aforeſaid, untill that Weſtchappel be a maſt length northward from the ſconce, then you are without all the Sandes that may hinder you, and may ſet your courſe whether you will.

IX.

How to ſayle into the Splete.

THe Splete lyeth betweene the Deurloy and the Wielingen, he that deſireth to ſayle into the Splete or the Wielinges, he muſt knowe, that from the banck of the Engliſh Pol, there reacheth a banck along the coaſt to Oſtende, which is called the Trip, which is about a quarter of a league broad, hard ſand & verie good anckor ground, when you come out of the Sea you may perfectly ſound the Trip with your lead, all along the drougth, and it is verie hard Sand. When Blanckenburgh ſtandeth ſoutheaſt and by eaſt from you, then upon the Trip it is 6 fathome deepe with a lowe water, and the more weſterly the deeper upon the Trip. When you come ſoutheaſtward a muſket ſhot length or more over the drougth or hardnes of the Trip, then preſently it is half a fathome deeper, and ſoft ground, which is the chanell of the Wielinges. The Trip.

If you will ſayle into the Splete, comming weſt out of the Sea, leave the coaſt of Flanders, and when you geſſe your ſelf to be paſt Oſtende, then caſt out your lead, untill you finde ſhallower water and harder ground, then you are againſt the Trip, when you have found this ſhallowe, be it at 6, 7, or 8 fathome water, as you are eaſterly or weſterly, (for the eaſterlyer the dryer, and the weſterlyer the deeper as aforeſaid) then you muſt not paſſe

paſſe over it ſo towards the land, for you ſhould fall into the mouth of the Wielinges, but you muſt there put about a ſaker ſhotte or more northward into the Sea, until you have it ſomewhat deeper, and ſoft ground againe, for northward from the Trip it is alſo ſoft ground like the Wielinges, then runne in eaſt-north-eaſt, and now & then make ſouthward towards the Trip, till you have ſhallowe and hard ground, which is the north-ſide of the Trip, hold ſo all along by the Trip, untill that Brugge be over againſt Liſwegen, or that Blanckenbergh be on your ſide, then you are againſt the weſt point of the Raen in the Splete. If ſo be you can ſee it, then hold Middleburgh ſtanding over a high downe, which lyeth betweene Iſehooke and Souteland, & frō which on the eaſt-ſide there lyeth no more downes, then goe in eaſt-north-eaſt, and then you ſhall not ſayle by any banck or Raen, untill the caſtle of Sluys come within the high downes which lye eaſtward from Caſand, when you have theſe markes goe freely forward to Fluſhing, without any doubt, & you ſhall ſayle neither by Raeſſes nor French Pol.

But if it chance to be darke or glome wether, then you muſt goe along by the north ende of the Trip eaſt-north-eaſt, ſtill ſounding with your lead, untill you finde the drougth or hard ground of the banck, and running ſo eaſt-north-eaſt along by it, then you ſhall goe in betweene the Raen and the banck. The weſt point of the Raen is verie flatte, ſo that you may eaſily ſound it, and in the chanell betweene the banck and the Raen it is ſoft ground, and on either ſide, both on the Raen and on the banck upon the ſhallowe it is hard ground. When in this ſort you runne in eaſt-north-eaſt, to the dryeſt part of the banck, and that you putte from the banck, then it beginneth to be deeper, ſo that you may paſſe over the banck at 18 foot water half flood, but I counſell you not to goe over it, leaſt you runne upon the French Pol, but keep along by the hard ground of the banck & direct your courſe ſomewhat eaſterlyer to ſhunne the Raeſſes, which reach into the Sea from the Souteland, for you can not ſound them with your lead, then when you are ſomewhat more inward, goe eaſt to Fluſhing, and then you ſhall ſayle by no drougths.

How you may ſayle out of the Splete.

IF you will ſaylē out of the Splete, then goe from Fluſhing vveſt and by north ſo long till S. Anne come vvithout the eaſt dovvne of Caſand, then may you runne forth into vvhat chanel you vvil: but if you vvill runne out of the Splete then bring Weſtchappel out of the dovvnes, and Middleburgh againſt the high dovvne vvhich lyeth betvveene the Iſehooke and Souteland, If you be next Flanders ſide, then S. Anne commeth firſt out of the downes: but if you be next Walcherens ſide, then Weſtchappel cōmeth forth firſt. When Middleburgh is againſt the foreſaid downe, then goe weſt-ſouth-weſt, & keepe Middleburgh ſo ſituate ſo long as you can ſee it. When Brugghe commeth againſt Liſweghen, then you are paſt all ſhallowes, & you may ſet your courſe whither you will: or if it fall out that you looſe the ſight of Middleburgh, then runne along out by the courſe of Raen, which you may wholly ſound with the lead, but the Pol inward is altogether ſteepe.

X.

How to ſayle into the Wielinges.

VVhen you come out of the Sea towards Flanders, and will ſayle into the Wielinges, then ſeeke out Liſwegen, that is a thick flat ſteeple ſtanding in the downes: when Bruggeling ſtandeth a Cable length from Liſwegen weſtward, then are you from daunger of all Sands, Pols, and Raſſes: keepe Bruggeling ſo ſtanding and ſo ſayle towards Flanders upon five fathome, there you finde ſoft ground. Then goe eaſt-north-eaſt or eaſt and by north, as the winde & ſtreame ſerveth: keepe the coaſt of Flanders at five fathome till Blanckenbergh commeth into the gappe of the Gallowes field, that is a great gappe in the downes: keepe Blanckenbergh ſo ſtanding till you ſee Heys in another great gap in the downes, almoſt half a maſts length eaſt from the Ungeboedt, then is Weſtchappel in Flanders full againſt Knock: then ſayle forward northeaſt & by eaſt, & northeaſt as the winde or ſtreame is that you may runne beyonde the French Pol. Whē S. Anne cōmeth upon that high down of Caſand which is moſt eaſterly then are you beyond the French Pol & al ſhallowes, then ſayle forward to Iſehook, toward Walcherē, & forward by the dyke along by the Hoofden & ſo to Fluſhing.

If you will ſayle into the Wielinges when you come out of the weſt, with a ſouth winde, then as it is aforeſaid in the deſcription of the Splete, you muſt ſeeke Fluſhing coaſt with your lead. When you are paſt Oſtende, then you ſhall finde drie and hard ground, which is the ground of the Trip, which you muſt ſayle over and when you are about the length of a musket ſhot over it, then youſhal preſently have half a fathome deeper water & ſoft ground, then you are in the chanel of the Wielinges, & in a good waie, but if then you goe ſomewhat more to landwards

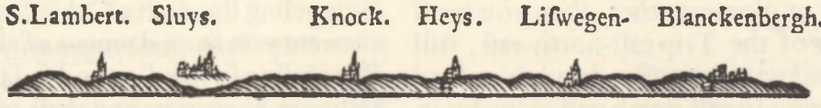
or ſoutheaſtward, then you will looſe the ſoft ground, and finde hard & drie ground againe, by reaſon of a Sand which lyeth frō Blanckenburgh about an Engliſh myle from the ſtrand along the coaſt, ſo farre as to Wenduynen, where at a lowe water, you have 15 foot water at the dryeſt, you may ſayle under this ſand, when you goe over the Trip a litle eaſtward from Oſtende, and ſo goe ſomewhat to farre over to the ſtrand: but to ſhunne it you have no better meanes, but when you are paſt the hardnes and drynes of the Trip, and finde ſoft ground with a litle deeper water, that then you put no more towards the land, but goe in right northeaſt, and ſometymes northerly, according to the hardnes of the Trip or banck, and then hold off againe, till you finde ſoft ground againe, whereby you ſhall be aſſured, that you runne along by the ſouth ende of the Trip, or banck in the chanell of the Wielinges, this doe ſo long untill Heys be about a maſts length weſtward from the beakon, then you muſt ſound no more northward with your lead for the banck there is verie ſteepe, for that cloſe by the banck it is eight fathome deepe at the leaſt. When Heyes is right againſt the beakon, then you are right againſt the ſhalloweſt of the banck or Engliſh Pol, then goe ſtill eaſt-north-eaſt til Heyes be a maſt length eaſtward from the beakon, in a hole or plaine where there are no downes, then you muſt goe no longer eaſt-north-eaſt, but goe a point northerlyer, that is northeaſt and by eaſt, to ſhunne the French Pol, ſo long till S. Anne is right againſt the eaſterlyeſt high downes of Caſant, then you are paſt the French Pol, and all daungers. Then ſayle up the Iſehooke to Walcheren, and ſo along to Flu-ſhing as is ſaid before.

To shūne the Banck of Blanc-kenbergh.

Markes of the Engliſh Pol.

Markes of the French Pol.

Thus the coaſt of Flanders ſheweth when you ſayle out and into the Wielinges.



XI.

Of the falling and running of the ſtreame in the chanels of Sealand.

HE that will ſayle theſe chanels, muſt neceſtarily underſtand, how the ſtreames upon the droughts (which lye before theſe chanels) falle and turne that he may knowe how to governe himſelf wiſely and warily therein.

At Weſtchappel before the land a ſouth and north moone maketh a high water, & when the water is fallen half an houre, then the ſtreame beginneth to fall outward, and when the water is riſen half an houre, then it beginneth to fall in, but when you are before the Botkill, then you muſt underſtand that the ebbe firſt beginneth to goe, when the water hath fallen an houre, but it falleth long into the Sea.

But in the Splete, and upon the drougths lying there abouts, the tydes runne about againſt the Sonne, and at laſt falleth into the chanel, an eaſt and weſt moone maketh loweſt water there, and the foreflood falleth there over the ſhallowes towards the land, but when the moone is about eaſt-ſouth-eaſt, or when the water hath flowen about two houres, upon thoſe ſhallowes, then the tyde begineth to turne ſouthward, firſt ſouth-ſouthweſt, and ſo by the ſouth to the eaſt, ſo long till the moone be ſouth-ſouth-eaſt, then the flood falleth eaſt. But to knowe how farre weſtward the tyde beginneth to turne & by what markes: you muſt underſtand, when Blanckenbergh ſtandeth about ſoutheaſt and by eaſt from you, from thence the tyde beginneth to runne eaſtward, but from thence weſtward you ſhall finde no turning tydes.

XII.

To know all the places upon the coaſt of Flanders.

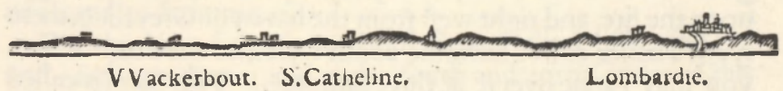
FLanders is a lowe hilly and downiſh land, full of ſteeples and churches, & reacheth from Calis to the point or ende of the Swyne, moſt altogether eaſt-north-eaſt, and weſt-ſouthweſt. To know it when you ſayle along by it, from Sluys to Calis, firſt you have a flatt ſteeple called S. Anne, and then the ſpeere ſteeple of Knock, which ſtandeth further into the downes, Heys is alſo a ſpeere ſteeple which ſtandeth weſtward from the Knock, but weſtward frō Heys lyeth Liſwegen, which hath a flat ſteeple ſtanding in the downes, then followeth Blankenbergh

kenbergh,which is a flatte ſteeple,but not ſo bigge as Liſwegen, inward to the land from Blanckenbergh ſtandeth Bridges, and there ſtandeth two ſpeere ſteeples upon one church, and weſtward from Blanckenbergh half a league lyeth Wenduynen with a ſpeere ſteeple. Betweene Wenduynen & Blanckenbergh,there ſtandeth an other ſteeple, called Ian Davies ſteeple,but Oſtende lyeth a league weſtward from Wackerbout, half a league weſtward from Oſtende lyeth S. Catheline. A league weſtward frō it lyeth Middlekerck,which is a thicke flattiſh high ſteeple,from Middlekercke to Newport it is two leagues, which hath a flatte ſteeple, and there within the land you may ſee another ſpeere ſteeple, a litle eaſtward from Newport lyeth our Ladie of Lombardie, which is a high flatte ſteeple.

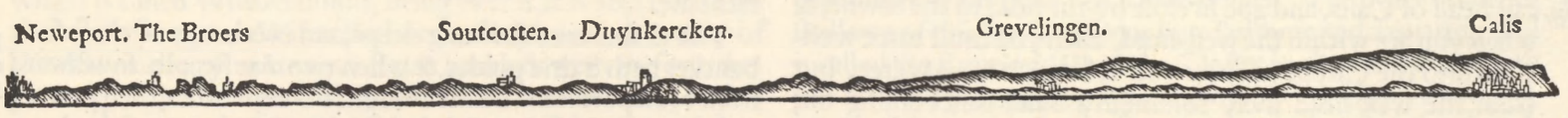
From Newport to Broers it is almoſt 3 leagues, & fromBroers to Duynkerck 4 leagues, Soutcotten is a league eaſtward of Duynkerck, Duynkerck hath a high flatte ſteeple with a ſmall ſpeere ſteeple. From Duynkerck to Greveling it is 3 leagues, betweene them are theſe ſteeples, firſt litle Sinten a ſpeere ſteeple, Great Sinten a flatte ſteeple, Mardicke a great thick flatte ſteeple, and S.Georges a high ſpeere ſteeple. Greveling hath no ſteeples,but there are two milles in it,one upon the Eaſtgate the other upon the weſtende of the towne. From Graveling to Calis it is alſo 3 leagues, Calis hath manie ſpeere ſteeples or towres, whereof one is higher then all the reſt, and betweene them both are theſe villages, but yet without ſteeples, unleſſe it be one or two flat ſteeples: firſt Hoogenpriſe & Daſen which are two flatte ſteeples, and Valdam a flatte church with a ſmall ſpeere upon it, in the middle thereof. This is the whole deſcription of Flanders coaſt, from Blanckenbergh to Calis. So that the coaſt of Flanders betweene Calis and Blanckenbergh is 24 leagues long, or as ſome ſay 22 leagues, and Blanckenbergh frō Fluſhing almoſt 9 leagues, ſo that from Fluſhing to Calis it is at leaſt 29 leagues, or as ſome ſay 31 leagues at the moſt.

That wich is heere ſet downe of the ſteeples & leagues along the coaſt of Flanders, is by good and expert Pilots diligently collected and ſet downe, and is verie neceſſarie and convenient to be known, not onely in regard of that which is before ſaid touching the Wielings, but alſo for the ſayling by the havens of Flanders, & ſpecially for the knowledge of the Flemiſh coaſt, as hereafter it is declared.

Thus the countrie of Flanders ſheweth it ſelf betweene Neweport and Oſtende.



Thus the countrie of Flanders ſheweth it ſelf betweene Calis and Neweport, when you ſayle along by it eaſtward.



Clooſter at the Downes.

XIII.

How to ſayle in to the Havens of Flanders.

TO ſayle into Oſtende let the new church ſtand weſtward from the old church, & ſo goe in cloſe by the weſt head, it is a tyde haven which you muſt uſe with high water, you muſt keepe the fire-beakons one right againſt the other, or a litle a ſunder, that they may ſtand ſoutheaſt & by ſouth from you, and ſo goe in right upon them, with a ſhip that draweth not much water, you may ſayle in there at half flood, and by night you may ſayle in by the lights of the fire.

To ſayle into Newport.

Neweport is a tyde-haven, which at lowe water is drie, at the continuall tydes, there is two fathome water,at high water, and at a ſpring tyde it is 3 fathome water, but the latter flood bringeth moſt water upon this coaſt, he that will ſayle into it, muſt ſtay till half flood and ſet the higheſt beakon a litle eaſtward from the leſſer beakon, & ſo he muſt ſayle into the Duycker. When the Duycker is under you have water ynough, but comming thither by night you ſhall underſtand, that they ſet out fire no longer then from half flood to half ebbe, which everie man

rie man muſt obſerve. Newport as I ſaid before, is a drie haven, and weſtward it is flatte water, and from the eaſt-head there cõmeth a Sand falling downe, where at a high water you muſt goe over, cloſe by the banck it is 3 fathome deepe.

To ſayle into Duyn kerck. At Duynkerck they burne fire by night, from half flood to half ebbe, and no longer: if you will enter into it, you muſt underſtand, that the loweſt beakons ſtand neareſt to the water, which you muſt keepe one right againſt the other till you be within the heads, ſhunne the weſt-ſide, and runne in cloſe by the eaſt-head into the haven, the weſt-head lyeth further into the Sea then the other doth.

To ſayle into Greveling. Greveling is a tyde-haven, vvhere you muſt enter at high water, there ſtand beakons vvhich you muſt hold one againſt the other, & ſo ſayle in betvveene the heads, on the vveſt-ſide there is a Sand-banck vvhich you muſt ſhunne.

But vvhen you goe along by the coaſt of Flanders through Wolbrechſont, and that you come at laſt to the Smal-banck, then you come to the vveſt ende of the Sand that lyeth out at Greveling, which reacheth farre into the Sea, on the eaſt-ſide thereof you may goe into the haven of Greveling, and there a great waie it is flat water, but by night you muſt runne in right upon the fire, and right weſt from the haven of Greveling, there lyeth a banck of five fathome about weſt into the Sea. There you may runne over it at three fathome. This Sand is called the Neweland, which lyeth along by the land to the haven of Calis.

To ſayle into Calis. When you are paſt that Sand of Newland, then ſayle to the eaſt head of Calis, and goe in cloſe by the head to the towne, & when you are within the weſt-head, then you muſt turne weſtward into the Cuype, where you lye drie at lowe water, but from the weſt-head there commeth a Sand-banck falling off, but you muſt runne in betweene that Sand-bancke and the eaſt-head, when it is tyde there are two fires by which you goe in.

There lyeth alſo croſſe from the weſt-head of Calis, a banck of two fathome, betweene the head or Mayeland and this banck you may goe through at 3 fathome half flood, the banck is two fathome deepe, and under Calis cliffe you may anckor at 10 fathome at the eaſt-ende, but at the weſt-ende there lyeth a rock under the water, which is about a Culvers ſhotte from the land, and this Calis Cliffe lyeth betweene Calis and Swarteneſſe, whereof ſomewhat ſhall be ſpoken in the chapter enſeweing.

XIIII.

The ſcituation and ſtretching of the Flemiſh banckes.

The Trick. ABout two leagues from Oſtende lyeth the Tricx, a banck whereon there is not above 15 or 16 foot water. When the Old church is right againſt the ſteeple of the Newe church, then you are againſt this banck, and when S. Catelines ſteeple is right againſt Oſtende, then you ſayle againſt that banck, betweene this banck and the head of Oſtende there lyeth another banck of 3 fathome water.

Betweene Oſtende & Newport there lyeth 4 bancks, which begin al four right againſt Oſtende: the 2 neareſt the land ende againſt Newport, the other two reach almoſt to Duynkerck, along the land. The firſt is called the Geere, betweene this banck and the land there goeth a chanel of 8, 9, & 10 fathome. Geere.

The 2 called Laland which endeth alſo againſt Newport, betweene theſe two bancks there runneth alſo a chanel, of 8 & 9 fathome. Laland.

The 3 is called Stroom, which rũneth almoſt to Duynkerck, on the eaſt ende having a point which reacheth eaſt, ending almoſt againſt Newport, it is a banck of 3 or 4 fathome, and of 5 and 6 fathome at the eaſt ende. Stroom.

The 4 called Sandele, Calbanck, or Oudemoers banck rũneth along by Breebanck, the utmoſt ende is at leaſt 2½ leagues long. Sandele, Calbanck, Oudemoers-banck.

Such ſhippes as deſire to goe into Duynkerck, and will not ſayle along by Flanders, runne about without theſe banckes, til they come againſt Breebanck, and then goe in by it at 5 or 6 fathome.

The chanel is 15 fathome deepe, and everie one of theſe four banckes hath a drie polder, & when two flat ſteeples ſouthward from Newport ſtand a bowe length frõ each other, then you are right againſt theſe four Sands, which are no deeper with a lowe water then 1 fathome, & at a ſpring flood fall almoſt drie. Markes of theſe bancks.

Betweene all theſe banckes you may anckor at 9, 10, 11, & 13 fathome, & vvithout it is 9, 10, 11, & 12 fathome deepe, you may runne over them at 4 fathome, but vvhen you are vveſtward frõ them, then it is deeper, that is 8 9 and 10 fathome.

Broers banck is three cornerd, it lyeth cloſe by the lãd againſt Broers, & the Cloſter in the downes, & reacheth from the land about vv. n. vv. a league into the Sea, vvhen the Cloſter in the dovvnes or Broers lyeth ſ. from you, then you are on the inſide of Broers banck, you may paſſe along betvveene this banck and the land at 4 fathome lovve vvater, but cõmonly men goe vveſt Broerſ. banck.

about

about it, vvhē they ſayle along by Flanders vvithin the bancks.

Cams-banck. Right weſtward from Broersbanck lyeth Cams banck, which is 3 fathome deepe, which lyeth upon manie Sandes, you may alſo runne betweene this banck & the land at 8,9,&10 fathome, you may alſo ride there ſafely againſt all windes upon the land of Flanders, betweene this ſand & Broers banck it is 5 fathome deepe, when you goe between this banck & the land, you goe alōg by Quadebāck, to the entrie of the chanel before Duynkerk.

Quabāck. Quadebanck is a bāck which eaſtward frō the head of Duynkerck falleth of about 2 leagues weſt, ending againſt the heads of Duynkerck. Eaſt frō the eaſt-head of Duynkerck havē you may lye at rode ſafe againſt a n.w. north, & n. e. winde behinde this banck, & there it is 2 fathome deep lowe water, but at the entrie it is drier. Before the mouth of the haven at Duynkerck, it is 9 or 10 fadome deepe, & on the weſt ſide of the weſt-head of Duynkerck it is 6, 7 or 8 fathome. From thence you may goe over

Smal-bāck the Smal-banck at 3 fathome, & goe towards the Broad-banck, this Smal-banck lyeth right croſſe before the haven of Duynkerck, betweene Duynkerck and the Broad-banck.

Splinter. From the weſt-head of Duynkerck there runneth a banck toward Greveling two leagues, which is called the Splinter, there on the weſt ſide you may ſaile under the Rode at 10,8,6,& 5 fathome, you muſt ſayle in cloſe by the foot ſtrand, you may ſayle in betweene the land and this banck almoſt to the weſt-head of Duynkerck, but you muſt ſayle out of it againe backward.

Vvilbaert-ſondt. When you ar a good waie paſt the head of Duynkerck, about f.w. from the Splinter, then you rūne over a ſand of 2 fathome, which is called Wilbaertſondt, being over it, it is 10,11,& 12 fathome deepe againe. When Borburger ſteeple is in the valley of the downs, then you are againſt this banck, & with theſe markes you may ſayle through the banckes n.n.w. into the Sea, and ſo come to the point of the Broad-banck, at 4 fathome, and then when you turne ſomewhat towards the land againe at 12, 13 or 15 fathome, then you may alſo ſayle through the Broad & the Small banck e. n. e. or e.& by n. till you have paſt the Cloſter in the downes or Broers banck, which commeth downe frō the Cloſter a league into the Sea, eaſtward paſt this banck it beginneth to be flat water, againſt Newport 4 or 5 fathome, & when you are paſt Newport, chooſe then the Maylād at 8 or 9 fathome keeping cloſe by the land, then you ſhall rūne between the land and a banck called Geere, which reacheth towards Oſtende, but whē you are againſt Oſtende, you are free of the bancks, & then you may ſafely put to Sea to goe to the Wielinges.

There lye yet five long bancks along by the coaſt of Flanders when Greveling is ſ. e. from you then you are againſt the ſouth ende of thoſe banckes, & when Newport is ſ. e. from you, then you are againſt the north ende of thoſe banckes, they are verie long, & betweene each of them there goeth a white chanel of 8, 9,12,15,16,18,19,& 20 fathome deepe each of a ſeverall depth. Markes of the Flemiſh banckes.

The uttermoſt banck, which is moſt weſterly & reacheth not farre northward, lyeth from Calis Cliffe n. n. e. about 4 leagues & an half, and is 3 fathome and an half deepe, betweene this & the other banck there goeth a white chanel, of 23 & 24 fathome.

The ſecond banck lyeth from Calis Cliffe northeaſt and by north, about 4 leagues, and there it is 5 or 6 fathome deepe, but at the ſouth ende there is a polder or ſand of a fathome and an half. When the ſouth ende of Winocxbergen is betweene the two flat ſteeples or towres that ſtand weſtward of Duynkerck, then you are againſt this Polder which is called the Cliffe. The Cliffe.

There ſtand alſo three or four milles eaſtward from Duynkerck, when the uttermoſt is againſt the eaſt ende of the towne or wall, that alſo is a good marke of this polder or ſand, and Duynkerck towre will then ſtand about ſoutheaſt frō you four leagues. Betweene this and the third ſand there is alſo a chanell of 12 and 13 fathome.

The third banck lyeth northeaſt from Calis Cliffe, and is 4 and 5 fathome deepe, and at the ſouth and north endes of this banck are polders or ſandes, that moſt ſouth is a fathome deepe, and lyeth alſo upon the markes of Winocxbergen, about northweſt and ſomewhat weſterlyer from Duynkerck, which is called the Polder of the dyke, or Dyke-polder. The other polder or ſhallowe of this banck is about four fathome and a quarter, and is called the Ruyting. When the Cloſter in the downes is ſouth eaſt frō you, then you are againſt the Ruyting. Upon this banck you muſt be warie, for the Ruyting lyeth almoſt in the chanel, and with a lowe water they have but two fathome deepe, & are verie dangerous. The Ruyting.

The fourth banck called Retlebanck, lyeth north-eaſt and by eaſt from Calis Cliffe, and is 3, 4, 5, and 6 fathome deepe, at the ſouthende whereof alſo is a ſhallowe, of a fathome deepe at low water, & with a ſpring-ſtreame theſe polders are drie. Betweene this alſo there goeth through a chanel of 19 and 20 fathome, & ſo alſo the aforeſaid banck. Retlebanck.

Betweene all the banckes aforeſaid there runne faire chanels, which you may laveere from one banck to the other, and betweene al the ſaid banckes you may anckor where you will.

Breebáck. The ſouth ende of Breebanck lyeth eaſt-north-eaſt from Calis Clif, and hath a ſand or ſhallowe at the ſouth ende, of two leagues long, and all through is three and four fathome deepe.

Weſtward from this banck there goeth a great chanell, of 19 and 20 fathome, which reacheth fartheſt northward, ſo that the north ende thereof is northweſt and ſoutheaſt from Newport: but it lyeth farre without the land, ſo that the north ende of theſe three banckes may well be the ſame, which is called the Broers banck, for they lye right with the north ende againſt Broers banck, and the Cloſter in the downes lyeth then ſouth-ſouth-eaſt from you, about 4 or 5 leagues, and at the north ende they are 6, 7, and 8 fathome deepe.

X V.

Of the running of the ſtreame in all theſe places aforeſaid.

IN the North Sea, the ſtreame falleth in round more then half a tyde, in the Breadth 14 it followeth the Sonne or the moone, & falleth but one quarter right along the Sea, comming along by the coaſts againſt Holland and Sealand, the ſtreame whether it be ebbe or flood runneth right to the land, but in the middle of the tyde, then the ſtreame runneth right along the Sea, but at the laſt of the tyde it will runne inward to the Sea, whether it be weſtward or northward.

How the ſtreames fall into the Marſdeepe is alſo declared before, that the foreflood and the latter ebbe fall northward croſſe the chanels, to the laſt quarter of the tyde, and the latter flood with the fore ebbe contrarily ſouthwards over the grounds.

The flood runneth not into the Maſe before it be a quarter flood, and although the foreflood falleth towards the land into the chanell, yet the latter ebbe cõmeth out of the chanell over the Sands, and ſo fall againe one with the other into the Sea.

But if you will ſayle into the Veerhaven or chanel, you muſt underſtand that the flood falleth not right in, before the moone be right ſoutheaſt, and ſoutheaſt and by ſouth, and then it is about half flood, for along by Sealand ſide the flood falleth outward along the Bangaert northward, againſt Sealand in the chanell a third part of the flood falleth towards the land, then it beginneth to fall northeaſt and by north.

Betweene Marſdeepe and the Maſe in the chanell the foreflood commeth out of the north Sea, and ſo followeth after the moone falling towards the land n. e. and n. e. and by n.

Along by the Flemiſh banckes, the foreflood falleth to the land over the bankes, and in the middle of the flood it falleth right into the Sea, but the latter flood falleth northward into the right chanell.

X V I.

What moone maketh high water in theſe places.

BEfore the pointes or hookes of the Teſſel an eaſt and weſt moone maketh a high water.

Betweene Haerlem and Petten a w. n. w. and e. n. e. moone maketh a full Sea.

Before the Maſe a ſ. w. and by w. and a ſ. e. & by e. moone make a full Sea.

Along by Sealand in the chanell without the Flemiſh bankes a ſouthweſt moone maketh a full Sea.

Before the Wielinges, a ſouthweſt, and ſ. ſ. w. moone maketh a full Sea.

Along by the coaſt of Flanders upon the land a north and ſouth moone make a full Sea.

Before Fulſhing and the Veere, it is full Sea with a ſouth and by weſt and a north and by eaſt moone.

Before Ramekens & Armue a ſ. ſ. w. moone makes a ful Sea.

Before the Briel a ſouthweſt and northeaſt moone.

Before Delfs haven a w. ſ. w. moone maketh full Sea.

Before Rotterdam a ſ. w. by ſ. moone maketh high water.

Before Marſdeepe an eaſt & weſt moone maketh full Sea.

Before Teſſel at Copevaerders Rode an e. ſ. e. and w. n. w. moone maketh high water.

Vpon Wieringer Flat it is high water with a ſ. e. moone.

X V I I.

Of the depths againſt theſe places, and at what depths a man may ſee the land.

BEtweene the Marſdeepe & the Heads in the right chanel it is 23 or 24 fathome deepe, but cõming by Goodwin or about the Foreland it is 26, 28, and 30 fathome deepe, the nearer Goodwin the deeper water.

Right without the Flemiſh banckes it is 18, 19 & 20 fathome deepe.

Betweene the Breadth-fourteen and the land it is deepe 19 fathome, & as ſoone as it is 16 or 17, fathome then you begin to ſee the land, upõ the Breadth-fourteene it is 14 fathome deepe.

The

The high ſteeples of Holland and Weſt Vreeſland are ſeene ſooner then the downes, as Egmont upon the Sea, the ſteeples of Egmont within, Wyck upon the Sea, Sandvoord, and other ſteeples, and then you are about 5 leagues from the land, and then it is 14 or 15 fathome deepe.

But Camper downes and the downes againſt Hhaerlem, are ſeene before ſome ſteeples, now moſt of the ſteeples are flatte, except Scheveling and Sandvoort.

Before the Maſe and Goree, you may ſee land at 14 or 15 fathome.

You may ſee Sealand frō the poope of the ſhip at 16 fathom.

You may ſee Flanders at 15 or 16 fathome, and then you are within the tayle of the Flemiſh banckes.

The Clif of Calis & the point of Dover may be ſeene when you are before the Heads at 24 fathome.

XVIII.

How theſe places lye one from another.

From Teſſel to Petten ſouth & by weſt — 4 leagues.
From Petten to Egmont ſ. ſ. weſt — 4 leagues.
From Egmont to the Maſe ſouth ſouth w. — 15 leagues.
From the land of Vooren to Goree ſouthweſt — 2 leagues.
From Goree to the land of Schouwen ſouth w. — 2 leagues.
From the land of Schouwen to Walcheren ſouth w. 4 leagues.
From Fluſhing to Blanckenhergh w. ſ. w. — — 10 leagues.
From Blanckenbergh to Oſtende ſ. w. & by weſt 2 leagues.
From Oſtende to Newport weſt ſouthweſt — 3 leagues.
From Newport to Duynkerck weſt ſouth weſt — 5 leagues.
From Duynkerck to Greveling weſt ſouth weſt — 4 leagues.
From Greveling to Calis w. ſ. w. — — 4 leagues.
From Calis to Calis Cliffe ſouthweſt and by weſt — 1 league.

XIX.

How theſe places lye diſtant from other countries.

From Teſſel to Bornriffe the courſe ſouthweſt & northeaſt about — — — — 12 leagues.
From Teſſel to the Maſe the courſe ſ. ſ. w. 24 leagues.
From the Maſe to Kaybanck the courſe ſ. w. & n. e. 18 leagues.
From Teſſel to Pas of Calis ſouthweſt & ſomewhat more ſoutherlyer, & n. e. aud ſomewhat more northerlyer 52 leagnes.
Calis lyeth ſ. w. & by ſouth from Teſſel, then you come upon the Flemiſh bancks, and the Foreland lyeth ſ. w. from Teſſel, then you come upon Goodwin or Querens. Therefore everie man muſt be verie warie and take heede thereof. The Flemiſh Banckes may be ſounded with the lead, at 15 & 16 fathome, and the chanel is 24 & 25 fathome deepe. But Goodwin is ſteepe and uneven, for at one caſting of the lead you have 26 fathome, and at another caſt of the lead you ſhall be faſt upon the Sand, the ſouth ende of Goodwin you may found at 15 and 16 fathome.
From Teſſel or Marſdeepe to Calis Cliffe ſ. w. by ſ. 52 leagues.
From Teſſel to the Foreland ſouthweſt — — 47 leagues.
From Teſſel to Orfordneſſe weſt-ſouth-weſt — 36 leagues.
From Teſſel to Yarmouth weſt, & w. & by ſ. — 32 leagues.
From Teſſel to Schilt or Crammer weſt — 40 leagues.
From Teſſel or Marſdeepe to Flamborough-head w.n.w. 60 le.
From Marſdeepe to Lieth in Schotland northweſt and by weſt and ſomewhat more northerlyer — — 100 leagues.
From Marſdeepe to Newcaſtle w. n. w. and ſomewhat northherlyer — — — — 81 leagues.
From Teſſel to Bokenes n. w, and n. w. & by n. — 118 leagues.
From Marſdeepe to Aberdyne northweſt and ſomewhat northerlyer — — — — 113 leagnes.
From Marſdeep to Lieth of Bergen in Norwaie n. 117 leagues.
Frō Marſdeepe to the northende of Hitland n.n.w. 160 leagues.
Then you fall about five leagues eaſtward of the land.
From Marſdeepe to the Neuſe n. and by e. — 93 leagues.
From the Maſe to Naſe e. and by w. — 29 leagues.
From the Maſe or Goree to Dover ſ. w. and by w. 36 leagues.
From Fluſhing to the Foreland eaſt and weſt, & ſomewhat ſoutherlyer — — — — 24 leagues.
From the Wielings to Dover w. ſ. w. — 24 leagues.
Out of Pas de Calis to the Riffe n. n. eaſt — 120 leagues.
From Calis Cliffe to the Neuſe in Norwaie n. & by e. 153 leag.

XX.

Vnder what degrees theſe places be.

Huyſduynen lyeth juſt under 53 degrees, ſayle eaſt out of the North Sea and you ſhall ſee it.

The north cape or point of the Maſe lyeth under 52 deg you ſhall ſayle by it when you ſayle eaſt under this heigth.

Fluſhing, Ramekens and Weſtchappel lye under 51½ degrees, & under this heigth are eaſt from you.

The Pas of Calis & Dover lye under 51 degrees 12 minutes.

Heere followeth the Carde N. 3.

CHAP.

CHAPTER III.

A DECLARATION HOVV

a man ſhall ſayle all the Sea-coaſts and Havens of Picardie and Normandie, betweene Calis and Cape de la Hague: And

What Banckes, Sandes, Cliffes or Rockes, and Shallowes are there to be found, and how you may ſhunne them.

I.

To ſayle from Calis to Diepen.

Vrouwe-ſandt.

IN the middle of the Heads betweene Calis and Dover lyeth the banck of Vrouweſand, of 5,6,7, and 8 fathome deepe, the ſhalloweſt or dryeſt part of Vrouweſand lyeth about weſt & by ſouth from Calis Cliffe,& ſouth, and ſouth & by weſt from Dover,where it is dryeſt, and no deeper then 4 fathome.

This banck aforeſaid reacheth along the land of Swarteneſſe, and lyeth neareſt to the French ſide, it is at leaſt 4 leagues long, on both ſides of this banck, both on the eaſt and weſt ſides it is 20 and 21 fathome deepe.

Croſſe from the weſt-head of Calis there lyeth a banck of 2 fathome, you may ſayle betweene the head or Mayeland & this banck at 3 fathome, with half flood, you may anckor under Calis Cliffe at the eaſt ende at 10 fathome water, but at the weſt-ende of Calis Cliffe there lyeth a Rocke under the water the length of a Culver ſhot from the land. The high land betweene Calis and Swarteneſſe is called Calis Cliffe.

Rode to anckor under Calis Cliffe.

Swartenes.

A league & an half ſouthward from Calis lyeth Swarteneſſe, which is a foule point lying out, by the which there lyeth certaine Rockes, you cannot anckor there, for the ground in that place is verie foule. A litle waie ſouthward of Swarteneſſe there ſtand ſome fewe houſes with a mill, all along to the mill you may not anckor, but you will indure ſome hurt and dammage either in your cables or anckors.

Tour d'ordre, or the Oldman.

Two leagues ſouthward from Swarteneſſe lyeth the Oldman or *Tour d'ordre,* there is a faire ſandie Baye, there you may lye ſafe & free from a north winde, it is a good Rode for north-eaſt, eaſt, and ſoutheaſt windes, for ſhippes that will ſaile eaſtward, you may anckor there at 6 or 7 fathome,ſo that the point or the ſteeple be north and by eaſt from you.

S. Iohns Rode.

But half waie betweene Swarteneſſe and the Old man lyeth S. Iohns Rode, there you may anckor at 15 or 16 fathome, for there it is faire ground. To anckor there you muſt bring the ſteeple of the village againſt the middle of the houſes,but there lyeth ſome rockes along by the land, which you muſt be carefull to ſhunne, and goe not neare unto them.

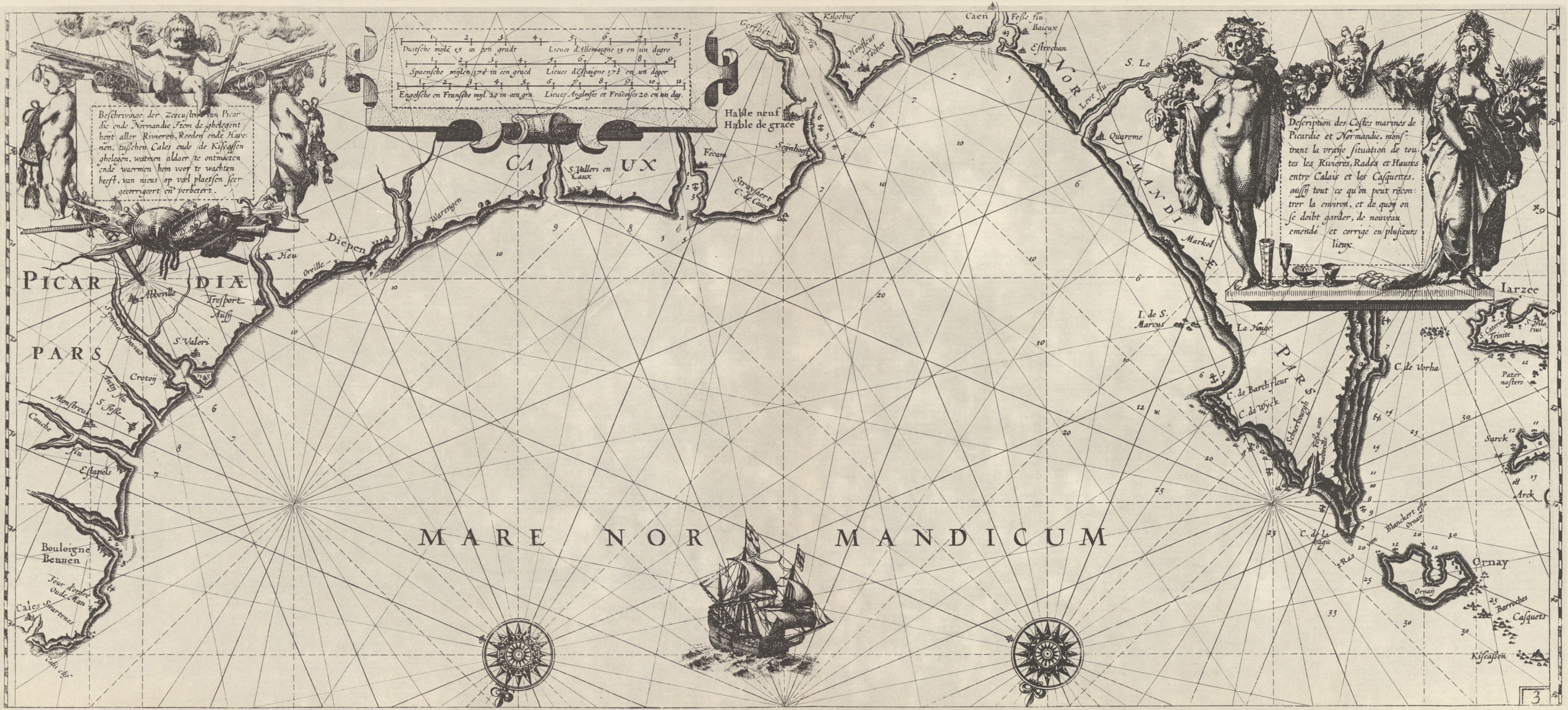
About two leagues from Tour d'ordre lyeth Beunen or Bullen, and when ſuch as lye at anckor under the Oldman goe on land they may from above looke downe into the River of Bullen.

Somme.

Betweene Tour d'ordre & the Somme there is a great creeke, and when you are right againſt the Somme it is ſhallowe water, 3 or 4 leagues at the leaſt into the Sea, about 6 or 7 fathome deepe,ſuch ſhippes as come out of the weſt,are many tymes caſt away there, but when you finde ſhallow water for a long tyme, you muſt underſtand that you are about the river of Somme.

To ſayle into Bullen haven.

He that wil ſayle up to Bullen muſt goe by the land by Tour d'ordre,at 3 fathome, and then along by the land to the middle of the river, and then keepe the middle of the chanel: the north ſide is full of rockes or cliffes, & from the ſouth ſide there commeth a riffe or ſand ſhooting out and runneth a good waie by the haven, which you muſt be warie of, and cloſe before the river alſo there lyeth a banck which you may ſayle under on the ſouth ſide at two fathome,& on the north ſide at 3 fathome,and there you may anckor or goe into the haven. It is a tyde-haven where you muſt goe in at a high water, and at a lowe water ſit drie, as you doe in all the havens of Flanders. You may there runne


Duitsche mylen 15 in een gradt
Lieues d'Allemaigne 15 en un degre
Spaensche mylen 17½ in een graed
Lieues d'Espaigne 17½ en un deger
Engelsche en Fransche myl. 20 in een gra.
Lieues Angloises et Fracoises 20. en un deg.
Beschrivinge der Zeecusten van Picardie ende Normandie Item de ghelegent heyt aller Rivieren, Reeden ende Havenen, tusschen Cales ende de Kiscassen ghelegen, watmen aldaer te ontmoeten ende waermen hem voor te wachten heeft, van nieus op voel plaetsen seer gecorrigeert en verbetert.
Description des Costes marines de Picardie et Normandie, monstrant la vraye situation de toutes les Rivieres, Rades et Haures entre Calais et les Casquettes, aussy tout ce qu'on peut rencontrer la environ, et de quoy on se doibt garder, de nouveau emendé et corrigé en plusieurs lieux
PICARDIÆ
PARS
CAUX
NORMANDIÆ
PARS
MARE NORMANDICUM
Caen
Foße flu
Baieux
Estrechan
S. Lo
Quareme
Markol
Iarzee
Hable neuf
Hable de grace
Fecam
Seynhoofd
Struysaert
C. de Caux
S. Valleri en Caux
Warengen
Diepen
Heu
Oreille
Abbeville
Tresport
Aussy
S. Valeri
Crotoy
Monstreul
Cauche
Estapels
Bouloigne
Beunen
Cales
Swartenes
Tour d'ordre
Oude Man
Kilgebuf
Honfleur
Tochet
Gerfliet
Seyne flu
I. de S. Marcus
La Hauge
C. de Barchfleur
C. de Wyck
Schierbourgh
C. de Vorha
Pater nosters
Sarck
Arck
Ornay
Ornay
Barroches
Casquets
Kiscaßen
Blanckert
Ornay
Ras van
Ras
3

runne cloſe along by the coaſt, at 2, 3, 4 & 5 fathome, as drie as you will, but before the havens you muſt put ſomewhat further off becauſe of the rockes which lye before them.

Somme. The courſe from the Oldman to the river of Somme is ſouth and north, diſtant 8 or 9 leagues, and from Bullen to Somme it is ſouth, and ſouth and by weſt, diſtant 6 leagues. Betweene them there are two rivers more, the one called Cauche, the other Antij: upon the firſt there lyeth Monſtruel and Eſtaples, about 3 or 4 leagues ſouthward from Bullen. This is no ſpeciall haven, you muſt enter into it at high water, and keepe the middle of the chanell, you ſhall finde it drie when you are within it.

Cauche. Antij.

Eſtaples and Monſtruel.

To ſayle up the river Somme. Before the Somme it is ſhallowe water at leaſt two leagues into the Sea, at 5 or 6 fathome, and from the north point of the river there commeth a Riffe or Sand ſhooting out, which runneth almoſt over the deepe, ſo that a man paſſing it by the ſouth ſhore, he muſt ſayle at 3 fathome water, as farre as to S. Valeries, which lyeth on the ſouth ſide, & then from the ſouth-ſhore there commeth another Sand ſhooting off, almoſt cleane over the river, ſo that as then you muſt turne to Crottoy, which lyeth on the north ſide, if it were not for the banck aforeſaid, (which runneth croſſe over before the haven) it were a haven for a great ſhip to goe into, for in the entrie of the haven it is 3 fathome, and within 2 fathome deepe, Abbeville lyeth about 5 leagues upwards in the land.

Abbeville.

Diepen. From Tour d'ordre or the Oldman to Deepe, the courſe is ſ. ſ. w. 16 leagues, but from the river of Somme to Diepen it is ſouthweſt and northeaſt, 8 or 9 leagues, betweene both, that is 4 leagues from Somme, and 4 leagues from Deepe, lyeth the river of Heu, and on the north ſide thereof a litle towne called Triport or Treſport, where into you muſt enter with a high water, as in a tyde-haven, with lowe water lying drie.

To ſayle into the haven of Diepen. The Haven of Deepe, on the eaſt ſide is to be entred at 3 fathome, there lye three tonnes in the chanel, you muſt ſayle frō the one unto the other, leaving them on your left hand as you goe in, on the eaſt ſide of the land there ſhooteth a peece of land out along, but if you keepe at 3 fathome, then you ſayle not under that peece of land, and from the weſt point of the haven or towne, there commeth a great Sand running downe, and reacheth north: without in the chanel it is 3 fathome, and within ſomewhat dryer, that is 2 fathome. There may a reaſonable great ſhip goe into the rivers of Somme and Deepe when it floweth, but ſmall ſhippes may goe in there at half flood, at a lowe water you lye drie.

To ſayle from Deepe to the river of Roane, you have firſt frō Deepe to S. Valerie or Valderie in Caux 4 leagues. This is a drie tyde-haven, wherein you muſt enter with high water, whereby there goeth none but ſmall ſhippes in and out from it.

S. Valerie in Caux.

To ſayle into Fecam. From S. Valerie to Fecam it is w. ſ. w. 4 leagues, it is a faire tyde-haven, where at lowe water there is about 2 fathome.

There lyeth a banck or Flat on the eaſt ſide of the haven, you may paſſe with ſmall ſhippes betweene the land and this Flatte with the lead, at 8 or 9 foot water, having regard to the Eaſtland for that is flatte.

But if you will goe about or without the Flat, then you muſt place Fecam ſteeple without the land, or without the weſt point of the haven, and then it will ſtand ſ. ſ. e. from you, and ſo goe into the haven, then the Sand is on baghborde. Eaſtward of the ſaid haven alſo there is a chanell to goe in, but the weſt ſide is beſt, having in the haven 2 fathome water, and when you are within before the towne, there you may anckor on the weſt ſide at 3 fathome half flood, the eaſt ſide is flatte.

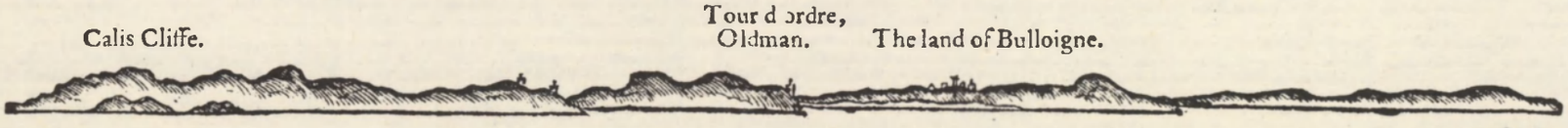
Strnyſaert and Seynhoft. From Fecam it is w. ſ. w. to Struyſaert, a litle towne lying in a Creeke about 3 leagues from Seynhead or Seynhoft.

Without the point of Struyſaert lye two high ſharp Rockes, and are about north, & n. & by e. from Seynhead 2 leagues.

From Deepe to Struyſaert it is w. ſ. w. diſtant 8 leagues, and from Struyſaert to Seynhead ſouth and north 2 leagues.

About n. w. frō Seyne-head there lyeth a banck of 3 fathome at lowe water, or as ſome ſaye 2 fathome & an half. When the towne of Hable is without Seyn-head, then you are againſt the banck, & you goe in cloſe by Seynhead to the firſt mil, & there anckor at 6 fathome, ſtaying for a Pilot to bring you into the haven.

The land from Calis Cliffe to beyond Bullen ſheweth it ſelf thus, when you ſayle along by it.



To ſayle

II.

To ſayle into the Rode of Newhaven & the River of Roane.

To ſayle into the river of Seyne.

VVhen you come from the north, & will ſayle up the River of Roane, you muſt ſayle right to Seynhoft, ſo long untill the ſouth point of the River be againſt the point of Seynhoft, hold it ſo ſtanding, and make ſtreight towards it, ſo long untill the land which lyeth eaſt frō Newhaven be without Newhaven, then ſayle to the haven of Newhaven, or if you will goe about without the banck, then winde ſo much off from the land, and ſayle weſt about untill the River openeth, then ſayle to the point of Tochet, and goe into it with your lead, at high water it is 3 fathome, and at lowe water a fathome deepe.

To ſayle to Newhaven.

To ſhūne the Rettiers.

The Rettiers lye in the middle of the River, which are ſtonie, hard, ſandie ground.

When the land of Caen is without the point of Seyn-head, then you ſayle without them if you hold ſouth, on the north ſide it is 3 fathome deepe at half flood, on the ſouth ſide at half flood it is but 2 fathome deepe.

To ſayle into the Seyne to Newhavē.

If you come out of the weſt, you muſt runne into the river of Roane with the tyde, & that when the moſt part of the flood is gonne, then ſayle along by the land of Deepe by your lead, till you may ſee the river of Newhaven open, then the ſouth caſtle is right againſt the eaſt-head and the mill, runne right upon it, but ſayle but halfwaie to the caſtle and Seynhead, ſtay there for a Pilot, but if none come to you, then ſayle right upon the caſtle which ſtandeth upon the head, there it is deepe water.

When you hold Struyſaert a bowe length without the land of Seynhead, then you goe without the Rettiers and the banck, then the eaſt gate of Newhaven is right againſt the eaſt-head & the eaſt mill, then you goe right northward in from the Rettiers, and then you can not miſcarie on the banck which lyeth towards Seynehead, and when you are a litle way from Seynehead you muſt ſtaye for a Pilot, as I ſaid before.

The Rettiers.

The Rettiers reach along in the middle of the River towards the point of Honfleur, and weſtward from them it is all full of Sandes, ſo that you muſt ſayle in with high water.

He that wil enter into Newhaven he muſt goe in with a high water, and everie tyde lye drie.

He that will goe from Newhaven upward to Roane, he taketh a Pilot, you muſt goe with a tyde through the firſt drie banckes, which reach from Newhaven to Honfleur ſ. e. along by the ſouth land, the banckes reach along by the north ſide of the River to Kilgebuf, then you are paſt the firſt banckes, but let everie man be warie of the ſtrong ſpring-tyde, (by the Normans called the Barre) which commeth with ſuch a force, that you can hardly ſtaye a ſhip with all her anckors and cables, for this & other daungers it is not good to ſayle up the River without a Pilot, and it is a water for a Pilot.

The ſcituation or forme of Struſaert and Seyn-head when you ſayle by it.



Thus the land of Caan ſheweth it ſelf being 4 leagues from you.



III.

To ſayle from the River of Roane to Cape de Hague.

To ſayle into Tochet.

TWo leagues ſouthward from the river of Roane, there lyeth a tyde-haven called Tochet, there ſtandeth a beacon on the weſt point of the haven, by the which you goe in, or you may goe in (with good heed) on the eaſt ſide, ſome French ſhippes goe in and out that way.

To ſayle into Foſſe of Caen.

From the point of Seynhead ſ.w. and ſ.w.& by ſ. about ſixe leagues, there lye manie banckes a great waie into the Sea, men ſayle eaſt and weſt from them into the River or Foſſe of Caen, which for the moſt part reacheth in ſouth, & lyeth in a Creeke.

On the weſt ſide there is a Boght, you may anckor behinde it, there it is wide and broad, and all ſand ſtrand.

The eaſt land is downie and ſhallowe, to enter upon with the lead, without it is farre ſhallowe to wete 6 or 7 fathome.

Cape Barchfleur

From Seynhead to Cape de Barchfleur, or Cape de Chierenberch the courſe is eaſt and weſt 19 leagues.

Ilands of S. Marke.

About 4 leagues eaſtward lye the Ilands of S. Marke, which you may ſayle round about, but it is not all to faire there.

LaHonge.

Right weſt from the Ilands of S. Marke or Markel about a league lyeth la Honge, which hath a flat ſteeple, there weſtward lyeth the point of Barchfleur, with a faire Creeke, wherein you may lye ſafe againſt a n. n. w. winde, at 6 or 7 fathome, a north eaſt winde bloweth right into it by the north point, which then

Baye of Barchfleur

lyeth

lyeth from you n. n. w. there falleth a banck off from the land but a ſhippe may well goe over it.

This Baye and the Ilands are by our Saylers called the Hongiers, but when you come out of the weſt, you ſhall not finde leſſe then 4 or 5 fathome water, & there you are ſafe almoſt frō all windes.

Chierenburch. From the point of la Honge to Chierenberch it is 4 leagues, weſt, and w.n.w. Chierenberch is a ſmall tyde-haven.

Weſtward from the point of Barchfleur there are foule paſſages, when the high land of Chierenburch commeth without the Cape la Wyke, you can take no hurt on thē. A great league northeaſt from the point of Barchfleur there lyeth a rock under the water but no ſhippe can goe over it.

Rode before Cape la Wyck. It is alſo good lying before Cape de Wyck, right eaſt from the two high cliffes in a ſandie Baye at 6 fathome.

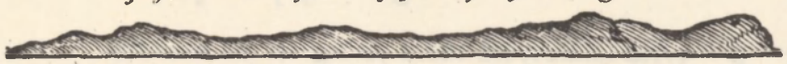
To ſayle into Moberille. And before Chierenburch lye the Cliffes or Ilands, which round about are faire, weſtward from them you goe into the Foſſe of Moberille, a tyde-haven, on both ſides having high cliffes or rockes four or five in number, you may paſſe in betweene them to Moberille at high water.

Cape de Hague. A league weſtward from thence lyeth Cape de Hage or Hague, from Cape de Hage weſt & by north almoſt 3 leagues, lyeth the Iland of Aldernex, or Ornay, reaching eaſt & weſt, betweene this Iland of Ornay & Cape de Hague rūneth the Raſſe of Blanckert, but weſtward from Ornay lye the Caſquettes, or Kiſcaſſes, which in the next Chapter ſhall be deſcribed.

Ornay.

Ras of Blāckaert.

Thus Chierenburch and the land after the Cape de Hague ſheweth it ſelf, when it is ſoutheaſt from you four leagues.



IIII.

How theſe Countries lye diſtant one from the other.

FRom Calis to Swarteneſſe ſouthweſt — 1½ league.
From Calis Cliffe to Tour d'ordre, or the Oldman ſouth and north diſtant — — — 2 leagues.
From Calis cliffe to the River of Somme ſ. and n. 8 leagues.
From the river of Somme to Treport ſ. ſ. w. — 8 leagues.
From Triport to Diepen ſouthweſt — — 8 leagues.
From Diepen to Feçam weſt-ſouth-weſt — 11 leagues.
From Fecam to Struyſart ſouthweſt & by weſt — 2 leagues.
From Struyſaert to Seynhead ſouth-ſouth-weſt — 2 leagues.
From the Seynhead to Caen in the Foſſe ſ. ſ. w. — 8 leagues.
Frō Caen to Dierliet or the point of Barchfleur n.w. 16 leagues.
From Dierliet to Cape de Hague weſt, & w. & by n. 8 leagues.
From Calis cliffe to Diepen ſouth-ſouth-weſt, and ſomewhat ſoutherlyer — — — — 19 leagues.
From Calis cliffe to Struyſaert or cape de Caux w. & by ſouth, and ſomewhat ſoutherlyer — — 29 leagues.
From Swarteneſſe to Diepen ſouth-ſouth-weſt — 16 leagues.
From Swarteneſſe to Struyſaert ſouthweſt & by ſouth, & ſomewhat weſterlyer — — — — 29 leagues.

V.

How all theſe places lye diſtant from other Countries.

FRom Swarteneſſe to Caſquettes w.ſ.w. — 48 leagues.
From Swarteneſſe to the Ile of Wight weſt, & ſomewhat ſoutherlyer — — — — 36 leagues.
From Swarteneſſe to Bevechier weſt — — 20 leagues.
From Diepen to the Ile of Wight w. n.w. — 36 leagues.
From Diepen to Bevechier northweſt — — 21 leagues.
From Diepen to Dover north — — 23 leagues.
From Struyſaert to the Eaſt ende of the Ile of Wight northweſt and ſomewhat northerlyer — — 29 leagues.
From Struyſaert to Bevechier ſouth & north — 24 leagues.
From Struſaert to Fierley north and by eaſt — 28 leagues.
From Struyſaert to the point of Dover n. n. e. — 32 leagues.
From Stonehead to Dierliet or the point of Chierenburch weſt and ſomewhat northerlyer — — 20 leagues.
Frō Seynhead or Stonehead to Portland n.w. & by w. 36 leag.
From Dierliet to the point of Chierenburch to Kaſquettes weſt and by north — — — — 16 leagues.
From Dierliet to the Ile of Wight north, and ſomewhat weſterlyer — — — — — 20 leagues.
From Dierliet to Beveſier northeaſt & by north — 29 leagues.
From the Raſſe of Blankart to Portland n.n.w. — 17 leagues.
From Cape de la Hague to Kaſquettes w. & by n. 16 leagues.

VI.

Of the falling of the ſtreames, and what Moone maketh a high water on theſe coaſts.

BEfore Calis and Swarteneſſe the flood falleth one quarter toward the land, then it falleth north-north-eaſt & ſouth-

ſouth-weſt, and there on the land a ſoutheaſt moone maketh an high water.

From Swarteneſſe to Bullen the flood falleth n. & by e. upõ the land, but without in the Sea it falleth n. n. e. and ſ. ſ. w. a ſouth-ſouth-eaſt moone maketh a high water there.

From Bullen to Diepen, and before the river of Somme the flood falleth a quarter towards the land, then it falleth northeaſt and by north, a ſouth-ſouth-eaſt moone maketh the higheſt water in this haven.

From Diepen to Struyſaert without the land in the Trave, the flood falleth northeaſt & by eaſt, & the ebbe ſ. w. & by w.

From Struyſaert to Caen in the Foſſe, the flood falleth ſouth-ſouth-weſt, and the ebbe n. n. e.

From Seynhead to Barchfleur the flood falleth eaſt and by north, & weſt & by ſouth by the land, but in the chanel without the land the flood falleth e. n. e. and the ebbe w. ſ. w.

At Newhaven & in the river of Roane, it is high water with a ſoutheaſt moone.

Before the haven of Caen it is high water with a ſouth-ſouth-eaſt moone, & within the haven with a ſ. & by e. moone.

At Markel, la Honge, Berchvliet, Chierenburch and Cape de Hague by the land a ſ. & by e. moone maketh a high watr.

VII.

At what depths you may ſee theſe places, and how you ſhall knowe the land.

VVhen you are through the Heads, againſt the Singles or about Deepe, and being a litle out of the chanel, you may ſee the land at 20 and 21 fathome.

The high land of Staples lyeth ſouthward of the Oldman or Tour d'ordre, it is verie high land, the ſteeple of the Oldman is a thick flatte ſteeple, and ſtandeth upon the northpoint of the haven of Bullen, if you fall upon the river of Somme, it is ſhallowe water, 8, 9, and 10 fathome, and then the high land of Eſtaples will be north-north-eaſt from you.

The land from the river of Somme to Deepe is all ſandie ſtrand, and there you finde divers ſpeere ſteeples, & ſome milles and trees upon the land.

About 4 leagues without Struyſaert it is 20 fathome deepe.

Five leagues without the land of Caen it is 22 fathom deep.

Againſt the cape of Barchfleur and Chierenburch 4 leagues from the land it is 30 fathome deepe.

The land betweene Deepe and Stonehead is knowne becauſe there ſtand many churches with ſpeere ſteeples and other trees and houſes, but Struyſaert is beſt to be knowne, becauſe there is a high cliffe thereon like to a high ſteeple, and in the Trave it is 16 or 17 fathome deepe.

La Honge is a flatte ſteeple lying two leagues eaſtward from Barchfleur, there lye the two Ilands of S. Marke eaſtward, which you may ſayle round about.

Barchfleur is a high point, and there ſtandeth a flatte ſteeple beneath upon the white land, & about eaſtward is more white land, and there ſtand two milles, & ſome houſes upon it, whereby this point is wel to be knowne.

Upon Cape de la Hague ſtandeth a caſtle with a ſmall towre, and a litle eaſtward within the land there ſtandeth a ſpeere ſteeple, and Chierenburgh lyeth two leagues about eaſtward upon the water ſide, having a flatte ſteeple.

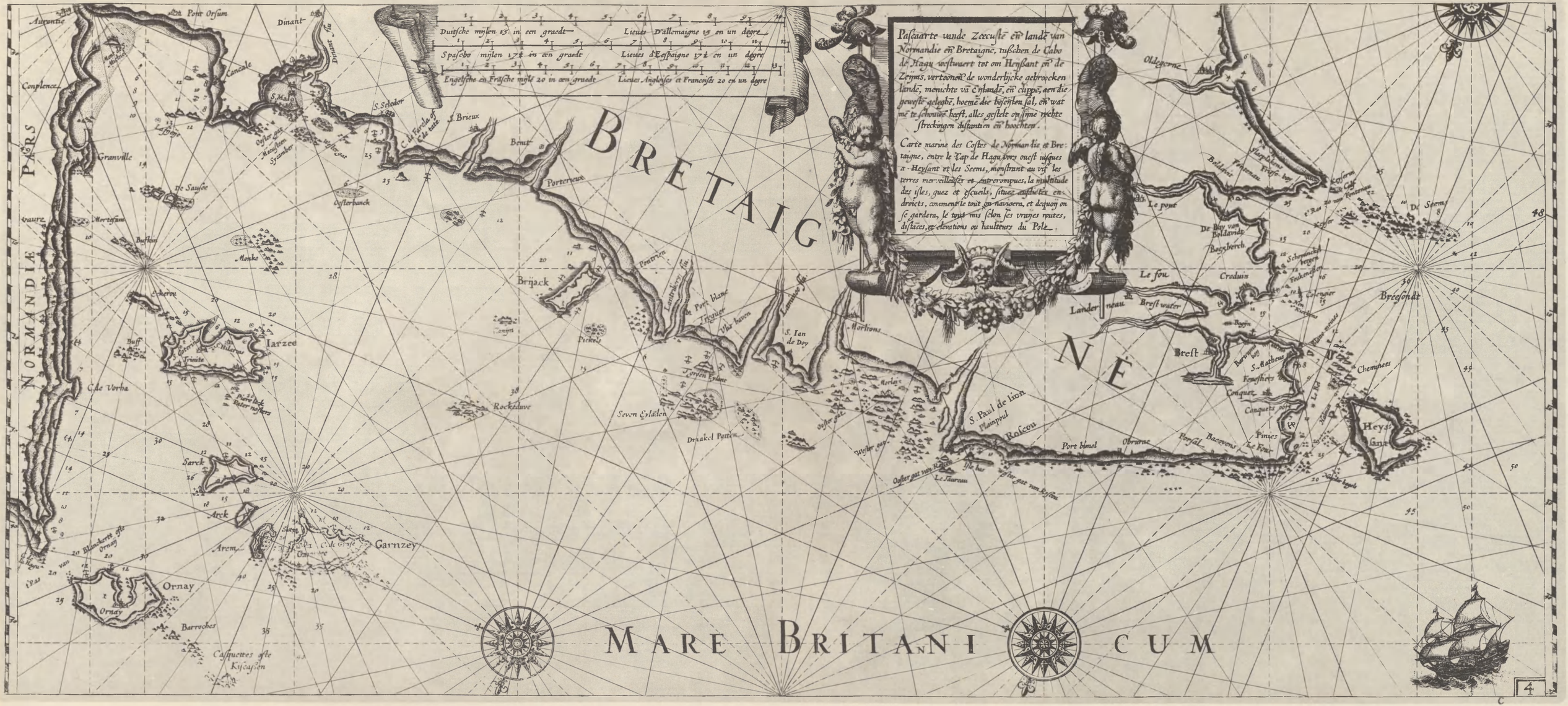
VIII.

Vnder what degrees theſe places lye.

CAlis Cliffe lyeth under 50 degrees 52 minutes.
The river of Somme lyeth under 50 degrees 18 minutes.
The point of Struyſard lyeth under 49 deg. 45 minutes.

Heere followeth the Carde N. 4.

CHAP.


Duitsche mijlen 15. in een graedt
Lieues d'allemaigne 15 en un degré
Spaensche mijlen 17½ in een graedt
Lieues d'Espaigne 17½ en un degre
Engelsche en Fransche mijle 20 in een graedt
Lieues Angloises et Françoises 20 en un degre
Paseaarte vande Zeecuste en landē van Normandie en Bretaigne, tusschen de Cabo de Hagu westwaert tot om Heijsant en de Zeemas, vertoonende de wonderlijcke gebroocken landē, menichte vā eylandē, en cluppē, aen die eenighe gelegēheē, hoemē deer bejegenen sal, en wat mē te schouwē heeft, alles gestelt op sijne rechte streckingen distantien en hoochten.
Carte marine des Costes de Normandie et Bretaigne, entre le Cap de Hagu vers ouest iusques a Heysant et les Seemes, monstrant au vif les terres merveilleuses et entrerompues, la multitude des isles, guez et escueils, situez justement en droicts, comment le tout se navigera, et dequoy on se gardera, le tout mis selon ses vrayes routes, distāces, et elevations ou hauteurs du Pole.
BRETAIGNE
NORMANDIÆ PARS
MARE BRITANNICUM
Dinant
Port Orsum
Auxontie
Conplence
Granville
Ile Sausee
Mortesum
Buston
Monke
Iarzee
Sarck
Arck
Garnzey
Ornay
Barroches
Cassquettes ofte Kijscassen
S. Malo
S. Briew
Bruit
Portrieux
Briack
Pontrieux
Pickels
Rockelave
Seven Eylanden
Drinakel Patten
Jersien eylant
S. Ian de Doy
Mortrons
Norlay
S. Paul de Lion
Plainpaul
Roscou
Port bimel
Obrunac
Le Taureau
Le pont
Le fou
Crodun
Brest
Brest water
Landerneau
Oldgerne
Bolldavis
De Seem
Bregendt
Heyst
Gant
Chemshees
Pinies
Le Fret
Canquets noirs
Coquet
Venestheers
S. Matheus
Barrebay
Bacovens
Horsfal
Le Raz
Le Goulet
Ile Bar

CHAPTER IIII.

THE DESCRIPTION OF

all the Ilands, Sea-coaſts, and Havens of Normandie and Britanie, ſituate betweene Cape de Hague and the Seims, and how you ſhall ſayle by them

I.

The ſituation of the Ilands of Ornay, Caſquettes, Garnſey, Sarck, and Iarſey.

Ornay.

ON the Cape de Hague, weſt and by north almoſt 3 leagues, lyeth the Iland Aldernex, which is alſo called Ornay, it is almoſt three leagues long, reaching eaſt & weſt. The eaſt ende is faire, for you may there ſayle indifferently cloſe by the land, but at the weſt ende it is verie foule. There lye ſome ſmall Ilands off from the weſt ende, when you are paſt them, then you may well ſayle to Iarſey, the Ilands lye cloſe on the weſt ende, and ſouthward from theſe Ilands there ſhooteth out a rocke or ſtone-riffe, when you are there within on the ſouth ſide it is faire. The ſouth point of Ornay is foule, he that will anckor there ſouthward, he muſt be carefull to ſette right eaſt from the tyde-haven.

Caſquette, Kiſcaſſes.

The Caſquettes or Kiſcaſſes are diſtant from this Iland of Ornay w. n. w. and weſt and by north almoſt 3 leagues. The uttermoſt of them is a great high Clif which hath manie rockes round about it. In the middle betweene this Cliffe or Rock and the Iland of Ornay lyeth another rock, but that is not ſo high, but there are manie other rockes, which reach out from it towards the other rock, when it is lowe water then you may ſee them all. Theſe two rockes are by the French men called Caſquettes, and by the Dutch men Kiſcaſſes. Some Shippers and Saylers are much deceived herein, which know not theſe Rocks, calling the land of Chierburch the great Kiſcas, and the land of Ornay the ſmall Kiſcas, for the Kiſcaſſes are nothing els but meere rockes lying out in the Sea. About w. n. w. and w. & by n. from this Iland of Ornay or Aldernex, there lye two other ſmooth great Rockes, called Barroches, which lye on the weſt ende of Ornay cloſe by the land.

Barroches.

To knowe Ornay, you muſt underſtand that the north ſide hath a white hill or downe, and the weſt ende is high & ſteepe downewards, at the eaſt ende it is hillie & dalie, but lower then upon the weſt ende, you may ſee a ſteeple or two upon it and ſome milles.

Thus Ornay ſheweth when you ſayle along by it being four leagues from the land.



Thus Ornay ſheweth it ſelf with Caſquettes, ſouth-ſouth-eaſt being three or four leagues fom you.



From Ornay to Garnſey the courſe is w. ſ. w. about 8 leagues but frō the Caſquettes to the weſt ende of Garneſey the courſe is weſt and by ſouth 8 leagues. To knowe Garneſey, you muſt underſtand that the eaſt ende is flatte and the weſt point ſteeping downewards.

Garnſey.

There ſtand two ſpeere ſteeples upon it, and ſome milles, and the land is dubble when you ſayle northward by it about four leagues from the land, then it ſheweth as it is heere ſet downe.

Thus Garnſey ſheweth when it is croſſe from you 4 leagues.



But comming out of the weſt, & that Garnſey lyeth e. n. e. or e. and by n. from you then it ſheweth thus.



He that

Rode under Garneſey.

He that commeth out of the north, and intendeth to anckor under Garneſey, he muſt goe weſtward about the rockes of Kaſquettes, and ſo ſayle upon the northende of Garneſey, until the caſtle which ſtandeth upon the rocke be right againſt the ſouth ende of the land, which you muſt hold ſo, untill you come by the caſtle, but beware of the litle Iland called Arem, for it is almoſt full of rockes about it, betweene the caſtle which ſtandeth in the water and the land is a good Rode, but if you will anckor without the caſtle, then doe it at 12 and 13 fathome, or if you will anckor betweene the point of the land and the caſtle, then ſayle till you be at 6 or 7 fathome lowe water, and there anckor. You muſt underſtand that there aboutes it ebbeth and floweth 6 or 7 fathome up and downe at everie tyde.

Arem.

Or els help your ſelf with theſe markes: when you are weſt from the Kaſquettes, then goe ſoutheaſt in, untill that the eaſt-ende of Garneſey lyeth ſouth and by weſt from you, then ſayle upon it, then you ſhall ſee the caſtle upon the rock, & then doe as you are taught before. Betweene the Kaſquettes and Garneſey it is 35 and 40 fathome almoſt al ſtone ground.

He that commeth out of the weſt, or from the Kaſquettes & will anckor upon the ſouthſide of Garneſey, he muſt rũne cloſe about by Cape de Gruie, or by the ſouthweſt ende, along by the ſouth ſide of the land, and when he is full half waie from the land, he may anckor where he will at 18 or 19 fathome, and if the winde ſhould chance to blowe ſouthweſt, or w.ſ.w. he may goe about the point, and anckor on the north or ſouth ſide of the caſtle, as I ſaid before.

From the ſouth-ſide of Garneſey there lyeth a rock above the water, which men muſt be carefull to ſhunne.

Rockedoves.

There lyeth alſo a rowe of rockes ſouth and by weſt, & ſ.ſ.w. from Garneſey called Rockedoves, about 8 leagues from it, which are at leaſt a league long.

Frõ Rockedoves to Cap Farelle the courſe is ſ.e. 11 leagues.

From Rockedoves to the Iland Briack ſ. & by w. 8 leagues.

From Rockedoves to the Rockes called the Monckes weſt & by north 10 or 11 leagues.

From Rockedoves to the rock Canine the courſe is ſouth & by weſt 4 leagues.

From Garneſey to the ſeven Ilandes the courſe is ſouthweſt and by ſouth 17 leagues.

From Garneſey to S. Maloes the courſe is ſouth-ſouth-weſt, and ſoutheaſt and by ſouth 17 leagues.

From Garneſey to Sarcke the courſe is e. & by n. a league.

Arcke. Arem.

Betweene Garneſey and Sarcke there lye two litle Ilandes. Arcke and Arem, you may ſayle betweene them: he that will anckor under Sarcke, muſt doe it at 26 or 27 fathome, you may anckor round about Sarcke, but from the north & ſouth endes there ſhooteth out certaine rockes, whereof ſome of thoſe at the north ende lye under the water, but at the ſouth ende they lye above the water.

Sarcke, & the Raſſe of Ornay, or Cape de Hague lye diſtant ſouthweſt and by ſouth, and northeaſt and by north 8 leagues.

From Cape de Hague to the northweſt ende of Iarſey the courſe is ſouth-ſouth-weſt, then you runne through betweene Iarſey and Sarcke. Sarcke and Iarſey are diſtant 4. leagues.

Sarcke.

Iarſey.

From Garneſey to Iarſey the courſe is ſoutheaſt 8 leagues, round about under Iarſey is good Rode, on the north ſide you may anckor all along at 10 & 11 fathome, at the weſt ende there are ſome rockes, ſpecially on the weſt point, there the rockes lye a good waie off from the land, but betweene both pointes you may anckor at 10, 11, or 12 fathome. On the ſouth ſide of Iarſey it is alſo a good Rode for northweſt, and weſt-north-weſt windes. On the eaſt ſide of Iarſey it is good lying at rode in Catelynen Baye, a litle within, or eaſtward from the weſt point, on the north ſide of Iarſey there lye ſome Rockes, which are called the Paternoſters. When you come out of the weſt, you may runne betweene them and the land at 11 fathome, and anckor before the ſandie Baye, called Trinitie, there is good anckoring at 10 & 11 fathome, leaving the Paternoſters, or Rockes of Pierlech north-north-weſt from you.

Rodes under Iarſey.

Paternoſters.

From the weſt ende of Iarſey to S. Maloes the courſe is ſouth and by eaſt, and ſ.ſ.e. 8 or 9 leagues, but about midwaie betweene the weſt ende of Iarſey, and the Ile of Sicember, which lyeth before S. Maloes, there lye certaine high rockes in the chanel, which conteine in circuite, to ſayle about them, about 8 leagues, which a man muſt be carefull to ſhunne, which rockes are called the Monckes.

Monkes or Minkes.

From Iarſey to Concale the courſe is ſouth-ſouth-eaſt, and ſouth and by eaſt, diſtant 11 or 12 leagues.

II.

To ſayle the coaſt along from Cape de Hague to S. Malo.

BEtweene Cap de la Hague and the Iland of Ornay, the Raſſe of Blanckart or Ornay runneth in, from whence a man may ſayle through the Ilands in divers manners to S. Maloes,

S. Maloes, as hereafter followeth and alſo along the coaſt by Granville and Concale.

Cape de Vorha. Firſt from Cape de la Hague or Hagu, to Cape de Vorha, it is ſ. ſ. e. and ſouth and by eaſt about 8 leagues. From Cape de Hague there ſhooteth of a rock, which you muſt be carefull to ſhunne.

Buf-rocks When you are paſt Cape de Vorha, then you ſhal finde three or four high rockes called the Buff, you may goe about betwixt them and the firme land eaſt and weſt: as alſo betweene the Martefam. Rockes and Iarſey, to the Riffe of Sand called Mortefam.

From Cap de Vorha to the ſaid Riffe of Mortefam the courſe is ſouth-ſouth-eaſt 8 leagues.

Againſt this Riffe there lyeth a rowe of Rockes reaching Bufkin. eaſt & weſt more thē a league into the Sea. Thoſe that are moſt eaſterly lye above the water, theſe Rockes are called Bufkin.

Being paſt Buff, you leave on your right hand, (as you doe all other rockes,) a great rowe of Rockes which reach out from Eckron, the ſoutheaſt point of Iarſey to Granville, which are called Eckron, all theſe rockes you leave on your right hand.

He that ſayleth to Granville betweene Buff and Iarſey, let him underſtand that he may anckor well under the north ende of Iarſey at 11 or 12 fathome.

But comming by the ſand or riffe of Mortefam, there you muſt ſayle ſ. ſ. e. forward to Granville, betweene Mortefam & Bufkin.

Quotanſe. Right ſouth from this riffe of Mortefam there ſtandeth a church with two ſteeples, called Quotanſe.

Granville. From the Rock Bufkin to the utter point of Granville it is ſoutheaſt 6 or 7 leagues, about the ſouth point there lye two or three litle rocks, going about behinde them you goe behinde a ſtone or head, where at lowe water you ſitte drie.

You muſt underſtand that betweene Cape de Hague and Granville the coaſt is full of houſes, milles and trees, and that you may anckor all along by that coaſt at 6 and 7 fathome, ſpecially on the ſouth ſide of Cape de Hague. The Cape of Vorha and Granville are two poīntes ſhooting or reaching out.

About five leagues ſouthward of Granville, there lyeth an Mont S. Michael. Iland about a league from the firme land, whereon the caſtle or litle town of S. Michaels lyeth, having a high towre which may be ſeene farre off, lying before the river of Averentie, which falleth drie into the Sea, at leaſt a league long, ſo that from the ſtrand you may ſee no Sea.

And about weſt from Granville lye the rockes of Sauſee or Santſee, which are about 3 leagues long, reaching eaſt & weſt. Sauſee or Santſee.

From Granville to the point of Concale the courſe is ſouth-weſt 5 leagues: you muſt runne in cloſe by the point for there Concale. it is 8 or 9 fathome deepe, there lye three rockes off from the point, before them you may anckor at 10 fathome, but before the towne it is ſhallowe water.

There lye two rockes alſo on the north ſide of the towne, under them you may anckor at 5 or 6 fathome.

Within the rockes to Mount S. Michael it is verie riſing ground, of 13, 9, & 6 fathome, it is all one, ſo that at a lowe water the whole ſhore is drie as I ſaid before.

From the uttermoſt rock of Concale to the Eaſt haven of S. S. Maloes. Maloes weſt, and w. & by ſ. it is 5 leagues.

There lyeth a litle Iland before the haven, wheron there ſtandeth a church called Sicember, you may ſayle in on both ſides thereof.

The eaſt chanel goeth in by a high ſharp rock, called the The eaſt chanel. Meeuſteen, and ſo you ſayle upon the weſt Iland, then you ſee two ſmall Ilands or rockes more, and on each of them there ſtādeth a litle houſe, which you leave on backborde, ſayling upon the uttermoſt, and cloſe in by it.

When you are within the cliffes or rockes, whereon the houſes ſtand, then you may anckor at 5 or 6 fathome lowe water. This eaſt chanel reacheth ſouth in, and upon the wēſt land in the Baye againſt S. Maloes, there are three or four litle houſes, which in ſayling in you muſt keepe cloſe upon the two aforeſaid Ilands whereon the houſes ſtand, and you muſt ſayle right up upon them, untill you are within the two Ilands or rockes, where you may anckor before the towne at 5 fathome.

At a lowe water it is there all full of rockes and ſtones, ſo that there you can hardly ſee through them, but ſayling in the chanels of S. Maloes, at half flood, you can doe no hurt, ſo you ſayle not upon any high rockes, for at high water it is there 14 fathome deepe, and it floweth everie tyde 7 fathome high.

The weſt chanel beginneth to runne in a litle weſtward of The weſt chanel of S. Maloes. Sicember. Sicember is the Iland whereon the litle church ſtandeth, there weſtward lye two or three great rockes, whereby you runne in leaving a great rock on ſtarborde, running in cloſe by the rockes that be moſt northeaſt and by ſouth, and e. ſ. e. till you are againſt the two rocks wheron the two houſes ſtand, then turne ſouthward up to the towne as aforeſaid.

The markes of the weſt chanel are theſe, there ſtandeth a mill Markes of the weſt chanel on high upon the waie to the towne, when that is right upon the north

the north or eaſt corner of the towne of S.Maloes, let it ſtand ſo til you come to the aforeſaid Ilands with houſes.

The ſouth chanel of S.Maloes,runneth along by the land be-
The ſouth chanel of S. Maloes. tweene it and the rockes, where you leave all the rockes to ſea-ward, keeping the weſt point of the haven right againſt the ſouth corner of the towne, ſo that betweene the towne and the Ilands you may ſee the place whereon the milles ſtand, and ſo you runne upon the point of the haven in, and cloſe in by the point, and when you are at the point, then you may ankor in the Baye where the houſes ſtand,at five fathome lowe water, in the middle of the haven there lye two or three ſandes, ſtone ground which you muſt ſhunne.

At S.Maloes an eaſt and weſt moone maketh a high water,& the ſtreame falleth into the weſt haven, through the cliffes or rockes, and out againe at the eaſt chanel: which you muſt marke well when you goe in at the weſt chanel of S. Maloes.

III.

The ſituation from S.Maloes to S.Pauls de Lion.

ABout five leagues weſt from the ſouth chanel of S. Maloes there lyeth a great ſandie Baye, where a man may lye ſafe from all windes, at 6 or 7 fathome, you anckor under a great cliffe or rocke, turning weſtwards up towards the milles with the trees.

Cape de Farelle. And almoſt three leagues northweſt from this foreſaid Sandbay lyeth Cape de Farelle, which alſo is called Cape de Late, becauſe the caſtle la Late ſtandeth eaſt from this point, there alſo is a good Rode for a weſt and ſouthweſt winde.

Weſt from Cape de Farelle lyeth a great cliffe or rocke, and weſt from it you may anckor in the great Sandbaye.

You may knowe Cape de Farelle by the aforeſaid rock,there are many Sand bayes alſo in the ſtrand, & upon the point ſtandeth a great caſtle.

Iland of Briack. From Cape de Farelle to the north ende of the Iland Briack it is weſt and by north 13 or 14 leagues.

Betweene them both there lyeth the Havens or Rivers of S.
S. Brieux. S.Benit. Brieux and Benit, and about weſt from Cape de Farelle there lyeth a great rowe of out-rockes above the water, two leagues from the land.

Two leagues northweſt from S. Maloes chanel lyeth the eaſt banck, right over againſt Cape de Farelle, there you may ride under at 6 or 7 fathome.

You ſhall knowe the Iland of Briack when you come out of the eaſt by two milles which ſtand upon the land about two cables length one from the other, and betweene the two milles there ſtandeth a high round hill, and on it a houſe, it reacheth ſouth-ſouth-weſt,& n. n. e. almoſt 3 leagues in length.

You may ſayle round about this Iland,and anckor when you will,it is al good ground,although there lye ſome rockes round about it, as one a great way from the north point,called Souffe, which you muſt take heede of, and beware alſo of a rowe of rockes at the north ende,lying under the water.

In the Trave of Iarſey, Rockedove,and the Iland Briack it is 20, 25 and 30 fathome.

Pickels rockes. Weſt-ſouth-weſt a league and an half from the Iland Briack lye the Out-rockes of Pickels, which you may ſayle round about. They lye 4 leagues from the firme land, and eaſt neare to the firme land there lye many blinde rockes which you muſt ſhunne.

Port blāc. Four leagues weſt from Briack, lyeth Portblanke upon a great river called Lantriliers, Eaſt frō this haven lye manie Out-rockes, you may ſayle betweene them at 6 or 7 fathome with a lowe water, about behinde the Seven Ilands, and come weſtward by the Greene Iland into the Sea againe.

Sept Iſles. From Pickels aforeſaid to the Seven Ilands it is 8 leagues eaſt and by north, & w. & by ſ. you cannot ſayle through nor betweene thoſe Seven Ilands, but betweene the firme land & the Seven Ilands, there runneth a white chanel through.

The Seven Ilands are to be ſayled upon at 45 fathome, and when you are againſt them then you ſee a ſteeple upō the firme land, whereby they are well to be knowne, this church is called Our Ladie of Brightnes.

And from the Iland which lyeth furtheſt eaſt there ſhooteth off a Sand, at the ende whereof there lyeth a rock, for a good marke to ſayle about this Sand.

Greene Iland. Taveliuc. Above a league ſouth from SevenIlands lyeth the Greene Iland otherwiſe called Tabeliuck,which may be ſayled round about, and from thence runneth the deepe to the Driakelpotten northweſt into the Sea.

The Seven Ilands are about 8 or 9 leagues long, and northweſt from the weſt ende of them, there lyeth a rock under the water which at lowe water is above it.

Driakelpottes. From theſe Ilands to Driakelpotten the courſe is weſt-ſouth weſt, & e n. e. 5 leagues,theſe are all mightie and fearfull Out-rockes, ſpreading out farre and broad,and lye without the coaſt of the

of the land about five or ſixe leagues.

Betweene the Driaklepotten and the Sept Iſles lyeth the river of Laminoe, and eaſt from it the Greene Iland or Taveliuc, which may be anckored round about.

Vlles haven. The haven behinde the Greene Iland is called Ulles haven, to ſayle into it you muſt leave Taveliuc on backborde, and you muſt goe in ſouth, it is a great creeke, then the river will open it ſelf, but you muſt take heede of the northſide of the river for it is foule.

To knowe the Driaklepotten, you ſhall ſee a high ſteeple ſtanding upon the land, although there it muſt be cleare wether before you can have any ſight of the land.

Along by this coaſt it is 50 and 45 fathome deepe, and you may eaſily ſee the land, ſo that in the night tyme you may come no nearer unto it then 45 fathome.

He that commeth from Voert and will ſayle to S. Maloes, muſt goe no nearer eaſt with a ſouth winde, then eaſt-northeaſt, but if the winde be weſt then goe n. e. & by e. untill you have Driaklepotten on your ſide, otherwiſe the flood would drawe you thither, the flood falleth there northweſt and ſoutheaſt in behinde the Seven Ilands, but by day there is no daunger when you can ſee.

S. Iohn de Doye. Behinde the Driaklepotten lyeth the haven of S. Iohn de Doye, almoſt three leagues weſtward from the Greene Iland, & aſmuch eaſtward from Morlions, it is a tyde-haven, from thence you may goe to Morlions through the rockes, and anckor at 5 or 6 fathome lowe water.

Morlions. Weſt from the Driaklepotten or pottes, lyeth a great rock: about ſ. w. & by ſ. from the ſame lyeth the eaſt chanel of Morlions, about 4 leagues diſtant.

Weſt-ſouthweſt, & weſt & by ſouth from the aforeſaid rock, 5 or 6 leagues lyeth the weſt chanel of Morlions, running in by a long craggie rock, you may ſayle into this chanel ſouth, and ſouth and by weſt, to the caſtle of Morlaix, and being about the caſtle you may ſayle eaſtward on through the rockes, and goe from the long rock n. n. e. and n. & by e. out of the eaſt havé into the Sea againe, as the ſtreame ſerves. The flood commeth from the northweſt.

The caſtle of Morlaix

Being within the caſtle of Morlaix, and deſiring to goe to Morlions they ſayle eaſt through the rockes, it is al broken land, where with lowe water it is five fathome deepe. But if you will put into S. Pauls de Lyon, then ſayle to the great rock with the two hornes or ſaddle, and ſayle cloſe along by the rock, & when you have gotten about the rock, then chuſe your land, there lyeth a village upon the land called Plainpoul, ſayle to it, for there eaſtward the river goeth in. Theſe are all tyde-havens, but betweene the rock of Morlions and the Iland called Bas, it is deep ynough at lowe water to hide a ſhippe.

S. Paul de Lion.

Plainpoul.

IIII.

The ſituation of the land between S. Paul de Lyon and Heyſant.

TO knowe the land of S. Paul you muſt underſtand that it is dubble land, and that there ſtand two ſpeere ſteeples upon the church, and upon the Iland de Bas there ſtand two ſtakes up, like unto milles, it lyeth croſſe before them. This Iland at the eaſt ende hath a high craggie rock, and when you are eaſt from this rock, then you may ſee two ſpeere ſteeples ſtanding a litle the one from the other, which are the ſteeples of Plainpoul, & you ſhal alſo ſee the caſtle of Morlaix lying ſoutheaſt from you, upon a high rock.

The aforeſaid uttermoſt craggie rock of Morlaix lyeth from the point of the Iland de Bas eaſt, and eaſt and by ſouth 4 or 5 leagues, you may runne along betweene the firme land & theſe rockes to Seven Ilands, and in many places it is good anckor ground, for they are all great creekes, and betweene the rockes of Morlions and the Iland de Bas it is deepe ynough at a lowe water to hide a ſhip, you may goe in on both ſides of the Iland de Bas at 7 or 8 fathome with a lowe water, and anckor where you will.

Thus the land of S. Paul ſheweth it ſelf to the Four toe, when you ſayle along by it four leagues from the land.



Behinde the Ile de Bas lyeth the towne of Roſcou, which hath manie great ſhippes, becauſe the water is deepe there.

East chanel. To goe into the eaſt chanel, when you are paſt the high rock, and come againſt the point of the firme land, you muſt goe in betweene it and the Ile de Bas, about weſt, and weſt & by ſouth, and anckor at half waie the lowe Iland de Bas, at 8 or 9 fathome then you lye in the haven of Roſcou.

Weſt have or chanel. To goe into the weſt chanel, which goeth in by the land of Voert, you ſhall ſee two great long rockes lying weſtward, cloſe by the firme land, and from the point of the land right eaſt of the eaſterlyeſt long rock, there goeth a Sand off from the firme land, which is the weſt ſide of the weſt haven of Roſcou, which runneth in by the weſt ende of Iſle de Bas, about ſoutheaſt, and when you are within, then turne northeaſt up under the Iland, there is the beſt Rode, then Roſcou will lye ſouth, and ſouth & by eaſt from you.

Abewrack It is from the Iland de Bas to Voert or Bacovens w. ſ. w. & w. & by ſ. about 13 leagues. But from Roſcou to Abbewrack it is almoſt 7 leagues.

About northweſt a league without the rockes of Abbewrack lyeth a rowe of rockes under the water, therefore thoſe that put by night out of Voert, or that will laveere to the Four, muſt goe no nearer to the land of Abbewrack then 45 fathome.

To knowe the land about the Voert, there lyeth many white peeces of land, as if they were Sandbayes, & along to the Voert many long rockes, like as if they were villages, and upon the land you may ſee ſome houſes ſtanding, whereby this land is well to be knowne.

La Four and Heyſant are diſtant almoſt 3 leagues, weſt-ſouth weſt, and eaſt-northeaſt.

V.

To ſayle betweene the Voert and Heyſant through Conquet & Fontenay. Alſo the ſituation of al Creekes, Havens, and Rodes lying there aboutes.

Le Four, Bacovens. THe Voert or Backovens, in French called *le Four*, is knowen by manie out rockes which ſtand like black villages, and in the firme land there are manie Sandbayes.

Heyſant. And you ſhall knowe Heyſand, for that at the ſouth ende it goeth moſt part ſloping downe, and in the middle you ſee a ſmall flatte ſteeple, as the figure enſeuing ſhewe you.

Thus Heyſant ſheweth it ſelf when it is ſ. & by e. frō you about 4 leagues.



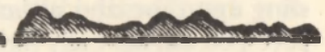
Thus Heyſant ſheweth it ſelf when it is ſ. e. from you about 4 leagues.



When Heyſant is e. n. e. from you about three leagues it ſheweth thus.



Heyſant three or four leagues n. n. w. from you ſheweth thus.



From the Four to S. Mathewes point it is ſ. ſ. e. 4 leagues. S. Mathewes. He that will ſayle to Voert he muſt runne cloſe by the land of Voert or *le Four*, there lye rockes like black villages or houſes along by the land, & behinde them are manie white Sandbayes (as I have ſaid before, ſhewing how to know the land) ſayle cloſe along by the rockes, til you come to the point. Upon the point there lye alſo two rowes of ſmall rockes, which you may paſſe along by at half the length of a peeces ſhot, or the length of two cables, and when you are about the point you ſhall ſee three heapes of rockes lying each a quarter of a league from the other, ſayle along cloſe by them becauſe of the north Hagles, which lye betweene Heyſant and the Four.

When you are againſt the middlemoſt heape of rockes, then hold S. Mathewes Cloſter under the point of Conquets-ort or corner, & ſayle right upon it untill you be cloſe upon the point, without turning farre from it, becauſe of the Bellaert, which lyeth croſſe over about two cables length from the ſaid point and with a ſpring tide is above water.

And when you are by Conquetſ-ort or corner runne a cables length along by the ſame until you ſee the haven open, but take good heed of the Feneſtiers which lye a cables length from the land, on the eaſt point or ſide of Conquets haven. Conquet. Feneſtiers.

Bus if you deſire to goe into Conquets haven, then when you come cloſe by Conquetſ-ort or corner bring S. Mathewes Cloſter without Conquets-ort, and then ſayle upon the Blanck Moines, untill S. Mathewes Cloſter be eaſt-ſoutheaſt from you, ſayle then to it, right before S. Mathewes Cloſter, and there anckor at 6 or 7 fathome, there is the beſt Rode for thoſe that will goe northward. But he that muſt goe into Voert and laveere, he muſt not bring S. Mathewes Cloſter farre without Rode before S. Mathewes Cloſter.

Conquets

Conquets-ort, as ſoone as it commeth without he muſt preſently winde towards the land againe, becauſe of the ſouth Hagles, which lye about a culvers ſhotte ſouthward frō the north Hagles.

Halman. Markes of the Hagles

When Halman(which is a high rock lying at the eaſt ende of Heyſant) is over againſt the northweſt ende of the northerlyeſt Cheminees or Kimmeneſſes then you are againſt the Hagles.

Breeſt water.

He that will ſayle into Breeſt water, muſt underſtand, that about a league eaſtward of S. Mathewes point there lyeth a rock which he muſt ſhunne. To ſayle into Breeſt water from S. Mathewes point goe e. ſ. e. and keepe the north ende of the ſoutherlyeſt Kimineſſes without S. Mathewes point, ſo long untill that the mille upon the north land is north from the trees, then ſayle ſouthward by the rock, and ſo you cannot erre. You may ſayle within two cables length along by the north land, untill that Breeſt is without the point,& then ſayle up to it. Or if you will ſayle otherwiſe into Breeſt water, northward of the rock aforeſaid, which lyeth about a league within S. Mathewes point right againſt Bartrams Baye, then keepe the north land wel,and hold the ſoutherlyeſt Kimmeneſſe covered behinde the great rock which lyeth off from S. Mathewes point,and ſo ſayle upon the weſt point of Bartrams Baye,untill that the mill which ſtandeth upon the north land be n. w.& by n. and the trees n.n.w. frō you, then you are paſt the ſtone. But it is beſt to goe ſouthward by the ſtone,it lyeth about half a peece ſhot frō the north land. If you will goe into the haven of Breeſt, then ſayle moſt part along by the north land, ſo long till that you come upon the point of Breeſt. When the ſouth point of Breeſt water is right againſt the point of Croduin,then you are againſt Baghin, which are a rowe of rockes lying in the mouth of Breeſt water, about two cables length from the north ſide, & at a lowe water are ſeene, being there within, you may turne up eaſtward or ſouthward before the rivers of Landerneau or Lefou, & anckor there againſt the ſouth land, at 10, 12, and 13 fathome, before the litle towne called old Croduyn. Breeſt water for the moſt part reacheth in eaſt-northeaſt,there it floweth everie tyde three fathome up and downe, and a ſouthweſt & by weſt, and northeaſt & by north moone there maketh a high water.

Baghin rockes.

Croix-duin.

He that lyeth within Breeſt, muſt paye about twelve pence for anckor mony, & for that you have a bill to ſignifie that you are free there, ſo that if you loſe your ſhippe upon the coaſt of Britanie,you might there freely lay hold on your goods, otherwiſe it is not free: there you lye at anckor in the Sea at 8 or 9 fathome, and at land your ſhip is made faſt with a rope at a tree.

To ſayle from S. Mathewes point to Claeſduinen or Croduin, keepe the ſoutherlyeſt Kimmeneſſes without the Blanck Moines,& goe forward e.ſ.e. untill you come to the weſt point of Claeſduynen, and when you are about the point, and may ſee the Baye open,then you ſhall ſee a church ſtand upō a peece of land diſtant from the maine,runne up to it,and anckor about the church at 6 or 7 fathome. Croduin is a great Creeke, & lyeth almoſt 3 leagues diſtant from S. Mathewes point,right over againſt Croduin lyeth Bartrams Baye, there you may anckor ſafe againſt a north,and n. w. winde, at 10 or 11 fathome.

Bartrams baye.

The Cheminees or Kimmeneſſes lye ſouthward from Heyſant,and weſtward from S. Mathewes point: betweene the Kimmeneſſes and Heyſant, a ſhip that will may well ſayle through, it is there 6 or 7 fathome deepe with lowe water. If a man by reaſon of the flood cannot ſayle above Heyſant and the Cheminees,he may well ſayle through between them(as I ſaid before) it is there broad and deepe ynough, the chanel reacheth about n. e. & ſ. w.& going in the middle of the water you cānot erre.

Chemi-nees.

He that will ſayle over the Trave from S. Mathewes point to the Emperor & Empereſſe,muſt have good regard to the rockes which lye betweene them. The Colengier lyeth from S. Mathewes point ſ. ſ. e. almoſt two leagues.

Colengier.

The Henne with her Chickens, and the middlemoſt Foukeneſſes lye from S. Mathewes point ſ.e.& by e. almoſt 2 leagues.

Henne with her Chickens.

The Foukeneſſes lye from the weſt point of Croduyn about w. ſ. w. almoſt half a league.

The ſoutherlyeſt Foukeneſſe lyeth from the northerlyeſt half a league,or two ſhootes of a peece, and at a high water it is covered: and n. n. e. a cables length from it there lyeth a blinde rock, which at alowe water is alſo ſeene. The ſaid ſoutherlyeſt Foukeneſſe lyeth ſouthweſt & by ſouth from Croixduin. There lyeth alſo another blinde rock, weſtward from the northerlyeſt Foukenes, which alſo at a lowe water is uncovered.

Foukeneſſes.

The Henne lyeth w. ſ. w. a peeces ſhot & an half from Foukeneſſe,it is a round ſharp rock,which round about is deepe and faire, at 6 & 7 fathome. The Chickens lye a baſes ſhot n. w. & by w. from the Henne, which are two ſharp ſtumpes, which with lowe water are even above the water, and lye about weſt from the northerlyeſt Foukeneſſe.

The Chickens.

The Scheminkel hilles lye ſouthward from the Foukeneſſes, you may runne betweene them at 10 fathome, to the weſt point of Croduin, there alſo is good rode and anckor ground.

Schemine-Rle bergen or rockes.

Raſſe of Fontenay.

The Ras of Fontenay lyeth from S. Mathewes point ſouth & by eaſt five leagues, if you will ſayle from S. Mathewes point over the Trave in the Ras of Fontenay, then goe ſouth and by eaſt, and hold the mill of Feneſtiers, which ſtandeth upon the eaſt point of Conquets haven, over the point of S. Mathewes Cloſter, as long as you can ſee it, and when you come before the Emperor and the Empereſſe, ſhunne the Emperor, becauſe of the rockes thereof which lye under the water, and beware alſo of the Empereſſe, for from it alſo there runneth a ſand called the Calf, over which the ſtreame breaketh verie much, and falleth verie ſtiffe from it, therefore marke your ſtreames heere wel, for the ſtreame runneth croſſe over this Ras of Fontenay, ſo that with a ſouthweſt winde, and an out fall or ebbe it is verie dangerous to put into that chanel, as alſo with a calme. This chanel runneth through ſ. ſ. w.

Emperor.

Empereſſe

Calf.

Seims rockes.

The Seims ſtand a litle ſouth from the Emperour, and reach about 3 leagues w. n. w. into the Sea, & about northweſt from them lyeth a rock which you muſt ſhunne.

Breeſond.

Betweene the ſaid Seims and Heyſant, reacheth Breeſand in e. n. e. againſt the which reacheth that of S. Mathewes point into the Sea, w. n. w. five leagues.

Frieſe bay.

Eaſt from Fontenay or the Empereſſe lyeth Frieſebaye, there you may anckor againſt a ſ. e. & by ſ. winde, there is good anckor greund.

Boldavids baye.

And further eaſt from Frieſe-baye lyeth Boldavids baye, a deepe wide baye reaching in e. n. e. on the eaſt ſide of the haven there lye two Ilands or rockes, which you may anckor under, there you may lye ſafe from all windes.

VI.

The running of the ſtreames, and what Moone maketh a high water there.

A South & by eaſt moone maketh a high water at Cap de Hague by land.

In the Ras of Blankaert or Ornay the flood falleth ſ.w and the ebbe northeaſt, but heere you can reckon no falling of ſtreames, for one quarter of a tyde the flood falleth croſſe into the Caſquettes, forth of the one haven into the other, and ſo out againe, but moſt northeaſt, and n. e. and by n. through the Ilands, where a n. and by e. and ſ. & by w. moone maketh a full Sea. In Garnſey alſo it is high water with a n. & by e. and ſ. & by w. moone.

At Concalo & Granville a w.n.w. moone maketh high water

At S. Maloes the ſtreames rũne in at the weſtchanel through the rockes, and runne out againe at the eaſt chanel, which a man muſt remember when he will goe into S. Maloes.

An eaſt and weſt moone maketh a high water at S. Maloes.

From the Iland of Briack in the creeke or haven of Benit the ſtreame falleth ſouth-eaſt, but in the chanel it falleth e. ſ. e. and w. n. w. an eaſt & weſt moone maketh high water there.

Behinde the Caſquettes the tyde turneth againſt the Sonne, ſo that there it is never ſtill water.

On the eaſt ſide of the Iland of Briack, in the chanel in the Rode, the flood goeth ſ.ſ.e. & a weſt moone maketh high water.

Betweene Garnſey and the Iland of Briack in the chanel, the ſtreame falleth e.ſ.e. & w.n.w. & it is there ful Sea with a weſt-ſouth-weſt moone.

Betweene the Sept-Iſles and Garnſey a w. ſ. w. moone alſo maketh a high water in the chanel.

Betweene Briack and the SeptIſles the ſtreame falleth weſt, and weſt & by north, & a w. & by ſ. moone maketh a ful Sea.

Betweene the Seven Ilands and the out-rockes of Morlions the flood falleth in behinde the Driaklepottes, to the Greene-Iland, and falleth in ſ.ſ.w. but in the chanel it falleth moſt eaſt, and e. & by n. and at Morlaix and S. Pauls a w. & by ſ. moone maketh a high water, and in the chanel a ſouthweſt & by weſt, and a weſt ſouthweſt moone.

At Sept-Iſles and S. Paul de Lyon a w. & by ſ. moone maketh a high water.

From Morlions or the Iland de Bas to Voert the ſtreame falleth w. & by ſ. and a w.ſ.w. and w. & by ſ. moone maketh high water there. Without Heyſant a w.ſ.w. moone maketh a high water, and within the Voert a ſ. w. & by w. moone.

Without the Iſle de Bas in the chanel the ſtream falleth eaſt-northeaſt, and w.ſ.w.

The flood falleth verie ſtiffe upon Heyſant, and through the Chimenees croſſe over the Voert to the Bacovens, he that commeth to ſayle about Heyſant he muſt be carefull hereof.

Before S. Mathewes point a ſ. w. & by w. moone maketh a high water. From the Four to S. Mathewes point the ebbe falleth ſouth and by eaſt, and the flood north and by weſt.

In Breſondt betweene Heyſant & the Seims a w.ſ.w. moone maketh a high water. The flood runneth into Breeſond towards Breeſt, it falleth alſo by S. Mathewes point in towards Backovens, and it raketh there verie much.

The flood

The flood falleth through verie ſtiffe betweene the Emperor and falleth thwartwiſe over to the Empereſſe,& ſo falleth with great rakings over the Calf, which is a rock, which ſtretcheth of from the Empereſſe,& then falleth forward alſo north, & north and by weſt into S. Mathewes point. But everie one that will ſayle through this way muſt be warie leaſt he be caried awaye with the ſtreame in calme wether, and with a ſtorme out of the north or ſouth it is not good to come into this chanel with an out or in-fall. A ſouthweſt and by ſouth, and a northeaſt & by north moone maketh a high water.

Upon all the coaſt of Britanie, Poictou,& Gaſcoigne a ſouthweſt and a northeaſt moone maketh a high water, and there they make no reckoning of any falling of the ſtreame.

VII.

Of the depths againſt theſe places, and at what depths a man may ſee theſe countries.

VVithout the Kiſcaſſes about three leagues from the land it is 35 and 40 fathome deepe, there is alſo a pitte about n. n. e. 4 leagues from Garnſey where it is 80 or 90 fathome deepe, otherwiſe it is deepe there aboutes 40 fathome.

About four leagues from Garnſey, when it lyeth ſoutheaſt from you, it is 40 fathome deepe.

About the Driaklepottes along the coaſt it is 50 and 45 fathome, and at ſuch a depth a man may ſee the land but by night you muſt come no nearer to it then 45 fathome.

You may well runne to the Sept Iſles at 45 fathome.

Betweene Ornay and Iarſey it is 20 and 28 fathome deepe.

Againſt the Sept Iſles about 5 or 6 leagues from the land it is 40 and 45 fathome.

Againſt S. Pauls de Lyon about five leagues from the land it is 45 and 50 fathome.

Againſt Iſle de Bas, & Abbewrac, or Marwanen five leagues from the land it is 50 and 55 fathome.

At the Backovens or the Four a man may ſee the land at 15 fathome, and you may knowe it by manie out-rockes, which ſtand like black villages, and in the firme land there are manie Sandbayes. And you ſhall knowe Heyſant becauſe at the ſouthende it goeth ſlope downewards, and in the middle you ſee a ſmall flatte towre, and ſoutheaſt from the ſame Hand five or ſixe leagues from the land it is 75 fathome deepe, and you may ſee the land from the poope of the ſhippe.

Upon S. Mathewes point there ſtandeth a flatte towre, and comming out of the Sea, you may ſee that flatte towre over the Kimeneſſes.

At the Seims and the Sheetes you may ſee the land at 60 & 65 fathome. The Seims reach weſt-northweſt from the Emperor into the Sea, and about a mile from thence northweſt, there lyeth a rock which you muſt ſhunne, and right there without it is 50 fathome deepe. In Breeſond it is 45 fathome deepe. North from Heyſant it is 50 fathome deepe, and you may alſo ſee the land. Without the Seims it is 55 fathome deepe, and then you may ſee the ſheetes alſo.

VIII.

How theſe Countries aforeſaid lye diſtant one from the other.

FRom Cape de Hague to Caſquettes w.& by n. 8 leagues.
From Cap de Hagu to Cap de Vorha ſ.& by e. 7 leagues.
From Cape de Vorha to Granville ſ. ſ. e. —— 9 leagues.
From Granville to Mount S Michael ſ. ſ. e. —— 5 leagues.
From Granville to the Weſt point of Concale ſ. w. 5 leagues.
From thence to the eaſt chanel of S. Maloes weſt, and weſt and by ſouth —— —— —— —— 5 leagues.
From the Iland Sicember before S. Maloes to Cape de Farelle, eaſt and weſt —— —— —— —— 7 leagues.
From Cap de Farelle to the Iland Briack w.& by n. 13 leagues.
From the Ile of Briack to Pickels rockes w. & by ſ. 2 leagues.
From Pickels to the Sept Iſles w. ſ. w. —— 9 leagues.
From Sept Iſles to the rockes of Driaklepottes weſt-ſouthweſt —— —— —— —— —— —— 5 leagues.
From Driaklepottes to Iſle Bas or Weſtpalen w. ſ. w. 9 leagues.
From the Iſle Bas or Weſtpalen to the Four w. ſ. w. 16 leagues.
From the Four to S. Mathewes point ſouth-ſoutheaſt, & ſouth-eaſt and by ſouth —— —— —— —— 4 leagues.
From S. Mathewes point to Claeſduin or Croduin eaſt-ſouth-eaſt almoſt —— —— —— —— 3 leagues.
From S. Mathewes point to the Ras of Fontenay, or neare to the Emperor ſ. & by e. —— —— —— 5 leagues.
The Ras of Fontenay rũneth through betweene the Empereſſe and the Emperor ſ. ſ. w. and n. n. e.
From Cape de Hague to the weſt ende of Iarſey ſouth-ſouth-weſt —— —— —— —— —— 10 leagues.
Then you goe through betweene Sarke and Iarſey.

From the Kiſcaſſes to the weſt ende of Garnſey ſouthweſt & by ſouth. — — — — 5 or 6 leagues.
From Garnſey to Iarſey ſ. e. & by e. — 6 leagues.
From Garneſey to S.Maloes ſ.ſ.e. & n.n.w. — 16 leagues.
From the ſouthende of Iarſey to S.Maloes ſ.ſ.e. 9 or 10 leagues.
From Garneſey to Sept Iſles ſ. w. & by ſouth — 17 leagues.
From Garneſey to the rockes called Rockedoves ſouth-ſouthweſt and n. n. e. — — — 8 or 9 leagues.
From Rockedoves to the rock called Mincke weſt and by north — — — — — — 9 or 10 leagues.
From Rockedoves to the Iland Briack ſ. & by w. 8 leagues.
From Kiſcaſſes to S.Paul de Lyon ſouthweſt — 29 leagues.
From Kiſcaſſes to the Four ſ. w. and by w. — 45 leagues.

I X.

How theſe places lye diſtant from other Countries.

FRom Caſquettes to the Sorlinges weſt and ſomewhat northerly — — — 56 leagues.
From the Kiſcaſſes to Startpoint w. n. w. — 19 leagues.
From Kiſcaſſes to Portland n. and by w. — 13 leagues
From Caſquettes to the Ile of Wight n. e. & by n. 20 leagues.
From Caſquettes to Beveſier or the Beach northeaſt & by eaſt — — — — — — 37 leagues.
From Garnſey to Lezard weſt & by north. — 37 leagues.
From Sept Iſles to Lezard n. w. & by w. — 26 leagues.
From Sept Iſles to Startpoint north and by weſt, & ſomewhat weſterlyer — — — — 37 leagues.
From Sept Iſles to Portland n.e. and by n. — 33 leagues.
From S. Paul de Lion to Lezard n.w. and by n. — 29 leagues.
From S. Paul de Lion to Startpoint n. & by e. 29 leagues.
From S. Paul de Lion to Portland n. e. & by n. — 40 leagues.
From Heyſant to Portland n. e. — — 54 leagues.
Ftom Heyſant to Startpoint n. e. & by n. — 40 leagues.
From Heyſant to Lezard north — — 29 leagues.
From Heyſant to Sorlinges n. w. & by n. — 37 leagues.
From Heyſant to Cape de Clara in Ireland n. w. 84 leagues.
Frō Heyſant to the Iland S. Michaels ſ.w. & by w. 360 leagues.
From Heyſant to Cap Finiſterre ſouth-ſouthweſt & ſomewhat weſterlyer — — — 123 leagues.
From Heyſant to Cizarga ſ. ſ. w. — — 113 leagues.
From Heyſant to Cape de Prior ſ.ſ. w. — 107 leagues.
From Heyſant to Cape de Pinas ſouth — 97 leagues.
From Heyſant to Laredo ſ. ſ. e. — — 113 leagues.

When you goe ſouth and by eaſt from Heyſant, then you goe right without the Seims.

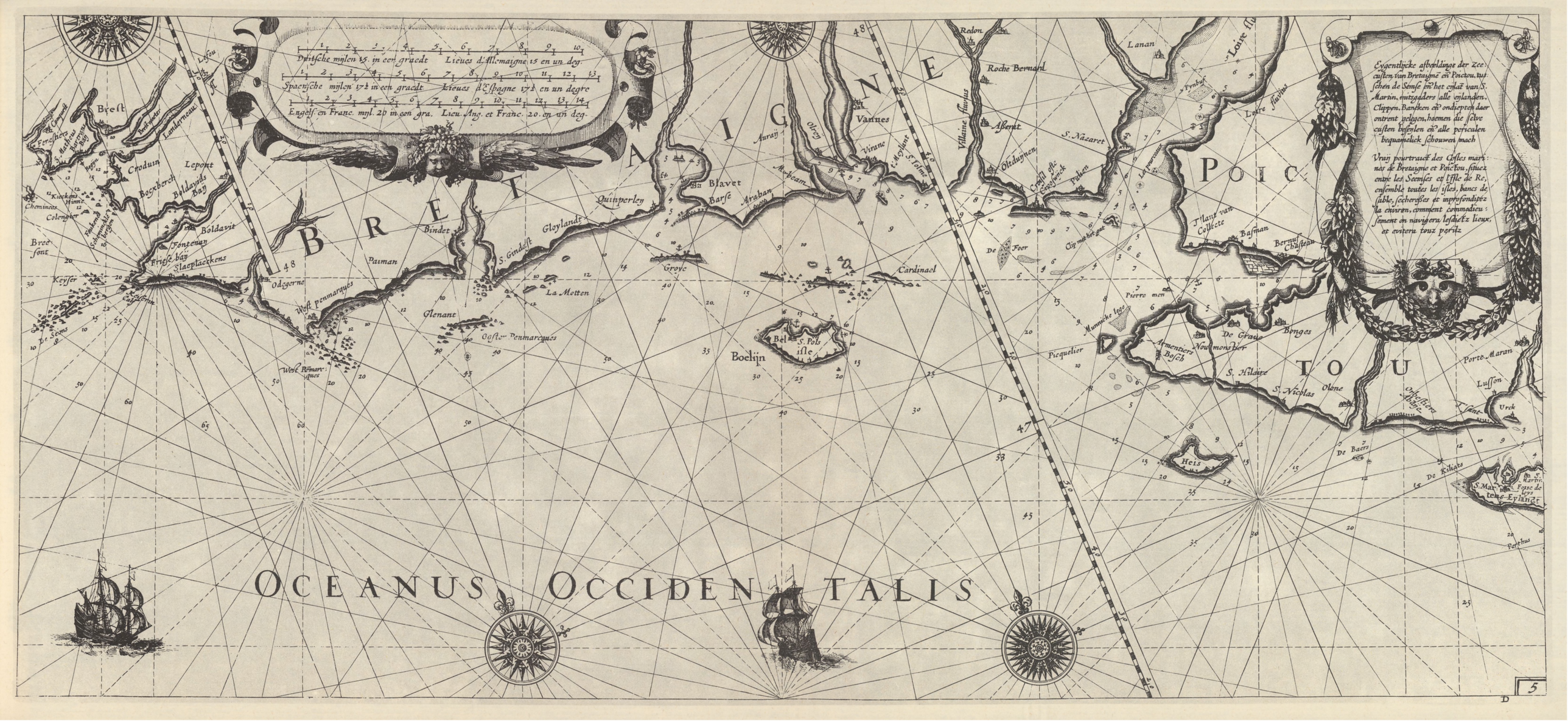
X.

Vnder what degrees theſe places lye.

THe Caſquettes or Kiſcaſſes lye under 49 degrees 48 min.
The Sept Iſles lye under 49 degrees.
Heyſant lyeth under 48 degrees 30 minutes.
The Seims lye under 48 degrees 5 minutes.

Heere followeth the Carde N. 5.

HOW


Eygentlycke afbeeldinge der zee custen, van Bretaigne en Poictou, tusschen de Seinse en't hat enaē van S. Martin, mitgaders alle eylanden, Clippen, Bancken en ondieptens daer ontrent gelegen, haemen die selve custen beseylen en alle perculen bequamelick schouwen mach
Vraij pourtraict des Costes maritimes de Bretaigne et Poictou, situez entre les Scemses et l'Isle de Re, ensemble toutes les isles, bancs de sable, secherosses et inprofonditez la environ, comment commodieusement on navigera, les dictz lieux, et entera tout peril
Deutsche mylen 15. in een gradt
Lieues d'Allemaigne 15 en un deg.
Spaensche mylen 17½ in een gradt
Lieues d'Espagne 17½ en un degre
Engelsch en Franc. myl. 20 in een gra.
Lieu. Ang. et Franc. 20. en un deg.
BRETAIGNE
POICTOU
OCEANUS OCCIDENTALIS
Brest
Crodun
Leport
Boldavid
Fontenay
Friese bay
Slaeplaeckens
Keyser
Odgerne
Bindet
Paman
Glenant
West Penmarcques
Oost Penmarcques
Quimperlen
Glaylandt
S. Gindast
La Motten
Grove
Blavet
Barse
Araban
Auray
Vannes
Virane
Cardinael
Boelijn
S. Pols isle
Redon
Roche Bernard
Asserat
Oltdunen
Croisil
Pabeu
Lanan
Loire
S. Nazaret
Pierre men
Munnicke lege
Armentiers Bosch
Noutmonstier
De Graue
Binges
Piequelier
S. Hilaire
S. Nicolas
Olone
Heis
Bermud Chasteau
Basman
Porte Maran
Lusson
Urck
De Baers
De Kliats
S. Martin
Fosse de ters tens Eylandt
Portchus

CHAPTER V.

HOVV A MAN MAY

ſayle along by the Coaſt of Britanie and Poictou, from Seims to the Iland of S. Martin together with all the Rivers, Havens, and Ilands, lying in and about the ſame Coaſt.

I.

The ſituation of the land betweene Seims and Blauet.

Seims. THe Seims (as in the chapter aforegoing is declared) are right ſouthward from the Emperor, and weſt-northweſt almoſt 3 leagues into the Sea. From the uttermoſt of the Seimes to the Weſtpenmarques it is eaſt-ſouth-eaſt and ſomewhat ſoutherlyer about 13 leagues. But from the Ras or from Fontenay to Weſtpenmarques the courſe is ſoutheaſt 9 leagues.

Odegerne. Betweene them both lyeth Odegerne a faire haven, about five leagues eaſt-ſoutheaſt from Fontenay, right before the chanell or haven there lyeth a banck, which you may runne by on both ſides at ſixe fathome. The ſouth point of this haven is ſhallowe, therefore ſayle in by the eaſt ſide, and there you have not leſſe then three fathome at lowe water.

Sheetes. The knowledge of the land betweene Fontenay & Odegerne is two round hilles, which the Hollanders call the Slaeplakens, that is the Sheetes, weſtward frō which there ſtand two milles, it is a verie craggie point, which without the Seims you may well ſee at 55 fathome, whereby this land is well to be knowne.

Weſtpenmarques. From Odegerne ſoutheaſt & by ſouth lye the Weſtpenmarques, which are good to knowe, for ſuch as have once ſeene thē, for on the ſoutheaſt ende there ſtandeth a thick flatte ſteeple, & a litle weſtward there ſtandeth a ſpeere ſteeple, and yet ſomewhat more weſterly againſt the high land there ſtandeth a village like a caſtle, at the eaſt ſide wherof there ſtandeth a flat ſteeple, there lye two great rockes cloſe by the land.

The Weſtpenmarques runne from the firme land more then a league ſoutheaſt into the Sea, you ſayle eaſt into them, leaving all the rockes on the left hand, running along by the ſtrand, until you come by a great rock, which you muſt ſayle ſouthward about, leaving it on your right hand, then you turne up north-northweſt, and ſo anckor right within the rock, at three fathome lowe water, then you can ſee no Sea, but at a lowe water it rolleth verie hard through the rockes.

You may from thence runne at a high water ſoutheaſt betweene the rockes into the Sea againe, but you muſt take good heede. Without the great rock in the entrie of the haven it is tenne fathome deepe, ſo that a man might there hide a great ſhippe if neede were.

Thus the Slaeplakens or the Sheets with Weſtpenmarques ſhewe themſelves when you ſayle along by them, and are about four leagues croſſe from them.

Fontenay. Odegerne. Weſtpenmarques.

Eaſtpenmarques. Glenant. From the Weſtpenmarques to Eaſtpenmarques or Glenant the courſe is eaſt-ſoutheaſt, ſouthward about, with ſuch a courſe you may runne farre ynough without, & behinde the Eaſtpenmarques lyeth a haven called Bindet, the eaſt ende whereof is full of rockes, you enter into that haven by theſe markes: there ſtandeth a mille farre within the land, which commeth over Bindet.

againſt

againſt a litle Caſtle which ſtandeth upon a point within the haven, which you muſt hold ſtanding one over the other, that is the eaſt mille, and goe in northeaſt and northeaſt and by north, and ſo you can get no hurt on neither ſide of the land, and then anckor againſt the towne, you may alſo ſayle behinde the Eaſtpenmarques, the firme land is ſandie ſtrand, where you may anckor at 10 or 11 fathome, neareſt the Iland of Motten which is verie faire.

Rode behinde the Eaſtpenmarques.

A league ſouthweſt from Gloyland, by us called the Eaſtpenmarques, there lyeth a great rock under the water, whereon it raketh continually, within & without this rock it is 40 fathome deepe, and when you goe eaſt-ſoutheaſt from the Weſtpenmarques then you runne farre ynough without them.

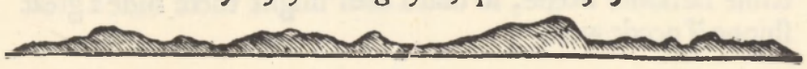
Thus the land of Eaſtpenmarques ſheweth it ſelf when you ſayle by it.



About two leagues eaſtward of Glenant lye the Ilands of Motten, you may ſayle betweene them and the firme land to Groye or Blauet, there it is 9 or 10 fathome deepe. But if you will goe through betweene Glenant and Motten, ſayle along by the Iland of Motten, till you are without Glenant, & then ſayle whither you would be.

Motten.

Thus the land eaſtward of Glenant or Gloyland to Groye when you ſayle along by it, openeth it ſelf.



From Motten to Groye the courſe is eaſt and by ſouth eight leagues. To knowe Groye, you muſt underſtand that there ſtand three or four milles upon it, and the eaſt ende goeth ſlope downewards, whereby it is eaſie to be knowne.

Groye.

When Groye is n. n. e. from you four leagues it ſheweth thus.



Under Groye it is good anckoring for a ſouthweſt winde, at 6 or 7 fathome, though at the ſoutheaſt ende of Groye there lyeth a Sand, which you muſt beware of, for there it is foule ground.

Right behinde the Iland of Groye lyeth the haven of Blauet which runneth in northeaſt and by north, at 4 or 5 fathome, upon the weſt ſide of this haven there ſtandeth a high ſpeere ſteeple called Quinperley. The Barſe lyeth on the eaſt ſide of the haven, which is a rock which commeth off from the eaſt ſide of the haven. On the eaſt ſide alſo there lye two blinde rockes which you muſt be verie warie of as you enter in, you muſt ſayle in along by the weſt ſide. When you are within it is wide and broad, you may there anckor before the Iland which lyeth in the middle of the haven at 5 or 6 fathome, it is 3 or 4 fathom deepe at lowe water.

Blauet.

To ſayle into Blauet

II.

The ſituation of Bel-Iſle and the Ilands lying there abouts, alſo the Creekes of Morbeam and Croiſil or Croiſwyke.

FRom Weſtpenmarques to Bel-Iſle or Boelin, the courſe is eaſt-ſoutheaſt 21 leagues. But from Groye to Bel-Iſle it is ſouth-ſoutheaſt 5 leagues. To know Bel-Iſle you muſt underſtand that on the northweſt ende it hath a rugged point, wherein there is a great ſaddle, you may alſo ſee ſome houſes there upon the land, and the eaſt ende goeth whole ſloping downe, you may ſee it at 5 5 fathome.

Bel-Iſle.

Thus Beliſle openeth it ſelf when the northweſt ende is eaſt from you about four leagues.



When Beliſle is northeaſt frō you 4 leagues then it ſheweth ihus.



He that will ſeeke harbor under Beliſle, muſt ſhunne the northweſt ende, for there under the water there lyeth a rock a good waie from the land. When you are there within, then you ſayle about two towes length along by the land, and within a baſes ſhotte about by the north point, till you come to the village with the ſpeere ſteeple, called S. Pauls, there ſtandeth a caſtle upon the point, weſtward from the aforeſaid ſteeple, anckor within the point at 9 or 10 fathome, then you lye ſafe from a ſouth, ſouthweſt, weſt, and northweſt windes, if it bloweth any thing northerlyer you may remove before the eaſt ende, which is half

Rode under Beliſle.

is half a league broad, at 10 and 11 fathome, the Iland reacheth ſ. e. and n. w. and as the winde bloweth ſo a man muſt remove from one Rode to another, it is good lying there. There lye ma-

Ilands behinde Bel-iſle.

nie Ilands behinde Bel-Iſle, but you may ſayle behinde them to Groye, and Morbeam, in ſome places having good Rodes, and ſpecially the middlemoſt which hath a good haven, which goeth in by a great rock, but to ſayle through there & back againe, a man muſt have ſome knowledge thereof, becauſe there lye manie rockes both above and under the water. The eaſt-Iland is

Cardinal.

called the Cardinal, and is diſtant from the eaſt-ende of Bel-Iſle e.n.e. and e.& by n. about 4 leagues, they lye 3 leagues from the firme land, where there lye two great creekes or rivers, from whence a man may ſayle through betweene the firme land, and the aforeſaid Ilands lying behinde Bel-Iſle to Croiſwyke or Croixiſle, and alſo up the River of Nantes called Loire.

Morbeam.

He that will ſayle into Morbeam let him goe from the eaſt-Iland called the Cardinal, to the Mayland n.w. & n.n.w. there it is deepe 8 or 9 fathome, then goe ſomewhat northerlyer upon the point which lyeth weſt from S. Iolme and runne in by it, within the point it is 6, or 7, & alſo 8 fathome deepe. When you are within the point, leave the weſt-point & runne cloſein by the eaſt-point, and as ſoone as you are within the weſt-point of the haven, then take good heede to your ſtreame, for the flood falleth verie ſtiffe into the river of Faunes, then chuſe the weſt-land at 6 or 7 fathome, there it is all ſhallowe, and when the ſteeple of Morbeam upon the weſt-land is weſt from you, then anckor in the middle of the haven at 9 fathome, then Aury the innermoſt ſteeple lyeth n. n. w. from you, and the other ſteeple n.& by e. but the point of Mayland e. ſ. e.

The litle Iland that lyeth in the Sea lyeth e. ſ. e. & w. n. w. from the weſt-point of the haven, and the land from the haven to S. Iolmes ſteeple n.w. and ſ.e. and ſo to Croiſwyke w.n.w. and e.ſ.e.

This Iland aforeſaid lying without the haven of Morbeam, on the north-ende is foule, you muſt leave it on the left hand, and runne to the point of the Mayeland, and cloſe in by it as aforeſaid, in the Trave it is 6, 7, and 8 fathome deepe.

From the eaſt-ende of Bel-iſle to Croiſ-iſle the courſe is eaſt

Croixiſle.

and by north, and eaſt-northeaſt about 11 leagues.

But he that will ſayle from Blauet to Morbeam, he may ſayle through behinde Groye and the Ilands lying behinde Bel-iſle, and when he is within the Ilands, he muſt goe north-northeaſt, till he be before the haven of Morbeam. Before it there lyeth a rock or an Iland, as I ſaid before, you muſt ſayle in through the rock and the eaſt-land, to the eaſt-ende of the haven, and you muſt ſhunne the weſt-point at 6 fathome, for it is ſhallowe: the eaſt-ſide is deepeſt, till you come ſomewhat within, then there lyeth a rock which at half flood is above the water, you muſt goe eaſt, or weſt about it, and anckor right behinde the rock, making a towe faſt on land, or as you come within the weſt-point, you may turne weſtward as I ſaid before, untill the village of Morbeam be weſt from you, and there anckor at 9 fathome.

I ſaid before that the land of the eaſt-point of this haven to S. Iolmes ſteeple reacheth northweſt, and ſoutheaſt, and from S. Iolmes to Croiſwyke weſt-northweſt, and eaſt-ſoutheaſt, along by the land it is about 7, 8, and 9 fathome deepe, the more ſouthward about the deeper, but againſt the point of Croixwyke you have ſixe and ſeven fathome water againe, ſo long untill you be within the banck.

Behinde the weſt point of Croiſwyke there is a Rode as if it were a haven, where you may lye at five, ſixe, and ſeven fathome water.

A Rode behinde Croiſwyke.

And weſtward from the northweſt-point of Croiſ-iſle there is a flatte church upon the high land. The land of Olduynen lyeth cloſe north from this church. The church ſtandeth upon the firſt point of Croixwyke.

Olduyné.

Southweſt and by ſouth from this church, two leagues from the land, lyeth a banck called the Foer, which in ſome places is drie at a lowe water, it lyeth a league from the northweſt-point of Croiſwyke, and from the eaſt-point of Pulyen weſt and by north, and ſomewhat northerlyer, and from Bel-Iſle it lyeth eaſt, it reacheth in length ſouthweſt and northeaſt, when you keepe the ſteeple of Olduynen over againſt the weſt-point of Croixwyke, and ſo goe eaſt-northeaſt, then you miſſe the banck. And when the ſpeere ſteeple ſtandeth over the height of the eaſt-ende of the land, then you goe northward about the ſame banck: and when you bring Pulyen ſteeple over the northweſt-point of Croiſwyke or Croiſiſle, then alſo you runne northward about the aforeſaid banck. And when you ſayle eaſt-northeaſt from the eaſt-ende of Bel-Iſle to Croiſwyke, then you goe weſt about the banck: but when you goe eaſt, and eaſt and by ſouth, from the eaſt-ende of Bel-Iſle, then you goe eaſt about the banck, ſayle ſo long eaſt, and eaſt and by ſouth on, untill that the ſteeple of CroixIſle or Croiſwyke be north-northweſt from you, and

Poer.

then ſayle to the land, and ſo forth at two cables length along by the land, untill you ſee the rock and the haven called Pierrepaſſe, then ſayle cloſe in by it, it is there 4 fathome deepe.

But when you come from the Cardinal, then keepe the ſteeple which ſtandeth weſt from Croixwyke over the point, then you runne northward about the banck, then ſayle towards the land, about two towes length along by it, as I ſaid before.

Sand of Croiſwyk. When you come to the eaſt point of Croiſwyke, then there ſhooteth a ſand off frō the land, which you may ſound at three fathome round about. The chanel is 8, 9, & 10 fathome deepe.

The weſterly ſteeple is Croiſwyke, the high ſteeple ſtanding eaſtward is Pulien.

III.

How you may ſayle into the River of Nantes, and the Baye & the ſituation of the Iland of Heys

The River of Nantes. IF you will ſayle up the River of Nantes, and are within the banck called the Four, then you muſt runne to the land of Croiſwyke, half a peeces ſhotte along by it, untill you come to the Rock with the hole, where you ſee through as if it were a gate, there in the chanel it is deepe 8 & 9 fathome, but againſt the rock it is 5 or 6 fathome deepe, and when you goe by the north point of the river, it is there 3 & 4 fathome deepe at lowe water, within to S. Nazaret it is ſtill deeper water, as 5, 6, and 7 fathome. S. Nazaret is a ſharp ſteeple ſtanding upon an out-point, a litle within the north point of the River. The Rock with the hole is called Pierrepaſſe, from it you muſt runne at two towes length in, upon the north point of the River, whereon the ſharp ſteeple called S. Nazaret ſtandeth, untill you are within the rocks called les Porceaux, which lye in the middle of the River, betweene the Rock with the hole and the ſteeple aforeſaid, and appeare above the water at half tyde. A litle within S. Nazaret, upon the northland ſtandeth a ſharp ſpere ſteeple, when that ſteeple is without the ſouth land, then you cannot hurt your ſelf upon that rocke, & there runne northward about. A litle eaſtward there lyeth another ſand with rocks, where you may runne eaſtward about with great ſhippes, for there it is verie ſlatte to the point: being within the point, you may anckor at 6 or 7 fathome. Eaſtward from S. Nazaret there lye two villages, betweene thoſe villages it is verie flat, & ſtone ground, there you muſt chuſe the ſouth land. But when you are half waie betweene the eaſterlyeſt village, then you may ſayle upon the point of the village, till you be paſt it, but againſt the eaſterlyeſt village on the ſouth ſide, at the point there lyeth a banck called Pinbuf, it reacheth almoſt half into the River, yet you may goe betweene the point and this banck at 5 or 6 fathome, for this is the Rode for ſhippes that will put to Sea.

S. Nazaret

The Pourceaux.

Pinbuf.

A league further inwards in the middle of the River, there lye two banckes of ſtones, which at lowe water are ſeene above it, theſe banckes lye in the chanel. At Pelerin is the lading place, almoſt three leagues frō Nantes, from whence the wares come in boates to lade the ſhippes. But this is Pilot water, which you commonly take in by the aforeſaid ſharpe towre of S. Nazaret, where when you are within, you may anckor at 10 or 12 fathome, and ſtaye for a Pilot. Thoſe that from S. Nazaret will goe to Sea againe, muſt doe as followeth, ſayle along by the northland, untill you come without the ſecond point of the River, turne then off from the north land into the middle of the River, and ſayle a great way ſouthward about Pierrepaſſe, and then when you may ſee the rock (which lyeth north from Pierrepaſſe) without the point, there it is four fathome and an half deepe, and when Pierrepaſſe is north-northweſt, and n. & by w. from you, then you are right againſt the rocke, and there you have deeper water, at 5, 6, and at laſt 7 fathome, but when you come into the Trave of Picqueliers, then you have 10 and 12 fathome water.

Pelerin.

Before the River of Nantes there lye many banckes, but at half flood you may well goe over them. And the ſouth point of the River of Nantes, is diſtant from the north point, n. n. w. & ſ. ſ. e. 4 leagues. Then this land runneth into a great creeke, and there men runne into the Baye. Theſe uneven banckes in the River of Nantes are verie unlike, ſometymes you caſt 15 fathome, and preſently after but 7 or 8 fathome.

To ſayle to the baye.

But to ſayle from Bel-Iſle to the baye of Armentiers, then goe on e. ſ. e. till you ſee the Cloſter of Armentiers, but before the River of Nantes it is uneven and banckie, when you ſee the Cloſter of Armentiers eaſtward from the trees which ſtand into landward beyond the ſaid Cloſter, then goe forward eaſt, and e. and by n. ſo long untill that the Cloſter commeth within the caſtle of Armentiers, then you are within the Monck-lege, then goe e. ſ. e. untill you are within the rock called Pierremen, which you may goe about on both ſides, and when you may ſee the Grave open, then you may anckor at 7 or 8 fathome, & goe on land to fetch a Pilot, for it is Pilots water. From Bel-Iſle to Armentiers the courſe is e. ſ. e. about 12 or 13 leagues diſtant.

Armentiers.

Monck-lege.

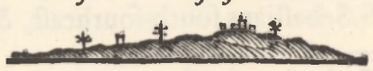
Pierremen

From

Heys. From Armentiers to Heys it is ſouth and by eaſt 7 leagues. And from Bel-Iſle to Heys it is ſ. e. 16 leagues. The Iland of Picqueliers lyeth right upon the point of Armentiers. Between Armentiers or Picqueliers & Heys, it is an uneven chanel, with manie ſhallowes and banckes, of 4, 5, 6, and 7 fathome.

Picqueliers. To knowe Heyes you muſt underſtand, that you may ſee it beneath on the hatches, when you are at 35 fathome in the Sea, on the eaſt ende of Heys there ſtandeth a ſharp ſteeple, & ſome houſes and milles, ſo that it is wel to knowe.

When you ſayle along by Heys almoſt 3 leagues of it ſheweth it ſelf thus.



In the chanel betweene Heys and Bel Iſle it is 35 and 40 fathome, but when you are within the chanel then it is but 25 fathome deepe.

Under Heys there is no great good Rode, for there it rolleth too much as if the water came from under the Iland, and at the north ende it is flatte water. The Rode is, when the ſteeple of the church is ſouthweſt from you, at 8 or 9 fathome, but you lye not ſafe there but from a ſouthweſt, & a weſt-ſouthweſt winde, and there it raketh alwaies verie much. Rode under Heyes.

From Heyes to the Kiliates, or the Iland of S. Marten the courſe is e. ſ. e. 12 or 13 leagues. Betweene them both lyeth the Barſe of Olone, about half a league frō the land of Poictou, but how you muſt ſhunne it & ſayle by the Kiliates is declared in the chapter enſewing.

Thus the land of Poictou ſheweth it ſelf betweene Heyes and the Iland of S. Marten when you ſayle along by it, being four leagues from it.

Olone.



IIII.

What Moone maketh a high water on theſe coaſts, and of the falling of the ſtreames.

VPon all the Coaſts of Britaigne and Poictou, as alſo upon all the Ilandes there aboutes, a ſouthweſt & a northeaſt moone maketh a high water. But within the Havens, Rivers, Creekes and Bayes, a ſ. w. and by w. and a n. e. & by e. moone, or a point later, as the Havens or Rivers ſtretch deeper into the land, and there you reckon no falling of ſtreames.

V.

At what depths you may ſee the land, about theſe Coaſts and Ilands.

AT the Seims and Sheetes you may ſee the land at ſixtie and five and ſixtie fathome.

Againſt the Eaſt and Weſtpenmarques you may ſee the land at 55 and 60 fathome.

You may ſee Beliſle at 60 fathome, but then you muſt runne into the ſhorones or els to the toppe of the maſt, but at 55 fathome you may ſee it beneath.

Heys a man may ſee at 60 fathome with cleare wether. You may ſee S. Martens Iland and the north ende of Olderdom or Oleron at 30 and 27 fathome.

VI.

How theſe Lands lye one from the other.

FRom the Ras of Fontenay to Weſtpenmarques the courſe is ſoutheaſt — — — — 9 leagues.
But from the weſt ende of the Seims to Weſtpenmarques eaſt-ſoutheaſt and ſomewhat ſoutherlyer — 13 leagues.
From Fontenay to Odegerne e. ſ. e. — — 5 leagues.
From Odegerne to Weſtpenmarques ſ. e. & by ſ. — 5 leagues.
From Weſtpenmarques to Eaſtpenmarques e. ſ. e. 7 leagues.
From Glenant or Gloylant to Groye eaſt & weſt — 9 leagues.
From Groye to the Weſt ende of Bel-Iſle ſouth and by eaſt, and ſouth-ſoutheaſt — — — — 5 leagues.
From Glenant or Gloyland to Beliſle ſ. e. & by e. 12 leagues.
From the northweſt ende of Beliſle to the ſoutheaſt ende ſouth-eaſt and by eaſt — — — — 3 leagues.

From Weſtpenmarques to Beliſle eaſt-ſoutheaſt 21 leagues.
From the ſoutheaſt-ende of Beliſle to Picqueliers or Armentiers eaſt-ſoutheaſt — — — 12 leagues.
From Beliſle to the Cardinal eaſt and by north and ſomewhat northerlyer — — — — 4 leagues.
From Beliſle to Croiſwyke e.& by n. & e. n. e. 11 leagues.
From the Cardinal to Olduynen e. n. e. — 7 leagues.
From the Weſt-point of Croiſwyke, to the North-point of the River of Nantes eaſt-ſoutheaſt — — 3 leagues.
From the point of the River of Nantes to Picqueliers ſouth-ſouthweſt — — — — — 7 leagues.
From Pierremen to Armentiers w. ſ. w. — 3 leagues.
From Armentiers or Picqueliers to Heys ſ.& by e. 7 leagues.
From the eaſt-ende of Beliſle to Heys ſoutheaſt, and ſomewhat eaſterlyer — — — — — 16 leagues.
From Heys to the Barſe of Olone e. & by ſ. — 7 leagues.
Frō Heys to the Kiliates or S.Martens Iland e.ſ.e. 12 or 13 leag.

VII.

How theſe Countries are diſtant from other Countries.

From the Seims or Fontenay to the Krage of Oleron ſ. e. and by e. — — — — 72 leagues.
From the Seims to Bayone in France ſ. e. — 112 leagues.
From the Seims to S.Sebaſtians ſ. e.& by ſ. — 112 leagues.
From the Seims to Bilbao ſouth-ſoutheaſt and ſomewhat eaſterlyer — — — — 101 leagues.
From the Seims to S.Andero ſ. ſ. e. — — 96 leagues.
From the Seims to Cape de Pinas or Tores ſouth 88 leagues.
From Seims to Ribadeus ſouth & by weſt — 93 leagues.
From the Seims to Cape Ortegal ſouth-ſouthweſt and ſomewhat ſoutherlyer — — — — 91 leagues.
From the Seims to Cape Finiſterre ſouthweſt & by ſouth, and ſomewhat ſoutherlyer — — — 112 leagues.
From the Seims to Sorles north-northweſt — 46 leagues.
From Seims without about Heyſant n. & by w. 10 leagues.
From Weſtpenmarques to Viverus ſouth-ſouthweſt 88 leagues.
From Weſtpenmarques to Cizarga ſ.w.& by ſ. 104 leagues.
From Groye to Cape de Finiſterre ſ. w. — 123 leagues.
From Beliſle to the River of Burdeaux ſoutheaſt 50 leagues.
From Beliſle to S.Sebaſtians ſouth-ſoutheaſt, & ſomewhat ſoutherlyer — — — — 80 leagues.
From Beliſle to S. Andero ſouth — — 72 leagues.
From Beliſle to Cape de Pinas or Tores ſ. ſ. w. 80 leagues.
From Beliſle to Cape de Ortegal ſouthweſt — 91 leagues.
From Bel-iſle to Cape de Finiſterre ſouthweſt 123 leagues.
From Heys to Cape de Pinas ſ. w. & by ſ. — 73 leagues.
From Heys to Cape Ortegal ſ. w.& by w. — 94 leagues.

VIII.

Vnder what degrees theſe Countries lye.

THe Seims lye under — 48 degrees 8 minutes.
The Weſtpenmarques lye under 47 degrees 50 minutes.
The Iland of Beliſle lyeth under 47 degrees 25 minutes.
The Iland of Heys lyeth under — 46 degrees 48 minutes.

Heere followeth the Carde N. 6.

A TRVE


POICTOU
GUAS;
COGNE
OCEANUS AQUITANICUS
CAIAE
PARS
BIS
Afbeeldinge der Zeecuſten van Vrancrijck, van Olone af zuijdwaert tot Bajone, voort de cuſte van Biſcayen tot aende C. de Machicaca, beſtelt op zijne rechte diſtantien van mijlen, ſtreckinghen ende hoochten
Pourtraict des coſtes marines de la France, de Olone vers le zuijſques a Bayone, et de Biſcaye iuſques au Cape de Machicaca, ſelon ſes vrayes diſtances de lieus, routes et hauteurs du pole
Rochelle
Tour de four
Tour de Carel
La Charente flu.
Soubiſe
S. Maſſare
Fronſac
Lan
Dangely
Meers
Sales
Marennes
Oleron
Plom
Den Bos
Brunt
Baniarre
Laverdijn
Porto maran
Luſſoer
Abdije S. Iân
S. Martin
Poſſe de Loyx
Ile de Re
S Martens Eylant
Orberſhiers Abdije
Olone
De Baers
Peerthus
Craige
Mortaigne
Talemont
Royan
Garonne fluvius
Soulac op Zee
Pouillac
Cadornes
Chaſtillon
Anchiſes
Accaſon
S. Magarita
Minaſora
Cabriton
Baiona
Bedarte
S. ſan de luz
Pinos de S. Anna
S. Anna
Fonteravia
C. Figuer
Paſſaie S. Maria
S. Sebaſtiaen
Orio
Heis
Urcamia
Duitſche mijlen 15 in een graet. Lieues d'Allemaigne 15 en un degre
Spaenſche mijlen 17½ in een gr. Lieu. d'Eſpagne 17½ en un deg.
Engelſche en Franſe mijl. 20 in een gr. Lieu. Anglois. et Francoiſes 20 en un degre
Duitſche mijlen 15. in een graedt
Comac
Bourg
Bleu
Roche de ton
Lermondt
Bas Fil
De galeh
Vier huijſſen
Eylandt
Sertruſſe
Bordeaus
Duijvels huys
S. Surijn
Noorder Eſels
Movages
Schannes
Cardan
Slot
Duijve-cot
Ontwerp vande Garonne, oſte Riviere van Bordeaux, hoemen in't op en af ſeylen (vade mont) af tot voor de ſtadt oft Bordeaux) alle ſandē en platen ſchouwen ſal.
Pourtraict de la Garonne, comment on montant et devallant ladicte Riviere (de la bouche iuſques a la ville de Bordeaux) on euitera tous bancs et lieux
Conca Reede
Gatarija oſte Coninckhaven
Deva
Hendarrao
C. de Machicaca
Barmea
Placentia
6

CHAPTER VI.

A TRVE DESCRIPTION

of the Sea-coaſts of France and Biſcayen, betweene the Iland of Heys, S. Iohn de Luz and Cabo de Maſſichaco.

I.

To ſayle into the Kiliates and Porthus, and ſo to Brouwage: as alſo the ſituation of Mammeſont.

Baerſe of Olone.

THe Kiliates or S. Martens Iland is diſtant from Heys eaſt-ſoutheaſt 12 or 13 leagues. If you will ſayle to Kiliates then runne eaſt and by ſouth, and eaſt-ſoutheaſt, till you be paſt the Baers of Olone, which lye about two leagues from Olone, & eaſt & by ſouth 7 leagues from Heys, ſo that it lyeth right in the chanel, and becauſe it is nothing els but rockes and ſtones, therefore it is not good to goe to neare to it in darke wether, you may well ſayle round about them, and at lowe water they are ſeene. He that will ſayle from Heys to Kiliates within through the Baers, firſt he muſt hold his courſe eaſt, and being within the Baers of Olone, then ſayle to that land of Poictou, that reacheth from Olone to S. Martens Iland eaſt-ſoutheaſt, & from Olone to the Picqueliers n. w. then ſayle by the land of Poictou, and leave two third-partes of the water to S. Martens Iland, and one third-part towards the firme land, and ſayle in this ſort ſo long untill S. Martens church be ſ. ſ. w. from you, then you may goe well over the banck before S. Martens and anckor at 5 or 6 fathome. But when the church aforeſaid is ſouth and by weſt from you, (for on that ſide of the Iland ſo farre inwards it is all banckie) then the chanel is deepe there 12 fathome, and when S. Martens church is ſouthweſt from you, then it is ſtill dryer, then you may well turne toward the Iland at 4. or 5 fathome, as I ſaid before, it dryeth up there verie quickly, for from 10 fathome you finde preſently but five or ſixe fathome.

To ſayle into the Kiliates.

Banck before S. Martens.

If you will goe with a ſhippe that draweth much water over the banck which commeth off from the Cloſter to Urck, then ſtaye till it be half flood, for upon the banck at lowe water it is no more then three fathome and two foot water, but when it is ſomewhat flowed a great ſhippe may well goe over it. When the ſteeple of Liſors ſtandeth at the north-ende of Urck or Travelenes, then you are upon the dryeſt part of the banck: but when the ſteeple is over the ſouth-ende of the Iland, then it beginneth to be deepe againe. The markes to keepe the deepeſt water when you goe over the banck are theſe: hold the great ſteeple of Rochell a bowe length ſouthward from the boxe-tree which ſtandeth upon the northerlyeſt height, and ſo ſayle over the banck. If you will anckor in the Rode before the Cloſter under the banck, then runne at ſixe and ſeven fathome, and anckor there.

Markes of the deepeſt water.

But if you will not anckor under S. Martens, but will goe forward to the Brand-Iland then place the ſteeple of Leſors or Luſſoer over the houſe which ſtandeth upon the litle Iland, & keepe it ſo, and then you cannot miſcarrie upon Laverdin.

Laverdin.

The Laverdins are certaine rockes lying a quarter of a league from the eaſt-point of S. Martens Iland, and with a lowe water after a ſpring-tyde are ſeene above the water. You may alſo ſayle through betweene La-verdin and S. Martens Iland, there it is deepe ynough. The markes of Laverdin are theſe, when the great ſteeple of Rochel commeth upon the ſouth-point of the Bos, and that the other point northward from the Bos be right over againſt the north-point of the Bos, then you are right upon the Laverdin, ſo that whenſoever you goe into the Kiliates, and that Rochell is a ſhippes length without the point of the Bos, then you are paſt the Laverdin, then you may boldly goe ſoutheaſt and by ſouth unto the Brand-Iland.

Markes of Laverdin.

To ſayle into Porthus which lyeth ſoutheaſt and by eaſt from

To ſayle into Porthus. from Heys diſtant 15 leagues, it is a wide and broad haven, reaching in betweene S. Martens Iland and Oleron or Olderdom eaſt-ſoutheaſt. When you will ſayle into Porthus, you muſt ſayle along by S.Martens Iland, to the eaſt-ende thereof, and then if you will anckor under the Bos, keepe the great ſteeple of Rochel a ſhippes length without the Bos, then you cannot be hurt upon Laverdin, but if you will anckor under the Abbay or Cloſter of S.Martens Iland, then keepe the ſaid Cloſter without the ſandie point of the ſame Iland, and ſo runne into the ſandie bay, on the eaſt-ſide of the cloſter, & ſo you ſayle not alſo by Laverdin.

The Crage of Oleron. At the north-ende of Oleron lyeth the Crage, which is a verie foule dangerous rock, when you ſayle through betweene S. Martens Iland and Oleron, and if you goe up into the toppe of the maſt, then you may ſee it lye in the water, goe no nearer to it by night then 12 or 13 fathome.

Brant-Iland. When you come by the eaſt-ende of S. Martens Iland, and ſayle into Porthus, and meane to goe into Brant Iland, then you muſt ſayle to it ſoutheaſt and by eaſt. When the ſteeple of the Four is over the Burnt or Brant Iland, then you may caſt your ballaſt over borde, there it is 12 fathome deepe.

River of Xarante. But if you will ſayle up into the River of Saranten, then goe ſouthward about the Burnt Iland, you may alſo ſayle about it northward, and ſayle by the ſteeple of the Four, at a lowe water this River is drie four leagues within the land.

to ſayle to Bronwage. To ſayle from the Burnt Iland to Browage, ſayle ſ. ſ. e. and keepe the litle ſteeple of Heers ſo long weſt from the wood, until the ſteeple of Four be over againſt the red tyled houſe which ſtandeth upon the ſouth-ſide of the river of Sarenten, then ſayle in ſoutheaſt, and ſometimes ſ. e. and by e. untill the village of Front which lyeth upō the ſtrand be north from Soubiſe, when Soubiſe commeth within the village aforeſaid, and the mill above the village, then you are againſt the point of the eaſt-banck then goe ſoutheaſt and by ſouth, and ſet the uttermoſt ſteeple of Hers upon the uttermoſt hillock of ſand whereon the Gallowes ſtand, and keepe them ſtanding ſo, and ſayle ſ.ſ.e, and then when the ſteeple of Hers cōmeth to the eaſt-corner of the valley in the wood, then hold that ſharp ſteeple right over the eaſt-corner of the valley in the wood, & ſayle ſo untill you are within the Creeke or River of Brouwage. At Brouwage there was ſomtime no one houſe ſtanding, whereas now there is a fair ſtrong towne, which hath beene ſo within theſe fiftie yeares.

East-back.

Banjaert. The Banjaert lyeth along by the land of Oleron, & reacheth into the Burnt Iland, at a lowe water it is above it, and the foot or tayle thereof reacheth out farre northward. If you muſt laveere outward from the Creeke to the Burnt Iland, then ſet not the ſteeple of Rochel without the Burnt Iland, before you are right againſt it, becauſe of the Banjaert, for ſo you can doe no hurt to your ſelf.

to ſayle into the Mammefondt. To ſayle out of the Sea into the Mammefond, you muſt underſtand that it reacheth in eaſt and by north, and e. n. e. and is deepe ynough for a great ſhippe, when you come within it there runneth up ſoutheaſt a river, where you lade ſalt, going towards Salis, and when paſſing by it you come to the other point of Mammefont, then there lyeth a Flatte, which you muſt goe northward about with theſe markes: you muſt hold the mille which ſtandeth upon the land of Oleron over againſt the trees, and ſo you goe northward about the Flatte, & there is the Rode for thoſe that will fetch ſalt at Oleron.

Markes to ſhūne the Flatte.

to ſayle from with in through Porthus. But if you will ſayle from within out of the River againe, then you muſt ſayle about ſo long eaſt, untill that Salis be over the trees that ſtand within Merven. Now to ſhunne the tayle, or the Sand which ſhooteth off from the point of Oleron, when Salis is over againſt the trees, then ſayle north and by weſt to the Burnt Iland, but bring Duke Charles ſteeple ſouthward frō the Burnt Iland, that you may not ſayle under the Banjaert, when the ſteeple of Hers commeth upon the wood hold it ſtanding ſo, until that Rochel commeth over againſt the north-corner of the Burnt Iland, and then ſayle out at Porthus. From the weſt-ende alſo of S.Martens Iland there ſhooteth out a Sand, which you muſt ſhunne.

A Riffe at the weſt-ende of S. Martens

Wrckamia There lyeth a great rowe of Rockes in the Sea, upon the which at lowe water there is not above 4 or 5 fathome, they are called Wrkamia, the Sea ravels alwaies much upon them, theſe Rockes lye ſouth, and ſ. and by w. from Heys 13 leagues, from Olone ſ. w. and w. ſ. w. from S.Martens Iland, and weſt from the Iland of Oleron.

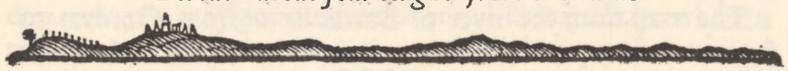
To know S.Martens Iland there ſtandeth a high ſteeple with a high houſe, and a mill upon the ſtrand, and you ſhall ſee four or five high downes. Upon Oleron alſo there ſtandeth a high ſpeere ſteeple upon a redde point, whereon you may ſee ſome trees alſo ſtanding, and ſouthward there are craggie downes in two or three places.

Thus S.Martens Iland ſheweth when it is n.& by e. from you.

When you ſayle into or out of Porthus then S. Martens Iland ſheweth thus.



Thus Oleron or Olderdom ſheweth it ſelf, when you are before Porthus about four leagues from the land.



II.

To ſayle into, and out of the River of Burdeaux.

Cordam. FRom the Krage of Oleron to the ſteeple of Cordam it is ſ. ſ. e. and ſouth and by eaſt 13 leagues. To knowe the River you muſt underſtand that the downes that lye eaſt or north from the ſteeple of Cordam are five or ſixe white high downes, and that the land ſouthward from it is lowe land, black downes overgrowne with heath.

Monages. The Monages or Monaſſes reach off from the ſteeple of Cordam towards the high downes upon the north-land, which is a ſmall white ſand, which you may ſound round about at ſeven fathome, till you be within the ſteeple of Cordam, which ſtandeth upon the ſame Sand, yet the ende is verie ſteepe, for by the point of Monages it is 20 fathome deepe.

To ſayle up into the River of Burdeaux, called La Garonne, you muſt underſtand that the right chanel reacheth in n. e. and by n. till you be at the high downes upon the north-land, thoſe high downes you muſt ſet northeaſt and by north from you, & goe in n. e. and n. e. & by n. as winde and ſtreame ſerveth, untill you come to a peeces ſhotte about thoſe high downes, then the caſtle at Talemont wil ſtand within two ſhips length ſouthward from the point of Maſſie, whereon all the milles ſtand, and the village of Soulack within the land, will come within two ſhippes length of the ſouthpoint of the River, keepe the caſtle that ſtandeth upon the Sand two ſhippes length without the point of Meſſie, and then goe ſoutheaſt and by eaſt, till you are within the point of Meſſie, whereon the milles ſtand, which is 4 leagues within the River.

to get to the haven, To get this haven when you come out of the Sea, then know that when the ſteeple of Cordam ſtandeth e. & by n. from you, and that you rũne upon it to the markes aforeſaid, that is, when the high downes upon the north-land, ſtand n. e. & by n. from you, then you ſaile without the South-aſſes, that is ſouth about from them, then goe to the downes aforeſaid n. e. & by n. and ſo further inward as I ſaid before, that is the right chanel. But when Cordam ſteeple is e. ſ. e. from you, then you may alſo runne upon it forward through the Aſſes, to the markes aforeſaid of the high downes, and this chanel is three fathome deepe.

And when the ſteeple of Cordam is ſoutheaſt, and ſ. e. & by e. from you, there goeth alſo a wide and broad chanel through the North-aſſes of 2 fathome deepe, which you may alſo rũne into, to the aforeſaid markes of the high downes, and goe forward upon them northeaſt, and n. e. and by n. as aforeſaid.

How to ſayle into the ſouth-chanel. To ſayle into the ſouth-chanel, you muſt knowe that it runneth in by the land: ſet the ſteeple of Cordam north from you, and when Royanen is northeaſt, and northeaſt & by north from you, then the higheſt ſteeple commeth within a ſhippes length of the middlemoſt point of the north-land, and you are upon 5 fathome on the ſtrand, then ſayle upon Royan and it will ſtill be dryer, that is four, and alſo three fathome, and upon the innermoſt threſhold of the chanel 15 and 16 foot at high water, then when the houſe that ſtandeth weſtward of Royan cõmeth into the middle of the Sandbaye, then rũne over the threſhold, which being over runne to the point of Miſſie, within this threſhold of the ſouth-chanel it is 20 fathome deepe, & on the ſouth land you may anckor at 6, 7, and 8 fathome.

You may alſo goe into this haven, all ſounding with your lead along to Monages, at 4 and 5 fathome, till you be within the Flat which lyeth without the chanel.

There runneth a chanel alſo in by the north, which is verie crooked, you muſt runne to the ſtrand at 4 fathome, and keepe along by it, and then comming againſt the north-corner of the high downes, there it is two fathome deepe at the deepeſt, and that is at the threſhold of the chanel, but preſently after it will be three fathome againe, then you muſt hold croſſe off from the land, untill you get deepe water, that is 4 or 5 fathome, and being there, runne up to Royan as aforeſaid.

Now when you are within the haven, and come againſt the point of Meſſie, which is the point whereon the milles ſtand, then goe over to the broken caſtle called Caſtilion ſ. e. & by ſ. which is 8 leagues from Miſſie, then you muſt goe along by the ſouth-land ſoutheaſt into Pouliack, which is almoſt 3 leagues. Pouliack

In the chanel betweene Monages & the point of Miſſie with the milles, it is 10, 11, and 12 fathome deepe: but againſt the ſouth-

ſouth-chanel it is 20 fathome deepe, but out of the chanel whether it be upon the north or ſouth-ſide it is dryer as 5, 6, 7, and 8 fathome, you muſt runne along cloſe by the point of Meſſie, there alſo it is 22 fathome deepe, and by the point of Monaſges it is alſo 20 fathome deepe.

Now when Royan commeth on the weſt-point whereon the milles ſtand, keepe it ſo ſtanding, and goe ſ. e. and by ſ. to Chaſtillion: in this reach it is moſt five fathome deepe, but going nearer to the north or ſouth-ſide it is dryer, and on the north-ſide it is full of ſand, where you may alſo ſayle through if you knowe it. From Chaſtilion to Pouliack it is ſouth-eaſt almoſt 3 leagues, as aforeſaid, and there it is 4, 5, 6, and 7 fathome deepe. Chaſtilion

Againſt Pouliack in the middle of the River, there lyeth an Iland, which you goe eaſtward about ſtreight up to Bley, and there you muſt goe over with the tyde, for at a lowe water it is but a fathome deepe, before Bleye it is 3 or 4 fathome deepe againe, and you runne out by the north-land at 3, 4, and 5 fathome, and when you come before the river which reacheth up northwards, then ſayle firſt on upon the middle of the Iland, & ſo along by it, untill you are againſt or paſt the gallowes, which ſtandeth upon the eaſt-point of the River, then along againe by the north-ſide to the four houſes, then you muſt put over to the high ſteeple of Dubelot or Duvecot, and when you are on the ſouth-land by the ſteeple of Dubelot, then you muſt preſently croſſe over againe eaſtward about to the weſt-point of the bocht, then goe along by the eaſt-land againe to Larmond, then you muſt croſſe over againe to the houſes of Chartroyſen, and ſo along by the ſouth-land to the towne of Burdeaux, before Burdeaux it is 4 or 5 fathome deepe, in the crooking it is 5, 6, and 7 fathome. To conclude in ſayling up the River there are many depths, and it is full of Sands, ſo that you muſt often croſſe over from one land to the other, as I have ſaid before. Dubelot.

When you will ſayle out of the River of Burdeaux, then you muſt ſtaye at Royan for good wether and a fore-ebbe, & therewith goe out, and when you goe out, keepe the north-downes northeaſt and by north from you, ſo long untill that the ſteeple of Cordam be eaſt-ſoutheaſt from you, then you may ſayle w. n. w. through the Aſſes into the Sea.

The North-Eſels or Aſſes may well be ſounded at ſixe or ſeven fathome, that chanel is wide and broad, and 12 or 13 fathome deepe.

III.

To ſayle into the chanels of Occaſon, Bayona, and S. Iohn de Luz.

FRom Cordam to Accaſon it is ſouth and by north diſtant 20 leagues, betweene them both there lyeth a tyde-haven called Anchiſes, which may be entered by a great ſhippe at high water, for it is a deepe tyde-haven. Anchiſes.

The coaſt from the river of Burdeaux or from Cordam to Accaſon is flatte, and it is there all downie land to S. Iohn de Luz.

Right before the haven of Occaſon, there lye three Ilands, which you may ſayle in by on the north or ſouth-ſide. Accaſon.

The north-chanel reacheth in ſoutheaſt, there ſtand two high ſteeples upon the ſouth-land, which you muſt hold two maſtes length diſtant from each other, and ſayle ſo upon them untill you are in. Right within the ſouth-point lyeth a rowe of rockes under the water which you muſt ſhunne, and within about the middle of the haven there lyeth a rowe of blinde rockes, but when you keepe the ſteeples ſtanding ſo, then you rũne through betweene the rockes at four fathome, and on the ſouth-ſide you may ankor at four fathome lowe water. North-chanel.

The ſouth-chanel runneth in betweene the ſouth-point and the ſoutherlyeſt Iland, and eaſtward from the village of Accaſon there ſtandeth a black hillock upon the land, when that is n. n. e. from you, then goe right in upon it, & when you come betweene the innermoſt and the north-point of the haven, there lye many blinde rockes on both ſides under the water: but goe right upon the black hillock northeaſt, and northeaſt and by north, before the village or ſmall towne, and there anckor at 8, 9, and 10 fathome, in the north-chanel alſo you have 9 or 10 fathome water, betweene the north and ſouth-point of the haven it is 5 fathome deepe, and within it is 12 fathome deepe. South-chanel.

From Accaſon to Bayona it is ſouth and north 17 leagues, betweene them both lyeth Cabriton, before which in former tyme there was woont to be a through-fare for the ſhippes that would ſayle into Bayona, through a chanel of 7 leagues long. The chanel or haven of Bayona runneth in betwene two ſleight ſtrandes, e. ſ. e. and e. and by ſ. There lyeth a Baerſe before the haven, and upon the land there ſtand two trees or maſtes keepe them one upon another, & ſo runne into the haven, there is at a high water & a ſpring ſtreame full three fathome, at daylie tydes two fathome and an half, but at lowe water but three foot Bayona. Cabriton.

foot water, when you come about the point, you turne up ſouthward,and anckor before the towne at 5 fathome, within on the north-ſide it is pyled, to keepe the chanel deepe: and it is Pilots water.

S. Iohn de Luz. Frō the haven of Bayona to S. Iohn de Luz the courſe ſouth and by weſt 4 leagues. S.Iohn de Luz is a tyde-haven, as if it were a peere,you muſt goe in there at high water,the towne lyeth on the right hand, when it is a ſpring-tyde the haven is ſo drie, that you may goe driefoot over it, but it is a baye wherein men lye.

I I I I.

The ſituation betweene S.Iohn de Luz and Cabo de Maſſichaco.

Pingnons of S.Anne. THree leagues ſouthweſt,and ſ. w.& by w. from S. Iohn de Luz lye the rockes called the Pingnons of S. Anne, which lye cloſe by the land. A league weſtward from them lyeth the Creeke of Fonteravia, it is a faire baye, where upon the head there ſtandeth a caſtle, and ſouthward from it a church.Upon the weſt-ſide of this Baye lyeth the Cape de Figuer, & upon the point of the Cape lyeth a rock ſomewhat diſtant from it,but the Sea cannot there paſſe through betweene them except it be at a verie high flood, then it breaketh a litle through: If you will anckor in this Baye of Fonteravia,caſt anckor at 8 or 9 fathome,ſo that the aforeſaid rock be n. n. w. from you, there is it faire ſand-ground, where you may lye ſafe from hurt by a n.w. winde. Lying in the Baye you have the Pingnōs of S.Anne e.n.e. and Cape de Figuer n.w.& by w. from you.

Cape Figure.

Fonteravia.

A league weſtward from Cape de Figure lyeth Paſſaje,alſo a faire haven, on the eaſt-ſide of the haven, which is verie narrowe, there lyeth a round rock, ſo that there it is ylle going in with an ebbe, but with a flood it is better, without it is verie faire, there are no ſhallowes at all, but onely the aforeſaid round rock. The towne lyeth right within the haven on the eaſt-ſide, where men anckor at ſeven fathome.

Paſſaie.

S. Sebaſtian. Almoſt three leagues weſtward from Paſſage lyeth S. Sebaſtian, betweene thē both there is a ſand-bay, which lyeth within a Creeke, and there there goeth a drie litle river up into the land, there come manie barkes into it when it is faire wether.

S.Sebaſtians haven is good to goe into, you goe in betweene two caſtles, whereof the eaſterlyeſt is the greateſt,it ſtandeth almoſt as if it ſtood upon an Iland,but it ſtandeth upō a high hill, the weſterlyeſt ſtandeth upon a ſmall Iland or Rock, which is a four-ſquare towre: in ſayling in, in the narrowe waie betweene theſe two caſtles lyeth a rock which at lowe water is 6 fathome deepe, and when the ſtorme commeth out of the Sea it alwaies ravels upon it, it lyeth neareſt unto the eaſt-land,& on the weſt-land it is 10 fathome deepe.Now to ſhunne this rock as you enter in, there is a cloſter eaſt from the weſterlyeſt Iland,and there ſtandeth a ſteeple,which come one over againſt the other,which you muſt runne eaſtward about.

Now to anckor without S.Sebaſtians in the Rode, you muſt hold the high hill, which lyeth upon the point of Cape de Figure, without the eaſterlyeſt Iland aforeſaid, and then you may anckor there,but if it fall to be covered under the Iland,thē you cannot anckor before S.Sebaſtians in the Rode, but when you are through the narrowe ſtrait within the rock, and paſt the caſtles,then you may anckor on the eaſt-ſide under the great caſtle, there is the beſt Rode: & behinde the caſtle aforeſaid there goeth up a litle water from the eaſt-caſtle you may goe on foot along upon a high ſtrand upon firme land at lowe water,but the ſtrand at high water is covered: it is a Creeke, & within before the towne it is deepe 5, 6, & 7 fathome, & on the weſt-ſide under the ſmall Iland you cannot anckor, for there it is flat & drie.

Such as come out of the weſt and ſeeke to goe into S. Sebaſtians, they muſt keepe by the land, for it is faire. And a league weſtward from S.Sebaſtians haven lyeth a Sand-bay,where you may anckor as deepe as you will, but they that from thence will goe into S.Sebaſtians,they muſt goe in in the middle of the water, betweene both the Ilands, and leave the litle Iland whereon the chappel ſtandeth on ſtarre-borde, running ſo towards the firſt or ſecond wall of the towne, and anckor there, the ſhalopes or barkes will come aborde to you, and help to gette you into the haven betweene the walles.

From S.Sebaſtians to Cape de Maſſichaco the courſe is w.n. w. 13 leagues,betweene them lye theſe Rodes, to wete, Gaturia and Deva. Gaturia. Deva.

Gaturia lyeth from S.Sebaſtian diſtant w. and by n. and w. n.w. 8 leagues: it is a round Baye or Creeke, where it is ſafe lying againſt a ſouth-winde, you may lye behinde the weſt-point before the towne upon faire Sand-ground, a n. w. winde is there corner-winde. This Baye is cōmonly called Kings-haven.

Along the coaſt of Biſcaya betweene S.Iohn de Luz and Gaturia it is al over faire ground,& good anckoring at 20 fathome.

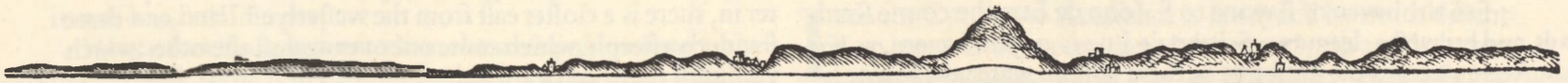
From Gaturia to Deva it is 2 leagues to the weſt, it is a falling water which commeth out of the hill.

Cape Maſſichaca. Three leagues weſtward lyeth the out-point of Maſſichaca.

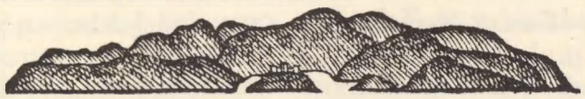
Thus the land about the bocht of S.Iohn de Luz ſheweth it ſelf from Cabriton till you be paſt S.Sebaſtians.

The land of Bayona and Cabriton is downie land and reacheth ſouth and north.

The land Fonteravia reacheth ſouthweſt and northeaſt but by S.Sebaſtians it reacheth eaſt and weſt.



Thus S. Sebaſtian openeth it ſelf when you have the ſight of it ſeven leagues from it.



V.

Of the running of the ſtreames, and what Moone maketh a high water heere.

IN theſe places they reckon no falling of ſtreames, for in all the havens lying upon theſe coaſts a ſouthweſt & northeaſt moone commonly maketh a high water, but within the havens or within the land a point later, that is a ſouthweſt and by weſt,and a northeaſt and by eaſt moone.

V I.

Of the depths againſt theſe places, and at what depths you may ſee the land.

VVithout Heys it is 35 fathome deepe,and then you may ſee the land as you ſtand belowe upō the hatches, when it is cleare wether you may ſee it at 60 fathome.

You may ſee the land of Olone beneath at 25 & 30 fathome.

S. Martens Iland and the north-ende of Oleron may be ſeene at 28 and 30 fathome. When you have a ſight of S. Martens Iland, then on it you ſee a high ſteeple and a high houſe, and on the ſtrand a mille, with four or five high downes.Upon Oleron you ſee a high ſpeere ſteeple upon a redde point, whereon you ſee ſome trees ſtanding, and ſouthward it hath black downes in three or four places.

Upon the land on the north-ſide of the River of Burdeaux, or the ſteeple of Cordam you ſee five or ſixe high white downes, but on the ſouth-ſide thereof they are lowe black downes overgrowne with heath, you may ſee the land againſt the River of Burdeaux from the poope of the ſhippe at 30 fathome.

The Coaſt from Cordam to Accaſon is a flatte coaſt, which may alſo be ſeene at 30 fathome.

Betweene Accaſon and S. Iohn de Luz,you may likewiſe ſee the land at 30 fathome, and when you are about Bayona, then you ſee Cabriton, Bayona, Bederte and S. Iohn de Luz, which for the moſt part are all flatte ſteeples.

When you come before Paſſage, you may ſee the corner of Cape de Figure, and alſo S.Sebaſtians, and there the land lyeth in a great creeke or bowing.

About Cape de Figuer there lyeth a high hill, which on the ſouthweſt ende is verie ſteepe,and it is verie long, the ſlopeneſſe deſcending towards the north, when you are cloſe by the land it is verie high and ſteepe,but when you are before S.Sebaſtians 7 leagues from the land then it is long, & on the weſt-ende ſteeping and hollowe.

When you are 8 leagues without S.Sebaſtians,then you may ſee the eaſt-caſtle,and alſo the ſmall Iland.

V I I.

How theſe Countries lye diſtant from each other.

FRom Heys to S.Martens Iland e.ſ.e.——12 or 13 leagues.
From Heys to Porthus or the Crage of Oleron ſoutheaſt and by eaſt —— —— —— ——15 leagues.
From S.Martens Iland to Cordam, ſ.ſ.e. —— 16 leagues.

From

From the Crage of Oleron to the ſteeple of Cordam, or the River of Burdeaux ſouth-ſoutheaſt, and ſ. and by e. 13 leagues.
From Cordam to Accaſon ſouth — — 20 leagues.
From Accaſon to Bayona ſouth and north 16 or 17 leagues.
From Bayona to S. Iohn de Luz ſ. and by w. — 4 leagues.
From S. Iohn de Luz to Pingnons de S. Anne ſouthweſt & by weſt — — — — — 3 leagues.
From S. Iohn de Luz to S. Sebaſtians weſt — — 8 leagues.
From S. Sebaſtians to Gateria w. & by n. & w.n.w. 8 leagues.
From Gateria to Cape de Maſſichaco n. w. — 5 or 6 leagues.

VIII.

How theſe Countries are diſtant from other Countries.

From Heys to Ortegal ſ. w. and by w. — 94 leagues.
From S. Martens Iland to Cape de Pinas ſ. w. — 80 leagues.
From S. Martens Iland to Ortegal weſt-ſouthweſt and ſomewhat ſoutherlyer — — — 99 leagues.
From the ſteeple of Cordam or the River of Burdeaux to Cape de Pinas w.ſ.w. and ſomewhat ſoutherlyer — 75 leagues.

IX.

Vnder what degrees theſe Countries lye.

THe Iland of Heys lyeth under 46 degrees & 48 minutes.
The Middle of the Iland of S. Marten lyeth under 46 degrees and 26 minutes.
The north-point of Oleron lyeth under 46 degrees 15 minutes.
The ſteeple of Cordam or the River of Burdeaux lyeth under 45 degrees 45 minutes.
Accaſon lyeth under — — 44 degrees 36 minutes.
Bayona in France lyeth under — 43 degrees 45 minutes.
Or as ſome ſaye under — — 43 degrees 35 minutes.
The Cape de Maſſichaco lyeth under 43 degrees 46 minutes.

Heere followeth the Carde N. 7.

CHAPTER VII.

A DESCRIPTION OF

the Sea-coaſts of Biſcaya, betweene Cabo de Maſſichaco and Capo de Pinas.

I.

The ſituation betweene Cape de Maſſichaco and Bilbao.

Maſſichaco. WEſt-northweſt from S. Sebaſtian lyeth Cape de Maſſichaco 13 leagues, there goeth a haven in right weſt from the Cape, which is a faire tyde-haven, the towne lyeth about a league into the land, upon a River which cõmeth out of the hill, right weſt from Cape de Maſſichaco lyeth a great rock faſt upon the land, and a litle weſt from it another, which you may well ſayle about with barkes, and that lyeth upon the ſharp point of Avellanes.

Barmea. Southweſt and by weſt from Maſſichaco lyeth the haven of Barmea, it is a faire great Creeke, the eaſt-ende whereof is foule, therefore you muſt ſhunne it, and goe on the weſt-ſide, and anckor where you will, it is wide ynough.

Placentia. Weſt from Barmea lyeth Placentia upon a litle river, the towne lyeth a litle into the land, they are all tyde-havens.

From Cape de Maſſichaco to Bilbao (betweene which lyeth Barmea and Placentia) it is ſouth-ſouthweſt, and ſouthweſt and by ſouth 7 leagues.

Bilbao. From Placentia to Bilbao are almoſt 3 leagues, weſt-ſouthweſt, and weſt and by ſouth. Bilbao lyeth upon a great river, downe from the which there commeth much yron: it is a good haven, but it runneth not farre in, becauſe of the Banck called La Barſe. *la Barſe*, which lyeth croſſe over the haven, which you muſt goe over at high water.

On the eaſt-point of Bilbao there commeth a Sand ſhooting downe, you muſt ſhunne that point, for there lye ſtones and rockes alſo under the water, and it is a high ſteepe point, which ſheweth white, yet you anckor before it at ſeven or eight fathome, from this point to the haven of Bilbao or the Barſe is two leagues, ſouth & by weſt, and you muſt anckor under this point betweene the rockes and the Peere, from whence the Pilots come downe, there you lye ſafe from a northweſt winde, but a weſt-northweſt winde is open into it. The chanel reacheth in by the weſt-land, there ſtand five or ſixe houſes upon the weſt-land, when the two weſterlyeſt houſes are one againſt the other, or when you may ſee betweene the two eaſterlyeſt houſes which ſtand within the land, then you are upon the Barſe or drougth, goe then to the caſtle of Portogalete ſouth, and ſouth and by eaſt, cloſe along by the caſtle, and ſette right within the caſtle againſt a weſt-winde: though as you are before the haven then the Pilots come downe & bring you to the towne.

When you lye before the Creeke, then you ſee Monte Anthoni weſt and by north from you. S. Anthonies hill.

Thus the land eaſt from Bilbao ſheweth when you fall upon it.



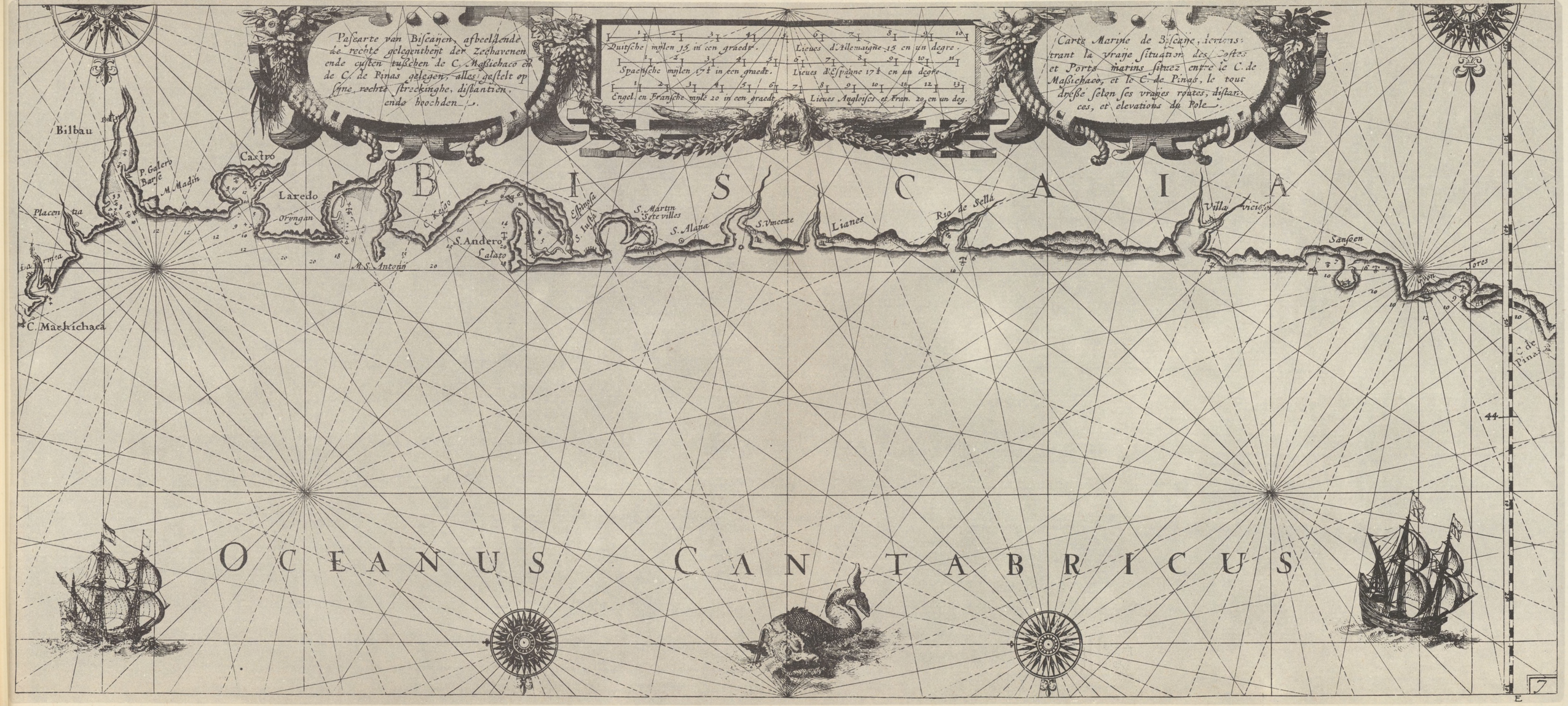
On the weſt-ſide you ſee a high ſharpe hill, and it ſheweth thus to Caſtro.



II.

To ſayle from Bilbao to S. Andero.

FRom the point of Bilbao to Caſtro the courſe is weſt five leagues, it is a good haven, being 6, 7, & 8 fathome deepe, and the length of the haven reacheth ſouthwards at 10 fathome Caſtro.


Pascarte van Biscaijen, afbeeldende de rechte gelegentheijt der Zeehavenen ende custen tusschen de C. Maßichaco en de C. de Pinas gelegen, alles gestelt op syne rechte streckinghe, distantien, ende hoochden.
Duitsche mijlen 15 in een graedt.
Spaensche mijlen 17½ in een graedt.
Engel. en Fransche mijlē 20 in een graedt.
Lieues d'Allemaigne 15 en un degre.
Lieues d'Espagne 17½ en un degre.
Lieues Angloises et Fran. 20 en un deg.
Carte Marine de Biscaije, derivistrant la vraije situation des Costes et Ports marins situez entre le C. de Maßichaco, et le C. de Pinas, le tout dreße selon ses vraijes routes, distances, et elevations du Pole.
B I S C A I A
Bilbau
P. Galero
Barse
M. Madin
Castro
Laredo
Oryngan
Placentia
C. Machichaca
C. Kesgo
S. Andero
Lalato
M. S. Antonij
Espinosa
S. Iusta
S. Martin
Sete villes
S. Alana
S. Vincente
Lianes
Rio de Sella
Villa viciosa
Sansoen
Tores
C. de Pinas
44
O C E A N U S C A N T A B R I C U S
7
E

thome, you muſt goe in weſt, & anckor at 6, 7, and 8 fathome, but further in the River to the towne it is no deeper then 3 or 4 fathome. There is no ſafegarde for great ſhippes but with a ſ.w. winde.

Laredo. From Bilbao to S. Anthonies Hill it is weſt & by north 9 or 10 leagues. From Caſtro to Laredo the courſe is weſt diſtant ſixe leagues: on the weſt-ſide lyeth the ſaid Hill of S. Anthonie, which is a high hill, you may ſayle cloſe in by it, or ſette this Hill ſouth & by eaſt from you, and ſo alſo runne in about the eaſt-point of the haven, there it is wide and broad, and a fit haven for great ſhippes, and there about eaſt you may anckor at 7 or 8 fathome. Eaſtward againſt S. Anthonies Hill in the middle of the waie lyeth a rowe of rockes under the water, which you may ſayle about on both ſides, it ravels alwaies upō them, there within is the Rode for common ſhippes, and that is right before the haven which is cloſed with a wall, but great ſhippes lye ſomewhat further off, there it is 6 and 7 fathome deepe. On the ſouth-ſide of the haven there is a tyde-haven, from the which there commeth a great Sand ſhooting off from the eaſt-ſide to S. Anthonies Hill, there within it is two fathome water, & that is right before the village, but from the village there commeth a point or tayle of ſand reaching croſſe out, within it at lowe water it is a fathome deepe, in the middle of the chanel it is 9 fathome, & at the point of S. Anthonie it is 20 fathome deepe.

C. Keſgo. From S. Anthonies Hill to Cape de Keſgo it is weſt, & weſt and by ſouth 3 leagues, it is a great Cape lying eaſt from S. Andero, and there is faire ground.

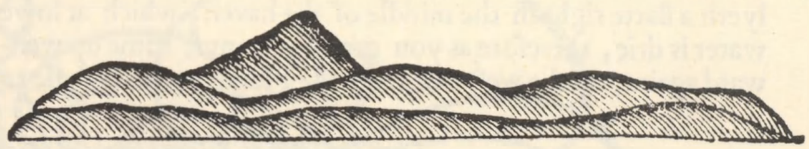
From Cape de Keſgo to the weſt-point of S. Andero it is w. & by ſ. five leagues, and right ſouthward from the point of S. Andero upō the eaſt-point of Sardinis is a ſandie Baye, where it is good anckoring at 10 fathome.

S. Andero. From Cape de Keſgo to the haven of S. Andero the courſe is w. ſ. w. diſtant 3 leagues. S. Andero lyeth in a creeke, and there lyeth an Iland before the haven, you may goe about it on both ſides, it is 8 and 9 fathome deepe, but ſouthward about the Iland it is 5, 6, and 7 fathome deepe, after you come neare to the ſtrand. The chanel firſt reacheth w. n. w. the Iland lyeth a great league within the creeke, it is from the eaſt-point of the haven to the weſt-point of the land about ſouth and north a great league. S. Anthonie and the weſt-point of S. Andero lye eaſt & weſt from each other about 5 leagues.

How to know the land about Laredo. To knowe the land when you fall about Laredo, then knowe that on the weſt-ſide of the haven of Laredo S. Anthonies Hill lyeth, which is a verie high hill, which you ſee verie farre both from eaſt and weſt, and right above the towne of Laredo you ſee alſo a ſharp hill, as if it were the point of a diamant, or the point of a two-handed ſword, and further about Laredo it is verie high double land, two, three, & at ſome places four double.

S. Andero hath no ſpeciall or knowne hilles, but when you are before the haven then eaſtward you may ſee the towne, and the caſtle ſtanding upon a high hill, as if it were a ſuger-loſe, or a hay-cock, & eaſtward there is much double land, two or three heigth double. But when you are about Cape de Keſgo, then preſently you ſee the caſtle upon the weſt-land.

The land eaſtward of Laredo being ſouth from you, ſheweth thus with a ſharp hill.



Thus S. Anthonies hill ſheweth it ſelf, lying on the weſt-ſide of Laredo.



Thus S. Anthonies hill ſheweth it ſelf, when you are ſouth-ſoutheaſt from it.



III.

How all the Havens and Rodes betweene S. Andero and Cape de Pinas ſhould be ſayled.

FRom S. Andero to Cape de Pinas the courſe is weſt, or a litle northerlyer 37 or 38 leagues, betweene the which theſe Havens following do lye.

S. Marten. Setteville. Firſt the haven of S. Marten or Setteville, lying eaſt & weſt 4 leagues from S. Andero, it is a tyde-haven.

S. Vincent. From thence to S. Vincents, alſo a tyde-haven is 5 leagues, the chanel goeth in on the eaſt-ſide, on the weſt-ſide there commeth a ſand ſhooting off, and in the middle of the chanel lyeth an Iland, which you may goe about on both ſides.

Lhanes. From S. Vincents to Lhanes the courſe is weſt three leagues, this is a tyde-haven, upon the weſt-ſide of the haven there ſtandeth a church, & right within the haven a middle-flatte or ſand, but you muſt goe about on the weſt-ſide: theſe are all unknowne narrowe havens, he that hath occaſion may uſe them.

Rio de Sella. From Lhanes to Rio de Sella the courſe is weſt five or ſixe leagues, he that will goe in there muſt have regarde to a maſt which ſtandeth upon the eaſt-land, you muſt goe in cloſe by it, for the weſt-ſide is foule within, & you muſt anckor within the maſt before the village, it is alſo a tyde-haven.

Villa Vicioſa. From Rio de Sella weſtwards nine leagues is Villa Vicioſa, this alſo is a tyde-haven, but faire: the chanel runneth in ſouth-eaſt and ſoutheaſt and by eaſt, cloſe upon the weſt-point of the land, for the eaſt-point is foule to the middle of the haven: there lyeth a flatte right in the middle of the haven, which at lowe water is drie, therefore as you goe in you muſt turne up weſtward againe, on the weſt-ſide lyeth the Plecke, you may ſayle to it, and anckor upon flatte water.

Sanſon. Seven leagues weſt-ward from Villa Vicioſa lyeth the out-point of Sanſon, eaſtward there lyeth a litle Iland whereon there ſtandeth a ſteeple: betweene Sanſon and the ſaid Iland it is good rode at 7 and 8 fathome.

On the weſt-ſide of Sanſon is alſo good rode, right before the litle haven of Sanſon at ſixe and ſeven fathome.

Gyon. Weſt from Sanſon lyeth Gyon, having a peere or pyled-head under the which the Fiſſhermen that dwell there laye their barkes.

Tores. A league and an half weſt from Gyon lyeth the Creeke of Tores, a good Rode for a ſouthweſt and weſt winde at 8 and 9 fathome: upon the point reaching out, ſtandeth a high ſteeple.

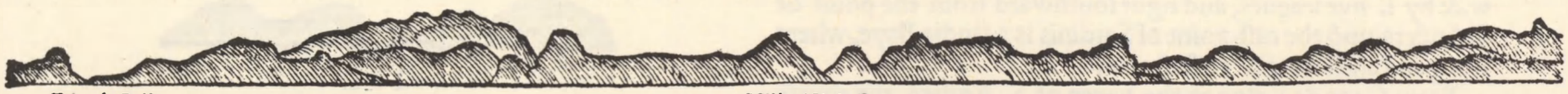
Cape de Pinas. Three leagues weſtward of Tores lyeth Cape de Pinas, from whence manie rockes lye off to Seaward good half a league at leaſt: it is ſayd by ſome that a man may ſayle through betweene the point and thoſe rockes.

Thus the land of Biſcaya ſheweth it ſelf betweene Laredo and Rio de Sella, as you ſayle along byit.



Laredo. Lhanes. Rio de Sella.

Thus the land ſheweth it ſelf from Rio de Sella to Cape de Pinas, as you ſayle along by the ſame.



Rio de Sella. Villa Vicioſa.

IIII.

What Moone maketh high water upon theſe Coaſts.

AT all places and before all the havens of this coaſt, a ſouthweſt and northeaſt moone maketh a high water, but within the havens about a point later, as they reach deeper into the land, as upon the coaſts of Britaigne, Poictou & Gaſcoigne. Heere alſo they reckon no falling of ſtreames. But the ſtreames fall croſſe to and fro.

V.

How theſe Countries are diſtant one from the other, and from other Countries alſo.

HOw theſe Countries reach and are diſtant from each other it is alreadie ſhewed in the deſcription.

From Cape de Maſſichaca to Accaſon northeaſt and ſomewhat eaſterlyer — — — 28 leagues.

From Cape de Maſſichaca to Heys north and ſomewhat eaſterlyer

ſterlyer — — — — — 60 leagues.
From S. Andero to the Seims n. n. w. — 96 leagues.
From Cape de Pinas to the ſteeple of Cordam eaſt-northeaſt, and northeaſt and by eaſt — — — 72 leagues.
From Cape de Pinas to Porthus or S. Martens Iland northeaſt and ſomewhat eaſterlyer — — — 80 leagues.
From Cape de Pinas to Bel-Iſle n. n. e. — 80 leagues.
From Cape de Pinas to the Seims north — — 88 leagues.
From Cape de Pinas to Cabo de Veilli in Ireland north and by weſt and ſomewhat weſterlyer — — 171 leagues.
From Cape de Pinas to Ortegal w. & by n. — 29 leagues.

VI.

Vnder what degrees theſe Countries lye.

CApe Maſſichaca lyeth under 43 degr. 46 or 48 minutes.
Cape de Pinas lyeth under 43 degrees 54 or 56 minutes.
The whole coaſt of Biſcaya betweene Cape de Pinas & Cape de Maſſichaca lyeth about 43 degrees and 43, 44, or 45 minutes..

Heere followeth the Carde N. 8.

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CHAPTER VIII.

A TRVE DESCRIPTION

of the Sea-coasts of Gallicia, from Cabo de Pinas to Cabo de Finisterre.

I.

To sayle from Cape de Pinas to Aviles and Ribadeus.

FRom Cape de Pinas there lyeth out a rowe of rockes, which reach half a league into the sea, they say that a man may sayle betweene those rockes and that point. But right within or westward from Cape de Pinas lyeth a great rocke, which you may sayle through betweene it & the land.

Aviles. When you are within Cape de Pinas, Aviles lyeth from thence s. s. w. three leagues, it is a good tyde-haven, where a great shippe may well enter at half flood, there is also a good Rode before this haven at 6 and 7 fathome deepe.

To sayle into this haven you must goe along by the east-side, for the west-side is verie flatte, there standeth a litle chappel upon the east-side which you must ruune in close by, til you be within the two rockes that lye on the east-side of the haven, which you must sayle close by, & anckor a litle waie within the rockes. The towne lyeth about a league upwards. Frō the west-point there shooteth off a sand, which reacheth within along the haven to the towne, so that there on both sides it is verie shallowe. On the west-side of the haven, without in the bowing thereof there lye two great rockes, right before the litle church, in the sandie Baye, which you may sayle round about, but it is not all to faire, yet without the rockes it is good anckor-ground at 7 & 8 fathome, which is right over against the church, which standeth against the high land.

Luarca. Ribadeus. From Aviles to Luarca it is 7 leagues, and from Luarca to Ribadeus the course is w. s. w. seven leagues. Or from Aviles to Ribadeus s. w. and by w. 13 leagues.

To sayle into the haven of Ribadeus you must goe close in by the west-land, on the west-side of the haven there standeth a high flatte steeple, as if it were upon the Corongne, you must sayle in along by the said steeple at two cables length, (for at the east-point there lyeth a rock under the water) thē you must sayle forward in the middle of the water, the haven for the most part reacheth in south, and south & by east, you may anckor on the east-side before Castrapol, or on the west-side before Ribadeus, where you will at five or sixe fathome. Within it is all flatte water, if you lye farre out or deepe within as 4, 5, 6, and 7 fathome. Castrapol.

Thus the land of Aviles sheweth it self when you are before Aviles.

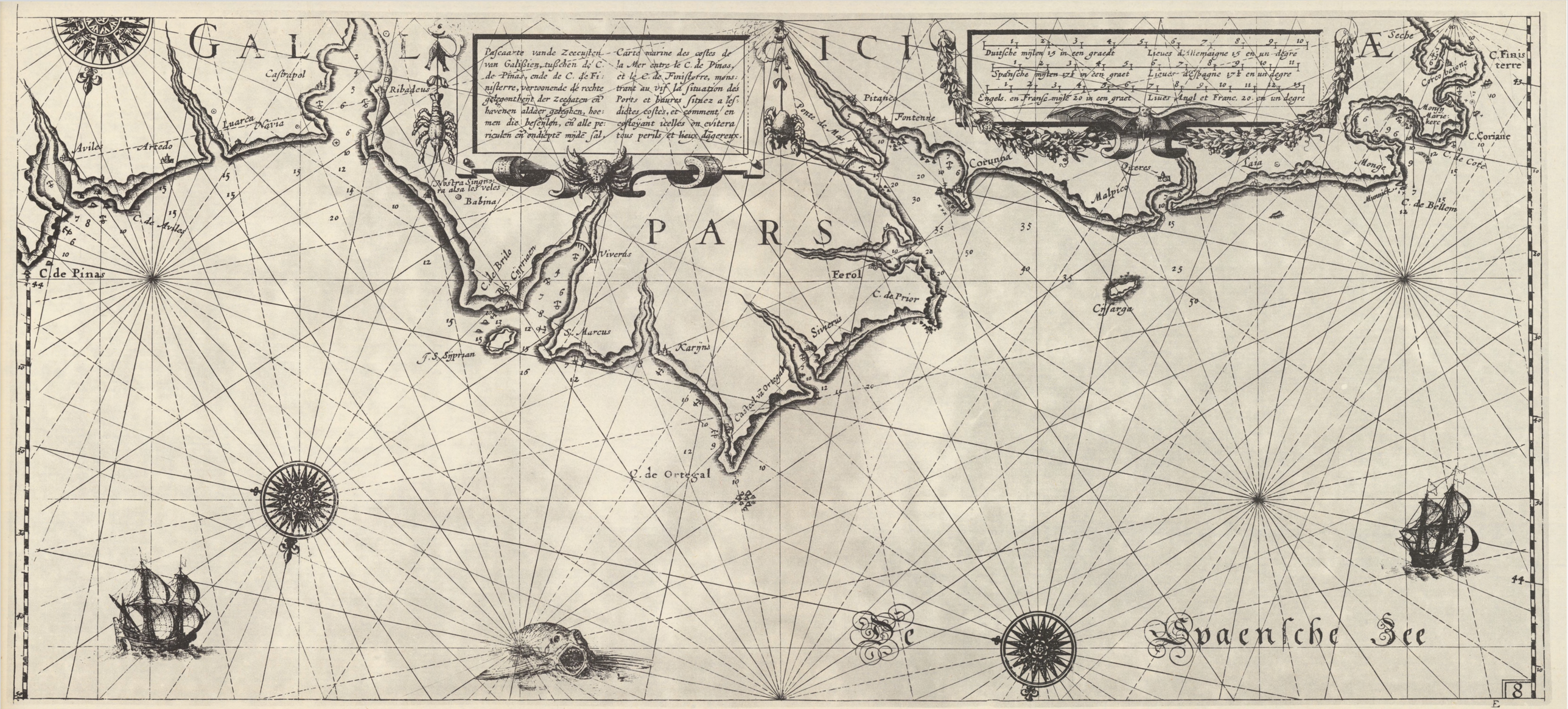


II.

To sayle from Ribadeus to Viverus, and then to Ortegal.

NOrthwest from Ribadeus about eight leagues lyeth the Cape de Brilo, and a litle west from thence lyeth the litle towne of Viverus. Westward from the baye of Cyprian (where you may anckor at tenne fathome) there lye two great high rockes, west-northwest from those rockes about half a league lyeth the Iland of S. Cyprian, which lyeth right before the haven of Viverus, whereby this haven of Viverus is well to be knowne, you may sayle round about on both sides of this Iland into the haven of Viverus, in the middle of the water south & south & by west, right before the towne, and being within you may anckor where you will, either on the east or west-side, it is there flatte water of 5, 6, 7, & 8 fathome, as you runne farre inward. Cape de Brilo. Viverus. Iland S. Cyprian.

From the haven of Viverus or from the Iland of S. Cyprian to Cape



Pascaarte vande Zeecusten van Galißien, tußchen de C. de Pinas, ende de C. de Finisterre, vertoonende de rechte gelegentheijt der Zeegaten en havenen aldaer geleghen, hoemen die beseijlen, en alle periculen en ondiepte mijde sal.
Carte marine des costes de la Mer entre le C. de Pinas, et le C. de Finisterre, monstrant au vif la situation des Ports et haures situez a lesdictes costes, et comment en costoyant icelles on evitera tous perils et lieux dagereux.
Duitsche mijlen 15 in een graedt
Lieues d'Allemaigne 15 en un degre
Spansche mijlen 17½ in een graet
Lieues d'Espagne 17½ en un degre
Engels. en Franse mijle 20 in een graet
Liues Angl et Franc. 20. en un degre
GALLICIÆ
PARS
Castrapol
Ribadeus
Luarca
Navia
Aviles
Artedo
C. de Aviles
C. de Pinas
Nostra Singnora alsa los veles
Babina
C. de Brilo
B. S. Cypriaen
Viveras
S. Marcus
J. S. Syprian
Karijns
Castel va Ortegal
C. de Ortegal
Sivierus
Ferol
C. de Prior
Pitanca
Fontenne
Ponte de Mas
Corunna
Malpico
Oxeres
Laia
Monge
Munick
C. de Bellem
Cysarga
Seche
C. Finisterre
Corcobaione
Monsy Mariekerc
C. Coriane
C. de Cote
De Spaensche Zee
8

Cape de Ortegal. to Cape de Ortegal the courſe is w.n.w. 9 leagues: betweene both, a league weſtward from Viverus, lyeth the litle towne of S. Marke with a creeke, which you may ride before at 7 or 8 fathome, and lye ſafe againſt a ſ.ſ.w. and w. winde.

S.Marck.

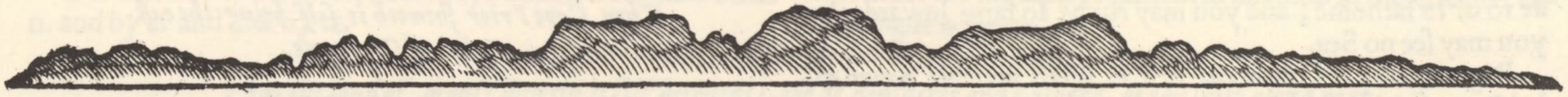
Karins. And three leagues weſtward from S. Markes lyeth the River of Karins, and there alſo it is good anckoring along to the caſtle of Ortegal, all the coaſt along is faire. From Karins to Ortegal the courſe is northweſt 5 leagues.

Ortegal is a great point of land lying out, eaſtward from it you may lye ſafe from a northweſt, weſt, ſouthweſt, and ſouth winde, againſt the caſtle is the beſt Rode, where you may anckor at 8 and 9 fathome. When you come from the eaſt, Ortegal is well to be knowne, you may ſee the caſtle ſtand againſt the high land.

Thus Ortegal ſheweth when it is ſ.w. & by ſ. from you.



Thus Ortegal ſheweth when the eaſterlyeſt hill lyeth ſouth-ſoutheaſt from you, and you may ſee the eaſt-ende clearly eight, nine, or tenne leagues into the Sea.



Thus Ortegal ſheweth it ſelf as it is ſ.e. & by ſ. from you.



When Ortegal is ſoutheaſt from you it openeth thus.



III.

To ſayle from Cape de Ortegal to Ferol de Corongne, and to the Iland of Cyzarga.

ABout a league into the Sea north-northweſt from Ortegal lyeth a rowe of great rockes, you may ſayle between them and the firme land at 10 fathome, Ortegal & Cape de Prior are diſtant northeaſt and ſouthweſt 11 leagues..

Siguera. Betweene Ortegal and Cape Prior lyeth the haven of Siguera or Siverus, which is a deepe haven, reaching in ſoutheaſt, the north-ſide is rockie & foule, you muſt goe in cloſe by the weſt-land, ſayling along by a high land at 12 fathome, within it is 10 fathome, and you muſt anckor before the village of Siguera at 6 or 7 fathome.

Cape de. Prior. Five leagues weſtward from Siguera lyeth Cape de Prior, which is a verie craggie uneven hill, which to ſee to is like as if it ſate full of men.

Three leagues from Cape de Prior ſouthward lyeth the haven of Ferol, ſayling to it you come firſt to two white Sand-bayes, which lye northward from the ſaid haven, wherof the ſoutherlyeſt is the greateſt, whereon alſo one or two white houſes ſtand, ſouthward from that lyeth the north-point of the haven of Ferol, and when you goe by it then the haven openeth it ſelf, which you muſt runne into through the middle of the chanel e. n. e. and e. & by n. betweene two high lands, & when you are within, you muſt turne up northward, and anckor at 12 and 13 fathome, for before the village of Ferol it is rockie and flatte. The ſouth-point of Ferol reacheth farre out, and is all foule, when you are in the middle of the narrowe or ſtrait, then you may ſee through betweene the firme-land and the Iland of Cyzarga, in the narrowe it is 20 fathome deepe, and ſo narrowe that you may caſt a ſtone upon the land on both ſides thereof.

How to ſayle into Ferol.

But when you come from Corongne from the weſt, and will put into Ferol, then from the Iland of S. Blaſe goe n. and n. & by w. untill you may ſee the haven of Ferol open, and ſayle ſtill till it cloſeth againe, then you ſhall ſee the great Sand-baye with two or three houſes, ſayle to it untill you are within the ſouth-point of the haven, for (as I ſaid before) it is foule and rockie, & then ſayle upon the north-point of the haven, thē you ſayle the haven open againe, and ſo goe through the middle of the chanel, and anckor therein as is taught you before.

How to ſayle into Corongne To ſayle from Ferol to Corongne the courſe is ſouth, and ſouth and by weſt about four litle leagues, but when you come to the weſt-land you muſt ſhunne it at leaſt four or five cables

cables length, for it is not verie faire: when you come to the point wheron the caſtle ſtandeth, then you ſee a litle Iland with a ſmall houſe upon it, you may ſayle by it within half a cables length, and goe about by it, and then goe up weſtward till you come before the Fiſſhermens village, and there anckor at 6, 7 or 8 fathome water.

From C. de Prior to Corongne the courſe is ſouth and north 6 leagues: to ſayle from thence to the Carongne you muſt alſo doe as I ſaid before.

Font aine. Pitance. You may ſayle into the haven or entrie of the Carongne 5 or 6 leagues right ſoutheaſt in, comming from Farol or Cyſarga, paſſing by the Coruna or Corongne to Fontaine or Pitance, where on the weſt-ſide under a rowe of rockes, you may anckor at 10 or 12 fathome, and you may runne ſo farre inwards that you may ſee no Sea.

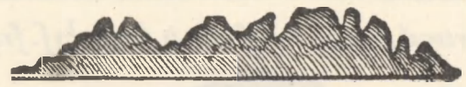
Pont de Mas. Right againſt la Corongne e. n. e. lyeth another haven called Pont de Mas, which reacheth in eaſtward, wherein alſo you may runne ſo farre that you can ſee no Sea, there alſo you may anckor at 10 or 12 fathome. There lyeth a rowe of rockes on the north-ſide, and over the river there goeth a great bridge.

He that commeth out of the weſt from Cyſarga muſt goe in e. ſ. e. untill he be a litle within the ſteeple which ſtandeth on the weſt-point of the Corongne, for on the weſt-ſide it is altogether foule, ſo long till it beginneth to come right againſt the caſtle, and then doeing as I ſaid before.

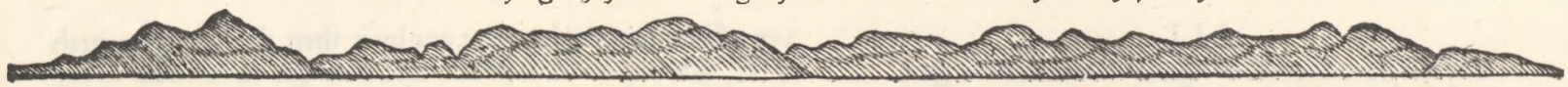
Cyſarga. Weſt-northweſt from the Corongne 8 leagues lyeth the Iland of Cyzarga, and from Cape Prior it is w. ſ. w 8 leagues.

But from Cape Ortegal it is ſouthweſt & by weſt 17 leagues, this Iland of Cyſarga (which by us is called Ceſarien) is round about foule.

Thus Cape Prior ſheweth it ſelf being the eaſt-point of Corongne.



The Land lying eaſt from Corongne ſheweth thus when it is ſoutheaſt from you.



IIII.

To ſayle from the Iland of Cyſarga to Cape de Finiſterre.

Queres. FRom the Iland Cyſarga ſouth and by weſt, and ſ. ſ. w. lyeth the haven of Queres, which is a good haven, the weſt-ſide is faire, but the eaſt-ſide is foule, therefore you muſt goe in along by the weſt-ſide, and when you are betweene the two landes, then runne in through the middle of the chanel, to the point, then turne up weſtward a league inwards, & there anckor at 7, 8, & 9 fathome, it is a faire haven for great ſhippes.

Cape de Bylem. From the Iland of Cyſarga ſouthweſt and by weſt, and weſt-ſouthweſt 12 or 13 leagues lyeth the eaſt-point of Monſy, called Cabo de Bilem, it is a high ſlopeing point with many craggie rockes, lying looſe off frō the land, as if it were a ſteeple, it ſheweth black, and is called the Monck.

Monck. Rockes before Monſy. There lyeth a great rowe of rockes right before the haven of Monſy, ſ.w. and by ſ. from Monck, but the innermoſt ende of them lyeth ſouth and by weſt from the Monck, for they are at leaſt two or three cables in length, when you fall upon Monſy it is double land, and about Cape de Finiſterre lyeth a high white ſand reaching into the land, as if it were a ſand-baye.

And as you come about Cape de Finiſterre you ſee alſo a craggie hill, which runneth in ſo farre ſouthwards that you may ſee it before Mores.

To ſayle into Monſy. If you will enter into Monſy comming from Cyſarga, you muſt goe in cloſe by Cape de Bylem or Bellem, this point is altogether a high craggie ſharp land full of high ſteepe rockes, as I ſaid before, and when you are by the point, you muſt hold Cape de Coriane a ſhippes length without Cape de Cotte ſo long untill S. Maries church commeth without the point of Monſy, then goe into the eaſt-chanel with theſe markes, and ſayle in ſ. ſ. e. till you paſſe by the church, then you ſhall ſee a rowe of rockes, runne in behinde them, and anckor there before the village of Monſy at 5, 6, or 7 fathome: as you ſayle thus from Cape Bylem to Monſy, thē the rockes that lye in the middle before the haven are about a quarter of a league inward to the Sea from you.

Eaſt-chanel.

Weſt-chanel. To ſayle in at the weſt-chanel, you muſt goe eaſt-ſoutheaſt caſely

eaſely along by the land, & when our Ladies church commeth without the point, then you muſt goe towards the rocks which lye before Monſy, as aforeſaid, and anckor within the rockes at ſeven or eight fathome, but goe not too farre in, for there ſhooteth out a ſand along the haven which is verie drie.

The eaſt-chanel is better to enter then the weſt chanel, but ſayle not into Monſy before you ſee the church without the point: you may alſo anckor well on the north-ſide of the haven at 5, 6 or 7 fathome.

South from the village of Monſy there is a creeke, before the which there lyeth a ſhallowe reaching e.n.e. two cables length along by the haven.

Our Ladies church & the Monke lye diſtant from each other n. and by e. and ſ. & by w.

Southweſt frō C. de Bylem 3 leagues lyeth Cap de Coriane. C. de Coriane.

And from Cape de Coriane it is ſouth & north three leagues to Cape de Finiſterre. Betweene theſe two Capes there is a Sand-baye, where you may anckor eaſtward from the great rock at 6 or 7 fathome. This is a great creeke, which reacheth farre into the land. On the north-ſide of this Baye there lye rockes under the water which you muſt ſhunne.

There lyeth a great Sand-baye eaſt from the Cape de Finiſterre, when you ſee it you may knowe, that you are by Cape de Finiſterre, there lyeth alſo another betweene the haven of Corcobayona and the Cape, but the firſt is the greateſt, but by this ſecond the haven of Corcobayona or Seche goeth in, which for the moſt part reacheth in north, as in the Chapter enſeweing it is ſhewed.

Thus the land of Monſy ſheweth it ſelf betweene Cape de Finiſterre and Cyſarga, as you ſayle along by it comming out of the eaſt, about four leagues from the land.



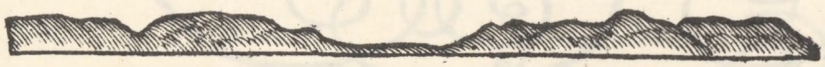
When Cape de Finiſterre is ſouth-ſoutheaſt from you it ſheweth thus.



Cape de Finiſterre being ſoutheaſt and ſomewhat ſoutherlyer from you ſheweth thus.



Thus Cape de Finiſterre ſheweth it ſelf when it is ſoutheaſt and ſomewhat eaſterlyer from you.



When Cape Finiſterre is ſoutheaſt and by eaſt from you five or ſixe leagues it ſheweth thus.



V.

What Moone maketh high water heere.

VPon all theſe Coaſts of Gallicia a ſouthweſt and a northeaſt moone maketh a high water, and within the chanels and havens a ſouthweſt and by weſt, and a northeaſt and by eaſt moone, or a point later, as the havens reach deepe or farre into the Land; as upon the coaſts of Biſcaya and France.

VI.

How theſe Countries lye from others.

FRom Cape de Pinas to Aviles ſ. ſ. w. — 3 leagues.
From Luarca to Ribadeus w. ſ. w. — 7 leagues.
From Ribadeus to Cape de Brilo n. w. — 8 leagues.
From S. Cyprian to Ortegal w. n. w. — 9 leagues.
From Carins to Ortegal northweſt — 5 leagues.

From Ortegal to Siverus ſouthweſt —— —— 4 leagues.
From Siverus to Cape Prior ſouthweſt —— 5 leagues.
From Cape Prior to Ferol ſouth and by eaſt —— 3 leagues.
From Ferol to Corongne ſouth and ſ. & by w. —— 4 leagues.
From Corongne to Cyzarga w. n. w. —— —— 8 leagues.
From Cyſarga to Queres ſ. & by w. and ſ. ſ. w. —— 3 leagues.
From Cyſarga to Cape Bylem or the eaſt-point of Monſy ſ. w. and by w. and w. ſ. w. —— —— —— 12 or 13 leagues.
From Cape Bylem to Cape de Coriane or Torrevian ſouthweſt —— —— —— —— —— 3 laagues.
From Cape Coriane to Cape Finiſterre ſ. & n. —— 3 leagues.
From C. de Pinas to Ribadeus ſ. w. & by w. 13 or 14 leagues.
From Cape de Pinas to the Iland of S. Ciprian eaſt and weſt —— —— —— —— —— 19 or 20 leagues.
From Cape de Pinas to Ortegal weſt and by north and ſome. what weſterlyer —— —— —— —— 29 leagues.
From Ortegal to Cape Prior ſouthweſt —— —— 11 leagues.
From Cape Ortegal to Cyſarga ſ. w. and by w. 17 leagues.
From Cape de Prior to Cyſarga w. ſ. w. —— —— 8 leagues.
From Ferol to Cyſarga eaſt and weſt —— —— 8 leagues.

VII.

How theſe Lands are ſituate in reſpect of other Lands.

FRom Cape de Pinas to Cap de Veel in Ireland north and weſt —— —— —— —— 168 leagues.
From C. de Ortegal to Waterford northward 160 leagues.
From Ortegal to Start-point north and by eaſt, and ſomewhat more eaſterly —— —— —— —— 128 leagues.
From Cyſarga to Cape Vejo north —— —— 160 leagues.
From Cyſarga to the Sorlinges north and by eaſt 138 leagues.

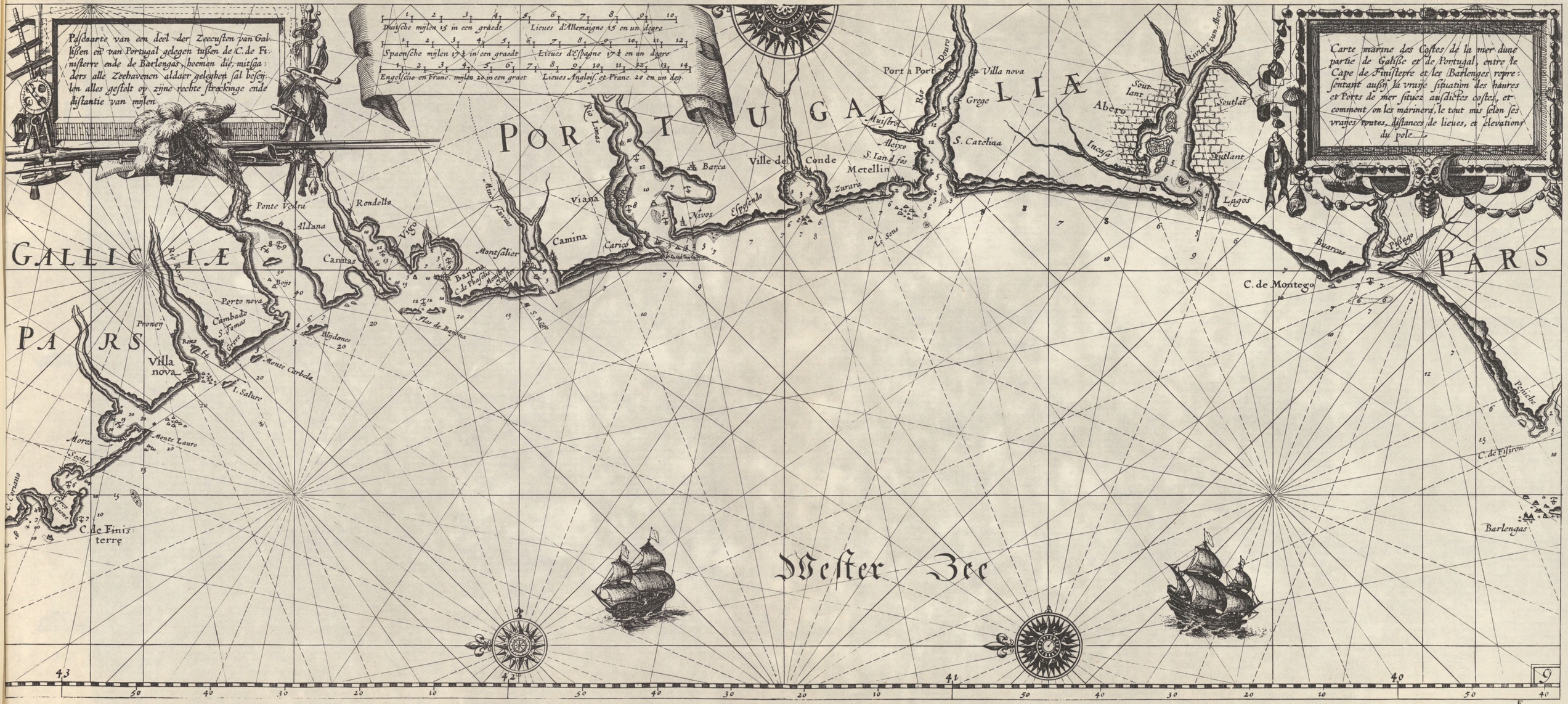
VIII.

Vnder what heigths theſe Lands are ſituate.

CApe de Pinas lyeth under —— 43 degrees 56 minutes,
Or as ſome ſay under —— 43 degrees 44 minutes.
Cape de Ortegal lyeth under —— 44 degrees 5 minutes,
Or as ſome ſay under —— —— 43 degrees 52 minutes.
Cap de Finiſterre lyeth under —— 43 degrees.

Heere followeth the Carde N. 9.

THE


Pascaarte van een deel der Zeecusten van Gallissen en van Portugal gelegen tussen de C. de Finisterre ende de Barlengas, hoemen die, mitsgaders alle Zeehavenen aldaer geleghen sal beseijlen alles gestelt op zijne rechte streckinge ende distantie van mijlen
Duitsche mijlen 15 in een graedt
Lieues d'Allemaigne 15 en un degre
Spaensche mijlen 17½ in een graedt
Lieues d'Espagne 17½ en un degre
Engelsche en Franc. mijlen 20 in een graet
Lieues Angloiſ. et Franc. 20 en un deg.
Carte marine des Costes de la mer dune partie de Galiße et de Portugal, entre le Cape de Finisterre et les Barlenges representant aussy la vraije situation des haures et Ports de mer situez ausdictes costes, et comment on les marinera, le tout mis selon ses vrayes routes, distances de lieues, et elevations du pole
PORTUGALLIÆ
GALLICIÆ PARS
PARS
Wester Zee
Villa nova
Porto nova
Ponte Vedra
Aldana
Rondello
Vigo
Cannas
Bayona
Montsalier
Camina
Viana
Carico
Nivos
Barca
Espesendo
Ville del Conde
Metellin
Zurara
Port a Port
Villa nova
Grege
S. Catelina
Abero
Incasa
Soutlant
Lagos
Buarcas
Pissago
C. de Montego
Peniche
C. de Fisiron
Barlengas
C. de Finisterre
Monte Carbela
I. Salure
Monte Lauro
Blijdones
Flas de Bayona
Rio Lima
Rio Douro
Rio Rexo
Rio Sonis
Le Sons
Mino fluvius
Mores
Seche
Cambado
S. Tomas
Grove
Rexo
Proneij
Boijs
Muistro
Aleixo
S. Ian d. fos
Riviere van Abero
Soutlat
Soutlant
Pissago
Carico
Nivos
Espesendo
Barlengas
C. de Fisiron
C. Coriano
Corco Baiene
43
42
41
40
9

CHAPTER IX.

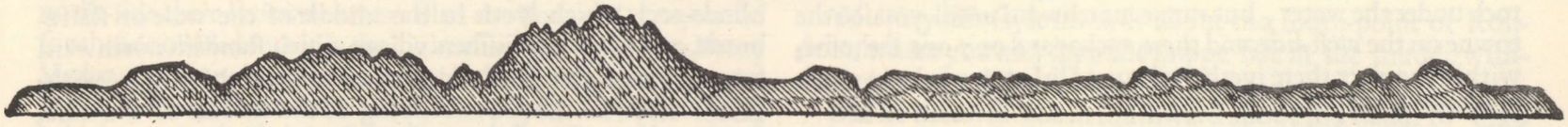
THE DESCRIPTION OF

the Sea-coaſts of Gallicia and Portugal, lying betweene Cabo de Finiſterre and the Barrels.

Thus Cabo de Finiſterre ſheweth it ſelf when it lyeth five leagues eaſt and by ſouth from you.



Thus Cabo de Finiſterre ſheweth it ſelf, when this craggie or rugged hill is northeaſt and ſomewhat eaſterlyer from you.



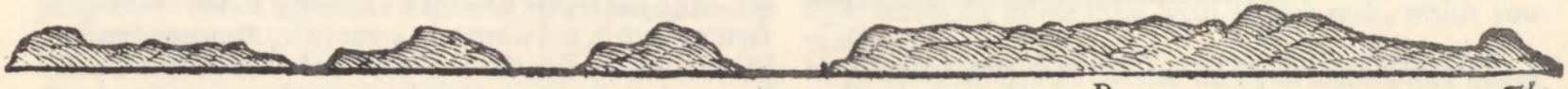
And then the land of Mores ſheweth thus, when it is eaſt northeaſt from you.



Thus lyeth the craggie hill of Finiſterre when it is northeaſt and by north from you.



When Cabo de Finiſterre is about north-northeaſt, and the land of Mores ſeven leagues northeaſt from you, then the Cape lyeth thus broken in three peeces, and the land of Mores thus.



I.

The ſituation of Cabo de Finiſterre, Mores, Rio Roxo, or Villa Nova.

BEtweene Cape de Coriana and Cape de Finiſterre (as I ſaid in the chapter before) there goeth in a great Creeke, which reacheth farre into the land, where you may anckor eaſtward of the great rocke, before a Sand-baye at 6 or 7 fathome.

Seche. About a league eaſtward from Cape de Finiſterre on the ſouth-ſide lyeth the haven of Seche or Corcovia, which the Hollanders call Corcke Bayone: betweene this

Corcke Bayone. haven & the Cape there lye two Sand-bayes, the firſt neareſt to the Cape is the greateſt, and by the ſecond goeth this haven in, and reacheth in north at 8 or 9 fathome. On the eaſt-ſide of the haven lyeth a great rock, and about ſouth-ſouthweſt from this rock, (almoſt in the middle of the haven) there lyeth a blinde rock under the water, but runne northward untill you ſee the towne on the weſt-ſide, and there anckor at 6 or 7 or 8 fathome, within the river there lyeth a village or litle towne about north northeaſt from you.

Mores. From Cape de Finiſterre to the haven of Mores the courſe is ſoutheaſt ſixe leagues. To knowe the land there aboutes you muſt underſtand that when you are about Cape de Finiſterre, you ſee a craggie ragged hill, which rũneth ſo farre ſouthwards that you may ſee it before Mores.

Monte Lauro. When the ſaid craggie Rock is northeaſt from you, then you are againſt C. Finiſterre, and then Monte Lauro, a hill lying upon the northeaſt-point of Mores, lyeth eaſt-northeaſt from you. This hill called Monte Lauro is a cloven high hill, which is eaſie to knowe.

When the craggie hill betweene Cape Finiſterre and Mores lyeth eaſt-northeaſt ſeven leagues from you, it ſheweth thus.



Southeaſt three leagues from Cape de Finiſterre there lye a companie of rockes under the water, and eaſt-ſoutheaſt alſo about 3 leagues from the aforeſaid rockes there lye ſome rockes above the water, & they lye northward from Monte Lauro, or the haven of Mores eaſt and by north and weſt and by ſouth diſtant from Monte Lauro. There lye alſo a number of rockes ſouthward from the haven of Mores, and almoſt in the middewaie from Monte Lauro, right in the middle of the Voert there is a blinde rock alſo about ſouthweſt from Monte Lauro.

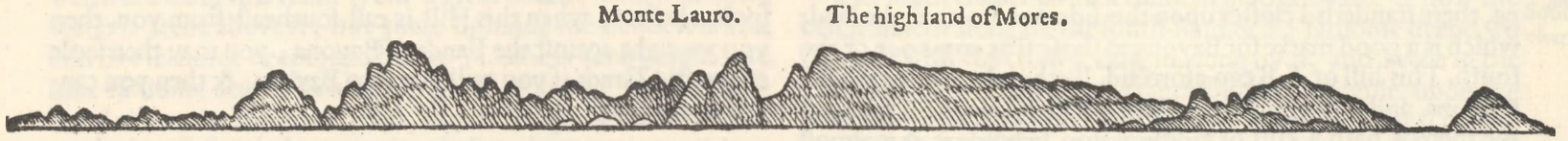
He that wil ſayle into Mores muſt ſette Monte Lauro northeaſt and by north from him, and ſayle right upon Monte Lauro, then he ſhall ſayle by no daungers, when he commeth to Monte Lauro, then he ſhall ſee the aforeſaid outrockes northward from Monte Lauro; let them, as alſo the point of Monte Lauro lye two or three cables length on baghborde, & ſayle ſo along by them, till you be paſt the ſecond point, leaving the blinde-rock which lyeth in the middle of the waie on ſtarreborde, and when the Fiſſhers village which ſtandeth northward from Monte Lauro is whole open to be ſeene, thẽ you are within the aforeſaid blinde rock lying in the middle of the waie, ſouth and by eaſt, and ſomewhat eaſterlyer from the eaſt-ende of the aforeſaid Fiſſhermens village. To ſayle into Mores.

When you come to the ſecond point, then goe 2 cables length along about by it, & turne up northward, till you come before the village, or weſtward up before the towne, whether you will, and there anckor at 12 and 13 fathome.

To ſayle into Rio Roxo, then rũne about without the rockes which lye ſouthward from Mores, and goe on ſoutheaſt and by ſouth, till you come before the haven of Rio Roxo, then you ſhall ſee a great number of out-rockes reaching out from the north-land almoſt to a great rock like an Iland, which is called Salure: you may goe north about this Iland, and ſo betweene it and theſe out-rockes, but it is verie narrowe and ſtrait, becauſe of the rockes aforeſaid, which come off from the north-land, therefore ſayle ſouthward along forward about that Iland, leaving it on baghborde, or to ſeaward from you, untill you ſee the River open, then runne in through the middle of the chanel, untill you ſee the Iland of Roxo in the middle thereof, and ſayle up unto it, and when you come to it, then you may anckor on the ſouth-ſide. On the ſouth-land there are two Sandie-bayes, where there is good anckor-ground. To ſayle into Rio Roxo.

When

When Cape de Finiſterre is northeaſt, or north-northeaſt, and Monte Lauro five leagues eaſt-northeaſt from you, it ſheweth it ſelf with the high land of Mores thus.



II.

To ſayle into Ponte Vedro and Bayona.

Blydones. FRom Rio Roxo or the Iland of Salure to Ponte Vedra, or the Iland Blidones the courſe is ſ. ſ. e. four leagues, betweene them both there lyeth an Iland, called Monte Carbela, behinde it it is three fathome deepe, but right before the haven of Ponte Vedro there lyeth an Iland called Blidones, which may be ſayled round about, on the north-ſide it is no deeper then five or ſixe fathome, and within the haven on the north-ſide there lye two rockes called the Boos or Oxen, on the ſouth-ſide of Blidones it is the right chanel to ſayle into Ponte Vedro, the chanel reacheth in northeaſt, till you be within the Iland, in the middle of the haven there lyeth an other Iland, which you muſt alſo goe ſouthward about, therefore goe all e. n. e. and along by the ſouth-land, untill you ſee the flat ſteeple which ſtandeth upon the ſouth-land, there you muſt runne over a banck forward to the point of Ponte Vedro, there within lyeth the towne, & againſt the flatte ſteeple you may anckor at 8 and 9 fathome. This haven in ſome places is 40 fathome deepe.

Monte Carbela.

Five leagues ſouth-ward from the Iland of Blidones, lye the Ilandes of Bayona, when you come out of the Sea upon them, then thoſe Ilands ſhine like graye or black rockes, and lye as if they were three Ilands, although the water runneth betweene them but in one place, but betweene each of them there is a valley.

Ilands of Bayona.

To landward over theſe Ilands you may ſee a high hill with three hillockes, and betweene each hillock there is a valley.

There lye two ſuch hilles, the northerlyeſt hath one valley more then the other, right eaſt from this hill you may ſee a white cloſter ſtand againſt the high land, whereby this land is well to be knowne.

You may ſayle in there both by north and by ſouth of the Ilands of Bayona, and on the north-point of the Ilands there lyeth a rock under the water, about a cables length frō it which you muſt beware of. You may alſo anckor under the Ilands at 10, 11, or 12 fathome.

North chanel. He that will ſayle northward in, he muſt runne in about the middle of the chanel, betweene the Ilands and the firme land, but neareſt to the Ilands, till the havens of Vigo and Cannas lye open, then you muſt ſayle in eaſtward, it is a wide haven, where on both ſides, that is on the ſouth-ſide before Vigo, and the north-ſide before Cannas you may anckor at twelve or thirteene fathome.

You may alſo ſayle inwards about the ſouth-point of Rondella, where you may laye the ſhippe ſafe in the mudde without anckor or cable.

South chanel. But he that will goe in ſouthward about the Ilands to Vigo or Cannas, he muſt ſayle in betweene the ſoutherlyeſt Iland & the point of the land of Bayona, along in the middle of the chanel northeaſt, aud northeaſt and by north 3 leagues at the leaſt, keeping the north-haven two ſhippes length open, ſo long until that Cannas commeth on the north-land without the point of Fignes or Vigo, then he muſt let the point of Vigo lye on ſtarborde from him, & goe in in the middle of the chanel, betweene the north-land & the land of Fignes, till he be before the towne of Vigo, and there he muſt anckor, as aforeſaid, before Cannas or Vigo where he will at 10 or 12 fathome.

Cannas. Vigo.

Bayona. But he that will ſayle into Bayona, he muſt ſayle on from the ſoutherlyeſt ende of the caſtle of Bayona, and when he cōmeth within the point of Bayona, he muſt not ſayle farre into the bocht, for there lyeth a rock under the water, but then ſayle to the eaſt-point of Bayona whereon the caſtle ſtandeth, and being within the caſtle, then turne or runne quickly ſouthward till you be before the towne, and anckor at 4, 5, and 6 fathome, but right before the towne there lyeth a blinde rock, which you muſt ſhunne.

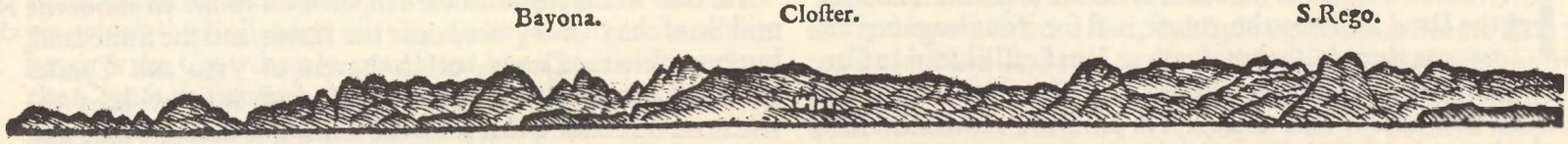
You may alſo, lying betweene the point on the other ſide of the aforeſaid haven and the Iland or Rock, ſayle through at three

three or four fathome to Vigo.

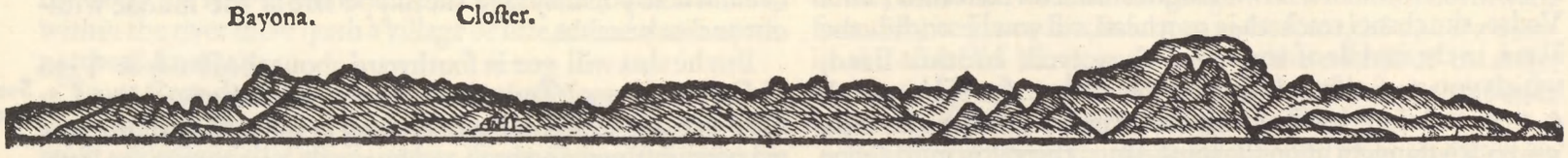
To knowe the land of Bayona.

To knowe the Land ſuch as come from the ſouth, muſt underſtand that north from the hill of S.Rego half waie to Bayona, there ſtandeth a cloſter upon the ſide or corner of the land, which is a good marke for Bayona to thoſe that come out of the ſouth. This hill of S.Rego aforeſaid, lyeth right northward frō Camina, and it is a high ſteepe hill, which above upon the middle thereof hath a clift or ſaddle as you beholde it, it is almoſt like to Monte Lauro, but it is at leaſt once as high againe, and it is a verie good marke to knowe this Countrie. Behinde Bayona alſo there lyeth a high hill with three clifts in it, whereof I have ſpoken before, when this Hill is eaſt-ſoutheaſt from you, then you are right againſt the Ilands of Bayona, you may then ſayle to the ſaid Ilands if you will goe into Bayona, & then you cannot doe amiſſe.

When the point of Bayona is eaſtnortheaſt, and the high land eaſt from you, then it ſheweth thus, and then ſouthward lyeth the high hill of S.Rego.



When the high hill of S. Rego is eaſt from you, then the high land of Bayona ſheweth thus, as it is heere ſet downe, and the Cloſter ſtandeth about half waie betweene S.Rego and Bayona.



III.

To ſayle into Camina and Viana.

Camina.

FIve leagues ſouthward from the Ilands of Bayona lyeth the haven of Camina, it is a tyde-haven, which great ſhips muſt enter into at a high water, the chanel reacheth in northeaſt and by north, within the haven there lyeth a rock neareſt to the ſouth-ſide, upon it there ſtandeth a houſe, and cloſe ſouthward from this litle Iland is the deepeſt water to ſayle out and into the haven. Within the haven on the north-ſide there lyeth a litle Iland, whereon there ſtandeth a ſteeple, which you muſt keepe over againſt the ſteeple which ſtandeth upon the north-land, & ſo goe in upon it, in the chanel it is two fathome deepe at half flood.

From the weſt-ſide of the haven there commeth a banck of ſtonie ſand ſhooting off, and there it is for the moſt part flat water, and verie rockie, therefore men muſt be careful thereof.

Viana.

Seven leagues ſouthward from Camina lyeth the Tyde-haven of Viana, he that will goe into it muſt underſtand, that from the north-ſide of the River there commeth a ſtonie banck of ſand ſhooting downe, croſſe over before the River, there (when you come out of the Sea) you muſt goe ſo long ſouthward about, untill that the two fire-towres are one againſt the other, and then runne to the ſtrand, ſo long untill that the towre ſtanding upon the north-ſide be over againſt the two houſes, keepe it ſtanding ſo, & runne to the rock with the maſt, and ſayle eaſtward about from it and cloſe along, you ſhal finde two fathome water upon that Sand (with a continuall dayly tyde) at lowe water: when you are paſt that Rock, then you ſhall ſee another Rock with a maſt or beakon ſtanding theron, lying on the north ſide of the land within the river, rūne there likewiſe about cloſe along ſouthward, and then eaſely along by the north-land, untill you come before the towne, there ſometimes there ſhooteth out a Sand, which you muſt ſhūne, & anckor before the towne.

When

When you lye before the towne, then there lyeth a litle Iland ſouthward from you, whereon there ſtandeth a litle chappell, weſtward from this Iland lyeth a great banck, which at lowe water is ſeene above it, but there behinde the banck it is five and ſixe fathome deepe, and before Viana it is ſeven, eight and nine fathome deepe. When you goe in you may runne ſouthward about the aforeſaid banck, and come by the Iland whereon the houſe ſtandeth out againe, before the towne.

Rode before Viana.

You may alſo anckor well without in the Rode at twelve fathome, there is the fareſt ground, there take in a Pilot, becauſe it is a verie narrowe chanel to enter into.

Or you may ſayle well in with theſe markes: there ſtand two markes upon the ſouthſide, which (when you come out of the Sea) you muſt hold one againſt the other, and ſayle ſo long to the land, untill the two markes ſtanding on the north-ſide of the River are likewiſe one againſt the other, and ſo ſayle in by the ſouth-ſide, eaſtward about the rock whereon the maſt or ſtenge ſtandeth, untill you ſee the River open, then ſayle in eaſtward, ſouthward of the ſecond rock with the ſteng that ſtādeth up, and when you are a bowe ſhotte within the ſaid rock, then ſtraight let your anckor fall, and carrie cables to the ſouth land and make your ſhippe faſt with four ropes.

IIII.

The ſituation betweene Viana and Port a port.

Villa del Conde.

FRom Viana to Port a port the courſe is ſouth and by eaſt twelve or therteene leagues. Betweene them both lyeth Villa del Conde, ſeven leagues from Viana and Metelin. Villa del Conde is a Tyde-haven, before the mouth thereof there lye many rockes, which may be ſayled about either ſouth or north, about them it is 5 or 6 fathome, and inwards againe there lyeth a banck croſſe over the haven, which is two fathome deepe with high water; within the haven it is 3 or 4 fathome deepe, & ſouthwards up it is deepeſt and ſafeſt, for on the north-ſide it is full of rocks, which for the moſt part lye under the water, ſo that it is beſt lying on the ſouth-ſide at 5 or 6 fathome.

Leſons.

Four leagues ſouthward from Villa del Conde, lye the great out-rockes called Leſons, right before a tyde-haven, of two fathome deepe called Metelin, & ſouthweſt from the ſouth-point of the ſaid Leſons, about half a league inward to the Sea, there lyeth a blinde rock under the water: betweene the land and the Leſons rockes it is ſixe or ſeven fathome deepe.

Metelin.

About a league ſouth from Leſons rockes lyeth Port a port which hath two chanels, the one runneth in n. the other ſouth.

Port a port.

The ſouth chanel (which runneth in ſouthward, & now the beſt) runneth along by the ſouth-land, & is 3 fathome deepe, to the rock with the croſſe, cloſe in along by it, and keepe in the middle of the chanel, till you come by a great ſteeple, upon the north-lād, which you may ſee through, & there anckor. Thiſchanel altereth ſometimes, & therfore you muſt be careful thereof.

South-chanel.

You muſt runne into the north-chanel in this manner, you muſt ſayle along by the north-point, where now with half flood it is three fathome water, it reacheth in e. ſ. e. and e. and by ſ. there reach manie rockes croſſe over the haven from the ſaid north-point, but you runne along by them, leaving two-partes of the water on the north-ſide, then you runne upon the ſouth-land, and along by it till you come to the rock with the croſſe, and then in the middle of the chanel, till you come before the towne, where you have 10 or 12 fathome deepe.

North-chanel.

V.

To ſayle into Avero with the ſituation of Cape de Montego and the Barles.

Avero.

FIrſt to ſayle from Port a port to Avero the courſe is ſ. and by n. 10 leagues. To knowe the land, you muſt underſtand, that frō Port a port to Avero it is altogether ſandie ſtrand, & you may goe along by the ſtrand at 10 or 12 fathome.

Inward to the land, upon the high land there lyeth a black hillock upō the land, when that lyeth e. ſ. e. from you, then you are open before Avero, and when you can not ſee the black hillock of Carmale, there lyeth a rowe of downes northward from the haven, then you are half a league from the haven.

To ſayle into the haven of Avero, you muſt underſtand that when you come upon the land at 6 or 7 fathome, then you may ſee three beakons made of maſtes of ſhips upon the ſouth-land, place them one right againſt the other, & ſo rūne in e. & by ſ. & e. ſ. e. over the banck, (at the entrie of the chanel you have but 2 fathome water at half flood) till you come by the beakons, then turne againe northweſt and northnorthweſt, till you be cloſe by the north-land, then runne cloſe by it, and ſo you leave all the ſhallowes on your right hand, untill you ſee the River open, then you ſee a houſe upon the ſtrand on the weſt-ſide, then goe from thence up into the River eaſt and by ſouth, and eaſtſouth-eaſt in the middle of the chanel betweene both landes, till you

To ſayle into Avero.

be before the Salt-pannes or Avero, where you may lade your ſhippe full of ſalt, when you goe upon the maſtes or beakons out of the Sea, then you ſee a drie Sand, by the which you muſt quickly winde about, and ſayle in by the weſt-land, as I ſaid before. This chanel is two fathome deepe, with dayly tydes, but within you have 4 or 5 fathome deepe.

Cape de Montego. From Avero to Cape de Montego it is ſouth-ſouthweſt 7 leagues.

Piſſago. A league ſouthward from Cape de Montego lyeth Piſſago, a Tyde-haven, in it you finde two fathome water (with a continual tyde) at half flood.

Half a league weſtward into the Sea from this haven lyeth a banck of ſixe fathome deepe, which you may anckor under at 12 or 13 fathome, it is at leaſt a great league long, and it is beſt to come in about under this banck.

Comming off from Cape de Montego you may alſo anckor under this banck at 7 fathome.

From Cape de Montego to Pineche, or Nova Lisbona the courſe is ſ.w. and by ſ. 11 leagues. From Cape de Montego to the Barlis it is ſ.w. 12 or 13 leagues.

The point behinde the Barlis or Barlinges, is alſo called Cape del Fiſiron, there lyeth a rock off from the point, & there ſouthward there is a great creeke, where the caſtle or towne lyeth, there you may runne behinde with barkes, and lye ſafe, the towne is called Atogie, it lyeth againſt the high hilles.

VI.

To knowe the places of this Coaſt.

THe Coaſt of Portugal about Viana is wel to be knowne, by meanes of the aforeſaid hill of Rego, becauſe it is ſo extreame high, and lyeth upon the water ſide, and the high land of Viana lyeth twiſe or thriſe double behinde it. Betweene Viana, Villa del Conde, and Port a port, you may ſee manie ſteeples, and houſes upon the Land, and you ſee Villa del Conde lye as if it were a great towne. You may knowe the River of Port a port by the rockes called Leſons which are verie high, and lye right north from the River. But about Avero it is altogether ſandie ſtrand, and inward to the land there lyeth a black hillock within the land.

Cape Montego is a high point, & there againſt it in the land it is high hilles. This Cape is ſometimes taken for Roxant, but that is wel to be knowne from the other, becauſe of the Barlis which lyeth betweene both.

Thus the coaſt of Portugal ſheweth it ſelf from Bayona to Cape de Montego, when you ſayle about four leagues from it.

S. Rego.



That which ſtandeth hecreunder belongeth to that that ſtandeth above where the croſſes ſtand.

Cap de Montego.



When that black hillock whereby the hand is, ſtandeth e.ſ.e. from you, then you are right againſt, or before the River of Avero.

VII.

What Moone maketh high water heere.

VPon all theſe coaſts of Portugal a northeaſt and ſouthweſt moone maketh a high water, but within the havens a point later, as I have ſaid before, you neede not reckon any falling of ſtreames heere, for the flood there goeth croſſe towards the land and off againe.

How

VIII.

How theſe Countries lye one from the other.

From Cape de Finiſterre to Mores or Monte Lauro the courſe is ſoutheaſt — — — 5 leagues.
From Rio Roxo to Ponte Vedra ſ. ſ. e. — 5 leagues.
From Ponte Vedra or Blidones to the Ilands of Bayone ſouth-ſoutheaſt — — — — — 5 leagues.
From Bayona to Camina ſouth & by eaſt — 4 leagues.
From Camina to Viana ſouthſoutheaſt — — 7 leagues.
From Viana to Villa de Conde ſouth & by eaſt — 7 leagues.
From Villa de Conde to Port a port ſ. & by e. — 5 leagues.
From Port a port to Avero ſouth — — 11 leagues.
From Avero to Cap Montego ſouthſouthweſt — 7 leagues.
From Cape de Montego to Pineche or Cape de Fiſiron ſouthweſt & by ſouth — — — — 11 leagues.
From Cape de Finiſterre to the Ilands of Bayona ſoutheaſt and by ſouth — — — 19 leagues.
From Cape de Finiſterre to Port a port ſ. ſ. e. — 44 leagues.
From C. de Finiſterre to Avero ſ. & by e. & ſ. ſ. e. 54 leagues.
From Cape de Finiſterre to Barrels ſouth — 67 leagues.
From Bayona to Barrels — — — 49 leagues.
From Port a port to Barrels ſ. ſ. w. and ſ. w. & by ſ. 29 leagues.
From Avero to Barrels ſouthweſt — — 20 leagues.

IX.

How theſe Countries lye from other Countries.

From Cape de Finiſterre to great Canaria ſouthſouthweſt and ſomewhat ſoutherlyer — — 307 leagues.
From Cape Finiſterre to the Salvages ſ. ſ. w. — 273 leagues.
From Cape de Finiſterre to the Ile of Madera ſouthweſt and by ſouth and ſomewhat ſoutherlyer — 246 leagues.
From Cape de Finiſterre to the Ile of S. Michael weſtſouthweſt — — — — — — 247 leagues.
From Cape de Finiſterre to the Iles of Tercera w. ſ. w. and w. and by ſ. — — — — — 280 leagues.
From Cape de Finiſterre to the ſouthweſt point of Ireland n. and by weſt, and north — — — 174 leagues.
From Cape de Finiſterre to Cape de Claro ſouth 174 leagues.
From Cape de Finiſterre to Waterford or the ſoutheaſt point of Ireland north and by eaſt — 184 or 186 leagues.
From Cape de Finiſterre to Start-point n. n. e. 153 leagues.
From Cape de Finiſterre to the Scims n. e. & by n. and ſomewhat northerlyer — — — — 112 leagues.
From Cape de Finiſterre to Beliſle ſouthweſt — 122 leagues.

X.

Vnder what degrees theſe Countries lye.

Cape de Finiſterre lyeth under 43 degrees.
Bayona lyeth under — 42 degrees 10 minutes, or as ſome ſay — — 42 degrees.
Port a port lyeth under — — 41 degrees.
Avero lyeth under — — — 40 degrees 26 minutes.
Cape de Montego lyeth under — 40 degrees 8 minutes.
The Barlinges lye under — — 39 degrees 40 minutes.

The other places lying on theſe coaſts you may take the heigth thereof in the Carde with the compaſſes.

Heere followeth the Carde N. 10

THE DESCRIPTION OF

the Sea-coasts of Portugal and Algarve, which lye betweene the Barlinges and Cabo de S. Vincent.

I.

How you ſhall ſayle the River of Lisbon.

Rode behinde the Barils.

FRom Barlinges to Roxent the courſe is ſouth and by eaſt, and ſouthſoutheaſt, diſtant 16 leagues. Behinde the Barlinges or Barlis there is a good Rode and anckor ground, againſt the Hermites houſe, where you may anckor at 10 fathome, under the great Iland, as it ſtanderh marked in the Carde, you may goe ſouth and north on both ſides thereof, behinde them as you will, for there it is faire.

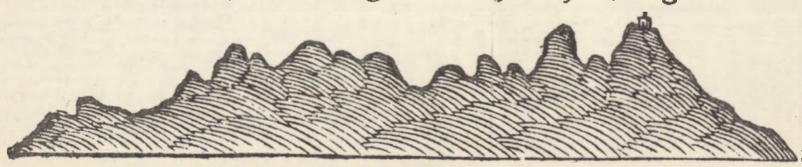
Yonge Rocxent.

Behinde the Barlis lyeth Cape de Fiſiron, and right ſouth frō thence lyeth a high round hill, which our ſaylers name Yonge Rocxent. From Cape de Fiſiron to Rocxent it is ſouth & north 15 or 16 leagues. Rocxent is a point of land well to be knowne, for although you are a great waie from it, yet you may ſee the ſharp hillock of Syntra cloſter.

When Roxent is eaſt and by ſouth and eaſtſoutheaſt from you ſeven leagues then it ſheweth thus.



Thus Rocxent ſheweth being northeaſt from you 7 leagues.



A league eaſt from the point of Roxent lyeth the Rode of Caſcalis, where you may lye ſafe from a northweſt, north, and northeaſt winde, at 12 or 13 fathome, as drie as you will. A great league eaſt from Caſcalis lyeth the point of S. Iulian or S. Giles, thereon ſtandeth a ſtrong caſtle, and that is the north-point of the River of Lisbon, and the north-chanel of the ſaid River goeth up the length of a bullets caſt in by it.

S. Giles.

North-chanel.

To ſayle in by this point, you muſt ſayle within a maſtes length of the caſtle, and keepe the north-land to Reſtiers, and ſo to Lisbon, commonly you anckor before the village of Bolin, at 12 and 13 fathome, but you muſt take heede that you enter not into the haven with ſtill water, and with an ebbe, for it falleth verie ſtrong upon the north Shops or Sops. The chanel of S. Giles reacheth in e. & by ſ. and when you are within you muſt ſayle e.n.e. and n.e. and by e. and when you come againſt the cloſter at Reſtiers, then you muſt make ſomewhat towards the ſouth-land, otherwiſe you muſt hold all along the north-land, as aforeſaid.

To ſayle into the Crake-chanel

To ſayle into the Crake-chanel, then you muſt place Caſcalis over the point of Roxent, untill the ſteeple (which you may ſee ſtanding above the cloſter at Reſtiers) commeth over againſt the white cloſter which ſtandeth furtheſt from Reſtiers, that is, over againſt S. Katherines cloſter, then goe in n. e. and n. e. & by n. keeping theſe markes ſtanding thus, until you come within S. Giles point, and ſo goe in along by the north-land of Reſtiers, till you be within the caſtle, and then anckor where you will: with theſe markes you may ſayle into & out of the Crake chanel. Or if you come from the weſt, and will goe into Crake-chanel, then place Caſcalis over againſt the weſt-ende of Roxent, and ſo ſayle about the North-capes, untill the towne of Liſbon be within two ſhips length of the ſouth-ſide of the River, and ſayle in ſo, n. e. & n.e. & by n. when you ſee the Sandbaye within S. Giles point, then you are in a good waie.

But if it ſhould fall out that you may not ſee the towne nor the


Pascaarte vande Zeecusten van Portugal tusschen de Barlenges en de C. de S. Vincente geleghen, vertoonende nae't leven de ware geleghentheyt vande vermaerde Riviere van Lisbona, hoemen die mitsgaders andere Zeegaten aldaer op en afseylen sal, en waermen op de selfde gewesten hem voor te wachten ende te hoeden heeft.
Carte marine des costes de Portugal situeez entre les Barlenges et le C. de S. Vincente, representant au vif la vraye situation de la fameuse Riviere de Lisbone et autres Ports la environ, comment en les navigant on se gardera de toutes inprofonditez, banex de sable et autrez perilz.
Duitsche mijlē 15. in een graedt
Lieues d'Allemaigne 15 en un degre
Spansche mijlen 17½ in een graet
Lieues d'Espagne 17½ en un degre
Engels. en Franc. mijlē 20 in een gra.
Lieu. Angl. et Francoise 20 en un deg.
REINO DO ALGARVE
PORTUGALLIÆ
PARS
Sout lant
Setubal
S. Uves
Slot van Palmelo
Jagus
Fluvius
Witte huys
Witte Slot
Troia
T'landt van Troianen
Les Bancques
Blauwberch
Salines
Algoas
Villa nova
Vijgebergh
Lagos
Vijgheberch
S. Vincente
C. de S. Vincente
Sout lant
Alcouchete
Conna
Palhais
Lisbona
Monsteria
R. Daposata
Zisembre
S. uves hoeck
C. de Spichel
Almada
Bolin
Restiers
S. Catrinen Clooster
Trasaria
Zuyder cachops
Craecke diep
Noorder cachops
S. Gielis
Cascais
Sintra
C de Roxent
Attogye
Jonge Roxent
Peniche
Barlenges
De Wester Zee
39
38
37
10

the caſtle, then keepe the Sandbay (which lyeth within S. Giles) n.e.& by n. from you, and ſo ſayle in n.e. and n.e.& by n. and hold the courſe of the North-Sops at 8 or 9 fathome, and when you begin to come againſt S. Giles point, then ſaile ſoftly along by the north-land, as I have ſaid.

To laveere in the Krake chanel.

He that will laveere out of and into the Crake-chanel muſt leave the ſteeple aforeſaid (ſtanding in the land) a ſhips length ſouthward, & a ſhips length northward from S. Katherines cloſter aforeſaid, and then turne everie boute, and ſo laveere out & in. And goe not out of or into this chanel with a calme or an ebbe, for it falleth verie ſtif over the eaſt-ende of the Cachops.

If you will goe out of the Crake-chanel, take good heede to the ſteeple, when it commeth under the high-land, then ſet it right weſt from the ſecond white cloſter, and goe on ſ.w.& by ſ. then the ſteeple will come upon the cloſter.

But if you muſt laveere out then looke well to your tyde, for the ſtreame falleth verie ſtif over the Cachops, ſo that with a calme it is dangerous to goe out and into this chanel, but ſpecially in ſayling out with an ebbe, for that falleth croſſe over the Cachops, therefore looke wel to it in calme wether.

II.

To ſayle to S. Vves or Setubal, & ſo to C. S. Vincent.

S. Vves point. C. Spichel.

FRom Roxent to S. Uves point the courſe is ſ.e.& by ſ. 11 leagues. It is a point well to be known, becauſe there lyeth a high round hill thereon, alſo you ſee the upper part of the caſtle of Sizember, upon a flatte hill, as if it were a great gavel ende of a countrie-houſe.

Thus S. Vves point ſheweth when it is eaſt and by north from you 7 leagues.



S. Uves point is called Cape de Spichel, right ſouth about the point there is a rent or cloven place in the land, thereagainſt it is good rideing at 9 and 10 fathome, and before Siſember you may alſo anckor at 15 or 16 fathome.

Five leagues eaſtward from Cape de Spichel, or S. Uves point lyeth S. Uves, where there lyeth a great banck before the haven, there ſtandeth a white caſtle beneath the high land upon the water, when it is n.n.e. from you, then you are right before the chanel or haven.

To ſayle into S. Vves.

He that will ſayle to S. Uves over the banck comming down from S. Uves point he muſt keepe the weſt-point of Siſember a ſhips length without the eaſt-point, and ſo goe forward e. & e. and by n. untill the caſtle of Palmelo, which ſtandeth above S. Uves commeth in a valley over the white caſtle which ſtandeth upō the water ſide, then ſaile in right n.n.e. til you be within the caſtle which ſtandeth upon the water, and then within a cables length in by the north-land n.e.& by e. till you are before the towne of S. Uves or Setubal. But whē the caſtle of Palmelo cōmeth under the land, ſo that you can ſee it no more, then there ſtandeth a white houſe on the north-ſide of the caſtle that ſtandeth upon the water ſide, keepe that ſtanding ſo, & runne in upon it, till you be within the white caſtle, and then goe along by the north-land, as I ſaid before, till you be before the towne of Uves, & anckor before the Fiſhermens village at 6 or 7 fathome. Upon the banck it is 3 fathome and a half water at half flood, & when you ſayle over it you finde ſeven ſhallowe or drie places. By the ſouth-land alſo there goeth in a chanel, but that is onely for barkes, between this chanel & the right depth, the banckes in ſome places lye ſo drie, that they lye almoſt above the water.

Now to goe over the deepeſt water in the banck of S. Uves as you ſayle out, with ſhippes that drawe much water, when you ſet ſayle from the white caſtle, then ſet the white houſe over againſt the north-ſide of the caſtle, ſo that you may ſee through them, and hold it ſo, untill S. Uves point begins to come without the eaſt-point of Siſember, then bring the white houſe on the ſouth-ſide of the caſtle which ſtandeth upon the water ſide, and ſo runne out, for there you ſhall have the deepeſt water, but whē you may ſee the caſtle of Palmelo, that is a right long mark to runne over the banck. Then the white caſtle muſt be n.n.e. & ſomewhat northerlyer from you.

C. S. Vincent.

Frō S. Uves point to C. S. Vincent it is ſ. & ſ.& by e. 29 leag. between them there is no knowne havens. But eaſtward about from Cape S. Vincent you may anckor before a ſand-bay at 20 fathome, againſt a n. & n.n.w. winde.

But to know the land, you muſt underſtand that between C. S. Vincent & S. Uves point there lye ſome high hilles, called Salines, & half a league n. from Cape S. Vincent, there lyeth a high whitiſh cliffe in the land, which is higher then the other land, when you ſee it then you are by the Cape, & upon the point of S. Vincent there ſtandeth a broken cloſter, & cloſe by the Cape there lyeth a high rock. The whole coaſt of Algarve may be knowne by the Fgge-hilles, as alſo Cape S. Vincent.

Fig-hilles

Thus the land about Cape S. Vincent ſheweth it ſelf when you come from the north, and ſayle along by it.



III.

What Moone maketh the higheſt water heere.

AS upon all the other Coaſts of Portugal and Gallicia, ſo alſo heere upon theſe deſcribed Coaſts, a northeaſt and ſouthweſt Moone maketh high water, but within the chanels or rivers a ſtreeke or two later, according as they reach deepe or farre into the land. And becauſe the flood heere commeth croſſe againſt the land, and croſſe back from the land, ſo have you heere no falling of ſtreames.

IIII.

How theſe Countries lye diſtant one from the other.

FRom Barlinges to Roxent ſ.& by e. & ſ.ſ.e. 16 leagues.
From Cape de Fiſiron, Pineche, or Nova Lisbona to Roxent ſouth and north — — 15 or 16 leagues.
From Roxent to Cape de Spichel, or S. Uves-point ſoutheaſt and by ſouth — — — — 11 leagues.
From C.de Spichel to C. S.Vincent ſ. & ſ.& by e. 29 leagues.
From Barlinges to Cape de S.Vincent ſ.and by e. 54 leagues.
From Roxent to Cape de S.Vincent ſ.& by e. — 37 leagues.

V.

How theſe Countries are diſtant from other Countries.

FRom Barlinges to great Canaria ſ. ſ. w. — 248 leagues.
From Barlinges to the Palma ſ.w. & by ſ. 256 leagues.
From Roxent to great Canaria ſouthſouthweſt & ſomewhat weſterlyer. — — — 340 leagues.
From the River of Lisbon to the Iſle of Salvages 208 laagues.
From the River of Lisbon to Porto Santo ſ.w. — 160 leagues.
Frō the River of Lisbon to the Ile of Madera ſ.w. 174 leagues.
From the River of Lisbon or from Roxent to the Ile of Tercera weſt — — — — — — 274 leagues.

VI.

Vnder what heigths theſe Countries lye.

THe Barlinges lye under — 39 degrees 40 minutes.
Roxent lyeth under — — 38 degrees 52 minutes,
or as ſome ſaye — 39 degrees.
Cape de Spichel or S. Uves-point lyeth under 38 deg. 25 min.
Cape S. Vincent lyeth under — 37 degrees.

Heere followeth the Carde N. 11

THE


Afbeeldinghe der Zeecusten, tusschen de C. de S. Vincente en de Strate van Gibraltar ... en deel van Algarve, de groote Condaet, en de custen van Andalusien, vertoonende de rechte gelegentheyt aller Rivieren, Havenen, en Reeden aldaer geleghen Item alle Sanden, Bancken, Clippen, ende Rudsen, diemen int beseylen derselver plaetsen te schouwen en te mijde hæft
Pourtraicture des costes marines entre le C. de S. Vincente et l'estroict de Gibraltar, comme une partie d'Algarve, la grande Condade, et les costes d'Andalusie, monstrant au vif la vraije situation de toutes Rivieres, Havres, et Rades desdictes costes, Item de tous Bancqs, sables, escueilz et rochers, que en navigeant lesdictes lieux on a a eviter.
EL CONDADO
ANDALUZIA
ALGARVÆ PARS
Guadiana Rio
Cartaja
Lepe
Jaron
Aimonte
Tavila
Porto Maria Castromaria
S. Miguel
Salteez
Moguer
Palos
Xavega
Clif
Soutlant
Rio Guadalquivir
Rivere van Sevilla
S. Lucar de Barrameda
Sipionen
Rottum
S. Catrmen capel
Puerta S. Maria
Diamant
Baya van Calis
Puercos
Calles
Punta de S. Sebastiano
Porto Real
Soutlant
Purto de Suaco
Marbella
Estipona
Gibraltar
I. de S. Pedro
Barbate
Cordl
Cabo Trafalgar
Tarifa
Faro
Silvis
Alboher
Algoas
Feraguda
Villa nova
Vijgeberch
Lagos
C. S. Maria
S. Vincente
C. de S. Vincente
De strate van Gibraltar
Ceuta
Alcasar
Tanger
PARS BARBARIÆ
C. de Spartel
Duitsche mijlen in een graedt
Lieues D'allemaigne 15 en un degre
Spaensche mijlen 17½ in een graedt
Lieues d'Espaigne 17½ en un degre
Engelsche en Fransche mijlen 20 in een gra.
Lie Angloises et Fraçois. 20 en un degre
11

CHAPTER XI.

THE DESCRIPTION OF

the Sea-coaſts of Algarve and Andaluſia, lying betweene Cabo de S. Vincent and the Strait of Gibraltar.

I.

The ſituation betweene Cape S. Vincent and Cape de S. Maria.

Rode under Cape S. Vincent

RIght eaſt from Cape S. Vincent about the ſecond point in the Sand-baye, there is good Rode for a northweſt and north-windes, at 14 or 15 fathome, from Cape de S. Vincent to Cape de S. Maria or Faro, eaſt or a litle ſoutherlyer 19 or 20 leagues, betweene thē both lyeth Lagos or Laves, and Villa Nova.

Lagos or Laves.

From Cape de S. Vincent to Lagos it is eaſt and by north ſeven leagues, there is a tyde-haven which rūneth through betweene the rockes, behinde a girdle of Sand, but at a lowe water it is drie, there you may alſo lye at anckor againſt a northweſt, weſt-northweſt, and a north winde, at 10 or 12 fathome.

Villa Nova.

Villa Nova lyeth about four leagues eaſtward from Laves, betweene them both, almoſt three leagues from Laves, & more then one from Villa Nova there lyeth a blinde rock, which you muſt think upon. Villa Nova is a faire haven, it runneth in 10th and north and by weſt, and at half flood you have therein two fathome water. Within the haven on the eaſt-ſide there lyeth a litle Iland or rock, whereon there ſtandeth a ſteeple or a houſe, and upon the land there ſtandeth a great maſt with a barrel upon it, when that ſteeple or houſe is right againſt the ſaid maſt, then you muſt ſayle upon it right into the haven, by the eaſt-land, till you be paſt the ſteeple, the weſt-ſide is flatte and drie, then when you come by the maſt, you muſt turne up weſtward before the towne of Villa Nova, where you may anckor at four and five fathome.

Faro, C. Maria.

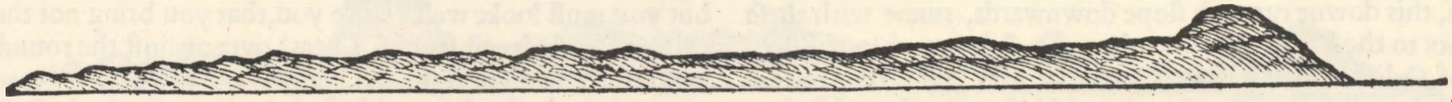
From Villa Nova to Faro, or Cape S. Maria it is about nine leagues, upon the ſtrand there ſtandeth a fire-beakon, and from the point there ſhooteth off a Sand which you muſt ſhūne, you muſt goe in eaſt to the haven of Faro, it reacheth weſt, and weſt northweſt, you muſt leave the ſteeple on the left hand, and the ſtrand of Tavila on the right hand, running in at two or three fathome, and being in, you may anckor right over againſt the towne of Faro under the Iland, at three fathome, the chanel at half flood is two fathome deepe.

To knowe this land when you come out of the Sea, you muſt underſtand that Cape S. Maria is a round hillock, by the which you may knowe the whole land of Condado.

Thus Cape S. Vincent ſheweth it ſelf when it lyeth ſeven leagues northweſt from you.



When Cape S. Maria lyeth northeaſt and by north from you, then it ſheweth thus.



II.

To ſayle from Cape de S. Maria to Saltees.

FIve leagues northeaſt & by north from Cape de S. Maria or Faro lyeth Tavila, which is a crooked drie haven, which almoſt everie yeere altereth, and is not to be truſted to ſayle into it, unles it be firſt marked with beakons or boyes, at half flood it is ſcarſe two fathome, and you lye right within the downes at four

Tavila.

four fathome.

Aimonte. From Tavila to Aimonte the courſe is e.n.e. five leagues.

Aimonte is a deepe haven, and one of the beſt havens in all Condado, it reacheth in northweſt by the eaſt-land, and at half flood it is 3 fathome deepe, there lye ſome ſands before the chanel, the markes thereof are theſe, there ſtandeth a tree upon the eaſt-ſide of the haven, when Aimonte is over againſt the tree, then you are eaſt from the Sands, which lye before the haven, then you goe to the foot-ſtrand, and runne in along by it, n. w. and n.w. & by w. and when you are in, then you muſt turne up northwards before the towne, or if you will be before Port Maria, then you muſt followe the n. w. courſe, untill you come before the caſtle, within it is wide and broade, and ſixe or ſeven fathome deep.

There goeth in a haven alſo by the weſt-land, where you come croſſe in out of the Sea, but that by the eaſt-land is deepeſt.

Lepe. S.Michael. From Aimonte to Leepe or S.Michaels the courſe is e.& by n. ſeven leagues. Leepe hath uncertaine chanels, which you may not truſt to ſayle into without a Pilot, for they alter continually, now the chanel which lyeth eaſt from the great Iland is the beſt, from thence you muſt turne up weſtward againe to Taron, and to the River, and ſo come to Leepe, where before the deepe you take in your lading.

S. Michaels chanel was woont to runne croſſe over into the Sea and with half flood was three fathome deepe, and before S. Michaels it is five fathome, from whence with a high water a man may well goe over the River to Leepe. Men were woont to goe in by Taron, but for ſecuritie it is neceſſarie to take in a Pilot.

Palos. Saltes. From S.Michaels to Palos or Saltes the courſe is eaſt, and e. & by ſouth ſeven leagues. Heere you ſayle into great Condado, this haven runneth in by the weſt-ende of Red-downe, there ſtandeth a great broad tree weſtward frō the white cliffe, which you muſt hold over againſt a redde downe, as if it were redde earth, this downe runneth ſlope downwards, runne with theſe markes to the ſtrand about north, and n.& by w. then the ſteeple of Odier which ſtandeth above Wolves, will come over againſt the eaſt-ſide of the chanel, hold it ſtanding ſo, and ſayle along by the ſtrand, within two cables length, till you be about the point, then you may runne up north to Palos, or n. w. to Wolves, and there anckor at 6 or 7 fathome.

There within it is 6, 7 and alſo 3 & 4 fathome in ſayling up, thereafter as you ſayle up farre or not. This chanel is at the threſhold with half flood three fathome and an half deepe, within it is five fathome deepe.

There commeth alſo a chanel out of the Sea, running in betweene the Sandes, then Wolves will be on the eaſt-ſide of the chanel, and you muſt ſayle in northnorthweſt, and when you are within the haven, then doe as aforeſaid, this chanel is three fathome deepe.

To knowe the land heereaboutes you muſt underſtand, that on the weſt-ende of Red-downe there lyeth a white ſhoring-land ſomewhat cliffie, being rediſh earth or chalck, he that falleth upon it may thinke that he is by the haven of Saltes, there ſtand ſome boxe-trees thereon, otherwiſe the land is cleane without trees, and it is reddiſh ſand, & therefore is called Red-downe. Redde downe.

III.

To ſayle from Saltes to the River of S. Lucas.

FRom Saltes to the River of S. Lucas the courſe is ſ. e. and ſ.e.& by ſ. diſtant about 8 or 9 leagues.

He that will ſayle into the River of S. Lucas, he muſt place the great tree over the north-ende of the white cloſter which ſtandeth eaſtward from S.Lucas, and ſayle out & in with thoſe markes, & ſo at the dryeſt at lowe water & dead ſtreame, you ſhall have three fathome, and with high water and dead ſtreame you ſhall have 22 foot or ſcarſe 4 fathome. Now when the caſtle of Scipion and the church beginne to come one upon the other, then you come to the firſt ſtone or ſand, & when the caſtle and the church are right over, or againſt each other, then you are upon the dryeſt, and then they ſtand right ſ. ſ. w. from you. And when the caſtle and the church come againe through each other, then you have deepe water againe, that is, three and an alfand four fathome with lowe water and dead ſtreame, then ſayle forward in with the ſame markes of the cloſter & the tree, but you muſt looke well before you, that you bring not the mil (which ſtandeth eaſt from S.Lucas) over againſt the round cloſter, which ſtandeth right eaſt beneath the towne, but keepe thē a bowe length aſunder, and ſo ſayle in through the beſt chanel or depth. But if the round cloſter and the mille come one over againſt the other when you ſayle in, then you ſhall touch upon the ſtones or ſandes. When you are over the Sandes and are gotten in, then ſayle to the ſtrand of S. Lucas, untill you ſee the To ſayle into the River of Lucas.

River

River cleane open,to ſhunne the Sand,which ſhooteth off from the northweſt-point of the River,and ſayle along by the land,& anckor before the church with the croſſes, which ſtandeth belowe in the downes, at 5, 6, or 10,or 12 fathome,as neare as you will, you may alſo laveere out of this haven with indifferent ſhippes or boates, but you muſt looke well before you, for it is not verie wide.

By the land of Scipion there goeth alſo a chanel in, to reach it, you muſt ſayle in within two cables length cloſe by the ſaid land,until you are within the ſecond Sand,then you muſt turne or put off from the land,until you come to the aforeſaid markes of the cloſter and the great tree, then runne forward in upon them as aforeſaid. S.Lucas River is good to knowe by Redde-downe, for it lyeth on the eaſt-ende thereof.

IIII.

To ſayle from S. Lucas to Calis.

FRom Scipion to Calis Malis the courſe is ſoutheaſt, nine leagues. Calis is knowne by the Granado hill, when that is e.n.e. and e.& by n. from you, then Calis lyeth e.& by n. from you, then ſayle up unto it, and you cannot miſſe Calis.

Scipion. Upon the point of Scipion there lye rockes, but they are above the water. And betweene the point of Sipion and Calis, four leagues from Scipion lyeth Rottum, from whence there ſhooteth a great ſtone-riffe or ſand.

Baye of Calis. If you will ſayle into Calis Baye, you muſt runne upon the rockes which lye upon the weſt-ſide of the Baye, which are called los Puercos,ſayle in upon them within two cables length,at

Los Puercos. 6 or ſeven fathome, till you be before the towne of Calis, and there anckor as deepe as you will, at 8, 10, 12, or 15 fathome, it reacheth in for the moſt part, e.ſ.e. and ſ.e.& by e.

But there lyeth a ſtone under the water which is called the Diamant, about n.n.e. and n.e.& by n. from Puercos, a litle league, and when S. Catherins chappel is e.n.e. from you,then you are againſt that ſtone or rocke, which at half flood hath 3 fathome water upon it. The markes of this rock are theſe,when S.Maries church commeth over the north ende of Calis(which is a cloſter ſtanding without Calis) there ſtandeth alſo a houſe upon the hill, which you goe along by to Xeres, when that houſe commeth over againſt the chappel which ſtandeth upon the ſide of the water, weſtward from Marie-port, when thoſe markes are one over againſt the other,then you ſhould ſayle upon the ſtone, which at the dryeſt with high water is but 3 fathome and a half, but ſette the two high hilles which are ſouth from the waie to Xeres, ſo that they may be a litle aſunder, and come not one under the other, then you ſayle not upon this ſtone or rock. Diamant.

The Puercos rockes lye about half a league from the north-point of Calis, he that lyeth in the Rode before Calis, hath the Puntal ſouth or there aboutes from him, after he cõmeth neare to Calis, but ſouthward from Calis there lyeth a rocke,but goe no nearer unto it then 7 fathome.

Calis Baye is wide and broad, and you anckor there at 5 or 6 fathome, a northweſt winde commeth into it, therefore if anie man will goe in behinde the Puntal, he muſt goe on ſoutheaſt in betweene the point of Porte-real and the Puntal, and then runne up upon the point of Puntal, where you lye ſafe from all windes, you may there alſo ſet a ſhippe drie to make it cleane, and if you goe into the Creeke,then you muſt take in a Pilot, & runne into the water of Porte-real,and leave the Iland on backborde, then you ſhall gett Herodes creeke open, then ſayle in through the middle of the chanel to the Salt-hilles. Rode behinde Puntal.

When you ſayle to Calis the Granado-hill will ſtand eaſt, and then it ſheweth thus.



V.

To ſayle from Calis Malis through the Strait.

C. Trafalgar. TO ſayle from Calis to the Strait, you muſt goe ſouth & ſ.& by e. to the point of Trafalgar, then you runne farre ynough without the banckes or rockes which lye ſ.ſ.e. from Calis, From S. Sebaſtians point to the point of Trafalgar it is ſ.ſ.e. 11 leagues. There lyeth a ſtonie banck two leagues into the Sea,weſt and by ſouth from the Iland of Tariſa, which is 9 and 10 foot deepe at the dryeſt,when the winde bloweth hard Tariſa.

you may ſee the Sea ravle upon it. If you will enter into the Strait, you muſt ſayle cloſe by the land, or farre from the land, but it is beſt in the middle of the Strait, when you are as farre from the land on the one ſide as on the other. From the point of Trafalgar or Tariſa to Gibraltar the courſe is e, and e. & by ſ. 5 leagues. On the weſt-ſide of Gibraltar there is a faire Rode to anckor in, where alſo it is good anckoring, but a ſouthweſt winde bloweth into it, you lye there ſafe againſt a weſt winde, and a ſouth-winde bloweth juſt upon the point of the land of Gibraltar.

Rode before Gibraltar.

C.Spartel. Cape Trafalgar, and Cape de Spichel or Eſpartel lye diſtant ſ.& by e. and n.& by w. 9 leagues. Eaſt from Cape de Spartel

Tanger. lyeth Tanger, in a great creeke and ſandbaye, there ſtandeth a caſtle upon the weſt-point of Tanger, ſomewhat high, and then ſomewhat higher upon the hill there ſtandeth a watchtowre, & eaſt from Tanger there ſtandeth another broken watchtowre, ſo that Tanger is good to knowe. When you are againſt Tanger, the coaſt to Scheminckel-hill reacheth moſt e.n.e. and e.& by n. therefore goe e.n.e. and e.& by n. forward, for that is the right courſe through the Strait. In the night keepe moſt upon the Barbarie ſide, for it is verie faire, and the Spaniſh ſide is all foule. Gibraltar or Iubleter (as our ſaylers call it) and Seuta lye

Seuta. diſtant ſ.& by e. and n.& by w. 8 leagues.

From Gibraltar to Maribella the courſe is n.e.& by n. it is a Rode to lade reaſons, oyle and other fruites in. Maribella.

From Gibraltar to Cap de Mol, on the weſt-ſide of Malaga, the courſe is n.e. 24 leagues. When you lye in the Rode at Malaga, then that point lyeth about 3 or 4 leagues ſ.w. from you.

Velis Malaga.

From Gibraltar to Velis Malaga the courſe is n. e.& by e. about 33 leagues, and lyeth about 7 leagues eaſtward from Malaga.

From Velis Malaga to Cape de Gato the courſe is e. and e. & by ſ. 16 leagues. From thence to Carthagena it is 19 leagues, that is a good haven, there you lye ſafe from all windes.

Malaga. At Malaga you lye at 15 or 16 fathome ſafe frō a weſt-winde, but an eaſt-winde bloweth cornerwiſe. To knowe Malaga you muſt underſtand, that there ſtandeth a caſtle on high, eaſtward from it, and there come two walles downe from it to the Sea, to another caſtle that ſtandeth upon the water, the rode is now before that caſtle, for at the other rode it is foule, by meanes of caſting of ballaſt into it.

At Velis Malaga you lye at 14 fathome, with an eaſt or Lavant winde it is there open, but there is good ground.

At Maribella you may anckor at 12 or 13 fathome, there ſtādeth a ſteeple by the water, bring that in the middle over againſt the towne, and anckor there, there is the beſt ground.

Thus the Spaniſh-coaſt ſheweth it ſelf when you are without the Strait, when the north-point is about ſeven leagues north and by eaſt, and the innermoſt point northeaſt from you.



When Tarifa is north from you, then the land ſheweth thus, & the point of Gibraltar lyeth northeaſt from you.



Tarifa.

VI.

What Moone maketh high water upon all this Coaſt.

AT Calis in the baye a ſ. ſ. w. moone maketh a high water, and alſo in the Strait of Gibraltar.

At Calis before the baye a ſ.w.& by ſ. and a n. e. & by n. moone maketh a high water.

Before the River of S. Lucas a ſ.w.& by ſ. and n. e. & by n, moone maketh high water.

Before the Condado a ſ.ſ.w. moone maketh a high water.

Before Palos Moger and Wolves a ſouth and north moone maketh a full Sea.

At Cape S. Vincent and Cape S. Maria a ſouthweſt and n.e. moone maketh a full Sea.

The

The ebbe falleth without the Puercos ſouth about to the Strait, & the flood falleth north about towards the land, but the moſt part of the flood falleth croſſe into the land about the Havens, a ſ.w. & by ſ. moone maketh a high water in the Strait, & when it is faire wether, commonly it is there four houres flood and eight houres ebbe, but the ſtreame goeth moſt part with the winde, by this everie man may geſſe how it is.

VII.

How theſe Countreys are diſtant one from the other.

From Cape S. Vincent to Lagos or Laves the courſe is eaſt and by north — — — 7 leagues.
From Lagos to Villa Nova eaſt — — 4 leagues.
From Villa Nova to Cape Maria or Faro e. & by ſ. 9 leagues.
From C. Maria or Faro to Tavila n.e. & by e. — 5 leagues.
From Tavila to Aimonte e.n.e. — — 5 leagues.
From Aimonte to Lepe e. & by n. — — 7 leagues.
From Lepe to Saltes or Palos e. and e. & by ſ. — 7 leagues.
From Saltes to the River of S. Lucas or Sibiona ſoutheaſt, and ſoutheaſt & by eaſt — — — — 8 leagues.
From S. Lucas or the point of Sibiona to the point of Calis ſoutheaſt — — — — — 9 leagues.
From Calis to the point of the Strait ſ.ſ.e. — 11 leagues.
From the point of the Strait called Trafalgar or Tarifa to Gibraltar e. & by ſ. — — — — 7 leagues.
From Cape S. Vincent to Cape Maria eaſt — 18 leagues.
From C. S. Vincent to Calis e. & by ſ. — 48 or 50 leagues.
From Cape S. Maria to Saltes e. n.e. — — 24 leagues.
From Cape S. Maria to Sibiona eaſt — — 29 leagues.
From C. S. Maria to the Strait e.ſ.e. and ſ.e. & by e. 46 leagues.
From Lepe to Sibiona e.ſ.e. — — 16 leagues.
From Saltes to Calis ſ.e. and ſ.e. & by ſ. — 16 leagues.

VIII.

How theſe Countries lye diſtant from other Countreys.

From Cape S. Vincent to Cape Cantin ſouth 87 leagues.
From Cap S. Vincent to Cape de Geer ſouth & ſomewhat weſterlyer — — — 134 leagues.
From C. S. Vincent to the Iland of Lanzarotte ſ.ſ.w. 165 leag.
From C. S. Vincent to Great Canaria ſ.w. & by ſ. 211 leagues.
From C. S. Vincent to Iſle de Palma ſ.w. — 224 leagues.
From C. S. Vincent to Porto Santo ſ.w. & by w. 137 leagues, and to Madera ſ.w. & by w. — — — 157 leagues.
From C. S. Vincent to Iſle S. Maria weſt — 262 leagues.
From C. S. Maria or Faro to Cape Cantin ſ. & by w. 91 leagues.
From Cap S. Maria to Great Canaria ſouthweſt and ſouthweſt & by ſouth — — — — 220 leagues.
From C. S. Maria to the Ile of Madera ſ.w. & by w. 93 leagues.
From Calis to Great Canaria ſouthweſt — 240 leagues.
From Calis to the Ile of Madera w.ſ.w. — — 200 leagues.
From Cape Trafalgar to Cape de Spartel ſ.e. — 9 leagues.

IX.

Vnder what degrees theſe Places lye.

Cape S. Vincent & S. Maria lye under 37 degrees.
The Coaſt of Condado lyeth under 38 deg. 15 & 20 min.
The Iland of Calis lyeth under 36 degrees 30 minutes.
The middle of the Strait of Gibraltar lyeth under 35 degrees & 50 minutes.

Heere followeth the Carde N. 12 and 13.

A TRVE DESCRIPTION

of the Sea-coasts of Barbarie, betweene Cape de Spartel, or the Strait of Gibraltar and Cape de Geer.

I.

From the Strait of Gibraltar to Cape de Cantin.

C. Trafalgar.

CApe de Spartel or Spichel (which is the south-point of the Strait of Gibraltar) lyeth distant from the north-point, called Cape de Trafalgar south and by east, and north and by west 9 leagues.

Arsila.

From Cape Spartel south 7 leagues lyeth Arsyla. Before Arsila there lyeth a rowe of rockes, where you may sayle through at two places, you may goe at the north-chanel with great shippes, but at the south-chanel with small barkes, & you must then anckor betweene the towne and the rockes.

Larage.

From Arsila to Larage or Alarache the course is south and by west 8 leagues, there runneth in a River to Larage, but it is verie crooked and drie, you can not goe into it with anie great shippe, but onely with barkes & Frigates, you anckor there before the Rode, at 16, 17 and 18 fathome. This coast reacheth all south & by west, and southsouthwest, it is from Larage to Mamora 20 leagues.

Mamora.

Mamora lyeth upon a River, which is two fathome deepe in the entrie thereof, but in the rode it is 20 fathome deepe, a southwest moone maketh a full Sea along this coast. South from Mamora lyeth Salee, & from Salee to Anafe or Algasse it is southwest and by south, that is a great decayed towne, you may yet see five or sixe towres standing up, when you come to the land, it lyeth 19 leagues east from Masagam. From Anafe to Azamor it is s.w. & by w. 14 or 16 leagues. there you may anckor at 14 or 15 fathome, & there you lye safe against a southwest winde. Two leagues more about west lyeth Masagam, he that will sayle to Masagam must knowe, that there are Pilots to bring in a shippe, for it is a great creeke, but it is not too faire, so that manie shippes could not lye there upon faire ground. On the west-point of the Baye there lye some rockes, which are not seen at high water, but at lowe water they lye bare, when you lye in the right Rode, then the west-point lyeth northwest from you, and the other point east. West from Masagam there standeth a towre upon a point.

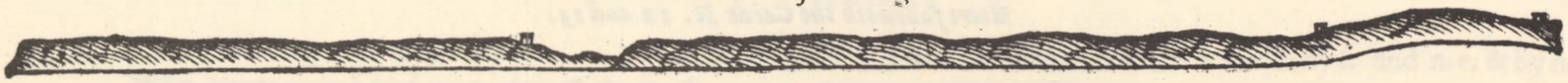
Salee. Anafe or Algasse.

Masagam.

From Masagam to Cape de Cantin it is westsouthwest 13 or 15 leagues, when you come to Cape de Cantin, you must shune the land somewhat, for there shooteth off from it a hard rock somewhat into the Sea.

C. Cantin.

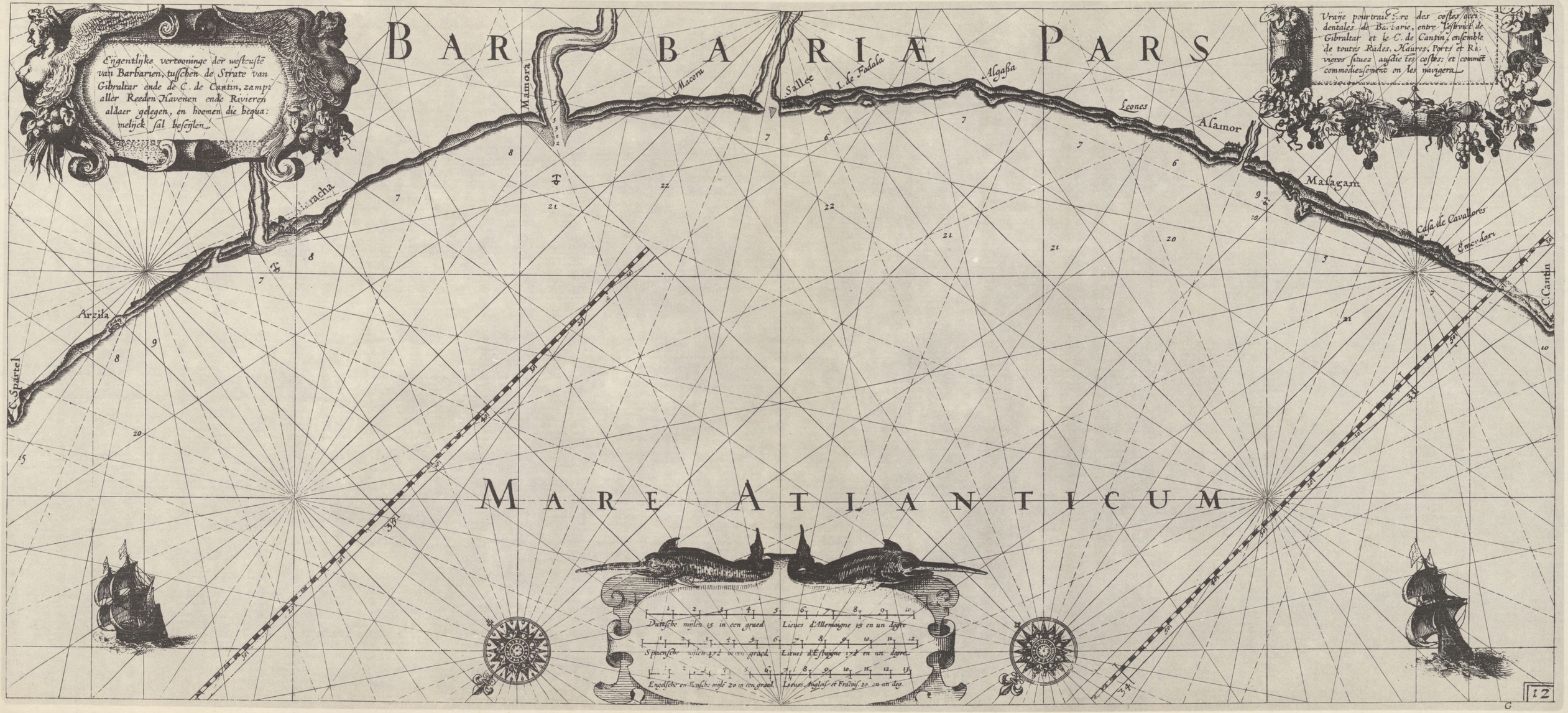
Thus the land sheweth betweene Masagam and Cape Cantin, being verie even and lowe land all along to Saffia, you see nothing on it but a small towre by a valley, which is called Casa Cavalgero.



Thus Casa Cavalgero sheweth when it is south from you seven leagues.



When



Eijgentlijke vertooninge der westeustē van Barbarien, tusschen de Strate van Gibraltar ende de C. de Cantin, zampt aller Reeden Havenen ende Rivieren aldaer gelegen, en hoemen die bequamelijck sal beseijlen.
BARBARIÆ PARS
Vraije pourtraicture des costes occidentales de Barbarie, entre l'estroict de Gibraltar et le C. de Cantin, ensemble de toutes Rades, Haures, Ports et Rivieres situez ausdictes costes; et commēt commodieusement on les navigera.
Mamora
Macora
Sallee
I. de Fadala
Algaßa
Leones
Alamor
Malagam
Casa de Cavallores
Emendari
C. Cantin
Arzila
C. Spartel
MARE ATLANTICUM
Duitsche mijlen 15 in een graed
Lieues d'Allemaigne 15 en un degre
Spaensche mijlen 17½ in een graed
Lieues d'Espaigne 17½ en un degre
Engelsche en Fransche mijlē 20 in een graed
Lieues Anglois et Fracois 20 en un deg.
12


Afbeeldinge nac't leven der Zee:
custen van Barbarien, van de C.
Cantin zuijdwaert tot verbij de
C. de Geer, mitsgaders de gelegent:
heit van't eijlant Mogodor, alles op zij:
ne rechte streckingē en hoochte gestelt.
Duitsche mijlen 15 in een graedt
Lieues d'Allemaigne 15 en un degré
Spaensche mijlen 17½ in een graedt
Lieues d'Espaigne 17½ en un degré
Engels. en Frūsche mijlen 20 in een graed
Lieu. Anglois. et Frāc. 20 en un degré
Delineation au vif des costes ma:
ritimes de Barbarie, entre le C.
de Cantin et le C. de Geer,
ensemble la situation de l'isle de
Mogodor, le tout commodieusement
accōmodé selon ses vraijes distan:
ces, routes et haulteurs du
pole.
AFRICÆ PARS
MARIS ATLANTICI PARS
Safia
Die Zuyd hoeck van Safya
Noort hoecken van Safya
C. de Cantin
C. de Sem
I. Mogodor
C. de Jassalana
Der Christenen Packhuijsen
Het Mooren castel
Buerenmarckt
C. de Geer
C. S. Cruz
13

When the north-point of Saffia is ſouthſoutheaſt five leagues from you then it ſheweth thus.



When you are about ſeven leagues ſouthweſt and by weſt from Cape Cantin, then it openeth thus, then the point of Saffia is eaſtſoutheaſt four leagues from you, and ſheweth thus.



II.

The ſituation betweene Cape Cantin and Cape de Geer.

FRom Cap Cantin to the point of Saffia the courſe is ſouth and ſomewhat weſterlyer 5 leagues. From Cape Cantin as aforeſaid there ſhooteth off a ſtonie Sand, which you muſt ſhunne, when you are paſt that Sand you ſee two or three rockes as a veſſel or boate in a Sandbaye, and the land there is round about black to looke on, whereby you ſhall knowe that
C. Cantin. you are not farre frō the point of Saffia. Cape Cantin is a lowe ſmoth point, whereon there ſtandeth a fire-towre, there about it is all even and ſmothe land, as if it were Normandie, along from Aſamor to Saffia, ſo that you may knowe it well by the plainneſſe. When you ſall a litle northward from the point of Saffia, or put to land, then upon the plaine land you ſee two houſes, the one (which is eaſterlyeſt) is called Caſa Cavalgero, and the other ſtandeth upon Cape de Cantin, which is the fire-towre aforeſaid.

Saffia. He that wil anckor in the Baye or Rode before Saffia, let him place the point a litle more weſterlyer then north from him, it is there almoſt 18 fathome deepe, but he that deſireth to ſette further within the boucht, muſt ſet the northerlyeſt point of both, a ſhippes length without the other which lyeth neareſt to you, then thoſe pointes will be northnorthweſt and north & by weſt from you, & the thicke towre on the ſouth-ſide of the caſtle of Saffia, will then be eaſt, and e. & by n. from you, there is the beſt Rode at 10, 11 and 12 fathome, you may anckor alſo ſo much further inward, untill the pointes be almoſt hard by each other, & that the towres, which you goe by on land, are againſt the thick towre which ſtandeth above upon the caſtle, there alſo it is good anckoring, this Baye is a round Baye or Creeke, when you fall ſouthward from Saffia, you muſt underſtand that the land ſouthward from Saffia is high and uneven land, & moſt part double land, ſo that thereby you may eaſely knowe whether you be north or ſouth frō Saffia, for the land on the north-ſide of Saffia (as I ſaid before) is lowe and plaine ground.

From the point of Saffia to the Iland of Mogodor it is ſouth- Iland of
ſoutheaſt 16 or 17 leagues, and ſo the land reacheth from Saffia Mogodor.
to Mogodor, & alſo forth to Cape de Geer, the land is all high and double land, and it is all faire ſandie ſtrand.

Againſt the north-ende of the Iland Mogodor, there cōmeth ſhooting off frō the faſt land a great rowe of hard rockes, whereof the utmoſt, or they which lye next to the Iland Mogodor lye high above the water, he which commeth out of the north, and will ſayle beyond Mogodor, he muſt runne betweene the Iland, and the foreſaid rockes, hard by the rockes, it is in the entrie betweene the Iland and the rockes five fathome deepe. Within the foreſaid rockes there lye on baghborde certaine other rockes, which at high water lye under water, & at lowe water appeare above water, when you come to the ende of them, then you may runne about toward the firme land, and there anckor behinde the rockes at 3 fathome lowe water: there is faire ſand-

ground, but notwithſtanding there is not verie good riding: for becauſe of the breaking of the Sea upon the aforeſaid rockes, it raketh there verie ſtrongly, ſo that with a ſtorme there is verie daungerous lying in that place: but further inward behinde the Iland it is good lying at 2 fathome and an half. From the ſouth-ende of the Iland ſtretcheth out a litle rock toward the firme-land: almoſt againſt the foot-ſtrand, but ſouthward from the foreſaid litle rock there ſtretcheth out a banck from the firme-land a league into the Sea. If you will ſayle out at the ſouth-ende, then runne along by the ſhore of the firme-land till you are about the foreſaid litle rock, and then runne out with the plummet by the banck: and then preſently you ſhall finde deeper water as 4,5,6,8,10. fathome, then ſayle whether you pleaſe.

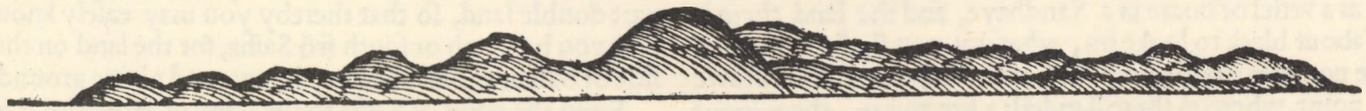
C. de Geer. From the point of Saffia to Cape de Geer it is ſouth-ſouth-weſt 48 leagues, but from Mogodor the ſame courſe it is 31 leagues, betweene them both about northeaſt 7 or 8 leagues from Cape de Geer, there lyeth a point called Cap de Taffalana, there you may anckor under it ſafe, againſt eaſt & northeaſt windes, there it is all ſandie ſtrand. Upon the ſouth-point of Cape de Geer there ſtandeth a caſtle, and when you are more then two leagues ſ.ſ.e. from Cap de Geer, then you ſee it with-

Cap de Tafalana.

in the land, over the downe-land, and you may ſee the Moores caſtle on the ſouthende of the high-land.

Rode of C de Geer. He that will anckor in the Baye or in the Rode of Cape de Geer, he muſt runne ſo farre into the Creeke till the Moores caſtle be north from him, then the Chriſtians packhouſes will be northeaſt from him, and there it will be 7 or 8 fathome deepe, the north-point will then lye northweſt & by weſt from him, & there ſhooteth out a litle ſand, againſt the caſtle there lyeth a rowe of rockes under the water, and there ſoutherly you goe in to anckor, againſt the Chriſtians packhouſes it is the beſt rode. But you muſt be verie carefull in this Rode, touching your anckors, the tie-anckor muſt alwaies ſtand before the winde, which bloweth out from the land, the other anckors to ſea-ward, you muſt hold the ſheete or plecht-anckor alwaies readie againſt it ſtormeth, then you muſt bring it out ſ. w. when it will be a ſtorme, you may ſee it before by the Sea-downes, you muſt alſo keepe the fock-ſayle readie upō the yarde, if you ſhould chance to ſlippe your anckor, that you may help your ſelf the beſt you canne, in this Baye there is good ſtore of fiſh to be taken, when you are there at anckor, then they goe by turnes to fiſh, in the morning by daye, & come aborde againe about 8 of the clock.

Thus the land ſouthward from the ſouth-point of the Baye of Saffia ſheweth it ſelf when it is weſtnorthweſt two leagues.

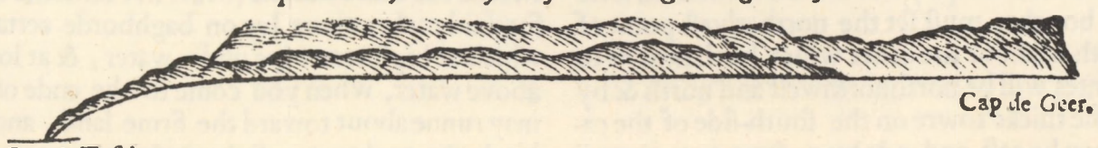


When you are weſtnorthweſt, or croſſe from Mogodor two leagues the land ſheweth thus, and it is double and high land.



Mogodor.

When you are ſouthſouthweſt from Cape de Taffalana three leagues, then the land ſheweth thus to Cape de Geer, and they are ſeven or eight leagues diſtant.

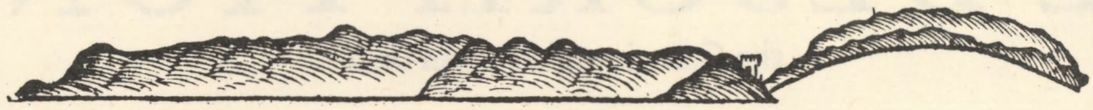


Cap de Geer.

Cap de Tafelana.

When

When you are three leagues ſouthſoutheaſt from Cape de Geer, then it ſheweth thus, and then the Baye is eaſt and by ſouth from you, and it is downe land.



Cap de Geer.

III.

How theſe places are diſtant one from the other, and from other Countreys.

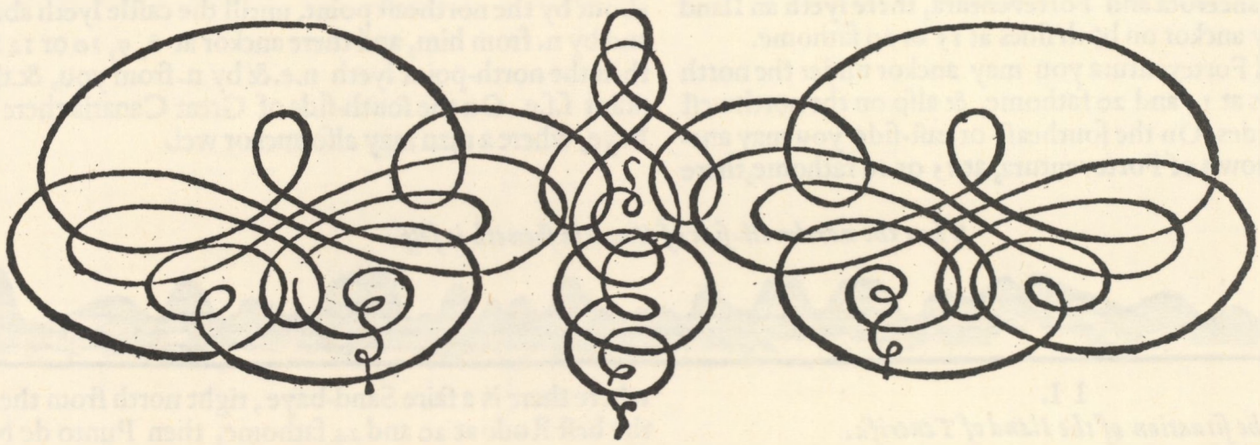
HOw theſe places and landes are diſtant one from the other, for the moſt part it is ſhewed particulerly before.

From Cape de Spartel to Cantin ſouthweſt and ſomewhat ſoutherlyer — — — — 75 leagues.
From Cape de Cantin to Cape de Geer weſt 53 leagues.
From Cape de Geer to Cape de Non ſouthſouthweſt, & ſouth and by weſt — — — — 28 leagues.
From Cape de Geer to the point of S. Crus ſ. c. — 5 leagues.
From Cap de Non to Ofin ſouth — — 13 leagues.
From Cap de Non to Cap Bayador ſ.w. & by w. 69 leagues.
From Cape de Geer to Cape de Bayador ſouthweſt and ſomewhat weſterlyer — — — — 93 leagues.
From Salſia to Madera eaſt and weſt — — 131 leagues.
From Cape de Geer to Madera w. n. w. — — 133 leagues.

IIII.

Vnder what degrees theſe Countreys lye.

CApe Spichel or Spartel lyeth under 35 degrees 32 minut.
Maſagam lyeth under — 32 degrees 52 minutes.
Cape Cantin lyeth under — 32 degrees 40 minutes.
The Ile of Mogodor lyeth under — 31 degrees 32 minutes.
Cape de Geer lyeth under — 30 degrees.
Cape de Non lyeth under — — 28 degrees 32 minutes.
Cape de Bayador lyeth under — 27 degrees.



Heere followeth the Carde N. 14 and 15.

THE

THE DESCRIPTION OF

the Canarie and Flemish Ilands.

I.

Of Lancerota, Forteventura, and great Canaria.

THe Ilandes of Canaria are ſeven in number, that is, Lancerota, Forteventura, Great Canaria, Tenerifa, Gomera, Palma and Ferro.

Lancerota. The Iland of Lancerota is diſtant from Cap de S. Vincent ſ.ſ.w. about 166 leagues. It hath a haven at the northeaſt ende, betweene the two Ilands Alegranca and Gratioſa, and you come in from northward, you may runne there ſo far in that you may come by Lancerota againe into the Sea, there it is 10, 15 and 20 fathome deepe, and there men lye ſafe from all windes.

On the eaſt-ſide of Lancerota there is alſo a good Rode, before the towne, but there lyeth a banck northward which you muſt ſhunne, you muſt runne ſouthward about the banck, and then anckor at 10, 11, or 12 fathome.

Forteventura. Betweene Lancerota and Forteventura, there lyeth an Iland where you may anckor on both ſides at 15 or 20 fathome.

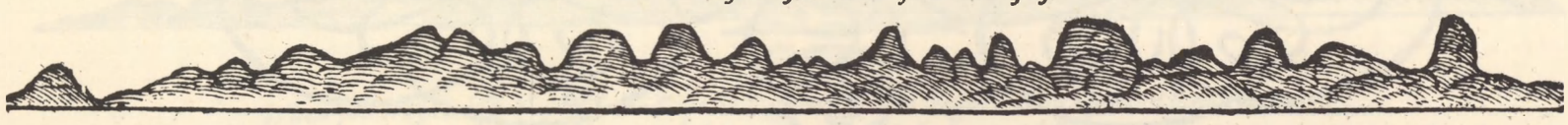
At the Iland Forteventura you may anckor under the north and ſouth endes at 15 and 20 fathome, & alſo on the northweſt and ſoutheaſt ſides. On the ſoutheaſt or eaſt-ſide you may anckor before the town of Forteventura, at 15 or 16 fathome, there is a faire Rode.

At the northweſt ſide you may anckor before the village at 20, 25 or 30 fathome, as deepe as you wil, the land on the northweſt-ſide runneth up with a great boucht. It is from the northerlyeſt Ilands of Lancerota to the weſt-point of Forteventura about 33 leagues.

Great Canaria. The Iland of Great Canaria lyeth diſtant from Forteventura e. and w. 18 or 20 leagues. He that will ſayle into the Rode of Great Canaria he muſt underſtand, that the Rode lyeth behinde the northeaſt point, on the eaſt-ſide of the land, right againſt the caſtle which ſtandeth upon a point of land, when the ſaid northeaſt point lyeth ſ.e. 6 or 7 leagues from you, then it ſeemeth to be an Iland, for it is faſt to the other land onely by a ſandie ſtrand, and that ſtrand is not broad, and the northeaſt point is verie high. He that will put into the Rode, he muſt ſayle about by the northeaſt point, untill the caſtle lyeth about n.w. and by n. from him, and there anckor at 8, 9, 10 or 12 fathome, then the north-point lyeth n.e. & by n. from you, & the ſouth-point ſ.ſ.e. On the ſouth-ſide of Great Canaria there is a faire Baye, where a man may alſo anckor wel.

The Rode of Great Canaria.

Thus the northweſt-ſide of Canaria ſheweth it ſelf.



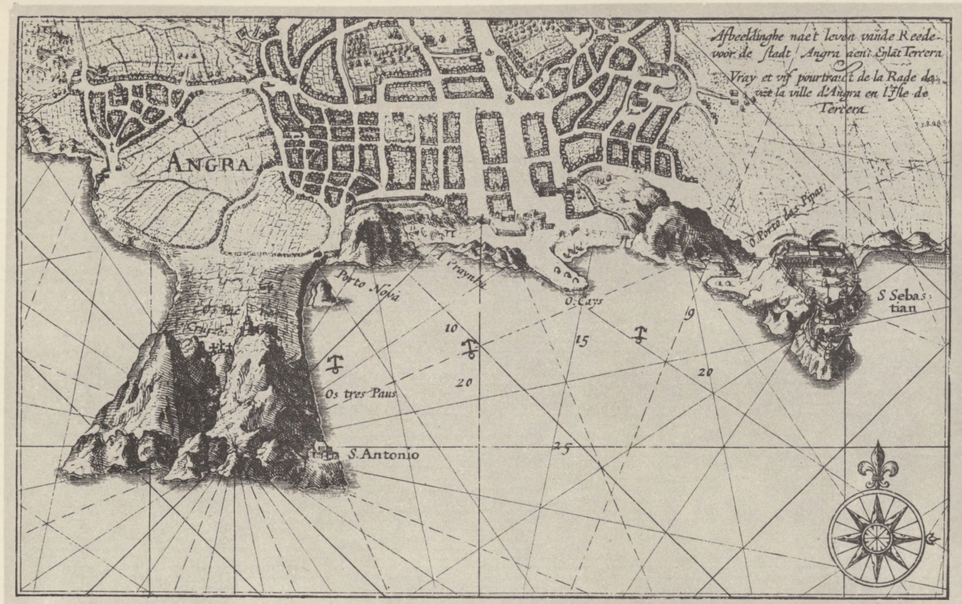
II.

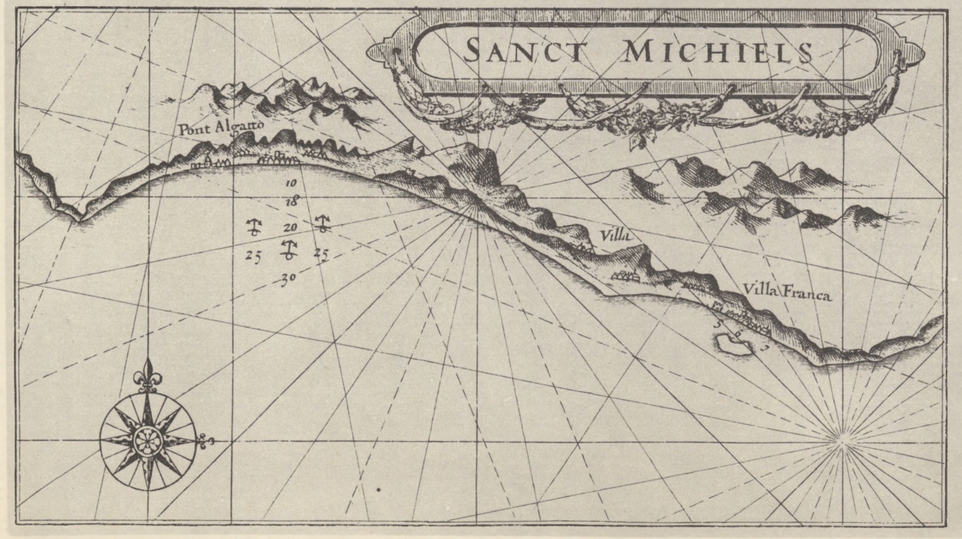
The ſituation of the Iland of Tenerifa.

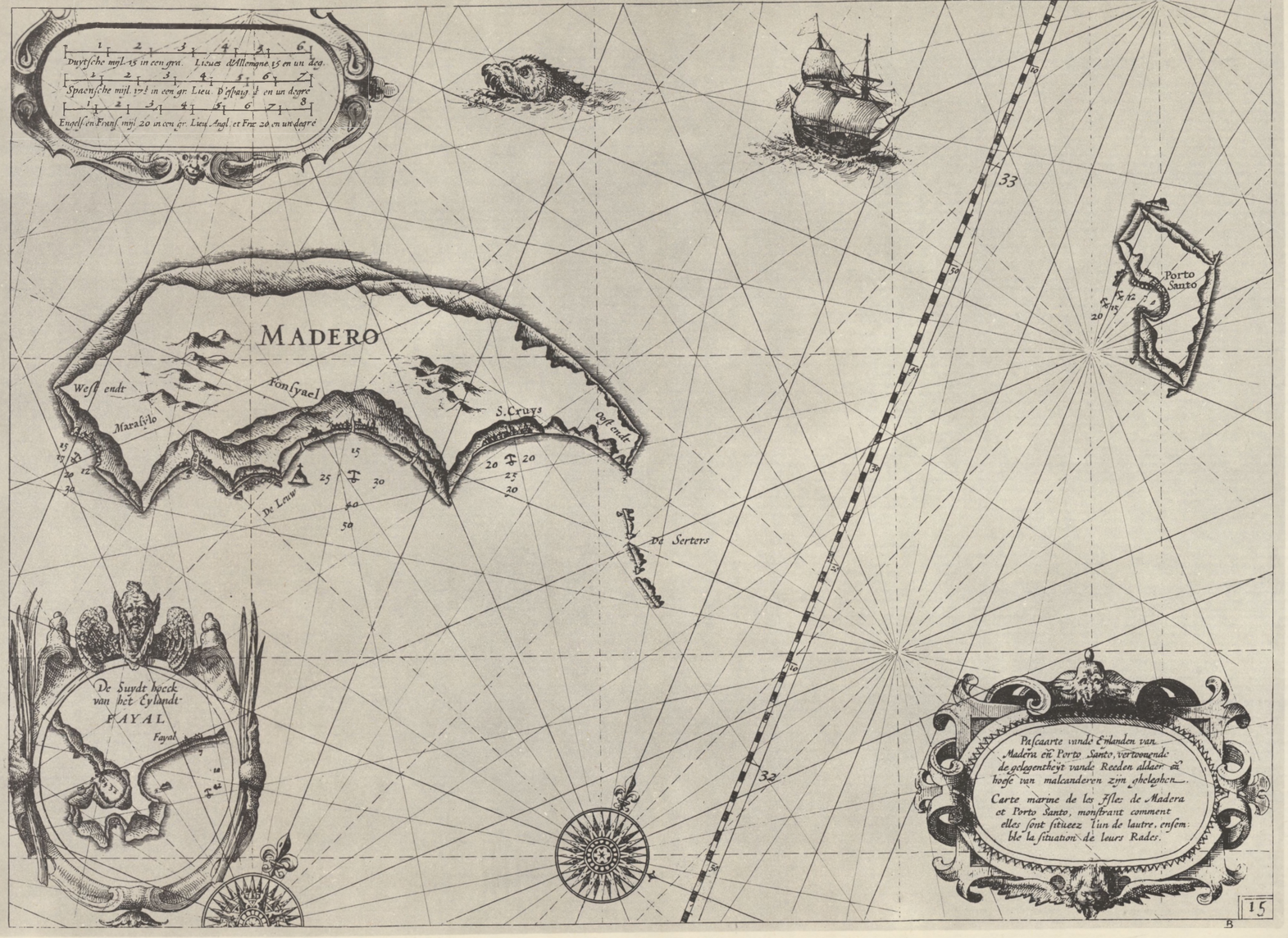
Rode of S. Crus. FRom the north-point of Canaria to the northeaſt-point of Tenerifa it is w.n.w. & e.ſ.e. 21 leagues. In Tenerifa the rode is on the ſoutheaſt-ſide, before the towne of S. Crus, where there is a faire Sand-baye, right north from the towne is the beſt Rode at 20 and 24 fathome, then Punto de Nago the northeaſt-point, lyeth about n. n. e. from you, and the ſouth-point of Tenerifa will then be ſ. & by weſt from you. When the Pico of Tenerifa is weſtſouthweſt from you, then you are open before the Rode of S. Crus, and when you lye in the Rode of

S. Crus


Pascaarte vande Eylanden van Canarien, vertoonende de rechte gelegentheyt der Custen ende Reeden vandien, Item hoese in rechte streckingen ende waere distantie van malcanderen verscheyden, ende hoese in hoochte gelegen syn.
Salvages
Duitsche mylen 15 in een graet
Lieues d'Allemaigne 15 en un degre
Spaensche myl. 17½ in een gra.
Lieues d'Espagne 17½ en un degre
Engelsche mylen 20 in een gra.
Lieues Angloises 20 en un degre
Carte marine des Isles de Canarie, representant au vif la vraye situation des costes et rades dicelles, Item comment ils sont distantes l'un de l'autre selon leurs vrayes routes, distances, et elevations du pole
MARE ATLANTICUM
I. Palma
Rammel reede
S. Crus
Vassacorda
C. de Navis
Punte de Nago
Oratame
Reteche
Laramale
Gerrachico
Sante Cruz
De Pico
Adeca
Insula Tenerifa
I. Gomera
Ferro
Canaria
INSULA CANARIA
Alagranca
Graciosa
C. Lalazon
I. Lancerota
I. de Lobos
C. Cabriton
Forteventura
Forteventura
14


Afbeeldinghe nae't leven vande Reede voor de stadt Angra aen: Eylāt Tercera
Vray et vif pourtraict de la Rade devāt la ville d'Angra en l'Isle de Tercera
ANGRA
Porto Nova
O. Cays
S Sebastian
Os tres Paus
S. Antonio


SANCT MICHIELS
Pont Algatto
Villa
Villa Franca


Duytsche myl. 15 in een gra. Lieues d'Allemagne 15 en un deg.
Spaensche myl. 17½ in een gr. Lieu. D'espaig ½ en un degre
Engels en Frans. myl. 20 in een gr. Lieu. Angl. et Frac 20 en un degré
MADERO
West endt
Marasylo
Fonsyael
S. Cruys
Oost endt
De Leuw
De Serters
Porto Santo
De Suydt hoeck van het Eylandt FAYAL
Fayal
Pascaarte vande Eylanden van Madera en Porto Santo, vertoonende de gelegentheyt vande Reeden aldaer en hoese van malcanderen zijn gheleghen.
Carte marine de les Isles de Madera et Porto Santo, monstrant comment elles sont situeez l'un de lautre, ensemble la situation de leurs Rades.

S. Crus then you may ſee the Iland of Great Canaria, which lyeth ſoutheaſt from thence about 13 leagues.

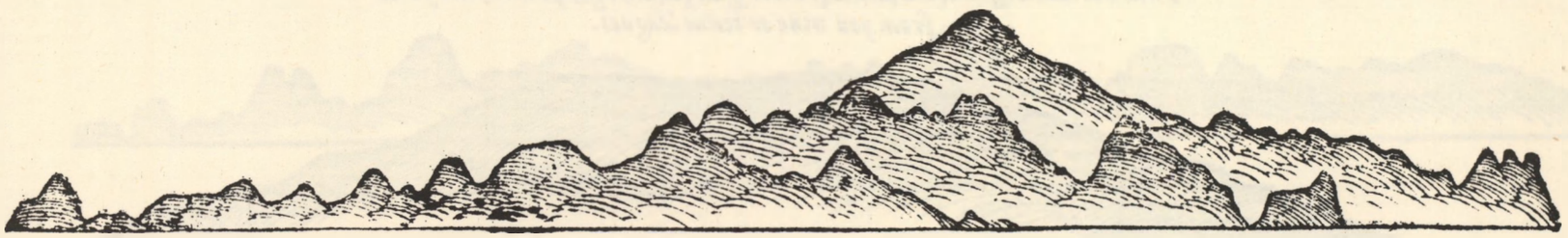
Rode of Gerrachia. On the northweſt-ſide of Tenerifa lyeth the Rode of Gerrachia, and it is from the north-point of Punte de Nago to Gerrachia w.ſ.w. and ſ.w. & by w. 8 leagues. He that will anckor before Gerrachia, he muſt anckor weſtward from the rock with the croſſe, called the Lyon, that the ſaid rock may lye ſoutheaſt & by eaſt and ſoutheaſt from him, then you lye right before the towne, and then you looke right into the ſtreete of the towne, through S. Dominicus cloſter, there it is faire ground at 36 or 40 fathome, then the Pico will lye right weſt by the towne. You may anckor no nearer to the land then at 35 or 36 fathome, nearer on the land or on the rock it is not faire, & weſtward to the Sand called Lapania it is alſo foule ground. This is a naughtie Rode, therefore they that come here muſt looke well to themſelves, and have a care of their anckors and cables, & keepe them fixe and readie, as alſo their ſailes, that they may move when it ſtormeth.

There is alſo a ſmall haven before Gerrachia, wherein men may lye with a fewe ſhippes: but to ſayle into it, you muſt have a Pilot, on the weſt-ſide of the haven there lyeth a rock under the water, but it ravels alwaies upon it, within the haven you anckor alwaies at 5 or 6 fathome, & you muſt put out two anckors before toward the Sea, with a cable upon the rockes, & an anckor behinde upon the land, that the ſhippe may not winde, and the ground is there foule, you muſt keepe your cables well with boyes and tonnes, to keepe them from the ground, this is a good haven in Summer, for then commonly it is good wether, but in winter I counſel you not to put in with your ſhippe there, for the waves of the Sea come out of the n.w. ſometimes rūning in ſo ſtifly, that it is not poſſible to hold a ſhip, although it had tenne anckors out. It happened certaine yeeres paſt, that a number of ſhippes were caſt awaie in that haven, and a good manie houſes of that towne were waſht awaie with the water.

Betweene Gerrachia and the eaſt-ende of Tenerifa, there are three places more to lade wine in, that is Laramela, Relecho, and Oratana.

On the ſouthweſt-ende of Tenerifa there is another litle haven or baye called Adeſſa, where alſo it is good anckoring, but a ſ.w. winde bloweth open into it, there you lade much wine.

Thus Tenerifa ſheweth when the Pico is weſtſouthweſt from you, and then you are open before the Rode of S. Crus.



When the Pico is ſoutheaſt from you it ſheweth thus, and then you are open before the Rode of Gerrachia.



III.

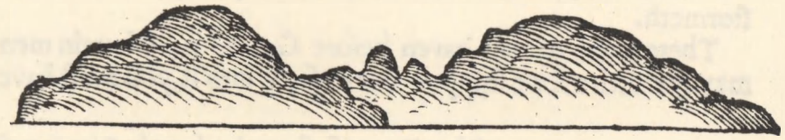
Of the Ilands of Palma Gomera and Ferro.

La Palma. FRom Tenerifa to the Iland la Palma the courſe is w. n.w. 20 leagues, in the Ile of Palma there is a towne, where men uſe to lade, called S. Crus, which lyeth about the middle, on the ſoutheaſt-ſide of la Palma, it is a faire baye. If you come from the north and deſire to anckor in the Rode of Palma, you muſt runne in ſo farre in the creeke, until that you be ſouthward or paſt by the head or the bridge, and then anckor at 25 or 30 fathome. But in winter tyme you muſt not anckor ſo neare the ſtrand, becauſe of ſoutheaſt, and ſouthſoutheaſt windes, for then you ſhould lye to neare the ſtrand, you muſt there put out two anckors at one hole, and a tye-anckor behinde, to keepe the ſhip right in the Rode, there lyeth a high white rock with a croſſe eaſt from the towne, there is the beſt rode, right north from the towne there is a faire Sand-baye, there it is good anckoring at 20, 30 or 35 fathome, thereafter as men lye farre off, this Rode is called Rammel-rode, when you lye in the rode of Palma, you may from thence ſee the Pico of Tenerifa e. ſ. e. from you, the Iland of Palma is verie high and full of trees, whereby it is well knowne. On the ſouthweſt-ſide of Palma alſo there is a place where you may lade wines, which is called Taſſa Corda. Taſſa Corda.

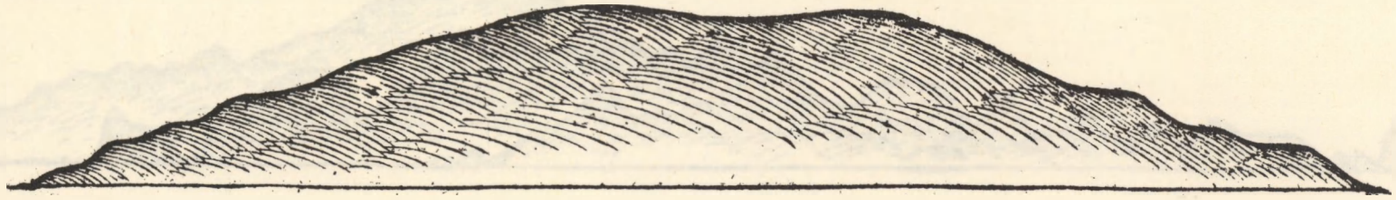
About five leagues weſt from the weſt-ende of Tenerifa lyeth the Iland Gomera, which on the north-ſide hath a good haven of 10 fathome deepe, where it is good lying for almoſt all windes, better then in anie of the other Ilands, but there is nothing to be laden, you may anckor before the haven at 20 fathome, there alſo you muſt ſhift anckor-place, as at Gerrachia. The rode of Adeſſa in Tenerifa lyeth there right againſt it, eaſt from it, about five leagues. When you lye at Gomera, then the rode of Palma is northweſt & by north from you 16 leagues. Gomera.

The Iland Ferro lyeth from the Ile Palma ſouth & by weſt 13 leagues diſtant. I. Ferro.

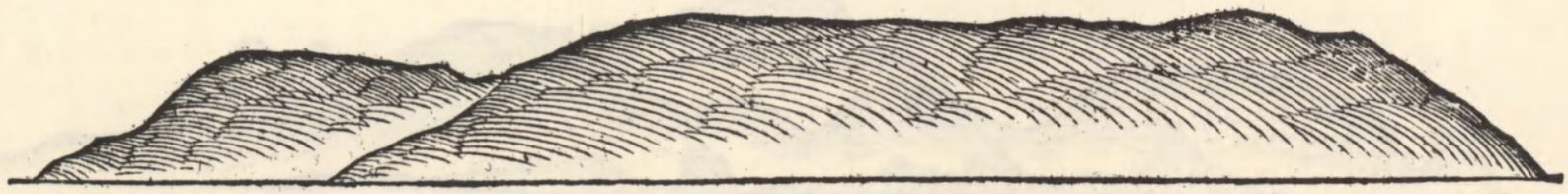
Thus the Ile of Palma ſheweth it ſelf when it is about east 16 or 17 leagues from you.



Thus the Iland of Palma ſheweth when it is ſouth, and ſouth and by eaſt from you nine or tenne leagues.



Thus the Iland of Palma ſheweth it ſelf when it is ſouthweſt and by ſouth from you four or five leagues.



The

IIII.

The Ilands Salvages, Madera and Porto Santo.

Salvages. GReat Canaria & Salvages lye diſtant from each other n. n.w. and ſ.ſ.e. 40 leagues. Southweſt from Salvages lyeth a rock, which a farre off ſheweth like a ſayle, it lyeth 3 leagues from the Ile, under the ſoutheaſt-ſide of the Iland, it is a good rode for a northweſt and weſt winde, it reacheth ſ.w. & n.e. to the uttermoſt rock, & it is faire ground 15 or 16 fathome deepe, it is but half a league long. The weſt-ende of Salvages is foule farre of, therefore you muſt ſhunne it, and therefore chuſe rather to ſayle eaſtward then weſtward about it.

Serters. Fortie leagues north from Salvages lye the Serters, which are three litle Ilands, lying on the eaſt-ende of the Iland of Madera, whereof the neareſt to the land is the ſmaleſt, and lyeth about a league from the land, that which is fartheſt from the land is the greateſt, and lyeth four leagues from the land, if you come out of the north, or from Porto Santo, you may ſayle wel through betweene the Iland of Madera & the Serters, there it is wide & broad ynough, but from the eaſt-ende of Madera there lyeth a blinde rock in the Sea, which you muſt ſhunne. In the Iland of Madera, before the towne of S. Crus it is a good rode at 20 fathome, but before Fonſyael it is the right rode to lade at, by the Lyon it is beſt to lye at 30 or 40 fathome. On the ſouthweſt-ſide before Maraſylo it is alſo good anckoring at 16 and 18 fathome, there it is good ground in everie place.

Madera. S. Crus. Fonſyael. Maraſylo.

Porto Santo lyeth from Madera northeaſt 13 or 14 leagues it reacheth moſt ſ.e. and n.w. At each ende of the Iland lyeth a great rock, the Rode is on the ſouthweſt-ſide, eaſt frō the cragged rock before the haven, where you may lye ſafe with barkes.

Porto Santo.

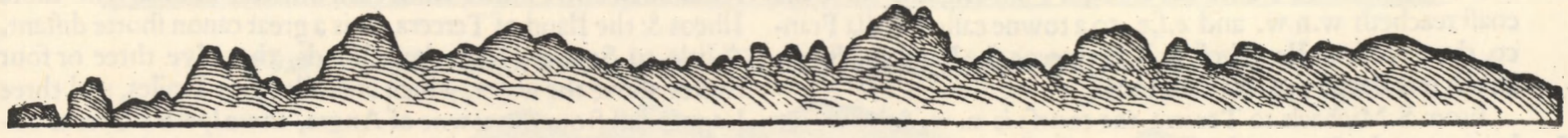
When Salvages is e.n.e. from you five leagues it ſheweth thus.



When Salvages is e.ſ.e. five leagues from you it ſheweth thus.



Thus the Iland of Madera ſheweth when you come out of the north, and that the middle of the Iland is twelve or therteene leagues from you, the ſoutheaſt ende is verie cragged when it is neare unto you, and the northweſt-ende goeth ſlopeing downe, and it is a ſteepe point.



Thus the Iland of Madera ſheweth when it is ſouthweſt from you.



When Madera is weſtſouthweſt from you therteene leagues it ſheweth thus.



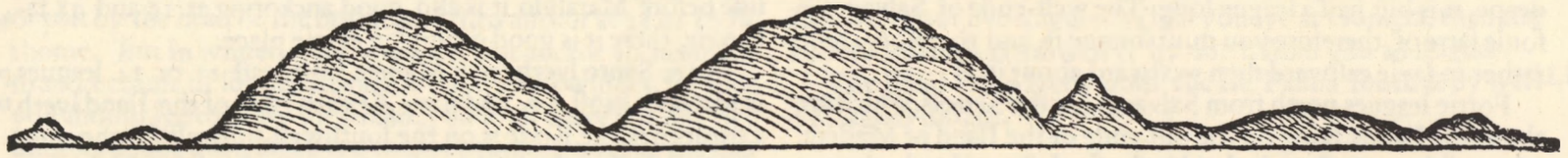
When Madera is ſ. from you 16 leagues it ſheweth thus.



When Porto Santo is ſouthweſt from you about nine leagues it ſheweth thus.



Thus Porto Santo ſheweth, about ſoutheaſt from you ſixe or ſeven leagues.



V.

Of the Flemiſh Ilands, S. Michaels, Tercera and Fayael.

S. Michaels. MAdera and the Iland of S. Michael lye diſtant from each other northweſt and ſoutheaſt 136 leagues. If you deſire to anckor under S. Michaels, you muſt underſtād that the Rode is on the ſouthweſt-ſide of the Iland, comming about the eaſt or weſt-point of the Iland you ſhall ſee two townes, before the weſterlyeſt is the Rode at 20 & 25 fathome, this towne is called Punto del Gada, or Punt Algato, there the coaſt reacheth w.n.w. and e.ſ.e. to a towne called Villa Franco, there lyeth an Iland before it, betweene the Iland and S. Michaels it is deepe 5, 6 and 7 fathome.

Tercera. From S. Michaels to Tercera the courſe is n. w. & by w. 35 leagues, under Tercera the rode is on the ſouth-ſide of the land, weſt frō the rockes, right before the towne of Angra, betweene two pointes reaching out, whereof the weſterlyeſt reacheth a good waie into the Sea, and on the ende thereof hath two verie high hilles. This point is called Breſil, and when you come out of the Sea, it ſheweth from farre as if it were ſeparated from the land, upon each of theſe pointes ſticking out, there ſtandeth a caſtle for defence of the ſhippes, which lye there in the Rode, it is there in the Rode deepe 20 and 25 fathome, and on the weſt-ſide of the aforeſaid point of Breſil, there is a great Sandbaye to anckor in, where there is a village called S. Martens, if you come from the north, or the eaſt, and deſire to anckor in the Rode of Tercera, you muſt ſayle upon the land about the eaſt-point, and ſayle all along by the two Ilands called the Ilheos, which lye a litle eaſt from the Rode, you may ſayle through betweene thoſe Ilands & Tercera, it is 15 fathome deepe betweene them, and you may ſometimes goe without the Ilands, and ſayle ſo long weſtward, untill you come to the aforeſaid point of Breſil, there you may anckor right eaſt before the towne of Angra at 10 or 12 fathome, or commonly men ſette the Sea-anckor at 16 fathome, & the tye-anckor towards the land, at 8 or 9 fathome, a ſoutheaſt winde bloweth there flatte in, betweene the two Ilands aforeſaid it is 6 fathome deepe ſandie ground, and they lye about a bowe ſhotte from each other. But betweene thoſe Ilheos & the Iland of Tercera, it is a great canon ſhotte diſtant. A litle to Seaward from theſe Ilands, there lye three or four rockes above the water, which are called Los Frailes, and three leagues eaſt from the towne of Angra, there lyeth a Creeke called Port Iudeo, there the Spaniards entered upon the land with all their powre, when they tooke the Ile of Tercera from the Portugales. Porto Iudeo.

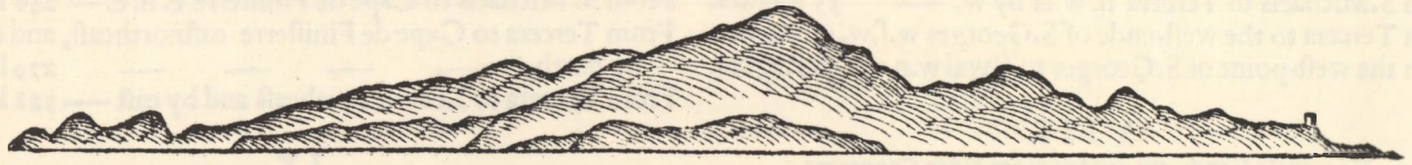
Fayal. If you will goe from Tercera to Fayal, hold your courſe w. ſ.w, to the eaſt-point of S. George, which is diſtant from thence 11 leagues, And through betweene the Pico and S. George to Fayal it is 16 leagues, it reacheth moſt w. n. w. betweene them. The Iland Fayal lyeth weſt from Pico diſtant a league.

If you will anckor in the Rode before Fayal, you muſt anckor in the Creeke right before the village of Fayal, at 14 or 15 fathome, there it is ſand-ground, & there goeth a ſtrong ſtreame both ebbe and flood.

On the ſouth-ende of Fayal lyeth a litle haven, if you will ſayle into it, you muſt goe in by the ſouthweſt-point, and ſo long

long about by the land, untill you ſee the haven open, ſayle about by the ſouthweſt-point, untill you come in the narrowe betweene the rockes, which lye off from the weſt-ſide, and as ſoone as you begin to come within the rockes, then let your anckor fall at 5 fathome, and carrie ropes on the eaſt-ſide of the land, to be made faſt to the ſtakes that are there purpoſely ſette. The haven is ſmall, ſo that there cannot above four or five ſhips lye in it, for further in it is all flatte water.

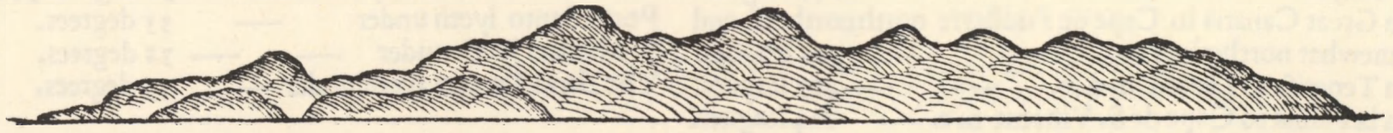
Thus the Iland of Tercera ſheweth when it is eaſt and by ſouth about ſeven leagues from you.



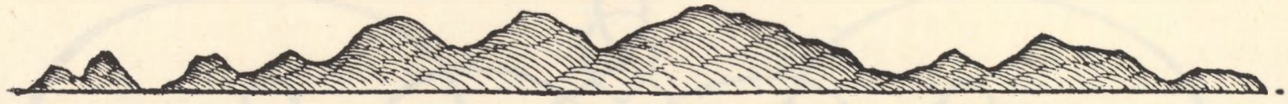
When Tercera is four leagues ſouthweſt from you, then it ſheweth thus, the weſt-ende of Tercera is higher then the caſt-ende, and therefore it is reaſonable well to be knowne.



Thus the Iland of S. George or Ioris ſheweth when it is weſtſouthweſt from you ſeven leagues.



Thus the Iland Gratioſa, when it lyeth weſtſouthweſt four leagues from you, ſheweth it ſelf.



VI.

What Moone maketh a high water at theſe Ilands.

VPon all theſe Canarie Ilands a ſ.w. and n.e. moone maketh a natural tyde, or high water, as upon the coaſts of Spaine, Portugal, Gallicia, France, and other places.

VII.

How theſe Places lye diſtant from each other.

FRom the weſt-point of Forteventura to the Iland of Great Canaria eaſt & weſt — — 19 or 20 leagues.
From the north-point of Canaria to Punto de Nago the north-point of Tenerifa w. n. w. — — 21 leagues.
From Punto de Nago to Gerrachia weſtſouthweſt, and ſouthweſt & by weſt — — — — 9 leagues.
From Tenerifa to Iſle de Palma weſtnorthweſt — 20 leagues.
From the weſt-ende of Tenerifa to Gomora weſt 5 leagues.
From Palma to Ferro ſouth & by weſt — — 13 leagues.
From Great Canaria to Salvages n. n. w. — 40 leagues.
From Gerrachia to Salvages n. n. e. — — 29 leagues.
From Tenerifa to Iſle de Madera north — 72 leagues.

From Great Canaria to the eaſt-ende of Madera north and by weſt — — — — — — 85 leagues.
From la Palma to Madera n.& by e. — — 53 leagues.
From Salvages to the Serters of Madera north 40 leagues.
The uttermoſt of the Serters reacheth from Madera 4 leagues.
From Madera to S.Michaels northweſt — — 136 leagues.
From S.Michaels to Tercera n. w.& by w. — 35 leagues.
From Tercera to the weſt-ende of S.Georges w.ſ.w. 11 leagues.
From the weſt-point of S.Georges to Fayal w.n.w. 16 leagues.

VIII.

How theſe Ilands are diſtant from other Countreys.

FRom the weſt-ende of Forteventura to Cape de Bayador ſouthſoutheaſt — — — — 20 leagues.
From Lancerota to Cape de S.Vincent n.n.e. 166 leagues.
From Great Canaria to Calis Malis northeaſt — 240 leagues.
From Great Canaria to Cape S. Vincent northeaſt & by north — — — — — — — 212 leagues.
From Great Canaria to Roxent northnortheaſt and ſomewhat eaſterlyer — — — — — — 240 leagues.
From Great Canaria to Cape de Finiſterre northnortheaſt and ſomewhat northerlyer — — — — 308 leagues.
From Tenerifa to Lezard n. n. e. — — 467 leagues.
From la Palma to Cape de S. Vincent n. e. — 224 leagues.
From Madera to Cape de Geer e. ſ. e. — 134 leagues.
From Madera to Saffia eaſt — — — 131 leagues.
From Madera to Calis eaſtnortheaſt — 200 leagues.
From Madera to Roxent northeaſt — — 164 leagues.
From Madera to Cape de Finiſterre northeaſt and by north and ſomewhat northerlyer — — — — 245 leagues.
From S. Michaels to Cape de Finiſterre e. n. e. — 246 leagues.
From Tercera to Cape de Finiſterre eaſtnortheaſt, and eaſt and by north — — — — — 279 leagues.
From Tercera to Lezard northeaſt and by eaſt — 388 leagues.

IX.

Vnder what degrees theſe Countreys lye.

THe Iland Lancerota lyeth under 28 degrees 35 minutes.
The north-ende of Great Canaria lyeth under 28 deg.
The north-ende of Tenerifa lyeth under 28 deg. 40 min.
Iſle de Palma lyeth under — — 28 degrees 32 minutes.
Salvages lyeth under — — 30 degrees.
The ſouthende of Madera lyeth under 32 degrees, but the north-ende lyeth under — 32 degrees 30 minutes.
Porto Santo lyeth under — 33 degrees.
S. Michael lyeth under — — 38 degrees.
The Iland Tercera lyeth under — 39 degrees.

Heere followeth the Carde N. 16.


De Suyd-syde van Yrland
Beschrijvinghe der zeecuste vande Zuyd sijde en Oost-zijde van Yerlant van de C. de Clare Oostwaert verby de Enlandse vā Saltez, Noortwaert tot aē Dondalck, hoemē alle havenē aldaer beschrē sal, en waer voor mē hem te houden heeft, alles gestelt op rechte streckinē d'situatie en hoochte des Pools
Deschriptiō de les costes marines meridionales et Orietales d'Irlande, cōmençant du C. de Clare vers l'Est iusques a les isles de Saltez, de la vers le Nort iusques a Dondalck, cōprenant touts havres et Portes desdictes costes, et monstrant comment on les trauvera, et de quoy on se doibt garder
Afbeeldinghe van de twee voornaemste Havenen op de west custe van Yerlant, als Limrick ende Galway, watmē int incomen eñ uytseylen aldaer te schouwen heeft
Pourtraicture des deux principaux Havres de la coste occidentale d'Irlande Limrick et Galway, monstrant ce qu'on a a eviter, en les entrant et issant
DE WEST SYDE VAN YRLAND
DE OOST SYDE VAN YRLAND
Duytsche mylen 15 voor een graed
Spaensche mylen 17½ voor een graed
Fransoysche mylen 20 in de graed
Duytsche mijlen is voor een grad
Spaensche mijlen 17½ voor een grad
Engelsche en Fransche mijl 20 in een grad
Lieuës d'Allemaigne 15 en un degré
Lieuës d'Espaigne 17½ en un dégré
Lieuës Angloises et Françoises 20 en un degré
Korck
Kynsal
Longecharrey
Tractan
Korckbege
Ballicate
Iochul
Michiel
S. Fruetisco
Ardmore
Ientelmans buys
Dongarvel
C. de Quint, otte Kary Quyn
Limore
Myrus Auvitis
Waterfoort
Bubrudy
Balchak
Faßaye
Lanter
Dunduen
Bamus
Wachtfoort
Blom
Wachebanck
Saltebanck
Quickel
Kneef
Korkuyt
Dublingh
Casteel
Wexfoort
Greil
Dodagh
Carol
Crabal
Dogalbank
I. Lambey
Donbanck
Dondalck
Griclow
Blanckat
Limrick
Galloway
Homoor
Alfun
Bernee
Balack
C. Gallowy
Niscal
Granaget
Canagor
Arnalum
Killone
Luymnes
Raval
Ranol
Baloy
C. Lamor
Rocol
Griel
Alinos
Hollangor
Blaway
Sastow
De Boy
Cockuyt
Aromen
Horse
Caloe
Mouth
Doumorey
Byr haven
Dungal
Kinsale
Konkijslane
Somerick
Ingeseyrkan
C. de Claro
Baldermoerhaven
Castelhaven
Strangs
Roßen
Crieghy
Kockle
Bocol
C. Velha
Vlehead
Kerry
Longhe erland
Fastenet
Rock
Coast
Sandy Bay
Bay
Harbour
Castle
Point
Head
Island
Sound
Channel
Anchorage
Rocks
Shoal
Sand
Mud
Stone
Wood
Church
Town
Fort
Mill
Ruins
Cliff
Hill
Valley
Mountain
Lighthouse
Buoy
Beacon
Tide
Current
Depth
Fathom
Feet
Meter
Yard
Mile
League
Degree
Minute
Second
Latitude
Longitude
North
South
East
West
Compass
Needle
Variation
Deviation
Course
Bearing
Distance
Speed
Knot
Wind
Storm
Gale
Breeze
Calm
Fog
Rain
Snow
Ice
Iceberg
Glacier
Volcano
Earthquake
Tsunami
Whirlpool
Reef
Atoll
Lagoon
Island
Peninsula
Isthmus
Strait
Gulf
Bay
Harbour
Port
Anchorage
Roadstead
Quarantine
Customs
Pilot
Tug
Steamer
Sailing
Rowing
Fishing
Trading
Navigation
Chart
Map
Survey
Sounding
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Bird's eye view
Perspective
Projection
Mercator
Conic
Azimuthal
Cylindrical
Polyconic
Gnomonic
Stereographic
Orthographic
Equirectangular
Lambert
Albers
Robinson
Mollweide
Sinusoidal
Goode
Winkel
Eckert
Hammer
Aitoff
Van der Grinten
Bonne
Werner
Cordiform
Heart
Globular
Interrupted
Modified
Oblique
Transverse
Equatorial
Polar
Meridian
Parallel
Graticule
Grid
Datum
Ellipsoid
Spheroid
Geoid
Reference
Coordinate
Origin
Axis
Plane
Surface
Volume
Area
Perimeter
Circumference
Radius
Diameter
Chord
Arc
Sector
Segment
Tangent
Secant
Cosecant
Cotangent
Sine
Cosine
Tangent
Cosine
Sine
Tangent
Cosecant
Secant
Cotangent
Versine
Coversine
Haversine
Exsecant
Excosecant
Vercosine
Covercosine
Havercosine
Exsecant
Excosecant

A TRVE DESCRIPTION

teaching how you may ſayle the Sea-coaſts and Havens of the VVeſt, South and Eaſt-ſide of Ireland.

I.

How to ſayle to the Havens of Galloway and Lemrick, and the Ilands thereaboutes.

Blackrock. THe Iland Blackrock and Cape Dorſey lye diſtant ſ. & by w. & ſomewhat ſoutherlyer, and n. & by e. and ſomewhat northerlyer 53 leagues: betweene them both lye the Havens of Galloway and Lemrick.

Galloway. If you will ſayle into Gallowaye, you muſt rũne in drough betweene the Ilands, or along by the firme land northeaſt to the point Galor, then you muſt yet goe in n. e. to the other point, and then forward three leagues more ſ. & by e. till you be before the towne of Galloway, where you may anckor at 6 or 7 fathome, it is there all ouer good anckor ground, a great depth and faire Creekes. You may alſo anckor well without, behinde the Ilands at 12 fathome, there alſo it is good anckor ground in everie place.

Aromen. From the Ilands before Galloway to the Iland of Aromen, it is about ſixe leagues: behinde the Iland of Aromen it is alſo a

Calos. good Rode: the Iland Calos lyeth about a league ſouthward from Aromen, and behinde it alſo there is a Rode.

Lemrick. From Aromen to the haven of Lemrick it is about 5 leagues ſouthwards, before the mouth of the ſaid haven there lye two rockes, the one ſouth by the haven, and is called Cockuyt, the other north by the haven, and is called Boye, you muſt ſayle in by Cockuyt, and runne eaſt, and eaſt & by north a league till you be about the point Blaway, and from Blaway to the caſtle Lamor e. ſ. e. 4 leagues, and from the caſtle Lamor to Griel ſouth ſeven leagues, from Griel to Lemrick ſ. & by w. 4 leagues, there you may anckor before the towne at 6 or 7 fathome, you may alſo anckor before Blaway, and there take in a Pilot, and he will bring you before the towne.

Blaſquay. Further it is from the Ilands before Galloway to Blaſquay ſouthſouthweſt — — — 18 leagues.

Dorſey. From Blaſquay to Dorſey ſoutheaſt — — 21 leagues.

From Dorſey to Cabo de Claro e. and by ſ. — 13 leagues.

II.

What Havens and Places lye betweene Cabo de Claro and Cape Velho.

Cape de Claro. YOu may knowe Cape de Claro by reaſon it is all broken land, when you come ſomewhat better eaſt about, and are by the land, you ſhall ſee a high point reaching out, which reacheth farre without the other land into the Sea, the ſouth-ende whereof is verie much ſhoring downe, and on the higheſt part thereof there ſtandeth a caſtle with three towres, which is decayed, the middle towre is yet the higheſt, it lyeth 12 leagues eaſtward from Cape de Claro, & right north from this

Cape Velho or Oldhead. out-point, (by our ſaylers called Cape de Velho, & by the Engliſhmen Oldhead) lyeth the haven of Kinſale, a faire haven deepe & broad, comming from the eaſt, or the weſt along by the land: this point ſeemeth to be an Iland, becauſe on the weſt-ſide it is lowe, but it is faſt to the firme land by a ſmall peece of land, and there you may anckor under it on both ſides as drie as you wil.

From Cape de Claro to the aforeſaid Cape de Velho or Oldhead, the courſe is eaſt and by north 12 leagues. To runne into

To goe into the Ilands of C. de Claro. the Ilands of Cap de Claro, you muſt underſtand that there lyeth a towne weſtward upon the high land, you muſt there goe eaſt to land, and ſo goe in eaſtnortheaſt, leaving the lowe Iland to landwards, and the uttermoſt Iland of Cape de Claro to ſeawards, and ſo running in to the ſecond Iland, whereon the cloſter of Claro ſtandeth, there on the weſt-ende there is a ſandie baye, where you may anckor at eight or nine fathome.

There goeth alſo a chanel into the Sea cloſe alõg by the weſt Iland, which is 12 fathome deepe, on the eaſt-ſide of the chanel there

there lyeth a rock above the water,which you muſt ſhunne,and in ſayling out you leave it on the eaſt-ſide, and right within the rock you may anckor.

Balder-more. If you will ſayle further into this haven of Cape de Claro, you muſt runne through betweene the Ilands to Baldermore, and ſhunne ſomewhat the Iland of Cape de Claro, for from it there runne manie blinde rockes, therefore you muſt ſayle to the other Iland. But when you are half waie by the Ile of Cape de Claro, then you muſt make to the narrowe waie, to goe through it, it is therefore the moſt part all about three fathome deepe,but in the narrowe waie it is drie at lowe water,therefore you muſt goe over there with the tyde, there you may anckor on what ſide you will, whether it be under the cloſter at Claro, or on Baldermore-ſide, which is the eaſt-ſide, where it is 5 and 6 fathome deepe.

The haven of Baldermore goeth in north, and in it it is 11 or 12 fathome deepe at lowe water, on the eaſt-point of Baldermore there lye two high ſteepe rockes, as if they were ſteeples, the one ſomewhat higher then the other,& there eaſtward there goeth in a haven, which is called Caſtle-haven. And a league eaſtward from it the Haven of Somrack, which is 8 or 9 fa-

Somrack. thome deepe, before the haven there lyeth a great rock, which you may runne in by on both ſides, but the eaſt-ſide is beſt, for the weſt-ſide is ſomewhat foule. To ſayle in by this rock it is diſtant at leaſt the length of the ſhotte of a great peece of Ordnance, you ſhall there finde a towre ſtanding, and againſt it you may anckor at loweſt water, it is there good lying, in the middle there lye two blinde rockes, which at half ebbe are above water, and betweene theſe two rockes, there lyeth a rock above the water,therefore you muſt runne in cloſe by the land,leaving the rockes on backborde, the haven is not above eight ſhippes long in length, you may ſayle through under theſe Ilands of Cape de Claro in manie places, and anckor, for it is all broken land,as if it were Norwaie.

Roſſen. Eaſt from Somracke, and about 4 leagues weſt from the out-point of Kinſale lyeth Roſſen,a tyde-haven,which at a lowe water falleth drie, you may ſee the church with the towres in the valley, weſtſouthweſt from the point there lyeth a ſtone under the water.

There lyeth an Iland betweene Roſſen and Kinſale or Cape de Velho, alſo in the creeke, which is called Roem, which you may ſayle round about,& alſo anckor behinde it. Three leagues eaſtward frō this Iland Roem lyeth Cape deVelho or Oldhead.

Thus the point of Roſſen ſheweth when it is weſt and by north from you.



III.

How to ſayle into all the Havens betweene Cape de Velho and Waterford.

To ſayle into Kinſale. CApe de Velho (as I ſaid before) is a high point reaching out, when it is the length of the ſhotte of a great peece, or a quarter of a league ſ. ſ. w. from you, then you are open before the Haven of Kinſale,& you may ſee into the ſame, and ſee the towne of Kinſale lye on ſtarborde of the haven, this is a deepe haven, and reacheth in n. n. w. which before it hath no foule entrie, but onely a blinde rock, which lyeth off from the eaſt-point of the haven, you may ſayle in in the middle of the water betweene both the lands, there it is ſeven fathome deepe, and when you are a litle within the caſtle,then you muſt turne up weſtward, and anckor on the weſt-ſide at 5, 6, & 7 fathome, you may alſo runne in further and lye ſafe againſt all windes, on either ſide there ſtandeth a flatte towre,& there eaſtward lye two black rockes a litle within the Sea, not farre from each other,the one is called Kockul, and the other(which is the eaſterlyeſt) Rock.

He that commeth out of the eaſt, and would ſayle into the haven of Kinſale, he muſt underſtand that there lyeth a blinde rock which ſhooteth off from the eaſt-point of the haven, (as I ſaid before) therefore he muſt keepe the rock called Rock without the rock called Kockul,ſo long until that the caſtle ſtanding within on the eaſt-ſide of the haven commeth without the eaſt-point of the haven, and then you take no hurt upon the blinde rock,then ſayle in n.n.w. and anckor at 6 or 7 fathome,as above ſaid, the Haven of Kinſale lyeth from the point with three towres north, and north & by weſt a great league.

Thus the point of Kinſale whereon the caſtle ſtandeth ſheweth, when you are half a league from it w.ſ.w,& then you ſee the haven of Kinſale open.



Thus

Thus the land ſheweth right eaſt from Kinſale.



When you are a league eaſt from the two black rockes aforeſaid, or three leagues from Oldhead with the caſtle with three towres, and are cloſe by the land, then you ſee two ſteepe hillockes or rockes in the land, as if they were ſteeples, ſtanding not farre one from the other, which ſtand about two leagues weſt from the mouth of the haven of Corck, & when you are by the eaſterlyeſt hillock, then you may ſee the haven of Corck, which reacheth in n. n. w. within it is wide and broade, running into a broad river, which goeth up into the land, & right within the haven there lyeth an Iland, which may be ſayled round about, but on the ſouth-ſide it is good anckoring, at 6, 7 & 8 fathome, on the weſt-ſide there lyeth a village, by the which you ſayle up to the towne of Corck, two leagues higher into the land.

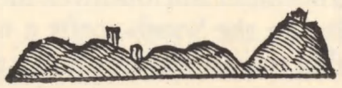
Corck haven.

There ſtandeth a caſtle alſo, from whence there ſhooteth off a Sand, & there within there lyeth a tyde-haven in a Sandbaye.

On the eaſt-ſide right about the point there ſtandeth a broken caſtle, upon the lowe land, and ſomewhat more eaſtward in the valley there ſtandeth a four-ſquare towre, and about a great league eaſt from the haven, there ſtandeth a towre on high upon the point cloſe by the water ſide, by the ſame there ſtand tenne or twelve ſtrawe howſes, & a league more eaſtward (two ſhipps length from a lowe point) there lyeth a round long rock, which is growne greene above, and on the eaſt-ſide of the point ſtandeth a flatte towre, which you may ſee when you are a great peeces ſhotte e. n. e. from the aforeſaid round rock, otherwiſe you ſee al lowe land to the point of Iochul.

This Haven of Corck at lowe water is 7 fathome, & alſo 10 fathome deepe, ſo that you may laveere it both out and in, and on the eaſt-ſide there lyeth a rowe of rockes, about two ſhippes length from it, which you muſt ſhunne.

Thus the land ſheweth which lyeth weſt from Corck.



Thus the land ſheweth eaſt from Corck to Iochul.



About 4 leagues eaſtward from Corck lyeth a point called Balicot, behinde it you may goe and anckor at 4 or 5 fathome. Balicot.

From Kork to Iochul it is e. n. e. almoſt 6 leagues, it is a tyde-haven, reaching along in by the eaſt-land n. w. and n. w. & by n. there lyeth a rock on the weſt-ſide; and the weſt-ſide is a ſandie ſtrand along to the towne. Iochul.

He that will ſayle into Iochul muſt runne under the Iland of Tapul, and there ſtaye for an after-flood, then there is four fathome water upon the banck, then ſayle north & by eaſt upon a league right to the haven of Iochul, and when you are within then anckor before the towne where you will.

Betweene the point and the towne there ſtandeth a cloſter, where alſo you may anckor, and yet you may ſtrike over to the eaſt-land, and ſo runne up the river, within it is 3, 4, and 5 fathome deepe, from the eaſt-ſide of the haven, there come a rowe of rockes ſhooting off, wel half waie into the haven, and right without theſe rockes it is at lowe water no more thē 5 or 6 foot deepe, but at a high water it is deepe ynough.

About 5 leagues eaſt from Iochul there lyeth a tyde-haven called Dongarvel, which is alſo 8 leagues from Waterford, the ſame reacheth in n. n. w. but in the haven it is full of rockes, & at a lowe water it is drie, ſo that you muſt goe in at a full Sea, & runne in betweene the rockes, it is a narrowe haven, but within it is deepe inough, the towne lyeth upon the weſt-ſide of the haven, and right n. w. within the land there lye three high hilles, which are called Cape de Quyn or Kary Quyn, whereby you may knowe this land, & when they lye n. n. w. from you, then they are croſſe from you, and then you are right before the haven of Dongarvel, when thoſe hilles lye n. n. e. from you, then you are before the haven of Corck, and when they lye n. from you, then you are right before the haven of Iochul, but when they lye n. w. from you, then you are right before the haven of Waterford. Dongarvel. Cape de Quyn.

From Iochul to Waterford it is e. n. e. 11 or 12 leagues. Waterford

The haven of Waterford reacheth n. and n. & by w. in betweene two ſteepe lands, it is a faire wide haven, and 11 fathome deepe as you enter in, but when you are a litle within, there lyeth a banck on the weſt-ſide, which is long & broade, comming almoſt into half the haven. Againſt this banck it is but three fa-

thome deepe at lowe water: therefore when you are a litle within you muſt chuſe the eaſt-ſide, & ſayle cloſe by the caſtle, which ſtandeth within the haven, and when you are within the caſtle then you finde 7 fathome deepe, and when you are at the ende of the banck, then you muſt turne to the weſt-ſide, & anckor at 4 or 5 fathome, before the litle towne of Paſſagie, from whence the River goeth weſtward further into the land.

Balmus. On the weſt-ſide of the haven it is all flatte high land, and on the eaſt-ſide there ſtandeth a high white flatte towre, which is called Balmus, whereby the haven of Waterford is well to be knowne. Two leagues eaſt from Iochul there ſtandeth alſo another high towre called Ardimore, but it is black, that you may ſee 4 leagues into the Sea, betweene the out-point of Kinſale & Waterford along by the whole coaſt, there ſtand manie other flatte towres, but that by Waterford ſtandeth further out, becauſe it is great & high. And the aforeſaid three high hilles called Cape de Quyn are verie good and knowne markes, whereby this Coaſt of Ireland is well deſcried and knowne. A league eaſt from Kinſale there lye two black rockes, and weſt from Iochul there lye two round rockes, which are overgrowne with greene weeds, otherwiſe there are no rockes upon this Coaſt.

The Ilands of Saltees lye eaſt from Waterford, and you may ſayle from Waterford through betweene the Ilands of Saltees and the firme land.

IIII.

How you ſhall ſayle by the eaſt ſide of Ireland from Saltees to Dondalck.

Watchford. FRom the Ilands of Saltees to the haven of Watchford it is 5 leagues, he that will ſayle into Watchford, he muſt ſet the towre (ſtanding upon the north-ſide inward within the haven) weſt and by north from him, then he ſhall runne betweene Saltbanck and Watchbanck, ſayling in betweene both the lands, and ſette within about the point at 4 or 5 fathome.

Wexford. From Watchford to Wexford it is n. & by w. 5 leagues. He that will goe into Wexford, he muſt bring the towne of Wexford (lying on the north-ſide in the haven) weſt from him, ſo he ſhall ſayle betweene Watchbanck and Griel, where betweene both the banckes it is 10 and 12 fathome deepe, then ſayle in forward weſt, and ſhunne the ſouth-point of the haven, for it is ſomewhat foule, and when you are within then ſayle along by the ſouth-ſide, till you come before the towne of Wexford, and and anckor at 4 or 5 fathome.

From Wexford to Dublin it is n. and n. & by w. 5 leagues. He that will ſayle into Dublin muſt bring the towre (ſtanding on the north-ſide of the haven) w. n. w. from him, ſayling in betweene the banck called Griel, and the ſand of the Iland Lambaye, betweene them both it is 12 fathome deepe, ſayle al along by Lambaye at 7 fathome, and runne ſo at ſeven fathome by the ſands to the haven, ſhunning the ſouth-point, for that is foule, therefore hold the northerlyeſt towre in Dublin on the ſecond point upon the ſouth-ſide, then you cannot miſcarie, then ſayle about the ſecond point, and then turne up weſtward and anckor before the towne at 4 or 5 fathome. Dublin. Lambaye.

Under Lambaye there is alſo a good Rode, in the boucht at 7 or 8 fathome. You may alſo ſayle through betweene Lambaye and Dagalbanck to Dublin. Dagalbanck.

Five leagues north from Dublin lyeth the haven of Drodag. He that will ſayle into it he muſt bring the towre (ſtanding upon the northſide of the haven) w. n. w. from him, as the line ſheweth, to ſhunne the foule waie which runneth off from the ſouth-point, and ſo ſayle weſtward in, untill he be in, then turning to the ſouth-ſide, he muſt ſayle in betweene the ſouth-ſide and the Iland of Carol, which lyeth in the middle of the haven, and ſayle till you be before the towne of Drodag, and anckor at 4 or 5 fathome. From Dublin to Drodag it is 8 leagues. On the north ſide of the haven of Drodag there lye three Ilands. Drodag.

From Drodag to Dondalck it is north 7 leagues. He that will ſayle in there muſt knowe, that on the ſouth-ſide of the haven of Drodag there ſtandeth a caſtle, you muſt ſayle in by the ſouth-ſide, keeping the towre, which ſtandeth north from Dondalck, over the round point of the north-ſide, as the line ſheweth, for from the north point of the haven there runneth a rowe of rockes, therefore you muſt ſayle in by the ſouth-ſide till you be about the point, and then turne up ſouthward, and anckor before the towne at 4, 5, 6 and 7 fathome. Eaſt from Dondalck there lye alſo five or ſixe Ilands. Dondalck.

V.

What Moone maketh high water in theſe places.

ON all the havens and places lying on the Weſt-coaſt of Ireland a northeaſt and ſouthweſt moone maketh a high water. But on the South-coaſts a w. ſ. w. and e. n. e. moone, but within the chanels or havens a point later, that is a weſt

weſt and by ſouth, and an eaſt and by north moone.

In the open water and in the chanel without the land a ſ. w. and northeaſt moone.

VI.

Of the falling and running of the ſtreames.

VVithout Cape de Claro by the land the flood falleth eaſt and the ebbe weſt.

Betweene Cape de Claro and Waterford the flood falleth eaſtnortheaſt along by the land.

In the chanel of Galles or S. Iohn betweene England & Ireland the ſtreame falleth northeaſt and ſouthweſt.

VII.

Of the ground and depths of Ireland, and how you may knowe the land.

BEtweene Cape de Claro & the point of Dorſey you may ſee the land at 58 and 60 fathome.

Betweene Cape de Claro and Waterford you may ſee the land at 45 fathome, and you may ſee all the coaſt of Ireland at 35 and 40 fathome, and at 35 fathome you are not farre without the land, and therefore by night you muſt goe no nearer to Ireland then 40 fathome.

VIII.

How theſe places are diſtant from each other.

FRom Cape de Claro to Cape Velho e. & by n. 12 leagues.
From Cape Velho to Kinſale n. & by w. a great league.
From Cape Velho to Corck n. e. & by e. a great league.
From Corck to the eaſt-point of Waterford e. n. e. 20 leagues.
From Cape de Velho to the Ilands of Waterford eaſtnortheaſt — — — — — — 29 leagues.
The whole South-coaſt ſtretcheth e. n. e. and w. ſ. w.

IX.

How theſe places are diſtant from others.

FRom Gallowaye to the Ilands of Aran w. ſ. w. 8 leagues.
From Blackrock to Rokot n. & by w. — 60 leagues.
From Cape Dorſey to the Sorrels ſ. e. & by e. 58 leagues.
From Cape Dorſey to Cape Finiſterre ſouth and by eaſt, and ſouth — — — — — — 164 leagues.
From Cape de Claro to Englands ende ſ. e. & by e. 54 leagues.
From Cape de Claro to the Sorrels ſoutheaſt — 47 leagues.
From Cape de Claro to Cape de Finiſterre ſouth 164 leagues.
From Cape de Velho to Englands ende ſ. e. — 46 leagues.
From Cape de Claro to Sorrels ſ. e. & by ſ. — 40 leagues.
From Waterford to Greſholme e. & by ſ. — 21 leagues.
From Waterford to Milford eaſt and by ſouth and ſomewhat ſoutherlyer — — — — — 23 leagues.
From Waterford to Englands ende ſouth & by eaſt and ſomewhat eaſterlyer — — — — — 37 leagues.
From Waterford to the Sorrels ſouth and ſomewhat eaſterlyer — — — — — — — 40 leagues.
From Waterford to Cape de Finiſterre ſ. & by w. 168 leagues.
or — — — — — — — 170 leagues.

X.

Vnder what degrees theſe Countreys lye.

CApe de Claro lyeth under — 51 degrees 20 minutes,
or as ſome ſay — — 51 degrees 38 minutes.
Cape de Velho or Oldhead lyeth under 51 deg. 28 min.
or as ſome ſaye — — — 51 degrees 42 minutes.
Waterford or the towre lyeth under — 52 degrees 4 minutes,
or as ſome ſaye — — — — 52 degrees juſt.

Heere followeth the Carde N. 17.

A DECLARATION HOVV

to ſayle by the Sea-coaſts and Havens of VVales: Alſo from the Chanel of Briſtowe to Englands ende, and to the Sorlinges.

I.

How to ſayle by Wales, from Ramſey to the Naes, and to Cardif.

Ramſey. IT is from the Ilands of Saltees in Ireland to the Iland of Ramſey, or the north-point of Wales, eaſt and by ſouth 19 leagues. Right north from Ramſey lyeth the Biſhop with his Clarkes, which are certaine rockes, which runne out a good waie from the north-point of Wales ſ. w. into the Sea. Upon the ſaid North-point there lyeth a towne, called S. Davies, and from thence northward the land reacheth northeaſt and ſouthweſt.

The Biſhop with his Clarkes.

Gresholm. Broad-baye. Two leagues ſouthward frō Ramſey, lyeth the Iland of Greſholme, and there betweene them both lyeth the Broad-baye, to goe into it you muſt ſayle through betweene the aforeſaid Ilands or Rockes, the one lyeth on the north-ſide, the other on the ſouth-ſide, it is a good Rode for ſhippes that will goe to Briſtowe, and it is there ſafe lying againſt north, northeaſt, and eaſt-windes, at 7, 8 and 9 fathome. The ſaid Ilands are well to be knowne, thereby to knowe the ſaid point of Wales, the land there reacheth n. n. w. and ſ. ſ. e.

Milford haven. Right ſouth from the Iland of Greſholme lyeth Milford haven, which firſt reacheth in n. e, which is a deepe and wide haven, in the middle thereof there lyeth an Iland, within it is verie good anckoring, for it is a good haven. About five Engliſh miles within the land there lyeth a towne called Carcewe.

S. Gawins point. Two leagues eaſtward from Milford lyeth S. Gawins point, which is the ſouth-point of Wales, which is alſo called the White-point.

Caldye. Four or five leagues eaſtward from S. Grawins point lyeth the Iland of Caldye, where you may anckor roūd about againſt all windes. This Iland lyeth before a great Creeke, which al o-

Tinbuy. ver is good rode. He that will goe before the towne of Tinbuy he muſt take heede of a rowe of blinde rockes, which lye northwards from Caldye under the Water, but if you will ſayle to Tinbuy, eaſtward from Caldye, you may ſayle cloſe along by the Iland: you may alſo come about weſt from Caldye, but there it is not verie wide, it is a ſtrait waie, but all through it is deepe ynough, & being eaſt frō the rockes you may anckor wel.

Eaſt from the Iland of Caldye there lyeth a white point, called Wormſhead-point, which hath manie white chalck ſpottes on the land, whereby that point is well to be knowne. There eaſtward it is a good rode for weſt, north, and northeaſt and by eaſt windes, in a great creeke, and ſoutheaſt from this out-point there lyeth a great banck, which reacheth off from the Naes w. & by ſ. and w. ſ. w. five leagues. Wormes point. The Naes.

You may alſo ſayle through this banck and the Naes to Cardyf or the Holme before Briſtowe, and this ſand is called Naes-ſand.

He that will goe into this baye or creeke eaſtward, he muſt ſayle in cloſe by the Naſe, or he muſt come out of the weſt, there it is wide and broad.

Barrey & Sily. Eaſt from the Naſe there lye two Ilands, cloſe by the coaſt of Wales, the one called Barrey, the other Sily. Cardyf and Flatholme lye eaſtward from them, the north-ſide is moſt drie and flatte water.

Cardyf. Cardyf is a tyde-haven, but there is a verie faire rode for ſhips that will goe about eaſt or weſt, for there lye manie ſands eaſtward, which at lowe water are drie.

He that will goe into the rode of Cardyf, he muſt runne in betweene Flatholme and the point of Cardyf, but there lyeth a rock in the haven which he muſt ſhunne, there lyeth alſo a ſtone ſ. e. and ſ. e. & by e. from the weſt-point of the land under the water: but when it is high water you may goe over all that that at half flood is not covered. Cardyf Rode is a faire rode, where you may lye ſafe againſt all windes.

Thus


Pascaarte van het vermaert Canael van Bristou, vertoonende act Zuijden de Zeecusten achter Engelat, vande Sorlinghes af tot Bristou toe, Item aent Noorden de Custen van bijna geheel Wals Engelandt, met een deel van Yerlant.
Carte marine du Canal de Bristou, monstrant au Su les costes marines d'Angleterre, de les Sorlinges iusques a Bristou. au Nord quasi toutes les costes de Wallie, et aussi une partie de Irlande, le tout dressé selon ses vraijes elevations du pole, routes et distances.
Duitsche mijlen 15 in een graedt
Lieues D'allemaigne 15 en un degre
Spaensche mijlen 17½ in een graedt
Lieues d'Espaigne 17½ en un degre
Engelsche en Franc. mijl 20 in een grad
Lieues Anglois et Franc 20 en un degre
WALS ENGELANT
ANGLIÆ PARS
Sorlinges
Zevensteen
Bresan
C. de Cornwal
S. Yves
S. Manga
Padstou
Stoupaert
Stratton
Harton
Hartlans point
Bediford
Barnestable
Combe marten
Dunster
Hunsphil
Exbrige
Crapkijl
Crapekijf
Bristol
Marsfeld
Glocester
Chepstow
Sabrina flu.
Newport
Cardief
Barrey
Silie
Slech oste Flaet holm
Stepeholm
Londey
Naes sant
De Naes
S. Donets
Winston
Noec van Cardief
Wormshoeft
Pennarh cast
Wibley cast
Carmartin
Carreuw
Penbrok
Tinbijj
S. Govens point
I. Caldeije
Muijlfoort
Gresholme
Ramsey
Bredebay
S. David
De Bisschop met zijn clercken
Cardingan
Bradsey
Waterfoort
Balmus
Quickel
Saltees
Kneef
Koekuyt
17

Thus Wales ſheweth it ſelf from Wormſhead to Cardyf.



II.

To ſayle from Naes and the Holme to Briſtowe.

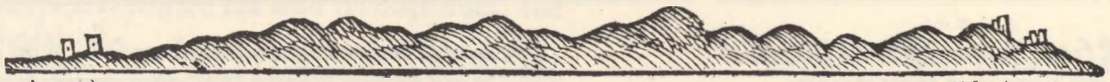
Stepeholm
Flatholm.

HE that will ſayle from the Naes to Briſtowe, he muſt goe to the Stepeholme, which lyeth e. ſ. e. about ſeven leagues from thence, you muſt ſayle north along by it, & leave Flatholme on backborde, which lyeth ſomewhat more inwards then Stepeholme.

But he that wil ſayle from Londey to Briſtow, he muſt keepe the Engliſh ſide to the Naes, then he is within the great banck which runneth along by Wales, called the Naes ſand, you may alſo ſayle with ſhips that drawe but litle water from the Stepeholme, with half flood, but there it is verie flatte, there is but two fathome water at loweſt water, and under Stepeholme you may anckor when you will at 4. and 5 fathome.

To ſayle in the right chanel through betweene the Holme, you muſt goe neareſt to Flatholme ſide, for there is the deepeſt water, with an open winde you may ſayle as neare as you will, yea ſo neare as that you may caſt a ſtone thereon. Frō the eaſtland there cōmeth a ſhallowe ſhooting off, under which a man may ſayle as he commeth out of the weſt. To ſhunne this ſhallowe as you will ſayle from Flatholme to Bruſt, ſet Flatholme when you are paſt it, ſouthweſt from you, and hold it ſo, untill you have ſayled a Dutch myle, then obſerve a litle Iland, which lyeth almoſt thwart againſt you, upon the Engliſh coaſt, whereon ſtand two milles, and upon the heigth of the firme land ſtandeth one mill: now when the mill which ſtandeth upon the high land commeth upon the weſt-ende of the Iland, then you are paſt the point of the foreſaid Engliſh ground, ſo that then you cannot ſayle under it, then goe eaſtnortheaſt by the Engliſh ground, which you may ſayle with your plummet at 3, 4, or 5 fathome, or you may come as neare as you will, for it is verie flatte. When the mill which ſtandeth upon the high land commeth to ſtand betweene both the milles which ſtand upon the foreſaid Iland, then are you wholly paſt the Engliſh groūd, then boldly ſayle toward the Engliſh coaſt, and ſo cloſe along if you pleaſe to Paſſis point, keepe along by the foreſaid coaſt, and ſayle cloſe about the corner of Paſſies point, whē you are about the point ſo anckor there at the Kings rode, betwixt the point and the River of Bruſt, next to the River, at 8 or 9 fathome, there is good clay ground. He that will goe into the River, ſhall be conducted by the Pilots. It is from Flatholm to Paſſies point deepe in the chanel 14 or 15 fathome at half flood. Heere you muſt keepe the Engliſh ſide, for the ſide of Wales is verie unevē and full of banckes, which in manie places fall drie, you come no nearer that coaſt then 12 fathome, for in ſayling toward the coaſt at one caſt you ſhall have 10 fathome, and at the next be faſt on ground, and that wholly from Flatholme to over againſt Bruſt. When you are about Paſſies point you may ſayle along by the coaſt forward northerly to the River of Severne, that is alſo a faire River as Bruſt, fitte to ſayle into.

Thus the land of England ſheweth from Axbridge weſtward to Ilfordcombe, when you ſayle along by it.



III.

To ſayle into the Havens betweene the Holms & the Sorlinges.

BEtweene the Holmes & Ilfordcombe on the Engliſh ſide, & betweene the banckes on the Welſh ſide in the middle of the chanel, it is 15, 16, 18, 20, 25 and 30 fathome deepe, the nearer you come to the Holms the flatter water it is. When you come from the weſt, and are within the Iland of Londey, then you may ſee the land on both ſides, that is, both England and Wales.

How it cõmeth that ſhippes ſayle behinde England and miſtake their courſe.

In this chanel behinde England manie ſhippes in times paſt were woont to manie times to overſhoote themſelves, which was for want that they had not taken their heigths well, and thought that they were in the chanel betweene England and France. And it happeneth ſometimes at this tyme alſo, and that by their owne default, whereby it is to be marked, how neceſſarie it is for a Sayler to be skilfull therein. But he to whom it may happen ſo hereafter may heereby underſtand the ſituation of theſe parts, all the coaſt of England, from the ende of England to the Holme, is altogether faire, but the Welſh coaſt is moſt part all foule and flatte water, from the River of Briſtowe to Caldye, & lyeth moſt full of bancks & ſands, as I ſaid before.

Now to ſayle out of the chanel of Briſtowe, it is from the Holme to Londey w. ſ. w. 19 leagues.

Ilfordcombe. And 11 leagues weſt from the Holmes lyeth Ilford-combe, which is a haven which at lowe water is 3 or 4 fathome deepe. Before the haven it is good rode at 8 & 9 fathome, half flood.

Bedeford. From Ilfordcombe to Bedeford it is ſ. ſ. w. 7 leagues. It is a Tyde-haven, but a faire chanel, where manie ſhippes may goe out and in, it devideth it ſelf into two Rivers, upon the eaſt River there lyeth a towne called Barneſtable, and on the right ſide as you goe in Bedeford lyeth.

Londey. From Bedeford to the weſt-ende of Londey it is n. n. w. five leagues. Under Londey you may anckor on both ſides at 14 & 15 fathome.

Hartland-point. From the point of Bedeford to Hartland point are 7 or 8 leagues. This out-point lyeth right weſt from Londey.

Padſtowe. From this point to Padſtowe or Stoupart the courſe is ſ. w. and n. e. 7 leagues. Stoupart is a creeke, where there is a good rode at 7 or 8 fathome. On the weſt-ſide there lyeth a blinde rock under the water, and at the point there lyeth a rock high above the water. Weſt from this point there are manie white ſandie bayes, or chalck-bayes in the land, whereby it is a good land to be knowne.

S. Ives. Betweene Padſtowe or Stoupart & the Cape of Cornewall lyeth the haven of S. Ives, (by the Hollanders called S. Uves) on the eaſt-ſide there lyeth an Iland or a great rock above the water, and the towne ſtandeth upon the weſt-point of the land, there you muſt runne in betweene the rockes & the weſt-point, then turne up weſtward, and anckor before the towne at 6 and 7 fathome, this haven at half flood is 14 fathome deepe.

The Cape of Cornwall. From Stoupart to Cape of Cornewall ſ. w. & by ſ. & ſomewhat weſterlyer, and n. e. and by n. and ſomewhat eaſterlyer 12 leagues, and from S. Ives aforeſaid it is five leagues.

Breſam. From the Cape of Cornewal there lyeth an Iland or rock inwards to the Sea, called Breſam, you may ſayle through betweene the Cape & the ſaid Iland to Englands ende. Englands ende lyeth from the Cape of Cornewall ſouth about 5 leagues, the ſituation thereof, as alſo of Sorrels is ſhewed in the next Chapter.

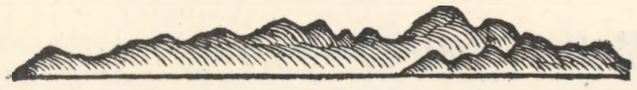
When the Iland of Londey is n.n.w from you it ſheweth thus.



When Londey is north from you it ſheweth thus.



Thus the land eaſt from Padſtowe or Stupaert ſheweth when it is three leagues eaſt and by ſouth from you.



Thus the land of Padſtowe or Stupaert ſheweth when you ſayle along by it, and are three or four leagues from it.



The land weſt from Stoupaert ſheweth thus when you ſayle along by it three leagues from it.



The land betweene Englands ende and the point of Cornewall or the Iland Breſam ſheweth thus when you are behinde Englands ende, & it is about five leagues long.



IIII.

Of the falling and running of the Sreames.

IN the Chanel of Briſtowe, betweene Londey and Milford, the ſtreame falleth n. e. & by e. and n. e.

At Ramſey in the Chanel of S. Davies the flood falleth northeaſt & by north.

In the Chanel of Briſtowe within the Holme the flood falleth n. e. & by e. and the ebbe ſ. w. & by w.

In the Chanel of Briſtowe betweene the Holmes and Londey the flood falleth e. n. e. and w. ſ. w.

Betweene Londey and the Sorrels the flood n.e. & ebbe ſ.w.

V.

What Moone maketh a high water in all the places aforeſaid.

AT Milford or Wilford a weſt and by ſouth moone maketh high water.

Likewiſe on the Coaſt of Wales a weſt and by ſouth moone maketh a full Sea.

Alſo againſt the Iland of Londey a weſt & by ſouth moone maketh high water.

At the Iland of Londey & the Holmes it is high water with an eaſt and weſt moone.

Within at Briſtow it is high water with a w. & by n. moone.

In the Sorrels a ſ. w. & by w. moone maketh a high water.

Without the Sorrels in the chanel a ſ. w. & by w. moone.

VI.

Of the depths heere, and at what depths you may ſee the Land, and how it is to be knowne.

BEtweene Englands ende and Londey in the chanel it is 45 fathome deepe,& you may ſee Cornewall at 44 fathome.

At Wales about-Milford,and there northward from it you may ſee the land at 42 and 45 fathome.

In the Chanel betweene the Holmes and Briſtowe it is 12,13 and 14 fathóme deepe,and you ſee the land on both ſides, the Engliſh land is the faireſt.

You may ſee Sorlinges at 45 and 46 fathome, & the ground is oaſie, with ſome ſmall ſtones among it. Eleven or 12 leagues w. n. w. and w. & by n. from Sorrels it is 56 and 57 fathome deepe, and the ground there is ſo ſoft that you can hardly get it to ſtick upon the lead, & ſometimes you ſhal have ſmall ſhelles.

Betweene Hartland point and S. Ives, againſt Padſtowe or Stupaert,there are manie white chalck hilles, and ſo all along to the ende of England, whereby you may knowe that Coaſt, upō Englands ende you ſee alwaies a towre or two. When you are n. from the Sorrels, then you ſee a towre or caſtle upon the eaſt Iland, and the Sorrels then lye moſt upon two Ilands although they are more then two, & without upon the eaſterlyeſt of the Ilands there lye two great rockes, which are verie craggie like hillockes,& without at the uttermoſt there lye three high black rockes, whereby you may learne to knowe theſe Lands.

VII.

How theſe places are diſtant from each other.

FRom Ramſey to Milford ſ. & by e. —— 5 leagues.
From Milford to S.Gawins point ſ. e. & by ſ. 4 leagues.
Frō S.Gawins point to the Naſe e.& ſomewhat ſ. 17 leag.
From the Naſe to Stepeholme e. ſ. e. about —— 7 leagues.
From Stepeholme to the river of Briſtow n.& by e. 12 leagues.
From the Holmes to Londey w. ſ. w. —— 20 leagues.
From Londey to the Cape of Cornwall ſouthweſt, and ſouthweſt and by ſouth —— —— —— —— 28 leagues.
From the Cape of Cornwal to the ende of Englād ſ. 5 leagues.
From Greſholme to Milford ſ. ſ. e. —— —— 3 leagues.
From Iſfordcombe to Bedeford w. ſ. w. —— —— 7 leagues.
From Bedeford to the weſtende of Londey w. n. w. 5 leagues.
From Hartland point to Padſtowe ſ. w. —— 7 leagues.
From Stupart to the Cape of Cornwal ſ. w. 12 or 13 leagues.
From Milford to Londey ſ. & by e. and ſ. ſ. e. 12 or 13 leagues.
From Milford to Englands ende or the Cape of Cornewall ſouthſouthweſt —— —— —— —— 32 leagues.
From Milford to the Sorrels ſouthſouthweſt & ſomewhat weſterlyer —— —— —— —— —— 40 leagues.

How theſe places are diſtant from the Havens of Ireland it is ſhewed in the chapter before.

VIII.

Vnder what degrees theſe Places lye.

THe Haven of Milford lyeth under 51 degrees 50 minut.
Londey lyeth under —— 50 degrees 20 minutes.
The Cape of Cornwal lyeth under 50 degrees 25 minut.

Heere followeth the Carde N. 18.

A TRVE DESCRIPTION

of the Sea-coasts of England, that lye betweene the Sorlinges and Portland.

I.

The ſituation of the Sorlinges, and from Englands ende to Lezard.

FRom the point of Cornwall, or the Iland of Breſam to Englands ende it is ſouth & north five leagues. From Englands ende there lye ſome rocks, which ſhoote off from it, where you may anckor behinde them at 8 and 9 fathome: you may ſayle behinde them when you come either north or ſouth, on the ſouth-ſide it is narrowe, but deepe ynough, at leaſt 10 fathome, but out of the north it is beſt to come in betweene them, there it is 8 & 9 fathome deepe. But there lyeth a rock under the water on the left hand, cloſe by the north-point of Englands ende, which you muſt ſhunne.

A Rode behinde the rockes at Englands ende.

The Sorrels or Sorlinges are diſtant from Englands ende w. ſ. w. 8 leagues. Betweene them both lye Sevenſtones w. ſ. w. and w. & by ſ. from Englands ende diſtant four leagues. It is a rowe of rockes whereon it alwaies ravles, and are not above the water. Sevenſtones is diſtant from Sorlinges n. e. & by e. and e. n. e. three leagues.

The Sorrels.

Sevenſtones.

Three or four leagues from Englands ende ſ. ſ. w. and ſ. w. & by ſ. there lyeth a ſharp rock in the Sea, which at half flood is above the water, and is indifferent faire, it is called the Wolf, it is diſtant from Sorlinges eaſt and weſt 5 leagues.

The Wolf.

To ſayle into the Sorlinges Ilands, when you come out of the eaſt, you muſt ſayle in by the eaſt-land at 8 or 9 fathome, there lyeth a ſconce right without the caſtle, from thence alſo there ſhooteth off a ſtone under the water, you may ſayle thorough betweene the ſaid ſtone and the ſconce. To ſhunne the ſtone alſo that lyeth in the haven, you muſt underſtand, that there lye two rocks on the weſt-ſide within the haven, one greater then the other, keepe the greateſt over againſt the ſmaleſt, & ſayle neareſt to the north-ſide, and hold them ſo, and then you runne wide ynough without the point at 10 fathome, but nearer you may not goe unto it.

To ſayle into Sorrels.

If you will goe ſouthward into the Sorrels, you muſt looke well before you, becauſe of the ſtone that lyeth in the haven, you may well ſayle about on both ſides, but the eaſt-ſide is the beſt and faireſt. But to goe into the beſt of the chanel, and to goe as neare unto the rock as well you may, then hold the two rockes aforeſaid (which lye on the weſt-ſide of the haven) the ſmalleſt under the greateſt, neareſt unto the north-ſide, as I ſaid before, and ſo ſayle about the point, and turne up northward, until you may ſee the towre ful in the middle of the ſandie bay, there anckor at 7 or 8 fathome, you may hold the ſaid two rockes, (which are within the haven on the weſt-ſide) a litle diſtant one from the other, ſo that you may ſee juſt betweene thē, then you are right north or eaſt from the rock which lyeth in the haven, and then you muſt runne in ſo by the eaſt-land, then the ſaid rock will be on the weſt-ſide, but on the innermoſt point of the Iland, againſt the Pale there lyeth a rock under the water, which you muſt ſhunne, and then runne up northward, until you may ſee the towre in the ſandie Baye, as I ſaid before.

To ſayle out of the ſouth into the Sorrels.

The Sorrels on the weſt-ſide are all full of rockes, & have manie chanels to come in, but the ſouth-chanel or haven is beſt.

When you come to the Sorlinges on the ſouth-ſide then you ſee a flatte ſteeple in the Sandbaye or valley, and weſt it is al full of Ilands & rockes, the ground is ſtonie with ſome redde ſhels, you may ſee the ſouth-land at 52 fathome.

Englands ende hath two round hilles, & on the higheſt there ſtandeth a ſpeere ſteeple, and when you goe ſomewhat nearer, you diſcover alſo upon the uttermoſt ende another ſpeere ſteeple or towre, in the lowe land, ſo that the ende of England is well to be known, the ground is whitiſh ſand, mingled with red ſand and ſhelles.

To know Englands ende.

From Sorrels to Lezard it is eaſt and weſt 16 or 17 leagues. But from Englands ende to Lezard it is e. ſ. e. 10 or 11 leagues. Monſbaye lyeth there betweene both, & betweene Monſbaye

and



Eygentlijck beworp naet leven van alle Havenen, Gaten, en Reeden, gheleghen gende Zeecusten van Engelandt, tusschen Engelandts eijndt, ende Poertlandt, oock vande rechte gelegentheijt vande Sorlinges, Hoemen deselve gewesten beseijlen ende hem van alles wat aldaer van Zanden, bancken, clippen, en ander ondiepten te gemoeten is, wachten sal.
Vraye et vive delincation, de touts les Havres, Ports, et Rades de Mer, situez entre les Sorlinges, et Portlande, aussy la vraye situation desdictes Sorlinges, Comment on singlera lesdicts endroicts, et se gardera de tous sablons, bancs, rochers, et autres perilz quil y a a rencontrer.
ANGLIÆ PARS
Engelandt
Sorlinges
Sevensteen
De Wolf
Brosam
C. de Cornual
S. Burien
Engelants eijndt
S. Justin
Pensance
Mousbol
Mons baij
Perijn
Vaelmuijen
Mijler
Trijm
Truyen
Mause
Maus cast.
Foye
Fawijt
Saltazhe
Westcoufer
Milbroke
Edgcome
Maker
Ramshoofde
Limehause
Vis scherdere
Pleymuyen
Catte water
Jalyn
Coex broot
Meuston
Idestone
Mieusteen
I. Lou
Lezard
Dortmuyen
Newton
Torbaij
Torbay
Totues
S. Patrikes
Start point
Goutstart
Excester
Exmouth
Sidmouth
Start point
Toemanstonen
I. Cob
Lyme
Poortlandt
De Canael tusschen Engelandt en Franckrijck
Duitsche mijlen 15 in een graad
Lieues d'Allemaigne 15 en un deg.
Spaensche mijlen 17½ in een graad
Lieues d'Espaigne 17½ en un degré
Engelsc. en Franc. mijlen 20 in een gra
Lieues Anglois. et Frãc. 20 en un deg.
Casquettes Kiscaßen
18

The Wolf.

and the Sorrels lyeth the rock called the Wolf, whereof I ſpake before, it lyeth eaſt from Sorrels 5 leagues, and from the Wolf to Monsbaye it is 8 leagues.

To ſayle into Mós-baye.

If you will enter into Monsbaye comming from Englands ende, or from Lezard you muſt runne upon a caſtle which ſtandeth upon a high round rock, untill you come within half a league neare unto it, then you ſhall turne up weſt, and ſayle to the Baye, untill you ſee the Iland on the weſt-ſide, whereon the two ſtumpes ſtand like beakons, leave that on the left hand, and ſayle cloſe along by it, for there it is faire, but leave the caſtle a great waie on the right hand, for there it is foule. When you come within the Iland or rock, then you ſhall ſee a great Sand-baye there behinde it, where you may anckor under at 7 or 8 fathome, there you may lye ſafe againſt a ſ. ſ. e. winde, but a ſ. e. and ſpecially an e. ſ. e. winde bloweth open into it, otherwiſe you lye ſafe there againſt all other windes.

From Monsbaye to Lezard the courſe is ſ. e. and n. w. five leagues. The north-ſide is all full of rockes to Lezard. From Lezard alſo there lye ſome rockes. And eaſt from Monsbaye there lye rockes a league into the Sea, in darke gloemie wether a man muſt be carefull to take neede of them.

To knowe Lezard.

To knowe Lezard, it is a ſmall lowe point, and on the ſouth-ende there ſtandeth a ſteeple, and on high towards the north-ende there ſtandeth a ſharpe ſteeple, you may ſee Lezard at 55 fathome, the ground is white and redde ſhellie ſand.

When the Sorrels are ſouthweſt from you four leagues, then they ſhewe thus.



When the Sorrels are ſoutheaſt from you three or four leagues they ſheare thus.



When Sorrels is ſoutheaſt and ſoutheaſt and by eaſt from you three leagues then it ſheweth thus.



When the Sorrels are eaſtnortheaſt from you three leagues then they appeare thus.



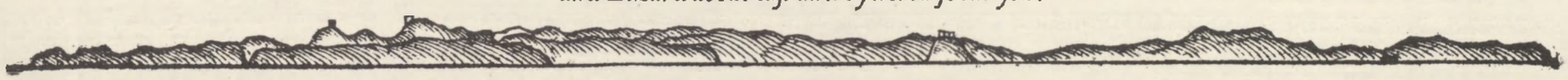
Thus Englands ende ſheweth when it is eaſt from you four leagues.



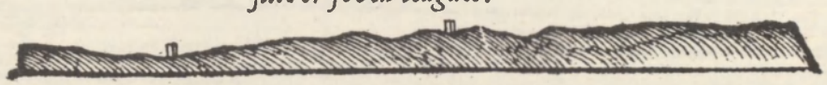
Thus Englands ende ſheweth when you ſee it firſt, comming out of the Spaniſh Sea, it is good to be knowne for there ſtand divers ſteeples and towres upon it.



Thus the land ſheweth betweene Englands ende and Lezard, when the caſtle of Monsbaye is north, and Lezard about eaſt and by north from you.



Thus Lezard ſheweth being eaſt and by north from you ſixe or ſeven leagues.



II.

To ſayle into the Havens and Rodes that lye betweene Lezard and Ramshead, the weſt-point of the Haven of Plimmouth.

FRom Lezard to Famouth ſouth and north 4 leagues.

Hilford haven.

Betweene Famouth and Lezard lyeth Hilford, where you may runne in through the middle of the haven, betweene a ſloping and a lowe point, on the ſouth-ſide lyeth the ſloping point, and on the north-ſide the ſharp point, it is a ſhort haven to ſayle into, and within the haven on the ſouth-ſide there ſtandeth a Gentlemans houſe, belowe upon the ſtrand, & on high there ſtandetha companie of trees, which you place one over againſt the other when you runne into the haven. On the north-ſide alſo there ſtand two or three trees, which come a maſts length weſtward from a houſe, which ſtandeth in a white ſand-baye, ſayle ſo in the middle of the haven, & anckor at 6 or 7 fathome. On the ſouth-ſide there ſtandeth a ſharp ſteeple upon the high land, and on the north-ſide there ſtandeth a caſtle upon the ſhoring land, this is in the haven, wherein fewe ſhippes enter for feare of daunger.

To ſayle into Famouth.

To ſayle into Famouth, you ſhall firſt ſee a caſtle on the high land, on the weſt-ſide of the haven, then runne along in within two cables length by the eaſt-land, there lye rockes upon the inner ſide of the eaſt-point of Famouth, you muſt goe in cloſe by them, and then ſayle upon the high land, which lyeth on the weſt-ſide. Behinde in the haven there ſtandeth a white chalke peece of ground, & there alſo you ſee a box tree, you muſt hold it over againſt the north-point of the high weſt-land, & ſo ſayle to the high land, untill you come to it, and you ſhall not have leſſe water at half flood then 5 fathome, & that is betweene the eaſt and weſt caſtles, or a litle within them, and you may alſo when you come within the weſt caſtle ſayle forward, to the middle of the high land, which you ſee on the weſt-ſide of the haven, and at the north-ſide of the high land you may anckor at 12, 13 and 14 fathome.

You may alſo ſtrike over to the eaſt-land, & anckor under the banck which commeth running off from the eaſt-caſtle in the middle along the haven, at 6, 7 and 8 fathome. This banck at lowe water is almoſt drie, and it is ſoft mooriſh ground, ſo that you lye faſt in the durt when you fall on ground there.

You may alſo runne about weſt from the ſtone which lyeth in the haven, then you muſt hold the weſt-land ſide whereon the caſtle ſtandeth, at 5 or 6 fathome, for it is no deeper then 6 or 7 fathome at half flood, but on the eaſt-ſide of the ſtone it is 7 or 8 fathome deepe. Four leagues upward from Famouth lyeth a towne called Traeren.

The Deadmanshead.

Two leagues eaſt frō Famouth lyeth the point of the Deadmanſhead, which is a round hill, which towards the weſt goeth ſlope downe, it is double land, and there weſtward there ſtandeth a mille at the ende of a ſharp ſteeple, there alſo ſtand ſome houſes upon the land, and a litle weſtward you may ſee the caſtle of Famouth, upon a round hillock, againſt that high land, it is well to be knowne for ſuch as come out of the weſt from Lezard.

Fawick.

From the Deadmanſhead to Fawick it is northeaſt 4 leagues.

Fawick lyeth in a great Creeke, it is a Tyde-haven, where a ſhippe may enter at half flood, on the eaſt-ſide of the haven there ſtandeth a litle church, with a ſteeple, and on the weſt-ſide there ſtandeth a white church with a flatte ſteeple, at the weſt-ende being ſomewhat greater then the church upon the eaſt-ende.

If you will ſayle into Fawick you muſt ſtaye till half flood, & ſo ſayle in the middle of the chanel, betweene the eaſt and weſt pointes, & when you are within the point, then you may chuſe what ſide you will, yet there is moſt water by the weſt-ſide, betweene the ſtakes & the ſteeple that ſtandeth upō the weſt-ſide.

But if you goe in by the weſt-ſide, then you muſt preſently turne off when you are within the ſtakes, and ſayle almoſt in the middle of the haven, neareſt to the weſt-ſide, to the towne that lyeth on the weſt-ſide of the haven, there is a deepe pitte, where a man may lye with a ſhippe of ſixteene foot deepe aflote at a lowe water.

You maye alſo ſayle further in, untill you ſee a wall on the weſt-ſide of the haven, and behinde it there ſtandeth a village: a ſhippes length ſouthward from the wall it is good lying faſtned with four ropes, for there you lye cloſe by the eaſt-ſide.

You may alſo ſayle in further to a hollowe place that lyeth on the weſt-ſide, wherein a water-mill ſtandeth, but goe not to neare the north-point thereof, for there lyeth a rock under the water, and when you are ſomewhat paſt it, then you may towe the ſhippe in the middle of the water, for there it is beſt lying for ſhippes that drawe much water: but ſouth from the aforeſaid wall a ſhippe of 16 foot may lye aflote.

Right within the eaſt-point of the haven of Fawick there lyeth a village, and right before the village there is a deepe poole, three

where you may goe in with three or four ſhippes, & the depth goeth right within the eaſt-point.

But if you goe in by the eaſt-point, and will lye in the ſaid poole, you muſt ſayle within the ſtakes, and put ſomewhat off from the eaſt-land, that you may goe neareſt to the weſt-land, for on the eaſtland there reacheth a flat along the haven, which beginneth right againſt the firſt houſe of the weſterlyeſt village, and if it ſo fall out, that you can not gette in there, then let your anckor fall without the ſtakes, and make your ſhippe faſt with ropes within, for that a ſhippe which draweth ſixteene foot water may lye aflote within the ſtakes at a dead ſtreame.

Ram-head From Fawick to Ramſhead (the weſt-point of the haven of Plimmouth) it is weſtſouthweſt, and eaſtnortheaſt 6 leagues.

Betweene them there lyeth an Iland called Lowe, where you may anckor under it, at 5 or 6 fathome, you may goe both on the eaſt and weſt-ſide, but the eaſt-ſide is wydeſt and beſt to goe in.

Thus Lezard ſheweth when you ſayle along by it.



Thus the land ſheweth betweene Lezard and Deadmanſhead..



Lezard. Famouth. Deadmanshead.

III.

How to ſayle into Plimmouth, and from thence into Goutſtart

Rode under Ramſhead. NOrth from Ramſhead, cloſe under the land, a man may anckor in a ſandbaye, at 8, 9, and 10 fathome, for there it is faire.

From Ramſhead to the Meuſtone or Ideſtone it is ſouth 3 leagues.

Ideſtone lyeth from the point of Plimmouth ſ. & by w. and ſouthſouthweſt 4 leagues.

The haven of Plimmouth reacheth in n. n. e. If you will goe into Catte-water, you muſt goe in betweene the eaſtpoint and the Iland, upon the point of Plimmouth, ſo long till you ſee Catte-water open, and then runne in betweene the point of Plimmouth and the eaſt-point to the north-land, and anckor before the ſteepe ſhoring land, at 4 or 5 fathome at a lowe water becauſe of the continuall tyde.

There lyeth a ſtone under the water weſtward from the Ilād, which at a lowe water hath but 3 fathome water upon it.

If you will goe behinde the Iland, eaſt or weſt from the ſaid ſtone, which lyeth within the Iland, as I ſaid before, then runne to the Iland, till you be at five fathome at a lowe water, untill the Fiſhermens village commeth on the weſt-ſide of the valley, then you are weſt from the ſtone, & you muſt goe through betweene the Iland and the ſtone, and when the fiſhermens village which ſtandeth behinde the wall, is in the northſide of the valley, then you goe eaſt from the ſtone.

But if you will ſayle over the ſtone, then you muſt hold the ſteeple of the fiſhermens village over the north-ſide of the valley, and ſayle to the land of Plimmouth, untill the wall ſtanding on the land of Plimmouth ſheweth endelong to you, & ſo long till Catte-water cōmeth open to you, then you may well ſayle behinde the Ilād into Weſtcomfer, or anckor behinde the Iland at 12 or 13 fathome, & then you are paſt over the ſtone, at three fathome and an half, at loweſt water.

And comming before Weſtcomfer in the narrowe waie, then you muſt goe through the middle of the water right in, & then ſtrike up on the left hand, and anckor at 15 or 16 fathome. In the narrowe it is 15, 16, & 17 fathome, and alſo 20 fathome deepe, and behinde the Iland 8, 9, 10, and 12 fathome.

In the haven of Plimmouth there lye two or three blinde rockes, at three fathome and a half at lowe water, the markes thereof are theſe, there ſtandeth a ſteeple and a mill eaſt from Plimmouth, & weſt from the Iland there ſtandeth a gentlemans houſe, when the towre of the houſe commeth over againſt the point which lyeth againſt the Iland, & the ſteeple & the mill eaſt from Plimmouth are one over againſt the other, thē you are upon the innermoſt ſtone, which at lowe water is 4 fathom deepe.

When the weſt-point of Weſtcomſer commeth on the point which lyeth weſt from the Iland, then you are upon the uttermoſt ſtone, and there it is 3 fathome & an half deepe, with lowe water and a ſpring-tyde.

Upon the eaſtpoint of Plimmouth haven there lyeth a rock verie round and high, which by the Engliſhmen is called Meuſtone, but by the Dutch ſaylers Cocxbroot, becauſe it is ſo round. Frō that ſtone or rock 7 leagues e. ſ. e. lyeth Goutſtart, under the point of Goutſtart you may anckor ſafe againſt a northweſt winde.

Thus the high land on the eaſt ſide of Plymmouth ſheweth.



Thus Goudſtart ſheweth it ſelf when it is ſeven leagues north from you.



IIII.

The ſituation of the land betweene Goutſtart and Portland.

Rode under Goutſtart.

VNder the point of Goutſtart on the eaſt-ſide you may anckor ſafe againſt a n. w. winde, at 10 or 11 fathome, betweene the church which ſtandeth upō the high land & the point of Goutſtart, ſo that the point may lye ſ. w. frō you.

Weſt from Goutſtart there lyeth a haven called Salcem, but from Goutſtart to Dartmouth it is northeaſt 3 leagues.

Dartmouth.

Dartmouth lyeth in betweene two high lands, and on each ſide of the haven there lyeth a caſtle, it is a narrowe haven, ſo that in tyme of war there was woont to be a chaine layd croſſe over the haven, and on the weſt-ſide there ſtandeth a church upon the high land.

To ſayle into Dartmouth.

To ſayle into Dartmouth when you come out of the weſt, you muſt ſayle ſo long about eaſt, or along by the weſt-ſide untill the Kaye of the village, (which lyeth on the eaſt-ſide of the haven) commeth in the middle of the chanel, then ſayle up upon it, in the middle betweene both the lands, and be readie with your boat, if the winde ſhould chance to whirle, that then you might towe in, & then turne on the weſt-ſide before the brewhouſe and anckor at 10 or 12 fathome, for within it is a wide haven, and you may as well anckor before the village as before the brewhouſe. There lyeth a blinde rock on the eaſt-ſide of the haven of Dartmouth, the markes to ſayle out of the daūger thereof are theſe, there is a redde point eaſt from Dartmouth, which upon the water is black, and in the redde there lyeth a white ſtone, when the white ſtone is over againſt the black point, then you are right over againſt the ſaid rock, which lyeth before the haven of Dartmouth, but when you ſee the Kaye of the village then doe as aforeſaid, and you ſhall not ſayle by the ſtone.

Torbaye Rode.

Four leagues eaſt from Dartmouth lyeth the baye ōf Torbaye, where you may anckor, you muſt place the weſt-point ſ. e. and ſ. ſ. e. from you, and there you lye ſafe againſt a ſouthweſt winde at 7 or 8 fathome.

On the eaſt-ſide there is alſo a Tyde-haven, where there is good anckor ground, at 4 or 5 fathome, as you are cloſe by or farre from the land.

From Torbaye to Portland it is eaſt, and eaſt & by north 13 leagues. About 5 leagues n. and n. & by e. from Torbaye lyeth the creeke of Tops or Exmouth, where you may lye ſafe againſt a ſouth-winde, at 7 or 8 fathome, good anckor ground, on the ſouth-ſide of the Single which lyeth before the tyde-haven of Exmouth, ſo that the rockes of Totmanſtone lye ſouth, and ſouth and by eaſt from you,

Exmouth.

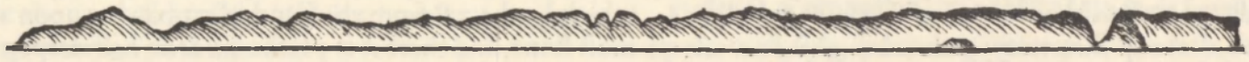
From Exmouth to Portland the courſe is e. ſ. e. 13 leagues.

Betweene them both, cloſe by the land there lyeth an Iland called Cob.

Thus the land ſheweth betweene Goutſtart and Torbaye.



Thus the land on the weſt-ſide of Portland ſheweth when you ſayle along by it.



Thus Portland ſheweth when you come from the weſt.



Thus Portland ſheweth when it is north and by weſt from you ſeven leagues.



Thus Portland ſheweth when you come from the eaſt.



As long as Portland lyeth weſt and by north from you, then the eaſt point is high and ſteepe, but when it beginneth to come north-

northnortheaſt from you, then it lyeth as it were round to your ſight, and when it lyeth more eaſterly from you, then the weſt-ſide is the higheſt and ſteepeſt.

V.

Of manie depths and faſhions of grounds which men finde when they come out of the Sea, to ſeeke out the chanel betweene Heyſant and the Sorrels, taken out of the ſearch made by Adrian Gerritſon of Haerlem.

The Seims SOuthweſt and by ſouth from Seims ſeven leagues it is 72 fathome deepe, and the ground is ſlopie white great ſand, as if it were wreathed ſmall ſtones, with ſmall peeces of ſhelles, graye flatte ſtones, and white ſhining needles, ſayle from thence n. and n. & by e. then you are in a good waie to Heyſant.

The Seims About 2 leagues ſ. w. from Seimes it is 52 fathome deepe, & the groũd is there white yellowe, with ſome ſmal redde ſhelles, manie graie ragged needles, & with ſome white ſhining points, as if they were needles. If a man found 70 or 80 fathome there, they would judge it to be good chanel ground, for it is white yellowe rough long ſand.

The Seims Alſo w. ſ. w. from the Seimes, ſo farre from the land that you may ſee the Sheetes from the poope of the ſhip verie well, there it is 54 fathome deepe, the ground there is redde white yellowe, and black peeces as if it were parings of cheeſe, with ſome great redde ſand amongſt it.

Weſt and by ſouth 8 or 9 leagues from Seims at 65 fathome there the ground is white yellowe, and ſome ſmall redde ſhellie ſand, with ſome peeces of ſhelles, which are not over great, and with much white-yellowe long ſand, with ſmall white points of needles, ſuch as men caſt in the chanels.

Heyſant. Seven leagues ſ. w. from Heyſant, or thereaboutes, where you may plainely ſee from the poope of the ſhip at 70 fathome, there the ground is white yellowe great ſand, with ſome peeces of crampen, ſome peeces of white thinne ſhelles, & ſome graye flatte hackled ſtones.

Southweſt & by weſt from Heyſant about 19 or 20 leagues, at 78 or 80 fathome, the ground is white yellowe great ſand with ſhining needles, white peeces of crampen, graye yellowe flatte ſtones, and peeces, as if they were of oyſter ſhelles.

Weſt and by ſouth from Heyſant 21 leagues, at 86 fathome, there the ground is redde yellowe and black, with a litle white round ſand amongſt it, ſhewing as if it were ſhel-ſand. But at 80 fathome, 21 leagues weſt from Heyſant the ground is yellowe and ſhellie, with ſome graye rugged needles, as if they were the endes of ſmall rye.

Alſo at 80 fathome, 24 leagues from Heyſant w. & by ſ. the ground is rough ſand, with manie peeces of redde white yellowe and graye ſhelles, and peeces of crampen or ſhelles. Heyſant.

From Heyſant weſt 16 or 17 leagues, at 75 fathome, the ground is pale yellowe great ſand, with peeces of white thinne ſhelles, and graye peeces of crampen, or of oyſter ſhelles, and white ſhining needles.

Eight or 9 leagues from Heyſant it is 70 fathome deepe, the ground is redde yellowe white & graye ſhellie ſand, with redde yellowe and black peeces of ſhelles, & ſmall redde yellowe black graye litle ſtones, and ſome white needles.

Fortie-eight leagues w. & by n. from Heyſant, and w. ſ. w. frõ Lezard 50 leagues, or thereaboutes, it is 95 fathome deepe, the ground is redde yellowe and black ſand, with ſmall white round ſhellie ſand, ſome ſmall peeces of ſhelles or crampen, and ſome ſmall peeces of thinne ſhelles.

Thirtie three leagues w. & by n. from Heyſant, & 28 leagues ſ. w. & by ſ. from Sorrels at 95 fathome, there the ground is graye, redde yellowe with black ſand amongſt it, & ſome darke redde peeces, and pale yellowe peeces of ſhelles, to conclude it is there ſmall graye redde ſhellie ſand, and the beſt courſe from this ground is e. n. e. it is almoſt under the heigth of nine-and-fortie degrees.

Four-and-twentie leagues w. or w. & by n. from Heyſant, and ſ. & by w. from the Sorrels 21 leagues, at 80 fathome, there the ground is white, graye, redde yellowe ſmal ſhellie ſand, with ſmall redde and white peeces of ſhelles, and to ſee to, it is like ground muſtard ſeed, it is under the heigth of 49 degrees.

Seven or 8 leagues weſt, and w. and by n. from Heyſant at 68 or 70 fathome, the ground is white yellowe ſmall ſhel-ſand, with many graye curld needles amongſt it.

About 31 leagues weſt, & ſomewhat northerlyer from Heyſant at 90 fathome, there the ground is ſmall white rough long ſand, mixt with a litle redde and yellowe, and with ſome ſhining needles, with two or three peeces of white graye ſhelles, and when you goe there n. e. & by n. till you be under 55 fathome, the ground is yellowe and white great ſhellie ſand, with white peeces of ſhelles, then you may ſee the Sorrels 9 or 10 leagues northward, or ſomewhat weſterlyer from you.

Heyſant. Weſtnorthweſt from Heyſant 21 leagues, and ſ. w. & by ſ. from Lezard 28 leagues, at 80 fathome, there the ground is gray redde ſhel ſand, and upon the lead there commeth a peece of white or graye crampen or ſhelles, with redde and yellowe peeces of ſhelles, and manie peeces of needles.

Nine leagues n. w. & by n. frō Heyſant the ground is white yellowe rugged ſhellie ſand, with graye ſhort needles, and ſhyning needles, there alſo ſtickes on the lead things like ſtrawes, when you goe n. e. from thence then you ſayle upō Goutſtart.

Twentie leagues n. w. and by n. from Heyſant, & 16 leagues ſ. w. & ſomewhat ſoutherlyer from Lezard at 68 fathome, there the ground is white yellowe redde ſmall round ſand, with ſome white ſhyning needles, and a graye ſhort needle or two, and two or three peeces of white ſhelles.

Nineteene leagues n. n. w. frō Heyſant, & 12 or 13 leagues ſ. ſ. w. from Lezard it is 68 fathome deepe, the ground is there of all kinde of hackled ſtones, graye, redde, and black, with redde peeces of ſhelles, and ſome graye hackled needles.

Nineteene leagues n. and by w. from Heyſant, & ſouthward from Lezard, there it is 62 fathome, there the ground is white, ſhellie ſand, with white needles and graye needles, & white peeces of ſhelles, and two or three redde ſtones amongſt it.

Sorrels. Twelve or therteene leagues about weſt frō Sorrels, or ſomewhat northerly, there it is 60 fathome deepe, and the ground is graye oaſie ground, with ſmall black ſand mixed among it, and in ſome places at the ſame depth, it is white graye oaſie ſmall ſand, with peeces of thinne white ſhelles among it, with a peece or two like parings of cheeſe, and this ground you cannot gette upon the lead with tallowe, for it will not ſtick upon it, unleſſe you putte butter or greaſe under the bottome of the lead, and in no place els you have this groūd at this depth, ſo oaſie as there, and therefore you muſt certainely know, that there yōu are behinde the Sorrels, or behinde England, that is weſt from Sorrels.

Weſt from Sorrels ſeven leagues, there alſo it is oaſie ground graye ſand, with two or three peeces of cheeſe parings.

Lezard. Seven or eight leagues ſouthſouthweſt from Lezard at 60 fathome, there the ground is white great ſand, with a litle redde, and white ſhelles, and ſhyning white needles.

Tenne or eleven leagues ſouthweſt from Lezard at 60 fathome, there the ground is yellowe peeces of ſhelles, and graye peeces of ſoft flatte ſtones, as if they were parings of cheeſe, and ſome redde peeces of ſhelles, without anie ſand therein.

Southweſt and by weſt from Lezard, and ſouthſouthweſt from Sorrels 19 leagues, there it is deepe 78 fathome, there the ground is graye yellowe redde ſhellie ground, with redde yellowe and blewe peeces of ſhelles and crampen, and a peece or two as if it were cheeſe parings, or peeces of oyſter ſhelles, and two or three ſhining needles, at the heigth of about 49 degrees 30 minutes.

Fiveteene or ſixteene leagues ſouthweſt and by ſouth from Goutſtart at 57 or 58 fathome, there the ground is all manner of peeces of ſhelles, and crampen, with a litle white yellowe ſhellie ſand, and all manner of ſtones, graye peeces like parings of cheeſe, ſome rough needles, ſhyning needles, and things like as if they were carnels or meaſels that are in bakon. Goutſtart.

Southweſt from Goutſtart 16 leagues, at 53 fathome, the ground is white rediſh ſhellie ſand, with peeces of crampen, and redde and graye ſtones.

Southſouthweſt 11 or 13 leagues from Goutſtart at 50 fathome, the ground is white yellowe ſmall ſhellie ſand, with ſome peeces of white ſhelles, and graye ragged, & ſhyning needles. To conclude he that ſoundeth much, findes manie ſortes of Ground, and ſometymes much alteration, in ſmall changing of places. But he that findeth depth with white ſhelles and litle needles, he muſt underſtand that he is neareſt to Heyſant. But if he finde brannie ground, or black ſtones mingled with white meaſels or carnels, then he is neareſt to the Sorlinges.

Markes of Heyſant and Sorrels. The tokens or ſignes of Heyſant depth, you ſhall finde ſmall white ſand and ſhelles, and ſmall things, it being oaſie and white, then Heyſant lyeth n. e. from you, and if you finde all along things like needles, then Heyſant lyeth ſoutheaſt from you, but if you be not ſure of theſe grounds, then you muſt goe northwards, & if you finde it deeper, then you are towards the Seims, and if it be dryer then you are in the chanel northward from Heyſant. If you are betweene Heyſant and the Seims at 70 fathome, then the ground wil be ſtones, like black earth ſand. And if you finde the ground great redde ſand, then you muſt goe northward, untill you finde white ſand ground, & long carnels or meaſels, then you muſt knowe that you enter into the chanel.

VI.

Of the falling and running of the ſtreames about theſe Landes.

FRom Sorles to Lezard the flood falleth northeaſt and the ebbe ſouthweſt.

From

From Lezard to the Deadmanſhead it ſalleth n. e. and ſ. w.
From Deadmanſhead to Ramſhead the flood falleth e. n. e. & the ebbe w. ſ. w.
In the chanel betwene Lezard & Goutſtart againſt Fawick the flood falleth e. & by n. and the ebbe w. & by ſ.
From Ramſhead to Goutſtart by the land within the Ideſton or Meuſtone the flood falleth e. ſ. e. and the ebbe w. n. w.
From Goutſtart to Portland in the middle of the chanel the flood falleth e. n. e. and the ebbe w. ſ. w.
Againſt Dartmouth by the land the flood falleth n. e. & by n. and the ebbe ſ. w. and by ſ.
Againſt Tops or Exmouth in the Creeke the flood falleth n. n. e. and the ebbe ſ. ſ. w.

VII.

What Moone maketh high water at theſe places.

IN the Sorlinges a ſ. w. & by w. moone maketh high water.
In the mouth of the chanel of England a ſouthweſt and northeaſt moone maketh full Sea.
Without the Sorrels in the chanel a ſ. w. & by w. moone.
At Englands ende and in Monsbay a weſtſouthweſt moone maketh high water.
At Lezard on the land an e. ſ. e. & w. n. w. moone makes ful Sea.
The like alſo at Hilford.
In Famouth an eaſt and by north moone maketh a full Sea.
Without Famouth an e. & by ſ. moone maketh full Sea.
Againſt Fawick in the chanel an e. ſ. e. moone makes full Sea.
In Plimmouth & Fawick a w. & by ſ. moone makes high water.
Againſt Goutſtart in the chanel a w. n. w. and e. ſ. e. moone maketh high water.
In Dartmouth and Torbaye a weſt & by ſouth moone maketh high water.
Againſt Portland in the chanel a ſouthſoutheaſt, and a northnorthweſt moone makes a full Sea.

VIII.

At what depths you may ſee theſe Countreys.

YOu may ſee the Sorlinges on the north-ſide at 48 fathome, but on the ſouth-ſide you may ſee them at 52 fathome.
Englands ende you may alſo ſee at 52 fathome.

You may ſee Lezard at 55 fathome, the ground is white and redde ſhellie ſand.
The Deadmanſhead may be ſeene at 42 fathome, from Lezard along to Goutſtart.
You may ſee Goutſtart at 45 fathome.
The high land of Plimmouth may be ſeene at 50 fathome, being north from you, it is high double land, lying upon two hilles, the ſame high within the land runneth all along the land from Fawick to Dartmouth, and you may ſee the land of Dartmouth at 45 fathome.

IX.

How theſe Countreys lye diſtant from each other.

FRom the Sorrels to Englands ende e.n.e. about 8 leagues.
From Englands ende to Lezard e. ſ. e. 10 or 11 leagues.
From Lezard to Famouth n. & by e. —— 4 league.
From Famouth to the Deadmanſhead eaſt & by north and eaſt northeaſt —— —— —— —— —— 4 leagues.
From the Deadmanſhead to Fawick n. e. —— —— 4 leagues.
From Fawick to the Ile of Lowe eaſt —— —— 3 leagues.
From the Ile of Lowe to Ramſhead e. n. e. —— 5 leagues.
From Ramſhead to Goutſtart e. ſ. e. —— —— 8 leagues.
From Goutſtart to Dartmouth n. e. —— —— 3 leagues.
From Dartmouth to Torbaye northeaſt —— 3 leagues.
From Torbaye to Tops or Exmouth north —— 5 leagues.
From Exmouth to Portland e. ſ. e. —— —— 13 leagues.
From Sorrels to Sevenſtones northeaſt and ſomewhat northerlyer —— —— —— —— —— —— 3 leagues.
From Sorrels to the Wolf eaſt —— —— 5 leagues.
From the Wolf to Englands ende n. n. e. —— 3 leagues.
From the Wolf to Lezard e. and by ſ. —— —— 11 leagues.
From Lezard to Deadmanſhead n. e. —— —— 7 leagues.
From the Deadmanſhead to Ramſhead e. n. e. —— 8 leagues.
From Ramſhead to Meuſtone ſouth —— —— 3 leagues.
From the point of Plimmouth to the Meuſtone ſouthſouthweſt and ſomewhat ſoutherlyer —— —— —— 4 leagues.
From the Meuſtone to Goutſtart e. & by ſ. & e. 7 or 8 leagues.
From Torbaye to Portland e. & ſomewhat north 13 or 14 leag.
From the Sorrels to Lezard eaſt —— —— 16 leagues.
From Lezard to Goutſtart e. & by n. —— 20 or 21 leagues.
From Goutſtart to Portland northeaſt and ſomewhat more eaſtward —— —— —— —— 19 or 20 leagues.

How

X.

How theſe places are diſtant from other Countreys.

FRom the Sorrels to Waterford in Ireland north and ſome. what weſterly — — — — — 40 leagues.
From Sorrels to Cape de Claro n. w. & by n. 40 leagues.
From Sorrels to Cape de Finiſterre ſouth and by weſt & ſomewhat weſterlyer — — — — — 151 leagues.
From Sorrels to Heyſant ſ. e & by ſ. — — 37 leagues.
From Sorrels to the Caſquettes eaſt and ſomewhat ſoutherlyer — — — — — — — 56 leagues.
From Lezard to Tercera ſ. w. and by w. — 387 leagues.
From Lezard to Tenerifa ſ. ſ. w. — — 467 leagues.
From Lezard to Cape Finiſterre ſouthſouthweſt, and then you runne about 5 leagues without it, — — 153 leagues.
From Lezard to Heyſant ſouth — — 29 leagues.
From Lezard to Septiſles ſ. e. and by e. — — 27 leagues.
From Lezard to Garnſey e. and by ſ. — 37 leagues.
From Goutſtart to Heyſant ſ. w. and by ſ. — 40 leagues.
From Goutſtart to S. Paul de Lyon ſ. & by w. — 29 leagues.
From Goutſtart to Septiſles ſouth and by eaſt and ſomewhat eaſterlyer — — — — — 37 leagues.
From Goutſtart to Caſquettes e. ſ. e. — — 19 leagues.

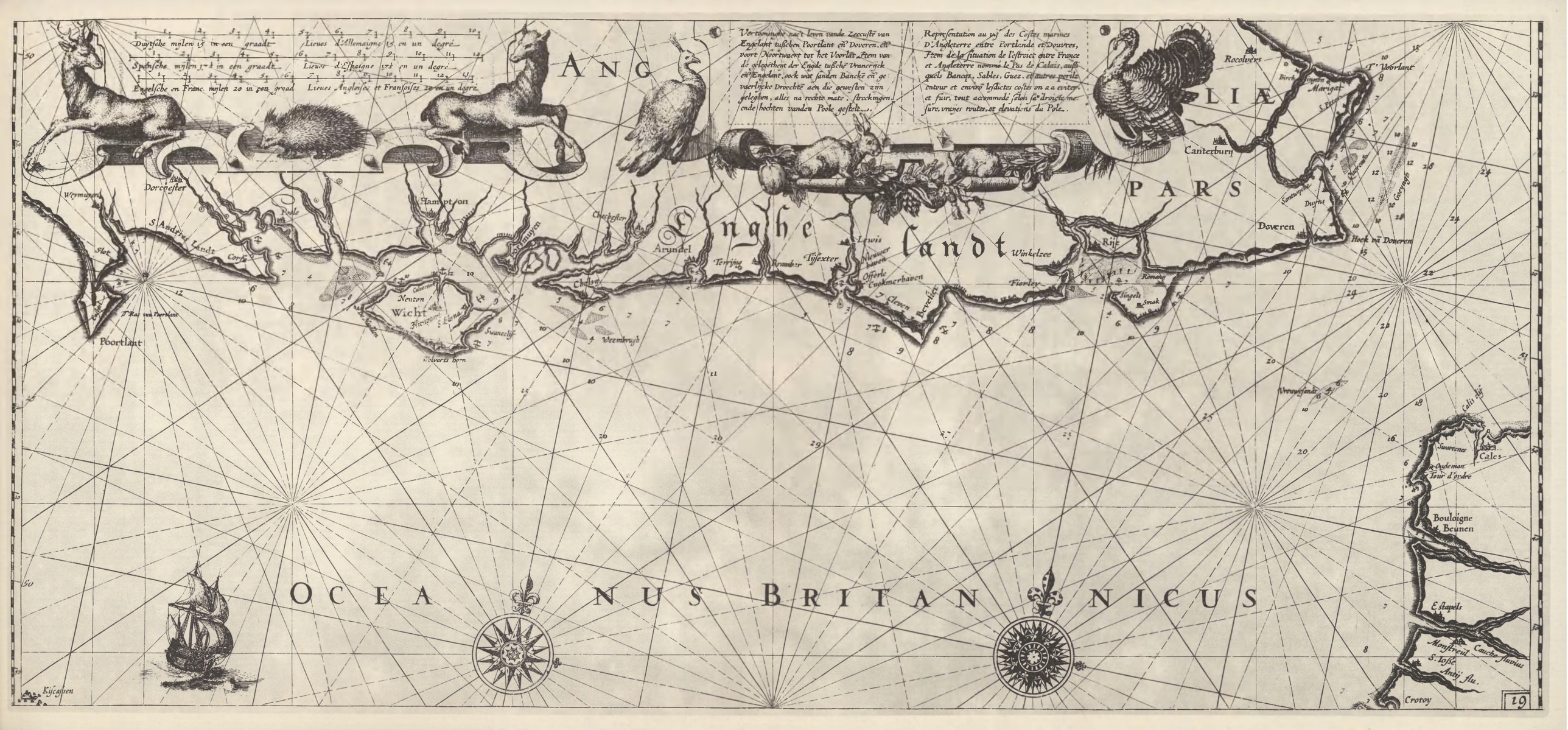
XI.

Vnder what degrees theſe Countreys lye.

THe ſouth-ſide of Sorrels & Lezard lye under 50 degrees.
Goutſtart lyeth under — — 50 degrees 12 minutes,
or as ſome ſaye — — 50 degrees 20 minutes.
Portland lyeth under — — 50 degrees 30 minutes,
or as ſome ſaye — — — 50 degrees 40 minutes.

Heere followeth the Carde N. 19.

A TRVE


Duytsche mylen 15 in een graadt
Lieues d'Allemaigne 15 en un degré
Spensche mylen 17½ in een graadt
Lieues d'Espaigne 17½ en un degré
Engelsche en Franc. mylen 20 in een graad
Lieues Angloises et Fransoises 20 en un degré
Vertooninghe nae't leven vande Zeecustē van Engelant tusschen Poortlant en Doveren, en voort Noortwaert tot het Voorlāt, Item van de gelegētheyt der Engde tusschē Vrancrijck en Engelant, oock wat sanden Banckē en gevaerlijcke Droechtē aen die gewesten zijn gelegen, alles na rechte mate, streckingen ende hochten vanden Poole gestelt.
Representation au vij des Costes marines D'Angleterre entre Portlande et Douvres, Item de la situation de l'estroict entre France et Angleterre nommé le Pas de Calais, aussi quels Bancqs, Sables, Guez, et autres perilz entour et enviro lesdictes costes on a a eviter, et fuir, tout accommodé selon sa droicte mesure, vraies routes, et elevations du Pole.
ANGLIÆ PARS
Engheland
OCEANUS BRITANNICUS
Dorchester
Weymuyen
Poole
Hampton
Chechester
Arundel
Terrijng
Bramber
Tijsexter
Lewis
Nieuwerhaven
Offerle
Cuckmerhaven
Cleven
Bevelicx
Winkelzee
Fierley
Rijs
Romany
Singels
Smak
Doveren
Hoek vā Doveren
Canterbury
Rocolvers
Birch
Marigat
T'Voorlant
Duyns
Goeyngh
Slot
S. Andries Landt
Corfe
Neuton
Wicht
Swanecliff
Weembrugh
Poortlant
Kiscassen
Vrouwesandt
Calis dij
Swartenes
Cales
Oudeman
Tour d'ordre
Bouloigne
Beunen
Estapels
Monstreul
Cauche fluvius
S. Iosse
Antij flu.
Crotoy
19

A TRVE DESCRIPTION

how you may ſayle into the Havens betweene Portland and the Foreland.

I.

To ſayle by the Ras of Portland, and into the Haven of Poole.

The Ras of Portland.

THe Ras of Portland beginneth about half waie from Portland, and endeth againſt the middle of S. Andrewes land, in ſome places it is all banckie, and ſometimes it is deepe 7, and then 10, and then 15 fathome.

Rode in Portland.

If you come from the weſt and deſire to goe into Portland, you may runne along within two cables length, or the ſhotte of a peece by Portland, and ſayle weſtward about the point up before the caſtle, where you may lye ſafe againſt a ſouth, and a ſouth and by eaſt winde, at 7 or 8 fathome, but with a ſouthweſt, and a ſouthſouthweſt winde, a man muſt take heede of the ravelings, which begin half waie from Portland, and ende half waie at S. Andrewes land.

About a great league north from Portland there lyeth a litle Tydehaven, which at lowe water is drie, it is called Weimouth, before it you may anckor at 4 or 5 fathome.

Men commonly anckor under Portland at 10 or 11 fathome, that the point may be ſouth and by eaſt, and ſouthſoutheaſt from you.

To ſayle into the haven of Poole.

By the eaſt-point of S. Andrewes land, three leagues weſt frō the Needles of the Ile of Wight, you runne into the haven of Poole, which is a good haven for ſhippes that will goe about eaſtward. To goe into it goe along by S. Andrewes land, at 5 or 6 fathome with half flood, but when you come againſt the Cingle or the other land, then looſe weſtward to the point, and there anckor, for there you lye ſafe againſt a ſ. w. and ſ. ſ. w. winde. But if you will ſayle into the haven of Poole, then ſhall you perceive another point beating out, ſo ſoone as you are gone about the foreſaid point, by the which ſtandeth a high white ſteepe rock like a maſt, almoſt like the Needle on the weſt ende of Wight, there you may ſayle about at 4 or 5 fathome. Now when you are about the ſaid point with the needle goe forward northweſt, and you ſhall ſee right before you a high flat hill riſing up out of the other land, keepe that hill betweene both the ſhores, and ſayle right forward. But if it chance that you muſt laveere, then ſpare not your lead, & runne no further weſtward as you croſſe, then that the foreſaid flatte hill cōmeth upon the weſt-land: for ſo ſoone as the hill beginneth to come upon the weſt-land, you muſt turne, or els you ſhall preſently be on ground: when you be turned, then croſſe no further eaſtward then that the foreſaid rock cōmeth upon the eaſt-downe, which is a high, graye, ſharp downe, lying upon the eaſt-ſide: if you hold theſe markes ſo, then you have water ynough at half flood. Where it is ſhalloweſt, at lowe water there is in the chanel 10 or 11 foot water, yet it floweth but five foot up and downe. A ſoutheaſt and northweſt moone maketh high water there: but it floweth twiſe in a tyde: for a ſouth and by eaſt moone maketh there alſo full Sea, and that commeth by reaſon of the fore-ebbe which falleth out of Wight. When you are within the chanel, then goe on northeaſt, and keepe the beakons which ſtand on the eaſt-land on ſtarreborde, and goe up reaſonable cloſe. The ſhores on both ſides are verie ſteepe, and the chanel is not wide, but without the deepe or chanel it is verie flatte. It is Pilots water.

When you be by Portland then S. Andrewes land thus, when you ſayle along by it.



Portland.

11.

To ſayle into the Havens of the Ile of Wight.

FRom Portland to the weſt-ende of the Ile of Wight it is 11 leagues e. n. e. but to Wolfertſhorne it is 13 leagues eaſt and by north and weſt and by ſouth.

To ſayle into the weſt-ende of the Ile of Wight

To ſayle into the weſt-ende of the Ile of Wight, you muſt ſayle right upon the Needle of the Ile of Wight, rūning in cloſe along by the Needle, within a cables length thereof, becauſe of the ſands which lye of from the Cingle, before the weſt-ende of the Ile of Wight, whereby the chanel or haven is not al to wide, and when you are within the Needle, you muſt turne over to the caſtle which ſtandeth upon the Cingle, becauſe there lye ſome rockes upon the Iland under the water, it is betweene the Needle and the banck five fathome deepe, with lowe water.

Markes of the haven of the Needle.

The markes to ſayle right into the Haven of the Needle are theſe, when you hold the inner point of the Iland without the Needle, or the caſtle which ſtandeth upon the Cingle without the Needle, and ſo runne till you be within the banckes, being there within, you muſt put of ſomewhat to the Cingle, and when you are within the Cingle, then leave two third-parts of the water on the left hand, and ſo ſayle before the village of Newton, and there anckor at 9 or 10 fathome. But if you will ſayle further to Calveroot, you muſt ſayle ſo long untill Southhampton commeth without the point, there is the beſt Rode, and the beſt lying in all the Havens of the Ile of Wight, at 10 or 12 fathome.

To ſayle into the eaſt-ende of the Ile of Wight.

To ſayle into the eaſt-ende of the Ile of Wight, then you muſt ſette the eaſterly caſtle over the Lime-kil (which is a white place in the land, lying beneath the caſtle) which you hold ſtanding ſo, untill the Swan-cliffe commeth within or under the point of the Ile of Wight, then you muſt bring the Lime-kill over againſt the eaſt-ende of Porchmouth, which you muſt hold in that ſort, until the caſtle that ſtandeth weſt from Porchmouth commeth upon the wood. Theſe markes ſtanding thus, you ſhall ſayle neither by flattes nor ſands, and you come ſometymes about S. Helens church, and when the caſtle of the Ile of Wight cōmeth without the Swan-cliffe, and S. Ellens church two ſhippes length within the redde-point, then you ſayle not by the ſand.

Markes not to ſayle by the Sand.

And if it fall out that you cannot ſee the Lime kill, then you muſt hold the caſtle weſt from the Swan-cliffe, untill S. Ellens church commeth a ſhips length without the point of the Iland, then you may freely goe northweſt without ſayling by the ſand, then you muſt ſette the four-ſquare-ſteeple betweene the eaſt-ende of Porchmouth and the caſtle, but when the caſtle on the weſt-ſide of Porchmouth cōmeth upon the eaſt-ſide of the wood, then you ſayle neither by flattes nor ſands, as I ſaid before.

Other markes.

When the eaſterly white place is a ſhippes length weſtward from the wood, which ſtandeth weſt from the caſtle, then you are eaſt from the ſand.

And when the Swan-cliffe is within the point, then alſo you are within the cliffe.

Markes of the Flat.

The markes of the Flat are theſe, there ſtandeth a four-ſquare ſteeple in the land, and a caſtle upon the water eaſtward from Porchmouth, againſt the caſtle there ſtandeth a white place called the Lime-kill, as I ſaid before, when that is eaſt from the ſaid caſtle, ſo that you may ſee juſt betweene them, then you are upon the Flatte, which at lowe water is 10 foot deepe, and then the caſtle weſt from Porchmouth, ſtandeth on the weſt-ſide of the wood,

But when the four-ſquare ſteeple on the weſt-ſide commeth to the foot of the caſtle, then the caſtle weſt from Porchmouth, ſtandeth on the weſt-ſide of the wood, and there at lowe water it is 12 foot deepe upon the Fatte. And when the four-ſquare ſteeple, ſtandeth betweene the eaſt-ende of Porchmouth and the caſtle right betweene the lime-kill and the ſteeple, and the caſtle weſt frō Porchmouth at the weſt-ende of the wood, there it is 11 fathome deepe at high water.

And when the lime-kill ſtandeth againſt the towre of Porchmouth, and the caſtle on the weſt-ende of the wood, then you have 10 fathome deepe at high water.

When S. Ellens church lyeth ſouthweſt & by weſt from you then the ſoutheaſt-ende of the Flat lyeth northeaſt & by north from you, and the weſt-ende north & by eaſt.

Thus the Iland of Wight ſheweth when you ſayle along by it, being three or four leagues off from it.



To ſayle

III.

To ſayle from the Ile of Wight to Beveſier.

Wembridge.

FRom Wight to the eaſt-ende of Wembridge at twelve fathome the courſe is caſtnortheaſt 6 or 7 leagues, and from Wembridge to Beveſier eaſt and by north, and ſomewhat eaſterlyer 13 leagues.

You may ſound Wembridge at 12 fathome, croſſe over in the land there ſtandeth a ſteeple againſt Wembridge, when that is northnorthweſt from you, then you are againſt Wembridge: and when Swan-cliffe is w. & by n. and w.n.w. from you, thē you are without Wembridge: if you be acquainted with the place, you may ſayle through betweene the land & Wembride.

Betweene Wembridge and Porchmouth there runneth in a great Haven, whereon there lyeth a towne called Chycheſter, which by ſome is placed upon the River of New-haven, which is otherwiſe.

Arundel.

From Wembridge to Arundel, it is eaſtnortheaſt 5 leagres. This is a deepe Tyde-haven, where at half flood a great ſhippe may well goe in, you goe along by the weſt-land, northeaſt, and in the mouth of the haven you have 2 fathome, betweene both the lands 3, and within the haven 4 and 5 fathome at lowe water, where you anckor before the village.

In this Haven the Engliſhmen build manie ſhippes, becauſe within the River there is much timber.

Newer-haven.

Eight leagues eaſt from Arundel lyeth the River of Newer-havē, where there rūneth in two chanels, the one weſt, the other eaſt: that on the weſt-ſide goeth in cloſe by the weſt-land, and is two fathome deepe at lowe water.

The eaſt-chanel goeth in along by the Cingle, & is three fathome deepe. In the ſame men lye at rode weſt frō Beveſier, for it is a good havē, wide & broad, & is 4 or 5 fathome deepe within at lowe water. But on the eaſt-ſide, within in the ſame haven there lyeth a blinde rock, which you muſt ſhunne. At this haven of Newer-haven begin the Seven-cliffes, which reach to Beveſier. Under Beveſier againſt the weſt-ende of the Seven-cliffes you may anckor right againſt the Cingle, whereby you rūne along into Newer-haven, at 7, 8, or 9 fathome, you may alſo anckor on the eaſt-ſide of Beveſier at 6, 7 or 8 fathome, then the point ſhall be ſouth, and ſouth and by weſt from you.

Beveſier is the beſt known land in the whole chanel along, & you may ſee the land without Beveſier, againſt the Seven-cliffes or Kenning-land at 28 or 30 fathome.

Thus the land of Beveſier ſheweth with the Seven-cliffes



IIII.

To ſayle from Beveſier to Dover, and then to the Foreland.

FRom Beveſier to the point of the Cingle it is eaſtnortheaſt 8 leagues.

To ſayle into the Chamber.

He that will ſayle into the Chamber comming out of the weſt, he muſt keepe Beveſier without the point of Fierley, and runne ſo on upon the Cingle, & then along by the Cingle within two cables length, to the ende of the Cingle, then you muſt turne up weſtward, leaving the beakons on the right hand, til you be before the caſtle which ſtandeth upō the South-Cingle, there you may anckor in the River of Rie, at four & five fathome, when you ſayle up, you muſt leave the beakons on ſtarreborde, (as is ſaid before) for the beakons ſtand upon the dariſen, and at lowe water they are drie, along to the towne of Rie, and it is all beakoned along.

Rumney-baye.

On the eaſt-ſide of the Cingle, you may alſo anckor in Rumney-baye, before Rumney towre, running in ſo farre that the point of the Cingle, be ſouth, and ſouth and by weſt from you, there it is ſeven and eight fathome deepe, there you may anckor.

From the Cingle aforeſaid to the north-point of Dover it is northeaſt and by eaſt 9 leagues.

Rode under Dover.

Before Dover you may anckor ſafe againſt a north, and a northweſt winde, right againſt the caſtle is the beſt anckoring at 10 fathome, for there it is faire ground.

To ſayle into the Downes.

To ſayle into the Downes, ſayle eaſily in by the point of Dover, all along by the land, within two cables length, and ſette beneath the middle caſtle, at ſeven or eight fathome.

To ſayle through betweene Goodwin and the land.

When you come out of the weſt and will goe in betweene Goodwin-ſands to the Foreland, you muſt goe n. and by e. ſo long untill that the mill which ſtandeth upon the Foreland, come on the weſt-ſide of the valley, which is in the Foreland, going all along north and by eaſt, and northnortheaſt, untill the towre which is upon the Foreland cõmeth upon the eaſt-ende of the valley, then you are north from the Quernes, then the flatte ſteeple which ſtandeth upon the land of Dover will be upon or right over the third white chalck hill which lyeth north from the point of Dover, this is a right long marke to ſayle through betweene the Quernes & Goodwin-ſands, as well from the eaſt as from the weſt.

To ſayle north within Goodwin ſands.

If you will goe north within Goodwin ſands, you muſt goe no nearer to the Quernes then ſeven fathome, placing the point of Dover ſouthſouthweſt from you, and there you goe in at the beſt depth, then when the flatte ſteeple which ſtandeth upon the Foreland cõmeth within Ramſgate or the valley, then you are againſt the Quernes, and when the mill commeth within Ramſgate then you are ſouth from the Quernes.

Markes of the Quernes.

When you lye in the Downes, & that the inner point of Dover cliffe is ſouthſouthweſt frõ you, then the Quernes lye north and by eaſt from you, and the north-ende of Goodwinſands lyeth northeaſt from you.

The aforeſaid north-ende of Goodwin ſands, lyeth ſ. e. and by eaſt from the Foreland, a great league, the Quernes lye along by the Foreland towards the Downes.

To ſayle without Goodwin ſands to the Foreland.

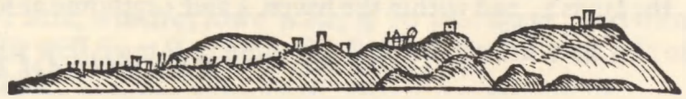
When you will ſayle without Goodwin ſands to the Foreland, then hold the point which lyeth weſt from Dover, without the point of the downes, and goe in north-eaſt, till the Foreland be northweſt and by weſt from you, then you may well goe to the Foreland and anckor before Margat, or where you will, but right againſt the ſteeple which hath the mill by it, is the beſt rode: or when the point of the Foreland is ſouthſouthweſt, and ſouthweſt and by ſouth from you, there alſo is good anckoring at 8 or 9 fathome.

To goe within the Quernes to Sandwich.

You may alſo goe betweene the Quernes and the Foreland, to Sandwich, but there lyeth an other Sand, called the Three-ſtales, betweene it and the Quernes, it is 3 fathome deepe, and betweene the land and the ſaid ſand it is alſo 3 fathome deepe at half flood, but the Quernes are in ſhort tyme much leſſened, & cleane gone, ſo that the north ende is almoſt gone.

Betweene Margat and the Reculvers you may anckor in all places at 6 or 7 fathome at half flood.

Thus Fierley ſheweth when you ſayle along by it four leagues from the land.



Thus the land of Dover openeth when you are weſt from Weman or Vrowen-ſand through the Heads.



When you goe from the Downes to the Foreland, then the land ſheweth thus.



V.

Of the running and falling of the ſtreames in theſe places.

FRom Portland to the Ile of Wight the flood falleth eaſt & by north, and the ebbe weſt and by ſouth.

From the Ile of Wight to Beveſier likewiſe eaſt and by north, and weſt and by ſouth.

By Beveſier on the land before the Seven-cliffes, the flood falleth caſt and by ſouth, and the ebbe weſt and by north.

From Beveſier to the Single it falleth eaſtnortheaſt, and weſtſouthweſt.

From the Singles to Dover the flood falleth northeaſt & by eaſt, and ſouthweſt and by weſt.

In the middle through the Heads the flood falleth northeaſt and by eaſt, and the ebbe ſouthweſt and by ſouth.

From Dover to the Foreland the ſtreame falleth within Goodwin-ſands through over the Quernes ſouth and north, & by the Foreland in to the Reculvers, over the Brakes the flood falleth weſtſouthweſt, and weſt and by ſouth.

About without Goodwin to Kintesknock, the flood falleth north and by weſt and northnorthweſt, there the flood commeth both from north and ſouth, and meete each other, and fall ſo into

ſo in to the ſands, and the havens or chanels.

In the chanel without the Flemiſh Banckes, it is 23 and 24 fathome deepe, but cloſe by Goodwin ſands it is 28 and 29 fathome deepe, and then you are not two peeces ſhotte from them, therefore he that ſayleth out of the Marſdeepe to the Heads, he muſt not goe otherwiſe then ſouthweſt, and ſouthweſt and by ſouth, & he muſt alſo ſtaye much upon the ſtreame, for in this place it is verie fit & neceſſarie to be done, and when you geſſe that you have ſayled 40 or 45 leagues, then chuſe the Flemiſh Banckes at 20 and 18 fathome, and when you are ſure of the ground, then goe ſouthweſt, and at laſt ſouthweſt & by weſt, then you ſhall come into the middle of the Heads.

VI.

What Moone in theſe places maketh high water.

AGainſt the Ile of Wight before Wolvertſhorn a ſouth & by eaſt moone maketh a full Sea.
At Hampton at the Kaye a ſouth and a north moone.
Within the Needles of the Ile of Wight a ſoutheaſt & by ſouth moone.
At S. Ellens and Calveroort a ſouthſoutheaſt moone.
At Beveſier on the land a ſouth and north moone.
Without in the chanel a ſ. ſ. w. moone.
In the chanel of Winchelſey a ſouth and by eaſt moone.
Againſt the Cingle a ſouthſouthweſt moone.
Betweene Dover and the Cingle the like.
At Dover a ſouth and north moone maketh a full Sea.
In the middle betweene the Heads a ſouthweſt moone maketh full Sea.
In the Downes a ſouthſouthweſt moone.
On the Foreland a ſouth and north moone.

VII.

What depths are about theſe places.

IN the chanel betweene Portland and the Caſquettes it is 40 fathome deepe, and when it is cleare wether, then you may ſee the land on both ſides, & the nearer you are to England the ſhallower.

Without or againſt the Ile of Wight it is 38 fathome deepe, and you may ſee the land.

Without Beveſier againſt the Seven-cliffes or Kenningſland it is 28 and 30 fathome deepe.

Betweene Winchelſey & Picardie in the middle of the chanel it is 26 and 27 fathome deepe, and you may ſee Fierley and the land of Dover.

Vrouwen or Woman-ſand lyeth in the middle of the Heads, & at lowe water it is but ſixteene or ſeventeene foot deepe, but it is narrowe, and runneth about ſouth to the land of Bullen. This Sand lyeth ſouth and by eaſt from Dover, and from Caliscliffe weſt and by ſouth. On both ſides of this Banck, both on Picardie and on the Engliſh ſide it is 22, 23, and 24 fathome deepe.

VIII.

How theſe places aforeſaid lye diſtant one from the other.

FRom Portland to the weſt-ende of the Needles of the Ile of Wight e. and by n. and e. n. e. — 11 leagues.
Frō S. Andrewes land to the Needles of the Ile of Wight eaſt about — — — — — — 4 leagues.
From the Needles of the Ile of Wight to Wolfertſhorne eaſt & by ſouth — — — — — — 4 leagues.
From the Ile of Wight to Wolfertſhorne, & up to Wembridge at 12 fathome eaſtnortheaſt — — — 5 leagues.
From Wembridge to Beveſier eaſt and by north — 13 leagues.
From Beveſier to Fierley eaſtnortheaſt — 5 leagues.
From Fierley to the Cingle eaſtnortheaſt — — 3 leagues.
From the Cingle to Dover n. e. and by e. — 9 leagues.
From the point of Dover or the Downes to the Foreland north — — — — — — 7 leagues.
From Portland to Wolfertſhorne e. and by n. — 13 leagues.
From Wolfertſhorne to Beveſier e. & by n. 19 or 20 leagues.
From Beveſier to the Cingles e. n. e. — — 8 leagues.

IX.

How theſe parts lye diſtant from other Lands.

FRom Portland to Heyſant ſouthweſt — 53 leagues.
From Portland to S. Paul de Lyon ſ. w. & by ſ. 40 leagues.
From Portland to the Caſquettes ſ. & by e. 13 leagues.
From Portland to Seynhooft or Stonehead ſoutheaſt and by eaſt — — — — — 37 or 38 leagues.
From the Ile of Wight to Caſquettes ſouthweſt and by ſouth — — — — — — — 20 leagues.

From the eaſt-ende of the Ile of Wight to Struyſaert ſoutheaſt and ſomewhat ſoutherlyer — — — 29 leagues.
From the Ile of Wight to Deepe or Diepen eaſt-ſouth-eaſt — — — — — — — 37 leagues.
From Beveſier to Caſquettes ſouthweſt & by weſt 37 leagues.
From Beveſier to Struyſaert ſouth and north — 24 leagues.
From Beveſier to Diepen ſoutheaſt — — 21 leagues.
From Beveſier to Swarteneſſe — — — 20 leagues.
From Dover to Deepe ſouth — — 23 leagues.
From Dover to the Wielings eaſtnortheaſt — 24 leagues.
From Dover to the Maſe or Goree n. e. and by n. 35 leagues.
From the Foreland to Texel northeaſt — — 45 leagues.

X.

Vnder what degrees theſe Countreys lye.

PORtland lyeth under — — 50 degrees 30 minutes.
The Ile of Wight or Wolvertſſhorn lyeth under 50 deg- 36 minutes.
Beveſier lyeth under — — 50 degrees 48 minutes.
The point of Dover lyeth under — 51 degrees 10 minutes.
The point of the Foreland lyeth under 51 degr. 28 or 30 min.

The ende of the firſt Book.

A table of the firſt Book, conteyning the Arguments of everie Chapter.

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The ende of the Table.

AT AMSTERDAM
PRINTED BY WILLIAM IOHNSON, DWELLING
vpon the VVaem, by the Old Bridge, at the Signe of
the Golden Sonne-dyall. Anno 1612.

THE SECOND BOOK

OF THE

LIGHT OF NAVIGATION

VVHEREIN ARE DESCRIBED ALL THE COASTS

Havens and Ilands of the North and Eaſt Seas:

As, of Frieſland, Iutland, Denmarke, Pomerland, Pruſia, Leefland, Sweathland, Norwaie, Lapland and Muſcovia.

AS ALSO

all the North and Eaſt Coaſts of Scotland and England.



AT AMSTERDAM

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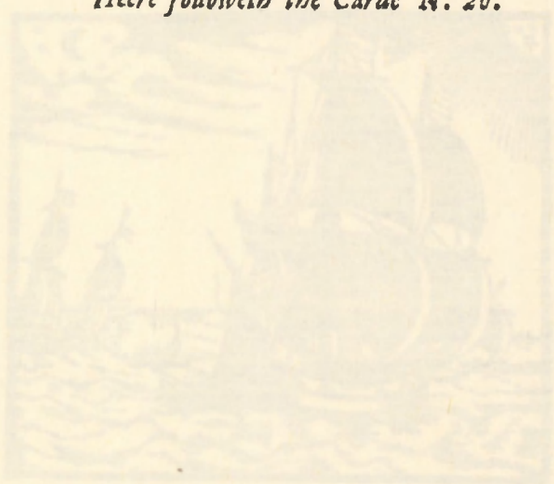
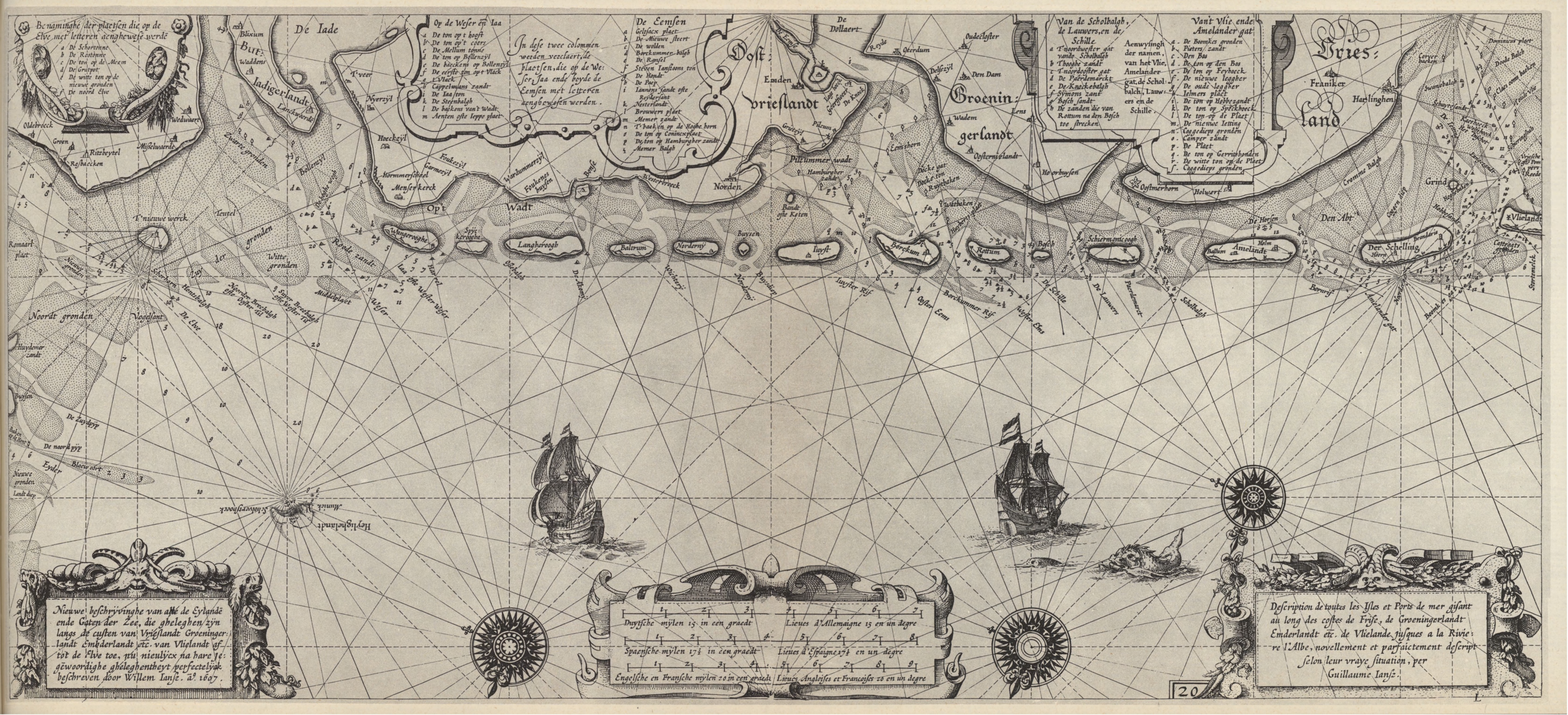
upon the VVater, by the Old Bridge, at the Signe of the Golden Son-dyall. Anno 1612.

Heere followeth the Carde N. 20.




Benaminghe der plaetsen die op de Elve met letteren aenghewesē werdē
a De Schorretonne
b De Rostonne
c De ton op de Meam
d De Grijtpot
e De witte ton op de nieuwe gronden
f De noord Elve
Op de Weser en Iaa
a De ton op t hooft
b De ton op t coers
c De Mellum tonne
d De ton op Bellenzijl
e De baeckens op Bollenzijl
f De eerste ton op t Vlack
g Cappelmans zandt
h De Iaa ton
i De Steenbalgh
l De baekens van t Wadt
m Aenten ofte Ieppe plaet
In dese twee colommen worden verclaert de plaetsen die op de Weser Iaa ende beyde de Emsen met letteren aengewesen werden.
De Eemsen
a Gelsacx plaet
b De Nieuwe steert
c De wolden
d Borckummer balgh
e De Rynsel
f Steven Iansoons ton
g De Rondt
h De Poep
i Iannens sande ofte Reydersant
k Nesterlandt
l Brouwers plaet
m Memer zande
n T'Vastlyn op de Hoghe horn
o De ton op Cominesplaet
p De ton op Hamburgher zandt
q Memer Balgh
Van de Scholbalgh, de Lauwers, en de Schille
a T'noordwesten gat vande Scholbalgh
b T'hooghe zandt
c T'noordoosten gat
d De Paerdemarckt
e De Knock ebalgh
f Symons zant
g Bolch sandt
h De zanden die van Rottum na den Bosch toe strecken
Aenwysingh der namen, van het Vlie, Amelander gat, de Scholbalch, Lauwers en de Schille
Vant Vlie ende Amelander gat
a De Boomkes gronden
b Pieters zandt
c Den Bos
d De ton op den Bos
e De ton op Feyhoeck
f De nieuwe leagher
g De oude leagher
h Ielmers plaet
i De ton op Hobbezandt
k De ton op Speckhoeck
l De ton op de Plact
m De nieuwe Ietting
n Logedieys gronden
o Camper zandt
p De Plaet
q De ton op Gerrithonden
r De witte ton op de Plaet
s Cingradeys gronden
Nieuwe beschrijvinghe van alle de Eylandē ende Gaten der Zee, die gheleghen zijn langs de custen van Vrieslandt Groeninger-landt Emderlandt etc. van Vlielandt af tot de Elve toe, zijn nieulijcx na hare ieghenwoordighe ghelegentheyt perfectelijck beschreven door Willem Ianse. Anno 1607.
Duytsche mylen 15 in een graedt
Lieues d'Allemaigne 15 en un degre
Spaensche mylen 17½ in een graedt
Lieues d'Espaigne 17½ en un degre
Engelsche en Franschе mylen 20 in een graedt
Lieues Angloises et Francoises 20 en un degre
Description de toutes les Isles et Ports de mer gisant au long des costes de Frise, de Groeningerlandt Emderlandt etc. de Vlielande jusques a la Riviere l'Albe, novellement et parfaictement descript selon leur vraye situation, per Guillaume Ianſz.
20
Oldebreck
Groen
Rijtzbeytel
Rysbaecken
Wedwaert
Misselwaerde
Blicum
Buse
Waddens
Iadigerlandt
Lanckwerde
De Iade
T'veer
Nyerzijl
Hoeckzijl
Hormmerschezel
Menserkerck
Fonkezijl
Garmerzijl
Wardummerzijl
Fonkenes pollen
Boufs
Westerpreeck
Oost-
vrieslandt
Emden
Norden
Opt
Wadt
Bandt ofte Keten
De Dollaert
Hoge Lucht
Georgshaef
De Knock
Oudecloster
Delfzijl
Den Dam
Groenin-
gerlandt
Wadem
Lens
Oosterms elandt
Pilsummer wadt
Hamburgher zandt
Eemshorn
Dycke gat
Dycke ton
Watbaken
Hoorbuysen
Vryes-
land
Franiker
Harlinghen
Dominicus plaet
Doode Balch
Swanenbalch
Schuyrs zandt
Cromme Balch
Grind
Vlielandt
Den Abt
De Horsen
Den Schelling
Broodplaet
Helm
Ballum
Ameländt
Schermontcoogh
Rottum
Bosch
Borckummer Rif
Ruytser Eems
Ruytser Ems
Ruytser Ems
De Schille
De Lauwers
Paerdemarck
Schelbalgh
Amelander gat
Borcumer
Boyen
Nieuwe werck
Ieutel
Romaart plaet
Noordt gronden
Vogelsant
Huydemer zandt
Schorren
Hondsbalgh
Noorder Broedbalgh
Oster Tij
Suyder Broedbalgh
Oster Tij
Middelgat
Uyterste
Witte gronden
Roode zande
Laa ofte Weser-vlack
Weser
Harrel
Schulpe
Gelbalgh
De Ruyte
Wisbergh
Mosterdgh
Buysgat
Ruytser Ems
Ruytser Ems
Ruytser Ems
Barckummer Rif
Ruytser Ems
Ruytser Ems
Ruytser Ems

THE DESCRIPTION OF

the Ilands and Chanels lying betweene Vlieland and the Elve.

I.

Of the Ilands of Vlieland and the Schellingh.

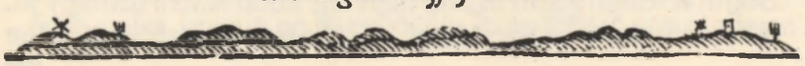
THe Iland of the Vlieland is three leagues long, and is well to be knowne; on the eaſt ende there lie high white bäckes or downes; but on the weſt it is flatte or lowe land. On the weſt ende there ſtandeth a church with a mill eaſt frō it. From the weſt ende thereof there ſhooteth out a Sand a good waie in to the Sea. Weſt from this rock, betweene Vlieland and Eyerland there runneth in a chanel called the Weſter gat, or Weſt-Vlieland-deepe, but it is not for great ſhippes, but onely for fiſhermen, for therein there is not above 8 or 10 foot water. At the eaſt ende there ſtandeth a mill with a cape, which are markes to ſhunne the grounds that lye before the Vlie. The eaſt ende of the Vlieland, and the weſt ende of the Teſſel are diſtant from each other 8 leagues.

Weſt Vlieland deep.

East from Vlieland lyeth the Schellingh; which is about three leagues long, upon it there ſtand four churches & one chappel: the weſterlyeſt is a high flatte ſteeple called Brandaris, which is well knowne by all Seafaring men. About the middle of the land there ſtand two ſteeples, the weſterlyeſt is a ſtatte ſteeple, called Zeerip, the eaſterlyeſt is ſharp and is called Midland, and eaſt frō it there ſtandeth a high ſpeere ſteeple called the Horne, and a chappel called S. Iohns. On the eaſt ende there lye high downes, but not upon the weſt ende, but one onely called the Lit, betweene Midlands and the Lit it is lowe flat land. On the weſt ende there ſtandeth three capes or beakons, the weſterlyeſt is for Bomekins gat, the eaſterlyeſt for the north gat or chane, but the middlemoſt is for the Slencke, which runneth from the Newe ligger through Peters ſand into the Sea.

The Schellingh.

Thus the Iland of the Vlieland ſheweth being about two leagues croſſe from it.



Thus the Schellingh ſheweth when you ſayle along by it about two leagues from the land.



II.

To ſayle into the chanels of the Vlie and firſt of Stortemelck.

HOw you muſt ſayle up and downe the Vlie ſtreame, and how you ſhall ſayle out of all the chanels of the Vlie ſtreame, it is at large declared in the firſt Chapter of the firſt Book. But how a man ſhall reach the ſaid chanels without, and ſayle into them I will heere at large truly declare.

To ſayle into Stortemelck (that is the Land-deepe of Vlieland) ſet the cape and the mill upon the eaſtende one againſt the other, and ſayle up upon it, and ſo you ſhall finde the uttermoſt tonne lying at five fathome, the cape and the mill ſhall then ſtand eaſtſoutheaſt, and ſoutheaſt and by eaſt from you. This uttermoſt tonne lyeth neareſt to the north ſide, yet you may well goe ſomewhat north about it, for the north ſide is reaſonable flatte, ſo that comming out of the north, you may ſound it at five or ſixe fathome, till you be within the uttermoſt tonne. The ſecond tonne, called the tonne upon the Droghe drie, lyeth eaſt, and eaſt and by ſouth from the uttermoſt, at four fathome on the north ſide, the right depth there againſt it is alſo four fathome, with lowe water. When you ſayle in you leave that on the bagh-borde.

The Droghe drie.

Betweene this tonne and the uttermoſt tonne, it is not deeper upon the Droghe drie or drumpel then 16 foot with lowe water. From the ſecond tonne to the third the courſe is eaſt and by north, that lyeth on the north-ſide at five fathome, but the right depth there againſt it, is ſeven fathome, you may ſayle in all along by the ſtrand of Flieland to this tonne without miſdoing, for it is all faire. From the third tonne to the fourth or innermoſt the courſe is eaſt and by north, that lyeth at 3 fathome on the ſouth-ſide, that is, at the point of the Sand, which commeth off from the north-point of the Vlieland. From the third tonne to this tonne you muſt leave the foot-ſtrand of Vlieland, becauſe of the ſaid Sand, and runne north about by the tonne. It is there in the chanel 4 fathome deepe at lowe water. From thence forward to the tonne upon the Flat the courſe is ſouth-ſoutheaſt, or ſayle forward by the foot-ſtrand of the Vlieland to Langeſand, for that is all verie faire, there in the chanel it is five ſixe and ſeven fathome deepe.

III.

The ſituation of Boemkens haven.

BOemkens gat is now at this time, the beſt chanel of all the chanels of the Vlie. If you will ſayle into Bomekens gat, comming out of the Sea, then ſet the weſterlyeſt cape on the Schelling againſt the ſteeple of Brandaris, and then they wil ſtand about ſoutheaſt from you, then ſayle upon them, and ſo you ſhall finde the uttermoſt tonne at tenne fathome, which lyeth at the ende of Boemkens ground. Boemkens ground ſhooteth off with a long ſmall ſand, to that uttermoſt tonne, and are both without and within verie uneven and ſloping, a litle ſouth or weſt from the tonne you ſhall be cloſe by it at 12 fathome, ſo that at one caſt with the lead you ſhall have 12 fathome, the ſecond but 8 or 7, and the third 3 or 4 fathome, with flat bottomed ſhips you may goe weſt without from the uttermoſt tõne, a faire waie at 12 foot water. When you come from without againſt it, then it drieth up apace, as I ſaid before, and as ſoone as you are over the point of ſand, thẽ it is 3 fathome deepe again. From the uttermoſt tonne to the ſecond tonne, the courſe is ſouthſouthweſt, there betweene them both, it is at the drieſt of the drumple 3 fathome deepe, at lowe water: being over it, it is deeper againe to the ſecond tonne, which lyeth in the middle of the water, at 4 fathome and an half at lowe water. The weſt ſide (as I ſaid before) is ſteepe & ſhoring, but the eaſt ſide is a great waie flatte, you may ſound a great waie eaſt about the two uttermoſt tonnes along by the land, at three, and three fathome & an half to the third tonne. From the ſecond tonne to the third, the courſe is ſouth and by eaſt, which lyeth on the eaſt-ſide at 5 fathome, and betweene the ſecond and the third tonne it is 7 fathome deepe in the chanel. From the third to the fourth (which is the tonne at Feihook) the courſe is ſ. ſ. e. it is a white tonne and lyeth upon the eaſt-ſide at 3 fathome, there againſt it in the Bomeſgat or chanel it is the narroweſt, and there in the middle of the water it is 7 or 8 fathome deepe at lowe water. The weſt-ſide there againſt it is verie ſteepe and ſloping, ſo that when a ſhippe lyeth againſt or upon it with the beak-head, it will lye 7 fathome deepe behinde at the ſterne, and right croſſe from Feihook on the weſt-ſide lyeth the ſand called Peter ſand, which at lowe water is all drie. If you will ſayle in at this chanel, you muſt reckon well your tydes, for without the chanels the ſtreames fall along by the land, and croſſe over the Bomekins-gat, till it be half flood or half ebbe, but then the flood begineth to fall right into the chanel, and at half ebbe to fall right out of it, which a man muſt have great care to thinke upon, and to remember, when you wil ſayle out or into this chanel with a ſharp winde. From the wite tonne at Feihook to the tonne at the Bos, the courſe is ſouthſoutheaſt, it lyeth at five fathome on the eaſt-ſide by the point of the Bos: betweene the white tonne at Feihook and the tonne at the Bos, in the chanel, it is 7 or 8 fathome deepe. From the tonne at the Bos to the tonne at Hobbeſand, the courſe is ſouthſoutheaſt, when you ſayle up you may ſayle under it at 5 fathome, the right depth there betweene them both is 8, 9 and 10 fathome. The tonne lyeth at the point of Hobbeſand at 5 fathome lowe water, the weſt-ſide is all ſhoring and ſteepe as I ſaid before, & you muſt goe no nearer to the eaſt-ſide then 6 fathome, ſpecially with a foreflood, for that would bring you lightly behinde the ende of Hobbeſand. Right over againſt the tonne at Hobbeſand lyeth the northerlyeſt white tonne of Speckhook, which you muſt leave on ſtarreborde, and right north from that white tonne there lyeth a Flat, which at lowe water is drie. From the tonne of Hobbeſand to the black tonne at Speckhook, the courſe is ſ. ſ. w. it lyeth at 3 fathome lowe water, but the right depth againſt it is five fathome: betweene the tonne at Hobbeſand and this tonne, it is in the right chanel 8, 6 and 5 fathome. Eaſt from this tonne the Newe or South Iettingh goeth in, and there the flood falleth ſtrongly in. The black tonne at Speckhook, and the ſoutherlyeſt white tõne

Feihook.

Bos.

Hobbe-ſand.

Speck-hook.

lye

lye about eaſt and weſt diſtant from each other, but the tonne
The Plate. at the Flat lyeth about w. ſ. w. from the black tonne at Speckhook, but heere you muſt looke well to your ſtreames & to the winde, for with the flood you muſt ſayle weſt, to get above the tonne at the Plate, when you ſayle up you leave the white tõne on ſtarreborde, and that lyeth at 12 foot lowe water, but the tonne at the Plate lyeth at 3 fathome, and that you muſt leave on baghborde, right againſt it it is in the chanel five fathome deepe. But betweene theſe two tonnes, that is, betweene the blacktonne at Speckhook and the tonne at the Plate, it is verie ſhallowe, for there at lowe water againſt the white tonne that lyeth betweene them both, there is no more water then 14 or 13 foot. The white tonne is diſtant from the tonne at the Plate n. e. and ſ. w. you may alſo ſayle ſomewhat north from this white tonne, over the ſoutherlyeſt point of Peterſand, for when you come in, and are a litle paſt the tonne at Hobbeſand, & the northerlyeſt white tonne at Speckhook, then there runneth a chanel or gutter about ſouthweſt through, wherein at lowe water there is not leſſe then 12 foot deepe, when you are through it, and come againſt Vlieland, and get deepe water againe, then you muſt ſayle in right forward along by Vlieland.

The New Ietingh. Eaſt from the tonne at Speckhook goeth the Newe Ietingh in, as I ſaid before, you may ſayle into it, and come right north from the tonne of Langeſand againe into the Vlie, therein lye three tonnes. When you come in, and will ſayle in the Newe Ietingh, then you muſt leave the black tonne at Speckhook on ſtarreborde, & goe on ſ. ſ. e. to the firſt tonne, there in the chanel it is 8 fathome deepe. From the firſt to the ſecond tonne it is ſouth, from the ſecond to the third ſ. & by w. & there againſt it, it is deepe 3 or 4 fathome at lowe water. Theſe tonnes lye all on the weſt-ſide which is verie ſteepe, but Hobbeſand or the weſt-ſide is flatte, which you may ſound with the lead, to the high beakon, which ſtandeth upon the point of the Ietingh. From the third tonne to Langeſand, the courſe is ſ. w. then when you come againſt the tonne at Langeſand, there upon the drumple lye two ſmall tonnes, which you ſayle through betweene, and then you are right north from the tonne at Langeſand. In the Vlieſtreame, there upon the ſaid drumple it is 14 or 15 foot deepe at lowe water.

But to ſayle into the Ietingh, when you come about the high beakon, there lyeth a white tonne at 3 fathome and an half on the ſouth-ſide upõ a point of ſand, which without you may ſayle under, leave it on ſtarreborde: from thence you muſt goe ſoutheaſt forward to the ſecond tonne, there in the chanel it is 8, 9 and 10 fathome, the north-ſide is all ſhoring ſo that you can not ſound it, upon it there ſtand ſome beakons, but the ſouth-ſide is faire and flatte, there you may ſound it all along at 3 & 4 fathome, the ſecond tonne is a black tonne, and lyeth upon the north-ſide upõ a Sand, which in going up you may ſayle under. From the ſecond tonne to the third, the courſe is ſ. ſ. e. and ſ. e. & by ſ. when you are paſt it there is good Rode on the ſouth ſide, that is on Langeſands ſide, at 3 or 4 fathome, then the towne of Harling will lye e. ſ. e. from you.

IIII.

The ſituation of the North chanel.

THe North chanel was within fewe yeeres become the beſt chanel in the Flie, but it is ſo much altered, that now at this preſent it can hardly be uſed by great ſhippes, but onely by ſmall and flatte bottomed ſhippes. To ſayle into the North chanel, ſet the northerlyeſt or eaſterlyeſt cape upon the Schelling right upon Brandaris, then they will ſtand about ſ. ſ. w. from you, ſayle upon them almoſt to the Schellingh ſtrand, there you ſhall finde the tonne at 3 fathome, right without the eaſterlyeſt point of Peterſand, leave that to Seaward from you, and ſayle w. ſ. w. to the ſecond tonne, which lyeth at the eaſt ende of the Bos at 14 foot lowe water, and there againſt it is no deeper in the chanel, for thereabouts it is dryeſt, for when you are paſt it it is deeper againe, and you muſt leave that tonne on baghborde. From the ſecond tonne to the newe ligger, (that is the third tonne, as you count them comming in) the courſe is w. ſ. w. that tonne lyeth at 2 fathome and an half, on the ſouth ſide, and there againſt it in the chanel it is 3 fathome & an half deepe. When you are by this new ligger, then the middlemoſt cape and Brandaris ſtand one againſt the other, and are ſ. ſ. e. from you. From thence, or right n. n. w. there runneth a chanel through Peters ſand into the Sea, in it there is 3 fathome, and without in the drumple 12 foot water. When you have the ſaid cape and Brandaris one againſt another, keepe them ſtanding ſo, and ſo you goe right out of that gutter: alſo when you will come in out of the Sea, and have the ſaid cape & Brandaris one over againſt an other, and ſayle upon them, then you ſhall goe by the newe ligger into the north chanel, this is a faire gutter for ſmall ſhippes, the weſt ſide is ſhoring, but the eaſt ſide is flat, which you may altogether ſound with your lead.

Newe ligger.

The Slẽck or Gutter.

Old Ligger.

From the Newe ligger to the Old ligger the courſe is weſtſouthweſt, and ſouthweſt & by weſt, it lyeth alſo on the ſouthſide at three fathome, but the chanel there is north four fathome deepe lowe water, the north ſide is all through ſhoring, but the ſouth ſide is outward ſomewhat flatter, but inward it is alſo ſhoring. From the Old legger to the tonne at Feihook the courſe is ſouthweſt and by weſt, yet that reach it is all four fathome deepe, you muſt goe cloſe ſouthward from the white tonne at Feihook, for there it is verie narrowe, and the Bos is all ſhoring, ſo that you can not ſound it. Now when you are paſt the white tonne, then you come into Bomekins chanel, & you finde deeper water, that is, five, ſixe and ſeven fathome. From thence you muſt ſayle ſouthweſt forward, to the tonne at the Bos, and further as is ſaid in the deſcription of Bomekins chanel.

Feyhook.

V.

The ſituation of the Land-deepe of the Schellingh.

THe Land deepth goeth in by the foot ſtrand of the Schellingh, it is a faire chanel for ſmall ſhippes. To ſayle into it goe along by the uttermoſt tonne of the north chanel by the foot ſtrand, and ſo runne in by it, you cannot there doe amiſſe, uleſſe you ſayle bluntly upon the land, now when you come almoſt againſt the northerlyeſt cape, or about the length of the ſecond tonne of the Northerne chanel, there it is dryeſt, and there at lowe water it is no more but tenne foot deepe, being over it, it is three, four and five fathome deepe, ſayle forward by the ſtrand, to the northerlyeſt point of the Schellingh, there againſt it it is ſixe fathome deepe. Now when you have the length of the northweſt point of the Schellingh, then goe ſouthweſt to the tonne at the Bos, but take heede to your ſtreames, that you be not caried by the flood upon Ielmers Flatte, which lyeth betweene the Schellingh, and the tonne at Hobbeſand. Now when you ſayle ſouthweſt from the northweſt point of the Schellingh, then you runne over the point of Ielmers Flatte, along at four fathome, and you come betweene the tonne at the Bos and the tonne at Hobbeſand into Bomekins chanell, and then goe ſouthſouthweſt to Speckhook, and ſo forth inward as you are taught before.

Ielmer Flatte.

VI.

Of the Iland of Ameland, and how you muſt ſayle into Amelands chanel.

ABout two leagues eaſtward from the Schellingh lyeth Ameland, reaching eaſtnortheaſt and weſtnorthweſt four leagues. Upon the weſtende of Ameland there ſtandeth a cape, and alſo a great flatte ſteeple called the Holmes, the roof of this church is broken off, but the hindermoſt part of the roof with the gavle is yet on, and ſtandeth upon the ſide walles. There was woont alſo a church to ſtand in the ſame Iland called Midland church, but that is broken downe, but on the eaſt ſide of Holme church there ſtandeth a mill, with a houſe weſt from the mill, alſo there ſtandeth a broad towre. There about where Midland church was woonte to ſtand, there lye three or four downes, which are lowe, flat and ſomewhat long. On the eaſt ende it is knollie black land, mixed with ſome white among it. But quite upon the eaſt ende, there lyeth a faire high round white downe, which is verie well to be knowne. From the weſt ende of Ameland there reacheth a Sand almoſt three leagues into the Sea, which is called Borneriffe. And weſt from that riffe Ameland chanel goeth in. This Borneriffe and the north points of Teſſel lye diſtant from each other northeaſt & southweſt 12 leagues.

Hoelum.

Bornriffe.

Thus Ameland ſheweth, being about two leagues and an half from it, when you are over againſt it.



IF you will ſayle into the Chanel of Ameland, comming out of the Sea, then ſet the cape which ſtandeth upon the eaſt ende of the Schellingh, right againſt the ſteeple of Horne, and ſayle upon it, and ſo you ſhall finde the uttermoſt tonne, which lyeth at the ende of Borneriffe, at five fathome lowe water. Or if you come out of the weſt, then runne upon the ſtrand of the Schellingh, at lowe water at five, or five fathome and an half, and ſo goe along by the ſtrand, and you ſhall ſayle right upon the uttermoſt tonne. Now when you come to the uttermoſt tonne, then the cape and the ſteeple of Holme upon Ameland are alſo one againſt the other, and ſtand then eaſt and ſomewhat ſoutherlyer from you, but Horne church and

and the cape upon the Schellingh ſhall then ſtand ſouthſouthweſt from you.

From the uttermoſt tonne to the ſecond tonne the courſe is eaſt, and a litle ſoutherlyer, or hold the church of Holme upon Ameland ſtanding right againſt the cape, & ſayle upon it from the firſt tonne, then you ſhall not miſſe the ſecond tonne, which lyeth at ſeven fathome. When you have the length of the ſecond tonne, then you are paſt the Coggie deepes grounds. When you ſound along by the Schellingh at four fathome, then you ſhall not ſayle under the Coggie deepes grounds. Betweene the firſt and the ſecond tonne it is five or ſixe fathome deepe in the chanel.

From the ſecond to the third tõne the courſe is eaſt, and eaſt and by north, that is the tonne at Gerrits honden, which lyeth at three fathome and an half lowe water. You leave all theſe tonnes on baghborde when you ſayle in, for Borneriffe on the inner ſide is all ſhoring, and ſpecially Gerritſhonden. Now when you ſayle from the ſecond tonne to the tonne upon Gerritſhonden, then Camper Sand is on your ſtarreborde, and lyeth cleane drie, you may ſayle as cloſe by it as you will. Betweene the ſecond and the third tonne it is nine and eight fathome deepe in the chanel. When you ſayle againſt Camper Sand, you muſt put over from it to the tonne at Gerritſhonden, about eaſtnortheaſt, to runne above the Plate, which lyeth ſouth from Gerritſhonden, for there betweene them both it is not wide. Betweene Gerrits Honden & the ſaid Plate it is three fathome deepe at lowe water. The Plate at the north ende is flatiſh, ſo that there you may ſound it with your lead.

Gerrits Honden or Dogges.

Camper-ſand.

The Plate.

When you ſayle into or out of this chanel, keepe good account of the ſtreames, and ſpecially take heede of an ebbe, for it falleth ſtrongly croſſe over this chanel, northnorthweſt, over Borneriffe along into the Sea.

When you are above the Plate, there lyeth a white tonne at three fathome, or fixeteene foot water, which you muſt leave on ſtarreborde, and runne there eaſt about it. This white tonne lyeth diſtant from the tonne upon Gerrits Honden ſoutheaſt, paſt the tonne preſently you finde deeper water, as eight, nine, tenne, and twelve fathome, then goe forth ſoutheaſt & by eaſt, ſo long, untill the ſteeple of Holme commeth over the ſouth point of Ameland, where the Scutes lye, then you may goe into the bought, where on the ſouth ſide it is verie flatte, & there you may ancker at five or ſixe fathome, but on the north ſide it is altogether ſhoring. This reach from the white tonne till you be in the boucht is 9, 10, and 12 fathome deepe, and on both ſides is altogether ſhoring.

The white tonne.

If you wil goe further into the Horſen, then goe on from the bocht caſtnortheaſt, along by the ſouth ſide, at 5 or 6 fathome, ſo long till that Heynoms chamber (that is a redde tyled houſe) be a handſpake length north from Holmer church, there ancker at 5 or 6 fathome, there is good anckor ground, and there you lye ſafe from all windes, there alſo goeth a litle ſtreame. The north ſide is al ſhoring, & the chanel there is 12 fathome deepe.

To ſayle to the Horſen forward.

Borneriffe without alſo is all ſhoring. When you come out of the Sea, you muſt goe no nearer to it then 12 fathome, for then you ſhall not be farre off from it. The whole Coaſt of Holland and Freeſland a man may not goe nearer unto in darke wether nor by night then 14, 15, and 16 fathome, becauſe of the grounds and Sands. When you come out of the eaſt along by Ameland, you cãnot ſayle under Borneriffe, but if you runne along by it at ſeven fathome, then you ſhall not goe a caſt of a bullet outward from it.

The ſituation of Bornriffe.

Warninge.

A ſoutheaſt & northweſt moone maketh a high water without, in the chanel of Ameland, and alſo upon the land.

VII.

The ſituation of Schiermonickooghe, and how you ſhall ſayle into Scholbalgh.

THe Iland Schiermonickooghe lyeth from the eaſt ende of Ameland diſtant eaſt, & ſomewhat northerlyer three leagues, it is a lowe ſmooth Iland, about two leagues long, there ſtande no ſpecial markes upon it, but on the weſt ende there ſtand two capes, with a white downe, otherwiſe they are all lowe blackiſh downes or hillockes, but higher then upon the eaſt ende, mixed with white. The eaſt ende is a long flatte ſtrand, with lowe rugged downes.

Betweene Ameland and Schiermonickooghe the Scholbalgh goeth in. Men were woont to goe in along by Schiermonickooghe, but that chanel is cloſed up within, and wholly ſpoyled.

Thus Schiermonickooghe ſheweth, when it is about two leagues croſſe from you.



To

To ſayle into the Scholbalgh.

To ſayle into Scholbalgh, ſet the capes upon the weſtende of Scheermonickooghe one right againſt the other, then they ſhal ſtand about e. ſ. e. from you, ſayle upon them, then you ſhall finde the firſt tonne, which lyeth in the Sea, at 7 fathome lowe water. From the uttermoſt tonne to the ſecond tonne it is ſ. e. it lyeth at 4 fathome on the ſouth ſide, as you ſayle in you muſt leave it on ſtarreborde, and goe with a flood at the leaſt e. n. e. to the third tonne, which lyeth upon the point of the ſand at 3 fathome, but betweene this tonne and the ſecond the chanel is dryeſt, that is two fathome and an half at lowe water, and that right without the third tonne, the ſouth ſide is faire and flatte, and you may ſound it, but the north ſide is all ſhoring, you muſt alſo look well to your ſtreames, for the flood falleth ſtrongly ſouthward croſſe the lands, and the ebbe contrarie. When you are paſt the third tonne, the courſe to the beakon upon the high Sand is ſouth, there it is deepe 7, 8 and 9 fathome. From the beakon upon the High ſand ſayle forth ſ. ſ. e. ſ. e. and eaſt, all along by the beakons, along till you be before Ooſtmerhorne, and there anckor, on the ſouth ſide it is all ſteepe and deepe, and verie white, but the north ſide is ſomewhat flat.

Northeaſt chanel.

The Horſmarket.

Weſt from the Horſmarket there goeth another chanel in, where at lowe water you ſhall have but 8 foot deepe, firſt it reacheth w. ſ. w. and ſometimes ſomewhat ſoutherlyer, but keepe along by the Horſmarket, ſpecially with a ſouth winde, ſo you ſhall goe to the third tonne, at the northweſt chanel, (which lyeth upon the point of the chanel) and ſo into the deepe, leave that tonne on ſtarreborde, and goe forward ſouthward to the beakon upon the high ſand, and there forth, as you are taught before.

VIII.

Of the Iland the Boſch, and how you muſt ſayle into the Lauwers.

FOur leagues eaſt from Schiermonickooghe lyeth the Iland of Rottum, betweene them both lyeth an Iland called the Boſch, which not manie yeeres ſince was wholly overwhelmed, and waſht awaie with a ſtorme, and is now againe (by meanes that men have begunne to plant heath upon it) growne up againe, ſo that now there lye two or three faire townes upon it. Betweene this Iland of the Boſch and the Ooghe the Lauwers goe in.

The the Iland the Boſch ſheweth thus with two hillocks.



Markes of the Lauwers.

Knockbalgh.

Symons ſand.

To ſayle into the Lauwers rūne in eaſt, cloſe along by Schiermonickooghe. There ſtand two towres in Groningherland, whereof the ſmalleſt or the ſhorteſt is the loper, or the innermoſt, and is called Liens or Leens: the longeſt or that which ſtandeth neareſt to the water is called Hoorhouſes: ſet the ſteeple of Liens a bowe length weſt from Hoorhouſes, then it will ſtand upon the foot ſtrand of Schiermonickooghe, keepe them ſtanding ſo, and runne upon the ſtrand of the Ooghe, for there you cannot miſcarie, before in the chanel it is wide and broade, and at lowe water no deeper then two fathome and an half, but when you are over the drumple, then it is 4, 5, and 7 fathome deepe, and reacheth in ſ. e. & by ſ. keepe upon the Ooghe ſide, but beware you ſayle not under the Knockbalgh, which reacheth through betweene the foot ſtrand of the Oogh, and Symons ſand, yet keeping upon three, or two fathome and an half you neede feare nothing, for everie yeere it leſſeneth much, and is almoſt cleane ſpoiled, but it is beſt along by the High ſand, on the eaſt ſide, there alſo you can gette no hurt. Now when you are againſt Symons ſand, there both the ſides of the land are ſhoring, ſo that you cannot well ſound them with the lead, turne then ſomewhat ſouthward up about Symons ſand, and anckor there at 7 or 8 fathome, there it is good lying. You muſt looke well to your ſtreame, for there it falleth ſtrongly both out & in.

IX.

To ſayle into the Schille.

EAſt from the Boſch goeth in the Schille. If you will ſayle into the Schille then place the two aforeſaid ſteeples of Leens and Hoorhouſes one right againſt the other, and ſo rūne upon the Boſcher ſand, until you get drougth of the ſand, you may ſound in al along weſt from Boſcher ſand, and alſo eaſt along to Rottum ſand. About a yeere, or a yeere and an half ſince, the chanel was almoſt 5 fathome deepe, but now before in the chanel at lowe water, no more then two fathome & an half, but being over the drumple or threſhold it is 10 or 12 fathome deepe, firſt it reacheth in ſ. e. til you come to the drie ſand, that is the ſand of the Boſch, go in thereby e. ſ. e. to that Ilād of the

Boſcher ſand.

Boſch

Boſch, there you muſt ſayle in cloſe by the land, for there it is verie narrowe betweene the Boſch and the Sands; which come ſhooting off from Rottum, & the Boſch is verie ſhoring. If you will anckor there, then turne about right behinde the point of the Boſch, there it is good lying at 6 or 7 fathome: but if you will goe ſomewhat better in, then turne off frō the Boſch, when you are full paſt it, and chuſe the north ſide, for that is faire and flat, and that you may ſound, but on the north ſide there lye manie ſands, which you may ſayle under. Sayle forward along by the north ſide till you be behinde Rottum, and there anckor at 8 or 9 fathome, you lye there ſafe againſt all windes. When you will ſayle into or out of this chanel, looke well to your ſtreame, for it falleth ſtrongly into and out of this chanel.

Rode under Boſch.

Rode behinde Rottum.

To knowe Leens and Hoore-houſe.

To knowe the ſituation of the ſteeples in Groninghe land you muſt underſtand, that when the ſteeple of Leens (which is the ſhorteſt) is a ſparre length weſt from Hoorhouſe, then there commeth a high houſe juſt as much eaſtward from Hoorehouſe as Leens is weſt from it, ſo that then Hoorehouſe ſteeple ſtandeth juſt in the middle betweene them, then you are right open before the Lauwers as I ſaid before. When thoſe ſteeples aforeſaid are one upon the other, then they ſtand ſ. ſ. e. and ſomewhat ſoutherlyer from you, then you are right againſt Boſcher ſand. But when Leens church leaveth that houſe and Hoorehouſe ſteeple, then you come againſt the Sands which ſhoote off from Rottum to the Boſch. A ſoutheaſt and northweſt moone maketh a full Sea in theſe chanels or havens.

X.

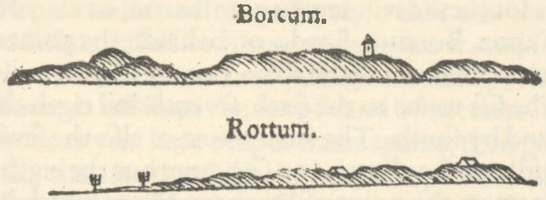
The ſituation of Rottum and Borcum, and how you ſhall ſayle into the Weſt Eems.

Rottum. THe Iland of Rottum is a ſmall Iland, almoſt a league and an half long, and is verie eaſely knowne: the weſt ende is high and ſteepe, & the reſt is lowe downe land. Upon the eaſt ende there ſtand two capes or beacons: the greateſt or the loper ſtandeth upon the eaſt ende of the flat ſtrand, and the ſmalleſt ſtandeth upon the ſouth ſide of the downes, there ſtand alſo two houſes upon it, the one upon the weſt ende, the other in the middle of the land in a lowe ground.

Borcum. Borcum is alſo an Iland well to be knowne, it is three leagues long, commonly when men come out of the Sea it ſheweth in three partes, as if it were three Ilands, but when you come out of the weſt, then it ſheweth in four partes, for the water runneth through it in three places, when it is a high flood. The towne of Embden hath placed a high thick towre upon the weſt ende thereof, which you may ſee farre into the Sea, & weſt from the towre there ſtandeth a lowe church. From the weſt ende of Borcum there ſhooteth off a Sand, a great waie into the Sea, which is called Borcum ſand. There ſouthward, betweene Borcum and Rottum the weſt Eems runneth in, the beſt chanel in all theſe coaſts along.

Borcum ſand.

Thus the Ilands of Rottum & Borcum ſhewe when you ſayle along by them about two leagues from the land.



If you wil ſayle into Weſt Eems, then place the capes or beacons upon Rottum one againſt the other, then they wil ſtand about ſ. e. from you, ſayle out of the Sea upon them, then you ſhall finde the uttermoſt tonne, lying at 6 fathome lowe water. But if you come out of the weſt along by the land at 7 fathome then you ſhal alſo ſee the aforſaid tōne, when you are at the firſt tonne, then Borcum ſteeple will ſtand e. from you, and the weſt ende of Rottum will be about ſ. e. & by ſ. from you. To landward from the ſecond tonne there lyeth a Flat called Geltſack flat, which reacheth with her foot along to the fourth tonne, where upon at lowe water is no more then 15 16 or 17 foot.

The uttermoſt tōne.

Geltſack Plate.

From the firſt tonne to the ſecond, third & fourth the courſe is e. The ſecond tōne lyeth at 5 fathome, the third at 4 fathome & an half, that is upon the drieſt part of Weſt Eems. The fourth tonne lyeth alſo at 4 fathome and an half, upon the point of the ſaid Flat. All theſe tonnes you leave on ſtarborde when you ſayle in. When you come out of the weſt, and are againſt the Lauwers or the Boſch ſand, kepe along by the land at 5 fathome untill you be paſt it, then ſayle on freely eaſt, then you ſhal rūne through within Geltſack flat, at 3 fathome and an half, and ſo come by the fift tonne, into the deepe of Weſt Eems, but keepe the ſouth ſide. Harling bancks which were woonte to reach out to ſeaward, at the weſtende of Rottum are cleane gone & worne awaie, ſo that now it is wide & broad betweene Rottum & the ſaid flatte.

Harling banckes.

The Sand of Borcum is without and at the ende verie ſlatte, when the capes or beakons upon Rottum ſtand ſoutheaſt from you, then you may goe well over the ſand, right to the fourth tonne, you ſhall there finde no leſſe then ſixteene foot water upon the foot of the Sand, at lowe water, for it is flat & broad, but when you come within the Sand of Borcum, on the inner ſide it is ſhoring, and then there ſhooteth off a point or foot of Sand, which in ſayling up you may ſayle under, you may goe no nearer to it then 7 fathome all along to Borcum.

The fift tonne lyeth diſtant from the fourth ſ. e. and by ſ. & lyeth in the middle of the chanel at eight fathome. But with an ebbe and a ſoutherlie winde you goe ſ. e. on, or els you would ſoone fall upon Borcum Sand, or behinde the point of Sand which commeth ſhooting off from Borcum Sand.

From the fift tonne to the ſixth, ſeventh and eigth the courſe is all eaſt and by ſouth. The ſixth tonne, as alſo the ſeventh, lye in the middle of the chanel, at 8 fathome: but the eigth lyeth at 5 fathome, upon the point of Huyberts Flatte, which by others is called the Hackes, which is a Sand which ſhooteth off from the ſouth-ſide, you cannot miſcarie with your lead on Rottum or on the ſouth ſide, but you may ſayle under this ſand of Huyberts Flat at 5 fathome lowe water, but at 6 fathome you muſt goe without about it. When you are by this tonne upon Huyberts Flatte, then Borcum ſteeple ſtandeth about n. n. e. from you, and there againſt it, it is 12 fathome deepe in the chanel.

Huyberts Flat.

From the tõne at Huyberts plate to Stephen Iohnſons tõne the courſe is ſoutheaſt. That lyeth betweene the Balgh beacon and the Ruyt beacon, at ſeven fathome and an half. Betweene theſe two tõnes the Eems is 10 or 12 fathome deepe. But when you goe by the tonne at Huyberts Plate then you muſt turne ſomewhat off from Borcum to ſhunne the Mieuwe ſand, which commeth ſhooting off from the Wolden, or the ſouth ende of Borcum, which when you will goe in, you may ſayle under at five fathome.

Weſtward from Stephen Iohnſons tonne, ſtandeth Wadt beakon, where right ſouth Wadt goeth in. But on the other ſide right over againſt the aforeſaid tonne, lyeth the Ranſel: which is a ſand that commeth ſhooting off from the north ſide, which in ſayling up, you may ſayle under at 5 fathome. The markes of this reach, and to ſhunne the Ranſel are theſe: upon the ſouth ende of Borcum there lye two downes, which are called the Wolden, hold the ſteeple of Borcum on the weſt ſide of theſe downes, or weſt from them, then you ſayle not by the Ranſel.

Wadt beacon.

The Ranſel.

The Wolder.

In this reach it is 9 and 8 fathome deepe.

From Stephen Iohnſons tonne to Docke tonne the courſe is ſ. e. Betweene theſe two tonnes there ſtandeth a beakon on the ſouth ſide, called the Ruyt beacon, by this tonne the Eems is in the chanel about 7 fathome deepe, and the tonne lyeth on the ſouth ſide at 5 fathome, upon a ſand which in ſayling up, you may ſayle under. The flood falleth verie ſtrongly behinde this tonne into Docke chanel, which you muſt be verie carefull of. The markes of Docke tõne are theſe: when the cloſter of Dam, which is a flatte church, commeth weſt from Old cloſter, ſo that you may ſee juſt betweene them, then you have the length of this tonne, and then theſe markes are about ſouth from you. From Docke tonne to the laſt tonne it is e. ſ. e. when you are paſt it then you ſhall ſee the beacons on the weſt ſide, ſayle all about by them. The reach from Eems horne to Delfes Ile reacheth all ſoutherly, up to Wadem. The markes of Eemſhorne are theſe, there ſtandeth a mill in Embden land, about eaſt and by north from you, and there ſtandeth a high houſe north from the church, when that mill ſtandeth betweene the houſe and the church, then you have the length of Eemſhorne, and there ſtande three or four beakons about Eemſhorne, which leade you to Groning land. When you come to Docke tonne and are paſt it, then you may ſound all the weſt ſide to Oterdam, at 5, 6, and 7 fathome, but goe no nearer unto it, for it is verie ſteepe and ſhoring, but there you may ſayle under the eaſt ſide at 6 fathome, when you come within Eemſhorne ſayling up, for there lyeth a Flat on the eaſt ſide called the Hound, which is a hard ſand, and ſomewhat more inward there lyeth an other Flat, called the Pape, alſo a hard ſand, and are faſt one to the other. But heere the weſt ſide is all ſoft & claye ground to Oterdam. You muſt keepe along by the weſt ſide, and followe the beacons which ſtand along. This reach ſtretcheth firſt ſ. ſ. w. and ſ. and by w. and about in a boucht or hollowe place ſ. ſ. e. and by Groning land ſoutheaſt.

Docke tonne.

Ruyt beacon.

Docke chanel.

Markes of Eemſhorn

The Hound.

The Pape.

To ſhunne Reyders or Iannens ſand, which is a Flatte which lyeth in the middle of the Eems, betweene Oterdam & Reyde, (upon it at lowe water there is no more then tenne foot deepe) then take heede of Oterdam, which hath a flat church without a ſteeple, and ſtandeth upon the banck of Groning land, when you come thither then you muſt ſtrike over to Embden land to the Knock, which is now a broken ſteeple, ſtanding in the water upon the point, when you have the Knock then rũne within two ropes length by the north ſide, along to Loegherhorne, and

Reyders and Iannens ſand.

The Knock.

and ſo you ſhall not ſayle by this flatte. There ſtandeth a flatte ſteeple between Knock and Loegherhorn, called Gerrits Swart, when you may ſee through this ſteeple, or when this ſteeple and the church come one upon the other, then you are againſt this Flat. Marker of Reyder ſand.

When you ſayle up the Weſt Eems, then you muſt leave all the tonnes on ſtarreborde.

A ſoutheaſt and northweſt moone maketh a high water with out the Eems. In the Balgh a ſouthſoutheaſt and northnorthweſt moone. But before the towne of Embden a ſouth and ſouth and by weſt, and a north and north and by eaſt moone.

XI.

The ſituation of the Iland Iuyſt, and how you muſt ſayle into the Eaſt Eems.

THe Iland Iuyſt lyeth about a league and an half e. n. e. from Borcum. It is a lowe Iland, but the weſt land is a high ſteepe point, and grayiſh land: the eaſt ende alſo is higher then the middle. The church ſtandeth in the middle of the land, the ſteeple is ſomewhat ſharp, and ſtandeth at the eaſt ende of the church. You cannot ſee the church but when it is againſt a lowe peece of ground, or a valleye. Betweene Borcum and Iuyſt the Eaſt Eems goeth in. From the weſt ende of Iuyſt there reacheth a Sand, at leaſt two leagues weſt into the Sea, you may ſound it without at 3 or 4 fathome, and ſouth from it you goe into the Eaſt Eems. Iuyſt ſand.

Thus the Iland Iuyſt ſheweth about two leagues croſſe from you.



If you will ſayle into the Eaſt Eems, then ſet the church upon Borcum ſouth from you, and ſo if it be cleare wether, then you ſhall ſee through the ſteeple, ſayle upon it & you ſhall finde the uttermoſt tonne, which lyeth at four, or four fathome and an half lowe water. To ſayle into the Eaſt Eems

From the uttermoſt tonne to the ſecond tonne the courſe is eaſt and by ſouth. The ende of Iuyſt ſand, betweene the two ſands, on the inner ſide is verie ſhoring and ſteepe, ſo that you cannot ſound it, but ſomewhat more inward from the ſecond tonne it is flatter, ſo that there you may eaſely ſound it.

The ſecond tonne lyeth at three fathome lowe water, at the point of a long ſmall banck or point, which commeth ſhooting off from the eaſt ende of Borcum, which is called Brewers flat, which you may ſayle under, this Sand on the north ſide is all ſhoring. Betweene the firſt and the ſecond tonne it is four fathome deepe at lowe water, but againſt the ſecond tonne it is deeper againe, at 8 or 9 fathome. From the ſecond tonne the Eaſt Eems reacheth in eaſt and by ſouth, and eaſtſoutheaſt, and ſometimes ſomewhat ſoutherlyer, but from the ſecond tonne with a flood you muſt goe eaſt, and eaſt and by north, that you may not be lead into the fore ſide of Brewers flat. Iuyſt ſand is inward from the ſecond tonne flatte, ſo that you may ſound it at 5 or 6 fathome, but come no nearer unto it, and ſo you ſhall not ſayle under Memers ſand, which is a ſand, which within Iuyſt ſhooteth off from the foot-ſtrand of Memers ſand. Brewers flat. Memers ſand.

As ſoone as you have deeper water againe, then goe firſt eaſtſoutheaſt, then ſoutheaſt, to the beakon upon the high Horne. which ſtandeth on ſtarreborde upon the drie ſand, turne ſouthward or weſtward up behinde the beakon, there is the rode and there you may anekor at 5, 6 or 7 fathome, as you thinck good, it is there good lying for a ſouth winde. The Eaſt Eemes there againſt it is wide and broad. The eaſt ende of Borcum is flatte, you muſt uſe your lead, when you goe there out or in with a ſhippe that draweth much water. Beakon upon the high Horn.

About ſoutheaſt, and ſouth & by eaſt from the beacon aforeſaid lyeth the tonne upon Conincx flat, upon a ſand that ſhooteth of from the ſouth ſide, this tonne and the ſaid beacon you muſt leave on ſtarreborde, and there betweene them both on the ſouth ſide there is good anckoring. At Norden in Eaſtvrieſland there are two flatte ſteeples, whereof the one is great and flat, the other long and ſlender, which ſtand one cloſe by the other, when theſe ſteeples come a ſhippes length eaſt from the eaſterlyeſt ſide of the Bant, (which is a ſmall Iland upon the Wadt) then you have the tonne upon Conincx flat, that is a good long marke, and when Iuyſt ſteeple is n. n. e. from you, it is a good croſſe marke of the ſaid tonne. The tonne at Conincx or Kings flat.

From the tonne at Conincx flat to the tonne at Hamburgh ſand, the courſe is ſ. e. and ſ. e. & by e. it lyeth at three fathome, but this is Pilots water for great ſhips. You may there goe through a Kille or ſmall gutterie chanel into the Weſt Eems, and come out againſt the ſoutherlyeſt tonne in the Weſt Eems. To ſayle through this Kille, leave the tonne upon Hamburger ſand on baghborde, and ſayle along by the beacons, leaving Tonne at Hamburger plate.

ving them on ſtarborde. It is at both endes of this Kille three fathome deepe, and in the middle 5, 6, & 7 fathome, it reacheth through about ſ. ſ. w. into the Weſt Eems.

Memer balgh. Memer balgh lyeth about half a league within Iuyſt, betweene the beacon upon the high Horne, and the tonne at Coninex flat, that is on the eaſt ſide of the Eaſt Eems, and reacheth moſt north in. It is a good rode for ſmall ſhips that wil goe weſt about, or without about. Alſo within the balgh which runneth in by the high Horne, there is a good rode for ſmall ſhips which will goe eaſt about, and reacheth in ſouth.

Iuyſt ſand. When you come out of the eaſt, then you may ſound Iuyſt-ſand, for without it is flat, as I ſaid before, but without in the point of the ſaid Sand there is a Sheare or Dodebalgh like two points, where betweene them it is 3 fathome & an half deepe.

A ſouthſoutheaſt and northnorthweſt moone maketh a high water in the Eaſt Eems.

XII.

Of the Ilands & Chanels which lye betweene the Eaſt & Weſt Eems.

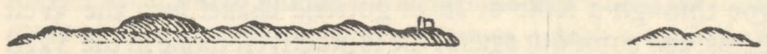
Buys. EAſtward from Iuyſt lyeth the Iland Buys, which is a ſhort ſmall Iland, and upon all that Coaſt there is no Iland ſo litle as it is, it ſheweth like two hillocks, the eaſterlyeſt *is* the higheſt and ſharpeſt.

Betweene Iuyſt & Buys goeth in the Buys chanel, the towne of Embden was woont to put tõnes in it, but now it is no more done, becauſe it altereth ſo much.

Norderny. Above a league and an half eaſt from Iuyſt lyeth Norderny, but betweene them both lyeth the Iland of Buys. This Iland of Norderny is knowne by a broad flat towre, which ſtandeth upon the weſt ende, but ſometimes you ſee but litle thereof. About the middle of the land, neareſt to the eaſt ende, there lyeth a high white downe, whereby you knowe it, otherwiſe it is all uneven ground, full of hillocks. Betweene Norderny and Buys the Norther deepe or the Norderny runneth in.

Thus the Ilands Norderny and Buys ſhewe being about two leagues croſſe from you.

Norderny. Buys.



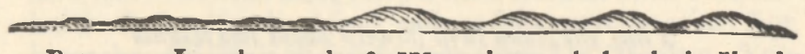
Baltrum. A league eaſt from Norderny lieth the Iland Baltrum, which is about two leagues long, and a litle ſhorter then Norderny. There ſtandeth nothing upon this Iland whereby a man may knowe it, but on the eaſt ende there is a high downe, which on the toppe is ſharp, and the weſt ende is lowe downes. When the aforeſaid high downe is ſ. e. & by e. from you, then it is round about to be ſeene, & at the weſtende there goeth a gulf through Betweene Baltrum & Norderny the Wichtery rũneth in, which is a chanel whereof there is nothing to be written, for it altereth manie times. Anno 1606 it was 2 fathome & an half deepe, but Anno 1607 there was no chanel to be foũd of 4 or 5 foot water. Wichtery.

Thus Baltrum ſheweth when it is about 2 leagues croſſe from you.



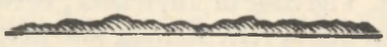
Langheroogh. The Iland of Langheroogh lyeth a league eaſt from Baltrum, it is four leagues long, without it there is a faire ſtrand, it hath three or four downes whereby you may knowe it, which lye from about the middle of the land to the weſt ende, they lye a good waie one from the other, and on the toppe are even & flat. Acumy. Betweene Langheroogh & Baltrum goeth in the Acumy, within it there lye two tonnes, but it is no chanel for great ſhippes, it reacheth out by Langherooghe, firſt n. e. and after ſomewhat eaſterly, along by the foot ſtrand of Langherooghe, but there is no hold to be taken of it, it altereth ſo often.

Thus the Iland of Langherooghe ſheweth being about two leagues from you.



Spikeroogh. Betweene Langherooghe & Wrangheroogh lyeth the Iland of Spickerooghe, which is about a league long. On the eaſt ende there was wont to lye a ſmal Iland, which was wel to be known called Litle Spickeroogh, but that is all waſht and eaten awaie. On Spickerooghe there ſtandeth nothing to knowe it by, but it is downie and hillie, and black land, like the other Ilands. Oxebalgh. Betweene Spickerooghe & Langherooghe the Oxebalgh goeth in.

Thus Spikeroogh ſheweth it ſelf, when it is about two leagues from you.



Wrangeroogh. Wrangheroogh lyeth three leagues eaſt from Langheroogh, it is about a great league long, it is a lowe white Iland, but at the

the eaſt ende there lye high broad white downes, & at the weſt ende the Earle of Oldenburgh hath cauſed a great thick towre with two ſpeeres to be ſet, whē they ſtand one againſt the other, then you are by the uttermoſt tonne of the Weſer, you may ſee this towre with two ſpeers in the Sea. Betwene Wrangheroogh and Spikeroogh the Harrel goeth in, about ſouthſoutheaſt, it is alſo marked with two tonnes by the towne of Embden, but it is not to be truſted, for it altereth manie times, and ſerveth not alſo for great ſhips.

The Harrel.

Thus the Iland of Wrangeroogh ſheweth when it is about two leagues croſſe from you.



To conclude the land from Bornriffe to Wrangheroogh reacheth e. n. e. and w. ſ. w. 29 leagues, or as ſome ſaie 31 leagues. But the chanels which lyę there betweene the Eaſt Eems, and Wrangheroogh are no chanels for great ſhippes, nor we cannot write anie thing of them, which may be truſted unto, for manie times in ſhort ſpace they alter both in ſtretching & depth.

XIII.

How men ſhall ſayle up to the Iaa and Weſt Weſer.

IF you will ſayle into the Iaa or Weſt Weſer with a ſouth winde, then rūne upon the ſtrand of Wrangheroogh at 4 fathome: but if the winde be weſterlie, then goe at 5 fathome, & ſo goe along in by the ſtrand of Wrangheroogh at 4 or 5 fathome, untill you be a good waie within, or at the ende of the foot ſtrand of Wrangeroogh, there you ſhall finde the firſt tōne, which lyeth at lowe water at 5 fathome, then Menſer church ſhall ſhand ſouth from you. Againſt this firſt tonne is the redde ſand verie ſhoring, which you leave on baghborde, but the tōne on ſtarborde. When you goe in alſo againſt this firſt tōne there commeth a Sand ſhooting off from the ſouth ſide, which is the innermoſt point of Steenbalgh, which you ſaile under at 3 & an half or 4 fathome, and the firſt tonne is layd upon this point of Sand. This Steenbalgh goeth in eaſt by Wrangheroogh, the ſouth ſide of this Balgh is ſhoring, & the north ſide is flat, ſo that you may ſound it. In this Balgh it is 10 foot deepe at lowe water. From the firſt tonne to the ſecond, and ſo forth to the third, it is eaſt. The ſecond tonne lyeth at two fathome and an half, & the third at 3 fathome, that is the Iaa tonne, which lyeth upon the entrie of the High waie. It is verie uneven betweene the firſt and the third tonne, you have twice a depth of 5 or 6 fathome, and then againe two, and two fathome and an half.

Steenbalgh.

The Iaa tonne.

The High waie.

If you will ſayle from the Iaa up to Weſer, then ſayle by the third tonne over the entrie of the High waie, n. n. e. to Mellem tonne, but you ſhall finde no more water there at lowe water, upon the aforeſaid drumple or entrie, or by the third tōne, then 10 or 9 foot, & when you are over it you ſhall get deeper water againe, and then you are in the Weſer: but looke well to your ſtreames, for the ebbe falleth verie ſtif n. n. w. out of the Iaa, & to the contrarie the flood falleth verie hard inward, ſo that you cānot get over the ſtreame with ſtill wether, therefore you muſt looke well thereunto.

Mellem tonne.

Falling of ſtreames.

But if you will ſayle up the Iaa, then leave the third tonne on baghborde, and from thence goe up for the moſt part ſouth, to the point of the banck of land called Hormmerſcheel, and when you come to it, then the Iaa is wide and broad, and without the ſaid banck there ſtandeth a beacon or two, for ſhips that wil goe before the Wadt. If you will goe further up the Iaa, then keepe al the weſt ſide, but when you come againſt the church without a ſteeple, which ſtandeth by the banck, there you muſt leave the weſt ſide, becauſe of the Aenten or Ieppe flatte, which ſhooteth off far along by the weſt ſide, & ſometimes at lowe water lyeth drie. The weſt ſide reacheth moſt ſ. e. & ſomewhat ſoutherlyer.

Hormmerſcheel.

Aenten or Ieppe flat.

A ſouth & north moone maketh a high water at the Iaa, and there it floweth dayly two fathome and an half up and downe.

XIIII.

To ſayle up the Weſer.

TO ſayle up the Weſer, goe no nearer to Wrangheroogh then ſeven fathome, and when you have 7 fathome, then turn off to 11 fathome, there you ſhall finde the firſt tōne without in the Weſer, lying at the point of the redde ſand at 7 fathome, then Menſer church is ſ. ſ. e. from you, which is a flat church without a ſteeple, ſtanding in Vroukens land. Now whē you are againſt the firſt tonne, and that the weſt ende of Wrangheroogh is ſ. ſ. w. from you, then you runne yet upon the point of the red ſand at five fathome.

Red ſand.

From the uttermoſt tonne to the ſecond, third, fourth & fift tonne the courſe is right eaſt, and they lye all at ſeven fathome, the ſouth ſide (that is the Redde ſand) neareſt, each a point differing from Menſer church, ſo that Menſer church lyeth from the ſecond tonne ſoutheaſt, from the third ſouth, from the

Tonne at the Head.

fourth ſouth and by weſt, from the fift ſouthſouthweſt. This fift tonne is called the tõne upon the Head, and becauſe you ſhould knowe it before all the other tonnes, there ſtandeth a pole upon it of half a fathome long, with a white knotte upon it. Right againſt the tonne at the Head now there lyeth a white tonne, which Anno 1608 was there firſt laid upon the white ground. Betweene theſe tonnes you muſt marke your ſtreames wel, for the flood cõmeth out of the northweſt, & falleth along over the red ſand, and the ebbe the contrarie. The right depth againſt theſe tonnes aforeſaid at the comming in is 11 fathome deepe, but againſt the tonne upon the Head it is five fathome at lowe water.

The Middle plate.

Right before the Weſer lyeth the Middle plate, the eaſterlyeſt ende, or the innermoſt ſide beginneth right north from the tonne at the Head, by the white ground, and ſtretcheth along the reach, to the third tonne, accounting from without, this plate is on both ſides flat to be ſounded, and there lyeth a white tonne on the weſt ſide of the ſaid plate, about ſouth and north from Menſer church, which when you come in you muſt leave on baghborde. If you will goe eaſt from the plate out againe, from this tonne upon the Head to ſayle to the Elve, then ſound about by the white tonne at 4 or 5 fathome, till you be in the Sea.

To ſayle by eaſt of the Middle plate out the Weſer.

To ſayle up out of the Weſer, the courſe from the tonne upon the Head to the ſixt tonne is ſ. e. and n. w. then Menſer church ſhall lye from you ſ. w. & by ſ. and there againſt it, the Weſer is about 20 fathome deepe. But from the ſixt tonne to the ſeventh, that is, the tonne upon the Cours, or the Wapper-

The tonne at the Cours.

tonne the courſe is ſoutheaſt, this tonne is allo called the Southweſt tonne, becauſe Menſer church as then lyeth ſ.w. from you. The Iaa tonne lyeth about ſouth and ſouth and by weſt from this tonne. From the tonne upon the Cours to Mellem tonne the courſe alſo is ſoutheaſt. You may ſayle under Mellem tonne at ſixe fathome. Menſer church ſhall then lye from you ſ. w. & by weſt. From Mellem tonne to the tonne upon Bollenſile the courſe is ſ. e. and ſomewhat eaſterlyer. There you muſt looke well to your ſtreames, for the flood falleth ſtrongly in to the weſt ſide. Langheworder church lyeth right ſouth and by eaſt from this tonne at Bollenſile: over againſt the tonne at Bollenzil, upon the point of the black ground lyeth a white tonne, come no nearer unto it at half flood then four fathome and an half: for if you ſayle inward, you may ſayle under the point at four fathome. From the tõne at Bollenzil to the beacon at Bollenzil the courſe is ſ. ſ. e. and ſ. e. & by ſ. and then Longworder church ſhal ſtand about ſouth from you. You leave the beacon on ſtarreborde, when you come in, and within the beacon at Bollenſil there is a good rode for a weſt winde. From the beacon upon Bollenſil to the firſt tonne upon the Flat the courſe is ſoutheaſt, till you are a litle beneath the beacon, but then it is eaſtſoutheaſt. The markes of the firſt tonne upon the Flatte are theſe, when you may ſee through the holes of Langheworder ſteeple, then you are againſt the firſt tonne, and then Longworder church is as ſoutherly as ſ. ſ. w. from you. From the firſt tonne upon the Flat to the ſecond the courſe is e. ſ. e. Betweene theſe two tonnes there ſtand five beacons, on baghborde as you come in, upon the black ground. From the ſecond tonne upon the Flat to the Mailand the courſe is ſoutheaſt & by ſouth, but when you are againſt Wadnis, or the Maieland, then ſayle along cloſe by the greene ſide to Blixem, there is a rode for great ſhips that will put to Sea.

The Flat.

A rode within Blixem.

As at the Iaa ſo at the Weſer a ſouth and north moone maketh a high water, and it floweth there two fathome & an half up and downe.

X V.

The ſituation of the Eaſt and Weſt Til or Breebalgh, and how you ſhall ſayle into it.

South grounds.

EAſt from the Weſer lye the ſouth grounds of the Elve, there goe in two faire and deepe balgen or chanels, of 10, 12, and 13 fathome, they are called the Till or Breebalghen, the weſterlyeſt lyeth about ſo farre weſt, that a man may ſee the newe worke from thence.

Brebalghen.

If it ſhould chance that comming eaſt from the Weſer, you ſhould fall upon the ſouth grounds, then ſayle upon the ſouth grounds at 4 or 5 fathome, but not much nearer, for that is ſomewhat ſhoring, and when you goe in that manner along by thoſe grounds, in the ſame courſe you ſhall finde 8, 9, yea and 10 or 12 fathome water ſoft ground, then for certaine you have that of the Breebalgh or the weſt Till, keepe then the land on which ſide you will, and goe ſo about by the grounds, at 4 or 5 fathome by the lead, and you ſhall finde faire and good rode under the ſands, ſo that you ſhall there lye ſafe from all windes. This Weſt Till firſt reacheth in e. ſ. e. along by the north ſide it is deepeſt, and on the ſouth ſide when you ſayle out you ſayle not under ani e Sands, but as you goe in. Now when you are

West Breebalgh or West Till.

ſome-

ſomewhat within, then it reacheth up ſoutherly, and there are ſeveral chanels, where you may ſayle through, for ſuch as are driven to doe it.

East Til. The East Till haven lyeth betweene the Weſt Til and the Hondbalgh, which runneth in at ſeven fathome, the eaſt point (or the old Schor-horne) which is a ſand which reacheth farre out, you may ſayle under at 7 fathome, when you will goe to the Elve. This Till alſo (as the other) reacheth eaſtſoutheaſt in, when you come firſt in, but a litle further in ſomewhat eaſterlyer. You may heere take which ſide of the land that you will, for when you come in you ſhall there finde ſhelter among the ſands for all windes, and in this chanel it is not leſſe then ſeven fathome water.

Hondbalgh. But the Hondbalgh lyeth right weſt from the Sheortonne or Schorhorne. If you will goe in with ſmall ſhippes, to goe over the Wadt and ſayle into the Weſer, then when you have the Schortonne goe in ſ. ſ. e. the Hondbalgh is indifferent wide, but hold that courſe until you come againſt the beakons, which you muſt leave on ſtarreborde, when you will goe up you may ſound the Schorhorne from without cleane within, but not the weſt ſide, for there lye flattes, which you may ſayle under from without, at 9 fathome, but upon the Schorhorne you cannot miſcarrie.

XVI.

Of the Iland of Holie land.

THe Iland of Holie land, and the uttermoſt tonne on the Weſer lye from each other ſouth, and ſomewhat weſterlyer, and north and ſomewhat eaſterlyer, when it is faire and cleare wether, then you may ſee Holie land, when you lye in the Weſer, by the tonne at the Head. But Holie land and Bornriffe lye diſtant ſ. w. & by w. and n. e. & by e. according to the common opinion 32 leagues. When you come out of the weſt and beginne to ſee Holie land, it is a high reddiſh ſteepe point which is flatte upon the toppe. If you will anckor under Holie land when you come out of the weſt, then runne upon that land at 10 or 12 fathome. As you ſayle ſo to the ſouth point and goe ſomewhat neare to the land, you ſhall ſee a rock like a ſmall ſteeple ſtand cloſe by the high land, which is called the Monck, which is almoſt as high as the high land. About ſ. ſ. e. and the third or fourth part of a league from this rock there lyeth a ſtone or rock under the water, but if you keepe at 8 or 9 fathome, then you runne about without this Stone, and cannot hurt yourſelf upon it: when the Monck is covered by the other land, then you are againſt that ſtone, but when the ſaid Monck commeth a handſpake length paſt, or without the other land, there is good rode, and there you may anckor at 10 or 11 fathome, there it is faire ground, & all over cleane, if it were not for wrackes of ſhips that have beene caſt awaie, or loſt anckors, whereof there are manie there, when you be there at 9, 10 or 11 fathome then you lye ſafe againſt a weſtſouthweſt, northweſt, & north windes. From the point whereby the Monck ſtandeth there ſhooteth a ſmal Sand frō the land, which you may ſounde at 3 fathome. You may alſo goe from the land at 5 fathome, & ſayle ſafely from the rock aforeſaid, that is, through betweene the rock and the ſand, but if you goe deeper, at ſeven fathome, then you ſhall ſayle upon the rock. But at 8 or 9 fathome then you goe without the ſtone.

The Monck.

A rock under water.

From the north ſide of Holie land there reacheth alſo a bad ſand almoſt a league into the Sea, ſo that you may goe no nearer to the north along then at 9 or 10 fathome, and when you will goe north about Holie land, comming ſo farre that the eaſt ende of Holie land is ſouth, and ſouth and by eaſt from you, then ſayle boldly to Scholvers point, which is a flat point, and that you may ſound at 5, 6 and 7 fathome. For if there you will put off at 8 fathome, then you muſt runne 3 leagues off from the land, and the right chanel which is betweene the Hever and the Holie land, is not above 9 or 10 fathome deepe. Now when you come about the point into the rode, and that Scholvers point is northeaſt, and the Cliffe ſouthweſt from you, there it is good anckoring at five fathome.

Holie land ſand.

Scholvers point. Scholvers point is the point where the ſouth haven lyeth within, & reacheth from the high land about eaſt into the Sea, and from the uttermoſt ende of Scholvers point, there reacheth a banck of three fathome, to the point where the Monck ſtandeth, there within it is verie good lying for ſhips that drawe not much water, and it is the ſouth haven of Holie land.

A ſouthſouthweſt and northnortheaſt moone maketh there high water.

When Holie land is e. n. e. five leagues from you it ſheweth thus.



When Holie land is north and by eaſt from you it ſheweth thus.



How

XVII.

How you ſhall ſayle up the Elve.

HOlie land and the Schor-tonne (that is the uttermoſt tonne of the Elve) lye diſtant ſoutheaſt and by eaſt, and northweſt and by north.

When you come out of the weſt, & are paſt Holie land with a northerly winde, then you may runne to the north ground without feare at 10 or 12 fathome, for betweene Holie land and the ſouth ground, or betweene the north ground and the ſouth ground it is 20 fathome deepe, along to the Elve, but the nearer that you goe to the Elve, the ſhallower water you finde. When you are within Holie land, & finde ſhallowe water of the North grounds, you may ſound it all along to the Elve at 8 fathome, for it is flat: but the South grounds are verie ſhoring, you may goe no nearer unto them by night then 10 or 12 fathome, for if you goe nearer unto them, then you may ſayle under the Weſt Til or Breebalgh, at 10 or 12 fathome.

To ſayle up the Elve, you muſt underſtand, that the North Elve which was woont to goe in north by the Newe grounds, is now ſo much altered, that you can hardly finde two fathome water in it: but to the contrarie the South Elve, ſouthward from the Newe grounds, is broken through with a faire depth, ſo that Anno 1606 was tonned by them of the towne of Hamburgh, as heereafter is ſhewed, which was delivered unto me in writing, by Symon Derrickſon of Vlieland, who with great diligence hath ſounded and found out the ſame.

When you come from Holie land, or out of the weſt, and ſee the Newe worke, then bring the beacon and the Newe worke one againſt the other, and then they will ſtand ſoutheaſt and by ſouth from you, keepe them ſtanding ſo, & ſayle forward upon them, then you ſhall finde the Schor tonne, which lyeth on the ſouth land, againſt the Schor horne at 10 fathome half flood, leave it as you ſayle on ſtarreborde, for the ſouth ſide is all ſhoring, from the Schor tonne to the ſecond tonne the courſe is eaſt and by ſouth, it lyeth at 8 fathome lowe water, and the Newe worke then ſtandeth from you ſouth & by eaſt. From the ſecond tonne to the third the courſe is eaſt & by ſouth, that lyeth at 5 fathome, the Newe worke ſhall then ſtand from you ſ. ſ. w. From the third tonne to the fourth the courſe is ſtill eaſt & by ſouth, it lyeth at 4 fathome and an half, then the Newe worke lyeth from you ſ. w. & by ſ. Right over againſt this tõne there lyeth a white tõne, which lyeth at the foot of the New ground, which as you ſayle up you muſt leave on baghborde, but all the black tonnes lye on the ſouth ſide, and you muſt leave them on ſtarborde. From the fourth to the fifth tonne, and the ſixth and ſeventh tonne, the courſe is ſtill eaſt & by ſouth. The fifth tonne lyeth at three fathome and an half, and againſt it it is the dryeſt place of the Elve, the Newe worke ſtandeth diſtant from it ſ. w. and n. e. The ſixth tonne lyeth at five fathome, and the Newe worke from it ſouthweſt and by weſt. The ſeventh tonne lyeth at 7 fathome, and is diſtant from the Newe worke ſ. w. & by w. and n. e. & by e. From the ſeventh to the eigth tõne the courſe is ſ. e. that is the tonne in the Ros, it lyeth at 8 fathome, when you are againſt it, then the Roſ beacon is againſt the ſteeple of Gron or Groen. Right over againſt the tonne in the Ros, on the north ſide, there lyeth a white tonne, upon a ſand which commeth ſhooting off from Romarlplate, which in ſayling up, you may ſayle under at 4 or 5 fathome, but when you are paſt Roſ-beacon, then there is a church with two ſpeeres upon a ſteeple called Oldenbrooke, when the ſpeere ſteeple of Wordt cõmeth weſt from Oldenbrooke, then they are ſouth from you, then you may ſound Romerlplate at 6 fathome without daunger, otherwiſe that plate is ſhoring without, and you may ſayle under it, as I ſaid before. From Ros tonne to the tonne at the Meem, the courſe is ſ. e. and ſ. e. & by e. From the tonne at the Meem to the Gurtpot, or the firſt tonne upon the flat, the courſe is e. ſ. e. From thence to the tonne at the Ooſt, or Pilgrims ſand it is e. & by ſ. From Pilgrims ſand to Brunſbuttle, the courſe is eaſt and eaſt & by north. You may ſayle under Pilgrims ſand at 5 or 6 fathome. From Brunſbuttle to the tõne at Saltſhorne, or Vryburgher ſand, the courſe is eaſt and eaſt & by north, all along by the north land. From Saltſhorne to the tonne which lyeth againſt the Steur it is e. and by ſ. and e. ſ. e. From Steur to the tonne at Gringeroots ſand, the courſe is ſ. e. and ſ. e. & by e. This tonne lyeth againſt Bilenburgh, and lyeth more then half in the deepe. Betweene this tonne & the tonne at the Steur lyeth another tonne in the chanel. But from the tonne at Gringeroots to the tonne at Staderſand ſ. e. & by ſ. and ſ. ſ. e. This tonne you muſt leave on ſtarborde. From Staderſand to Willemſvliet, or the tonne of the Luy, it is ſ. e. and ſ. e. & by ſ. And frõ the tonne at the Luy to the tonne at Terloo, the courſe is e. ſ. e. From thence to the tonne at Hanebal, the courſe is e. and by w. From Hanebal to the t onne at Blanckenes ſand, the courſe is eaſt and eaſt & by north, and you muſt hold the tonne againſt a great tree, and ſo you runne by the north land, til you be paſt

be paſt the tonne.

From Blanckenes ſand to the tonne in the bocht, the courſe is e. ſ. e. And from the tonne in the bocht to the Eckehout e. & by n. there it is 3 or 4 fathome deepe when you are in the right Kille or chanel, and there lye the great ſhips to lade and to unlade.

Thus the Newe worke ſheweth when you come before the Elve.



XVIII.

Of the running of the ſtreames, and what moone maketh high water in theſe places.

BEfore the Vlie a ſoutheaſt and northweſt moone maketh a high water. What moone maketh a high water within the chanels of the Vlie and Teſſel ſtreame, and how the ſtreames runne there, it is at large deſcribed in the firſt Chapter of the firſt Book. Without the Vlie the ſtreames fall along by the land, till it be half flood or half ebbe, and then they begin to fall into Bomekins chanel, and to fall out againe. The foreflood commeth over Bomekins ground, and ſo falleth into the Schellingh, out at the north chanel, ſo that the fore flood maketh an ebbe in the north chanel, and to the contrarie the foreebbe maketh a flood there. Now when the flood beginneth to fall in, which is ſooner in Stortmelck then in Bomekins chanel, then it falleth veric ſtif upon the Schellingh, & behinde Grindt into the Iettingh, which you muſt take heede of, but when the flood is about half ſpent, then it beginneth to fall right in, as in the deſcription alſo is ſhewed, but at the other chanels of Freeſland the flood falleth ſooner in.

Without in Ameland chanel a ſoutheaſt & northweſt moone maketh a full Sea, and alſo on the land.

At the ſame time it is alſo high water before the Scholbalgh, the Lauwers and the Schille.

Before Weſt Eems a ſoutheaſt & northweſt moone alſo maketh high water.

In the Eaſt Eems and in Borckummer balgh a ſ. ſ. e. and n. n. w. moone maketh high water.

Before the towne of Embden a ſouth or ſouth and by weſt, and north and north and by eaſt moone maketh high water.

Before the chanels betweene the Eaſt Eems and the Weſer, a ſ. and ſ. & by e. and a n. and n. & by w. moone maketh high water.

Under Holie land with a n. n. e. and ſ. ſ. w. moone it is a full Sea.

Before the Weſer and before the Elve, a north and ſouth moone. There the flood commeth northweſt without, and the ebbe ſoutheaſt, and ſo fall ſtrongly over the grounds.

In the chanel betweene the Elve and the Vlie, the fore floods come out of the North Sea, and goe about with the Sonne, and fall but half the tyde along by the land, that is eaſtnortheaſt, & the ebbe weſtſouthweſt.

XIX.

Of the Groundes and Depths about theſe Countries, and at what depths you may ſee the land.

THe Iland of the Vlie, the Schellingh, and Texel you may ſee at 15 or 16 fathome.

Againſt the Schellingh you have white Sand, & cloſe by Peters ſand it is 12 or 13 fathome deepe. You muſt take heede of the grounds of the Vlie, as of Bornriffe, for they are verie ſhoring.

You may ſee Ameland at 12 fathome, and it is verie farre flat at 12 and 13 fathome, ſo that at 15 fathome you can not ſee it.

You may ſee Schiermonickoogh at 12 and 13 fathome, and then it is about four great leagues from you.

You may ſee Rottum and Borcum at 14 and 15 fathome. Againſt Borcum the ground is great redde ſand, with ſome black amongſt it.

Iuyſt may be ſeene at 13 and 14 fathome, and three leagues from the land it is 12 fathome deepe.

Buys and Norderny you may ſee from the poope at 12 and 13 fathome.

Baltrum, Langheroogh and Wrangheroogh you may ſee at 14 and 15 fathome.

About Holie land it is 7, 8 and 9 fathome deepe, that is, on the inner ſide: but without on the weſt ſide it is 15, 16, 18 and 19 fathome, and at ſuch depths you may ſee the Holie land.

What notable markes ſtand upon theſe Ilands, whereby you may knowe them, it is perfectly and at large declared in the deſcription of them.

XX.

How theſe lands are diſtant from each other.

From the Vlie to the northnortheaſt ende of the Broad fourteene the courſe is weſtnorthweſt — 8 leagues.
Peterſand and Borneriffe lye diſtant about northeaſt and by eaſt, and ſouthweſt & by weſt — — 4 leagues.
From Borneriffe to Weſt-Eems e. n. e. about — 13 leagues.
or as ſome will — — — — 15 leagues.
From Borneriffe to Wrangheroogh about — 29 leagues.
From Borckummer riffe to Wrangheroogh e. n. e. 16 leagues.
From Eaſt Eems, or Iuyſt riffe to Schortonne n. e. 20 leagues.
From Wrangeroogh to the Newe worke e. n. e. 8 leagues.
Holie land and Borneriffe lye diſtant n. e. & by e. and ſ. w. & by w. as men commonly ſay — — 32 leagues.
or as ſome ſay — — — — 34 leagues.
Holie land & Borkummer riffe lye from each other n. e. & ſ. w.
Holie land and Langheroogh lye diſtant northnortheaſt and ſouthſouthweſt.
Holie land & the uttermoſt tonne in the Weſer lye diſtant from each other, ſouth and ſomewhat weſterly, and north and ſomewhat eaſterly. But the tonne at the Head in the Weſer, and Holie land lie diſtant ſouth and north — 8 leagues.
Holie land and the Schor tonne or the Newe worke lye diſtant ſ. e. & by e. and n. w. & by w. — — 8 leagues.

XXI.

How theſe Lands are diſtant from other Countreys.

From the Vlie to the Ile of Silt in the Coaſt of Iutland northeaſt — — — — 47 fathome.
From the Vlie to Rincoper or Numer deepe northnortheaſt and ſomewhat eaſterlyer — — — 59 leagues.
From the Vlie to Bovenberghen northnortheaſt, and ſomewhat northerlyer about — — — — 69 leagues.
From the Vlie to the Sand at ſixteene fathome north and by eaſt — — — — 61 or 63 leagues.
From the Vlie to the Neus north & by eaſt — 85 leagues.
From the Vlie to Schuytenes north and by weſt, and ſomewhat northerlyer — — — — — 107 leagues.
From the Vlie to Fairehill n. w. & by n. — 144 leagues.
From the Vlie to Hitland northweſt and by north and ſomewhat northerly — — — 152 leagues.
From the Vlie to Tinmouth or Newcaſtle w. n. w. 91 leagues.
From Borneriffe to the Neus north, or as ſome ſaye ſomewhat eaſterlyer — — — — 83 leagues.
From the Eems to Bovenberghen north & by eaſt 60 leagues.
From the Eems to Flamborough Head weſt & ſomewhat northerly — — — — — 85 leagues.
From Holie land to Bovenberghen n. and by w. 50 leagues.
From Holie land to Hanglip in Hitland n. w. — 147 leagues.
From Holie land to Boeckenes n. w. and by w. 123 leagues.
From Holie land to Lieth in Schotland weſt and by north, and ſomewhat northerlyer — — — 120 leagues.
From Holie land to Tinmouth or Newcaſtle weſt, and ſomewhat northerly — — — — 107 leagues.
From Holie land to Scarborowe or Flamborough Head weſt, and ſomewhat ſoutherly — — — 94 leagues.
From Holie land to the Holme before Iarmouth weſtſouthweſt, and ſomewhat weſterlyer — — 72 leagues.

How Holie land lyeth diſtant from the Iuttiſh Ilands, and from all the havens or chanels lying on Iutland you ſhall finde in the Chapter enſewing.

Heere followeth the Carde N. 21.

THE


Pascaarte vande westcuste van Iutlant ende Holsterlant vertoonende de gelegentheyt van de Reviren de Elve de Eyder en de Hever, Voort alle de Iutsche Eylanden ende alle Zeegaten tusschen de Elve ende den Reefhorn geleghen met alle Senden Reven ende Banck daer ontrent alles gestelt op zijne rechte streckinghen ende coursen.
Carte Marine de la coste occidentale de Iuthlande et Holsterlande, remonstrant la situation des rivieres de l'Elbe, Eyder et Hever, en outre toutes les Isles de Iuthie et embouchures de mer, situees entre l'Elbe et le Reefhorn, Semblablement tous bancs de sable lieux areneux et dangereux entour lesdictes places, le tout exactement posé selon ses vraijes routes et distances.
Duitsche mijlen 15. in een graedt. Lieues d'Allemaigne 15 en un degre
Spaens. mijlen 17½ in een graedt Lieues d'Espagne 17½ en un degre
Engel. en Fran. mijl. 20 in een gr. Lieu. Anglo et Franc. 20 en un deg.
IUTLANDT
Holsterlandt
EYDER LANDT
Ditmars
Noordt Zee
Kacegard
Rijpen
Hugum
Phanu
Manu
Rym
Iurtmans huys
Iusant
List
Silt
Keydommerkerk
Oster S. Ians
Vorē
Ameren
Strant
Pielworm
Oclan
Tonderen
Nijbul
Ditzbijl
Borlum
Hadstede
Doplum
Oostenveld
Huusum
Neusted
Tetebijl
Gardinge
Oosterhever
S. Pieter
Cotinge
Ulkehurn
Tatinge
Ees
Suaisstedt
S. Anna
Lunden
Hemme
Heyde
Mildurp
Weßelboeren
Oldewordē
Buysen
Roomarder sandt
Aterdorp
Oudebroeck
Groey
Heylighelant
Scholvershoeck
Oosthaven
Münck
Oster weser
Middel plaet
Wanger wijk
A Wester sijd
B de Reefhorn
C Dode bergh
D Doel sant
E Schelling kroegh
F Langhe legh
G Wijdijc sant
H Panu knut
I Grauwe diep
K Haelsant
L Reuck en Rust
M Ameren bor
N Nubal eylant
O de Quade
P Utto
Q de Koebargh
R Nieuwe gronden
r Hecke sant
S Blau oort
ß de steert vād hant
T Vogel sant
V Schorre horn
U Nieuwe gronden
W Ooster ende W. tijl
X Myd plaets
Y Ton opt hoost
Z t'Rroode sant
Z Steen balgh
21

THE DESCRIPTION OF

the Sea-coaſts of Iutland, and the Iutish Ilands, lying betweene the Elve and Rifhorne.

I.

To ſayle into the South and North Pip.

IN the Chapter before it is ſhewed how you ſhall ſayle into and out of the Elve. About ſeven leagues north from the Elve lyeth the Eyder, but there right ſouth lyes the North Pip, and a league ſouth from the North Pip lyeth the South Pip, which lyeth right eaſt from the Holie land, and goeth in e. ſ. e. at 5 or 6 fathome, through the North grounds, and at the north ende of Hodemer ſand commeth into the flat ſtreame, whereon there ſtandeth a beacon, which you muſt leave upon the ſtarre-borde, when you will ſayle up into this haven.

The South Pip.

The North Pip as I ſaid lyeth a league northerlyer then the South Pip, and is ſeperated from the Eyder by a Sand, which is called Blaweoort, or the point of the Hound, which runneth off from the beacon upon the Hound, and ſo farre into the Sea, almoſt half waie to Holie land. There right ſouth the North Pip goeth in, and reacheth in moſt part eaſt and eaſt & by ſouth, to the beacon at the Hound.

North Pip.

Blawoort.

Erom the beacon at the Hound to Hudemer ſand it reacheth forward moſt ſ. e. and ſ. e. & by e. you may ſound it frō without cleane within along by the ſouth ſide at 3 and 4 fathome, as farre as within the beacon at the Hound, leaving the ſaid beacon on baghborde.

When you come within Buyſen, there it is twice or thrice crooked, and there ſtandeth a beacon upon the north ende of Hudemer ſand, leave it on ſtarborde, and then goe up eaſtward, till you be about the Sand, which ſhooteth off from Hudemer-ſand, there you ſhal finde a beacon, which you muſt ſayle up unto, and leave it on baghborde, and goe ſ. w. then you ſhall finde another beacon upō the eaſt ſide of the flat ſtreame, ſtanding upon Roomaerder ſand, ſaile out by the ſame, leaving it on the left hand, and then you ſhall come out at the old Elve.

II.

To ſayle up into the Eyder.

RIght north from Blauweoort the Eyder goeth in, and lyeth diſtant from Holie land eaſt & by north, and when with that courſe you fall upon the land, then you ſhall ſee a ſharpe ſteeple upon Eyder towne called Gartinghen, which is an indifferent long ſteeple you muſt bring it on the ſouth ſide of the downes, which are called the South heads, and then they ſtand from you n. e. & by n. or ſomewhat eaſterlyer, & with theſe markes you muſt ſayle over Blauoort, ſo long untill you finde deepe water, as 5 or 6 fathome ſoft ground, then you ſhall ſee a ſharpe ſteeple ſtand in Ditmarſe called Weſelborne, bring that eaſt or ſomewhat ſoutherlyer from you, & goe in e. & by ſ. and ſometimes ſomewhat eaſterlyer, till the Buys be ſ. e. and by ſ. from you, and that the beacon at the Hound ſtandeth ſ. ſ. w. from you, then Ees will come a ſhips length north from Tatinghen, which is the ſoutherlyeſt of the two flatte churches ſtanding upon Eyderland, then goe up northnortheaſt, for then you are within the Newe grounds, then there commeth a Sand on the ſtarre-borde ſide ſhooting off from Ditmarſe, which is called Hecke ſand, when you are paſt this Hecke ſand & the Newe grounds, then you come againſt the greene land of Coebergh or Cow-hill.

Gartinghen.

South heads.

Hecke-ſand.

A litle waie within Koebergh there commeth a Sand ſhooting off from Eyder ſide, which you may ſayle under, as you goe along by the Eyder ſide, ſo that you muſt runne into a Dead chanel, where you muſt come backward out againe. Behinde or in it there lyeth a ſmall village of ſeven or eight houſes called Ulckhorne, there men lade oxen, and there the oxen come to be bought.

Vlcke-horne.

When you come about Heckeſand or againſt Koebergh or Cowe-hill, then the Eyder reacheth from the aforeſaid Sand which commeth ſhooting off from Eyderſtede eaſt & by ſouth. When you are paſt that Sand, then the Eyder reacheth eaſt-northeaſt, and northeaſt and by eaſt to Tonninghen. There alſo they lade oxen.

Tonninghen.

Or to get into the Eyder otherwiſe, when (as I ſaid before) you come from Holie land, then bring Gartinghen before the downes, and rūne by the ſouth ſide at 3 fathome, keepe the ſteeple

To goe another waie into the Eyder.

ple ſtanding ſo, and ſound about by the ſouth ſide, till you gett deeper water, and bring the ſharpe ſteeple in Ditmarſe aforeſaid eaſt or ſomewhat ſoutherlyer from you, hold that ſtanding ſo till you be within. But if you will goe up the Eyder, then chuſe the north ſide when you come in, becauſe of the Pip, for without the Pip and the Eyder is all one chanel, and the ſand of the Hound whereon the beacon ſtandeth, ſhooteth there betweene them both a great waie into the Sea, as I ſaid before, and you may ſayle over the ſand into the north Pip, a litle weſtward frō the beacon at the Hound, therefore you muſt there runne over the ſand in time, if you will goe into the Eyder, otherwiſe you may ſayle under the north ſide inward from without.

Beacon at the Hond.

But from the north you cānot well get to the Eyder, becauſe of the points which rūne off from the grounds. But there looke well to your ſtreames, for without the Grounds the ſtreames fall in moſt part ſoutheaſt, and northweſt out, and a ſouth and north moone maketh a high water there.

The Eyder is 6 or 7 fathome deepe, ſoft ground. And when you will goe out of the Eyder into the Pip, then you muſt goe out ſo farre, untill Tatinger church come upon the eaſt ende of Ees, there you may goe over the Hond ſand, you ſhall not there have leſſe then two fathome and an half at high water.

To goe out of the Eyder into the Pip.

The Land chanel, or the Northchanel of Eyder for the moſt part reacheth in e. & by n. right up upon Koebergh, you muſt get to that from the north, to ſayle in north from the Newe grounds, they lye upon the ſouth ſide of this chanel, and then you come againſt the Koebergh againe into Eyder ſtreame.

The Land chanel of the Eyder.

About two leagues north from Koebergh, or from the ſaid Land chanel, there lyeth another chanel or balgh, which you may ſayle up into, there ſtand two beacons in it, and it reacheth in moſt eaſt & by north to the ſouth downes of Ees, then you may goe along by the land, till you be behinde the Iland Utto. You may alſo in that chanel runne along by the ſouth downes of Ees, to Koebergh, and ſo come againe into the Land chanel of Eyder, but it is verie crooked. You may not uſe this unles you be driven to it, theſe are bad chanels, becauſe they are flatte ſo farre out, therefore it is not well to be done, unleſſe a man be forced to ſearch theſe chanels of neceſſitie.

Thus the land of Eyder ſheweth



III.

How to ſayle up the Hever.

TO ſayle from the Newe worke, or from Schor tonne to the Hever, you muſt underſtand that the courſe is north and ſouth, diſtant 11 leagues, but alwaies looke well to your ſtreames, for as I ſaid, the fore flood falleth verie ſtif croſſe over the grounds into the land, & the ebbe contrarie, but when you are half waie, then you meete with Blawoort ſand (whereof I ſpake before) at the depth of two or three fathome.

But to ſayle from Holie land to the Hever, then goe on n. e. and ſomewhat eaſterlyer, according as the winde and ſtreame ſuffer, and runne upon the Grounds at 6 or 7 fathome, then you ſhall finde an indifferent high ſteeple, which on the toppe is ſharpe, it is called Pielworme, ſet this ſteeple northeaſt and by north from you, and a maſt length ſouth from the ſoutherlyeſt Cowehouſe, which ſtandeth upon the Iland of Nubal, keepe the ſteeple ſtanding ſo, and ſayle up to it, then you ſhall finde the uttermoſt tonne, then goe from the firſt tonne to the ſecond tonne northeaſt, and northeaſt and by eaſt, and comming to it, then Pielworme ſteeple will ſtand n. n. e. from you. Frō thence the courſe inward is n. e. & by e. and when you come a good waie in, thē you finde two beacons ſtanding there on ſtarborde, upon a drie ſand called the Quade, right over againſt it cōmeth the North chanel into the right Hever. The North chanel commeth reaching in from the north, about eaſt and by north from Pielworme, and commeth right upon the Ile of Nubal, whereon the Cowehouſe ſtandeth, and you may ſayle up northward or n. n. e. frō the Cowe houſe tō the ende of the ſtrand, where there ſtandeth a flatte church, it is a deepe chanel. You may alſo ſayle from the Ile of Nubal into the right Hever, and then you come againſt the Quade againe into the right deepe, as is aforeſaid. To ſayle up into the Hever the courſe from the firſt beacon to the third is e. & by n. ſayle along by the beacons, leaving them on ſtarborde. Betweene the firſt and third beacon on the north ſide it is all full of ſands and flattes, there you may ſayle behinde them.

Piel-worme.

Nubal.

The Quade a drie ſand.

North-balgh.

By the third beacon the South chanel commeth into the Hever, and commeth running off from the Iland Utto, about n. e. & by n. and reacheth from the northende of the Ile of Utto into the Sea, and it is above a league to ſayle into the Sea.

South-balgh.

From the the third beacon to the two other beacons, the courſe is northeaſt and by eaſt, then you come to the Greene land

land, which lyeth on ſtarborde, then it is a four ſquared chanel, which is wide and broad, you may there ſayle in the middle of the water to Hoeſem, juſt to the bridge, or you may anckor where you will.

Hoeſem.

Without in the Hever the north ſide is ſhoring, therefore keepe by the ſouth ſide, till you are within all the beacons. The chanel is two fathome and an half deepe at half flood, and it is verie farre flatte water. There lyeth alſo a banck a good waie without the Hever, which you muſt remember when you will ſayle in. A ſouth and north moone maketh a high water there.

IIII.

To ſayle into the Small or Narrowe Chanel.

Small deepe.

THree or four leagues north from the Hever lyeth the Small-deepe. He that will ſayle from Holie land to the Small-deepe muſt goe northeaſt and by north, & runne upon the Grounds about weſt and by north from Pielworme, then the ſouth ende of Ameren will be north or there abouts from you, then ſeeke for the ſouth-ſide, and ſound about it, you cannot doe amiſſe on the ſouth ſide, for it is a riſing ground, which lyeth farre without the land, then ſayle in north and by eaſt, northnortheaſt, and northeaſt and by north, then you ſhall finde a ſand or raveling, which you muſt leave on baghborde, you may ſound about by it, untill you come in, you muſt keepe the ſouth ſide, and ſound about by it, going in northeaſt and by north. On the north ſide there lye manie ſands and out-points, but if you let the aforeſaid ſhallowe lye on ſtarborde, then you come into a Dead chanel, where at the beginning you ſhall have 7 fathome deepe, but it runneth all on a heap to nothing. And when you have ſounded ſo farre about the aforeſaid ſhallowe, that you come againſt the ſouth ende of Ameren, then you may ſayle under the north ſide, for there commeth a ſheare of the Wadt ſhooting off from Voren. Then chuſe the ſouth ſide till you come againſt Voren.

V.

To ſayle into the Roode deepe or Silter chanel.

TO ſayle into the Roode deepe or Silter chanel, comming northward, or out of the Sea, you muſt runne in the ſight of the Iland of Ameren, and about the middle of the Iland of Ameren there lyeth a white round hill, a litle higher then the other hillocks, in a lowe plaine valley in that Iland, place that downe or hill northeaſt from you, and keepe it ſtanding ſo, and runne up upon it, untill you be within the ſand, which ſhooteth off from the Foretrap, and is commonly called Ameren borne, and you cannot faile thereon, for then you ſhall have no leſſe then three fathome water upon the point of the Sand, and comming within the ſaid Sand, 11, 12 or 13 fathome water. Sayle ſo forward till the north ende of Ameren be north & by eaſt from you, when you have theſe markes ſtanding thus as aforeſaid, then runne upon the north ende of Ameren, till you come within the drie ſand, there you may anckor where you will, or ſayle as farre in as you will, and ſound along by the ſand. The ſtrand of Ameren alſo is a faire ſtrand, without ſands, which you may ſayle under. But when the ſaid hill lying upon Ameren is e. n. e. from you, and you ſhould ſayle up to it, then you goe to neare the ſaid ſand of Silt. The hill then is divided into two partes, and then the northerlyeſt is the ſmalleſt.

Markes to reach the chanel.

Ameren Borne.

But if you will ſayle into the Roode deepe or the Silter chanel cõming from Holie land, & ſee the land, then ſet the north-ende of Ameren north and by eaſt from you, till you come betweene Ameren and Silt ſand, and then ſo in by Ameren ſtrand, till you be about the north point of Ameren, ſo long till Ameren lyeth ſouth, and ſ. ſ. w. from you, you may not ſayle anie further into this chanel, for then you come againſt the Iland of Vooren. There lye two riffes or bad ſands, the one lyeth about w. ſ. w. from Ameren, and is drie above the water, which is a great waie flat, at 3, 4 and 5 fathome, and by the Iutters is called the Borne, or Ameren Borne, although it is not faſt to Ameren, for the Roode chanel goeth in there betweene them both. It is not alſo faſt on the Voortraps or the ſouth ende of Silt, although it cõmeth ſhooting off from thence, for betweene them there goeth a Fiſhermans chanel into the Sea of a fathome and an half, where the Fiſhermen goe daily out to fiſh, ſpecially they of the Iland of Vooren. This is the uttermoſt Sand lying on the chanel, ſuch as uſe much to theſe places, as to Repen and the places there abouts, are verie fearefull of Ameren borne, when they come from the Holie land, and they finde this drie ſand about w. ſ. w. from Ameren. The other Sand ſhooteth off from the ſouth ende of Ameren, reaching about ſouth and ſouth and by weſt into the Sea, along by the land. This alſo by manie is called the Borne, or Ameren borne. If you come from Holie land, & will goe north about, you neede not feare this Sand, for it ſhooteth out moſt by the land.

To ſayle into Silter chanel cõming out of the ſouth.

Ameren Borne.

The other Riffe.

Ameren.

Thus the Iland of Ameren ſheweth.



V I.

To ſayle into the haven of Liſt.

ABout eight leagues north from Silter chanel there lyeth a verie faire haven called Liſt, which runneth in at the north ende of the Iland of Silt. To ſayle into this haven of Liſt comming out of the ſouth, then runne ſo long about the north at 6 or 7 fathome, untill you ſee a ſmall Iland within the land, without the point, whereon you ſhall then ſee a howſe ſtanding, which is called Iurtmans houſe, when you have that houſe a maſts length without the point of the Liſt, then goe in e. & by ſ. and e. ſ. e. and keepe theſe markes ſtanding ſo, until you are within the point of Liſt, then turne up about the point ſouthward, and anckor before the Voochts houſe, there it is 9 or 10 fathome deepe.

Markes to reach the chanel.

Without in the chanel there lyeth a Flat or Sand called Haef ſand, that you leave on baghborde when you come in, without it is verie flat, and you may ſound it when you come out of the north. To ſhũne it when you come northward, you muſt turne or put ofſo far from the land, till the redde cliffe cõmeth without the downes, or that you ſee it full, for then you may well goe over Haefſand, with ſhips that goe not verie deepe. And alſo when you come out of the haven of Liſt and will goe north about, then ſayle ſo farre out, that you may ſee the cliffe, then you may alſo goe over the ſaid Sand. This Sand reacheth off from the ſouth ende of Rem, a good waie into the Sea.

Markes to avoide. Haef ſand.

On the ſouth ſide of the haven of Liſt, there lyeth another Sand or Banck, along by the land, not verie farre without the ſtrand, named Ruſt or Ruſting. To ſayle into the chanel of Liſt comming from the ſouth, you muſt in tyme ſayle upon the land of Liſt, about the redde Cliffe, becauſe of the Ruſt, which commeth ſhooting off from the north ende of Liſt, along by the ſtrand, and when you are by the land, and come a good waie within the redde Cliffe, then there commeth a Flatte ſhooting off from the land, which you muſt ſhunne ſomewhat, but you may ſound it verie well, and keepe all the foot ſtrand, and you can not faile therein. Ruſt is a ſmall banck, which ſhooteth along by the ſtrand, and beginneth againſt the innermoſt point of Liſt, and reacheth till it commeth about the redde Cliffe. From the inner point of Liſt alſo ſhooteth off a Sand which you muſt alſo take heede of. Now when you come within the innermoſt point of Liſt, and are before it, then you may anckor where you thinke good.

Ruſt or Ruſting.

The ſituation of Ruſt ſand.

But if you will goe to Lutke Tunderen, then leave the Sand, which lyeth ſouth from Iure ſand on ſtarborde, & rũne through betweene them both, but if you will goe to Hoeſem or to Silt, over the Wadt, then leave that Sand on baghborde, and upon Voorn there ſtand two or three trees, which you muſt keepe againſt the weſterlyeſt church or ſteeple, and ſo you muſt goe to Voorn.

To ſayle to Lutke Tunderen.

To ſayle over Wadt to Hoeſem.

Betweene Haef-ſand or Haes-ſand and the Iland of Rim, there goeth another chanel in, of about a fathome and an half water. The Ile of Rim is about 3 leagues long, without it is verie flat, ſo that you can hardly ſee the land at ſixe or ſeven fathome.

The Land-deepe of Liſt.

About eight or nine leagues without the Iland of Silt there lyeth a Banck along by the land of eight or nine fathome deepe, it is about two leagues long, and neare as long as the Iland, betweene this Banck and the Iland, it is thirteene fathome deepe, but when you are at nine fathome without the Iland of Silt, then Holie land lyeth about ſouth from you.

Thus the Iland of Silt ſheweth when you ſayle along by it.



To ſayle

VII.

To ſayle into Knuyts or Ryper Chanel.

FRom the Haven of Liſt to Knuyts or Ryper chanel the courſe is north & ſouth,about 7 leagues: but Ryper deepe and Holie land lye diſtant north and ſomewhat ſoutherly, and ſouth and ſomewhat eaſterly. To ſayle into Knuyts or Ryper chanel, when you come out of the ſouth,then runne by the flat of Rim and Manu, about to the ſouth ende of Phanu, called South head or South point,then you ſhall ſee two capes or beacons upon a drie ſand ſtand a litle ſouthward from South head, bring theſe beacons a litle before each other, that is, the innermoſt or longeſt a litle,or a hand ſpake length north frō the ſhorteſt or uttermoſt,then they wil ſtand caſt,or ſomewhat northerly from you, let them ſtand ſo, and there you ſhall finde the uttermoſt tonne, which lyeth at four fathome on the north land, which you muſt leave on baghborde,& goe to the ſecond tōne, e. and by ſ. and when you are by the firſt tonne, then you may ſee the ſecond, yet they lye a great waie one from the other,you muſt leave the ſecond tonne alſo on baghborde, keepe along by the ſouth land till, you be paſt the beacons, for there ſhooteth off a Flat from the uttermoſt beacon to the ſecond tōne, which you muſt ſhunne ſomewhat. When you are paſt the beacons, then loofe becauſe of the Sand whereon the beacons ſtand, and there anckor where you will, for there it is deepe and ſhoring or ſteepe, there you can doe no harme. The Ryper ſhippes which come out lye there ſtaying for a winde. In this chanel it is 20 foot water at half flood, but at a high water it is not the beſt chanel, for it is narrowe and flat a great waie without: and then when you have gotten that, then you may ſee both the ſides of the land ravle, when the winde bloweth ſomewhat hard. But when you come out of the north, then you muſt rūne upon the ſouth ende of Phanu, untill you ſee the beacons aforeſaid, and then do as I ſhewed you before. The Moone being ſouthſouthweſt, and northnortheaſt maketh there a high water.

VIII.

To ſayle into the Grouwe deepe,and Schellingh kroegh.

Luyſbergh. Langhelech.

ABout n.e. and n. e.& by n. from the north ende of Phanu there lyeth a little Hill as if it were an Iland, called Luysbergh. A litle north frō it there lyeth a long plaine ſand hill which is called Langhelech, from thence the land reacheth northweſt, from the ſouth to the weſt ſide.

Betweene the north point of Phanu & Langhelech Grouwe deepe goeth in. To ſayle into it whē you come out of the ſouth runne along by the Iland,& ſound along about the north point, till you gette deeper water. The north ende of Phanu is flat verie far. Now when you get deeper water, then you ſhal ſee three or four hillocks about northeaſt from you, upon the high land, with a flat ſteeple called Holm or Bruynum, bring this church a cables length north from the hillocks, and then when you have the depth, then thoſe markes are northeaſt from you, then goe in n. e. and keepe the ſouth ſide, till you come within by the drie ſand, called Smeur ſand, which ſhooteth off from Phanu, there you may well goe along by direction of the eye without ſayling, and let that be on ſtarborde as you come in. The lands there on both ſides are verie ſhoring, both Wiſdyke (which is the Flat which lyeth in the chanel)and Smeurſand alſo. When you are paſt the point of Smeurſand, then turne over to Wiſdyke, and there anckor, till you have the loweſt water,then you may ſayle to Hartinghen, and goe to Wardt or Woordt which lyeth 8 or 9 leagues within the land, but the River goeth crooked,wheron now & then a houſe or Gentlemans lodging lyeth.

Grouwe-deepe.

Smeur-ſand.

Wiſdyke.

Woordt.

A fouthſouthweſt and northnortheaſt moone maketh high water heere,and it floweth heere with a continual tyde about a fathome up and downe.

From Phanu to Schellinghrock it is four leagues. Betweene them both lyeth Suyderfid, which is a River of 8 or 9 foot water. The land betweene Langhelech and Suyderſid is knottie downe land,rough and overgrowne with heath. If you chance to come to land, or to fall upon Suyderſid,and could not get into the chanel, then chuſe the land of Langhelegh,you may rūne upon it without anie daunger,but keepe at 2 fathome & an half, then you cannot miſ-ſayle that Kroech, for you may ſound all this land frō Langhelegh till you be within Schellinghkroech at three fathome and an half: but if you come to three, or three fathome and an half, then you would ſayle miſſe the drie ſand, and goe without the Kroech aforeſaid. Schellingh kroech reacheth in northweſt for the moſt part, and there you lye ſafe againſt all windes, as if you laye in the Ketle at Koninghſbergheu.

Suyderfyd.

Schellingh kroech.

To ſayle into Schellingh kroegh cō-ming out of the north.

But if you come out of the north & will goe into this haven, you may well ſound about that drie ſand at three fathome. And when you come by the innermoſt point of the drie ſand, there ſhooteth a Sand off, but you may ſee it well and avoide it:

now

nowe when you come to the eaſt ende of that Sand, then looſe up by the Sand into this Kroech, and there anckor at two fathome and a foot water, there it is ſomewhat wide, you may well goe in a pritie waie, and laveere in. A ſouthſouthweſt and northnortheaſt moone maketh a full Sea there, but the further NOTA. you goe about northward to Iutland, there goeth leſſe ſtreame, and it floweth leſſe up and downe.

On the north ende of the aforeſaid drie ſand lyeth the Dead-hill, which is a ſhort peece of a downe, which lyeth alone, when you are ſomewhat off from it, then it ſayleth under the other land, and then you ſee it not. But comming from the ſouth and north, then you may alwaies ſee it lying. From Dead hill to the ſouth ende of the drie ſand, it is all faire ſtrand, and faire flatte ground. If you will anckor under the drie ſand when you come out of the north, then you may ſound along by it round about, and get good harbor for a northweſt winde, and alſo for weſterlie windes. Rode under the drie ſand.

Right north from the Dead hill lyeth the Horne, where the Reef horne ſhooteth out, whereof I wil ſpeake more in the next Chapter.

Thus the Iland of South-ſid ſheweth ſouth from the Dead hill.



I X.

Of the falling & running of the ſtreames at theſe Ilands and Coaſts of Iutland, and what Moone maketh high water there.

IN the Pip, Eyder and Hever a ſouth and north moone maketh high water, the flood commeth there out of the northweſt, and the ebbe ſoutheaſt, & runneth ſo over the North-grounds.

In the chanel of Liſt or Silt a ſouth & north moone maketh high water, and the flood commeth out of the northweſt, and falleth litle along by the land, but the ebbe the contrarie.

In Knuytes deepe a ſouthſouthweſt and a northnortheaſt moone maketh high water: there alſo the flood commeth out of the northweſt, and falleth more then a great quarter thereof along by the land, and the ebbe the contrarie.

In the havens of Suyderſid, Grouwe deepe, and Schellingh-kroegh a ſ. ſ. w. and a n. n. e. moone maketh high water. The flood there alſo commeth out of the northweſt, and falleth over the Reef horne to the Iuts Ilands, the ebbe alſo to the contrarie off from the land to the North Sea.

X.

Of the groundes and depths about theſe lands, and at what depths you may ſee them being at Sea.

IN Ditmarſe, the land of Kidingh, and Botjaghers land the groundes lye ſo farre without the land, or the Coaſts, that you can not ſee the Coaſts, unleſſe you clime up into the toppe of the maſt.

The groundes of Hever, and the bancks of the Small deepe without Strand & Yederſtee, they lye about two leagues without the Coaſts of the land.

Betweene Holie land and Ameren or Strand it is 10 or 11 fathome deepe, and at that depth you may ſee both the lands, if you clime up into the ſhrowdes. You knowe Strand by the ſteeple of Pielworme, ſtanding upon the ſouth ende of the land, there ſtand more churches & ſteeples upon the Iland of Strand, but none of them is ſo well to be knowne as Pielworme.

Ameren is a great league long, it is all lowe downes, overgrowne with heath.

The Iland of Silt may be ſeene at 10 fathome, upon the Iland neareſt to the north ende there lyeth a high ſhoring redde cliffe going ſteepe down on both ſides. On the ſouth ſide of the cliffe there ſtandeth a flat church with a lowe clock-houſe, and eaſtward ſtandeth another church with a high thick ſteeple, called Heydom. The north ende of the land is called Liſt, but the ſouth ende is called the Voortrap.

X I.

How theſe Lands lye diſtant from each other.

FRom the uttermoſt tonne of the Elve to the Eyder north and ſouth — — — 7 or 8 leagues.
From the Eyder to the Hever the land ſtandeth north-north-

northweſt and ſouthſoutheaſt — — — 5 leagues.
From the Hever or the ſouth ende of Strand to the ſouth ende of Ameren n. n. w. — — — 5 leagues.

Ameren is a ſmall Iland of two leagues long.

Two great leagues north from Ameren lyeth Silt, it is about five leagues long, and reacheth ſ. and by e. and n. and by w.

From the north ende of Silt called Liſt to the ſouth ende of Rim or Rem it is n. e. and ſ. w. a league long, and the Ile of Rem is three leagues long, and reacheth moſt ſouth and north.

From the north ende of Rem to the ſouth ende of Manu it is n. e. and ſ. w. a league long, but you can not well ſee it, becauſe of the grounds and great flats which reach out there from the Sea.

Manu and Phanu lye about two leagues diſtant from each other. Manu is about half a league long. The Iland of Phanu is about three or four leagues long, and reacheth from Phanuknuyts to Knuyts chanel ſ. ſ. e. and n. n. w. This Iland hath alſo a faire bottome, but the north ende is flat verie farre to the Grouwe deepe.

Frō Phanu to Deadhill or Dodenbergh it is about 4 leagues. Betweene them both lye the havens of Grouwe deepe & Schellinghkroegh, as it is ſhewed elſwhere.

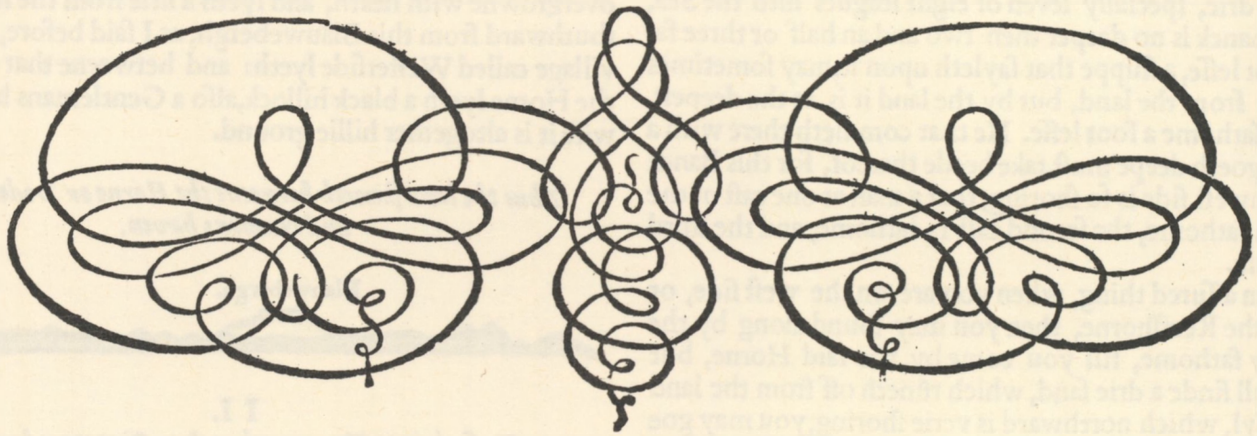
XII.

How theſe Countreys are diſtant from other Countreys.

FRom Holie land to the Eyder it is eaſt and by north and weſt and by ſouth — — — 7 leagues.
From Holie land to the uttermoſt tonne in Hever it is n.e and ſ.w. — — — — 8 leagues.

You may anckor by the uttermoſt tonne in Hever, and ſee Holie land plainly.

From Holie land to Small deepe or Ameren northnortheaſt, & ſomewhat eaſterlyer, and ſouthſouthweſt and ſomewhat ſoutherlyer — — — — — 11 leagues.
From Holie land to Silt haven or Liſt the courſe is north and by eaſt diſtant — — — — 19 leagues.
From Holie land to Knuyts deepe or Reper deepe north, and north and by eaſt — — — — 25 leagues.
From Holie land to the Horne or Dodenbergh north and ſouth — — — — — 32 leagues.
From Knuyts deepe or from the Iland Phanu to the Vlie ſouthweſt and by ſouth — — — 51 leagues.
From the Iland of Silt to the Vlie n. e. and ſ. w. 47 leagues.



Heere followeth the Carde N. 22.

A TRVE DESCRIPTION

of the ſituation of the Seacoaſts and Havens of Iutland, from Dodenbergh till you come about Schaghen.

I.

Of the ſituation of the Horne and of the Reefſhorne.

Horne.

RIght north from Doden-bergh lyeth the point called the Horne, betweene Suyder-ſide and Weſter-ſide, which there maketh a Horne of the land: for there ſouthward the land reacheth eaſtſoutheaſt and weſtnorth-weſt to the Grouwe deepe, but there nor-therly it reacheth north and ſouth to We-ſterſide. Weſterſide is a village betweene Blawenbergh and the Horne.

Reefs-horne.

About this point or Horne there runneth off a long banck, at leaſt 12 leagues about weſtſouthweſt into the Sea, called Reeff-horne, or as ſome ſay the Divels horne. This banck in ſome pla-ces lyeth all drie, ſpecially ſeven or eight leagues into the Sea, where this banck is no deeper then two and an half or three fa-thome a foot leſſe, a ſhippe that ſayleth upon it, may ſometimes

Depth up-on Reefs-horne.

be ſeene juſt from the land, but by the land it is at the deepeſt, that is four fathome a foot leſſe. He that commeth there with a ſhippe that goeth deepe muſt take heede thereof, for this Banck on the northweſt ſide is ſo ſhoring, that a man at one caſt of the lead hath 22 fathome, the ſecond caſt 15 fathome, and the third caſt 3 fathome.

But it is an aſſured thing, when you are on the weſt ſide, or north from the Reefſhorne, then you may ſound along by the wall at 6 or 7 fathome, till you come by the ſaid Horne, but

The Owle

then you ſhall finde a drie ſand, which rũneth off from the land called the Uyl, which northward is verie ſhoring, you may goe no nearer north unto it then ſeven fathome. Right ſouthward there beginneth Reefſhorne to runne off from the land, & there

Depth up-on Reefs-horne by the land.

it is a ſmall banck, there you ſhall for certaine finde but three fa-thome, or three fathome a foot leſſe, for two or three caſts with the lead, as the winde bloweth, and as you goe forward, for pre-ſently againe you have five fathome, ſound then forward about by that drie ſand, where you deſire to be, as I told you before.

According to ſome mens opinions, Dogghers ſand begin-neth from this banck: for as a man earely in the morning ſetteth ſayle out of Rincopers haven, with a ſouthweſt courſe, and a good northeaſt winde, then you are about three or four of the clock in the afternoone, yet at nine fathome, whereby it may partly appeare, that Dogghers ſand ſhould have her firſt begin-ning from this banck, and the rather, for that Dogghers ſand ly-eth there abouts.

To knowe the land.

To knowe the land heere abouts, you muſt underſtand, that about four leagues north from the ſaid Horne, there lyeth a high hill called Blawebergh, which on both ſides goeth plainly ſloping downe, it is ſomewhat blacker then the other land, and overgrowne with heath, and lyeth a litle from the ſtrand. And ſouthward from this Blauwebergh, as I ſaid before, the fiſhers village called Weſterſide lyeth: and betweene that village and the Horne lyeth a black hillock, alſo a Gentlemans houſe, other-wiſe it is altogether hillie ground.

Thus the land ſheweth betweene the Horne or Dodenbergh, and Numans haven.



II.

To ſayle into Numans chanel or Rincopers haven.

To knowe Nnmans chanel.

NOrth from the aforeſaid Blauwebergh there lye three or four lowe downes, & by Numans chanel or haven there lye two great ſand hilles cloſe by each other. North from theſe Sand hilles Numans haven runneth in, and the land betweene Numans haven and the Dodenbergh reacheth for the moſt


Ware afbeeldinge der Zeecusten vant nooyder deel van Jutlandt vanden doodenbergh af tot om den hoeck van Schagen, tonende hoe men die selve beseylen, en de ondiepten daer neffens gelegen schouwen sal
Vray pourtraict des Costes marines de la partie Septentrionale de Jutlande, commencant du mont dict doodenbergh jusqu'a l'entour la poincte de Schagen, monstrant comment on les navigera et evitera les gues y environ
Duitsche mylen 15. in een graedt
Lieues Allemandes 15. en un degré
Engelse en Franse mylen 20. in een graedt.
Lieues Angloises et Francoises 20. en un degre
Spaensche mylen 17½. in een graedt
Lieues D'espaigne 17½. en un degré
IUT
WENSSUSSEL
LANDT
Maesterlant
Pater noster
Lesu
Dwaelgront
Schagher Rif
Schagen
Robirg
Hugerby
Harthals
Hyrring
Robbeknuit
Borlum
Werlum
Kettorp
Ins
Orim
Holmen
Timmerbuy
Westeryl
Engelberg
Boevenbergen
Hostebro
Huusbuy
Hobro
Alborg
Schellinckroech
De Horn
Westersydt
Blauwebergh
Rincoper diep
Tlandt van Nimet
Iutsche Rif
22

moſt part ſouth and north about ſeven leagues. There it is altogether a faire ſtrand, and the beſt part of this coaſt to be knowne is Blauwebergh, and the two aforeſaid ſandhilles.

To ſayle into Rincopers haven.

If you will ſayle into Rincopers haven or the chanel of Numan, then goe along by the land of Weſterſide at ſixe or ſeven fathome, til you come to the two aforeſaid great white downes, then you ſhall ſee two beacons ſtand, whereof each hath a barrel upon it, on the north ſide of the haven, upon a lowe land, bring them one againſt an other, then they will ſtand north, or north and by eaſt from you, and there you ſhall finde a tonne, unleſſe it be laid otherwiſe. But right before the chanel of Numan lyeth a ſandie flat called Gladde Iaep: if you will ſayle into the ſouth chanel, then leave this flat on baghborde, and runne in cloſe by the ſouth ſide or foot ſtrand, whereon the ſaid downes lye, to the beacons; for there you can have no hurt, for you may ſound them eaſely, and that is the moſt aſſured courſe to ſayle in by the ſtrand, if you looke well to your lead. When you are paſt by Gladde Iaep, then rũne to the north ſide whereon the ſaid beacons ſtand, for you muſt there ſayle about them, as cloſe as you will: it is a lowe plaine point, verie faire and altogether ſteeping. Now when you are within this point, you may anckor there where you will. This haven from without reacheth in moſt north, and north and by eaſt, untill you are within the Gladde Iaep, then you muſt goe ſomewhat eaſterlyer to the point aforeſaid, it is a haven that hath a good ſtreame, becauſe there lyeth ſo great a chanel within it, but it floweth there but litle up and downe, not above two foot and an half, with a dayly tide. A ſouthweſt and northeaſt moone maketh there high water.

Gladde Iaep.

North-chanel.

Right north from Gladde Iaep there runneth another chanel in, but there is but eight foot water in it.

To ſayle from Numit chanel to Rincopen.

When you are within Numen haven, then forward it is Pilots water, but ſhips that goe not deepe, they may well ſayle up, unles it be at a lowe water. The depth runneth by Numits ſtrand, and when you keepe Numits ſtrand, whereon the beacons ſtand, then you can not goe amiſſe: but as ſoone as you put off from thence, then you may ſayle under the ſands or ſheares, which reach off from the Wadt to the land of Numit, therefore runne ſo long cloſe by the ſtrand of Numit, till a church with a flat ſteeple (which ſtandeth about eaſt from you, againſt the high land of the Holme) commeth on the ſouth ſide of the high land, then you are within the ſands and outſands, then you muſt leave the ſtrand, and goe in n. n. e. and n. e. & by n. till there commeth a round hillock cloſe ſouth, or right over againſt a blewe church, which ſtandeth upõ the high land of the Holme, then goe in northeaſt and by eaſt, till the aforeſaid blewe church commeth againſt a Gentlemans houſe, which ſtandeth belowe cloſe by the water, in the lowe land, then ſayle north and north and by eaſt, till you be before Rincopen, for there it is wide and broad. The right depth there is two fathome and two foot. Rincopen and the haven of Numen lye diſtant from each other four leagues.

Markes of the Sands.

North from Rincopen there runneth a River into the land, whereon there lye two ſmall townes, the one called Hoſtebro, the other Huyſbuy; they lye at leaſt ſeven or eight leagues into the land.

Hoſtebro. Huyſbuy.

Half a league ſouth from Bovenberghen there goeth another ſmall haven out of the Sea inward, it is called Troſmond. There ſtand two maſts, which you muſt hold one over againſt the other, and ſo goe in, within it there lyeth a village called Troſmond, from thence you may ſayle over the Wadt to Rincopen.

Troſmond chanel.

This haven or chanel is ſometimes cloſed up, and ſometimes againe botes or crayers and ſmall ſhips may goe out of and into it, but it is reckoned for no haven.

III.

Of the ſituation of Bovenberghen and the Holmen.

FRom Rincoper haven or the haven of Numan, to Bovenberghen, the land reacheth moſt north & ſouth 10 leagues, and betweene them both it is all over a faire ſtrand, with white downes, which are overgrowne with heath, when you ſayle along by it, then you may ſee the blewe within the land of Rincopen called Holmes, above over this land.

Betweene Bovenberghen and Reefſhorne there lye ſome bancks, of 7, 8, and 9 fathome, and ſome that are deeper.

Bankes betweene Reefshorn & Bovenberghen.

Bovenberghen is a long plaine hill, in the middle having a round hillock or hill, and upon this hill ſtandeth a church with a ſteeple, you may ſee the land at 13 and 14 fathome. But if you come upon Bovenberghen to land, then it openeth in three hilles, it is a ſhoring ſteepe point; the middlemoſt hil is the higheſt, whereon ſtandeth the church aforeſaid, with a flat ſteeple, and on both ſides of this hill there ſtand other churches, which are not ſo high. You may ſee the land at 13 or 14 fathome. The ground is great redde ſand, with ſome ſmall ſtones therein.

Bovenbergh.

From Bovenberghen to the Holmen the land reacheth north

northeaſt 9 or 10 leagues, but it lyeth in a Creeke, and it is black hillockie downiſh land, overgrowne with heath, and there ſtandeth now and then a flat ſteeple in the land. And there lyeth a banck of 10 fathome about five leagues from the land, but it continueth not long.

Iutland Sand.

Betweene Bovenberghen and the Holme, from thence the Sand reacheth off from the land weſt into the Sea, and when you goe over that Sand, at 12 and 13 fathome, then the Neus lyeth from you northweſt and by north 24 leagues.

Holmes.

The Holmes is a plaine point, which on the northeaſt ſide goeth ſhoring downe, and in the middle upon this hill, there ſtandeth a four-ſquare church without a ſteeple. When that heigth of the land is ſouthſoutheaſt from you, and that you may juſtly ſee the north ende, then it is 15 fathome deepe, great rough ſand, with ſome ſtones amongſt it. There lyeth a banck of ſtone (like the Trindle of Leſou) two leagues northeaſt or ſomewhat eaſterlyer from the north point of the Holmes, that is betweene the north and the eaſt points, ſo that the two third parts of the water is almoſt betweene this ſtone-banck and the north point, and the other third part betweene the eaſt point & the ſaid ſtone-banck, and there is not above 12 foot water upon it, there hath ſome ſhips bin caſt awaie upon it. This eaſt point lyeth about four leagues eaſtward from Holmes, and is alſo a high ſhoring or ſloping point, as if it were Holmes. Right againſt this eaſt point there ſhooteth a Sand half a league into the Sea, which you may ſound about at ſeven fathome, but as ſome ſay you may goe through betweene the land and this Sand.

A ſtonie banck north frō Holmes.

East point

Thus the land betweene Bovenberghen and the Holmes ſheweth, when you ſayle along by it two leagues from the land.



III.

The ſituation of the Coaſts of Iutland, from the Holmes to Schaghen.

FRom the Holmes to Robbeknuyt the courſe is northeaſt nine leagues. And right weſt from Robbeknuyt, in the creeke to the eaſt point, there ſtand five churches with flat ſteeples, which ſtand neareſt to Robbeknuyt, there lye alſo two blewe lands betweene the Eaſt-point and Robbeknuyt, and there the land lyeth in a Creeke, and chere alſo you ſee a cloven hill or downe before you come to Robbeknuyt. It is there all along flatte ſtrand. Eaſt from Holmes there goeth in a water called Miſdorp, and right weſt from the white Cliffe of Robbeknuyt there alſo runneth in a litle River whereon there lyeth a towne called Werlom.

Miſdorp.

Werlom.

Robbeknuyt is a high round hill, and right upon the heigth of the hill there ſtandeth a church with a ſharpe ſteeple. But eaſt about from this point there goeth a great Creeke about to Hartſhals. Againſt Robbeknuyt it is verie farre flat, for fifteene fathome depth is at leaſt two leagues from the land. And about four leagues from the land there lyeth a banck of nine fathome, which reacheth along by the land. And againſt Robbeknuyt there lyeth a ſtone or rock about a league from the land.

To knowe Robbeknuyt.

From Robbeknuyt to Hartſhals it is ſouthweſt and by weſt four leagues. The land as I ſaid before reacheth that waie with a creeke or bowing, and there ſtandeth a flatte ſteeple betweene them both, but neareſt to Robbeknuyt, and there you ſee the high land of Laclowe over that high land.

Hartshals.

Hartſhals is a long plaine hill, on the eaſt ende going ſomewhat ſhoring downe. And right againſt Hartſhals there lyeth a ſandie or ſtonie ground, about a quarter of a league from the land, whereon ſome men ſaye manie ſhips have been caſt awaie, but it is litle uſed.

To knowe Hartshals.

From Hartſhals to Schaghen the courſe is eaſtnortheaſt eight leagues. The land eaſt from Hartſhals is altogether downie and hillockie land, you may ſee the high land of Laclowe beyonde it, and you finde along upon theſe Coaſts, no ſuch plaine hilles as Bovenberghen, Holmes, Hartſhals, and Robbeknuyt. A litle waie within the point of Schaghen there ſtandeth a flat church with a flat ſteeple, when this church is ſouthſoutheaſt from you, then there runneth a Sand or Flat off from the land, and there you muſt put ſomewhat off from the land, otherwiſe it is all ſhoring ſtrand betweene Hartſhals and Schaghen: but you may ſound that Sand about at ſixe or ſeven fathome.

Upon the eaſt ende of the outmoſt of Schaghen there ſtandeth a fire beacon, as if it were a ſand beacon, and when the church is ſouthweſt and by weſt from you, then the fire beacon and the ſteeple are one againſt the other, and then you are right againſt the Sand of Schaghen, which reacheth off from the point eaſtnortheaſt, and eaſt and by north almoſt a league into the Sea. When you goe along by the land, and goe under it at five or ſixe fathome, then you may ſound the Sand: but comming ſouth out of the Sea, you can hardly ſound it, for it is ſhoring, and then come no nearer unto it then 12 or 13 fathome.

Markes of Schaghen ſand.

To knowe by ſure markes when you are paſt this Sand, as well over the one ſide as the other, then marke that as you come out of the weſt, and the old church and the fire beacon are one againſt the other, then you come upon the weſt ſide of the Sand: but when you come out of the ſouth or the eaſt, & that old church is againſt or within the ſouth ende of the village, then you are upon the ſouth ſide of the Sand. When the ſteeple and the fire beacon are ſouthweſt and by weſt from you, then they are one againſt the other, and then you are againſt the Sand, as I ſaid before: and when the ſteeple is ſouthweſt, and ſouthweſt & by ſouth from you, then you are without or weſt from the Sand: but when the ſteeple or fire beacõ is weſtſouthweſt, and weſt and by ſouth from you, then you are within the Sand. This you may by night take by your compas, & marke it ſo, to ſee whether you be within or without the Sand, when the fire lighter maketh a cleare bright fire. You may ſette well on both ſides of the Sand, ſo that you may put off from it at 7 or 8 fathome.

Markes to knowe that you are paſt the Sand.

Some ſaye that upon neceſſitie a man might goe betweene this Sand and the land at two fathome and an half.

Bancks betweene Schaghen and Hartſhals.

About two leagues without Schaghen towards Hartſhals, two leagues from the land there lyeth a banck of 10 or 12 fathome, and within this banck it is 16, 17, and 18 fathome deepe.

Betweene Schaghen and Maſterland or Norwaie it is all ſoft ground, and the nearer to Norwaie the deeper water, but when you come out of the Sond, and are in the chanel, and finde no ground at 18, 20, and 22 fathome, it is a ſigne that you are about Schaghen Sand.

Of the ſtreame out of the Belt.

When you come out of the weſt about Schaghen, and will goe to the Sond or to the Belt, then take heede of the ſtreame out of the Belt, for cõmonly it falleth out of the Belt towards Norwaie, ſpecially when the winde hath blowne a while eaſt or northeaſt, this ſtreame by night or in darke wether will carrie you under Norwaie before you are aware thereof, therefore be carefull thereof, and geſſe accordingly.

Thus the land betweene the Holmes and Schaghen ſheweth, when you ſayle along by it.



Schaghen. Hartshals. Robbeknuyt.

IIII.

How theſe places lye diſtant one from the other.

From the Dead hill or the Horne to Numans chanel or Rincoper chanel it is n. and by w. —— 7 or 8 leagues.
From Rincoper deepe or Numans chanel to Bovenberghen north and by weſt —— —— —— 31 leagues.
In general from Deadehill to Bovenberghen the land of Iutland reacheth n. & by w. and ſ. & by e. —— 17 or 18 leagues.
From Bovenberghen to the Holmes n. n. e. —— 9 leagues.
From the Holmes to Robbeknuyt northeaſt —— 9 leagues.
From Robbeknuyt to Hartſhals n. e. and by e. —— 4 leagues.
From Hartſhals to Schaghen e. n. e. —— —— 8 leagues.

V.

How theſe Countreyes are diſtant from other Countreyes.

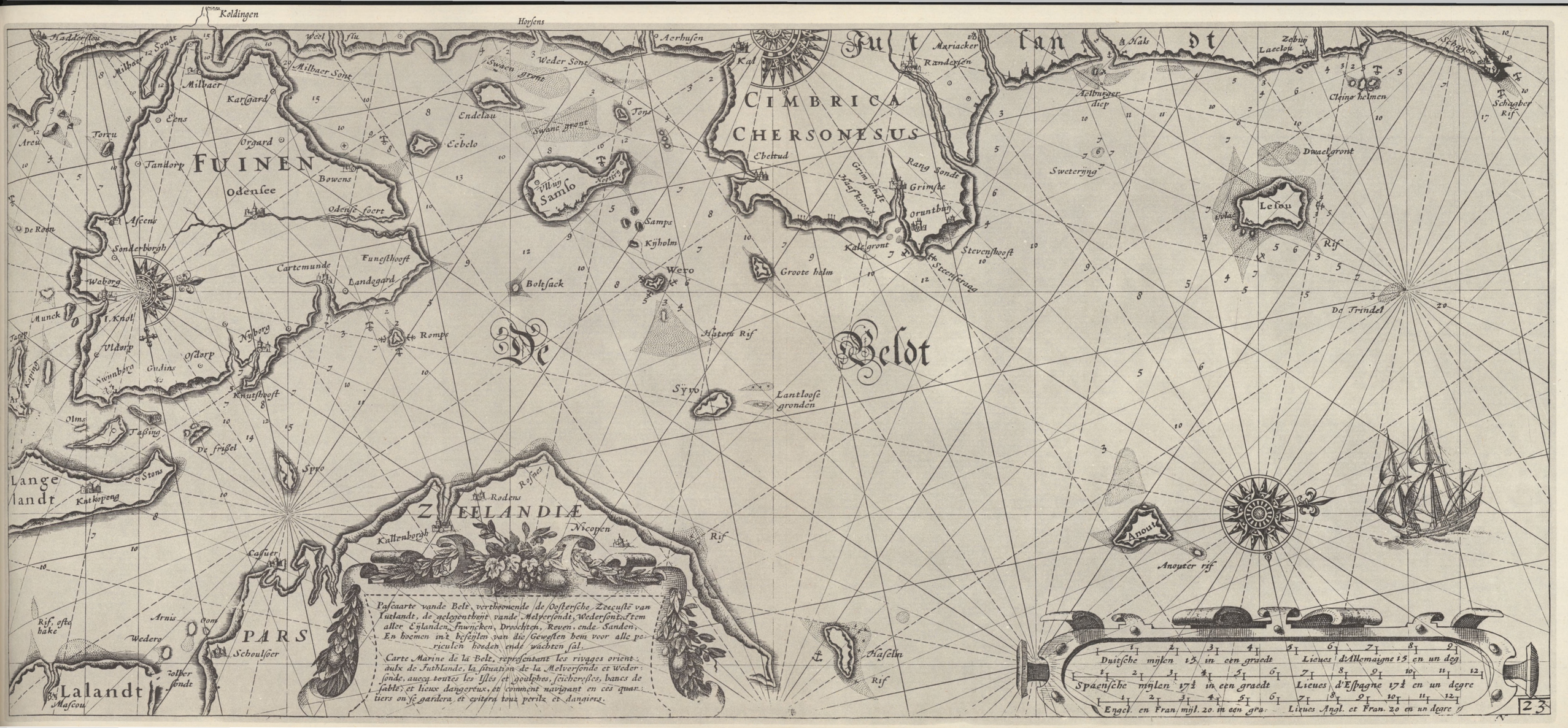
From Rincoper or Numanschanel to the Vlie ſouthſouthweſt and ſomewhat weſterlyer —— 59 leagnes.
From Bovenberghen along by Iutland without the grounds to the Elve or the uttermoſt tonne ſouth and by eaſt about —— —— —— —— 51 leagues.
From Bovenberghen to Holie land ſouth and by eaſt, and ſomewhat ſoutherlyer about —— —— ——45 leagues.
From Bovenberghen to the Vlie or Borneriffe ſouthſouthweſt about —— —— —— —— —— 69 leagues.
From Bovenberghen to the Foreland ſ. w. & by ſ. 120 leagues.

From Bovenberghen to the Holmes before Iarmouth ſouthweſt — — — — — — 93 leagues.
From Bovenberghen to Flamboroughhead w.ſ.w. 100 leagues.
From Bovenberghen to Scharborough weſtſouthweſt & ſomewhat weſterlyer — — — — — 100 leagues.
From Bovenberghen to the River of Newcaſtle or Tinmouth weſt and by ſouth about — — — 107 leagues.
From Bovenberghen to Buquneſſe w. and by n. 107 leagues.
From Bovenberghen to the Neus n. w. & by n. 24 leagues.
From the Sand at eighteene fathome to the Vlie ſouth and by weſt — — — — — 61 or 62 leagues.
From the Sand at eighteene fathome to the Heads at Calis ſouthſouthweſt about — — — 120 leagues.
From the Holmes to the Neus n. w. — 19 or 20 leagues.
From the Holmes to the Vlecker n. w. & by n. — 19 leagues.
From the Holmes to Mardon north — — 24 leagues.
From the Holmes to Langheſond n. & by e. 28 or 29 leagues.
From the Holmes to Farder n. n. e. — — 36 leagues.

From Schaghen to Tinmouth w. ſ. w. — — 136 leagues.
From Schaghen to the Neus weſt — — 33 leagues.
From Schaghen to Vlecker w. and by n. — 25 or 26 leagues.
From Schaghen to Reperwick weſt and by north, and weſtnorthweſt — — — — 24 leagues.
From Schaghen to Mardon n. w. and by w. 20 or 21 leagues.
From Schaghen to Langheſond northweſt and by north, or a a litle northerlyer — — — — 21 leagues.
From Schaghen to Fardero n. and by w. — 21 leagues.
From Schaghen to Ottrum n. and by e. — 23 or 24 leagues.
From Schaghen to Maſterland e. n. e. — — 12 leagues.
From Schaghen to Nydingh e. and by ſ. — 15 or 16 leagues.
From Schaghen to Waerſberghen e. ſ. e. — 19 or 20 leagues.
From Schaghen to the Trindle ſoutheaſt — 8 leagues.
From Schaghen without the Trindel ſ. e. and by e. 8 leagues.
From Schaghen to Leſou, or the northende of the Sand ſouthſoutheaſt — — — — — 8 leagues.

Heere followeth the Carde N. 23.

THE


Pascaarte vande Belt, verthoonende de Oostersche Zeecuste van Iutlandt, de gelegentheijt vande Melversondt, Wedersont, Item aller Eijlanden, Inwijcken, Droochten, Reven, ende Sanden, En hoemen int befeijlen van die Gewesten hem voor alle periculen hoeden ende wachten sal.
Carte Marine de la Belt, representant les rivages orientaulx de Iuthlande, la situation de la Melversonde et Wedersonde, auecq toutes les Isles et goulphes, seicheresses, bancs de sable, et lieux dangereux, et comment navigant en ces quartiers on se gardera et evitera touz perilz et dangiers.
Duitsche mijlen 15 in een graedt
Lieues d'Allemaigne 15 en un deg.
Spaensche mijlen 17½ in een graedt
Lieues d'Espagne 17½ en un degre
Engel. en Fran. mijl. 20. in een gra.
Lieues Angl. et Fran. 20 en un degre
23
Koldingen
Horsens
Aerhusen
Kal
Mariacker
Randersen
Hals
Zebuij
Laeclou
Schagen
Schagber Rif
Cleine helmen
Aelburger diep
Dwaelgront
Sweterijng
Lesou
Rif
De Trindel
Anout
Anouter rif
Haselin
Rif
Rif
Rosnes
Rodens
Nicopen
Kallenborgh
Cassuer
Schoulsoer
Rif, ofte hake
Arnis
Oom
Wedero
Golber sondt
Lalandt
Mascou
Lange landt
Katkopeng
Stons
Spro
De frißel
Taßing
Olms
Knutshoost
Nyborg
Osdorp
Gudins
Swijnborg
Vldorp
I. Knol
Munck
Waborg
Sonderborgh
De Roen
Ascens
Odensee
Odense foert
Bowens
Orgard
Tandorp
Torru
Areu
Eens
Karsgard
Milbaer
Milbaer Sondt
Milbaer Sont
Weel flu
Weder Sont
Swaen gront
Endelau
Eebelo
Tons
Swane gront
Samso
Samps
Kijholm
Wero
Boltsack
Romps
Haters Rif
Syro
Lantloose gronden
Groote helm
Kalegront
Steenseraag
Stevenshoost
Oruntbuij
Grimste
Rang Sondt
Grim sondt
Haafknoed
Ebeltud
Cartemunde
Funesthoost
Landogard
FUINEN
Odensee
Cimbrica Chersonesus
De Beldt
Zeelandiæ
Pars
Lalandt
Iutlandt

THE DESCRIPTION OF

the Belt, VVederſond, and Melverſond, and of all the Ilands lying thereabouts.

I.

The ſituation of Lezou and the Trindle, and how you ſhall ſayle from Schaghen to Seebuy

The ſituation of Leſou.

FRom Schaghen ſand to Lezou the courſe is ſ. ſ. e. eight leagues. Leſou is a foule Iland, which is round about flat, and compaſſed about with manie banckes, & ſands ſhooting out. At the ſouth ende it is but two fathome deepe, above two leagues from the land, and from the ſouth ende whereon the church ſtandeth there ſhooteth a Sand into the Sea, two leagues and an halt, which you may anckor under ſafe againſt a ſ. ſ. e. winde. Alſo on the other ſide of the ſouth ende there ſhooteth off a ſand, ſo that when the aforeſaid flat church is eaſt, and northeaſt from you, there you cannot ſee the land when you are within a league of it: but you may goe ſo neare to the north ende, that you may lye at anckor under it ſafe againſt a ſouth winde, at 3 4 and 5 fathome. From the north ende alſo there ſhooteth off a ſand to the Trindle, but you may ſound it about at three or four fathome, through betweene Leſou and the Trindle.

Trindle. The Trindle lyeth northeaſt, or ſomewhat northerlyer from the northende of Leſou about two great leagues, & from Schaghen ſand ſoutheaſt and northweſt eight leagues. It is ſtonie ſand ground, about 4 foot deepe, and about ſixe or ſeven akers of land great, reaching along by the chanel of the Sea: On the north ſide alwaies there lyeth a tonne, whereby men may know it a farre off. You may ſayle well through betweene Leſou and the Trindel, and the nearer to the Trindel the deeper water, and the nearer to Leſou the flatter & ſhallower. Cloſe by the Trindle it is 5 or 6 fathome deepe.

Zeebuy. But to ſayle from Schaghen to Seebuy, the right courſe is ſouth and by weſt 7 leagues. When Schaghen lyeth about n. w. and by w. from you, and that you are a league from it, there it is 17 and 18 fathome deepe: and when Schaghen is weſt, and weſt and by ſouth a league, or a league and an half from you, there it is 34 or 35 fathome deepe. And come no nearer to Schaghen by night then 14 or 15 fathome. Now when you wil ſayle from Schaghen to Seebuy, then you goe by the ſmall Helmes, lying ſouth and by weſt 4 leagues from Schaghen, and if you will goe into the Belt, then you leave them on ſtarborde, going all ſouth and by weſt to Zeebuy. And he that will anckor under the Helmes, comming off from Schaghen, he muſt runne to the land at three fathome, and runne in betweene the ſtrand & the Helmes, untill he be within the rockes, there you may anckor or goe through at three fathome, along by the foot ſtrand, and when the rockes of Helmes are eaſt, and eaſt and by north from you, there is the Rode, at four and four fathome and an half.

Small Helmes.

Rode under the Helmes.

The Helmes are three Ilands, the ſoutherlyeſt the Iutters call the Dien or the Dee, the middlemoſt Holmes, and the northerlyeſt the Graſholme, and by it there lyeth another litle Iland. You may ſayle through betweene the ſoutherlyeſt and the middlemoſt, but neareſt to the ſoutherlyeſt Iland: there is betweene them four fathome water. The beſt Rode to lye in for litle ſhips behinde the Helmes, is betweene the middlemoſt and the ſoutherlyeſt Iland, a litle nearer the ferme land then the Ilands, but for great ſhips the beſt lying is by the Graſholme.

Betweene the Holmes and the ferme land in the faire-water, it is at the leaſt three fathome deepe.

Sand of the Helmes

When you come on the ſouth ende of the rockes, there runneth a Sand off from the Helmes to the ſtrand, called Boutferriffe or ſand, where the great ſtones lye upon the ſtrand, but keeping at three fathome you can doe no hurt upon this ſand, and you may ſo goe out againe at the ſouth ende of Zeebuy.

A league eaſt from Helmes there lyeth a heape of ſtones which you muſt beware of, when you will goe into the Belt.

A ſhippe that goeth not deepe may ſayle round about the Helmes, for there at the leaſt it is three fathome water. In the chanel betweene the Helmes, and the north ende of Leſou it is

10 fathome

Depth betweene the Helmes & Leſou.

10 fathome deepe ſoft ground, and before Zeebuy in the rode it is 4 and 5 fathome deepe. Leſou lyeth about four leagues from Zeebuy. On the weſt ſide of Leſou lye the Dwalegrounds, which lye north from the aforeſaid Sand (which ſhooteth off weſt into the Sea, from the ſouth ende of Leſou, whereon the flatte church ſtandeth. Theſe Dwalegrounds are verie uneven, of 3, 4, 5, and 6 fathome deepe, and within Zeebuy there are alſo flat grounds of 4, 5, and 6 fathome. The chanel betweene the Dwalegrounds and the flattes of Zeebuy is ſeven and eight fathome deepe.

II

To ſayle from Zeebuy to Aelborgh and Stevenſhooft.

To ſayle into Aelburgher chanel or haven.

FRom Zeebuy to Aelburgher chanel the courſe is ſouth & by weſt 7 leagues. On the north ſide of the chanel there ſtandeth a flat ſteeple called Hals, in the chanel there lyeth a tonne, and upon the ſouth land there ſtand two capes, which you muſt bring one againſt the other, and then you finde the tonne. The haven firſt reacheth in w. and by ſ. about a cables length, then you goe n. w. and by w. right up to Hals, and goe in by the north ſide till you be againſt Hals, for from the ſouth point of the land there commeth a Flatte ſhooting off, which you muſt ſhunne: being againſt Hals, you muſt then goe ſ. w. & by w. to the bocht or hollowe ground, and in the crooking you muſt ſhunne the north ſide ſomewhat, then goe northweſt and by weſt againe along to the ſecond crooking, then ſ. ſ. w. and then w. ſ. w. to the towne. Before in the haven at the tõne it is two fathome deepe, and there within a litle while after five or ſixe fathome: but to ſayle into it it is beſt to take a Pilot. By the ſouth ſide alſo there goeth in a chanel of 6 or 8 foot deepe.

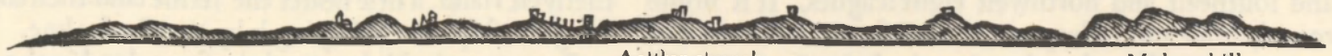
The towne of Aelburgh lyeth four leagues upwards in the River, within the land: alſo weſt along by theſe Coaſts there lye ſome bancks, there you muſt ſhunne the land ſomewhat.

When you ſayle from the Helmes to Stevenſhooft, through betweene the Dwalegrounds and the Flats of Zeebuy, then you finde flat grounds about half waie betweene Stevenſhooft and Zeebuy of 5, 6, and 7 fathome. This ſhallowe is called the Sweteringh, lying above two leagues caſtward from Aelburgher haven, and the chanel there betweene them both is about 10 or 11 fathome deepe. The Sweteringh.

From Aelburgher haven to Haſelin the courſe is ſoutheaſt and by eaſt about twentie leagues.

From Aelburgher haven to Stevenſhooft the courſe is ſ. e. and by ſ. about nine leagues. There betweene them both the land lyeth in a great Creeke, wherein the two townes called Mariacker and Randerſen doe lye. Mariacker lyeth from Aelburgher haven ſouth, and ſouth and by weſt four leagues, and from Stevenſhooft five leagues. Betweene Mariacker & Stevenhoofr lyeth the River of Randerſen, which runneth crooked about ſo farre up into the land, to the towne of Schandelburgh, where the King of Denmarke hath a great fiſhing, and alſo manie times commeth there to hunt. Stevenſhooft. Mariacker Randerſen

Thus the land and the church of Aelſt ſheweth two leagues and an half eaſt from Aelburgher haven.



III.

To ſayle from Stevenſhooft to the Ilands of Syro, Wero, and Sampſo, and forth through the Wederſond to the Melverſond.

Haſelin.

FRom Stevenſhooft to Haſelin the courſe is e. ſ. e. thirteene leagues, and Haſelin without is full of foule Sands and grounds: you ſhall finde further and larger deſcription of Haſelin and Anout, as alſo of the foule waies and ſhallowes lying thereabouts in the tenth Chapter of this Book.

Right ſouth from Stevenſhooft lyeth a litle towne called Oruntbuy, there lye the Chalck grounds right before the River of Grimſond in a Creek, right about the point of Stevenſhooft, that is a ſand two or three foot water deepe, but not farre from it, it is 10 fathome deepe, you may ſound it at 4 fathome. You may ſayle up the Grimſond to Grimſteed, which is a lading place of Boeyers. Oruntbuy Chalkgrounds. Grimſond.

From Stevenſhooft to Great Helmes the courſe is ſ. ſ. w. about 7 leagues. The land from Stevenſhooft to the point of Ebeltud reacheth ſ. ſ. w. ſeven or eight leagues. Ebeltud is a litle towne lying againſt the Great Helmes inward to the land. Great Helmes. Ebeltud.

Betweene

tweene the Great Helme & Iutland it is 6 and 7 fathome deepe. Cloſe by Stevenſhooft and the point of Ebeltud it is 8, 9, and 10 fathome deepe. The great Helme hath two Sands, one upon the north ſide, and the other upon the ſouth ſide.

Siero. From Stevenſhooft to Siero the courſe is ſ. ſ. e. 8 leagues. North from Siero lyeth a land-loſſe ground divided into two Sands, which you muſt ſhunne.

Sands of Siero. Theſe two Sands in ſome places lye above the water.

The Iland Wero. From the Great Holme to the Iland Wero the courſe is n. n. w. and ſ. ſ. e. four leagues, and there it is 4 or 5 fathome deepe.

The ſituation of Kayholme and Samps From Wero there runneth a ſhallowe to Kayeholme, and about Kayholme: and alſo about the Ilands Samps, it is all full of drie grounds, and they runne all to the great Iland Sampſo.

Sampſo. From Great Holme to the Iland Sampſo it is ſ. w. and n. e. four leagues.

Sand of Sampſo. From the north ende of Sampſo there ſhooteth off a Sand north into the Sea, there you may ſound cloſe about, to come into the Rode of Sampſo, when you will anckor there, there at the Rode it is 10 fathome, and under the Swan grounds you lye ſafe from all windes.

Aerhuyſen From the ſouth ende of Ebeltud to Aerhuyſen the courſe is weſt, and weſt and by ſouth five leagues, there it is all flat water, that is 2 and 3 fathome deepe. He that will anckor in the Rode before Aerhuyſen, let him bring the great ſteeple in the middle betweene the two other ſpeeres, there is the beſt ground, and good Rode at 3, 4, or 5 fathome, ſo drie as one will.

Wederſond. South by Aerhuyſen the Wederſond goeth in, between Iutland and Sampſo: he that will ſayle into it muſt be wel acquainted there with, for there it is all full of Sands and ſhallowes, and alſo by night you can not uſe the chanel, becauſe of the ſands and ſhallowes, and by daie alſo you muſt looke well about you, and ſpare not your lead, but you may anckor and lye at rode there all over. When you will ſayle through the Wederſond, comming from Great Holme or Ebeltud, then leave the Iland Tons and the Swan grounds on baghborde, running forth all along by the coaſt of Iutland at 2 or 3 fathome, till you be paſt Horſens, or the Iland of Endelau, which Iland of Endelau a man may not goe neare unto on the weſt ſide, becauſe of all the grounds which lye on the weſt ſide thereof.

To ſayle through Wederſond. Tons. Endelau. Swan-grounds. Betweene Endelau and the firme land it is narrowe water, ſtretching from Wederſond ſouth through the Swan grounds, on both ſides it is drie, it is but a chanel to ſayle through.

When you come off from Melverſond, & will ſayle through the Wederſond, it is beſt to runne along by the Iutland ſide, till you be againſt the River of Horſens, there you muſt then put ſomewhat off from the land, & ſayle upon the Ile of Tons, then you goe through betweene the North and South grounds, leaving the Ile of Tons on ſtarborde. When you are paſt Tons, then you muſt goe out cloſe by the north point of Sampſo, to the land of Ebeltud, it is altogether one courſe from Horſens to Tons, and forth to Sampſo, and the point of Ebeltud, that is, altogether northeaſt and ſouthweſt 8 or 9 leagues.

Melverſond. Frō Horſens or the Iland Endelau to Melverſond the courſe is ſ. ſ. w. 7 leagues. Melverſond is a deepe Sond, of 20 and 25 fathome, and is verie crooked to goe in. It goeth in betweene Fuynen and Iutland, which are two high lands.

From the Iland Ebelo to Melverſond the courſe is ſouthweſt and ſouthweſt and by ſouth five leagues.

Ebelo. From Sampſo Rode to the Ile of Ebelo the courſe is ſ. ſ. w. and ſ. w. and by w. five leagues. And from the ſouth ende of Sampſo to Ebelo the courſe is ſ. w. and by w. four leagues.

Roems. Frō Sampſo to Roems the courſe is ſ. e. & n. w. 5 leagues.

The northweſt Coaſt of Fuynen reacheth ſouthweſt and by weſt 8 leagues. The Iland of Ebelo lyeth a league from it, yet you cannot goe through betweene it and Fuynen, it lyeth right before Bowens. South from the Iland there lyeth a great ſtone or rock under the water, betweene this Rock & the Iland lyeth the Rode before Bowens, at 8 or 9 fathome.

Rode before Bowens.

1111.

To ſayle from Syro and Wero to Langheland, and forth about Fuynen to Melverſond, alſo along by Zeland to Golverſond.

Haters Sand. BEtweene Syro and Wero lyeth a bad ſand, long & broad, reaching further then half waie to Siero. When you will ſayle through betweene the two Ilands aforeſaid, above Ruſſeneſſe, you muſt leave two third parts of the water lying on Wero ſide, and goe in ſ. ſ. w. and ſ. and by w. to Roems, that is nine leagues.

The ſaid ſand is called Haters ſand, and it is on the eaſt ſide it is verie hard and ſtonie, and if you come from Boltſack you muſt runne cloſe by the Iland of Wero, to ſhunne the Sand, the chanel betweene the ſand and Wero is not to broad, but it is three and three fathome and an half deepe.

He that cōmeth eaſtward of Wero through betweene Wero and Haters ſand, and will ſayle to Roems, let him goe right

ſouth by eaſt, & ſo he ſhal rũne about a quarter of a league eaſtward of Boltſack, and fall right eaſt from Roems. In like manner he that goeth from Roems or a litle eaſt of it, north and by weſt he falleth betweene Wero and Haters Sand right in the fairewaie. One may runne through betweene Roems and Fuynen at two fathome, but you cannot goe through there with great ſhips. From the north ende of Fuynen there ſhooteth off a Sand at leaſt a quarter of a league into the Sea. Within Roems in the land of Fuynen there lyeth a litle towne to lade at, which is called Cartmond, there commonly lye two tonnes in the haven, you may ſayle in by them: the haven goeth in eaſt, on the weſt ſide it is flat, the tonnes lye along by the flats, and in ſayling up you leave them on ſtarborde: this haven is 12 foot deepe.

Carte-monde.

Spro. Knuytſ-hooft.

From Romps to Spro or Knuytſhooft the courſe is ſ. & by e and ſ. ſ. e. five leagues. Betweene Siero and Knuytſhooft it is 12 and 13 fathome deepe, but betweene Romps and Siero it is 10 or 11 fathome deepe.

Nyburgh.

Right ſouth about the point of Knuytſhooft in Fuynen lyeth the Haven of Nyburgh, when you are about the point, then you goe cloſe up to the towne, about a league northweſtward it is 6 or 7 fathome deepe, you lye there with your ſhip at the Kaye, and have anie thing caried aborde that you will.

From Knuytſhooft to Langheland the courſe is ſ. e. four leagues, & then you leave Spro on baghborde, frõ the ſoutheaſt ende of Spro there ſhooteth off a Sand which you muſt ſhũne.

Friſſel.

At the northende of Langheland lye the Ilands of Friſſel, which are verie foule round about.

From Knuytſhooft to the Iland of Taſſingh the courſe is ſ. 4 leagues: you muſt leave Friſſel on the left hand, and you muſt runne through betweene Friſſel and Fuynen. If you will goe to Swinburgh, then from Friſſel goe to the ſoutheaſt ende of Fuynen ſ. ſ. w. and you ſhall come to an Iland, where you may goe about on both ſides, through betweene Taſſingh and the Iland, or you may runne along by the land of Fuynen, till you come to the towne of Swinburgh, which lyeth over againſt the Iland of Taſſingh, & againſt the point of Fuynen there lyeth an Iland called Olmes, then you muſt ſtrike up weſtward. You may alſo goe about on the other ſide of Taſſingh, & leave the Iland Arr, & the foule grounds that lye between Arr & the ſoutheaſt ende of Fuynen on baghborde. Upon thoſe Grounds it is not above 6 foot deepe. And when you come by the Iland of Olmes or the ſoutheaſt point of Fuynen, then (as aforeſaid) you muſt ſtrike up weſtward, about the point of Fuynen to Woburgh. On the

Swin. burgh.

Olmes.

ſouth ſide of theſe Grounds aforeſaid there goeth alſo a chanel through, which goeth weſt and weſt and by ſouth, betweene the Grounds and the Iland of Arr. In this Iland of Arr there is a towne called Copingh. This foule ground is 2 leagues long, & the Iland of Arr is alſo two leagues long, both of them reach eaſt & weſt, & Monke Iland lyeth at the ende of theſe grounds, in Fuynen before Woburgh: it hath two Sands, the one commeth from the ſoutheaſt ende, and ſhooteth eaſt into the Sea, the other commeth from the north point, and reacheth northeaſt into the Sea. But when you ſayle north frõ theſe grounds, that is, betweene Fuynen and theſe grounds to Woburgh, then you goe upon the ſaid Ile of Monke, and an Iland or two more, which you muſt leave on the left hand, and runne all along by the land of Fuynen, about w. and w. and by n. to the point of Aſkens, which is about five leagues from the ſoutheaſt point.

Copingh.

Monke Iland.

Askens.

From the eaſt point of Aſkens to the Iland Areu and Toreu, the courſe is w. and by n. and w. n. w. above 2 leagues. Theſe two Ilands lye one over againſt the other, the one on Iutland, the other on Fuynen land, and you muſt goe through betweene two Sands, which runne one againſt the other, and there it is 4 or 5 fathome deepe.

Areu and Toreu.

North or weſt frõ Areu the chanel of Hadderſleu begineth, and reacheth in about w. and by ſ. upon it lyeth the towne of Hadderſleu, which is above two leagues within the land.

Hadder-ſleu

From Areu or Toreu to Melverſond the courſe is n. n. w. 5 leagues, which you goe into ſouthward: firſt you goe weſtward in to the chanel of Coldinghen, which is a wide chanel, which goeth about a league into the land, when you will goe through Melverſond, then you leave it on the left hand, and goe up eaſtward to the towne of Melver, where you come againe into the crooked. Melverſond goeth out northward, with a great crooking, and then you muſt goe out againe into the broad water north from Fuynen, as I taught you before.

Coidin-ghen.

To ſayle through Melver-ſond.

You may alſo ſayle out from Areu or Aelſche chanel ſ. ſ. w. to Apenrade, and ſo behinde about the Iland of Aelſens till you come into the chanel of Flenſburgh.

Apenrade.

To turne againe to the Belt: it is from Roſnes n. n. w. going weſt from Syro. From Roſnes ſhooteth a Sand off to ſeaward, but a litle eaſt from Roſnes, that is, from the point which lyeth halfwaie at Haſelin, there reacheth a Sand off, above a league & an half into the Sea, that lyeth at the ende quite drie, you may boldly runne about cloſe by the drie, for not farre from it it is eight fathome deepe.

Roſnes.

From

Callenburgh. From Roſnes to Spro ſouth and north 8 or 9 leagues. Betweene Roſnes and Spro lyeth Callenburgh in Zeland, which alſo is a lading place, and about two leagues ſouth from Callenburgh ſhooteth a flatte along the Coaſt, about three quarters of a league from the ſtrand of five fathome deepe.

From the eaſt ende of Spro ſhooteth a ſtonie banck off, and over againſt it commeth a Flat ſhooting off from the land, there betweene them it is 4 and 5 fathome deepe. But behinde or againſt Spro lyeth Caſſuer, a faire Haven, where alſo lying at the Kaye you may have your goods caried into the ſhip. Caſſuer.

From Spro to Langheland the courſe is ſ. e. and by ſ. four leagues. Right againſt Langheland lyeth Golberſond, whereof I will ſpeake in the Chapter following.

V.

How theſe places lye diſtant from each other, and alſo from other Countreys.

ALthough in the deſcription of this Carde of the Belt frō Schaghen to Langheland, moſt part of the reachings of the land from one place to another is ſet downe, yet I thought it requiſite to ſet and place them heere in order one after the other, as I have done in the reſt of the deſcriptions, and the rather, for that I thinke it will be profitable for Saylers, when men (having them all together by themſelves) may the readier and ſooner finde ſuch ſtretchings as they deſire to ſee.

From Schaghen to Leſou ſ. ſ. e. — — 8 leagues.
From Schaghen to the Trindle ſ. e. — — 8 leagues.
From Schaghen to the ſmall Helmes ſ. and by w. — 4 leagues.
From Schaghen to Zebuy ſ. and by w. — 7 leagues.
From the Helmes to Zeebuy — — — 2 leagues.
From Zeebuy to Aelburgher ſ. and by w. — — 7 leagues.
From Aelburgher chanel to Mariacker ſ. and ſ. by w. 4 leagues.
From Aelburgher deepe to Stevenſhooft ſ. e. & by ſ. 9 leagues.
From Aelburgher chanel to Haſelin ſ. e. and by e. 20 leagues.
From Stevenſhooft to Haſelin e. ſ. e. — — 13 leagues.
From Stevenſhooft to the great Holme ſ. ſ. w. about 7 leagues.
Frō Stevenſhooft to the point of Ebeltud ſ. ſ. w. 7 or 8 leagues.
From Stevenſhooft to Siero ſ. ſ. e. — — 8 leagues.
From Great Holme to Wero ſ. ſ. e. — — 4 leagues.
From Great Holme to Sampſo ſouthweſt — 4 leagues.
From the ſouth ende of Ebeltud to Aerhuyſen weſt and weſt & by ſouth — — — — — 5 leagues.
From the Rode of Sampſo to Ebelo ſouthſouthweſt, and ſouth and by weſt — — — — 5 leagues.
From the ſouth ende of Sampſo to the Iland Ebelo ſouthweſt — — — — — — 4 great leagnes.
The northweſt coaſt of Fuynen reacheth ſ. w. & by w. 8 leagues.
From Ebelo to Melverſond ſ. w. — — — 5 leagues.
From Endelau to Melverſond ſouthſouthweſt and ſomewhat ſoutherlyer — — — — 7 leagues.
From Sampſo to Roems ſ. e. — — — 5 leagues.
From weſt from Siero to Roems ſ. ſ. w. and ſ. & by w. 9 leagues.
From Wero to Bultſack ſ. ſ. w. — — 4 great leagues.
From Bultſack to Romps ſ. ſ. e. and ſ. and by e. — 4 leagues.
From Romps to Knuytſhooft ſ. & by e. and ſ. ſ. e. 5 leagues.
From Knuytſhooft to Langheland ſ. e. — 4 leagues.
From Knuytſhooft to the Iland Taſſingh ſouth — 4 leagues.
From the ſoutheaſt ende of Fuynen to the eaſt ende of Askens weſt, and weſt and by north — — — 5 leagues.
From the point of Askens to the Ilands of Toreu & Areu weſt and by north and weſtnorthweſt — — 2 leagues.
From Areu to Melverſond n. n. w. — — 5 leagues.
From the point of Roſnes in Zeland to the Ile of Spro ſouth — — — — — — 8 or 9 leagues.
From Spro to Langheland ſ. e. and by ſ. — — 4 leagues.

Heere followeth the Carde N. 24.

A DECLARATION HOVV

you shall sayle forth through the Belt to Femeren, and along by the Coasts of Holst, Mechelenburgh and Pomerland: Also the situation of Laland, Falster, Borneholme, and the places lying there abouts.

I.

The situation of the Golversond, of Laland, Falster, and Meun so farre as to Steden.

THe Iland of Langheland is about eight leagues long, and reacheth south and north, there east against it lyeth the Golversond, which reacheth in north from Laland, and reacheth all up to Nestvelt, and Wordenburgh, and commeth into the Greensond, and in that Wolf-chanel or Wolve-gat goeth into the East-sea againe. Before Golversond there lye three Ilands: the one called Wedero, which lyeth at the point of Laland, and is fast to it by a Sand, so that you may not sayle through betweene them, there northward you goe into Golversond, leaving it on starborde. The other two lye north from the said Iland of Wedero: the first whereof is called Arnis, and the other Ooms. Ooms is a litle plaine Iland, but Arnis is the greatest, it lyeth neerest Zeland, and is full of trees. From the Iland Ooms a Sand stretcheth off southwest to seaward, which is at least a league long, and at the ende flat, that you may runne over with the lead, and when you will sayle into Golversond you must let these two Ilands lye on baghborde of you. The Iland Laland at the west point, over against the south ende of Langheland hath a Sand or Hooke, which reacheth off from Laland half over the Belt: to shunne it, you must runne along a quarter of a league east from Langheland: or if you leave two third parts of the water on Lalands side, and the other third part on Langhelands side, then also you shall not sayle upon it. When you come out of the south and will goe into the Belt, and that then the steeple of Mascou, which standeth upon Laland, commeth to be northeast and by east from you, then you are past that sand, and it lyeth south from you. In this chanel betweene Laland and the south ende of Langheland it is sixe & seven fathome deepe.

To sayle into Golversond.

The Sand of Laland.

Markes of Lalands Riffe or Sand.

From the south ende of Langheland to Femeren the course is southeast and by east seven leagues.

Now when you come off from Langheland, and have past the Sand or Hooke of Laland, the South coast of Laland reacheth there east and west. There lyeth a long Sand along, which is called the Redde-sand, and reacheth out till it commeth before Golversond, which runneth in betweene Laland and Gester. North from this Sand there is a Rode of sixteene and eighteene foot water, before the townes of Aelholme and Robuy, where you may lade nuttes and barley.

Tha Redsand.

Aelholme. Robuy.

Betweene Laland and Gester against this Redde sand (as I said) the Golversond goeth in, you may there goe into it, and come out againe into the Belt: but in this chanel there is small depth, for there lyeth a stone-bancke within crosse over the chanel: in it there lyeth a towne called Nicopen, which lyeth upon the Iland of Falster a league within Gester.

Nicopen.

From Gester Gester-sand shooteth off, at least two leagues into the Sea, it is a drie Sand. East from Gester-sand lyeth an Iland called Bout, and there it is all flat or shallowe water at 3 or 4 fathome.

Gester-sand.

Bout.

East from Bout Gronesond goeth in, it goeth there through the land, by the towne of Stuybekuyp, and commeth north by Laland againe into the Belt. Gronesond reacheth in about west and west and by north at three fathome, there lyeth a Sand on the left hand of the haven, called the Tolck, which you must shunne, you must there goe in east, you may goe in by the land of Meun, at fourteene or sixteene foot water, the said towne of Stuybekuyp

Grønesond. Stuybekuyp. Tolck.


Friſſe Haff
Gryps-wolde
Wolgaſt
Nollum
Swin
Ysedum
t'Swin
t'Nieuwe diep
Wineta
Ruige eijlant
Meſonde
Rostwick
Oudtfaer
Jermunde
Barts
Robbenes
RUGHEN
INSULA
t'Peert
Kesmont
Wismont
De ſelle
Wilsmer
Breeckhooch
Poel lant
Cleijn Crus Oort
Groot crus Oort
Termunde
Lubec
Olde haven
Sismer
Grempe
Rentzum
Holſter lant
Oldenborg
Heijligerhaven
Nyehuijs
Rantzou
Femeren
Tegers horn
De Colberger Heyde
Kiel
Boke
Ckelenfort
Nutte
SLEES.
Gottorp
Gaſſel
Grauholt
Sleſwijck
WYCK
Indor
Flensborg
Caplen
Nibel
Radoſter
Nubel
Segard
Kalcgrondt
Likerck
Apenrade
Pools Rif
Alſen
Noortborg
Laisapel
Lindelse
Lant Kutkopen
Olms
Munck
Aelse
Foert
Oſthÿ
Bever
Hadders low
Aroe
Vlbert
Swijnbirg
I. Knol
Aldborgh
Gaſter Rif
Roode Sant
Melholm
Roolvijn
Saſcopeng
Maribergh
Hilke ofte Rif
Maſchou
Nieuheng
Stubkoping
Falſter Insul
Deutolck
Groenſont
Stich
Meun inſula
Curſant
Wolve gat
Werdenborgh
Nyeualde
Steden
Vedero
Arys
Oxe
Scheuſſer
ZEELANDIÆ
PARS
LA
LANDT
Gelbesſont
Brouwers Rif
Hamelhuys
Naſel
Nex
Rottum
Born
Suanex holm
Santwijck
Stoe
Eertholms
t'Rif ve Veſterhen
Bleicken
Dvelhoogh
Veſterhen
Beſchrÿvinghe vant zuyder deel vande Belt, en hoe men de Cuſten van Mekelaborch Pomeren, met de Landen daer tegen over tuſſchen Femeren en Bornholm gelegher beſeylen, en alle Revē en Sanden daer ontrent ſchouwen ſal.
Deſcription de la partie meridionale de la Belt, comment qu'on doibt mariner les coſtes de Mekelenbourgh, Pomere et les pais la viz a viz ſituez entre Femere et Bornholm, et eviter tous bancs de ſable et dangiers la environ.
24

Stuybekuyp lyeth about a league inward.

Meun. From Geſterſand to Meun the courſe is northnortheaſt eight leagues, but from Bout to Meun it is northeaſt about ſeven leagues.

Rode under Meun. From Golverſond to Meun the land lyeth in a Creeke, there you anckor ſafe againſt a northeaſt, north, northweſt and weſt windes at five or ſixe fathome. If you come out of the Sond and will goe ſouth from Meun, you may goe as neare Meun as you will, and looſe weſtward up by the point, and anckor where you will at 5 or 6 fathome.

On the north ſide of Meun you may alſo anckor at ſixe fathome, behinde a Sand which ſhooteth off from the northpoint, againſt an eaſt, ſouth, ſouthweſt, and weſt windes, it is there all flatte and good ground.

Steden. From Meun to Steden it is northweſt and by north four leagues. Betweene them both the Wolfſond, or the Wolf chanel goeth in, it runneth by Werdenburgh and Neſtvelt, and through the Golverſond out at the Belt.

Wolfs chanel.

II.

To ſayle from Melverſond out of the Aelſe to Langheland.

MElverſond and the Iland of Areu are diſtant ſouthſoutheaſt and northnorthweſt as I ſaid in the Chapter before.

To ſayle from Areu to Melverſond out of the chanel of Aelſche, then goe from Areu or Toreu to Roen eaſt and by ſouth above two leagues, and ſo forth betweene the Iland and Fuynen, that is north along by the Roen, for you can not goe ſouth by it. The Roen is a badde ſhallowe Sand, which ſhooteth off from Aelſen, where it is faſt, and the outtermoſt ende lyeth drie, as if it were Anoulter Sand.

The Roen.

From Roen to Arr or Copingh the courſe is ſoutheaſt and by eaſt five leagues.

From the ſoutheaſt ende of Aelſt there ſhooteth off a great Sand to Arr, which is called the Poelſche Sand, you muſt runne betweene Arr and the Sand, and leave two parts of the water on the Aelſche ſide, and one part towards Arr, and runne ſo upon the ſouth ende of Langheland, untill you come againſt Copen.

Poelſche Sand.

From Arr to the ſouthende of Langheland the courſe is ſoutheaſt and by eaſt, and ſouthſoutheaſt four leagues, and from the Poelſche ſand to the ſouth ende of Langheland the courſe is weſt and by ſouth ſeven leagues.

You may runne through betweene Langheland and Arr north about and come into the Belt againe by Nyburgh. From the ſouth ende of Langheland to Taſſing it is north and by weſt ſeven leagues. You may ſayle about Taſſing on both ſides, and leave Arre and the foule grounds ſidewaies from you, upon the grounds it is no deeper then ſixe fathome.

The ſituation of Taſſingh.

Betweene the ſaid grounds and Fuynen you may alſo runne forward into the Aelſche chanel, to the Ilands of Areu and Toreu, as I ſaid in the Chapter before.

III.

The ſituation from Areu off to Apenrade, Flenſburgh, and ſo to Femeren.

FRom the Ile of Areu to Apenrade the courſe is ſouthſouthweſt five leagues: the chanel or haven of Apenrade is an open wide chanel, and thereon lyeth the aforeſaid towne of Apenrade.

Apenrade chanel.

From the River of Apenrade to the crooking of Sonderburgh, which goeth in betweene the Iland Aelſen and the firme land, the courſe is eaſt two great leagues: there you may ſayle through behinde the Iland of Aelſen about to Sonderburgh, & ſo into the haven of Flenſburgh.

Betweene the Iland and the firme land it is verie narrowe & crooked, but when you are through the narrowe and crooked waie, into the chanel of Flenſburgh, then it is wider and broader.

The chanel of Flensburgh goeth in betweene Sonderburgh and Holſterland, it is a wide chanel, if you will ſayle into this chanel, you muſt take good heede of the Holſter ſide, when you beginne to come betweene both the lands, and runne in along by the land of Aelſt, for from Nubel or Holſterland the Chalck grounds reach half over the chanel. This chanel reacheth weſt and by ſouth, till you come before the River. Before upon the River there lyeth an Iland, on the right hand, there you muſt goe in eaſt, and runne weſt and by ſouth, and weſt, till you come within the crooking of the River, and then you muſt goe ſouth up againe, then you may ſee the towne of Flenſburgh lye before you.

Flẽſburgh chanel.

Chalck grounds.

South from the chanel of Flenſburgh there lye three Rivers or chanels more, where great ſhippes may goe in, that is, the

Sleye, Nilhofvoert, and the Kiel: from Flensburgh to the Kiel, the land reacheth ſ. ſ. e, and ſomewhat eaſterlyer 7 leagues.

The Sleye. From Sonderburgh to the Sleye the courſe is ſ. e. and by e. 4 leagues. This is a deepe & wide chanel, firſt reaching in about weſt, and when you are within, then it runneth by Sleeſwick about ſ. e. and by w.: there alſo come manie great ſhips out, the towne of Gottorp alſo lyeth upon this River.

Sleeſwick. Gottorp.

Nilhofvoert. Between the Sleye and the Kiel lyeth Nihofvoert, and upon it there lyeth a towne called Eckelenford.

Kill haven The Haven of Kiel is a great wide haven, it reacheth in about ſ. e. a great ſhip may goe into it.

Femeren. From Kiel to the weſt ende of Femeren it is e. n. e. eight leagues.

Colberger Heyde. From the Poelſche ſand to Femeren over Colbergher Heyde, the courſe is e. ſ. e. 13 or 15 leagues, but from the ſouth ende of Langheſand, it is ſ. e. and by e. ſeven leagues.

The chanel betweene Femeren and Laland is 5 or 6 fathome deepe.

You may ſayle round about Femeren, there it is flat ground, you may runne through betweene Femeren and Holſterland, at

Heyliger haven. 8 or 10 foot water, there lyeth a towne called Heyligher Haven, where you may ancker with flat bottomed ſhips, to lade wheat or barley.

IIII.

To ſayle from Femeren to Lubeck, and ſo forth along the Coaſt from Mekelenburgh to the Ielle.

Trave of Lubeck. FRom the Iland of Femeren to Geſter Sand the courſe is e. and by n. about 11 leagues, but from Femeren to the Trave of Lubeck it is ſ. ſ. w. eleven leagues. There goeth in a good chanel for great ſhips, and it is 12 foot deepe upon the banck. There is alſo a great Creeke & a good Haven, where you may lye ſafe againſt al windes, except a n. e. & a n.n.e. winde.

From the Trave of Lubeck to Geſter ſand, the courſe is n. e. and ſ. w. about 19 leagues.

From the Trave of Lubeck to Wiſmar haven the courſe is firſt n. e. and by e. and then e. n. e. there goeth in a good chanel for all kinde of ſhips.

To ſayle into Wiſmar haven. To ſayle into Wiſmare haven, place the ſteeple which ſtandeth upon the ſouth land ſouth from you, and ſo ſayle in, untill the ſteeple ſtanding on the eaſt land by the eaſterly houſe be againſt five or ſixe houſes, and by thoſe houſes ſtand ſome trees together, from the eaſt ende there commeth a Sand ſhooting off, and reacheth n. w. & by n. off from the eaſt land, and when the ſteeple commeth upon the houſes, then goe in ſ. ſ. e, and in that deepe it is 12 foot water. In the Somer there lye two tõnes in the chanel: the one upon the point of the Sand, which commeth ſhooting off from the eaſt land, and the other upon the the flat ground, & you muſt runne in through them both. This Wiſmare haven lyeth diſtant from Femeren ſouth and by eaſt about 7 or 8 leagues, but from Wiſmare to Geſter ſand the courſe is n. n. e. 12 or 13 leagues.

Roſtock. About ſouth from Geſter ſand lyeth Roſtock, and there alſo goeth in a faire haven of tenne foot deepe, but it is verie flat on both ſides, you may uſe it on both ſides with the lead. Wiſmaer and Roſtock are diſtant about 8 or 9 leagues.

Robbenes A litle eaſt from Roſtock lyeth a high land called Robbenes, from it there reacheth off a great Sand or flat to the Seaward, toward Geſter ſand: betweene Geſter ſand and this Sand it is no deeper then 12 or 13 fathome: if you goe neareſt to Geſter ſand, then it is preſently drie: but if you goe neareſt to this Sand, then it is ſometimes drier. Geſter ſand as I ſaid before is a drie Sand, and runneth at leaſt two leagues into the Sea.

Berts. Right eaſt from this Sand aforeſaid lyeth Berts. There goeth in a chanel of ſixe foot deepe, and on the weſt point there reacheth off a Sand, which you muſt ſhunne.

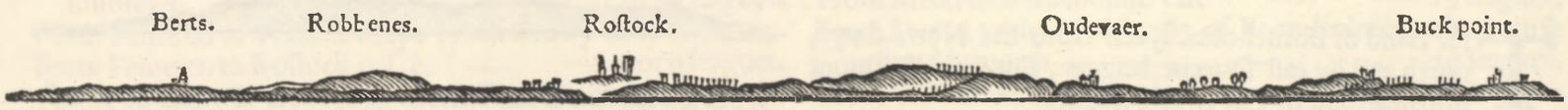
To ſayle into the Ielle. Three or four leagues eaſt from Berts the Ielle goeth in, at eight or tenne foot deepe, there you may goe into Meſond or Straelſond, and going into it you may ſee the ſteeple of Meſond lying before you, within it is 12 and 14 foot deepe, altogether flat water.

When you ſayle to Lubeck, betweene the land of Cruyſoort and Holſterland, it ſheweth thus on both ſides.



Thus

Thus the Coaſt of Mekelenburgh, ſheweth betweene Cruyſoort and Dornebos or the Ielle, when you ſayle along by it a league from the land.



V.

The ſituation of Dornbos, Witmont, Iaſmont, the Peert and Newe deepe.

Thornebush. THe point of Dornbos lyeth from Ielle north & by weſt a league and an half: under it you may ancker & lye ſafe againſt a northeaſt and ſouthweſt winde.

Witmont. From Dornebos to Witmont the courſe is northeaſt and by eaſt four leagues. Betweene Dornebos and Witmont there goeth in a great Creeke, you may there runne into it along by Witmont, and there anckor at five or ſixe fathome, ſafe againſt a ſouthweſt and eaſt winde.

Iaſmont. From Witmont to Iaſmont the courſe is eaſtſoutheaſt two great leagues. Betweene Witmont and Iaſmont you may alſo ancker, there alſo is a good Rode, at ſeven or eight fathome, there you may lye ſafe againſt a weſt and ſouth winde, but further from the land, at tenne or twelve fathome there is foule ground.

The Peert. From Iaſmont to the Peert the courſe is ſ. ſ. e. two leagues. Betweene Iaſmont and the Peert one may ride it againſt a weſt, ſouthweſt, and ſouth winde, it is there all over faire ground.

The Peert, (which is alſo called the Great Bocke upon Iaſmont is a heape or two of trees, and it is an out-point with two points or endes, and there betweene them is a brave Sandbaye, where it is good lying at four five fathome faire ground.

To ſayle into the Newe deepe. A league ſouth from the Peert the Newe Deepe goeth in, right within the point there lyeth a foule ground under the water, and ſomewhat inwards to the ſoutherlyeſt point lyeth a drie Sand. To ſayle into the Newe Deepe, holde the two points one over the other, that is the Peert on the ſouththerlyeſt point, and hold it ſo ſtanding, and ſo you ſhall ſayle right upon the firſt tonne: ſince theſe former yeeres there have three tonnes beene layed in the middle of the faire water, ſouthſouthweſt and northnortheaſt from each other. From the third tonne to the beacon that ſtandeth upon the ende of the Sand that ſhooteth off from the Roeden the courſe is ſoutheaſt, by it you may goe about, and anckor behinde the Iland at five or ſixe fathome. Or if you will goe quite within, then runne upon the point of Gripſwolde, and thereby you may then turne up weſtwards to Meſond, or eaſtwards to Stetin. That chanel is about twelve foot deepe, and within it is all flat, and for the moſt part two or three fathome till you be before the towne of Meſond or Straelſond. There lyeth an Iland, and there is the Veer to ſet over upon the land of Ruyghen. The towne of Gripſwold lyeth in the entrie right before you in the River. To Meſond and Stetin. Gripſwold

The Coaſt of Pomeren reacheth from the Newe Deepe to Colsberghen eaſt and by north, and eaſtnortheaſt 16 or 17 leagues.

But betweene Colsberghen and the Newe Deepe, there lye two Havens more: firſt the Swin lying from the Newe Deepe ſeven leagues, it runneth through with a River, up to Haf, right over againſt the River of Stetin. Swin.

From the Swin to Camin it is eaſtnortheaſt five leagues: Camin lyeth upon the eaſt ende of the Stetynſche Haf and goeth alſo with a River to Haf. Camin.

Thus Witmont ſheweth when you ſayle by it being two leagues from the land.



Thus Iaſmond ſheweth when you ſayle by it, being two leagues from the land.



The

VI.

The ſituation of the Iland of Borneholme and of the Ertholmes.

THe Iland of Borneholme lyeth from the Newe-deepe, north and by eaſt ſixteene leagues, but from Witmont northeaſt and by eaſt twelve leagues.

From Valſterbon to ſayle north about Borneholme it is eaſt and by north nineteene leagues: but from Valſterbon to ſayle ſouth about it is eaſt and by ſouth one-and-twentie or two-and twentie leagues.

Borneholme. Borneholme is an Iland which is round about faire, and one may ſound it round about at twelve and thirteene fathome, and on the ſouthweſt ſide at eight or nine fathome, without anie daunger: But on the ſoutheaſt ende there lyeth a Sand called Brouwers ſand, which you muſt ſhunne. You may anckor round about Bornholme, as before Rottum, Nex, Swanex and Santwick.

Rottum. Betweene Rottum and the caſtle which ſtandeth upon the northweſt point, you may anckor at thirteene fathome, and there you lye ſafe againſt a northeaſt winde. You may alſo anckor under the caſtle at eighteene or twentie fathome, but the nearer to the land the fouler ground.

Under the northweſt point before Santwick, there alſo it is good anckoring for a ſouthweſt winde, and you may goe boldly neare to the point. From the northweſt point to the other point, the land reacheth eaſtſoutheaſt and weſtnorthweſt.

Suanex & Nex. On the eaſt ſide of Borneholme it is good anckoring before Swanex and Nex, but by Nex it is not verie faire. By Nex there ſhooteth off a Sand from the land, which on both ſides is ſhoring, but at tenne fathome you can not miſcarie: there lyeth alſo a rock north from Nex.

If you will anckor before Nex, you muſt ſet the flat ſteeple, which ſtandeth above Nex betweene weſt and weſt & by ſouth from you, and let the north point be north and by weſt, and the ſouth point ſouthſouthweſt from you, there it is about two-and twentie fathome deepe, and it is there faire ſand-ground, for in manie places it is nothing but ſtonie and gravelie ground, there you lye ſafe againſt a ſouthweſt winde.

Eertſholmes. From the ſoutheaſt point of Borneholme to Ertholmes it is north and by eaſt five leagues, but from the northweſt point to Ertholmes it is eaſtnortheaſt four leagues. In the Ertholmes it is a faire haven, but becauſe it is not uſed, it is unknowne.

Thus Borneholme ſheweth when you come out of the weſt.



When Eertſholmes is northnortheaſt from you, it ſheweth thus.



When Eertſholme is eaſt from you it ſheweth thus.



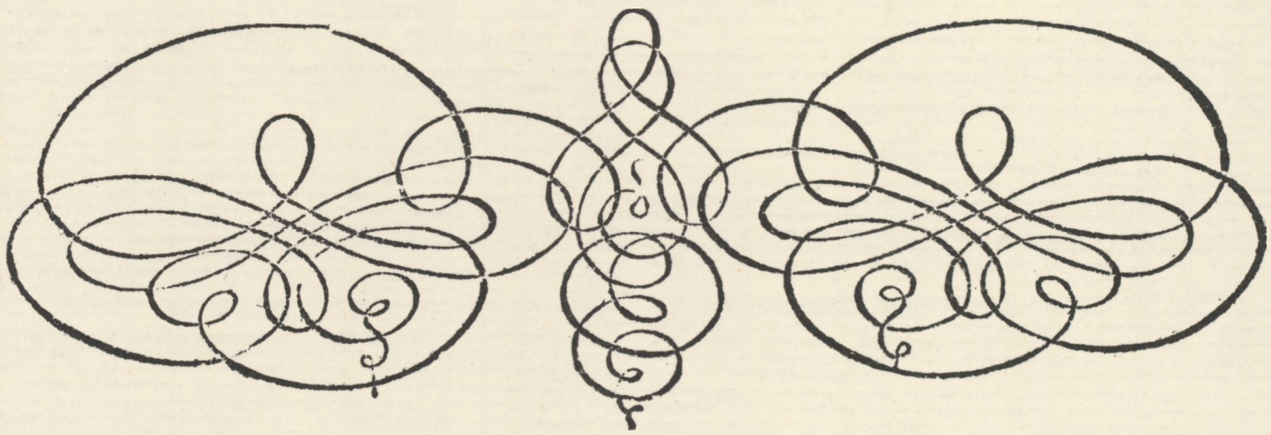
VII.

At what reaching and diſtance theſe places aforeſaid are diſtant each from other.

FRom the North ende of Langheland to the South ende the courſe is ſouth — — — 8 leagues.
From the South ende of Langheland to Femeren ſoutheaſt and by eaſt — — — — 7 or 8 leagues.
From Femeren to Geſter ſand e. and by n. — 9 leagues.
From Geſter ſand to Meun n. n. e. — — 8 leagues.
From Geſter to Meun northeaſt — — — 7 leagues.
From Meun to Steden northweſt and by north — 4 leagues.
From Meun to Falſterboen n. and by e. — — 5 leagues.
From the Iland of Areu to the Roen e. and by ſ. — 3 leagues.
From Roen to Arr or Copingh ſ. e. and by e. — 5 leagues.
From Arr to the ſouth ende of Langheland ſoutheaſt & by eaſt and ſomewhat eaſterlyer — — — 4 leagues.
From Areu to Apenrade ſ. ſ. w. — — — 5 leagues.
From the River of Apenrade to the Strait of Sonderborgh eaſt more then — — — — — 2 leagues.
From Sonderburgh to the Sleye ſ. e. and by e. — 4 leagues.
From the Sley to the Kiel ſoutheaſt — — 4 leagues.
From Kiel to Femeren eaſt and by north — — 8 leagues.
From Femeren to the Trave of Lubeck ſ. ſ. w. 9 or 10 leagues.
From the Trave of Lubeck to Wiſmer haven firſt northeaſt and by north, and then eaſtnortheaſt — — 9 leagues.
From Roſtock to Robbeneſſe northeaſt — — 5 leagues.
From Robbeneſſe to Thornebuſh n. e. and by e. — 7 leagues.
From Thornebuſh to Witmont n. e. and by e. — 4 leagnes.
From Witmont to Iaſmont eaſtſoutheaſt — 2 leagues.

From

From Iaſmont to the Peert ſ. ſ. e. — — 3 leagues.
From Iaſmont to Camin eaſtſoutheaſt — — 19 leagues.
From the Poolſche ſand on the Iland of Aelſt to Femeren eaſtſoutheaſt — — — — 13 or 14 leagues.
From Femeren to Wiſmar deepe ſouth and by eaſt 7 leagues.
From Femeren to Roſtock e. ſ. e. — — 8 or 9 leagues.
From the Trave of Lubeck to Geſtir ſand the courſe is northeaſt and ſouthweſt about — — — 19 leagues.
From Wiſmar to Geſtir ſand n. n. e. — 12 or 13 leagues.
From Roſtock to Geſtir ſand north — — 7 or 8 leagues.
From Geſtir ſand to Dorneboſch eaſt — — 9 leagnes.
From Dorneboſch to Meun northweſt — 9 leagues.
From Dornebuſch to Bornholme northeaſt and northeaſt and by eaſt — — — — — 16 leagues.
From Witmond to Borneholme northeaſt — 13 leagues.
From the Newe deepe to Borneholme north and by eaſt — — — — — — 16 or 17 leagues.
From Meun to Borneholme eaſt — — 19 leagues.
From Steden to the north ende of Borneholme is the courſe eaſt and by north — — — — 20 leagues.
From Valſterboen or from the ſand north from Borneholme about, the courſe is eaſt and by north — — 19 leagues.
From Valſterbon or from the ſand ſouth from Borneholme about, the courſe is eaſt and by ſouth — 21 leagues.
From Valſterbon to Iaſmont ſoutheaſt — 16 or 17 leagues.
How all the reſt of the points and Ilands in the eaſt Sea are diſtant from Borneholme, that ſhall you finde deſcribed in the next Chapter following.



Heere followeth the Carde N. 25.

THE DESCRIPTION OF

the Sea-coaſts of Pomerland and Pruſia, from Colberghen to Memle.

I.

The ſituation betweene Colberghen and Righſhooft.

THe Newe deepe and Colberghen (as I ſaid in the former Chapter) lye diſtant eaſt and north, and eaſtnortheaſt ſixteene or ſeventeene leagues.

Colberghen. You muſt ſayle into the Haven of Colberghen betweene two Heads, cloſe before the towne. Within the River of Colberghen, right over againſt the towne there lyeth a Pit or Well, which yeeldeth ſalt to all the Countreyes there abouts, but they muſt ſeeth it, yet the water of the River is as freſh as milk, for it is an out-water.

Garshooft The Coaſt of Pomerland reacheth from Colberghen to Garſhooft northeaſt and by north about thirteene leagues, but betweene them both there lye two Havens called Coſlyn and Ruwold.

Coſlyn. The haven of Coſlyn lyeth diſtant from Colberghen northeaſt four leagues. And from Coſlyn to Ruwold the courſe is

Ruwold. northnortheaſt five leagues. In Ruwold Haven, or in the River called Wipper a good ſhippe may well goe in, for there come manie Craers out. From Ruwold to Garſhooft it is northnortheaſt four leagues.

The land from Garſhooft to Righſhooft reacheth eaſtnortheaſt nineteene or twentie leagues: betweene them there lye the Havens of Stolp, Lyba and Serneviſes.

Stolp. Right eaſt from Garſhooft lyeth Stolp haven, which is a River called by the name of the towne, which runneth unto the ſaid towne, it is a River for ſmall ſhippes, although ſome reaſonable great ſhippes lade there.

From Garſhooft to Reefcole it is all white ſtrand, lying diſtant eaſt four leagues. Reefcol is a high round Hill, whereby you knowe the land when you goe from Borneholme. From Reefcol to Lyba it is ſeven leagues.

Lyba lyeth upon a great River called the Oſſe. From Lyba Lyba.
to Serneviſſe or Serneſſe it is five leagues. Betweene them both
there lye the three Wolſackes, which are three black ſtumpes Wolſackes
of trees, by the which this Land is well knowne, and right eaſt from thoſe three hillockes there lyeth a long Hill, which when you come out of the weſt, and are at the weſt ende of it ſheweth as if it were divided into three or four hillocks. After that followeth the high land of Righſhooft, which is verie ſhoring on the water ſide. Betweene Righſhooft and Reefcol it is a white ſtrand, and for the moſt part full of trees.

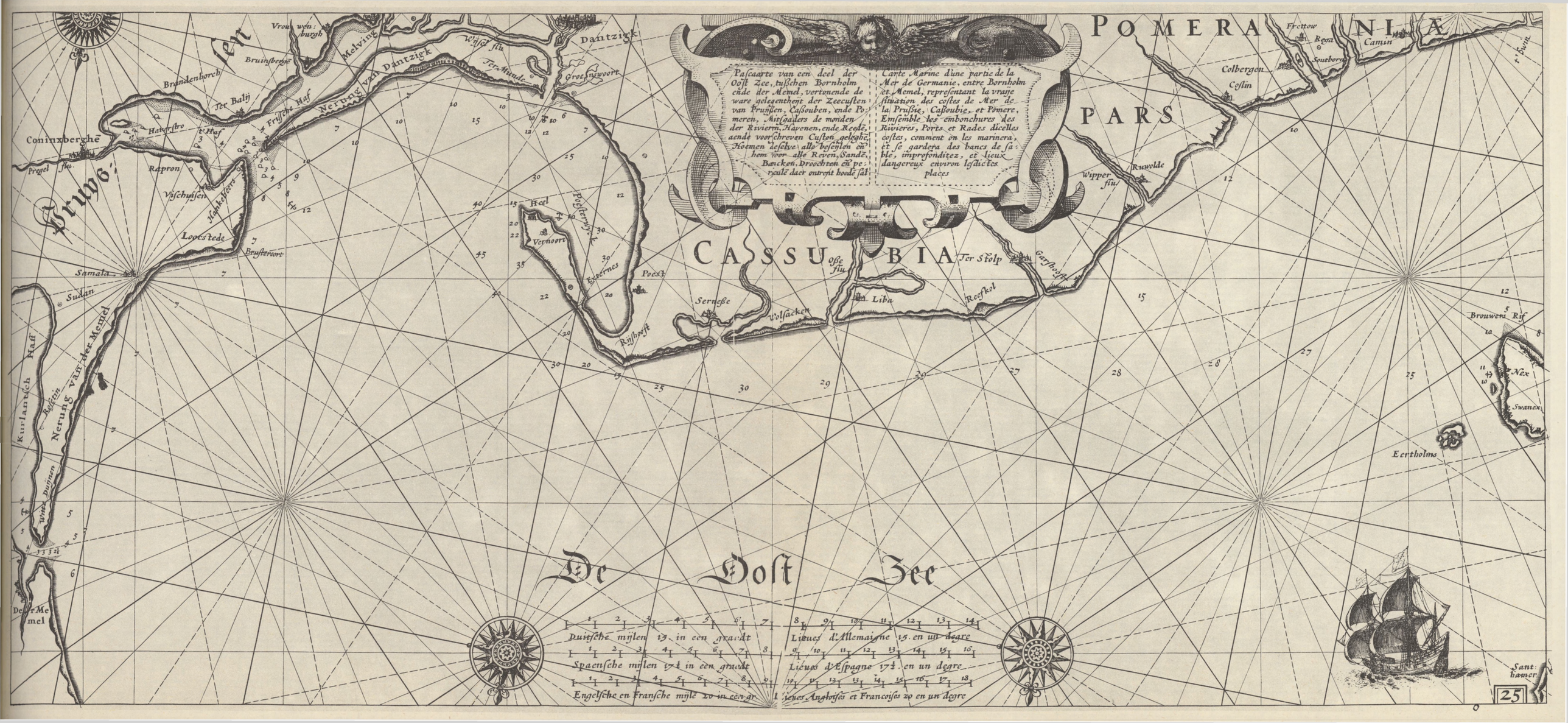
Serneſſe or Serneviſſe is a towne lying upon an out-water, Serneviſſe.
which with a River rũneth into the Sea, but within it divideth it ſelf into a great water. From Serneveſſe to Righſhooft it is four leagues.

You may ſound about Righſhooft ſufficiently at fiveteene or Righſ-
twentie fathome: You may alſo anckor under Righſhooft, for hooft.
there it is better ground then under Heel. All Pomerland along by the Sea-coaſt ſheweth black with trees that ſtand upon it.

Thus the land of Pomerland ſheweth betweene Colsberghen and the Stolp, when you ſayle along by it two leagues from the land.



Thus



Pascaarte van een deel der Oost Zee, tusschen Bornholm ende der Memel, vertonende de ware gelegentheyt der Zeecusten van Pruyssen, Cassouben, ende Pomeren, Mitsgaders de monden der Rivieren, Havenen, ende Reede, aende voorschreven Custen geleghe, Hoemen deselve alle beseylen en hem voor alle Reven, Sande, Bancken, Droochten en pericule daer ontrent hoede sal
Carte Marine d'une partie de la Mer de Germanie, entre Bornholm et Memel, representant la vraye situation des costes de Mer de la Prussie, Cassoubie, et Pomere, Ensemble les embonchures des Rivieres, Ports et Rades d'icelles costes, comment on les marinera, et se gardera des bancs de sable, improfonditez, et lieux dangereux environ lesdictes places
POMERANIÆ PARS
CASSUBIA
Pruyssen
Dantzigk
Melving
Nerung van Dantzigk
Groenswoort
Ter Munde
Wijsel flu
Brandenborch
Ter Balij
Frissche Haf
Coninxberghe
Pregel flu
Rapron
Vischuisen
Hankelsers
Lootstede
Brustercort
Samala
Sudan
Kurlantsch Haff
Nerung van der Memel
Witte Duynen
Der Memel
Heel
Vernoort
Poesterwyck
Externes
Poest
Rijshoeft
Serneße
Wolsacken
Oße flu
Liba
Reefkol
Ter Stolp
Garshoeft
Wipper flu
Ruwolde
Colbergen
Coslin
Frettow
Rega
Soutborn
Camin
Brouwers Rif
Nex
Swanex
Eertholms
Sant: hamer
De Oost Zee
Duitsche mijlen 15. in een graedt
Lieues d'Allemaigne 15. en un degre
Spaensche mijlen 17½ in een graedt
Lieues d'Espagne 17½. en un degre
Engelsche en Fransche mijle 20 in een gr
Lieues Angloises et Francoises 20 en un degre
25

Thus the land ſheweth betweene Reefcol and Righſhooft when you ſayle along, about three leagues from the land.



II.

To ſayle from Righſhooft to Danſick.

Heel.

FRom Righſhooft to Heel the courſe is ſoutheaſt eight or nine leagues: when you come neare Heel, then you are preſently deepe thirtie fathome, and the Coaſt of Heel cloſe by the land is 24 and 30 fathome.

Rode under Heel.

You may anckor under Heel at ſixteene & twentie fathome cloſe by the land, there it is a verie ſloping ground, when you are a litle from the land, then you finde no ground, for without the land you have no ground at fortie fathome. A league north from Heel there runneth a flat off from the land, whereof you muſt take heede. When you will anckor before Heel, you may anckor on both ſides of Heel, but on the inner ſide it is ſoft ground.

From Heel to Danſick before the Wiſſel the courſe is ſouth and by weſt five leagues. If you will anckor before Wyſel then anckor weſt from the Kiſten or the Weſt head at tẽne or twelve fathome. To anckor before Wiſel.

To ſayle into the Weſel.

But to ſayle into the Weſel or the Haven of Danske, then take heede to the two maſtes, whereon there ſtand two barrels, which ſtand upon the Kiſten or the Weſt head, place them one againſt the other, and ſayle up upon them, and goe in betweene the two Heads, but when you are within Termunde, then chuſe the eaſt ſide, for the weſt ſide is flatte, and when you come before Boteſmans flat, then goe on Groenſwoort ſide, and there make your ſhippe faſt with four cables or ropes. Weſel chanel was wonte to runne in by the eaſt ſide, but that is wholly ſtopt and ſpoyled.

Thus the land ſheweth betweene Righſhooft and Heel.



III.

To ſayle to Conincxberghen and Memle.

FRom Weſel to Conincxberghen Haven the courſe is eaſtnortheaſt, and northeaſt and by eaſt thirteene leagues: but from Righſhooft to Conincxberghen haven it is eaſt and by ſouth ſeventeene or eighteene leagues: and from Heel it is diſtant thirteene leagues eaſt and weſt. It is altogether faire white ſtrand, and on both ſides of the Haven there ſtand drie trees as if they were burnt, and on the weſt ſide there ſtand two beacons, which you muſt place one againſt the other, and ſayling up upon them then you finde the tonnes: the tonnes lye on both ſides of the chanel, and you muſt ſayle in betweene the tonnes, untill you come within the Ketle, there you may lye in the winde at three and four fathome, then you come into a great Haf or Haven, which goeth up eaſtward to Conincxberghen, and ſoutheaſt to Melvin and Brunsberghen. Melvin. Brunsberghen.

To ſayle into Coninexberghen haven.

The two Havens aforeſaid of Danske and Coninckſberghen commonly alter everie yeere, by meanes of the ſtreames of the out-waters, and the great force of the flackes of yce, ſo that I can not well write of the ſtretching of them of anie certaintie, but the Governours of the land have great care thereof, ſo that they cauſe them to be continually well marked and beaconed.

Four leagues north and north and by weſt from Coninkſberghen lyeth the point of Loocſteede, or Bruſteroort. Lockſtede

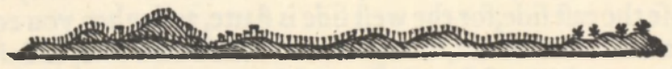
There ſtandeth a caſtle with a church by it, not farre from

each other, and there alſo there are two high hillocks, and there it is all full of trees.

If you will anckor before Conincxberghen chanel or haven, you muſt place the point of Lockſtede north and by eaſt from you, and there it will be eight or nine fathome deepe.

The Memle. From the point of Lookſtede to the haven of Memle n. n. e. 16 or 17 leagues: there betweene them both it is altogether a faire ſtrand, & there the land lyeth in a great bought or creeke. The haven of Memle reacheth in n. e. and n. e. and by e. and it is two fathome deepe, being within it you goe into a great haven or water, and weſtward up about the point you may anckor where you will.

Thus the land ſheweth betweene Conincxberghen deepe and Lockeſtede.



IIII.

Of the Depths and ſhallowes lying in theſe Chanels.

SWin lyeth about ſouth from Borneholme, and in the chanel betweene them both, when you may ſee Borneholme it is 26 fathome deepe, and when you may plainly ſee the Swyn, there it is 7 and 8 fathome deepe, but when you cannot diſcerne the land it is 12 or 13 fathome deepe, for there along by the Pomerſche coaſt it is al flat, & that moſt betweene Newe deepe and Garſhooft, but towards Reefcol, Ryſhooft, and Heel it is 20, and 22, and 25 fathome deepe by the Coaſt.

About 7 or 8 leagues ſouthweſt and by ſouth from Borneholme there lyeth a banck, which is no deeper then five fathome.

This banck reacheth northweſt and ſoutheaſt, and in this haven there lye more bancks, ſome of 6, 7, 8, 9, and alſo 10, 11, 12 and 13 fathome.

From Colsberghen to Garſhooft it is altogether an even and flatte ſtrand without bankes.

In the chanel betweene Borneholme and Reefcol, it is 27 & 28 fathome deepe.

About four leagues from the land, northweſt from Reefcol there lyeth a banck of nine fathome, and if you uſe your lead til you come to Righſhooft, you ſhall then finde more bankes then are ſpoken of here.

When Righſhooft is ſ. ſ. w. from you about a league there it is 30 fathome deepe, and there it is altogether uneven and bankie, and the ground is white great ſand.

When Righſhooft is weſt from you, there it is 16 fathome deepe, and the ground is white ſand.

When Righſhooft lyeth ſoutheaſt from you, then you have 28 fathome deepe, with redde ſtonie ground, as if it were bankie ſand.

Betweene Heel and Righſhooft, but neareſt to Heel, there it is 33 fathome deepe, and there the ground is white ſand.

At Heel in the Rode it is 25 fathome deepe: the ground is verie ſloping to 30 and 40 fathome, it is black ſand.

Betweene Heel and Conincxberghen it is verie deepe, comming againſt Heel it is ſhoring, but to Conincxberghen and the Nerungh it goeth naturally and flat up.

Betweene Lockeſtede and Sevenberghen in Coerland it is all flat riſing ground, and there you may ſee the land at 30 and 32 fathome.

V.

How theſe Lands and Places in their reaches and diſtances are ſituate from each other.

FRom Camin to Colsberghen the courſe is northeaſt and by eaſt — — — — 4 legues.
From Colsberghen to Caſtlyn northeaſt — 4 leagues.
From Caſlyn to Ruwold n. n. e. — — — 5 leagues.
From Ruwold to Garſhooft n. n. e. — — 4 leagues.
From Garſhooft to Reefcol n. e. and by e. — 4 leagues.
From Reefcol to Liba e. n. e. — — — 7 leagues.
From Liba to Serneviſſe e. n. e. — — 5 leagues.
From Serneviſſe to Righſhooft eaſtnortheaſt — 4 leagues.
From Righſhooft to Axternes ſoutheaſt — — 4 leagues.
From Axternes to Vernorden ſoutheaſt more then a league.
From Vernorden to Heel n. n. w. and ſ. ſ. e. above a league.
From Heel to Danſke ſ. and by w. — — 5 leagues.
From the Heads of Danske to Conincxberghen haven e. n. e. and n. e. and by e. — — — 13 leagues.
From Conincxberghen haven to Lockſtede north and north & by weſt — — — — — 4 leagues.
From Lockſtede to Memle n. n. e. — 16 or 17 leagues.

From

From Colsberghen to Garſhooft n. e. and by n. — 13 leagues.
From Reefcol to Righſhooft e. n. e. — — 16 leagues.
From Righſhooft to Conincxberghen haven eaſt and by ſouth — — — — — — — 17 leagues.
From Righſhooft to Memle northeaſt & by eaſt — 29 leagues.
From the ſouth ende of Borneholme to the Swin ſ. 13 leagues.
From the ſouth ende of Borneholme to Colsberghen ſoutheaſt — — — — — — — 16 leagues.
From the ſouth ende of Bornholme to Reefcol eaſt & by north — — — — — — — 24 leagues.
And when you leeſe the ſight of Borneholme, then you ſee Reefcol againe within an houre after.
From the northende of Borneholme, or from Ertholmes to Righſhooft eaſt, and eaſt and by north — — 40 leagues.
From the northende of Borneholme, or from the Ertholmes to Memle e. & by n. and ſomewhat northerlyer — 65 leagues.

V I.

How theſe Points and Places are diſtant from other Lands.

From the northende of Borneholme to Utſtede northweſt — — — — — — 8 leagues.
From Borneholme to Hanno n. and by w. — 12 leagues.
From Borneholme to the Der-clippen or Uyt-clippen northnortheaſt — — — — — 19 leagues.
From the eaſt or ſouth ende of Borneholme to the ſouth ende of Oeland northnortheaſt — — — 26 leagues.
From the weſt or north ende of Borneholme to the Southnoorden, or the ſouth ende of Oeland northeaſt and by north — — — — — — 25 leagues.
From Borneholme to Houghburgh, or the ſouth ende of Gotland the courſe is n. e. & ſomewhat northerlyer 50 leagues.
From Borneholme to Oſtergarde northeaſt, or ſomewhat northerlyer — — — — — 61 or 63 leagues.
From Borneholme to Winda is the courſe northeaſt & by eaſt, and ſomewhat eaſterlyer — — — — 80 or 82 leagues.
From Garſhooft to Calmerſond north and by weſt 32 leagues.
From Righſhooft to Hanno weſt and by north, or ſomewhat northerlyer about — — — 38 or 40 leagues.
From Righſhooft to the ſouth ende of Oeland the courſe is northweſt — — — — — 33 leagues.
From Righſhooft to Houburgh, the ſouth ende of Gotland north and by weſt — — — — 34 leagues.
From Righſhooft to Oſtergarde is the courſe north and ſouth — — — — — — — 45 leagues.
From Righſhooft to Dagheroort n. n. e. — — 80 leagues.
From Righſhooft to Derwinda the courſe is northeaſt and by north — — — — — — 54 leagues.
From Righſhooft to Sevenberghen northeaſt — 33 leagues.
From Conincxberghen deepe to Southernoorden, or the ſouth ende of Oeland n. w. & by w. and w. n. w. — 50 leagues
From Conincxberghen haven to Houburgh, or the ſouth ende of Gotland northweſt and by north — — 48 leagues.
From Memle to Houburgh is the courſe w. n. w. 37 leagues.

Here followeth the Carde N 26.

A DESCRIPTION OF

the Sea-coaſts and Ilands of Lyfland, which lye betweene Memle and Revle.

I.

The ſituation of Memle to Domeſnes.

FRom Memle to Sevenberghen the land reacheth northnorthweſt 11 leagues: but three leagues ſouth from Sevenberghen lyeth Helighawe or Heliger Rou, which is a place where you lade all kinde of wares.

Heliger Rou.

Four leagues north from Sevenberghen lyeth the River of Ter Liba: This River is ſixe foot deepe, & goeth farre up into the land: but within you come to a great water. Terliba is alſo a lading place, where you lade all kinde of Coerland Ware.

Terliba.

From Olma or Terliba to Backovens the courſe is north and by eaſt ſeven or eight leagues, next to Domeſnes it is the beſt land to be knowne in all Coerland: it is certaine hillocks or downes with trees, which ſhowe out above the reſt of the land.

Bacovens.

About three leagues ſouth from Backovens there lyeth an outpoint called Steenſoort, which is flatte like Luſeroort, but it is ſtonie ground. And this Steens-oort lyeth about four or five leagues ſouth from Derwinda. The coaſt of Coerland from Sevenberghen to Derwinda reacheth north and by eaſt fifteene or ſixteene leagues. At Derwinda there ſtandeth a caſtle with two or three ſteeples, whereby it is well knowne.

Steenſort.

Derwinda

About ſeven leagues weſt and by north from Derwinda lyeth a banck, upon which there is no more water then five fathome, it is about half a league broad, and groweth deeper on both ſides eaſily, but how far it ſtretcheth northward or ſouthward is unknowne to me.

From Derwinda to Luſeroort it is northeaſt and by north four leagues. Luſeroort is an outpoint, but when you are againſt it then the land ſeemeth all to have one reach, but when you are a league or two on the eaſt ſide thereof, then you ſee it to be an outpoint. Againſt Luſeroort it is all flatte water three leagues into the Sea.

Luſeroort

The land of Luſeroort to Domeſnes reacheth northeaſt and by eaſt, and ſomewhat eaſterlyer about twelve leagues.

From the ſouth ende of Oeſel, called Swalueroort there ſhooteth off a Sand ſouth and by weſt at leaſt two leagues into the Sea, betweene Domeſnes and Luſeroort, but neareſt to Luſeroort, and ſhooteth to the flatte of Luſeroort, it is a bad Sand, verie hard and broad, at ſome places it is drie, and four fathome deepe, and in ſome places ſhallower, as you are diſtant from the point of Oeſel, for at ſome places about Oeſel it is drie, and againe at ſome places two, two and an half, and three fathome deepe. To conclude it is hard and verie uneven, and a man muſt there be verie carefull of it. Weſt from that Sand there lye alſo manie Dwale-grounds, which reach north about the coaſt of Oeſel, which in ſome places are no deeper then two three, four and five fathome.

Swalueroort.

Oeſle ſand

If you wil goe to Ryge, and comming out of the Sea fall upon Derwinda, you muſt not leave the coaſt of Coerland, but you muſt runne about the flatte of Luſeroort at five fathome, or ſomewhat leſſe, that you may not ſayle without the Sand of Oeſel. The chanel betweene the flatte of Luſeroort & the Sand of Oeſel is not above eight or nine fathome deepe, but cõmonly you have ſeven fathome, then you goe juſt about this flatte. The ground heere againſt Luſeroort in ſome places is verie uneven, ſometimes ſixe, ſometimes eight and nine fathome: at one caſt of the lead you ſhall have two or three fathome leſſe or more then at another time, and that not verie farre from the land, but you neede not feare it, for (as I ſaid before) you may goe nere the land at four or five fathome without feare.

To avoid Oeſle ſand

The land of Domeſnes is a land verie well to be knowne: betweene Derwinda and Domeſnes it is all double blewe land, & that on the eaſt ende of Domeſnes is ſhoring, and goeth ſloping downe to Luſeroort: alſo by Domeſnes it is high land, & goeth alſo

Domeſnes


Lijf landt
Pour landt
OESEL
RYGHSCHE BODEM
Finlantsche scheeren
Parnou
Pernou
Rÿga
Kock
Waranger
Fegusner
C. de Wolff Sont
Britte Cloester
Wolff sont
De Wolf
Revel
Nargen
I. Blbeten Carels
Surp
Willes
Groote roegе
Cleine roegе
T' Slott van Moensont Harpsael
Moen sont
Gras grondes
Oges holm
O. Grafgront
Grafholm
W. Grafgront
Oſſe holm
Daden
Honts wiſck
Sybrichneß Dager oort
Dager oort
Dagerort
Tgatt van Luÿs
Wtoÿ
Sorcheim
Magno
Kÿn
Poolſche Slot
Dÿnamunde
Dÿna flu.
De Spille
Boldera flu.
De Stael
Tucken
Runen
Paternoſters
Dwael gronden
Sonneborg
Arensborg
Abbrick
Deſe boom is een merck
Abberburch
Whok
Oeſel
Reke
Skiolle ſont
Dwack gronden
Ferwalen
Domdangen
Domeſnes
Blawe berch
Jeke
Biſschopborg
Tockhen
Benden
Andaro
Corvuia
Goldingen
Danſs
Derwÿnda
Backovens
Saxhem
Jerlyha
Otma
Hÿſligaw
t'Huff
Sÿven
Bergen
Ambocten
Taberna
Dermemel
Witte duynen
Vinkshor
Steÿnſoort
Lufck oort
Pilack
Deſcription des Rivages de la Mer de Courlande et Liſlande, avecq toutes les Iſles, et Goulphes entre Memel et Revel a ladicte coſte giſantes, Monſtrat comment ſinglant le long a icelles coſtes on pourra eviter et ſe garder des profonditez, bancs a ſable, fonds abuſſs, et lieux dangereux giſants environ ladicts endroitz
Duitſche mylen 15. in een grae. Lieues d'Allemaigne 15 en un degre
Spaenſche mylen 17½ in een gra. Lieues d'Eſpagne 17½ en un degre
Engel. en Fra. my. 20. in een gr. Lieu. Ang. et Fran. 20 en un deg.
Beeldinghe der Zeecuſten van Coerlant ende Liſlant met alle de eylanden en Inwyncken tuſſchen der Memel ende Revel aende ſelve cuſten gheleghen, Vertoonende hoemen in beſeylen der ſelver landen alle ondiepten, Reven, bancken, dwelgronden, ende periculeuſe plaetſen daer aen en omme gheleghen bequamelyck ſal moghen mijden ende wyken.
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P

alſo ſteeping downe to Luſeroort, ſo that two high blewe lands goe ſloping downe one to the other, the eaſterlyeſt high land is Domeſnes, and the weſterlyeſt is Derwinda, and the lowe land betweene them both is Luſeroort, but the point of Domeſnes is lowe downe land, and lyeth from the touth point of Oeſel about eaſtſoutheaſt three leagues, and the chanel betweene both is ſixteene and eighteene fathome deepe, but the cõmon depth of this chanel when you come from Luſeroort is 14, 15, and 16 fathome.

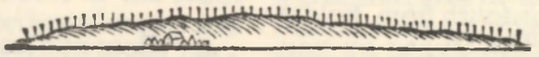
Thus the Coaſt of Coerland ſheweth it ſelf about Sevenberghen when you ſayle along by it, being a league from it.



Thus the Coaſt of Coreland ſheweth from Domeſnes to Derwinda, and the Backovens to Sevenberghen.



When you ſayle about Domeſnes then the land of Oeſel ſheweth thus



II.

To ſayle from Domeſnes to Ryghe and Parmout.

Sand of Domeſnes

FRom the point of Domeſnes there ſhooteth off a Sand eaſtnortheaſt, and northeaſt and by eaſt a league into the Sea.

From Domeſnes to Rye the coaſt reacheth firſt from Domdanghen ſoutheaſt four leagues: From thence to Voorwalen alſo ſoutheaſt five leagues, and all ſoutheaſt to Tucken. From Tucken it reacheth firſt eaſt, then eaſtnortheaſt, and northeaſt to the downe, or the River of Rye. From Vorewalen to Dunemond it is eaſt and by ſouth twelve leagues, and there the land betweene both falleth into a great Creeke.

From Domeſnes to Dunemond, or the haven of Ryghe the courſe is ſoutheaſt and by eaſt one-and-twentie leagues. And

The Iland Ruynen.

from Domeſnes to the Iland Ruynen the courſe is eaſt and by north eight leagues. You may ſound the Iland of Ruynen round about at ſeven and ſixe fathome, yet on the eaſtſoutheaſt ſide it runneth flatte a good waie off: along the whole weſt ſide, or ſouthweſt ſide it is all foule, ſharp ſtonie ground, come no nearer the ſhore there then ſixe fathome, for at ſuch depth you ſhall ſometime ſound five, ſixe and ſeven fathome: Neyther is there anie good lying there, but on the eaſt ſide as you come about the ſoutheaſt corner, there is a litle Baye or Creeke, neere whereto ſtand certaine ſmall howſes, which may be ſeene as you come neere the ſhore, there about is it good lying againſt weſt windes at five or ſixe fathome, faire ſand ground: but when the winde blowes hard it wil ravle there, otherwiſe round about it is ſharp ground: but ſome ſaye that on the ſouth ſide it is faire ground.

From Ruynen to Dunemond the courſe is ſoutheaſt ſixteene leagues. If you will anckor before the haven of Duyn, then anckor at thirteene fathome, ſouth or north from the Haven where you will. Betweene Ruynen and Dunemond in the chanel it is 23 and 24 fathome deepe.

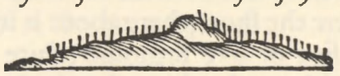
To anckor before the Haven of Ry.

To ſayle into the haven of Ryge, then ſet the towne of Ryge ſouth

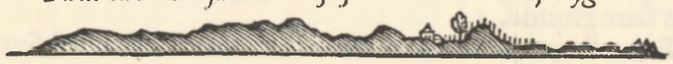
To ſayle into the. River of Righe.

ſouth and by eaſt, or ſouthſoutheaſt from you, and ſayle up upon it, ſo long untill that the Poolſche caſtle ſtandeth eaſtſouth-eaſt from you, then the houſes of Dunemond will be ſoutheaſt from you, then you ſhall ſee a great tree, ſet that right north from the ſaid houſes, that is where the caſtle of Dunemond ſtood, for the caſtle of Dunemond is broken downe by them of Ryghe, while Duke Charles of Sweathland laye there abouts with his ſhipps: but to knowe this tree, you ſhall underſtand that there right north there ſtandeth a drie tree, whereby you may eaſily knowe it: now when you have the markes aforeſaid of the great tree and the houſes, one againſt the other (as I ſaid before) then you are right before the haven of the Duyn, keepe them ſtanding ſo, and ſayle right up upon them, and you ſhall finde the right chanel, it is about three fathome and an half deepe at the entrie: you muſt alſo cõming north or ſouth ſound the land, and runne along by it at three or four fathome, till the ſaid markes of the houſes and the tree are againſt each other, and ſo runne in upon them, as I ſaid before. The land on both ſides within the haven is flat, but when you are over the entrie then it is deeper, and the weſt ſide ſhoring or ſteepe, but the eaſt ſide is flatte, and ſo runneth farre out, then goe boldly cloſe by the weſt ſide, till you be before Boldra, but comming againſt it you muſt put ſomewhat off from the land, for ſouth from Boldra there commeth a Sand ſhooting off, which in ſayling up you may ſayle under: this is Pilots water as well in going up as in comming downe, for in ſuch rivers as have great ſtreames, the ſhallowes alter and change manie times, not onely by reaſon of the dayly ſtreames, but alſo of the running of great waters, ſo that it is not certaine to truſt to ſuch deſcription as men may make thereof, which everie man muſt thinke on.

Thus Ruynen ſheweth when you ſayle by it.



Thus the land ſheweth eaſt from the haven of Ryghe.



Parnout.

From the Haven of Ry to Parnout the courſe is north and by eaſt twentie leagues.

About half waie betweene them both, eleven leagues from Righe, and nine leagues from Parnout, there lyeth a towne called Lemſale, or Sales, there lyeth a banke before the haven, you may goe behinde it, (behinde it it is three fathome deepe) you may goe about it on both ſides, there goeth a chanel into Sales of eight foot deepe. Lemſale or Sales.

From Ruynen to the Iland Kyn the courſe is eaſtnortheaſt eleven leagues. Kyn and Sales lye diſtant northweſt and ſoutheaſt, it is a lowe Iland, about three leagues long, and hath moſt part all foule ground. From Kyn to Manno and Sorcholme, all to Parnout, the courſe is northeaſt and by north eight leagues. Betweene Kyn and the coaſt of Lyſland it is wide four leagues. and the right deepe there betweene them both is eight or nine fathome. Againſt Manno and Sorcholme it is five and ſixe fathome deepe, and the coaſt of Coerland is there altogether a faire ſtrand. Parnout lyeth there in a great Creeke, and before Parnout it is three and four fathome deepe: If you will anckor before Parnout, place the ſteeple of Parnout northnortheaſt from you, there is the beſt Rode. Manno. Sorcholme. Rode before Parnout.

The Iland Kyn and the haven of Righe lye diſtant ſouth and north thirteene or fourteene leagues.

III.

The ſituation of the Eaſt-coaſt of Oeſle.

ABout two leagues and an half northweſt from Domeſnes is the Rode of Oeſel, when the church of Oeſel is weſt and by north half a league from you, and the point of Oeſle whereon the houſes ſtand weſt, there is the beſt Rode at ſeven fathome ſoft ground, there you lye ſafe againſt a weſtſouthweſt winde, all along by Oeſle it is flatte ground, of three four and five fathome. Rode of Oeſle.

Five leagues northward from Domeſnes lyeth the Iland Abrick, which lyeth diſtant from Ruynen northweſt and by weſt, and ſoutheaſt and by eaſt ſeven or eight leagues, and there betweene them both it is almoſt full of Dwalegrounds, of three four, five & ſixe fathome, but they lye neareſt to Abrick. Abrick is a foule Iland, with ſtonie ground, and manie Dwalegrounds: it lyeth within a league and an half of Oeſle. From Abrick to Arensbergh, in Oeſle, the courſe is north and by weſt four or five leagues, it is a lading place for barley and fatte wares. From the ſouth ende of Oeſle to Arensbergh through within Abrick it is northnortheaſt eleven leagues. Abrick. Arenſbergh.

From Abrick to the north ende, or northeaſt ende of Oeſle the courſe is northeaſt and ſomewhat norrtherlyer tenne or eleven

eleven leagues: but from Ruynen to the aforeſaid point of Oeſſe it is north 13 leagues. If you will ſayle from Abrick or from Ruynen, about the northeaſt point of Oeſſe you muſt take good hecde of the Paternoſters, which is a Sand a league from the ſaid point reaching into the Sea. From the northeaſt point of Oeſſe to Parnout the coaſt of Lyfland reacheth eaſtſoutheaſt and weſtnorthweſt.

Paternoſters.

The Iland Abrick lying a league from Oeſſe.



IIII.

The ſituation of the Weſt-coaſt of Oeſſe and of Dageroort.

FRom the ſouth ende of Oeſſe (as I ſaid before) there ſhooteth off a great Sand ſouth and by weſt into the Sea, almoſt three leagues. From Swalueroort or the ſouth ende of Oeſſe to Hondſoort the courſe is northnorthweſt, and north and by weſt ſixteene leagues. Betweene them both lye two lading places, called Wycke and Reecke: this coaſt of Oeſſe is verie uneuen and foule ground, and about the ſouth ende there lye manie Dwalegrounds, of three or four fathome, which are verie hard.

Hondſoort.

Wyke and Reeke.

From Hondſoort to the point of Dageroort the courſe is northnorthweſt eight leagues. Upon Dageroort there ſtandeth a high ſteeple or towre, which they of Revle built there, to knowe the land by it: and betweene Hondſoort & Dageroort there is a great Creeke, for there goeth alſo a water betweene Dageroort and Oeſſe, but is verie flatte and drie, ſo that no ſhippes can goe through it. Such ſhippes as miſtake Swaluerooit or Oeſſe, manie times are at their wittes endes in this Creeke, for there is no manner of thing to knowe the land by, and there it is all ſharpe ground, but when you come againſt the land of Dageroort, when you are in this creeke, then you ſee the ſaid towre of Dageroort over the land, whereby men then knowe it. Under the point of Dageroort there is faire Sandground, and verie good anckoring againſt the north and northeaſt windes. You may runne about the point of Dageroort at ſeven or eight fathome, and north from the point it is alſo good lying.

Dageroort

From Dageroort to Sibrichſnes the land reacheth northeaſt about ſeven leagues. Betweene them both, that is three leagues from Dageroort and four leagues from Sibrichſnes, there reacheth a Sand croſſe from the land northweſt into the Sea ſixe or ſeven leagues, and it is a flat ſloping land, going to the Scharen: firſt it is of three, four, five, ſixe and ſeven fathome, and then it is ſometimes deeper, to the Finſche Scharen.

Sybrighſnes.

Sybrichſnes is an out-point that hath two pointes, from either of which ſhooteth off a Riffe or Sand: but betweene the two Sands there is good Rode, faire flatte ground, and good ſand-ground, there you may anckor as neere the ſhore as you will at ſixe, five or four fathome: but a litle weſt from the weſterlyeſt point of Sybrichſnes, not farre from the land, there lyeth a ſhallowe about as great as a ſhippe, where it is no deeper then twelve foot water.

From Sibrighſnes to Oetgenſholme the courſe is eaſtnortheaſt ſeven leagues. Betweene them both the Meunſond goeth in.

South from Oetgenſholme there goeth a great Creeke into the land, whereon there lyeth an Iland, and above the Iland there lyeth a towne called Hapſale, you may anckor there where you will. On the ſouth ſide of this Creeke there runneth a great Sand or Stone-ſhelfe ſomewhat more then a league into the Sea, which is verie broade, there you may goe in by it to Meunſond.

Hapſale.

Sand of Hapſale.

Thus the land of Dageroort ſheweth to Sybrichſnes.



V.

To ſayle into the Meunſond behinde or north about from Oeſle, to the Creeke of Ryghe.

Grasholm. Offeholm. FRom Sibrighſnes to Offeholme & Graſholmes the courſe is ſ.e. four or five leagues. The Graſholms are two greene Ilands, and Offeholme lyeth about a league weſt from Graſholmes, where you may ſayle round about, and alſo ankor: but about a league north, and north and by eaſt from Offeholme, there lyeth a Landloſe-ground which you muſt ſhunne, which is called the Weſt Graſſeground, for there are two ſhallowes which are called the Graſgrounds: the other Graſground which is called the Eaſterly, lyeth over againſt Graſholme to the Sand of Hapſale, having no more then four or five foot water, if you will ſayle into Meunſond, you muſt be verie carefull to ſhunne it.

Graſ-grounds.

To ſayle into Meunſond. If you will ſayle through Meunſond from Oetgens you muſt goe ſouthſouthweſt to Graſholme, and there ſayle in cloſe by it, to ſhunne the Graſground which there lyeth eaſtward over againſt it. From Graſholme to the point of Oeſle, whereon the great tree ſtandeth, the courſe is ſouthſoutheaſt ſeven leagues. From Graſholme to Oeſle there lye four Ilands, each about a league from the other. When you ſayle from Graſholme to Oeſle, then you ſayle along by theſe Ilands, leaving them about two or three cables length on ſtarborde, till you come to the land of Oeſle, right over againſt the great tree, in that chanel it is five fathome deepe.

Meunſond caſtle. When you ſayle in this manner and come before the Graſground, then on baghborde you finde an Iland, and againſt it, the haven or chanel goeth in to the caſtle of Meunſond, at three fathome, and then it is ſomewhat flatter, for there it is full of Sands. South or weſt from the ſaid Iland there goeth in a chanel, which you may ſayle through to Oeſle, and then you leave the two Ilands on the ſouth ende of Oeſle on ſtarborde.

But the right and beſt chanel goeth from the aforeſaid great tree along by the land of Oeſle, which is three or four fathome deepe, and at laſt it is ſixe fathome, ſeven and eight fathome deepe againe, and ſayling along by it, then you leave the two aforeſaid Ilands by the ende of Oeſle on baghborde. From the great Tree to the firſt Iland the courſe is eaſtſoutheaſt five leagues, then from the firſt Iland to the ſecond ſoutheaſt, and then forth to the ende of Oeſle eaſt and by ſouth, and comming about there, you may ſayle into the Righſche Sea, or the creeke eaſtſoutheaſt to Kyn, ſouth to Ruynen, and ſouthweſt or ſomewhat ſoutherlyer to Abrick, or whither you will: but you muſt take good heede of the Paternoſter, which ſhooteth off from the point of Oeſle, almoſt a league into the Sea.

V I.

The ſituation of Oetgenſholme to Revle.

Oetgenſholme. THe Iland of Oetgenſholme may be ſayled round about, and you may alſo anckor behinde it at ſixe or ſeven fathome.

Great Roghe. From Oetgenſholme to great Roghe the courſe is eaſt and by north, or a litle eaſterlyer four leagues: betweene them both a litle beſide the right chanel lyeth a ſhallowe which you may ſayle round about: this Shallowe lyeth with a Rigge of Sand even and alike with the water, and round about is rockie and ſtonie. Great Roghe is a white-out-point, wherein there are two or three chalke hilles. Behinde Oetgenſholme, ſouth from Great Roghe, there lyeth another point, called Litle Roghe, betweene Great and Litle Roghe there goeth in a wide River or Haven of ſixe and ſeven fathome, but in the ende it is drie. It is there all faire ground, and good to anckor in.

Litle Roghe.

Nargen. From Great Roghe to the Iland Nargen, the courſe is eaſt and weſt five leagues. When you ſayle from Great Roghe to Narghen, three or four leagues eaſt from great Roghe you finde a point called Surp, wherein alſo there lye two white ſpottes or patches, and then you ſee the Iland of Nargen lying out before you, if then you will ſayle to Revle, then leave the Iland Nargen on baghborde, & runne in by the point of Surp, about eaſt, to the ende of the Iland, and when you are at the ende of the Iland, thē goe on eaſtſoutheaſt more then a league, ſo ſhall you come by the ende of the Sand that ſhooteth off from Bare Carels, come no nearer unto it then at ſixe fathome: Now when the caſtle of Revle commeth without the Carels, then ſayle ſtreight to the eaſt ſide of the Head at Revle, & there let your anckor fall, and turne with your beake head or your ſtearne to the Head, and make it faſt there with four ropes, for-that the north and northnorthweſt windes blowe there open into the Haven, ſo that there it heaveth and ſetteth verie much.

Surp.

The ſituation of the Rode before Revle.

Wolf. From the ſouthende of Nargen to the Iland Wolf the courſe is eaſt, and eaſt and by north four leagues, and that Iland is a league long. Northnorthweſt and northweſt and by north two leagues from the weſt ende of this Iland, and northeaſt and north-

northeaſt and by eaſt from the north ende of Nargen lyeth a rock or ſtone called the Revle ſtone, when the ſteeple of Revle commeth againſt the weſt ende of the Iland, then you are paſt or eaſt of this rock. The right markes of the Revle ſtone are theſe: when the northeaſt ende of Nargen is ſouthweſt and ſouthweſt and by weſt from you, and the ſteeple of Revle is a windbeames length weſt of the Iland Wolf, then are you juſt about it, there is but three foot water. In Somer when it is faire wether, ſometimes the water is ſo ſmooth, that the waves beate not upon the rock: but if it be rough wether you may eaſily perceive it by the breaking of the waves. The Revle ſtone is verie ſteepe, you muſt not come nearer unto it then twelve fathome.

From the weſt ende of the Iland Wolf ſhooteth out a point northward into the Sea, about a fourth part of a league toward the Revle ſtone, upon the ende of the point lye five or ſixe ſtones ſomething above the water, ſo that they may well be perceived. If you come ſayling from Revle north and by weſt beſide the Wolfe ſo long till the point of Surp come even againſt the Iland of Nargen, then you have juſt the length of that point, then looke out of the ſhippe on ſtarborde, and you ſhall ſee the foreſaid ſtones upon the ende of the point, you may runne about by them at five fathome without daunger.

VII.

How theſe Places are diſtant from each other.

FRom Memle to Sevenberghen is the courſe northnorthweſt — — — — — — 11 leagues.
From Sevenberghen to Derwinda north & by eaſt diſtant — — — — — — — 15 or 16 leagues.
From Derwinda to Luſeroort northeaſt and by north diſtant — — — — — — — 4 leagues.
From Luſeroort to Domeſnes northeaſt and by eaſt, and eaſtnortheaſt — — — — — — 12 leagues.
From Domeſnes to Domdanghen ſoutheaſt — 4 leagues.
From Domdanghen to Ferwalen ſ. e. — — 5 leagues.
From Ferwalen to Duynemond e. and by ſ. — 12 leagues.
From Domeſnes to Duynemond or the haven of Righe ſoutheaſt and by eaſt — — — — — 21 leagues.
From Domeſnes to Ruynen is the courſe eaſt and by north — — — — — — — 8 leagues.
From Ruynen to Duynemond ſoutheaſt — 16 leagues.
From Ruynen to the Iland Kyn eaſtnortheaſt — 11 leagues.
From Duynemond to Lemſale or Sales north and by eaſt — — — — — — — 11 leagues.
From Lemſale to Parnout is the courſe north and by eaſt — — — — — — — 9 leagues.
From the haven of Ry to the Iland Kyn north 13 or 14 leagues.
From Domeſnes to the ſouth ende of Oeſle weſtnorthweſt — — — — — — — — 3 leagues.
From Domeſnes to the Rode of Oeſle northweſt alſo — — — — — — — 3 leagues.
From Domeſnes to Abrick north — — — 5 leagues.
But Abrick and Ruynen are diſtant ſoutheaſt and by eaſt, and northweſt and by weſt — — — 7 or 8 leagues.
From Abrick to the northende of Oeſle northeaſt & ſomewhat northerlyer — — — — 10 or 11 leagues.
From Ruynen to the northeaſt ende of Oeſle is the courſe north — — — — — 13 leagues.
From the ſouth ende of Oeſle to Arensbergh northnortheaſt — — — — — — — 11 leagues.
From Arensbergh to the northeaſt ende of Oeſle eaſtnortheaſt — — — — — — — 8 or 9 leagues.
From the ſouth ende of Oeſle Swalueroort to Hantſort is the courſe northnorthweſt and north and by weſt — 16 leagues.
From Hanſort to Dagheroort northnorthweſt — 8 leagues.
From Dagheroort to Sibrighſnes is the courſe northeaſt about — — — — — — 7 leagues.
From Sibrighſnes to Oſſeholme and Graſholme ſoutheaſt diſtant — — — — — — 4 or 5 leagues.
From Graſholme to the great tree upon Oeſle ſouthſoutheaſt — — — — — — — 7 leagues.
From Graſholme to Oetgenſholme is the courſe northnortheaſt — — — — — — — 8 leagues.
From Sibrighſnes to Oetgenſholme it is eaſtnortheaſt about — — — — — — — 8 leagues.
From Oetgenſholme to Great Roghe eaſt and by north diſtant — — — — — — — 4 leagues.
From Great Roghe to Narghen eaſt — — 5 leagues.
From the ſouth ende of Nargen to the Iland Wolfe eaſt, and eaſt and by north — — — — 4 leagues.
From Derwinda to Dagheroort north and by weſt, and ſomewhat northerlyer — — — 33 leagues.

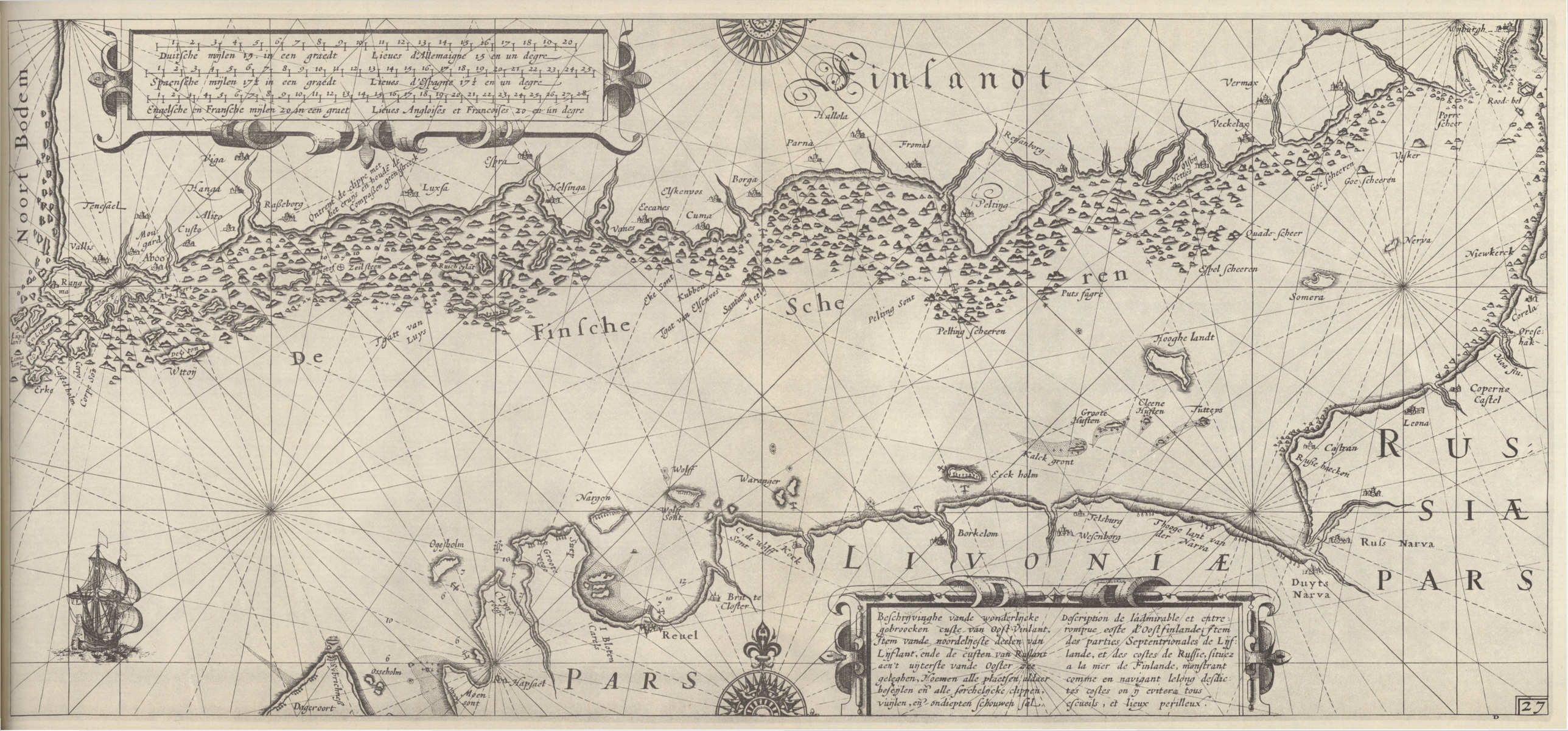
VIII.

How theſe Lands are ſituate in reſpect of other Lands, in the reaches and diſtances.

FRom Sevenberghen to Righſhooft ſouthweſt 33 leagues.
From Sevenberghen to Southernorden weſt and ſomewhat ſoutherly — — — 48 leagues.
From Derwinda to Houburgh weſt and by ſouth 37 leagues.
From Derwinda to Oſtergarde weſt — — 29 leagues.
From Derwinda to Goetſche ſand is the courſe northweſt and by weſt — — — — 31 or 32 leagues.
From Luſeroort to Houburgh weſt and by ſouth, and ſomewhat ſoutherlyer — — — — 40 leagues.
From Luſeroort to the point of Alant, or the Ilands northnorthweſt — — — — — 59 leagues.
From Dageroort to Oſtergarde ſouthweſt and ſouthweſt and by ſouth — — — — — — 37 leagnes.
From Dageroort to Righſhooft ſouthſouthweſt 80 leagues.
From Dageroort to Goetſche Sand ſouthweſt and by weſt — — — — — — — 27 leagues.
From Dageroort to Boechſchaer weſt and by north 21 leagues.
From Dageroort to the point of Aland or the Ilands northweſt — — — — — — 24 leagues.
From Dageroort to the haven of Abbo or Wtoy northweſt & by north — — — — — — 20 leagues.
From Sibrighſnes to the haven of Abbo or Wtoy northweſt — — — — — — — 20 leagues.
From Oetgeſholme to the haven of Abbo northweſt and by weſt — — — — — — 27 leagues.

Heere followeth the Carde N. 27.

A DE-


Duitsche mijlen 17 in een graedt
Lieues d'Allemaigne 15 en un degre
Spaensche mijlen 17½ in een graedt
Lieues d'Espagne 17½ en un degre
Engelsche en Fransche mijlen 20 An een graet
Lieues Angloises et Françoises 20 en un degre
Noort Bodem
Finlandt
Viga
Hanga
Tenosael
Alito
Custo
Vallis
Aboo
Rungma
Raßeborg
Luxsa
Esora
Helsinga
Hallola
Parnà
Fromal
Borga
Eskenvos
Eecanes
Cuma
Vmes
Pelting
Reuelsborg
Vermax
Veckelax
Assin
Wyburgh
Roode bel
Porre scheer
Vyker
Goe scheeren
Quade scheer
Esbel scheeren
Nerva
Niewkerck
Somera
Puts sagre
Pelting scheeren
Pelting Sont
Eke Sont
Kubben
Ysae van Essenves
Santaem
Ruich ylae
Zeilsteen
Tgatt van Luys
De Finsche Scheren
Hooghe landt
Groote Huysten
Cleene Huysten
Futters
Kalck gront
Eeck holm
Borkelom
Felsburg
Wesenborg
Thooge lant van der Narva
Coperne Castel
Leona
Oresehak
Nova flu.
Correla
Castran
Russe hoecken
RUSSIÆ PARS
Ruis Narva
Duyts Narva
LIVONIÆ PARS
Wolff
Waranger
Narvon
Wolfs Sont
C. de wolff
Kock
Ogesholm
Groote ridge
Cleine ridge
Reuel
Brit te Closter
Carls
Blotern
Osseholm
Hapsael
Moen sont
Dageroort
Wibrichms
Ontrent de klippe met het cruys, en houdt de Compassen geen stroock
Eck sont
Ruych
Wyck
Lappe land
Lima land
Erke
Castelholm
Corpe
Wittorp
Vttorp
Abo
Mou gard
Ruych ylae
Zeilsteen
Tgatt van Luys
Beschrijvinghe vande wonderlijcke gebroocken custe van Oost Vinlant, ende vande noordelijcste deelen van Lijflant, ende de custen van Rusland aen't uijterste vande Ooster zee gelegen, Doemen alle plaetsen, alsmen beseylen en alle forcheloocke clippen, vuijlen, en' ondiepten schouwen sal...
Description de l'admirable et entremontrue coste d'Ost finlande, et des parties Septentrionales de Lijflande, et des costes de Russie, situez a la mer de Finlande, monstrant comme en navigant lelong desdictes costes on y evitera tous escueils, et lieux perilleux.
27

A DESCRIPTION OF

the Sea-coasts of Lyfland, Russia, and Finland, from Revle to the Narve, and Wyborgh, and from thence to Alants Haf.

I.

The situation betweene Revle and the Narve.

IN the former Chapter it is shewed how you shall sayle from Nargen to Revle, before the towne, and also to the Iland of Wolf.

Ile of Wranger. From the Wolf to the Iland of Wranger the course is east and by south, but going outward about, it is east and by north seven or eight leagues. Under Wranger there is good Rode, and good anckoring on both sides, and all over good anckor ground. But on the southside from Wranger lyeth a long small Iland, which is rockie and foule. Northwest and northwest and by north about a league from Wranger lyeth a rocke, and about two leagues from Wranger lyeth also another litle Iland.

Eckholme From Wranger to the Eecholmes it is east, and east and by north thirteene leagues. Betweene them both lyeth a foule point upon the Coast of Lyfland, which you must shunne, for there lye manie Rockes off from it, otherwise all the Coast of Lyfland is verie faire, all along to the River of Narve. Betweene this foule point aforesaid, and the Iland of Eeckholme there is a faire Creeke upon the Coast of Lyfland, where you may anckor safely against a southeast winde. The Eckholmes also are faire round about, and under them it is good rode.

Rode under Lyfland.

Telsborch From the Eckholmes to Telsborgh, it is east and west sixe or seven leagues. Northward from Telsborch in this chanel there lye verie bad grounds and rockes, called the Hoften, which round about them have verie foule and bad shallowes, which you must shunne: but the Eckholmes as also the coast of Lyfland are faire, you may sayle within half a league along by the coast of Lyfland, and leave these shallowes and shelfes on the left hand.

Hoosten or Huften.

From Telsborch to the Narve in the Rode it is east and by south sixteene leagues. To sayle from Wranger north from the Hoften to the Narve, the course from Wranger to Highland is eastnortheast, and east and by north three-and-twentie leagues. From the Great Hooften there commeth a shallowe shooting off westnorthwest into the Sea, which is at least two leagues long, which is called the Chalcke grounds, you must take heede of it. The Small Hooften also are full of Sands and Rockes, so that you can hardly sayle through them, for those foule Sands and Shallowes runne all from the Tutters along Lyfland, nere the east ende of Eckholme. Tutters lye from High land southsoutheast two leagues distant, and northwest and by west from Highland about four leagues from the land, there lyeth a Rock under the water, which is no deeper then two fathome.

To sayle to the Narve north frō the Hufte.

Chalke grounds.

Small Hoften.

Tutters.

From Highland to the Rode of the Narve, the course is southeast thirteene leagues, and then you must goe through betweene Highland and Tutters: and likewise when you sayle from the Rode of the Narve northwestward, then you goe through betweene Tutters and Highland. If you will goe into the Narve, you must place the woodē towre with the mast, right upon Narve castle, and so goe into the haven. The land of the Narve is knowne by the round hilles which lye on the south side of the Rode.

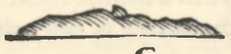
The Rode of the Narve.

To sayle into the Narve.

Thus Eckholme sheweth when you sayle along by it.



Thus Thusten sheweth southwest and by west from Highland.



Thus the Iland of Highland ſheweth.



Thus the land eaſt from Narve ſheweth when you come from the Highland.



I I.

To ſayle from Wranger, and alſo from the Narve to Wybergh.

ABout two leagues north from Wranger lyeth a litle Iland full north: from that Iland toward Highland is the courſe ſomewhat more eaſterly then eaſtnortheaſt three-
Highland. and-twentie leagues, then you runne full north. Highland is about three leagues long, and hardly a league broad: it lyeth in length ſouthſoutheaſt and northnorthweſt: to them that come out of the weſt it ſheweth with three hillocks: on the north and eaſt ſide it is full of trees. On the eaſt ſide a litle about the north point is there a litle Creeke by a boores or husbandmans houſe, there is faire ground, and good lying againſt weſt windes. A certaine ſpace ſouthward from thence, not farre from the ſhore lyeth a great ſtone above the water: On the north ende, alſo on the weſt ſide to the ſouthweſt point it is wholly faire ground and good lying.

Sōmers. From Highland to the Sommers (that is a litle Iland) the courſe is eaſt and by north ſeven leagues. A litle eaſt from the Iland Sommers there lye certaine rockes above the water, but you may ſafely ſayle through betwixt the rockes and the Iland.
Goeſchare or the great Fiſher. From Sommers to the Goeſchare, or (which is all one thing) the great Fiſher, is the courſe ful northeaſt diſtant ſeven leagues. The great Fiſher is a lowe Iland, conſiſting of ſeven rockes joyned together, therefore it is alſo called the Seven-rockes, and when you firſt deſcrie it, it appeareth with four hillocks, as if it were four lowe Ilands. From the great Fiſher to the litle Fiſher is the courſe northeaſt & by eaſt diſtant four ſmall leagues.
The litle Fiſher. Round about both the Fiſhers you may ſeeke and finde Rode, for both of them are verie faire, but that on the ſouth ſide of the great Fiſher there lyeth a blinde rocke about a peeces ſhotte from the ſhore, when the water is not wholly calme, but that the weather is ſomething rough, you may eaſily ſee the waves breake thereon. About a peeces ſhotte ſoutheaſt, or ſoutheaſt and by eaſt from the litle Fiſher there lyeth a Rock even above the water, as if it were a Seales head, the cōmon chanel is there betweene both. From the litle Fiſher to Corſſenes is the courſe eaſtnortheaſt, and ſomewhat more eaſterly a league, upon the Corſnes. point of Corſnes lyeth a ſtone as if it were a Iol, you muſt ſayle about it at four fathome and an half. Weſt from Corſnes lye two Ilands cloſe by the land, but eaſtward from the point you may anckor againſt weſterly windes at five or ſixe fathome. About two leagues croſſe from Corſnes there are manie rockss that lye under the water, ſome at a fathome, ſome at half a fathome, ſome more ſome leſſe, you cannot venture out of the chanel but with verie great daunger. It is not poſſible to deſcribe the right ſituation of all, the grounds are there ſo uneven and craggie: ſo full of rocks, and craggie ſhallowes, that it is to be wondred at. From Corſnes to the Roohel the courſe is Rohel. northeaſt and by north about three leagues. You muſt leave the Iland of Rohel on ſtarborde and ſayle cloſe by it, or in the middle of the water: but not cloſe by the north point, which our ſaylers call Iohn Lambertſons point, for there ſhooteth off a ſtonie point, which is ſhoring: notwithſtanding you may ſayle about there ſafely by the plummet at ſeven or eight fathome, but come no nearer. In the right chanel betwixt both it is 14 and 15 fathome deepe. When you come within the Roodehel you may anckor where you pleaſe, and fetch a Pilot from the land, which may bring you to Wyborgh.

From Narve Rode to the Ruſſia Hacken the courſe is north Ruſſia Hacken. and ſouth five leagues diſtant. This point is called Caſtram, and Caſtram. there lyeth a towne called ſo.

From the Point or the Ruſſia Hacken to the Rode Hel the courſe is northeaſt and by north, and ſouthweſt and by ſouth about 26 leagues. Betweene them both on the Ruſſia coaſt there is no Seafaring, although ſome Rivers goe into the land. There the land lyeth in a great creeke, and reacheth from the Ruſſia Hacken to the River Nioa or Oreſchack eaſtnortheaſt 13 The River of Nioa or Oreſchack or 14 leagues. This River of Nioa devideth Ruſſia from Finland through the Ladingh, which is a great lake or water within the land. The ſtrong caſtle of Noetenburgh lyeth there alſo upon a River, which reacheth out of the Lyflands or Eaſt Sea into the aforeſaid Lake: From thence the land reacheth northnortheaſt and north and by eaſt thirteene or fourteene leagues, to the Roodehel.

The

III.

The ſituation from Wyborgh to Elſen-vos.

Porre-ſcharre. FRom the Rodehel to Porreſcharen the courſe is ſouthweſt and by weſt about five leagues. And from Porreſcharen to the Fiſher the courſe is ſouthweſt three leagues, which is a great out Scharre, which lyeth alone: but eaſtward from

Fisher. the Fiſher there lye ſome out-ſcharres in the middle of the chanel, and lye almoſt like water, they lye almoſt right in the chanel betweene the Fiſher and the Roodehel. The courſe from the Fiſher to Roodhel is northeaſt and by eaſt and ſouthweſt and by weſt 7 or 8 leagues.

Eſpleſcharen. Quade-ſcharre. From Goeſcharen to the Badſcharen, or Eſpelſcharen the courſe is weſtſouthweſt, and ſouthweſt and by weſt 11 or 12 leagues. The Eſpelſcharen is a great heape of out ſcharres, and there right eaſt there lyeth a great rock called Quade ſcharre, which you may ſayle round about.

Putſſagre. From Eſpelſcharen to Putſſagre the courſe is weſt and eaſt ſeven leagues. Putſſagre is a great Rock or Iland, lying north & by weſt from Hogheland, diſtant ſeven leagues: from thence you may goe where you will betweene the Swethen Scharres: if you will goe within the Scharres, at Putſſagre you muſt take in a Pilot, who will bring you through the rockes where you will, you runne in in all places, & within the Rocks or Scharres it is for the moſt part good anckor ground. About a league right ſouth from Putſſagre there lyeth a blinde rock which you

Pelting-ſcharres. muſt ſhunne. From Putſſagre to Peltingſcharen it is 5 leagues: Weſt from theſe out-rockes there lyeth a haven called Pelting-

Pelting-ſond. ſond, which runneth in northeaſt, there within there are a great number of Rockes and Scharres, where you lye ſafe from all windes, and you may, being in, ſayle through the rockes, ſo you have a good Pilot, whither you will.

The haven of Elſen-vos. From Peltingſond to the haven of Elſenvos, the courſe is weſt, and weſt and by ſouth 12 leagues. On the weſt ſide of the haven there lyeth a high round rock, whereon there ſtandeth a

Cubben. warder or maſt, which is called Cubben: on the other ſide of the haven, over againſt Cubben, there lyeth a long rock or Iland

Santam. called Santam, betweene theſe two rocks the haven of Elſenvos goeth in, and reacheth in moſt part northeaſt, and northeaſt & by north, through betweene the rocks.

Mely. A certaine ſpace eaſt from the foreſaid long rock called Santam, there is another round rock called Mely: theſe three rocks are markes of this haven.

To ſayle into the chanel of Elſenvos. To ſayle into the haven of Elſenvos, firſt it reacheth in northeaſt, till you are within the rockes, then it reacheth northnortheaſt, till you come to the river of Elſenvos, there you may anckor betweene the rockes, for there it is good anckor ground. There runneth alſo a chanel through within the rocks, & commeth in againe by Putſſagre into the Sea, but runneth verie crookedly about, and it is Pilots water.

IIII.

The ſituation of Elſenvos to the Alandſche Haf.

Out rocks of Luys. FRom Elſenvos to the out-rocks of Luys the courſe is weſt and by ſouth twelve leagues: And from the out-rockes three or four leagues more to the haven of Luys. The ha-

The haven of Luys. ven of Luys goeth in weſt from the rough Iland, and there goeth a chanel up through the rockes to Abo eaſt, and eaſt and by north thirteene leagues long, and it runneth into the Sea againe by Corpo. A litle waie upward in this chanel, you goe by a rock, which lyeth under the water, which is of Loadeſtone, Lodeſtone there the compaſſes alwaies runne about, and can not ſtand ſtill, till you are a league from it. When you are without the rocks of Luys, then you may ſee the land of Revle, there right over on the other ſide.

From the out-rocks of Luys to the haven of Wtoy it is weſt and eaſt about 21 leagues. Betweene Utoy and the haven of Luys, there are no havens for ſhippes to goe in, although that there betweene them both it is all broken land and rocks.

Utoye is a great Iland, whereon there ſtandeth a maſt with a barrel, there weſtward the chanel of Aboo goeth up: firſt it rea- Vtoy.

The chanel of Abbo. cheth in north, and north & by eaſt about three or four leagues, and then you come againſt an Iland, along by that great Iland, then it reacheth forward northeaſt to the haven of Aboo, and Aboo lyeth at the ende of that foreſaid great Iland.

From Utoy to the uttermoſt Iland of the Alandſche Haf, it is weſt & eaſt nine leagues: there lye three Ilands, called Ercke, Ercke. Caſtleholme, and Corpo: Ercke is the outermoſt from the A-

Caſtle-holme. landſche Haf, and from thence Corpeſond goeth in, and goeth along northeaſt by Corpe. Corpe lyeth within the other Iland, and from Corpe you may ſtrike over to the haven of Abbo, Corpo. which cõmeth running from Utoy. You may alſo ſayle up this haven about behinde Lipland, and come ſo out into the North- Corpſond. bodem.

Betweene Uxe or Boſtle, and the Ilands of Aland the Alandſche

ſche Haf goeth in, which is called the North-bodem, which goeth up ſo farre into Finland, that a ſhippe with a good faire winde can hardly ſayle to the ende thereof in five daies. Upon the uttermoſt of theſe Northbodems there lyeth a towne called Toren, there Sweathland and Fynland part aſunder.

V.

How theſe Lands and Places lye diſtant from each other.

From Revle to Wolf the courſe is n. and by w. 5 leagues.
From Wolf to the Iland of Wranger eaſt & by ſouth, but there without about them it is e. and by n. 7 or 8 leag.
From Wranger to Eckholme eaſt, and e. and by n. 13 leagues.
From Eckholme to Telsborch eaſt and weſt — 6 or 7 leagues.
From Telsborch to the Narve in the Rode eaſt and by ſouth — — — — — — — 16 leagues.
From Wranger to Highland eaſtnortheaſt, and ſomewhat eaſterlyer — — — — — 23 leagues.
From Highland to Tutters ſouthſoutheaſt — 3 leagues.
From Highland to the Narve Rode ſoutheaſt — 13 leagues.
From the Rode of the Narve to Ruſſia Hacken, or the point of Caſtram north and ſouth — — — 5 leagues.
From Ruſſia Hacken to the River Nioa or Oreſchack eaſtnortheaſt — — — — — 13 or 14 leagues.
From Oreſchacke to the Roodehel northnortheaſt and northand by eaſt — — — — 14 or 16 leagues.
From Ruſſia Hacken to the Roodehel n. e. & by n. 26 leagues.
From Highland to the Ruſſia Hacken e. ſ. e. — 9 leagues.
From Highland to Somera e. n. e. about — 7 leagues.
From Somera to the Iland Narve about e. n. e. — 4 leagues.
From Somera to the Great Fiſher or Goeſcharre northeaſt — — — — — — — 7 leagues.
From the Great Fiſher to the Litle Fiſher northeaſt and by eaſt — — — — — — — 4 leagues.
From the Litle Fiſher to Corſnes eaſtnortheaſt and ſomewhat eaſterlyer. — — — — — 1 league.
From Corſnes to Roodehel n. e. and by n. — 3 leagues.
From Roodehel to the Porreſcharres ſouthweſt and by weſt about — — — — — 5 leagues.
From Poreſcharen to the Fiſher ſouthweſt — — 3 leagues.
From Goeſcharen to Quadeſcharen or Eſpelſcharen weſtſouthweſt and ſouthweſt and by weſt — — 11 or 12 leagues.
From Quadeſcharen to Somera eaſtſouthcaſt — 5 leagues.
From Eſpelſcharen to Putffagre weſt — — 7 leagues.
From Putffagre to Somera eaſt — — 12 or 13 leagues.
From Putffagre to Highland ſouth and by eaſt — 7 leagues.
From Putffagre to Peltingſcharen w. and by ſ. — 5 leagues.
From the Out-ſcharres of Peltingh to the Haven of Elſenvos weſt and by north — — — 12 leagues.
From Peltinghſcharen to Highland eaſtſoutheaſt — 8 leagues.
From Peltingſcharen to the Wolfe ſouthweſt and ſomewhat weſterlyer — — — — — 20 leagues.
From Elſenvos to the Wolf or Nargen ſ. ſ. w. 16 or 17 leagues.
From Elſenvos to Eckholme ſoutheaſt — — 16 leagues.
From the haven of Elſenvos to the Out-ſcharres of Luys weſt and by ſouth — — — — 12 or 13 leagues.
From the Out-ſcharres of Luys to Wtoy weſt — 21 leagues.
Frō Wtoy to Ercke the uttermoſt Iland of Alant w. 9 leagues.
From the Out-ſcharres of Luys to Nargen ſ. ſ. e. 13 leagues.
From the Outſcharres of Luys to Oetgenſholme ſouth and by weſt — — — — 15 or 16 leagues.
From the Haven of Abbo to Nargen or the Wolfe eaſt and by ſouth — — — — 32 or 33 leagues.

V I.

How theſe Lands are diſtant from other Lands.

From the Haven of Abbo to Boech-ſcharre ſouthweſt and by ſouth — — — — — 16 leagues.
From the Haven of Abbo to Godſche ſand ſouthſouthweſt — — — — — 29 leagues.
From the Haven of Abbo to Oſtergarde ſ. & by w. 56 leagues.
From the Point of Alant or from the Ilands to Luſeroort or Derwinda ſouthſoutheaſt — — — 59 leagues.
From the Ilands of Alant to the Sweathland ſcharres before the Haven of Stockholme ſouthweſt and ſouthweſt and by ſouth — — — — 32 or 33 leagues.

Here followeth the Carde N 28.


Duytsche mylen 15 voor een graadt
Lieues D'allemaigne 15 en un degré
Spaensche mylen 17½ in een graad
Lieues D'espaigne 17½ en un degré
Engelsche en France mylen 20 in een graad.
Lieues Angloises et Frausois 20 en un degré
Afbeeldinghe vande wonderlijcke ghebrooken Zeecusten van Sweden en van Schoonen, van bevoorden Stocholm af tot ver by Valsterboen. Item vande Eylanden aldaer, als Gotlant, Oelandt, Bornholm, en andere aen dat selve vaerwater ghelegben.
Pourtraict de la merveilleuse et entrecompue coste marine de Suede et pais de Schoone, de Stocholme iusques a Valsterboen. Item de les isles comme Gotlande, Oelande, Bornholm, et plusieurs autres situez environ lesdictes costes.
Schonen
Sweeden
SVEDIÆ PARS
Oelandt
Bornholm
Oost Zee
Pomeraniæ Pars
Stocholm
Meller Lacus
Sweetsche Scheren
Gotlandt
Wisbuij
Groot Carelso
Copersteen
Godtsche sandt
Oostergaerde
Sliet haven
Narwijck
Santwijck
Wester wijck
Suijder Coppen
Noorder Coppen
Schelsvier
Stickholm
Silbuij
Calmer
Sondt
Borcholm
Eertholms
Brouwers Rif
Colbergen
Coslin
Ruwolde
Garshoost
Reefcol
Hartshols
Elsnap
Hartstick
Daler
Trosa
Nieu Coppen
Upsael
Stick
Sweetsche Jeucfrou
Uijt clippen oste Der clipping
Rottenbuij
Stuboon
Malqueren
Hanno
Santhamer
Somerhaven
Ahuijs
Elcholm
Drelborch
Bleicker
Wistee
Wester garde
Hoeburch
Heylicholm
Boshwijck
Salsoman
Fare sondt
Gat van Silbuij
Stick holm
Fluer buij
I. Frouwen bergh
Stickborch
Honts buij
Telgen
Hartstick
Diarhaven
Vecken
Gat van Stocholm
Middel steen
Carwisen
Gotlandsche Steen
Schoonen
Ruwolde
Ter stolp
Reefcol
28

THE DESCRIPTION OF

the ſituation of the Sea-coaſts and Havens of Sweathland, which lye betweene Stocholme and Valſterboen: as alſo of Gotland, Oeland, and other Ilands more there abouts.

I.

How you ſhall ſayle into the Haven of Stockholme.

THe Sweathland Out-ſcharres and Rockes lying before the haven of Stockholme lye diſtant from the Ilands of Aland ſouthweſt, and ſouthweſt and by ſouth two-and-thirtie or three-and-thirtie leagues: as in the Chapter before is declared.

Landſoort. The haven of Stockholme goeth in ſouth, by a point called Landſoort, a litle north from thence there lyeth a rocke above the water, called the Heyr-hamer, it is a foule rock, and to ſeaward from this rock there lyeth another great rock, called Wigh-ſteene, it lyeth diſtant from the point of Landſoort northeaſt three leagues, & upon it there is a clift, you muſt goe in cloſe by it, and leave it on baghborde, you may alſo goe in weſtward about, betweene this rock and the Heyr-hamer, for it is verie faire round about it, then you come by a rock called Middleſtone which alſo is cloven, and ſheweth like a ſaddle of a horſe, you muſt leave that on ſtarborde. Betweene Wighſtone and Middleſtone the haven of Stocholme reacheth in about northnortheaſt: if you wil ſayle into the haven of Stocholme you muſt be warie and take heede of a rowe of rocks, which lye under the water, ſoutheaſt and by eaſt from Wighſtone, where you muſt goe cloſe in, croſſe before the channel, they are called Crawaſen, and there north lyeth Gomberſtone ſouthſoutheaſt from the Middleſtone. Eaſt from the haven of Stockholme there lyeth another great rock, which is called Schareopen, when you are paſt Middleſtone & are betweene both the lands, then you finde a rock called Rookoe. From Middleſtone to Rookoe the courſe is northeaſt and by north a league, and there you may runne about on both ſides if you will. Rookoe lyeth within the haven of Stockholme, and the point thereof reacheth into the Daler northeaſt and by north.

Heyrhamer. Wighſtone. Middle ſtone. Crawaſen. Gomberſtone. Scharopē. Rookoe. Daler.

Without the Daler Elſnap lyeth, & within the Daler Hartſticke goeth in, but is ſonke with ſhippes, ſo that no good ſhips can goe through: the Hartſtick reacheth firſt northweſt to the bocht, and then to Conincxhaven weſt and weſt and bynorth. Elſnap. Hartſtick.

From the Daler to Deerhaven, the haven of Stockholme reacheth northeaſt and by north, and northeaſt: from Duerhaven to Steendoren it reacheth ſouthweſt, and ſouthweſt and by weſt, from thence to the old church yarde weſtnorthweſt, from the old church yarde to Waxholme weſt and weſtſouthweſt, there you may ſhutte the haven with a boome: from thence it is ſouthweſt and by ſouth, and ſouthſouthweſt to Conincxhaven or S. Blaſins holme: from Conincxhaven or S. Blaſins holme the courſe to the towne of Stockholme is weſtnorthweſt, and northweſt a league. Dierhavē. Steendoren. The Old church yarde. Waxholm. S. Blaſens holme.

The chanel of Stockholme runneth along by the Northland in againe into the Northbodem, and ſo into the Eaſt-ſea, it reacheth betweene Wedde and Uxe about northeaſt and ſouthweſt, you muſt leave the firme land on baghborde, and the great Ilands on ſtarreborde, and ſo runne about northeaſt, and northeaſt and by eaſt to the North bodem.

II.

The ſituation of the Coaſt of Sweathland, betweene the haven of Stocholme, and the Sweathland Ioncvrouwe.

TWo leagues weſtſouthweſt from the point of Landſoort there lyeth a great rock named Hartſhals, which is verie well to be knowne, betweene them both the land there reacheth eaſt and weſt. Weſt from this rock there goeth in another haven or chanel, which you may runne through behinde Elſnap with jachts towards Stocholme.

The haven of Telgen. Weſt from this Haven the Haven of Telghen goeth in, which reacheth in about northweſt almoſt to the Moller, and at the ende of the chanel lyeth Telghen, but before it there lyeth a

Troſa. towne called Troſa.

The haven of Stickborch. From the aforeſaid rock called Hartſhals, to the Haven of Stickborch the courſe is w. n. w. but from Landſoort to this haven the land reacheth eaſt and weſt: it is a wide haven, and in

Newecoppen. the mouth thereof Newecoppen lyeth on the north ſide, but

Southcoppen. Sticxborch lyeth on the ſouth ſide: then there goe two havens more in, the one to South, and the other to North Coppen.

Northcoppen. From Landſoort to the Haven of Silbuy the courſe is ſ. w. and by ſ. 19 leagues: It reacheth in n. w. and n. w. and by n.

Silbuy. If you will anckor under Silbuy, you muſt turne up eaſtward, and anckor before the towne in the middle of the rocks, at ſeven, eight and nine fathome. You may there ſayle through the Sweathland Rocks to Weſtwick, Fluyerbuy, Vrouwenbergh, Sticxholme, and ſo northward to Schelſuyer, there it is all faire ground, and is fiveteene, eighteene and twentie fathome deepe.

Vrouwenbergh. Fleurbuy. If you will goe to Vrouwenbergh or Fluerbuy, then ſayle forward weſt, and weſt and by north, till you come againſt the land, then you may anckor againſt Fleurbuy, or you may turne up northweſt betweene the Iland of Vrouwenbergh and the firme land, and there anckor at twelve fathome. You may alſo runne through it into Weſterwick.

Weſterwick. Weſterwick lyeth diſtant from Silbuy weſt, and weſt and by north through within the Rockes, and there it is fiveteene or ſixteene fathome deepe.

Schelſuyr. From Silbuy to Schelſuyr it is norrhweſt ſeven leagues, all through within the rockes: Schelſuyr is a faire Haven or Creeke: there lyeth a rock in the Haven, but you may goe about it on both ſides, and anckor before the towne.

Hontsbay. Greene-Iland. Eaſt from Schelſuyr lyeth Hontsbaye, and then Greene Iland, there alſo is good anckor ground, and you may runne along thereby to Sticxborgh.

The out-rockes and ſcharres of Silbuy, and the land of Newe Coppen, or of Telghen lye diſtant about north and by eaſt and ſouth and by weſt fiveteene leagues: but the Out ſcharres of Silbuy and the Sweathland Ioncvrouwe lye diſtant ſouth and by eaſt, and north and by weſt eight leagues.

From Landſoort by the Haven of Stockholme to the Ioncvrouwe the courſe is ſouthſouthweſt four-and-twentie leagues. But from the Haven or the Out-rocks of Silbuy to the Sweathland Ioncvrouwe it is ſouth and by eaſt eight leagues.

III.

The ſituation of Gotland with the Ilands lying about it.

Sweathland Ioncvrouwe. From the Sweathland Ioncvrouwe to Carelſoo the courſe is eaſt, and eaſt and by north eleven or twelve leagues.

Small Carelſoo. Great Carelſoo. Great Carelſoo and Small Carelſoo, lye cloſe one by the other, they are two ſmall high Ilands, lying on the weſt ſide of Gotland: The Small Carelſoo lyeth neareſt to Gotland, and there under it is round about good Rode, at eight, nine, and tenne fathome, for round about it it is faire and cleane: Under Great Carelſoo alſo it is good Rode, on the weſt and eaſt-ſides, but on the north and ſouth ſides it is foule, therefore you muſt goe no nearer to Carelſoo by night then eleven or twelve fathome. Betweene Great Carelſoo and Small Carelſoo it is twelve, thirteene and fourteene fathome deepe. Right over againſt Carelſoo lyeth weſtergarde upon Gotland.

Weſtergarde.

Wisbuy. From Carelſoo to Wisbuy in Gotland the courſe is northeaſt ſixe or ſeven leagues. Men were wonte in old time to anckor there behinde a Head or Kiſt. In times paſt this was a notable and famous towne of Marchandiſe, where all trade of Merchandiſe was uſed, but now by Gods viſitation it is cleane decayed and ſpoyled. There yet to this daye you may ſee manie decayed houſes of Marble, and other hewen ſtones, whereby a man may partly ſee and geſſe her former ſituation and proportion. The Hanze townes did there for a long tyme holde their ſtaple and trade, the old Water-lawes are there made, and alſo the old famous Cardes, which in times paſt were verie perfect, but now altogether ſpoyled.

Gotland Sand. From Carelſoo to Gotland Sand the courſe is northeaſt, and northeaſt and by north one-and-twentie leagues. Gotland Sand is an Iland of a league great, you may ſayle round about it, and round about it it is white ſtrand. From the northweſt point there ſhooteth off a Sand, there it is ſixe, ſeven, and eight fathome deepe, and all over good anckor ground.

Coperſtone. The Coperſtone lyeth diſtant from Gotland Sand weſtnorthweſt and northweſt and by weſt three leagues.

Faro ſand. Four or five leagues ſouth and by weſt, and ſouthſouthweſt from Gotland Sand lyeth Faro Sand, and at the north ende of Faro Sand there ſhooteth off a badde foule ſhelf or Sand north-

north-

northeaſt about two leagues into the Sea, which is called Salfonreyn. You may runne into Faroſand at two and three fathome deepe, and there ſtandeth a church with a flatte ſteeple upon the land. From Faroſand to Sliet-haven the courſe is ſouth and by weſt three leagues, and from thence to Oſtergarde alſo ſouth and by weſt four leagues.

Salf-onreyn.

Sliet havē.

Oſtergarde.

From Oſtergarde there lyeth an Iland, which you may ſayle round about, and anckor where you will, at ſeven or eight fathome. You may ſayle into Oſtergarde about on both ſides of the ſaid Iland: The ſouth chanel reacheth in north at ſeven fathome, and the eaſt chanel, north from the Iland, reacheth in ſouthweſt and ſouthſouthweſt.

From Oſtergarde to Houborch the ſouthweſt ende of Gotland the courſe is ſouthweſt, and ſouthweſt and by ſouth about twelve or thirteene leagues.

Betweene them both there lye four Havens, called Santwick, Narwick, Boſwick and Heylicholme.

The haven of Santwick reacheth in about northnorthweſt, within it is five and ſixe fathome deepe: there ſtandeth a chappel upon the point of the land, and there it is good lying. This Haven and Oſtergarde are diſtant ſouthweſt and by ſouth, and northeaſt and by north about a league and an half.

Santwick.

Narwick lyeth from Santwick ſouthweſt three leagues, and on the eaſt ſide of the Haven there lyeth a long rock, which you muſt goe in by, and leave the other ſharpe rock on baghborde, and anckor within the haven at four or five fathome.

Narwick.

A league weſt from Narwick lyeth Boſwick: there lyeth an Iland in the middle of the haven, it is beſt to goe in ſouth from it, but you may alſo goe in north about it, and then you leave the two rocks on ſtarreborde: it is a faire haven, and in it is three fathome water.

Boſwick.

A league ſouth from it lyeth Heylich holme, it is alſo a good haven, but it is litle knowne.

Heylich-holme.

From Heylich holme to the ſouth ende of Gotland the courſe is ſouthweſt five leagues. On the ſouth ende of Gotland there ſtandeth a high ſteeple called Houborch. At Houborch alſo there goeth in a haven, you may anckor before it at ſixe or ſeven fathome. From the ſouth point of Gotland there runneth a Sand a great waie into the Sea, which is verie ſtonie, but you may ſound it about at ſeven, eight, and nine fathome.

Houborch

Sand of Gotland.

IIII.

The ſituation of Oeland, Calmerſond, and ſo to Valſterbon.

FRom the ſouth-point of Gotland to the ſouthpoint of Oeland the courſe is as much weſterly as ſouthweſt three-and-twentie or four-and-twentie leagues.: but the north ende of Oeland lyeth diſtant from the ſouth ende of Gotland weſtnorthweſt, or as ſome ſaye weſt and by north tenne or eleven leagues..

The Iland of Oeland as ſome ſay is four-and-twentie leagues long, and a great league broade, when you ſayle along by it you may telle eighteene ſteeples which are all flatte. The eaſt-coaſt reacheth north and by eaſt, and ſouth and by weſt, it is a faire coaſt, but about ſeven or eight leagues ſouth from the north ende, there ſhooteth off a Sand croſſe from the land about a league into the Sea, which you muſt ſhunne. By it alſo there goeth in a haven, where indifferent ſhippes may goe in, otherwiſe Oeland hath never a Haven. But within Calverſond there a man may anckor under Oeland, verie fitly to lade, for there it is good lying in all places.

Oeland.

Haven in Oeland.

From the north ende of Oeland to the Sweathland Ioncvrouwe, the courſe is weſt and by ſouth: you may ſayle round about it, and anckor where you will, there it is eighteene or nineteene fathome deepe.

Sweathland Ioncvrouwe.

From the Sweathland Ioncvrouwe to the rockes of Calmer, the courſe is ſouthſouthweſt eleven leagues. Calmerſond ſtretcheth through to Der-clipping ſouth and by weſt, and northand by eaſt twelve or thirteene leagues, there it is not all to broad nor deepe, there about you have three fathome and a foot deepe: If you come out of the ſouth you may runne in weſt alſo from the rockes, but there it is no more then twelve foot deepe, and that runneth in northnorthweſt.

Calmerſond.

About eight leagues ſouth from Calmer, and four leagues north from the Rough Iland there lyeth a litle towne called Overſchaer, there abouts ſhooteth out a ſtonie Sand, about a third part of a league from the ſhore into the Sea, come no nearer unto it then tenne fathome.

From the ſouth ende of Oeland there ſhooteth off a great Sand, at leaſt a great league into the Sea, and there it is ſeven or eight fathome deepe, when the chappel upon Suyder Norden is

Sand of Oeland.

northweſt a league from you, there it is tenne or eleven fathom deepe, you may ſound it about at eight or nine fathome, the ſouth ende of Oeland is called Zuydernorden, and the Sand is called the Sand of Zuydernorden. From thence to Derclipping it is weſtſouthweſt eight leagues

Derclipping.

North from Derclippingh or Out-clippingh lyeth the Rough Iland. Betweene that Iland and the firme land it is foule and craggie, ſo that you cannot ſayle through there: but upon the eaſt ſide of the Rough Iland you may ſaile along at tenne or twelve fathome without hurt. On the weſt or northweſt ſide of the Rough Iland there is good Rode, where is good lying, at eight or nine fathome faire ground, againſt the northeaſt and eaſt windes.

From Derclipping to Ahuys the courſe is weſt, and weſt and by ſouth tenne or eleven leagues: betweene them both, that is, weſt and weſt and by north from Derclippingh five leagues lyeth a great rock called Malqueren, which you may anckor under. North from this rock the towne called Rottenbuy lyeth in a Creeke: before it, as alſo before Eleholme you may anckor at ſixe, ſeven and eight fathome, for there is good anckor ground.

Malqueren. Rottenbuy. Eleholme.

There goeth up a river to Ahuys of eight or tenne foot deep, and before it as alſo before Selsborgh the Rode is ſeven or eight fathome.

Ahuys. Selsborch.

From Ahuys to Hanneu or Hanno the courſe is ſoutheaſt five leagues. Hanno is a high round Iland, you may ſayle and anckor round about it at tenne, eleven and twelve fathome. From Hanno to the north ende of Borneholme it is ſouth and by eaſt and north and by weſt eleven or twelve leagues diſtant.

Hanno.

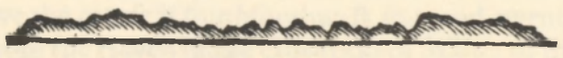
South from Hanno lyeth a towne called Sant-haver, weſt or north from it lyeth Somer-haven in a round baye, and there it is verie good anckor ground.

Santhaver Somer haven.

From the north ende of Borneholme to Utſtede the courſe is northweſt eight leagues. But from Utſtede to Valſterbon the coaſt reacheth about weſtſouthweſt thirteene or fourteene leagues.

Wtſtede.

Thus the ſouthende of Oeland ſheweth when it is croſſe from you.



V.

Of the depths and grounds ſituate in theſe chanels.

BEtweene Gotland and the Sweathland rockes and ſkarres in the chanel it is 34 and 38 fathome deepe, and cloſe by Gotland it is 25 fathome deepe.

Two leagues from the land weſt from Oſtergarde it is about one-and-thirtie fathome deepe ſoft ground.

Betweene Oſtergarde and Houborch you have a banck of four-and-twentie fathome, it is great redde ſand, then you can not ſee the land out of the toppe of the maſt.

And eaſtward alſo you have a banck there of fourteene fathome deepe, it is graye and white ſand, when you are over it, then you finde no ground at fortie fathome.

When Houborch is northnortheaſt ſeven leagues from you there it is fiveteene fathome deepe, ſtonie ground. And when you goe from thence northeaſt three leagues, there it is twentie fathome great ſtonie ground.

If you will ſayle from Borneholme to Oſtergarde, you muſt not ſpare your lead, but ſtill caſt it out towards theſe bankes, that you may make your account thereafter.

Betweene Gotland and Oeland it is uneven to ſound the depth: ſometimes you have two-and-twentie and three-and-twentie fathome, and ſometimes nine-and-twentie fathome, and all black grayiſh peeces of ground, ſometimes ſtones as great as peaſe, which are black and earthly coloured.

When you are northweſt and northweſt and by north from Houborch almoſt three leagues from the land, there you have great redde ſtonie Sand, with blacke ſtones in it as bigge as beanes.

When Zuydernorden lyeth weſt from you three leagues, there it is ſoft ground ſeven-and-twentie and nine-and-twentie fathome deepe.

And when the chappel upon Zuydernorden lyeth weſtnorthweſt from you three leagues, there it is thirtie and one-and-thirtie fathome deepe, it is lymie ſoft ground.

When Zuydernorden lyeth northnorthweſt, and ſomewhat northerlyer from you, and you are a league from the land, there it is thirteene fathome deepe.

When you are paſt Zuydernorden and come againſt Derclippingh in the chanel, there it is nine-and-thirtie fathome deepe, and there it is ſlickie and ſoft ground.

If I

If I ſhould deſcribe all the banckes which lye in the Eaſt-ſea ſeverally and perticularly by themſelves, they alone would conteyne a whole volume, for that in manie places it is verie banckie and uneven, for you ſhall come in no place but you ſhall finde banckes, as betweene Houborch and Oſtergarde, betweene Zuydernorden and Gotland, and betweene Oeland and Borneholme, and likewiſe againſt Reefcoi and Righſhooft, where you finde ſeverall banckes, and of unequall and ſeverall depths. Betweene Iaſmont and Borneholme you finde banckes of ſeven, tenne, fiveteene and twentie fathome, as in their places it is partly ſhewed: alſo on Righſche bodem it is full of banckes, of fiveteene, twentie, and five-and-twentie fathome. The deepeſt water of the Eaſt-ſea is about fortie fathome. Thus much I thought good to place here, that no man by reaſon of ſuch banckes, ſhould erre and goe out of the waie.

VI.

How theſe Places lye diſtant from each other.

HOw the Haven of Stockholme reacheth in from point to point, and all the Ilands and rockes thereabouts, it is alreadie deſcribed at large.

From Landſoort or the point of the haven of Stockholme to the rock Hartſhals weſtſouthweſt — — 3 leagues.
From Hartſhals to the River of Sticborch the courſe is w. n.w.
From Landſoort to Smaland weſt — — —5 leagues.
From Smaland to the haven of Silbuy ſouth and by weſt diſtant — — — — — 15 or 16 leagues.
From Landſoort to the haven of Silbuy ſouthweſt & by ſouth — — — — — — 19 leagues.
From Silbuy to Schelſuyr the courſe is northnorthweſt diſtant — — — — — — 7 leagues.
From Landſoort to the Sweathland Ioncvrouwe ſouthſouthweſt— — — — — — 24 leagues.
From the Outſcharres or rocks of Silbuy to the Sweathland Ioncvrouwe ſouth, and ſouth and by eaſt — 8 leagues.
From the Sweathland Ionckvrouwe to Carelſoo eaſt, and eaſt and by north— — — — 11 or 12 leagues.
From Carelſoo to Wisbuy northeaſt — 6 or 7 leagues.
From Carelſoo to Gotland ſand northeaſt, and northeaſt and by north— — — — — 21 leagues.
From Gotland ſand to the Haven of Stockholme weſt and by north — — — — — 16 leagues.
From Gotland ſand to Faroſand or the northende of Gotland ſouth and by weſt, and ſouthſouthweſt — 4 or 5 leagues.
From Faro ſand to Oſtergarde ſouth and by weſt —7 leagues.
From Oſtergarde to Houborch ſouthweſt, and ſouthweſt and by ſouth — — — — 12 or 13 leagues.
From the ſouth ende of Gotland to the northende of Oeland weſtnorthweſt— — — — 10 or 11 leagues.
From the Sweathland Ionckvrouwe to the rockes of Calmer ſouthſouthweſt — — — — 11 leagues.
From Calmerſond to Derclippingh ſouth and by eaſt diſtant — — — — — —12 or 13 leagues.
From Derclipping to Malqueren weſt, and weſt and by north — — — — — — 5 leagues.
From Derclipping to Ahuys weſt, and weſt and by ſouth diſtant— — — — — 10 or 11 leagues.
From Derclipping to Hanno ſ. w. and by w. — 10 leagues.
From Ahuys to Hanno ſoutheaſt— — —5 leagues.
From Hanno to the north ende of Borneholme ſouth and by eaſt— — — — — 11 or 12 leagues.
From the north ende of Borneholme to the tonne at Valſterboen ſand weſt and by ſouth — — 19 leagues.
From Stockholme ſkarres or rocks to the north ende of Oeland ſouth and by weſt — — — 22 leagues.
From the haven of Stockholme to Carelſoo ſouth 21 leagues.
From the ſouth ende of Gotland to Zuydernorden the ſouthende of Oeland ſ. w. & ſomewhat weſterlyer 23 or 24 leag.
From the ſouth ende of Oeland to Derclipping w.ſ.w. 8 leag.
From Derclipping to the northende of Borneholme northnortheaſt— — — — — 19 leagues.
From Oſtergarde to Borneholme ſouthweſt and ſomewhat ſoutherlyer — — — — 63 or 64 leagues.
From Houborch to Borneholme ſouthweſt and ſomewhat ſoutherlyer— — — — — 51 leagues.
From the ſouth ende of Oeland to the ſouth ende of Borneholme ſouthſouthweſt — — — 26 leagues.
But to the northweſt ende it is ſ. w. and by ſ. —25 leagues.

VII.

How theſe Lands are ſituate from other Lands.

FRom Gotland ſand to Boechſcharre north and by eaſt — — — — —20 or 21 leagues.
From Carelſoo to Boechſcharre n. n. e.— 40 leagues.

From Gotland ſand to the ſouth point of Alants Haf north, & north and by eaſt — — — 19 or 20 leagues.
From Gotland ſand to Dageroort n. e. and by e. 26 leagues.
From Gotland ſand to Derwinda ſ. e. & by e. 31 or 32 leagues.
From Oſtergarde to Dageroort northeaſt and northeaſt and by north — — — — — — 38 leagues.
From Oſtergarde to Derwinda eaſt — — — 29 leagues.
From Oſtergarde to Coninexberghen deepe ſouthſoutheaſt — — — — — — — 48 leagues.
From Oſtergarde to Righſhooft ſouth and north — 45 leagues.
From Houborch to Hondſoort northeaſt — 47 leagues.
From Houborch to Luſeroort eaſt and by north, and ſomewhat northerlyer — — — — 40 leagues.
From Houborch to Derwinda eaſt and by north 38 leagnes.
From Houborch to Memle eaſtſoutheaſt — 38 leagues.
From Houborch to Coninexberghen ſoutheaſt and by ſouth — — — — — — — 48 leagues.
From Houborch to Righſhooft ſouth and by eaſt 34 leagues.
From the ſouth ende of Oeland called Suydernorden to Sevenberghen eaſt, and ſomewhat northerlyer — 48 leagues.
From Suyder Norden to Memle eaſt — — 48 leagues.
From Suyder Norden to Righſhooft northweſt — 34 leagues.
How all the points of the Eaſt Sea, are diſtant and lye in length and bredth from Borneholme, you finde it at large deſcribed in the ſixth Chapter.

Heere followeth the Carde N. 29.

A DE-


t'Landt van Noordoosten
SVEDIÆ PARS
HALANT
t'Lant te Schoonen
SCANIA
Zeelandt
Het Schager rac
Duytsche mylen 15. in een graedt
Lieues d'Allemaigne 15. en un degré
Spaensche mylen 17½ in een graedt.
Lieues d'Espagne 17½ en un degré
Engelsche en Fransche mylen 20. in een gr.
Lieues Angl. et Franc. 20. en un degré
Bahuis
Nilens
Elsborch
Recfsont
Conshaek
Waersbergen
Valckenbergh
Helmste
Engelholm
Bodstadt
Katterop
Lailolm
Swedero
Juhlo
Haber
Bleeckle zijde
Malmuijen
Lants-croon
Barsebeeck
Elsenborch
Raa
Wichap
Krokrop
Swijneboeden
Lappesande
De Sondt
Ween
Sourholm
Noort-vliet
Visscher
Sunt-vliet
Drelborch
Schoner ende Valsterboon
Draker
Wibor
Coppenhaven
Elsineur
Het Basch
Halsneße
Estrum
Roskildt
Roschildsiourd
Iensiourd
Nicoper
Draxholm
Kuyck
Stecken
Haselin
Rif van Anout
Anout
Luys gronden
De Trindel
Lesou
Schager rif
Schagen
Dwael gront
Cleine helmen
Bratte spart
Berch spruyt
Kongel
Calfshut
Maestrant
Wrack
Wrack van Nieuwe Jaar Wings
Wrack van Bahuis
Nyng
Maelsgat
Maelsgat
Maelsgat

A DESCRIPTION OF

the Sea-coasts of Schoonen, Zeeland, Haland, and the Land of Northeaſt, from Valſterbon to Schaghen.

I.

The ſituation betweene Valſterbon and the Sond.

Valſterboen ſand. THe Sand of Valſterbon reacheth about ſouthweſt above a league to Seaward: If you come out of the eaſt, you may anckor under Valſterboen Sand at 7 or 8 fathome, ſo that then the ſteeple of Valſterbon ſtandeth weſt or weſt and by north from you: from Valſterboen Sand along by the Bleeſche ſide to Drelborch it is verie flatte.

Rode under Steden. You may alſo anckor under Steden, ſafe againſt a northerly winde, but you muſt runne in ſomewhat farre betweene Steden and Meun into the creeke, and anckor betweene Meun and Steden at eight or nine fathome, ſo that the ſhoring point of Steden may lye northnortheaſt from you.

Kuycke. North from Steden you muſt rũne up weſtward to Kuycke, which lyeth in a great creeke, it is there all ſhallowe or flat water at five, ſixe, or ſeven fathome, and you may anckor there where you will. Cloſe by Steden it is twelve and thirteene fathome deepe.

On the Sand of Valſterboen there lyeth a tonne at four fathome, and you may ſound about the Sand at five fathome without daunger. When the ſteeple of Valſterboen and the caſtle are one againſt another, then you are right againſt the Sand.

When you are about Valſterboen Sand, you may ſounde there within it at four fathome, along to the ſtrand of Schoo-
Hulwater. nen or old Valſterboen, where there lyeth a haven called Hul, or Hul-water, it is a deepe haven for common ſhippes, and goeth in at three or four fathome, and reacheth in moſt part northeaſt, you may ſound in along by the foot-ſtrand of Olde Valſterboen at three fathome, and you muſt leave Olde Valſterboen on the right hand, it is there wide and broade ynough. But before or againſt Olde Valſterboen there lyeth a Sand called Zuydvliet, which you muſt remember to ſhunne. Southvliet

From the tonne upon Valſterboen Sand to the tonne upon Draker ſand the courſe is north five leagues: but if you come out of the eaſt, and come out by Steden, then goe north and by Drakerſand. eaſt to Drakerſand, and that is ſixe leagues, and when the ſteeple of Coppen haven commeth upon the eaſt ende of the wood which ſtandeth weſt from Draker, then you have the length of Markes of Draker ſand. the tonne upon Drakerſand, then you may well ſet your courſe upon Southolme, till you come before Draker, there you ſhall finde five fathome water a foot leſſe, and that is the dryeſt of all the Middle ground.

The ſouth tonne of the Middle ground lyeth ſomewhat South tonne. higher up to Draker: from the tonne upon Draker ſand to the in the Middle ground Suyder tonne north, and north and by weſt.

Right over againſt this Zuyder tonne there lyeth a ſtone a- Fisher. bove the water, which is called the Fiſher, there you may ſound the Southolme, for there it is flatte water.

From the Zuyder tonne of the Middle ground, or the Caſper Caniel tonne and the markes. drought, to the tonne upon Caſper Caniel, the courſe is north and north and by weſt, there the Middleground is at the naroweſt, & there it is ſhoring on both ſides, if you lavere through the ſhallowes, you muſt winde as ſoone as it beginneth to drie, on the one or the other ſide. The markes of this tonne upon Caſper Caniel are theſe: when the ſharpe ſteeple of Coppen haven is againſt the white caſtle, then you have the length of this tonne, and there it is ſeven and eight fathome deepe.

From the tonne at Caſper Caniel to the Middle tonne, the Middle tonne. courſe is north and by weſt: the ſoutherlyeſt mille commeth upon the ſouthende of the towne, and the flatte ſteeple cõmeth within a lever or bowe length of the ſpeere ſteeple of Coppen haven

haven, theſe are markes of the Middle tonne: it is there eight or nine fathome deepe.

North tonne. From the Middle tonne to the North tonne the courſe is north and by weſt, and northnorthweſt, there in the chanel it is nine and tenne fathome deepe, but the tonne lyeth at ſixe fathome, on the north ende of the Middle ground.

From the north tonne to the Sond the courſe is north and by weſt, in that chanel it is eight, nine & tenne fathome deepe: you may alſo runne along by the weſt ſide at ſixe and ſeven fathome.

Rode under the Sond. A man may anckor in the Sond where he will: all the ſhippes for the moſt part anckor commonly along by the land ſouth from Elſenore, but with a ſoutheaſt winde it is badde lying there, for there it is fiveteene and ſixteene fathome deepe, but to Weem there lyeth a banck or flat of ſeven, eight, or nine fathome, there it is better lying, but it is ſomewhat farre from the land.

II.

How you ſhall ſayle out of the Sond through the ſhallowes, and ſo into Reefſhol.

ALthough I have heere perfectly declared how you ſhall ſayle through the Sands and Shallowes comming from Valſterboen to the Sond, yet I thought it not amiſſe alſo to write, How a man comming north, or out of the Sond ſhall ſayle through it, in regard that there paſſeth ſo great a number of ſhippes that waie everie yeere, and for that it is ſo requiſite and convenient to knowe the true and perfect ſituation of that chanel.

North tonne. If you wil ſayle out of the Sond to the Shallowes and Sands, you muſt goe ſouth and by eaſt, or you may ſound along by the wood at five or ſixe fathome, then you ſhall not in ſayling miſſe the North tonne, for it lyeth at ſixe fathome, on the north ende of the middle ground, eaſt from the tonne it is ſeven fathome deepe, but in the right chanel againſt this tonne it is nine or tenne fathome deepe. Markes of the north-tonne. The markes of this tonne are, when the ende of the wood is weſtſouthweſt, and the ſteeple of Coppen haven ſouthweſt from you, then you are againſt the north tõne, and there ſtandeth a flatte ſteeple a certaine ſpace ſouth from that wood: alſo there come then three hillocks on the north-ſide of the towne, all theſe are markes of the north tonne.

If you will ſayle to Reefſhol or to Coppen haven, then rũne weſt about this north tonne, and goe on ſouthweſt & by ſouth and ſouthſouthweſt, till the tonne lyeth eaſt, and eaſt and by north from you, there it will be four or five fathome deepe ſoft ground. To ſayle into Reefſhol. The markes of Reefſhol are theſe, there ſtand two or three trees on the high land weſt from Coppen haven, they ſtand ſouth from two or three hillocks: when they come upon the uttermoſt trees which ſtand on the northweſt ſide of Coppens haven, then ſayle ſouthweſt and by ſouth, till Torenbuy or Amack be againſt the beacon, then goe in ſouth and by weſt, then a ſteeple which ſtandeth croſſe within the land weſt from you, will come againſt a great ſtone, then you are in the narrowe where in times paſt the ſhippes were ſonke, and you leave a wracke of a ſhippe lying on the ſouth land, and then the beacon and the ſteeple of Amack are there long markes. Now to ſayle further forward through that ſtrait or narrowe waie, goe in ſouth and by weſt, and when you are farre ynough in, you may anckor where you will, you lye there croſſe the chanel with an anckor on the land, and another to Seaward.

Middle tonne. To turne againe to the Middle grounds or ſands: from the North tonne to the Middle tonne, the courſe is ſouth and by eaſt, and ſouthſoutheaſt, when you come to the Middle tonne, then the ſoutherlyeſt mille being ſouth from the towne of Coppen haven, and the flatte ſteeple come within a leaver or bowe length to the ſpeere ſteeple, theſe are the markes of the Middle tonne, or ſecond tonne in the ſhallowes or Sands, and there it is eight or nine fathome deepe.

Tonne on Caſmer Caniel. From the Middle tonne to the tonne upon Caſper Caniel, the courſe is ſouth and by eaſt, then the white caſtle commeth over the ſharpe ſteeple, and that is the marke of the third tonne, or the tonne upon Caſper Caniel, which is the ſouth ende of the Middle ground, there it is not verie wide, but ſhoring on both ſides, the depth is ſeven or eight fathome. If you will lavere there, you muſt winde as ſone as it beginneth to drie on either of the ſides.

Fourth tonne. The Fiſher. From the third tonne to the fourth, the courſe is ſouth, and ſouth and by eaſt: this lyeth upon the north ende of Draker upon the flatte, right over againſt it lyeth the Fiſher, which is a ſtone (as I ſaid before) which lyeth above the water, there you may ſound the Southolme, for there it is flat water. Betweene this third and fourth tonne there commeth a chanel or haven running out from Coppen haven, which is called Caſmer Caniel. Caſmer Caniel.

From the fourth or South tonne in the Middle ground to Draker

Draker ſand the courſe is ſouth, and ſouth and by eaſt, you may ſound the land of Draker at 3, 4 and 4 fathome and an half.

Draker ſand lyeth a good waie without Draker, and it reacheth half a league eaſtward into the Sea. The marks of the tõne at Draker ſand are theſe: when the ſteeple of Coppenhaven is ſouth from Draker upon the wood, then you are againſt the tonne. The dryeſt & ſhalloweſt water that you finde is betweene this tonne upon Draker ſand, and the aforeſaid fourth tonne, there it is 5 fathome leſſe a foot. When you are againſt the tõne upon Draker ſand, then goe ſouth and ſ. & by w. to Valſterboens ſand or to Steden, that is 5 leagues: but from the tonne upon Draker ſand to the Kuycke the courſe is ſ.w. ſixe leagues. When comming out of the Sond you are paſt the Sand of Valſterboen, then it is ſomewhat deeper, when you followe your courſe to Borneholme, but comming from the eaſt then it begins ſpeedely to be deeper when you are about the point of the Sand: the further ſituation of Valſterboen is declared before.

Markes of the tonne upon Draker ſand.

III.

How you may ſayle out of the Sond to Elleboghen, Malmuyen, and Landſcrone.

IF you will ſayle out of the Sond to Elleboghen or Malmuyen, then from Ween goe ſ. e. and ſ. e. and by ſ. then you ſhall ſee the ſteeple or towne lye before you, ſayle to it, in that chanel it is for the moſt part 7 or 8 fathome deepe, but whẽ you come within the Saltholmes, thẽ it is 5 or 6 fathome deepe, the drougth ſoone riſeth from ſeven to five fathome, but before the towne it is flatte water, there you may anckor at 3, 4 or 5 fathome as you will, you may alſo lye at the ende of the head at three fathome, there it is good lying, but with a n. w. winde there it is bad rode, for it bloweth openly in.

Rode before Malmuyen.

If you will goe out againe ſouth frõ the Southolmes to Valſterbon or Steden, then you muſt take heede of the Southolms, they are foule round about, from the north ende there ſhooteth a Sand ſomething farr out, on the eaſt ſide, upon the ſouth ende it runneth out flatte verie farre: and there alſo lyeth Nordvliet, which is a ſtonie Sand which lyeth under the warer, but you may ſee it lye greene under the water, which you muſt leave on the Southolmes ſide, that is on ſtarborde, but Southvliet which lyeth againſt old Valſterboen, you muſt leave on baghborde, & ſo runne through betweene them both, in that water at the dryeſt it is four fathome deepe. When you come from Malmuyen, and that the ſteeple of Coppen haven commeth upon the ſouth ende of Southolmes, then you are paſt by Northvliet: as you ſayle through in this ſort you muſt be verie watchfull, and take heede of the grounds aforeſaid.

Nordvliet. Southvliet

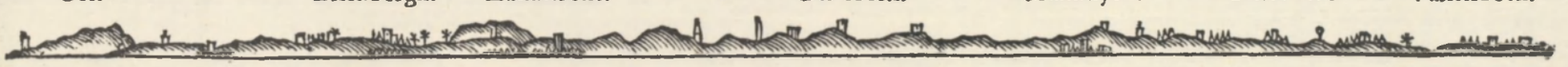
You may alſo goe out along by the ſtrand of Schoonen, and leave both Northvliet and Southvliet on ſtarreborde, for you may ſound that ſtrand at four and five fathome, as alſo the Sand of Valſterboen.

If you will ſayle into Landſcrone you muſt underſtand that there lyeth a ſhallowe Sand before the haven, you muſt runne ſouth into it, there ſtandeth a church on the north ſide ſomewhat forward, and a Gentlemans houſe ſomewhat further into the land, bring the church againſt the houſe, then you are free from that Sand, then ſayle in upon the point, and anckor at three fathome.

Landſcrone.

Thus the land of Schoonen ſheweth, when you ſayle through the Sands, from Col to Valſterboen.

Col. Elſenborgh. Landſcrone. Berſebẽck. Malmuyen. Schoonen. Valſterboen.



IIII.

The ſituation of the Sond to Col, and north from Zeeland to the Belt.

FRom Elſenore or the Sond to the point of Col the courſe is northweſt, and northweſt and by weſt 4 or 5 leagues. About a quarter of a league north frõ Elſenore lyeth Lappeſand, on the weſt ſide of the chanel, goe no nearer to it then 7 fathome, & you can not be hurt upou it. On the eaſt ſide about half waie betweene Col and Elſenborch lye the Swyneboden, which reach off from the land a good waie into the Sea, therfore when you are at the ende of Lappeſand, then goe n.w. & by w. till Col Huyberts cometh out before, & begineth to lye northnortheaſt from you, then goe boldly northweſt and by north, and northnorthweſt to the Sand of Anout, then you ſhall runne farre ynough without.

Col.

Lappeſand.

Swyneboden.

How to ſhune the Swyne boden.

But if you will ſayle from Col to the Sond, then hold the Iland of Weene hidde behinde the Caſtle of Elſenor, for if you bring not Weene without the caſtle of Elſenor, then you cannot ſayle under the Swyneboden: when you are paſt the Swyneboden, then you may ſayle forward in the middle of the water about Lappeſand: and when you are within the caſtle, then you may anckor where you will, as I ſaid before. Betweene Col & Zeeland it is ſixteene, ſeventeene, eighteene, and in ſome places twentie fathome deepe, but in the night come no nearer to Zeeland then twelve, thirteene or fourteene fathome, for at that depth you are cloſe by the land; for on Zeland ſide it is verie ſhoring.

Haſelin.

From Col to the Iland Haſelin it is ſouthweſt and by weſt eight leagues. From the eaſt ende of Haſelin there reacheth out a Sand northeaſt and by north: a great league from the ende of the Sand lye the Luyſgrounds, and lye from the ſouth ende of Anout diſtant northweſt & by weſt and ſoutheaſt and by eaſt: and from Col eaſt and by ſouth and weſt and by north, there the water is no deeper then eight foot. When you come from Anout ſand, and will goe to the Sond, then goe no ſoutherlyer then ſouthſoutheaſt, & ſo you ſhall not underſayle theſe groũds, for with a ſouth and eaſt courſe you ſhould ſayle by them, when you come from Anout ſand: but comming out of the Sond you ſhould underſayle thoſe Luyſgrounds with a weſtnorthweſt courſe. Therefore if you will ſayle to the Sond from Anout, or from the Sond to Anout with a ſharpe winde you muſt be carefull to remember them, and to take heede of them.

Luyſ. grounds.

Rode under Haſelin.

The Iland Haſelin on the outſide is all foule and full of Sands and ſhallowes, but on the Zeland ſide it is indifferent faire, there you may runne under to anckor. The coaſt of Zeeland is a faire ſtrand, and you may runne through betweene Haſelin and Zeeland to the Belt, but a litle weſt from Haſelin there ſhooteth off a Sand from Zeeland, which you muſt ſhunne.

About eaſtſoutheaſt from Haſelin there lyeth a great wide river, which without in the beginning is at leaſt a league wide, it is there good anckoring againſt a northeaſt winde at five or ſixe fathome. This River devideth it ſelf into three parts in the land of Zeeland: the firſt or caſterlyeſt goeth up ſouthſoutheaſt to Roskild: the ſecond goeth up to Iſicbie and Holbecke, there there lyeth a great Iland in the middle, and within it is three leagues broad, this River is called Iſenvoort, reaching into the land ſouth, and ſouth and by weſt ſixe or ſeven leagues. The third River reacheth to Draecxholme alſo five leagues ſouthweſt and northeaſt, ſo that in Draecxholme you may ſee the Sea, this river ſtretcheth as the Sea-coaſt doth along to the Belt.

Iſenvorde.

Thus Zeeland ſheweth it ſelf when you come from Anoult ſayling to the Sond.



V.

The ſituation betweene Col and Waersberghen.

FRom Col to the Iland Swederoer it is northeaſt and by north, there you may goe northward in behinde, there it is wide and broad, and betweene the great and ſmall rocks you may anckor at ſeven fathome, againſt the church of Turko, which is a white church, it is good to come in there, you may there goe ſouthward out againe, leaving the two rockes with the warders on ſtarreborde, and runne right up to Col cloſe about the rockes. If you come from Anout, and by meanes of ſoutherly windes can not gette above Col, you muſt goe from Col northeaſt and by north to Swederoer, and goe cloſe in by the two rockes wheron the warders ſtand, there it is ſoft ground ſo that you muſt looke to your anckors: a north winde bloweth openly into it. Swedero.

Betweene Col and Swederoer there is a great creeke, & there lyeth the towne of Engelholme, there alſo you may anckor. Engle-holme.

North from Swederoer there goeth in another great creeke, wherein Bos-ſtadt lyeth, three leagues eaſt from Swederoer, & a league eaſterlyer lyeth the towne or caſtle called Laholme, & there alſo goeth a River into the land. Bos-ſtadt. Laholme.

Three leagues northward from Laholme lyeth Helmſte upon a currant or falling water, but there may nothing but boyers and ſmall boates goe into it. Helmſte.

Three leagues weſtward from Helmſte lyeth the Iland Tullo, which lyeth northnorthweſt about five leagues from Swederoer: inward to the land againſt this Iland there lyeth a high hill, which ſheweth white, as if it were ſandie land, it is called Haver, but by Saylers it is called Yong Col, becauſe it is like Col for heigth and faſhion, and ſometimes alſo it is taken for Col. The Iland Tullo. Younge Col.

Three leagues north from Tullo lyeth the River of Valckenborch: on the north ſide thereof there lyeth an Iland called Muruptinge.

And

Valckenburgh. And three leagues more north from the River of Valckenborch lyeth Waersberghen, which is diſtant from Col north and by weſt, and ſouth and by eaſt twelve or thirteene leagues.

To ſayle into Waersbergen. To ſayle into Waersberghen then runne in by the eaſt ſide, but right upon the point of the Iland there lyeth a rock under the water, and from the point whereon the caſtle ſtandeth, there alſo lyeth a blinde rock, which you muſt ſhunne, and goe in the middle of the water, betweene the Iland and the Maie-land, and anckor againſt the caſtle at four or five fathome, there within it is all flatte water. To ſayle otherwiſe into Waersberghen ſette Outboy north from the caſtle, and goe in northnortheaſt, there lyeth a Rock there even with the water, you muſt leave it on ſtarreborde, and anckor belowe the caſtle at four fathome.

Thus the land of Waersberghen ſheweth, when you ſayle by Anout to the Sond.



VI.

The ſituation betweene Waersberghen and Maſterland.

Monſterſond. THree leagues north from Waersberghen lyeth Monſterſond, which is a River, which reacheth up into the land: upon it there lye ſometownes, as Vlymenes, Horne and Goeſwaer.

Nydingh. From Waersberghen to Nyding the courſe is northweſt five leagues: it is a verie badde rock, it lyeth even above the water, ſo that the water almoſt ſtriketh over it: everie man muſt take heede of it.

Maleſond. A great league northeaſt and northeaſt and by eaſt from Nydingh there lyeth an Iland called Maleſond, it is a round Iland, you may ſayle round about it at ſeven or eight fathome, and under it alſo it is good anckoring. Two cables length weſtnorthweſt from Maleſond lyeth a blinde rock, & there lyeth another rock a bowe ſhotte from the land even with the water, on it there ſtandeth a beacon, and upon the Mayeland there ſtande two great beacons each upon a rock, betweene them both there goeth in a haven, which lyeth eaſtnortheaſt from Maleſond, it is a faire haven of tenne fathome deepe, there is good anckor ground, about the lowe point you may ſee Consback lye north from you, you may runne in betweene Ning or Nydingh and the firme land, for there alſo it is flatte water.

Consback

Wynno. From Maleſond to Wynno the haven of Niloos the courſe is northnorthweſt three leagues. By Wynno you goe into the River of Niloos, the haven is called Reefſond, there lyeth a rough Iland, which you muſt leave on baghborde, and the long rock on ſtarreborde, and ſo you muſt runne in through the rocks by the rugged Iland, there are no blinde rocks which you neede to feare. When you come within the rugged Iland, then you may anckor there behinde or within at twentie fathome. The ſouth chanel reacheth in northnorthweſt, it is wide and broade and goeth in at eight, nine and tenne fathome.

Reefſond.

Frō Reefſond to Calffond it is northnorthweſt four leagues: you muſt ſayle into it ſouth from a great rock, whereon there ſtandeth a beacon, ſouth from the Haven there are manie great rockes, and northward they are ſmall rockes: now when you are within the rockes, about the point of the north land, there you may anckor at fiveteene or ſixteene fathome, for there it is good anckor ground. From Calffond you goe forward to Bahuys, and then you leave Connel on the left hand: you may alſo goe within the rockes from Calffond to the river of Nyleus. Calffond. Bahuys. Connel.

Maſterland and Calffond lye about four leagues diſtant. If you will ſayle from Schagen to Maſterland, then goe eaſtnortheaſt, then you ſhall ſee a round rock or hill called Bretto, when that is eaſtnortheaſt from you, and you ſayle right upon it, then you come open before Maſterland, and then you ſee the Paternoſters lye before you, which is a heape of out-rockes, which reach farre out into the Sea, leave them on baghborde, and ſayle along by them eaſtnortheaſt, & eaſt and by north, till you come by the Iland of Maſterland, and when you come to the land then the River will open, which reacheth in by the ſouth ſide moſt eaſt and by ſouth and eaſtſoutheaſt, and when you are within the Iland where the maſt or beacon with the barrel upon it ſtandeth, then turne up ſouthward behinde it, and anckor before the towne, for then you may ſee it lye before you: there you put an anckor out before to ſeaward, and make a rope faſt upon the Kaye, lying alſo with the ſterne of the ſhippe at the Kaye. Maſterland. Bretto hill. Paternoſters.

South chanel.

You may goe into the Sea againe through the ſouth chanel cloſe along by the rock, which lyeth in the middle of the chanel above the water: you may goe about on both ſides of this rock: but within the rock which lyeth above the water, there lyeth a blinde rock, and on the ſouth ſide there lyeth a great rock, that lyeth ſomewhat more outward then that which lyeth above it: and there lyeth alſo a blinde rock under the water on the Iland, upon the north ſide of the rock which lyeth in the chanel. The chanel reacheth in moſt eaſt and eaſt and by north, there all about it is good anckor ground, and you may alſo ſayle within through the rockes to the havens or rivers of Bahuys & Nileus.

Thus the land ſheweth betweene Waersberghen and Maſterland.



VII.

The ſituation betweene Col and Schaghen.

ANout ſand and Col lye diſtant from each other northweſt and ſoutheaſt about eleven leagues, you may eaſely ſee them both upon the hatches of the ſhippe in cleare wether, when you are betweene them: in that chanel it is twentie and two-and-twentie fathome deepe.

From Anout ſand to Zeeland the courſe is ſouthſoutheaſt twelve or thirteene leagues. Betweene Anout and Zeeland it is fiveteene and ſixteene fathome deepe.

Anout ſand is verie ſhoring, and reacheth from Anout about eaſtnortheaſt into the Sea: but when you come out of the weſt you may ſound it at ſeventeene or eighteene fathome, but when you come out of the Sond with a ſharpe winde then you can not ſound it. On the north ſide of Anout you may ancker at tenne or eleven fathome, ſo that then you may ſhunne the Sand to goe to the Sond.

Betweene Col and Anout there lyeth a banck which is no deeper then ſeven or eight fathome, ſometimes the ſtreame raveleth much thereon. There lyeth another banck betweene the banck of Anout and Valkenborch of twelve fathome, which reacheth to Haland, which alſo in ſome places is no deeper then eight fathome a litle ſouth from Anout ſand.

Betweene Anout and Waersberghen in the chanel it is two-and twentie fathome deepe, but there alſo there lyeth a banck betweene them both of tenne fathome deepe: when you are forced to lye by a winde betweene Anout and Leſou, and that you finde twentie fathome deepe, then you muſt knowe that you beginne to fall neare to Norwaie ſide: but when you runne weſtward and finde but twelve, thirteene, fourteene and fiveteene fathome, then you muſt knowe that you are towards the Iutſche or Anout ſide, then you muſt winde againe towards Norwaie: but where the bancks aforeſaid lye is declared before, there you muſt looke to it paſſing to and againe over it, leaſt thereby you ſhould erre and goe out of the waie. If you muſt be forced to laveere betweene Leſou and Anout, or betweene the Sond and Schaghen by night or in miſtie wether, you muſt not ſpare your lead: the chanel for the moſt part is twentie, one-and-twentie, two-and-twentie and three-and-twentie fathome deepe. Betweene Anout and Lezou in the right chanel it is five-and-twentie fathome deepe: but right betweene Anout and Lezou it is flatte water, of ſeven or eight fathome. There you may ſayle through betweene them both, till you come to the Belt. Anout on the weſt ſide is verie foule, and full of Dwalegrounds of two or three fathome.

Trindle. From the Sand of Anout to the Trindle it is northweſt tenne or eleven leagues. The Trindle lyeth northeaſt from the north ende of Lezou three leagues, upon it is about eight foot water, but as ſome ſaye but four foot. It is ſtonie ſand ground, and a Flatte in bigneſſe as much as two Morgens of land, it lyeth extended along the chanel, and on the northeaſt ſide there lyeth a tonne upon it. From Lezou there commeth a Flat towards the Trindle, which you may ſound at three or four fathome. When you ſayle through betweene Lezou and the Trindle, then the nearer to the Trindle you have the deeper water, that is 5, 6 & 7 fathome: ſpare not your lead by night about the Trindle, nor come no nearer unto it on the out ſide then 9 or 10 fathome.

Lezou.

What may be ſaid more of the Trindle, as alſo of the full ſituation of the Iland Lezou, with the bancks and Flats ſhooting

out

out from it, and how you may ſayle forward to Schaghen, & ſo about it, I have alreadie declared it at large in the fourth Chapter of this Book, whereunto I referre the Reader, and leave it here as needeleſſe to be reherſed againe.

VIII.

How the ſtreames runne in theſe places.

THrough the Sands and the Sond the ſtreame commonly goeth with the winde, but moſt about the North, when a hard eaſt winde bloweth, and then the ſtreame runneth out north.

Betweene Waersberghen and Maſterland in the chanel, the ſtreame alſo goeth moſt with the winde, and it raveleth there ſometimes upon certaine places as if they were Sands: this you may ſee in calme wether, when you let a lead ſinke upon the ground.

By Schaghen the ſtreame commonly commeth falling out of the Belt, and falleth to the Northeaſt land, ſpecially when the winde hath for a while blowne out of the eaſt or northeaſt: if you come from Anout, and will ſayle to Schaghen by night with a weſt winde, or cõming out of the weſt about Schaghen with a ſoutherly winde you would with thoſe ſtreames ſoone be driven under Norwaie, before you ſhould once thinke or imagine ſo much.

To conclude, in this chanel of Valſterboen, and from Steden to the Sond, & forth from the Sond to Schaghen it behooveth a Maſter or Pilot of a ſhippe to be verie circumſpect, and not to be careleſſe or negligent to ſhunne all the daungers of the multitude of foule Sands, Rocks and Shallowes which are therein, and about the ſame: therefore he that will uſe theſe Seas muſt be verie warie, for that one that is well acquainted with them hath ynough to doe to looke to himſelf.

Thus the Iland of Anout ſheweth when you come from Lezou.



Thus Lezou ſheweth when you come from Schaghen.



IX.

How theſe Lands and places are diſtant from each other.

FRom the tonne upon Valſterboen ſand to the tonne on Draker ſand ſouth and north — — 5 leagues.
From Steden to the tonne upon Draker ſand north and by eaſt — — — — — — 6 leagues.
The tonnes in the Sands or Shallowes how they lye diſtant is alreadie ſhewed.
From the north tonne in the Shallowes to the Sond north and by weſt — — — — — 7 leagues.
From the Kuycke to the tonne upon Drakerſand northeaſt — — — — — — — 6 leagues.
From Steden to Malmuyen northnortheaſt — — 8 leagues.
From Malmuyen to Reefſholme weſt — — 5 leagues.
From Malmuyen to Weeme northweſt and northweſt and by north — — — — — — 7 leagues.
From Lantſcrone to Elſenore weſtnorthweſt — — 3 leagues.
From Weene to Lappeſand northnorthweſt — 3 leagues.
From Elſenore or Lappeſand to Col northweſt and northweſt and by north — — — — — 5 leagues.
From Col to Engleholme eaſt — — 4 leagues.
From Engleholme to Tuerko northweſt — — 4 leagues.
From the point of Tuerco behinde Swederoer to Laholme eaſtnortheaſt — — — — — 3 leagues.
From Laholme to Tuylo northweſt and by weſt — 5 leagues.
From Tuylo to Waersberghen norhweſt — 5 leagues.
From Waersberghen to Maleſond n. n. w. — 5 leagues.
From Maleſond to Winno northnorthweſt — — 3 leagues.
From Winno to Maſterland northweſt — — 5 leagues.
From Maſterland to the weſt ende of the Paternoſters weſtſouthweſt — — — — 3 leagues.
From the point of Col to Haſelin ſ.w. & by w. — 8 leagues.
From Col to the out-point of Zeeland ſouthweſt — 5 leagues.
From Col to the ſouth ende of Swedero northeaſt 4 leagues.
From Col to Waersberghen north and by weſt — 12 leagues.
From Waersberghen to Nydingh northweſt — 5 leagues.
From Nydingh to Maleſond n. e. and n. e. & by e. 1½ league.
From Nydingh to Maſterland northnorthweſt 8 or 9 leagues.
From Col to the Sand of Anout northweſt 10 or 11 leagues.
From Haſelin to Anouts ſand north — — 11 leagues.
From the Sand of Anout to the Trindle northweſt 11 leagues.

From the Trindle to Schagen ſand northweſt — 8 leagues.
But from within the Trindle to the ſand of Schagen northweſt and by north alſo — — — — 8 leagues.
When you come from Schagen and will goe without about the Trindle the courſe is ſoutheaſt and by eaſt — 8 leagues.
From the north ende of the Sand of Leſou to Schagen the courſe is northnorthweſt — — — 8 leagues.

XI.

Croſſe courſes in Schaghen Reach.

FRom Waersberghen to Anoult or Anouts Sand ſouthweſt — — — — — 10 leagues.
From Waersberghen to Leſou weſt — — 16 leagues.
From Waersberghen to the Trindle weſt and by north diſtant — — — — — — 13 leagues.
From Waersberghen to Schagen is the courſe weſtnorthweſt — — — — — — 19 or 20 leagues.
From Nydingh to Schagen weſt and by north diſtant about — — — — — 15 or 16 leagues.
From Nileus to Schaghen weſt — — — 15 leagues.
From Maſterland to Lezou ſouthweſt, and ſouthweſt and by ſouth — — — — 13 or 14 leagues.
From Maſterland to Schagen weſtſouthweſt — 12 leagues.
And how the moſt part of the places and havens of Norwaie are diſtant from Schagen it is alreadie ſet downe in the third Chapter, and alſo in the Chapter enſewing.

Here followeth the Carde N. 30.


Ergentlijcke beschrijvinge der Zeecusten van Noorweghen tusschen der Neus en de Pater nosters, met alle havens daer tusschen beyden gelegen, daer benefens de Custe van Jutlandt vande Hibns aff tot om Schaghen, hoemen die beseylen en hem voor alle periculen hoeden sal

Naïve description des Costes maritimes de Norvege entre le Cap dey Neuse et les Pater nostres, avecq tous les Ports de mer la entredeux situez, Ensemble la coste de Juthlan, de des Holmes jusques au de la Schaghen, et comment on les navigera et evitera tous inconvenients et dangiers.

NORVE GIA

Noorweghen

T'LANDT VAN NOORT OOSTEN

IUTLANDIÆ PARS

Duitsche mylen 15. in een graedt. Lieues Allemandes 15. en un degre

Engelsse en Fransse mylen 20. in ee graedt. Lieues Anglaises et Francoises 20. en un degre

Spaensche mylen 17½. in een graedt. Lieues D'espagne 17½. en un degre

Fosteenen
Berch lant
Berch sont
Wijsfoort
T'hooge lant van Spanger
T'lage lant van Leest
Leest
Huer
Galmersond
Selloer, ofte Maensont
Maensont
Bisschops holen
Der Neuse
Der Neuse Melis
Calf
Koe
Wijsternsen
De Cloof, of Calf en Koe
Sparreus
T'gat voor Schaer.
Sont, ofte Westersont
T'gat van Hellige sont
Bylant van Hellige sont
Wester gat van Vlecker
Bylant voor Vlecker
Oester gat van Vlecker
Heilige sont
Vlecker
Drommels
Bergh verworden de Drommels
Omgekeerde Boot
Otterschaer
Bock
Ruyterwijck
Wolffsont
Oude Gat
Oude sont
T'gat van Wolffsont
Oester gat van Wolffsont
Wester gat van Wolffsont
T'gat van Blinckhorns eylant
Blinckhorns eylant
T'gat van oude hulsont
Hulsont
T'gat van Hemersont
Hemersont
Bylant voor Hemersont
Wester gat voor Hemersont
Oester gat voor Hemersont
Bylant voor Marsdou
Wester gat voor Marsdou
Oester gat voor Marsdou
Marsdou
Ronnesont
Oosterschaer
Oosterschaer
Oosterschaer

A DESCRIPTION OF

the Coaſts of Norwaie, lying betweene Maſterland and the Neus.

I.

The ſituation betweene the Paternoſters and the Iland Farder.

Britto hill.

BEhinde the Paternoſters (as I ſhewed in the Chapter before) there goeth a broad River into the land, whereon the round hill of Britto lyeth, which is a hill verie well to be knowne: when it is eaſtnortheaſt from you, then you are right before Maſterland.

Kercke-ſond.

North upward from this River lyeth Kerckeſond a great River which reacheth far into the land.

Harmen-ſond.

Three leagues north from Kerckeſond lyeth Harmenſond, & by it there lyeth an Iland called Harmenſhooft.

Harmenſ-hooft.

Harmenſhooft and the weſt ende of the Paternoſters lye diſtant north and by weſt, and ſouth and by eaſt five leagues.

Booch-ſcharre.

From Harmenſhooft to Suyderwicxholme the courſe is northnorthweſt four or five leagues, betweene them both lyeth Boochſcharre.

Suyderwic holme.

Suyderwicxholme & Noderwixholme are two great Ilands, which lye upon a great River, which runneth up farre into the land, whereon manie townes lye, which are alſo farre up in the land, as Oldborch, Oldwat, Aleroes and Dragens, from whence much fatte wares come. North from thence lyeth Ottrom, which alſo is a great River or Creeke, reaching into the land.

Ottrom.

Akerſond.

Weſt from Ottrom lyeth the Iland of Akerſond, which you may ſayle round about. The Iland of Akerſond lyeth from Zuyderwicxholme northweſt and by weſt five leagues.

Schip hill.

By Akerſond north from Ottrom lyeth Schiphill, it is a haven where men lade ſparres and other fatte wares.

TheSiſters

Graſwick.

From Akerſond to the Siſters it is weſt and by north four leagues: betweene them both lyeth Graſwick: When you ſaile into it then you leave the ſharpe point on baghborde, and within there lyeth a round rock, there is good anckor ground: you may goe about on both ſides of this rock. North from this rock there lyeth a great Creeke, where ſhippes lye in for the winde, and within alſo there lyeth a round rock, runne along by the weſt ſide, which firſt reacheth in north, and about the Iland northnorthweſt, leave the Iland on ſtarreborde, and then goe in northnorthweſt by the weſt ſide.

Elſange.

Behinde the Siſters lyeth Elſange: when you come from Farder, then you runne through within the rockes which lye within the Siſters, till you be againſt the land, then you ſee a great graye rock, which you muſt leave on baghborde, and the ſmall rockes that lye there within on ſtarborde, then goe about by the weſt ſide of the land, and then you ſhall ſee the haven open, which is narrowe, but within it is flatte water and ſoft ground.

Roge.

North from Elſanghe lyeth the point of Roge: at the eaſt ende of Roge you may anckor, there it is a ſmooth ſtrand, and you may goe through betweene Roge and the Calf. But if you will be under Fleto, then goe through betweene the two ſmall rockes. The point of Roge lyeth diſtant from the Iland Farder northnortheaſt five leagues.

Baſt.

From the Siſters to the Iland Baſt it is northweſt five leagues. But Farder and Baſt are diſtant north and by weſt, and ſouth & by eaſt alſo five leagues.

Marken-boet.

Asko.

Louſond.

From Baſt to the Soenwater it is north and by eaſt & northnortheaſt four leagues, betweene them both lyeth a foule point: and ſouth from Baſt lyeth Markenboet, and ſouth from it lyeth Asko, which is a creeke, and north from Asko lyeth Louſond.

Soenwa-ter.

From Farder to Soenwater it is north. When you ſayle from Farder or Baſt to Soenwater there lyeth a redde point betweene Soenwater and Coperwick: but if you will put into Coperwick you muſt turne up weſtward, when you are within the Lammeren, there ſtandeth a church on the weſt land, there is the lading place: you may ſayle further upward to Brakeneſſe, and on the north ſide Holmſond lyeth. Soenwater reacheth in for the moſt part north, upon it there lye manie havens and lading places, moſt on the right ſide as you come in: firſt Moſſond, which goeth up

Coper-wick.

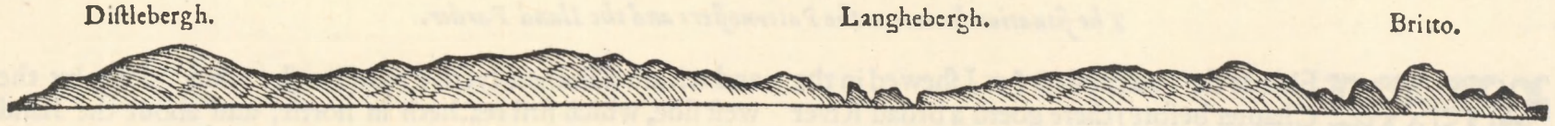
Holmſon

Moſſond.

Wickſte. eth up eaſtward: then Wickſte behinde an Iland, it is a creeke:
Schiphil. then Schiphill, which alſo is a Sand-baye, but it is a good rode:
Anſloe. It goeth up northward to Anſlo, then it runneth ſouthward into the Bodem.

Upon the coaſt betweene Maſterland and Farder it is all over for the moſt part good ancker ground at five-and-thirtie and fortie fathome.

Thus the Land of Northeaſt ſheweth it ſelf betweene Maſterland and Zuyderwicxholme being four leagues from it, as you ſayle along by it.



II.

The ſituation betweene Farder and Langheſond.

Tonsberghen. VVeſt from the Iland of Farder there lyeth a towne in a great Creeke called Tonsberghen.

Larwick. From Farder to Larwick the courſe is weſtſouthweſt four leagues. Larwick is a great broad River, wherein there are manie lading places and Creekes, where you may ancker. From the eaſt point of Larewick there runneth a rowe of rocks, which reach ſoutheaſt and by ſouth a good waie into the Sea, which you muſt ſhunne, for they runne almoſt over half the Creeke: the rockes are called the Larewicſche Swynen: within it it is flatte ſhallowe water, ſo that farre there within it no great ſhips can lye aflote, the havens of Larewick are all firrwood havens.

Stavange. On the weſt ſide of Larewick Stavange lyeth which are rockes, there you may ſayle in on both ſides.

A league weſt from Stavange lyeth the Neſſe, which is the eaſt point of Langeſond. From Farder to Langeſond it is weſtſouthweſt eight leagues.

Lange-ſond. Langeſond is one of the faireſt havens of all Norwaie: before old Langeſond there lyeth a high round rock, whereon there ſtandeth a great round maſt or beacon to knowe Langeſond by.

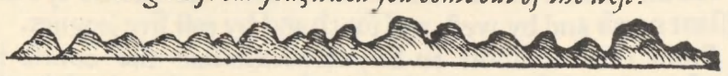
Coninex-haven. Coninexhaven or the River of Langeſond goeth northnorthweſt in by a rough rugged point, and then you goe in eaſt from the Baerſe, which lyeth off from the aforeſaid rugged point, within that haven it is thirtie fathome deepe: when you ſayle in keepe in the middle of the water, and ancker in Coninex-haven at eight-and-twentie or thirtie fathome. If you will goe in-

Baerſe.

The Neſſe. to the Neſſe, then ſayle betweene the great rock whereon the maſt ſtandeth, and the land of Old Langeſond, leaving the ſaid rock on ſtarreborde, and ſayle ſo about the rugged point into the Neſſe. The Neſſe lyeth behinde a Cingle ſtrand, you lye under a rowe of Rockes like redde ſand, there lye ſome ſmall rockes againſt this Cingle, there it is wide and broade, and a good haven to come into, there it is four-and-twentie and five-and-twentie fathome deepe.

Strand like a girdle.

Thus the land eaſt from Langeſond, ſheweth being five leagues from you, when you come out of the weſt.



III.

The ſituation of the Havens and Rivers, betweene Langeſond and Maerdou.

Iofferland. Aberfort. FRom Langeſond to Iofferland the courſe is ſouthſouthweſt a great league, betweene them both lyeth Abbefoert and Oſtkiel, and eaſt from the out-rock of Iofferland you may goe into the two havens. From the northerlyeſt rockes of Iofferland to Abbefort the courſe is northnorthweſt and northand by weſt a league, and to Oſtkiel is the courſe alſo northweſt a league. When you come out of the ſouth, you may goe within Iofferland through to Oſtkiel, or Abbefoert: you may alſo ancker behinde Iofferland at fiveteene and twentie fathome.

Oſtkiel.

Weſtkiel. Weſt from Iofferland there lye Weſtkiel, Santfort and Longen. If you will goe into Weſtkiel, you muſt leave all the great rockes which lye off from Iofferland on ſtarborde, and ſo ſayle upon the weſt ende of the haven, leaving all the ſmall rockes of Santfort on baghborde, and ſayle in northnorthweſt till you be about

about the weſt point, & then turne up northweſt. On the north ſide of the Ilands which lye within the haven, there is a ditch or falling water, where you may ancker at twentie or five-and-twentie fathome.

Santfort. Santfort lyeth a league weſt from Weſtkiel: if you will ſayle into Sandfort, leave all the ſmall rockes on ſtarborde, and ſo goe along by the land, till you be within the Longholmes, which remaine on baghborde, & goe right into the Wike. This is a faire haven, and you may goe from the eaſt into it.

A banck by Santfort. Againſt Santfort there lyeth a banck into the Sea, which in ſome places is no deeper then three or four fathome, and it endeth at Weſtkiel.

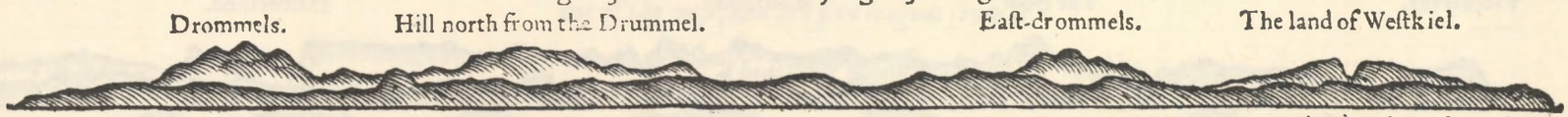
Longhen. A great league weſt from Sandvort lyeth Longhen, there lyeth a round Iland or rock before it, and thereon there ſtandeth a maſt with a barrel: this Iland or rock with the maſt lyeth upon the eaſt ſide of the haven, keepe along by the land whereon the maſt with the barrel ſtandeth, and ſayle in cloſe by the barrel, for there ſtandeth a hand on ſtarreborde of the haven, which ſheweth you, that there lyeth a blinde rock under the water, that there you might turne ſomwhat from it: this haven is narrowe, and a ſhort chanel to come into: now when you are within you may goe eaſtward againe into the Sea, and come out againe to the river of Santfort.

A league weſt from Longhen lyeth the haven of Oxefort, it is a wide haven, & runneth in firſt north, there lyeth a long rock weſt from the haven, leave that on baghborde, and goe north till you be about the weſt point of the land: when you are a litle waie within the long rock, there lyeth a blinde rock under the water, which you muſt leave on ſtarborde, and on the weſt point alſo there lyeth a blinde rock, which you muſt ſhunne. When you are there within, then you muſt ſayle in northweſt and by north and northweſt, and ancker upon the north ſide of the haven, there it is wide and broad, & there are manie creekes, wherein you may lye at twentie and five-and-twentie fathome, there you may ancker where you thinke good. Oxfort.

When you are before Longhen and Oxefort, then the Drommels lye weſtnorthweſt from you.

About a league weſt from Oxford Tromſond goeth in, eaſt from the white church which ſtandeth on the Sea ſide, about half a league eaſt from Mardou: it is a faire river. You muſt ſayle in behinde the land of Mardou into the haven of Mardou, there ſtand two maſts or beacons upon the eaſt or north ſide of the haven upon a high hill, you muſt ſayle in by them, and there alſo you may ancker. Tromſond

Thus the land betweene Mardou and Langheſond ſheweth, when you come out of the weſt, and are five leagues from the land almoſt againſt Longhen.



I I I I.

The ſituation betweene Mardou and Vlecker.

The Iland Mardou. THe Iland of Mardou on the toppe is full of greene trees, and round about it is all bare rockes, on each ſide of the Iland there-goeth in a haven: the eaſt haven of Mardou reacheth in w. ſ. w. there lyeth a blinde rock on the right hand as you goe in, but you muſt go cloſe in by the Iland of Mardou, the haven is no deeper then three fathome, and you may ancker under the Iland at 12 or 13 fathome, you may alſo goe up into the river. The weſt haven goeth in on the weſt ſide of the Iland, you muſt leave Mieuholme on baghborde, and goe in n. n. e. & ſo ſayle behinde the Iland, or els goe up the river, and there ancker on the weſt ſide. Frō the weſt ende of the Iland of Mardou there lyeth a rock under the water, which you muſt ſhūne, when you goe into the weſt haven. When you are before Mardou the Drommels lye n. w. from you, but when you are right before the land or the haven you cannot ſee the Drommels. Drōmels.

Weſt from Mieuholme there lye manie redde rocks: weſt frō thence you goe into Heſnes, and half a league weſterlyer lyeth Kerckſond: upō the Iland of Heſnes there ſtand two beacons or maſts, and there it is verie deepe, but to Kercken it is ſhallower, there it is 30 fathome deepe, & the outrockes there are all redde. On the weſt ſide of the haven lyeth a rock under the water called Coenagle: there ſtand two maſts upon the land, when they are one againſt the other, then you are againſt the Coenagles. The two maſts aforeſaid ſtand upon the graie holme, leave them on ſtarborde, and ſo goe inwards, there it is high land, and the Drommels lye about n. n. w. from you: you may ſayle from thence within the rockes to Mardou. Heſnes. Kerckſond.

Hamerſond. Two leagues weſt from Heſnes lyeth Hamerſond: the haven of Hamerſond reacheth in northnortheaſt, and you may ancker behinde the Iland againſt the beacon at thirtie fathome. The eaſt haven of Hamerſond reacheth both in and out northweſt and ſoutheaſt, & there lyeth a rock on the weſt ſide with a maſt or beacon upon it.

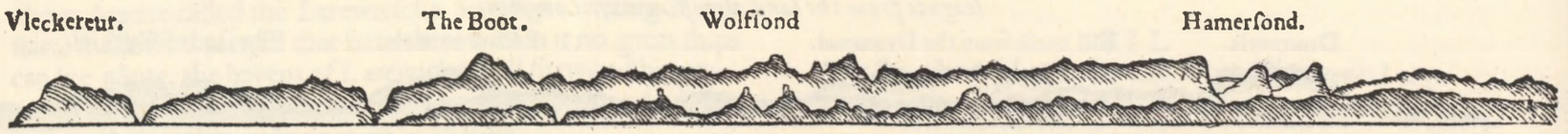
Old Hilſond. Weſt from Hamerſond you goe into the Old Hilſond: if you will goe into Old Hilſond, you muſt goe in eaſt from the rockes of Blindſond, which lye on the weſt ſide of Old Hilſond. Before Old Hilſond there lye manie great rockes, and there ſtand two or three maſtes upon them all, which you muſt leave upon ſtarborde, and goe in (as I ſaid before) by the weſt ſide, you may turne weſtwards up about the point, and ſayle through betweene the Ilands, that you may ſee no Sea, you may there goe into what River you will, they are all faire Rivers to goe into.

Blindſond The Iland of Blindſond lyeth on the point of the weſt ſide of Old Hilſond.

Wolffond. You ſhall knowe the Iland of Wolffond thus: they are all high graie rockes, and there ſtand three or four maſtes upon them. Wolffond hath two havens: the eaſt haven reacheth in northweſt, and then you muſt leave the great round high rock whereon the maſt ſtandeth on the weſt ſide: the weſt haven is a narrowe haven to goe into, it goeth in upon the north ſide of Reperwick, there ſtand two ſtenges or maſts upon the land, which you muſt leave on baghborde, and there you muſt goe in cloſe by them, and on ſtarborde there lye a companie of ſmall rockes, you muſt goe in by them, and ſayle behinde the Iland whereon the great maſts ſtand, and there ancker, there you lye ſafe againſt all windes, and you may alſo runne there within the rockes, and come out againe into the Sea by Old Hilſond, or you may alſo goe out of the eaſt haven of Wolffond, which you will.

Reperwick haven goeth in right weſt from Wolffond north, and north and by weſt, it is a faire wide haven, you muſt ſayle in by the land of Wolffond, and leave all the rockes of Wolffond whereon the maſts ſtand on ſtarreborde, and all the great rocks of Ranſond on baghborde, and ſo goe in behinde into the haven, and then turne up weſtward, and there ancker, there is the rode, and a faire haven for ſhips that will goe weſt.

Thus the land ſheweth betweene Mardou or the Drommels and Vlecker, when you come out of the weſt, and ſayle along by it.



V.

How you ſhall ſayle into Vlecker and the havens betweene Vlecker and the Neus.

Vlecker. VVeſt from Coperwick lyeth Vleckeroer, which alſo hath two havens to goe into, the eaſt haven of Vlecker goeth in weſt from the point of Ranſond weſtnorthweſt: when you are before the eaſt haven of Vlecker, then you may ſee full into the Voſſe, when you ſayle into it you leave all the black rockes on ſtarborde, and the great graie rockes with the Iland whereon the two maſtes ſtand on baghborde, & goe in by them, leaving them on baghborde, then you muſt turne up weſtward to Dievenholme, and there ancker weſt in the Sandbave.

When you are before the eaſt haven of Vlecker there lyeth a round hill, called the Omgekeerde Boot, it ſtriketh out above all the land againſt Hamerſond, when you come out of the weſt, then you ſee three high lands lying inward to the land, which when they come towards the Drommels by litle and litle vaniſh awaie. Omgekeerde Boot.

The weſt haven of Vlecker reacheth in northnorthweſt, whē you come from Heyligheſond you may ſee the river open, and you may ſayle by the rocks and ſcharres of Heyligheſond, along into that Iland, you muſt ancker on the weſt land within Dievenholme whereon the gallowes ſtand, at fiveteene, ſixteene and twentie fathome.

You may goe againe from thence through that eaſt haven into the Sea, and leave the Iland with the maſtes and all the great rockes on ſtarborde, and all the black rockes on baghborde.

The

Heyligheſond.

On the Iland of Heyligheſond there ſtand two great maſtes, you muſt goe weſtward into the Iland til you be in,& you muſt ancker under the aforeſaid Iland, whereon the maſtes ſtand, there runneth a great river into the land, there you may ſaile in, for there the ſhippes lade.

Scheerſond or Welterryſen.

Four leagues weſt from Heyligheſond you goe into Scheerſond or Weſterryſen, you muſt leave Sparrels on the left hand, and all the great holmes or rockes on ſtarborde, and ſo you muſt goe in.

Melin.

A litle eaſt from the Neus lyeth a rock with two maſtes called Melin: a litle eaſterlyer from that there lyeth another rock, whereon alſo there ſtandeth a maſt, which rock is called Sparrels, betweene theſe two out-rockes you muſt goe into the Cloof, or the Cowe and the Calf, which are two well knowne round hillocks, lying in the land of the Neus, when you come againſt Sparrels, there lyeth a blinde rock under the water, but when you are within Sparrels, then there lyeth a rock above the water,which you muſt leave on baghborde, then the haven will by litle and litle open unto you, and then you are againſt the Clofe, and then turne up weſtward about the point,and ancker there in the Sandbaye at fiveteene or ſixteene fathome, then the Cowe and the Calf will be about northnortheaſt from you.

Sparrels.

Cowe and Calf.

Right weſt from the point of Neus, there goeth in a haven which is called Selloer or Maneſond: if you will ſayle into the eaſt chanel of Maneſond, you muſt beware of the Biſhops boeden(lying in the middle of the River)and leave them on baghborde, and goe along in by the land of the Neus, untill you come a litle within Biſhopsboeden, there you ſhall finde a rock under the water, which you muſt ſhunne,& ancker right againſt the white church within the ſaid rock: but if you will goe in at the weſt or north chanel, then you muſt goe north about the out-rocks, and ſayle upon the ſouth ende of the lowe land to Leeſt, and goe in by it, but you muſt take heede of the rockes, which lye off from the innermoſt Iland,under the water on ſtarborde: now when you are againſt or within Biſhops boeden, then it will there be nine fathome deepe, there you may ancker, or if you will goe further in, then ſayle upon the ſaid white church, which ſtandeth on the north ſide, & ancker there where you will.

Sellore or Maneſond.

Bishops boeden.

You may alſo goe in eaſt,behinde the lowe land of Leeſt, but it is a whole land.

The high land of Spangher.

Eaſt from the Neus the high land of Spangher lyeth, which is a land verie wel to be knowne.

Thus the land of Norwaie ſheweth betweene the Neus and Vlecker, when you come out of the weſt,and are five leagues from it.



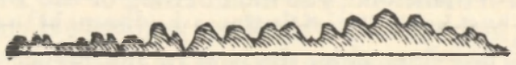
Thus the Cowe and the Calfe ſhewe when you come out of the weſt, and are againſt them.



Thus the Cowe and the Calf ſhewe when they are north and by eaſt four or five leagues from you.



Thus the Neus ſheweth when it is four or five leagues weſt from you.



VI.

Of the falling of the ſtreames along theſe Coaſts.

ALthough the water upon the coaſts of Norwaie falleth up and downe, yet it holdeth no certaine tyde: ſome time of the yeere, and ſpecially in the fore part thereof there goeth ſo ſtiffe a ſtreame about the weſt, along by the coaſt of Norwaie, that a ſhippe lying by the winde with a ſouthweſt ſtreame, cannot drive downewards if it may beare ſayle, and the nearer you are under the coaſt of Norwaie, there you finde the harder ſtreame. This ſtreame commeth in that ſort falling out of the Belt againſt the Land of northeaſt, and turneth in that ſort along by the coaſt of Norwaie into the north Sea: but betweene Farder and Maſterland it is for the moſt part all anckor ground at 35 and 40 fathome.

VII.

How theſe Places are diſtant one from the other.

FRom the weſt ende of the Paternoſters to Harmenſhooft north and by weſt — — — 5 leagues.
From Harmenſhooft to Zuyderwicxholme northnorthweſt — — — — —4 or 5 leagues.
From Zuyderwicxholme to Akerſond n. w. & by w. 5 leagues.
From Akerſond to the Siſters w. and by n. — —4 leagues.
From the Siſters to Baſt northweſt — — 5 leagues.
From Baſt to Coperwick north and by weſt — 4 leagues.
From Baſt to the Roo-hooke or Soenwater n. n. e. 4 leagues.
From Soenwater to Farder ſouth — — 8 leagues.
From Baſt to Farder ſouth and by eaſt — 5 leagues.
From Monick Iland & from Roge to Farder ſ. ſ. w. 5 leagues.
From Farder to Larwick weſtſouthweſt — — 4 leagues.
From Farder to Langeſond weſtſouthweſt — 8 leagues.
From Langeſond to Iofferland ſouthſouthweſt above a league.
From Oſtryſen to Mardou ſouthſouthweſt — —3 leagues.
From Iofferland to Mardou ſouthweſt — 8 leagues.
From Mardou to Blindſond ſouthweſt — —4 leagues.
From Mardou to Reperwick ſ. w. — — 8 leagues.
From Blindſond to Wolffond ſ. w. — —3 leagues.
From Wolffond or Reperwick to Vleckereur weſtſouthweſt, & ſouthweſt and by weſt — — — —3 leagues.
From Vlecker to Scharſond weſtſouthweſt — 3 leagues.
From Schareſond to the Neus w. ſ. w. — — 4 leagues.
From Vlecker to the Neus w. ſ. w. — — 8 leagues.
From Reper to the Neus weſtſouthweſt — —8 leagues.

VIII.

How theſe Lands are diſtant from other Lands.

HOw all theſe havens of Norwaie are diſtant from Schaghen and the Holmes in Iutland, both for length and wideneſſe, you finde it in the third Chapter of this Book deſcribed at large.

From der Neus to Schaghen eaſt — — 33 leagues.
From der Neus to Holmes in Iutland ſ. e. —19 or 20 leagues.
From der Neus to Bovenberghen ſ. e. and by ſ. —24 leagues.
Frō der Neus to Holie land ſ. & by e. & ſ. ſ. e. 67 or 68 leagues
From der Neus to the Eems ſouth and ſomewhat eaſterlyer — — — — — 75 or 77 leagues.
From der Neus to Bornriffe ſouth, and (as ſome ſay) ſomewhat weſterlyer — — — — — 83 leagues.
From der Neus to Texel or Marſdeepe ſ. & by w. 93 leagues.
From der Neus to Walcheren ſ. and by w. 126 or 127 leagues.
From der Neus to the Pas of Calis ſouthſouthweſt and ſomewhat weſterlyer — — — — 144 leagues.
From der Neus to the Holmes before Yarmouth ſouthſouthweſt and ſomewhat weſterlyer — — 104 leagues.
From der Neus to Flamburgh head ſouthweſt —101 leagues.
From der Neus to Scarborowe ſouthweſt — 100 leagues.
From der Neus to the river of Newcaſtle ſouthweſt & by weſt and ſomewhat weſterlyer — — 104 leagues.
From der Neus to Lieth in Schotland weſtſouthweſt & ſomewhat weſterlyer — — — — 103 leagues.
From der Neus to Buquhamneſſe weſt and ſomewhat northerlyer — — — — — 88 or 90 leagues.
From der Neus to Fairhill weſtnorthweſt — 93 leagues.
From der Neus to Hitland n. w. and by w. about 100 leagues

Here followeth the Carde N. 31.

A DE-



Pascaarte van Noorweghen, vertoonende de Zee-custen geleghen tusschen der Neus en Berghen, met alle hare wonderlycke clippen rudsen en menichte van Eylanden aende selfde custe geleghen, gestelt op zyne rechte streckingen en distantien van mylen
Carte Marinesque de Norwege representant les costes situees entre le Cape der Neus et Bergues auecq. ses admirables rochiers escueilz, et quantité d'Isles gisantes a la dicte coste, le tout exactement mis selon ses vrayes routes et distance de lieues.
Duitsche mylen 15. in een graedt
Lieues Allemandes 15. en un degré
Engelse en Franse mylen 20. in een graedt.
Lieues Angloises et Francoises 20. en un degré
Spaensche mylen 17½. in een graedt.
Lieues D'espaigne 17½. en un degré
NORVEGIA
Noorwegen
Dit is Uldrick
Halsne
Dese 3 bergen leggen benevens Cruysfoort
Flandt van bock op de raa
Bergen
Kuckenwyck
Lethoern
Wagestroom
Cruisfoort
Crabbekerck
Bagholm
Bock opra
Bock liedt
S. Olofs holm
Dat groote eylant
Reyne knaep
Rooholm
De Cruysfoort
Storm sont
Pape sont
Soltmer sont
Bommel sont
Bommel hoofd
Notu sont
Tlant van oude Liedt
Oude Liet
Bremerholm
Dat nieuwe Liet
Bommel
Bommel haven
Syck
Lunghol
Quale
Bock
Dat Liedt
Nouuwe
Scuteness
Clip
Wt sieers
Stafanger
I. Diefholm
Doeswyck
Slot van Doeswyck
Tongeness
Bock foort
Sibrich steen
Wyttinsch ooch
Rudt
Festeen
Ustia
Jedder
Walbert
Serenooch
Ekesont
Berchsont
Haven van Winfoort
Winterfoort
Maen sont
Galmesel
Koe Calf
Muer
Der Noess
Bisschops boeden
Leest
Selloer
Fock steenen
I. Winfoort
31

A DESCRIPTION OF

the Sea-coaſts of Norwaie, from the Neus to the Citie of Berghen.

I.

The ſituation betweene the Neus and Schuytenes or the Liet or Haven of Berghen.

IN the Deſcription made before I have ſufficiently declared how you ſhall ſaile from the weſt and north into the Havens of the Neus or Maenſond.

Winfort. Three or four leagues north from the low land of Leeſt lyeth the Iland of Winfort, & ſouthward from thence you goe into the haven or Winfort, which reacheth in northeaſt: but betweene Winforde and the lowe land of Leeſt there lyeth another faire haven called Winterford.

Fockſteenes. A league to ſeaward from the Iland of Winfort there lye two out-rockes, which are called the Fockſteenes, the one lyeth nearer to the land then the other.

Berchſond North from the Iland of Winfort you goe into Berghſond, which haven reacheth in e. n. e. along by the aforeſaid great Iland, and you may ancker at the ende of the Iland.

Ekeſond. Three leagues north from Berghſond lyeth Ekeſond a good haven, there you goe in north from all the out-rockes, and you may ancker on the north ſide, for there is beſt anckering.

Serenooch North or weſt from Ekeſond there lyeth a haven called Serenooch, north from that there is a white ſtrand, where there ſtandeth a church upon an out-point, and alſo there lyeth a high rock called Walbert, whereon there ſtandeth a maſt or beacon.

Walbert. From that rock there ſhooteth out a ſtone Sand or ſhelf, and on this white ſtrand there is a Las or Salmon fiſhing.

The Iedder. The aforeſaid high rock called Walbert lyeth right over againſt the ſouth ende of Iedder or the high land of Leeſt. The land of Iedder is at leaſt five leagues long, without anie havens, on each ende of this land there ſtandeth a church, & from each ende alſo there ſhooteth off a Sand: the northerlyeſt Sand reacheth northweſt into the Sea, & an half league northnorthweſt frō the ſaid Sand there lyeth a rock or Iland named Rut, which you may goe about on both ſides. Croſſe from Rut to Seaward lyeth the Veſteene, about five leagues north from the Iedder. Veſteene.

About three leagues northnorthweſt from the Veſteene there lyeth an Iland whereon a church ſtandeth called Wittinghs: but northnortheaſt from the Veſteene four leagues there lyeth an Iland before the haven or river of Stavanger called Sibrichtſteen. Wittinghs eye. Sibrichſteene.

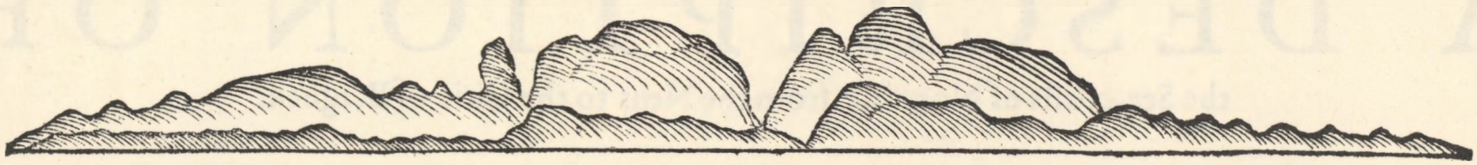
If you will ſayle into Stavanger, comming out of the ſouth, ſayle through betweene the Veſteen and the Maieland, leaving the foreſaid Rock called Rut on ſtarborde, but take good heede of the ſtone Shelf, which reacheth off from the north ende of Iedder, ſayle ſo inward till the Veſteen be ſoutheaſt from you, then goe in northeaſt to the point of Tonghenes, which is a long point and lowe land, and lyeth on the ſouth ende of the River: now when you ſayle from the Veſteene to Tonghenes, then you ſhall ſee the Iland Sibrichſteen before the River, which openeth it ſelf into two parts, leave it on baghborde, and ſayle in by the point of Tonghenes, but there lyeth a rock northward from the point: ſayle through betweene this rock and the point, about eaſt and eaſtſoutheaſt into Doeſwick, and when you are within the caſtle of Doeſwick there you may ancker. But if you will ſayle forward before the towne of Stavangher, then leave Dieſſholme on ſtarborde, and ſayle in foutheaſt, & ſouthſouthеaſt, till you be before the towne, and there ancker where you will. Tonghenes. Doeſwick Stavangher.

But when you come out of the north and will ſayle to Stavangher, then goe betweene the Veſteen and Whitings eye, and then goe on northeaſt to Sibrichſteen & the point of Tonghenes, and doe as I ſaid before.

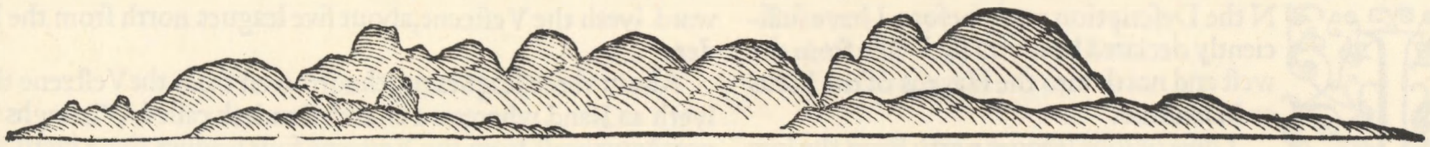
From Veſteen to Schuytenes it is northnorthweſt five leagues. But from Schuytenes to Sibrichſteen, through betweene Whitings eye it is eaſt and weſt five leagues.

Four leagues weſt and weſt and by north to ſeaward from Schuytenes there lye certaine rocks called the Wtſiers.

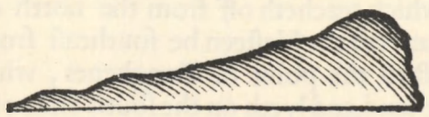
Tus the land of the Iedder ſheweth when it is northeaſt from you five leagues.



Thus the land of Iedder ſheweth when it is eaſtnortheaſt from you ſixe or ſeven leagues.



Thus the Bock ſheweth when you are ſouth from Schuytenes, before the Liet.



Thus the hill Syke ſheweth when you are north from Schuytenes.



II.

How you may ſayle up the Liet van Berghen from Schuytenes to Berghen.

THe Liet goeth in betweene the Iland of Schuytenes and Bock, when Bock lyeth northeaſt from you, then you are right open before the Liet, Schuytenes lyeth on the weſt ſide, and Bock on the eaſt ſide, and reacheth in firſt north and north and by weſt three leagues to Perdeholme, or the great warder or maſt, and there is good rode againſt the foreſaid warder or maſt. From Perdeholme to Vlocx it is north & north and by weſt three or four leagnes. The Vlocx lyeth right without Longhol, which is a good haven, you lye there with an anckor to Sea, and a rope faſt on the land, there it is fiveteene fathome deepe.

Over againſt the Vlocx lyeth Bommel haven, there alſo is a a good Rode.

Bommelſond. Bommel or Bommelſond goeth into the Sea by Bommel head, which is a high rock, which lyeth on the north ſide of the haven, but on the ſouth ſide there lye manie ſmall rockes, which as you goe out you muſt leave on baghborde: the haven reacheth ſouthweſt, and ſouthweſt and by weſt into the Sea.

From Vlocx to Bremerholme or Dievenholme the courſe is northnorthweſt three leagues. Weſt or ſouth from thence lyeth Monſterhaven, there ſtandeth a church, and there it is good rode for ſhippes that will goe up and downe the Liet. Bremerholme or Dievenholme. Monſterhaven.

From Bremerholme to Rootholme it is northnorthweſt four leagues: under Rootholme you may ancker at twentie fathome. South from Rootholme the Soltmer river goeth out, and reacheth ſoutheaſt into the Sea, there lyeth a high round hill upon the land of Bommel called Syck, which ſheweth like a hat, thereby you knowe Bommel and Soltmer river, for it lyeth right betweene them both: when this hill Syck lyeth northeaſt from you, then you are right before Bommelſond, and north from Soltmer river it is high land, but the land on the ſouth ſide of Bommel is lowe land. Rotholme. Soltmer. Syck.

To ſayle from Rootholme to Crabbekerck, firſt it is a league to ſayle through the narrowe or ſtrait northweſt, & from Rootholme Crabberkerck

holme to Crabbekerck it is north and by weſt three leagues: betweene them both lyeth the Reyne Knape, which you may ſayle about on both ſides. About ſouth from Reyne Knape there reach two rivers into the Sea, namely Papeſond & Stormſond. Papeſond reacheth ſouthſouthweſt into the Sea. But if you will ſayle out of Stormeſond, then goe along cloſe by the land of Rootholme ſouth and by eaſt, and leave all the broken Ilands and rockes, with the great Iland on ſtarborde, till you come into Soltmer river, there it goeth out into the Sea ſouth and ſouth and by weſt.

The Reyne Knape.

Papeſond.

Stormſond.

From the Narrowe or Strait of Rootholme to Reyne Knape it is a league diſtant, but from Reyne Knape to Crabbekerck it is north and by eaſt more then a league.

From Crabbekerck to Bock upon the Ra, or Bockliet the courſe is northweſt and by north three leagues: betweene them the Cruys river runneth into the Sea ſouthweſt: Cruys river is a haven verie well to be knowne, for againſt it there lye three hilles in the land, as if they were the Drommels of Norwaie, but they are not ſo high, they are alſo called the north Drõmels, when thoſe three hilles are northeaſt, or thereabouts from you, then you are open before the Cruys river.

Bock upon the Ra.

Cruys river.

North Drõmels.

By Bock upon the Ra you goe through the narrowe waie, & right north from Bock there lyeth a ſtone under the water, whereon alwaies there ſtandeth a beacon or a maſt.

From Bock upon the Ra to the Watgeſtrome the courſe is north, and ſomewhat weſterlyer four leagues: in Watgeſtrome it is good anckor ground to lye there, upon the ſouth ſide at four-and-twentie fathome. In the Watgeſtrome the Liet reacheth northweſt a league, to the Reeſteen, againſt it S. Oelofs holme lyeth, by it you may goe out of the Ielte river, about behinde Aſland, about northweſt into the Sea: when you come out of the Sea to goe into the Ielte river, then you are right againſt Reeſteene upon that Liet. Reeſteen lyeth on the eaſt ſide of the Liet, right againſt the point whereon the two high hilles ſtand, which are called the Letoorens, they are two high ſharp hillocks, which you may ſee farre off, when you ſayle up or downe the Liet, in ſayling up they lye moſt northnorthweſt, and north and by weſt from you.

Watgeſtrome.

S. Oelofs. holme.

Reeſteene.

Letorens.

Within Aſland lyeth Struys haven, and from thence to the towne of Berghen it is northnortheaſt two leagues.

Struys haven.

Berghen.

The Iland of Harle is five leagues long, you may goe about it on both ſides when you come out of the north, and come ſo into the Waghe of Berghen in Norwaie. The Harlefoert goeth out about north and by weſt, and northnorthweſt betweene Aſland and the land of Harle.

Harle.

Harleford.

III.

Of the Tyde or running of the Streames.

ON this coaſt of Norwaie from Neus to Berghen, & paſt Berghen as farr as Stadt the water riſeth and falleth, but holdes no certaine tydes. But northward by Dronton the tyde beginneth to holde, and to be ruled by the Moone.

IIII.

How theſe Places are diſtant from each other.

FRom der Neus to the high land of Leeſt the courſe is northeaſt — — — — 3 leagues.
From der Neus to Fockſteenes northweſt about 7 leagues.
From the uttermoſt rock of Fockſteenes to Ekeſond north — — — — — — — 4 leagues.
From Fockſteenes to the ſouth point of the Iedder northweſt — — — — — — — — 7 leagues.
From the ſouth point of the Iedder to the Veſteene northweſt — — — — — — — 5 leagues.
From the Veſteen to Sibrighſteen northeaſt — 4 leagues.
From Veſteen to Schuytenes northnorthweſt — 5 leagues.
From Schuytenes to Sibrightſteene through within Whitingſey caſt — — — — — — 5 leagues.
From Schuytenes to the Wtſiers w, and w. & by n. 4 leagues.
From Schuytenes to Bommels hooft northnorthweſt, and ſomewhat northerlyer — — — — — 7 leagues.
From Bommels hooft to Cruyſſoert n. n. w. — 9 leagues.
From Cruyſſoert to Harle northnorthweſt — 13 leagues.
The ſtretching of all reaches in the Liet from Schuytenes to Berghen, you finde it in the Deſcription of the Liet, from point to point perfectly ſet downe.
From the Neus to the Wtſiers northweſt — — 29 leagues.
From the Wtſiers to Ieltefoert or the Waghe of Berghen north and by weſt — — — — 26 leagues.

V.

How theſe Lands are diſtant from other Lands.

IN the former Chapter I have ſhewed how all the places and chiefeſt

chiefeſt points of all the north Seas, are diſtant in breadth & length from the Neus.

From Schuytenes to the Vlie ſouth and by eaſt, and ſomewhat ſoutherlyer — — — — 106 leagues.

From Schuytenes to the Texel ſouth, and ſouth and by eaſt — — — — — — 111 leagues.

From Schuytenes to Walcheren ſouth — 142 or 143 leagues.

From Schuytenes to the Holmes before Iarmouth ſouth & by weſt and ſomewhat weſterlyer — 112 or 113 leagues.

From Schuytenes to Flamborowe head ſouthweſt & by ſouth — — — — — 105 or 106 leagues.

From Schuytenes to Tinmouth ſouthweſt — 105 leagues.

From Schuytenes to Buquhamneſſe weſt and by ſouth, and ſomewhat ſoutherlyer — — — 72 leagues.

From Schuytenes to Hitland weſt and by north and weſtnorthweſt — — — — — 67 leagues.

From Schuytenes to the north ende of Hitland weſtnorthweſt and ſomewhat northerlyer — — 71 or 72 leagues.

From the Wtſiers to the Vlie ſ. and by e. 103 or 104 leagues.

From the Wtſiers to the Wtweer rockes north and by weſt — — — — — — 40 leagues.

From Ielteforde or the Waghe of Berghen to Hitland weſt — — — — — — 48 leagues.

From Ielteford or the Waghe of Berghen to the north ende of Hitland weſt and weſt and by north — — 51 leagues.

VI.

Of the heigth of theſe Countreyes.

ACcording to the writing of Lucas Iohnſon Waghenaer theſe Lands lye under the heigths hereafter ſet downe.

The Neus lyeth under — — 57 degrees 48 minutes.

But my opinion is that it is not ſo much northerly, for the reaſons ſhewed in the Preface at the beginning of this Book.

The Iland of Schuytenes lyeth under 59 degrees.

The Waghe of Berghen lyeth under 60 deg. 15 or 20 minutes.

Heere followeth the Carde N. 32.


Beschrÿvinge der Zeecusten van Noorweghen, geleghen tusschen Berghen en̄ Dronten, hoemen alle Havenen en̄ Foorden aldaer beseÿlen en̄ alle periculose clippen en̄ rudsen mÿden sal.
Description des costes marines de Norvege situez entre Bergues et Dronten, et comment on abordera a ladicte coste tous Ports et Haures, et evitera tous dangereux rochiers et escueils.
Duitsche mÿlen 15. in een graedt. Lieues Allemandes 15. en un degré
Engelse en Franse mÿlen 20. in een graedt. Lieues Angloises et Francoises 20. en un degre
Spaensche mÿlen 17½. in een graedt. Lieues D'espaigne 17½. en un degré
NORVEGIA
Noorwegen
NOORTMER LEEN
TSUIDMERLEEN
Dronten
Munck
Moerße
Bodwÿck
Andenes
Hamersont
Frosten
Stick
Tronto
Stathÿ
Nomendael
Niel sont
Gellis sont
Grÿp Sondt
I. Grÿp
Wieholm
Holmen
Humodal
Anwÿck haven
Torwyck fluvius
Noortmer Leen
Noortmer fluvius
Avero Sont
Avero foort
Toster Poster
Normer
C. Smeerholm
Bere sont haven
Boede
Stappels
Bere sont
Soknadal
Straver
Bon
Bÿstade
Roms fluvius
Romdhe
Roems daels haven
Leuer
Romsdalsche Scheren
Gomsky
Luÿck Sont
Luÿcke
Harlo
Flowach I.
Gesko
Dit streeckt oost in
Vldal
Vdden
Tsudmer fluvius
Sudmer
Surendal
Walhem
Bestadt
Stadt
Swinost
Waldres
Halingalab
Kÿn Sont
Kÿn
Kÿn sonts gatt
Olde Sont
Olde sonts gatt
Olde
Suÿdt foort
Halimgalab
Sonder daland
Wtweer clippen
Osterre
Rachier
Santwick
Harle
Lille foort
Marie foort
32

A DESCRIPTION OF

the Sea-coasts of Norwaie, from Berghen or Ielteford to the North Cape.

I.

The ſituation betweene the Waghe of Berghen and the point of Stadt.

Harle. THe Iland of Harle is five leagues long: ſouth from it Harleforde goeth in, ſayling into it you come into the Waghe of Berghen. The ſame waie alſo you goe into Ielteforde, but that reacheth in weſt, or behinde Aſland, as it is ſhewed in the Chapter before. Alſo when you come out of the north, you may ſayle about the Iland of Harle, and ſo come alſo into the Waghe of Berghen.

From Ielteford or the Waghe of Berghen northnorthweſt and north and by weſt eleven or twelve leagues lye the rockes called Wtweere: they are out-rockes which reach ſomewhat into the Sea about three leagues. There betweene them both it is all broken rockie land, which you may ſayle through, for the Northerne Iachts ſayle all through within the Kielſtrome, and come down from Kyne all within the rockes, behinde the Iland of Harle to Berghen.

Wtweere rockes.

From Wtweer rockes to Olde it is northnorthweſt, and north and by weſt twelve or thirteene leagues: betweene them both lyeth Zuydfort, which is a faire haven, there lye two Ilands before, and you muſt runne in betweene them both.

Zuydvort.

Olde. Old is a high rock and lyeth alone, it ſheweth like a ſaddle, and on both ſides goeth round downe: you may ſayle ſouthward into Old, and come north out againe, and alſo north in and ſouth out. Oldſond reacheth in northeaſt. When Olde is eaſt from you, then there is a haven, which is three leagues from the uttermoſt rock, for there lye two rockes right weſt from Old, and two weſtnorthweſt from thence, thoſe rockes you muſt leave on baghborde. When Old is ſoutheaſt from you there lye two or three rockes, which you muſt leave on ſtarreborde, and goe in eaſtnortheaſt, then you finde three or four Ilands, which you muſt leave on baghborde, and then goe cloſe along by the eaſt ende of the Iland, and you ſhall ſee Stadt lye without the land of Old.

The innermoſt land of Old is high land and hillie, as if it were houſes: the hackled land which ſtandeth inward is the land of Stadt.

About northweſt and northweſt and by north from Old there lye two ſmooth rockes, ſome part above, and ſome part under the water.

North from Oldſond lyeth Kyne and Ornel, which is like a ſaddle for a horſe, and goeth round downe on both ſides, you may ſayle in ſouthward to it, and come out againe north, and ſo you doe Kine alſo. Kyn. Ornel.

From Olde to Kyne it is four leagues, but Olde and Stadt lye about eleven leagues diſtant. Betweene Kyne and Olde there goeth a great River into the land, whereon there lye two townes, called Waldres and Eſterdal. Kyne is an Iland and openeth like the hoofe of a cowe, or like a biſhops Miter. Behinde Kyne there is a faire haven. Stadt.

Northweſt and by weſt from Kyne there lye three or four rockes, ſome under the water.

Southweſt and by weſt alſo there lye rockes under and above the water, theſe rockes lye at leaſt three leagues from the land.

North from Kyne lye the out-rockes of Wtover, and there forward it is all ſound land to Flowach. Wtover.

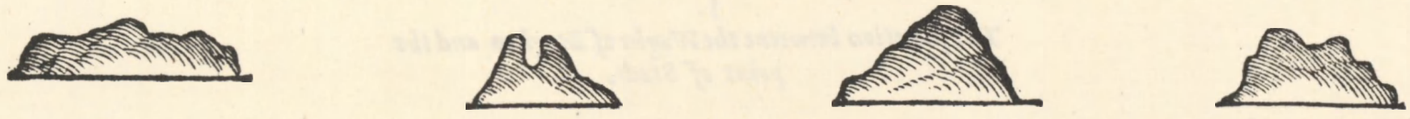
North about the point of Stadt lyeth an Iland or rock called Swinoſt, which lyeth four leagues north from the point, about half waie betweene Stadt and the Iland of Geſke. Swinoſt.

Thus the land about Northford and Southford ſheweth, when it lyeth eaſt and by ſouth from you.



Thus the Fore-lands about Stadt ſhew.

Stadt. Kyne. Ornel. Olde.



When the point of Stadt is northeaſt and by north from you, then the land of Stadt, Kyne and Olde ſheweth thus.

Stadt.



This ſhould have followed above, for it is the ſituation of the land about Olde.



I I.

How you ſhall ſayle from Stadt along the Liet of Roemſdale to Boede or the Stopples.

Flowach. Geske.

ABout eight leagues north from Stadt lyeth the Iland Flowach, and the Iland Geske lyeth there northwards. The Iland which ſome of our Hollanders call Geske, the Bores or Husbandmen in Norwaie call Sandowe: but behinde it lyeth a litle lowe long Iland which they call Geske. From the fore part of the Iland Sandowe there ſhooteth out a point of ſand toward Flowach: when you come out of the Sea you muſt turne about behinde that point, and there you may ancker at tenne fathome faire ground againſt the Iland Geske: but you muſt not ſayle farre beyond the foreſaid point, for there lyeth a blinde rock ſomewhat inward cloſe by Sandowe. Therefore you muſt ancker cloſe within the point; there ſtand litle beacons or warders on the ſhore, that thereby the Rode may be knowne.

Betweene Sandow and Flowach you muſt ſayle in eaſtward, and that is the beginning of the Liet of Dronten. Right ſouth from Flowach there lyeth an Iland called Harle or Hary, you may alſo goe in by it to the Liet of Dronten or Roemſdale, but ſoutheaſt from Flowach, there goeth a great river up to Zuydmer or Nordmer. Harle or Hary.

The Iland Sandowe hath a ſtrand round about it, and there ſtandeth a church upon it, there you may goe in about north and ſouth on both ſides. And eaſt from Geske there lye three or four great Ilands, which you may alſo runne in betweene, & goe to the Liet of Dronten. Sandowe.

The firſt great Iland eaſt from Geske is Luycko: north from it Luyckeſond goeth in, it reacheth about ſoutheaſt and northweſt. The Liet reacheth from Luycko along by the Iland Lever to Bereſond, moſt part northeaſt and by north and ſouthweſt and Luycko. Luyckſond.

and by ſouth, through betweene Roemſdale rockes, but without about it reacheth northeaſt and by eaſt and ſouthweſt and by weſt.

Roemſdale. Gounske. Samſo. If you will goe into Roemſdale, you may goe in eaſt or north by Gounſke or Gomsky, it reacheth in eaſt and eaſt & by ſouth. North from Samſo, that is betweene Samſo and Gounske, there runneth in a haven eaſt and by ſouth, you may goe into all theſe havens or chanels if you will goe into Roemſdale, to the Liet: and when you are in Liet, there lyeth the aforeſaid Iland called Lever, which you may ſayle round about. The haven of Roemſdale reacheth in from the Liet ſoutheaſt and northweſt. From the Iland of Lever to Boede the Liet reacheth northeaſt.

The Iland Lever.

Boede. Boede is an out-point, which is faſt to the firm land by a neck or ſmall peece of land, there dwell manie fiſhermen, and there is a great fiſhing. Againſt Boede lye the Stopples, and there betweene them both it is about half a league wide, when you goe through betweene them, then you runne along by Boede. Bereſond lyeth about three leagues weſt from Stopples. All theſe Ilands betweene Boede and Flowach are under Zuydmer Leen.

Stopples.

Bereſond.

Thus the Iland of Stadt, and thus the point of Stadt ſheweth, when it lyeth ſouthſoutheaſt from you eight leagues.



When Geske lyeth about four leagues eaſt from you then the land betweene Geske and Stadt ſheweth thus, and then Stadt lyeth ſouthſoutheaſt from you.



This belongeth to the former, for it is the land to the point of Stadt.



Thus the Iland Sandowe ſheweth, when it is eaſt from you.



Thus the Iland Luycko ſheweth when it is eaſt and by north from you.



III.

How you ſhall ſayle from Boede along the Liet to Dronten.

Witholme. Stemmeſnes. FRom Boede to Witholme the courſe is northeaſt five leagues: betwene them both lyeth Stemmeſnes or Heynſt, and there againſt it to Seaward lye four or five Holmes or rockes, you may runne in betwixt them, cloſe along by the point of Stemmeſnes.

About half a league ſouthſoutheaſt from Witholme lyeth the point of Smeerholme, and betweene them both the Liet of Dronten goeth in eaſt, and eaſt and by north, till you come before Normer, which as you ſayle up lyeth on the left hand, and the Ilands of Avero lye on the right hand. From Normer the Liet reacheth to the church of Ielbaye, along by the Eaſt Poſter northeaſt ſixteene leagues. From thence the Liet reacheth upwards to Dronten before the towne eaſtſoutheaſt and eaſt and by ſouth: betweene them both there lyeth a point called Dreckort or Drontenort.

Smeerholme. Normer. Drontenort.

Oſter Poſter.

The Eaſt Poſter is a high land, which in ſayling up you leave on ſtarborde. North from the Eaſt Poſter there lyeth a haven called Hamerſond, there are manie good Deales. Right ſouth from Hamerſond lyeth Iorianwagh, which is a faire river, and there alſo they ſawe faire Deales. There lye three Holmes or Ilands before the haven, but there you may ſayle through in all places without feare.

Hamerſond.

Iorianwagh.

Iuret.

South from Iorianwagh there lye two great creekes or rivers, called Iuret, where you may alſo fetch great maſtes and deales: there lye two Ilands before them, and you may runne through betweene them both. Or if you will goe into Averoſond, comming from the Eaſt Poſter, then you may goe north about them: there the land reacheth northeaſt and ſouthweſt.

Avero ſond.

Anwick. Torwick.

Right ſouth from the creeke of Ioret there lyeth a great broad river called Anwick, there are two or three Sawes to ſawe Deales, as Anwick and Torwick, which rivers or Currants are the places whereon the ſawes are placed, theſe reach in moſt ſoutheaſt, and on the north ſide of the haven there ſtandeth a church.

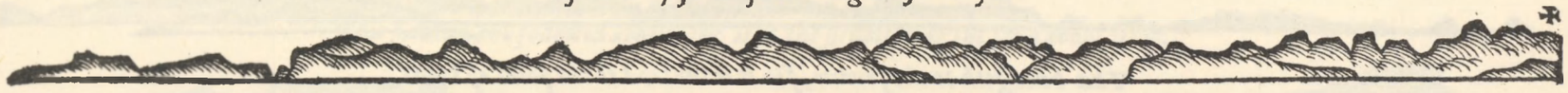
The Iland of Grip lyeth about four leagues without the land: betweene Witholme and Grip the Gripſond reacheth in eaſtnortheaſt, you may goe through within the fiſhermens Weert, and then you may ſee the high land of Eaſt Poſter lye before you, you goe in upon it till you be in the Liet of Dronten, and from Grip to Eaſt Poſter it reacheth moſt eaſtnortheaſt, then you come betweene two lands, and from that place it is Pilots water to bring you up to Dronten, then forward it reacheth to Dronten firſt northeaſt, and then eaſtſoutheaſt to the towne, as I ſaid before.

Grip Iland

Gripſond.

South from Grip there are divers chanels, by the which you come up to the Liet, as alſo north from Grip: but ſouthward are the beſt, for northward it is daungerous to come into the land.

Thus the land betweene Grip and Geske ſheweth, when the north point lyeth eaſt and by ſouth ſeven leagues from you.



This belongeth to that before, and is to be joyned by the Croſſes, being the reſt of the land that followeth along to Geske.



Thus the point of Stemmeſnes or Heynſt ſheweth.



Heere followeth the Carde N. 33.

The


Duytsche mijlen 15 in een graad
Lieues d'Allemaigne 15 en un degré
Engels. en Fransc. mijlen 20 in een graet
Lieues Angloiſ. et Franc. 20 en un degré
Spaensche mijlen 17½ in een graat
Lieues d'Espagne 17½ en un degre
Pascaarte vant Noorderſche deel van Noorwegē van Dronten aff tot om de Noortcaap toe, met alle de eylanden aende ſelfde cuſten geleghen, alles geſtelt op zyne rechte ſtreckinghen en behoorlycke diſtantien
Carte marine de la partie plus Septentrionale de Norwege, de Dronten juſques au dela du Nortcap, avecq toutes les isles ſituees a icelle coſte, le tout mis ſelon ſes vraijes routes et exactes diſtances.
Finmarcken
NORVEGIA
Noort Kyn
Keelwyck
Noort Caap
Stappen
Helmshuy
Ingen
Suroy
Langenes
Angenes
Tromſont
Foswonas
Scartewago
Ansnes
Wandwag
Santwaer
Malanger
Rodhelle
Lock ſtelle
Rollen
Weryn
Londiga
Oſtrafiord
Sanien
J. Anenas
J. Weſtrol
J. Loffoet
Maelſtrom
Weroy
Rust
Truen ooch
Heylige lant
Stech
Octevor
Salten
Heyligelāder leen
Vysk
Shongen
Wardal
Nomendael
Jublewyck
Dronten
Drueck oort
Moerſſe
Bodwyck
Andenes
Hamerſont
Humodael
Foſterpoſter
Iuerck
Gelts ſont
Niel ſont
Grip
33

IIII.

The situation betweene Dronten or the Iland of Grip and the North Cape or point.

Nomendaelsch Ilands. Rust.

FRom the Iland Grip to Nomendaelsch Ilands the course is northeast nineteene leagues: but from Grip to the Iland Rust, the course is north and north and by east four-and-sixtie leagues: betweene them both (besides Nomendaelsch Ilands) there lye the Ilands of Heyligheland, and Tranooch Rust and Tranooch are distant thirteene leagues. From Rust to Loffort it is northnortheast three-and-thirtie leagues. But from Rust to Wero it is northeast and by north nine leagues. Betweene them both lyeth Maelstrome, which you can not goe through when the tyde runneth, but at still water you may well goe through it. Loffort lyeth north from Wero, there you may also goe through betweene them, and ancker under the west ende of Loffort. You may sayle through from Loffort betweene the Ilands and the firme land along to the North Cape.

Holy land. Traenoch. Loffort. Wero.

Betweene Westerhol, Sanien, Tromsondt and Ingen, you may goe in also & seeke Rode, but without you may not come to neare those Ilands, for in some places there lye rockes reaching out from them more then a league into the Sea, you may also goe through betweene Surroy and Loppen or the North Cape, and come out againe in Keelwick. Under the Iland it is a verie good Rode, before the Fishermens village. Keelwick is a place lying in the Creeke betweene the North Cape and the North Kyne.

Westerhol. Sanien. Tromsond Ingen.

Keelwick.

About seven-and-thirtie leagues west from the North cape reacheth the Coast along the Ilands west and west and by south.

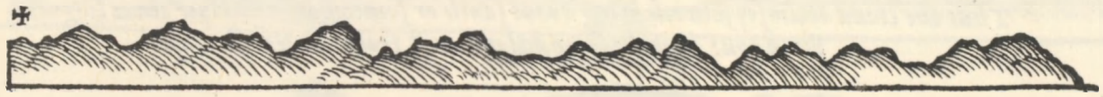
Thus the east ende of Westerhol sheweth, when you sayle by it, and are about seven leagues from it



Thus the Iland of Sanien sheweth, when the east ende, that is, the two high hilles are southeast and by south, and the point with the clift south and by west from you four leagues. But when the two high hilles upon the east ende are south from you, then they are right one against the other.



This following is the rest of the land of Sanien, and joyneth with that before by the Crosses.



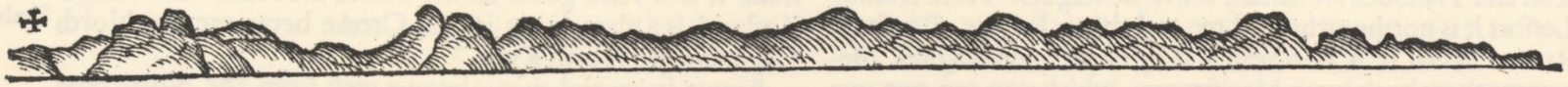
Thus the west point of Angenes sheweth, when it is east from you.



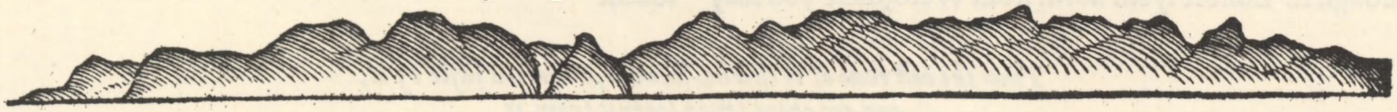
Thus the Iland of Angenes ſheweth, when the two hilles here under are ſouth and by weſt from you.



This belongeth to that which went before, being the reſt of the land of Angenes, which muſt be joyned together by the Croſſes.



Thus the Iland of Langhenes ſheweth when it lyeth four leagues eaſt from you.



Thus the Iland of Suroy ſheweth when you ſayle along by it, and are five leagues from it.



Thus the Iland of Ingen ſheweth when it lyeth four leagues eaſtſoutheaſt from you, it is the third Iland weſt from the North Cape.



Thus the Iland Helmſey ſheweth being about ſouth or ſomewhat weſterlyer three leagues from you: it is the ſecond Iland weſt from the North Cape.



When Helmſey is five leagues ſouth and ſouth and by weſt from you it ſheweth thus.



When

When Helmſey is ſeven leagues ſouthweſt from you it ſheweth thus.



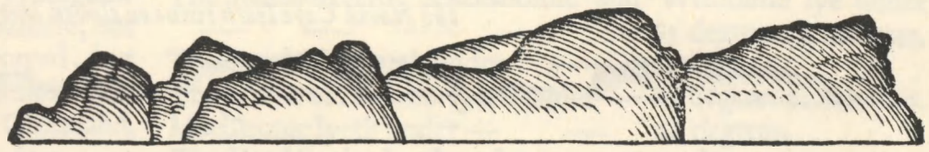
Thus Stappen ſheweth four or five leagues ſouthſouthweſt from you: it is the neareſt Ile weſt from the North Cape.



Thus the Iland Stappeu ſheweth, when it is ſixe or ſeven leagues ſouthweſt from you.



Thus the eaſt ende of Stappen ſheweth when you ſayle along by it.



When the North Cape is ſoutheaſt, and the Mother with the Daughters ſouthſoutheaſt from you, then it ſheweth thus.

The Mother with the Daughters.



Thus the North Cape ſheweth when you ſayle about three leagues from the land along by it, you may ſee the Mother above the land, when you ſayle along cloſe by the land.



Thus the North Cape ſheweth when the Mother with the Daughters are ſouthſouthweſt four leagues from you, then the North Kyne is about ſouthſoutheaſt from you.

North Kyne.

The Mother with the Daughters.



When

When the North Cape lyeth weſt and by north from you, then it ſheweth thus, and then you are three or four leagues without North Kyne.



Thus the North Cape ſheweth when the points lye from you as they are marked heereunder, and then you may ſee the Mother from the hatches juſt above the water.

Southweſt and by ſouth. Southweſt. ſouthweſt and by weſt



Mother.

Thus North Kyne ſheweth being eight or nine leagues ſouthſoutheaſt from you, and then the North Cape lyeth tenne or eleven leagues from you.



V.

Of the tydes and running of the ſtreames in theſe places

BEtweene Stadt and Berghen the water ebbes and flowes, but holdes no certaine tyde.

Betweene Stadt, Luyckſond and Boede a ſouthſouthweſt moone maketh full Sea.

Within Aveiro, in Anwick, and before Dronten a ſouth and north moone maketh full Sea, and the ſame Tyde runneth to Boede.

On the North Cape a ſouthſouthweſt and northnortheaſt moone maketh high water.

Weſt from the North Cape the ſtreames come out of the northweſt, and weſtnorthweſt, and ſo fall along by Finmarke to the North cape.

V I.

How theſe Countreys are diſtant from each other.

FRom Ielteford or the Waghe of Berghen to the rockes of Wtweer n. n. w. and n. and by w. 11 or 12 leagues.

From Wtweer rockes to Olde northnorthweſt, and north and by weſt — — — — 12 or 13 leagues.

From Olde to Kyne northnortheaſt and north and by eaſt — — — — — — — 5 leagues.

From Kyne to Stadt n. n. e. and n. and by e. — 8 leagues.

From Stadt to Flowach northeaſt — — 7 leagues.

From Stadt to Geske northeaſt and by north 11 or 12 leagues.

How you ſhall ſayle from Geske and Flowach through within the Ilands is ſhewed before ſufficiently in the deſcription.

From Geske to Gounske northeaſt and by eaſt, and ſomewhat northerlyer — — — — 8 or 9 leagues.

From Gounske to Boede eaſtnortheaſt — — 8 leagues.

From Beerſond to the Stopples eaſtnortheaſt — 3 leagues.

From the Stopples to Heynſt or Stemmeſnes northeaſt and northeaſt and by north — — — 4 leagues.

It is alreadie at large declared how you ſhall ſayle along from Stemmeſnes and Witholme to Dronten along in the Liet.

From Stemmeſnes to Grip northeaſt and by north 5 leagues.

From Grip to the Ilands of Nomendale northeaſt 19 leagues.

From Grip to Heiligheland n. e. and by n. — 26 leagues.

From Grip to Ruſt north and north and by eaſt — 64 leagues.

From Ruſt to Lofford northnortheaſt — 33 leagues.

From Loffort to Sanien northeaſt — — 37 leagues.

From Loffort to Tromſond northeaſt — 50 leagues.

From Sanien to Suroy northeaſt and by eaſt — 43 leagues.

From Tromſond to Suroy eaſtnortheaſt — 24 leagues.

From

From Suroy to the North cape e. & by n.—24 or 26 leagues.
From the Iland Inghen to Helmſey it is weſtſouthweſt. Where eaſt from it lyeth the Iland Stappen, and from Stappen to the North Cape it is eaſt— — — 6 or 7 leagues.
From the North Cape to the North Kyne it is eaſt & by ſouth — — — — — — 13 leagues.

VII.

How theſe Places are diſtant from other Countreys.

From Stadt to the north ende of Hitland the courſe is weſt ſouthweſt — — — — 69 leagues.
From Stadt to the eaſt point of Iſland weſtnorthweſt — — — — — — —200 leagues.
From Stadt to the right Greenland about n.w. 333 leagues. Men were wonte to goe thither eaſtward about Iſland, but that waie is altogether ſpoyled and utterly decayed, but now within theſe fewe yeeres the King of Denmarke hath given commandement to his Subjects to ſayle to Greenland, and to diſcover the ſame.
From Grip to the north ende of Hitland ſouthweſt and by weſt — — — — — — 125 leagues.
From Grip to the ſouth ende of Fero w. ſ. w. —167 leagues.
From Grip to the eaſt point of Iſland weſt, and weſt and by north— — — — — — 233 leagues.

VIII.

Vnder what degrees theſe Lands lye.

THe Wtweer rockes lye under—61 degrees.
The Iland Kyne lyeth under 61 degrees 30 minutes.
Stadt lyeth under — — 62 degrees
The Iland Geske lyeth under — 62 degrees 30 minutes.
Luyckeſond lyeth under — 62 degrees 40 minutes.
The Stopples and Boede lye under — 63 degrees 28 minutes.
The Ilands Avero, Smeerholme and Witholme lye under — — — — —63 degrees 44 minutes.
The Iland Grip lyeth under — 64 degrees.
The towne of Dronten lyeth under — 64 degrees 30 minutes.
Maelſtrome lyeth under — — 68 degrees.
The Iland Sanien lyeth under — —70 degrees.
The North Cape lyeth under — —71 degrees 30 minutes.

Here followeth the Carde N. 34.

THE DESCRIPTION OF

the Sea-coasts of Lapland, from the North Cape to the Mouth of the White Sea.

I

The ſituation betweene the North Cape and Kilduyn.

North Kyne.

FRom the North Cape to the North Kyne the courſe is eaſt and by ſouth thirteene leagues: and from the North Kyne to Tannebay or Matcorf the courſe is eaſtſoutheaſt eleven or twelve leagues.

Tannebay

Tannebay is a great broad River, which within devideth it ſelf in two partes, and in ſome Creekes there ſtand ſome fiſhermens houſes.

From Matcorf or the point of Tannebaye to Warhouſe the courſe is ſoutheaſt and ſomewhat ſoutherlyer fourteene or ſixteene leagues. Betweene them both there lyeth much flatte high land, about half waie betweene them both (but neareſt to Warhouſe) upon the high land there lyeth a high hillock, like to a land houſe, or a litle caſtle, which is verie well to be knowne: when you are by it cloſe by the land, it ſheweth as if that againſt it there were a great river which you might ſayle into.

Warhouſe.

If you will ſayle into Warhouſe comming ſouthward you may ſayle in without doubt betweene the Iland and the firme land, for there it is deepe ynough in everie place, there you may ancker about the middle waie from the Iland, at tenne or twelve fathome before a Sandbaye, againſt the caſtle, there it is good ancker ground.

But if you will goe out againe at the north chanel, then ſayle nearer to the rock whereon the gallowes ſtand then to the Iland, for there againſt it it is ſomewhat foule on the Iland of Warhouſe, and the chanel reacheth out moſt part northward. The Iland of Warhouſe is about half a league long, and there lye alſo two ſmall Ilands more cloſe by to ſeaward.

Fishers Iland or Kogor.

From Warhouſe to the point of Kegro, or the fiſhermens Iland it is eaſtſoutheaſt, and ſoutheaſt and by ſouth eleven or twelve leagues. When you are againſt the point of Kegro, then you may ſee the land of Warhouſe from belowe. You may ancker under the point of Kegro, but it is no faire rode for great ſhippes, for there it is not deepe. Betweene Warhouſe and Kegro there is a great Creeke, therein lyeth the river of Pitſingh, where there is fiſhing for ſalmons. Southſouthweſt from the point of Kegro or Ooſterhaven there lye two Ilands, there ſouthward you may goe into Monick river.

Pitſingh.

Monick-foert.

Frō the point of Kegro or Kegor to Laus the courſe is along by the land ſoutheaſt and ſoutheaſt and by ſouth about nine leagues, it is a faire ſandbaye: behinde the point, and a litle more towards Kegro there is a point like an Iland, and upon the point of Laus there ſtand two great beacons or maſtes.

Laus.

From Laus to the river of Cola the courſe is ſouth and by eaſt, and ſouthſoutheaſt about eleven leagues. But Kilduyn and Laus lye diſtant ſoutheaſt & ſomewhat ſoutherlyer and northweſt and ſomewhat northerlyer.

Cola and Kilduyn.

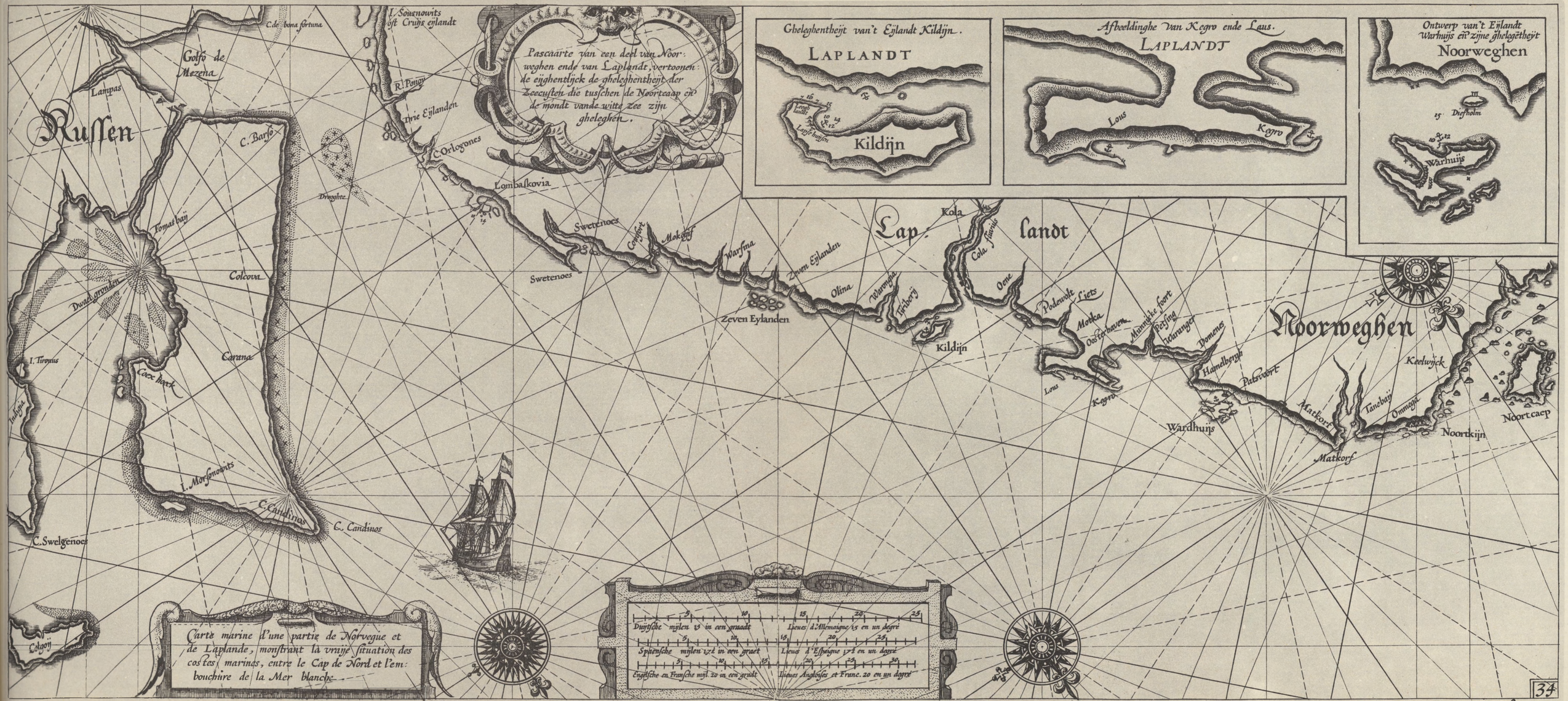
Thus Matcorf ſheweth when it is croſſe from you three leagues.

Thus North Kyne ſheweth when you ſayle by it.

Tannebaye.



Thus


Pascaarte van een deel van Noorweghen ende van Laplandt, vertoonende eijghentlijck de gheleghentheijt der Zeecusten die tusschen de Noortcaap en de mondt vande witte zee zijn gheleghen.
Gheleghentheijt van't Eijlandt Kildijn.
LAPLANDT
Kildijn
Afbeeldinghe van Kegro ende Laus.
LAPLANDT
Lous
Kegro
Ontwerp van't Eijlandt Warhuijs en zijne ghelegetheijt
Noorweghen
Diefholm
Warhuijs
Russen
Golfo de Mezena
Lampas
C. de bona fortuna
I. Sousnowits ost Cruijs eijlandt
R. Ponoy
Drie Eijlanden
C. Orlogones
Lombaskovia
Swetenoes
Comfort
Mokoijf
Warsma
Zeven Eijlanden
Olina
Warongia
Tiriberij
Kildijn
Kola
Cola fiavius
Oene
Podewolt
Liets
Motka
Oosterhaven
Munnicke foort
Petsing
Waranger
Domenes
Hamelbergh
Patsvoort
Lous
Kegro
Wardhuijs
Matkorf
Tanebaij
Ommega
Keelwijck
Noortkijn
Noortcaep
Lap: landt
Noorweghen
C. Barso
Tomasbaij
Dwaelgronden
Colcova
Carana
Coex hoeck
I. Tirouus
Indigia
I. Morsonowits
C. Candinos
C. Swelgenoes
Colgoij
Carte marine d'une partie de Norvegue et de Laplande, monstrant la vraije situation des costes marines, entre le Cap de Nord et l'embouchure de la Mer blanche.
Duijtsche mijlen 15 in een graadt
Lieues d'Allemaigne 15 en un degré
Spaensche mijlen 17½ in een graet
Lieues d'Espaigne 17½ en un degré
Engelsche en Fransche mijl. 20 in een gradt
Lieues Angloises et Franc. 20 en un degré
34

Thus the land eaſt from Tannebay ſheweth, when comming out of the weſt you ſale along by it three leagues from the land.

Tannebaye. Kyne.



Thus the Iland of Warhouſe ſheweth when it lyeth three or four leagues ſouthward from you.

Warhouſe. The land north from Warhouſe.



Thus Kegro or the fiſhermens Iland ſheweth, when comming out of the weſt you ſayle along by it



I I.

How you may ſayle up into the River of Cola, and the ſituation of Kilduyn.

TO ſayle up the River of Cola, then goe from Laus or the ſouth ende of the fiſhermens Ilands to the River ſouthſoutheaſt and ſouth and by eaſt, and goe about by the high land of Podenvolke, then the river will ſhowe verie wide open unto you. When you are by the point of Laus, then you may eaſily ſee the Iland of Kilduyn and the River of Kola, or the land by it, and betweene Laus and the River of Cola there is alſo a great Creeke, and when you are within the mouth of the River, firſt it reacheth in ſouth and by weſt, and then ſouthſouthweſt to the Iland, which in the Carde of this River is marked with the Letter *A*, and then ſometimes ſouthweſt and by ſouth by the Iland marked with the letter *B* to the Trane Iland, then ſouthweſt and by weſt, and ſometimes about the point weſt and by ſouth, and then in weſt to Divles point, there over againſt it lyeth the white ſtone, which lyeth on the land, and againſt it is good Rode: from thence againe weſt and by ſouth, weſtſouthweſt, ſouthweſt, and ſouthſouthweſt moſt part to Cola.

When you are up within the River, and will ancker there, Rode in the river. then keepe along by the weſt ſide, and when you are a litle within there you ſhall ſee a litle ſmall Iland, lying cloſe by the land, from thence a litle further forward about the high point there is a bought or Creeke, and in it there is a Sandbay, where you may laye a ſhippe ſafe without ancker or cable, it is a faire Sandbaye where you goe full in, along by the north ſide it is five fathome, and faire ſandie ground, and there you goe in betweene the two points: but there lyeth a black rock in the narrowe waie betweene both the ſides of the land, which you muſt leave on ſtarborde, and within that rock it is drie & two fathome deepe, till you be againſt the ſtrand, there within it is faire greene fields. Right without the baye there lye two Ilands, whereof the uttermoſt or the eaſterlyeſt is the ſmalleſt, where in ſayling up

Heere followeth the Carde N. 35.

the River by theſe two Ilands, you come in the middle waie betweene the Iland marked *A*, there alſo is good rode on the weſt ſide, there upon the high ground you ſhall ſee three beacons or maſtes, called the three Kinges, againſt them there is a rode, & when you are a litle paſt the Iland marked with *A*, then you can ſee the river no more open, but it ſeemeth to be cloſe and ſhutte up, for then the Iland marked with *A* commeth under the high land on the eaſt ſide.

Traue Iland. Under the Iland marked with *B* there is alſo good Rode and faire ſandie ground, it is alſo good Rode under the Traen Iland, and that is reckoned for half of the River, to wete, from the Mouth to Cola.

Divels hil. When you are a litle paſt the Traen Iland, where the letter *C* ſtandeth, then before you ſee a black bluiſh hill, called the Divels hill, and it ſeemeth from thence forth, as if the River were cloſe and ſhutte up: on the ſtarborde ſide it is beſt ſayling along for there you have good ground moſt part along cloſe by the land, there are manie bougths, hookes, and Creekes, which can not all be deſcribed: on the other ſide men uſe not ſo commonly to goe, unleſſe it be by default, and there are as it ſeemeth manie bayes and rivers, and alſo ſome by-rivers. Now when you are paſt the Divels hill, where the letter *D* ſtandeth, paſt the Clinckhil. white ſtone, then you may ſee Clinck hill on the weſt ſide, and almoſt along to Cola. When you may ſee Clinck hill, there is ground all along by the weſt ſide to ancker, and then it is not foule on neither ſide: but when you come in ſo farre to the place which is marked with the letter *E*, there you muſt ſomewhat ſhunne the weſt ſide, becauſe of a foule place, which there ſhooteth off from the land, and keepe in the middle of the water till you be againſt Clinckhill, there you muſt goe cloſe to the land againe, for in the middle of the river there lyeth an Iland of rockes, which at high water are covered, you muſt look well unto it: from Clinckhill to Robben Iland ſayle all along by the Robben Iland. weſt ſide: Robben Iland alſo is covered at high water, and when it is covered then ancker under the dryed trees. Againſt Robben Iland there lyeth a verie great ſtone at the foote of the hill, look well unto it there, and goe without it or north from it, at leaſt a bowe ſhotte, there is the Rode, and there you may ancker by the land as drie as you will, there it is good lying, and there you begin to ſee Cola by the houſe.

Kilduyn. If you will ſeeke for rode under Kilduyn, when you come out of the north or the weſt, then goe to the weſt ende of Kilduyn, through betweene the mayeland and Kilduyn, and when you have ſayled a litle within, then you ſhall ſee a round Iland, and there it beginneth to be narrowe, but you may well laveere through it, then goe forth to the ſontheaſt ende, and there ancker in the bought under Kilduyn, as neere to the land as you will, there ſtand a companie of Lapland houſes, and there is the principal rode, there you are ſafe againſt all windes: the point ſouth from the rode is lowe land. You may alſo ancker under the firme land, betweene the narrowe waie and the rode of Kilduyn, at a place wher in the Carde an anker is marked. Through betweene Kilduyn and the land it reacheth weſtnorthweſt and eaſtſoutheaſt.

To ſayle from the eaſt into Kilduyn then goe in weſt, till you come by the aforeſaid lowe point of the Iland, then turne up northward along about the point, & ancker in the bocht aforeſaid before the houſes upon the Rode, at twelve thirteene or fourteene fathome, on the ſouth ſide it is verie deepe, fiftie or ſixtie fathome.

There lye alſo ſome other Ilands eaſt from Kilduyn, where poſſible you ſhould finde Rode under them, but I can write no certaintie thereof.

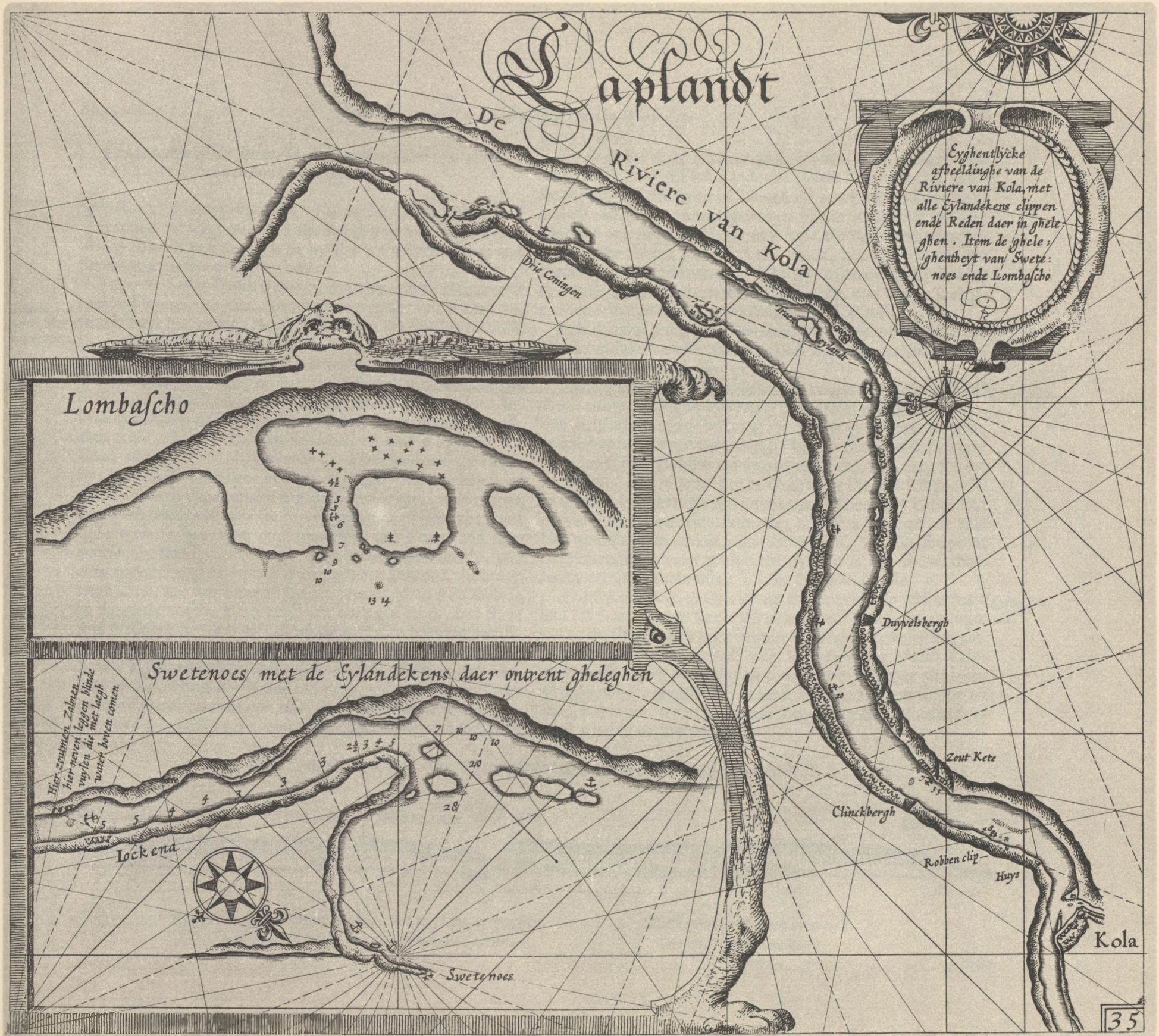
Thus the Iland of Kilduyn ſheweth it ſelf when you come out of the weſt.



Thus Kilduyn ſheweth when the ſhoring point is ſouth and by eaſt, and the river of Cola ſouthſouthweſt from you about five leagues, the land weſt from Kilduyn is verie hillie, and the river openeth verie wide as it ſtandeth heere.



The


Laplandt
De Riviere van Kola
Eyghentlycke afbeeldinghe van de Riviere van Kola, met alle Eylandekens cluppen ende Reden daer in ghelegen. Item de ghelegenheyt van Swetenoes ende Lombascho
Drie Coningen
Lombascho
Swetenoes met de Eylandekens daer ontrent gheleghen
Hier zeumen Zahnen hier neven leggen blinde vuylen die met laegh water boven comen
Lockena
Swetenoes
Duyvelsbergh
Zout Kete
Clinckbergh
Robben clip
Huys
Kola
35

CHAP. III.

The ſituation of the Seven Ilands, Swetenoſe and Lombaſco, and ſo forth to Orloghones.

Seven Ilands.

FRom Kilduyn to the Seven Ilands the courſe is ſoutheaſt nineteene leagues: under the Ilands you may anker where you will: you may goe in by the weſterlyeſt Iland, and there ancker at five or ſixe fathome.

Ilands weſt from Swetenoes

From the Seven Ilands to Swetenoſe the courſe is ſoutheaſt one-and-twentie leagues. About three leagues weſt from Swetenoſe there lye certaine Ilands, where you may ancker behinde them, the northerlyeſt lyeth right weſt frō the point of Swetenoſe, you may there goe in by it & ancker behinde it, when you are by Swetenoſe, then you ſee litle of thoſe Ilands, becauſe the firme land is much higher then thoſe Ilands. To ſayle into Iokena or the river of Swetenoſe when you come north or weſt, then you muſt ſayle cloſe by the land, to have a ſight of the Iland, and goe through betweene the Mayeland and the Iland, but the beſt chanel to goe into it is through betweene the third and the fourth Iland, which is a deepe wide and broad chanel, and lyeth ſouthweſt, and ſouthweſt and by weſt from the point of Swetenoſe, you runne moſt ſouth into the River, and then you ſee the Iland, which lyeth within the other Ilands, you may ancker there behinde. When you are a litle paſt the innermoſt Iland, and come againſt the high point, then you ſayle in in the middle of the water betweene both the lands, and there it is ſhallowe water at five, four, three and two and an half fathome, as it ſtandeth marked in the Carde, but you may goe boldly in through the middle of the chanel, along to the Lapland houſes, where the ſalmon fiſhing is, and ancker there in the midſt of the water, but you muſt there looke well about you, for there abouts there lye ſome blinde rockes, which are bare at lowe water.

Blinde Rockes.

To finde the right ſituation of this haven, then marke, that when the high point is behinde the fourth Iland, about ſouth from you, and the point of Swetenoſe northeaſt and northeaſt and by eaſt, then you are right open before or againſt the ſaid haven. Some ſaye that you may ſayle through behinde, betweene the fourth Iland and the point, but there betweene them both it is verie narrowe. The Tyde there falleth juſt with the Tyde at Swetenoes, not much differing, and with a Spring-tyde ebbeth and floweth two fathome and an half.

Swetenoes.

Behinde the point of Swetenoes you may runne into the Creeke and there ancker ſafely againſt a north, northeaſt, and eaſt windes, there it is faire ground.

Lombaſco.

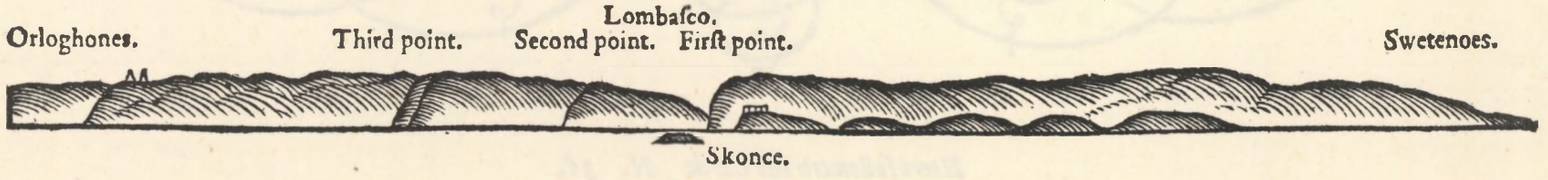
From Swetenoſe to Lombaſco the courſe is ſouthſoutheaſt about thirteene leagues, you may alſo ancker under Lombaſco, but there it is not ſo good lying, ſpecially with great ſhippes, and alſo there it is not verie faire, it beates there verie ſtrongly in, when the winde bloweth out of the Sea. You may ſee the ſituation of this rode in the Carde, & there the depth is perfectly marked, both at high and lowe water. The water ebbes and flowes there at leaſt two fathome, and at a Spring-tyde litle leſſe then three, or two fathome and an half. Within the point or the bought you can not lye, for there it is not above three foot water, and there alſo it is verie ſtonie and foule.

Orlogones.

From Lombaſco to Orlogones the courſe is ſouthſoutheaſt and ſouth and by eaſt ſixe or ſeven leagues. But from Orlogones to the three Ilands it is ſouthſoutheaſt about twelve leagues.

When you are about half waie betweene the North Cape and North Kyne, and about ſeven leagues without the land, you goe with a courſe of ſoutheaſt and by ſouth without all land, but if you ſet your courſe ſomething more ſoutherlyer then you fall on Swetenoes.

Thus the land ſheweth betweene Swetenoſe and Orloghones, when you ſayle along by it.



Vnder this Iland you may hide a ſhippe from yſeganges, and it lyeth half a league beyond the Skonce.

Theſe graie points are betweene Swetenoes and Lombaſco.

IIII.

Of the Tyde and running of the ſtreames.

AT the North Cape a ſouthſouthweſt moone maketh a high water.

Againſt Tannebaye a ſouthweſt moone maketh high water.

At Warhouſe a ſouthweſt and northeaſt moone maketh high water.

At Kilduyn an eaſtſoutheaſt moone maketh high water.

At the Seven Ilands a ſoutheaſt moone maketh high water.

At Swetenoſe a ſouth and north moone maketh high water.

Along by theſe Coaſts eaſt frō the North Cape the ſtreames come out of the northweſt and northnorthweſt, and goe ſo along the coaſt of Lapland to Orloghonoes.

V.

How theſe Lands are diſtant from each other and from other Lands.

FRom North-kyne to Tannebaye or Matcorf the courſe is ſoutheaſt — — — 11 or 12 leagues.

From Matcorf or the point of Tannebaye to Warhouſe ſoutheaſt and ſomewhat ſoutherlyer — — 14 or 16 leagues.

From Warhouſe to the point of Kegor or Oſterhaven ſoutheaſt and ſoutheaſt and by ſouth — — 11 or 12 leagues.

From the point of Kegro to Laus ſoutheaſt and ſoutheaſt and by ſouth about — — — — — 9 leagues.

From Laus to the River of Cola ſouth and by eaſt and ſouthſoutheaſt about — — — — 11 leagues.

From Kilduyn to the Seven Ilands ſoutheaſt — 19 leagues.

From the Seven Ilands to Swetenoſe ſoutheaſt — 21 leagues.

From Swetenoſe to Lambaſco ſouthſoutheaſt — 13 leagues.

From Lambaſco to Orlogenes ſouthſoutheaſt and ſouth and by eaſt about — — — — 6 or 7 leagues.

From Orlogenes to Cape de Candenoes northeaſt 47 leagues.

From Kilduyn to Coſtintſarke upon Nova Zembla eaſt and by north — — — — — — 118 leagues.

VI.

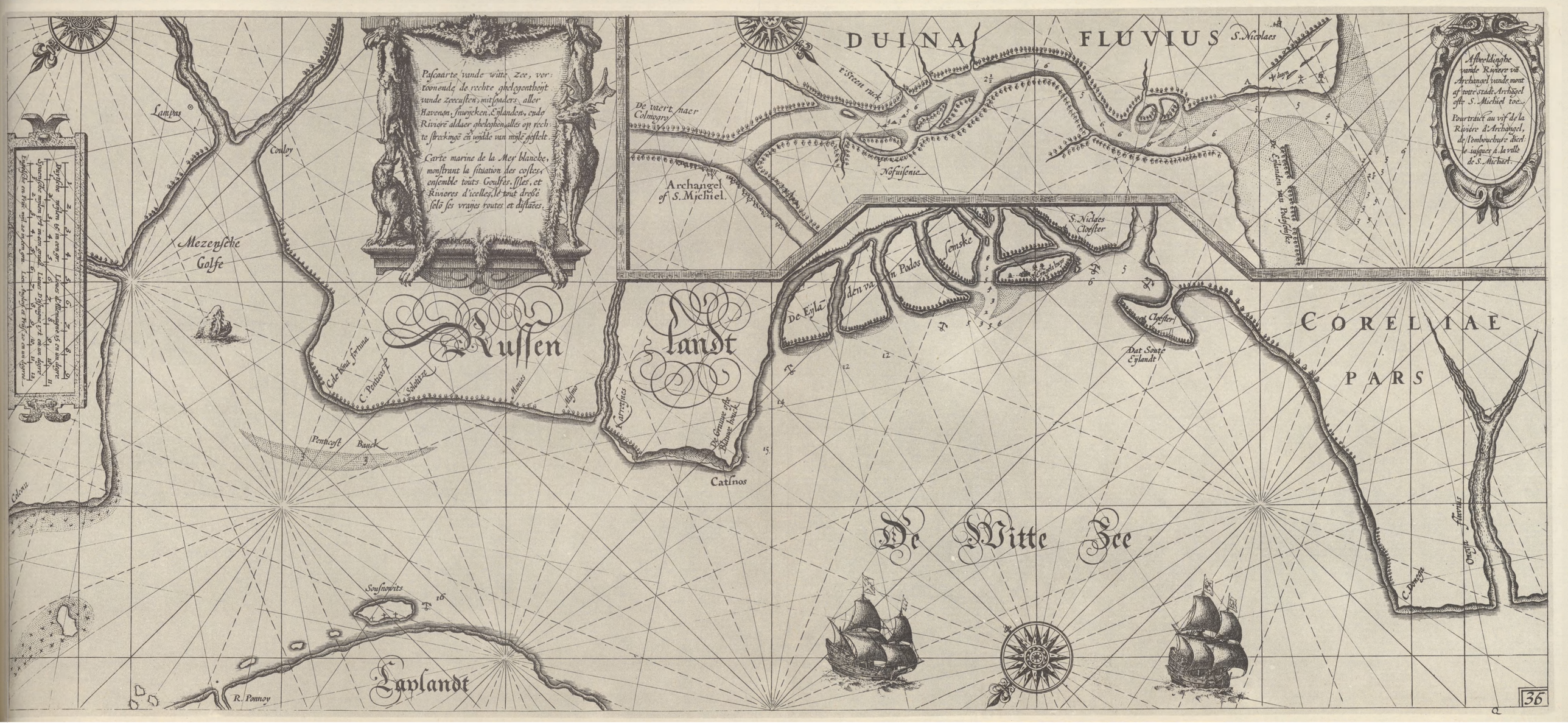
Of the heigth of theſe Countreys.

THe Iland of Kilduyn lyeth under 69 degrees 34 minutes.

Cape de Candenoſe lyeth under 68 degrees 46 minutes.

Heere followeth the Carde N. 36.

A DE-



Pascaarte vande witte zee, vertoonende de rechte ghelegentheijt vande zeecusten, mitsgaders aller Havenen, Inwijcken, Eylanden, ende Rivierē aldaer gheleghen alles op rechte streckingē en wijdde van mijlē gestelt.
Carte marine de la Mer blanche, monstrant la situation des costes, ensemble touts Goulfes, Isles, et Rivieres d'icelles, le tout dressé selō ses vrayes routes et distaēes.
Asbeeldinghe vande Riviere vā Archangel vande mont af totte stadt Archāgel ofte S. Michiel toe.
Pourtraict au vif de la Riviere d'Archangel, de l'embouchure dicelle iusques a la ville de S. Michael.
DUINA FLUVIUS
S. Nicolaes
t'Steen rack
De vaert naer Colmogry
Archangel of S. Michiel.
Nofuisenie
De Eylanden van Podosenske
S. Niclaes Cloester
Cloester
Dat Soute Eylandt
De Eylanden van Podosenske
Lampas
Couloy
Mezensche Golfe
Russen landt
C. de bona fortuna
C. Penticos
Solotitze
Monies
Musmo
Penticost Banck
Karretsnes
De Grauwe ofte Blauwe bouck
Catsnos
Colonu
Sousnowits
Laplandt
R. Ponnoy
De Witte Zee
CORELIAE PARS
C. Donega
Onega fluvius
36

A DESCRIPTION OF

the Sea-coasts of Ruſſia, Corellen and Lapland: and alſo the Coaſt of Ruſſia, betweene Cape de Candenoſe and Nova Zembla, or the Strait of Waigats.

I.

The ſituation betweene Orloghones and the River of Archangel.

Three Ilands.

FRom Orloghones to the three Ilands (as I have alſo ſhewed in the Chapter before) the courſe is ſouthſoutheaſt five leagues: from thence three leagues diſtant ſouth-ſouthweſt, lyeth the river of Ponoy.

Ponoy.

The Mouth of the White Sea is but eleven leagues broad: about four leagues from the three Ilands, in the middle of the Mouth of the White Sea there lyeth a Sand, which in ſome places at a lowe water is bare, you muſt ſayle weſtward about it, and you may alſo goe eaſtward about it, but there it is flatte water and verie ſhallowe.

A Sand in the Mouth of the white Sea.

From the three Ilands to the Iland Souſnowits, which is cõmonly called the Croſſe Iland, the courſe is ſouthſouthweſt thirteene leagues, but from Ponoy it is eleven leagues. South-eaſt and by ſouth from the three Ilands on the Ruſſia ſide the Meſenſche Golf goeth in, whereinto there runneth a great river to Colmogro, and there goeth another river into the land, whereon the towne of Slowodo lyeth.

Croſſe Iland.

Souſnowits.

Meſenſche Golfe.

Slowodo.

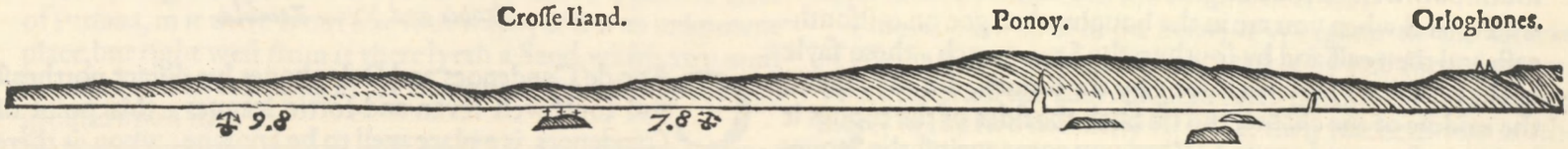
From the Croſſe Iland or Souſnowits to the Cats or Catſnoſe point, which is alſo called the Blue or Graie point, the courſe is ſouthweſt and by ſouth twentie or one-and-twentie leagues, upon the ſouth ſide of the chanel there lyeth a banck, which is no deeper then three fathome, it is at leaſt ſeven or eight leagues long, and reacheth ſouthweſt and by weſt and northeaſt and by eaſt.

Catſnoes or Graie point.

Banck.

From Catſnoſe point to the Mouth of the river of Archangel the courſe is ſouth and by weſt ſeventeene leagues.

Thus the Iland of Orloghones ſheweth ſouthward from the three Ilands, Ponoy, and the Croſſe Iland.



II.

How you ſhall ſayle into, and up the River of Archangel.

VVhen you goe ſouth and by weſt from Blue point to S. Nicolas you ſee the land a great waie weſt from S. Nicolas, which ſheweth like a long peece of land, and a litle nearer to the River you ſee more iand, which openeth it ſelf as if it were a round Iland, and after that you may ſee the ſteeple of S. Nicolas, & when the ſteeple of S. Nicolas ſtandeth ſouth and ſouth and by weſt from you then you are open before the Mouth of the River of Archangel. If you will goe into the River, then ſayle upon the ſteeple of S. Nicolas untill you ſee the Cape which ſtandeth upon the weſt ſide, place that a lever or bowe length weſt from S. Nicolas ſteeple, then there come two ſmall

S. Nicolas.

Markes of the haven.

ſmall downes under the ſaid ſteeple, thoſe two ſmall downes lye right weſt from the croſſe downe, and there lyeth alſo another downe weſtward, which alſo is greater, for thoſe downes are verie ſmall, then the ſteeple ſtandeth alſo in a valleye of the wood, which are all markes of this haven. Having brought the Cape ſo as I ſaid, then ſayle in upon it ſouth and ſouth and by weſt, and ſometimes ſomewhat eaſterlyer. You may alſo place the Cape and the ſteeple right againſt each other, and goe in upon them, then you goe in along by the weſt ſide, which farre off from the land is altogether flatte. Without before the haven it is five, four, and three fathome deepe: but in the mouth or upon the Drumple of the haven it is no deeper at high water then fiveteene or ſixteene foot, and at lowe water twelve or thirteene foot. But when you can not ſee the Cape, or that it is gone, then you may bring the towne of S. Nicolas into the wood, in ſuch manner, as that almoſt the third part of the wood be weſtward, and almoſt the other two third partes of the wood ſtand eaſtward of it. When you have gotten to the mouth of the River, you muſt ſometimes goe eaſterlyer, as, ſouth and ſouth and by eaſt, till you come to the weſt ſide, then goe cloſe along by it, and put not off from it, untill you come againſt the white pleck or place on the weſt ſide, to the place, the which is marked in the Carde with the letter *A*. Then ſtrike over from it eaſt and by ſouth, and eaſtſoutheaſt right to the point of the wood on the eaſt ſide, and ſo ſoutheaſt along by the eaſt ſide, cloſe by the land: but againſt the two Ilands which lye on ſtarborde, it is verie foule and ſhallowe along by the eaſt ſide, which you muſt look to: but goe along by the eaſt ſide, untill you come to the firſt river on baghborde, then ſtrike over againe to the weſt ſide ſouthſouthweſt to the bought, there on the eaſt ſide it is flatte water: and when you are in the bought, then goe on eaſtſoutheaſt, and then eaſt and by ſouth to the Stone-reach, there ſayle in the middle of the river, along by the tonnes, for they lye in the middle of the chanel, and on both the ſides of the tonnes it is uneven & rugged ground. When you come againſt the Stone-reach there ſtandeth a fiſhers houſe upon the weſt ſide, by the litle river that runneth into the land, on the north ende or weſt ende of the Stone reach: againſt that foreſaid houſe there lyeth a great ſtone under the water, about which you may ſayle on both ſides, it lyeth about the middle in the chanel, as you ſayle forward, but Mariners are accuſtomed to ſayle weſtward about, along by the weſt ſide, as alſo through the Stone-reach, for the weſt ſide is deepe ynough, and in ſome places ſoft yeelding ground, but the eaſt ſide is full of ſtones. When you are paſt the tonnes, then you muſt againe keepe ſome thing off from the ſhore. There was wonte to lye an Iland at the ende of the Stone reach, but not long ſince it is wholly cutte and broken awaie by the yce. When you are through the Stone-reach, then the courſe is firſt ſoutheaſt, and then ſoutheaſt and by ſouth into the bought, then goe eaſtſoutheaſt, and keepe along by the weſt ſide, till you ſee the towne of Archangel, then ſayle right to it, but ſhunne the point on baghborde for that is foule.

Depth in the chanel.

Stone-reach.

Archangel

To ſayle further up the river, from Archangel to Colmogro it is about twelve or thirteene leagues, muſt ſoutheaſt crooking about, according to the ſtretching of the crookings of the River.

To ſayle to Colmogro.

From the haven of Podeſſemſche, or from the River of Archangel to the Rode of S. Nicholas it is four leagues: there ſtandeth a beacon upon the ende of the Iland, whereon the Engliſh houſe ſtandeth, and weſt from that beacon is the Rode for the Engliſh ſhippes at ſixe or ſeven fathome, as you lye neare or farre from the land. The Engliſh river reacheth in eaſtnortheaſt and northeaſt and by eaſt, along by the cloſter of S. Nicolas, but it is a drie River, ſo that no ſhippes may goe into it, but you muſt lade your ſhippes with lighters or boates.

English River.

About ſouthweſt and ſouthweſt and by weſt from the mouth of the River of Archangel there lyeth a Salt-Iland, whereon there ſtandeth a cloſter, it is faſt to the firme land. From thence to Cape de Onega the land reacheth weſt and by north.

Salt Iland.

Cape de Onega.

III.

The ſituation of the Coaſt of Ruſſia betweene Cape de Candenoes and Nova Zembla.

CApe de Candenoes and Orloghones lye diſtant northeaſt and ſouthweſt ſeven-and-fortie leagues: this point of Candenoes is a place well to be knowne, upon it there ſtand five Croſſes for markes: and when you fall upon it, you may perfectly perceive, that the land falleth on the one ſide ſouthweſt to the white Sea, and ſoutheaſt to the other ſide.

Cape de Candenoes.

About thirteene leagues eaſt from Cape de Candenoes there lyeth an Iland called Morſonowits, and eaſt there goeth a great creeke into the land, but it is verie flatte water, with manie ſhallowes and dwalegrounds: Eere now it hapened that ſome ſhips ſayled into this place, thinking that they ſayled into the mouth of the

Morſonowits.

of the white Sea, & knewe not where they were, for it is almoſt one heigth & ſtretching with the white Sea, but it is eaſily to be knowne and diſcerned by the land, for the Coaſt of Ruſſia eaſt from Candenoes is altogether downie lands, and flat ſtrand, but the Coaſt of Lapland is high and hillie. Within this River there runneth up a River through the land, which you may goe through with Lodges into the White Sea.

Colgoia. Againſt this creeke, about ſix-and-twentie leagues eaſt, and eaſt and by ſouth from Candenoes lyeth the Iland of Colgoia, which is thirteene leagues long, you may ſayle round about it, but on the ſouth ſide there goeth a great Sand or ſhelf along by the land: when you come out of the eaſt you muſt ſhunne it, for it is faſt to the weſt ende of the Iland. Upon this Iland there are a great number of Geeſe, which in Somer are all cleane naked, without anie fethers, they ſitte and hatch upon one egge, which lyeth under them, and ſo breede their young ones, and are ſo great a number there, that the Ruſſians goe there on land with their Lodges, and laye a deale or board upon the land, and drive the geeſe with ſtaves in ſo great number into their Iachts and Lodges, that they ſalt great number of them in barrels.

Tuſſara. Swelgenoes. From Candenoes to the Iland Tuſſara it is eaſtſoutheaſt three-and-fortie leagues: Betweene them both the Creeke aforeſaid goeth in. Weſt from Tuſſara lyeth the point of Swelgenoes.

Colcova. From Tuſſara to the River of Colcova the courſe is eaſt ſeven leagues: it is a good River, being twelve foot deepe, but there is no other trade there, but that the Ruſſians come thither from Colmogro and S. Nicolas with Lodges to traffique there, and to barter their wares for skinnes and other wares.

Pitſana. Seven leagues eaſt from the River of Colcova lyeth the river of Pitſana, in it there is but ſixe foot water, & it is an unknowne place, but right weſt from it there lyeth a Sand, which you muſt ſhunne, for Oliver Brunel in his voyage to Nova Zembla fell on ground upon it.

Pitſora. About thirteene leagues eaſt from Pitſana lyeth the River of Pitſora, which reacheth in by the eaſt point ſouthſoutheaſt, it is twelve foot deepe: there the land is lowe and downie, and on the weſt ſide there ſtandeth a Packhouſe, with ſome Croſſes: when you are within the River, then you turne up weſtward to the Packhouſe, and there you muſt ancker at three and four fathome, for there is a great Haf or Inland-water: you muſt ſhūne the eaſt ſide of the River, for it is full of Sands and Bankes. The towne of Pitſora lyeth about ſix-and-twentie dutch myles into the Land, and there is great abundance of Skinnes and Criſtal.

Oltgin. Betweene Pitſora and Waygates lyeth Oltgin, and without upon the land there lye two rockes or Ilands, the one called Orangien, the other Grave Maurits, there you may ancker under them at ſixe or ſeven fathome: from the ſoutherlyeſt there commeth a Sand ſhooting off, but you may well ſound it at three fathome. Eaſt and weſt from theſe two Ilands there is a great Creeke, it is flatte water, & there the land runneth round about to the point of Pitſora, altogether in one Creeke from Pitſora to Waygates: and it is from Pitſora to Waygates northeaſt and northeaſt and by eaſt two-and-thirtie leagues.

Orangia. Graef Maurits.

IIII.

The ſituation of Waygates and Nova Zembla.

Waygates. VVaygates (which alſo is called the Strait of Noſſowe) is a Strait which you may ſayle through into the Tartarian Sea, which firſt reacheth about eaſt, and then northeaſt till you be through it, about eight or nine leagues, & about the middle thereof there lyeth an Iland, which you may ſayle about on both ſides. A litle within the point, on the north ſide there lyeth a faire Baye, which you may ſayle into as deepe as you will at five, four and three fathome good ancker ground: along by the eaſt ſide it is deepe water, and there you lye ſafe from all kinde of windes and currants of yce. This Strait or narrowe paſſage hath been twice ſought to finde a waie to goe north about Tartaria to the rich Kingdomes of China and Cathaya, and ſo to the Molucques, but it was all in vaine, becauſe of the great yce, which all the yeere long ſtayeth there, and can never melt, by meanes of the continuall colde.

Traenbay.

From the eaſt ende of the Strait of Waygates to the Creeke of Oby it is eaſtſoutheaſt, & ſoutheaſt & by eaſt fortie leagues. There eaſtward the land reacheth forth northeaſt fortie leagues more, to the two northerly rivers, & then reacheth alſo northeaſt forward, but how farre it is yet unknowne. The weſt coaſt of Nova Zembla reacheth from Waygates or northwards to Coſtinſarck about northnorthweſt three-and fiftie leagues, and there about the north, it is about north and by eaſt to the point of Longhenes, or the States point, and then northnortheaſt, northeaſt, and eaſtnortheaſt to the Ilands of Orange, the northerlyeſt part of Nova Zembla, which lyeth under ſeven-and-ſeventie degrees and an half.

Oby.

V.

What Moone maketh high water heere, and how the ſtreames riſe and fall.

AT the three Ilands it is high water with a ſouthweſt and northeaſt moone.

At Catſnoſe point an eaſt and weſt moone maketh high water.

Before Podeſſemſche and S. Nicolas an eaſt and by ſouth and weſt and by north moone maketh high water.

At the Iland of Nova Zembla a ſoutheaſt moone maketh high water.

From Orloghones & the three Ilands the ſtreame falleth into the mouth of the White Sea, to the Graie point of Catſnoſe, about ſouthſouthweſt and ſouthweſt and by weſt.

But about the point of Catſnoſe the ſtreame falleth into the White Sea, part to Warſiga and Ombay, and alſo to Podeſſemſche and S. Nicolas ſouth, and ſouth and by weſt, and ſo falleth out and into the River of Archangel.

Eaſt from Candenoes to the Iland of Colgoya the ſtreame falleth eaſt and eaſt & by ſouth, as alſo along by the ſame Iland, & from Colgoya to Waygates the ſtreame falleth eaſt & weſt.

Along by Nova Zembla the ſtreames followe the moone, & along by Ruſſia they come betweene Candenoes and Pitſora out of the weſt and weſtnorthweſt, and ſo fall along by Ruſſia.

The ſtreames to Waygates come from Colgoya and Nova Zembla, and fall with the others eaſt and by north, through the Strait of Waygates, to the river of Oby, ſo that the ebbes and the floods keepe the chanels of Waygates open, whereby manie times they are without yce, or at leaſt but with ſuch yce as driveth in ſholes or great flakes.

But eaſt from Waygates the floods come out of the northeaſt and ſo fall into Oby, and into the Strait of Naſſowe, the water there riſeth and falleth, but it holdeth no certaine tydes.

VI.

Of the depths and grounds, as well eaſt as weſt from Waygates.

ALl the whole Coaſt along from Candenoes to Waygates you finde a flatte riſing ground, moſt part ſand and ſoft or ſteek-ground. When you ſayle in miſtie wether, you muſt underſtand that you are at eight or nine fathome depth four or five leagues from the Coaſt, but when you are at thirtie, five-and-thirtie or fortie fathome, then you are farre ynough from the land, ſo it is alſo along by Nova Zembla, as alſo before the eaſt ſide of Waygates, but when you come before the chanel it is ſhallower.

VII.

How theſe Lands are diſtant from each other.

FRom Orloghenoes to the three Ilands ſ. ſ. e. — 5 leagues.
From the three Ilands to the Iland with the croſſe, called Souſnowits ſouthſouthweſt — — 13 leagues.
From the Croſſe Iland to Catſnoes, or the Graie point ſouth & by weſt — — — — — 17 leagues.
From Podeſemſche or the river of Archangel to the Salt Iland ſouthweſt and ſomewhat weſterlyer — 7 leagues.
From the Salt Iland to Cape de Onega weſt and weſt and by north — — — — — 18 or 19 leagues.
From Cape de Onega to the Ilands of Solofky northweſt and by weſt — — — — — 20 leagues.
From the Ilands of Solofky to the Somma weſt and weſt and by ſouth — — — — — 9 leagues.
From Candelex to Ombay ſoutheaſt and by eaſt — 13 leagues.
From Ombay to Stulſland ſoutheaſt — — 11 leagues.
From Stulſland to Warſiga e. ſ. e. — — 16 leagues.
From Warſiga to Pelitſa e. ſ. e. — — 16 leagues.
From Pelitſa to Souſnowits or the Croſſe Iland e. n. e. and ſomewhat northerlyer — — — 13 leagues.
From Ombay to Warſiga ſoutheaſt and by eaſt 25 leagues.
From Warſiga to Coroa eaſtſoutheaſt — — 11 leagues.
From Coroa to Craſwick eaſt — — 7 leagues.
From Craſwick to Polongi eaſt — — — 7 leagues.
From Polongi to the Iland Souſnowits n. e. & by e. 8 leagues.
From Orloghenoes to C. de Candenoes northeaſt 47 leagues.
From Candenoes to the Iland Colgoya e. and by ſ. 26 leagues.
From Candenoes to Swelgenoes ſ. e. and by e. — 29 leagues.
From Candenoes to the Iland Morſonowits ſ. e. 13 leagues.
From Candenoes to Tuſſara e. ſ. e. — — 43 leagues.
From Tuſſara to Colcova eaſt — — 7 leagues.
From Colcova to Pitſana eaſt and by north — 7 leagues.
From Pitſana to Pitſora eaſt and eaſt and by north diſtant about — — — — — — 13 leagues.
From Pitſora to Waygates about northeaſt and by eaſt diſtant — — — — — 14 or 16 leagues.

Some

VIII.

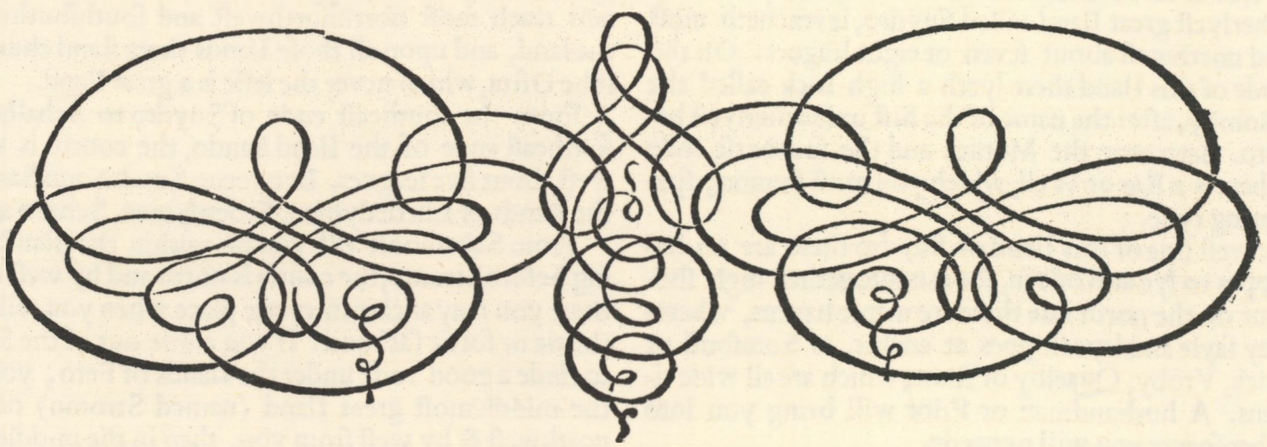
Some long and croſſe courſes from the White Sea, and alſo from Ruſſia betweene C. de Candenoes and Nova Zembla.

FRom Catſnoes or the Graie point to the Ilands of Solofky weſt & ſomewhat ſoutherlyer — 37 leagues.
From Catſnoes to Warſiga northweſt and ſomewhat weſterlyer — — — — 29 or 30 leagues.
From Catſnoes to Polongi northweſt & by north 23 leagues.
From the Iland of Solofky to Ombay in Lapland the courſe is north — — — — —32 or 33 leagues
From Solofky to Warſiga northeaſt and ſomewhat eaſterlyer — — — — — — 32 leagues.
From Solofky to Polongi northeaſt and by eaſt —51 leagues.
From Candenoes to Coſtintſarke in Nova Zembla northeaſt & by eaſt about— — — — —61 leagues.
From the eaſt ende of Colgoya to Waygates eaſt —60 leagues.
From Pitſora to the eaſt ende of Colgoya w. n. w. 43 leagues.

IX.

Vnder what degrees theſe Countreys lye, as writings do witneſſe.

THe point of Catſnoes or the Graie point lyeth under — — — —65 degrees.
S. Nicolas or the River of Archangel lyeth under — — — — 64 degrees 30 minutes.
The Ilands of Solofky lye under — 65 degrees.
Ombay lyeth under — — — 66 degrees 45 minutes.
Cape de Candenoes lyeth under — 69 degrees 30 minutes.
The Iland of Colgoya lyeth under — 69 degrees 10 minutes.
The Rivers of Colcova, Pitſana, and Pitſora lye under — — — — — —68 degrees 30 minutes.
Waygates or the Strait of Naſſowe lyeth under — 69 degrees 40 minutes.



Heere followeth the Carde N. 37.

THE DESCRIPTION OF

the Ilands of Fero or Ferre: alſo of Hitland, Fulo, and Fayrhil.

I.

The ſituation of the Ilands of Fero.

Thenames of the Ilands of Fero.

THe greateſt and chiefeſt Ilands of Fero are twelve in number: as Suydro, Sando, Mogghenes, Waghe, Stromo, Oſtro, Calſo, Cuno, Bordo, Wydro, Swyno and Fulo: the ſmall Ilands of Fero are tenne, as Littledymen, Stoerdymen, Schuyvo, Dalſſles, Heſten, Trollo, Cloſter, Mogghenesholme, Monick, and the Biſhop. Beſides theſe there are ſome rockes & ſmall Ilands ſixe or ſeven in number.

Suydro.

The ſoutherlyeſt great Iland called Suydro, it reacheth moſt ſoutheaſt and northweſt about ſeven or eight leagues. On the ſoutheaſt ende of this Iland there lyeth a high rock called the Monick or Somby, after the name of the firſt or ſoutherlyeſt haven in Suydro. Betweene the Monick and the ſoutheaſt ende of Zuydro there is a Ras or Well, which you muſt ſhunne, ſpecially at a Spring tyde.

Monick. Somby.

Upon the weſt ſide of this Iland of Suydro there are no havens for ſhippes to lye at Rode in, for it is altogether high ſhoring land, but on the north ſide there are manie havens, whereinto you may ſayle and laye ſhippes at ancker, as Somſond or Heſt, Hofwick, Vroby, Quaelby or Rane, which are all wide rivers or havens. A husbandman or Pilot will bring you into them all, whenſoever you will or neede.

Mogghenesholme.

From the northweſt ende of Suydro to Mogghenesholme, the weſterlyeſt or uttermoſt Iland of Fero, the courſe is northweſt and by north and northnorthweſt about eight or nine leagues.

Wage.

At the eaſt ende of Mogghenesholme lyeth Mogghenes, and eaſt from it lyeth the Iland Wage. Eaſt from Wage there runneth a faire river out of the ſoutheaſt, from the Iland Sando, about Heſten and the Iland Kolſter: for you may goe about on both ſides of theſe Ilands, and leave the great Iland Stromo on the eaſt ſide, and ſo come into Waghe. In the middle of the river or haven of Waghe, there goeth a faire haven eaſtward, up into the great Iland of Stromo, therein you may ancker at tēne or twelve fathome, but the haven is at leaſt twentie fathome deepe.

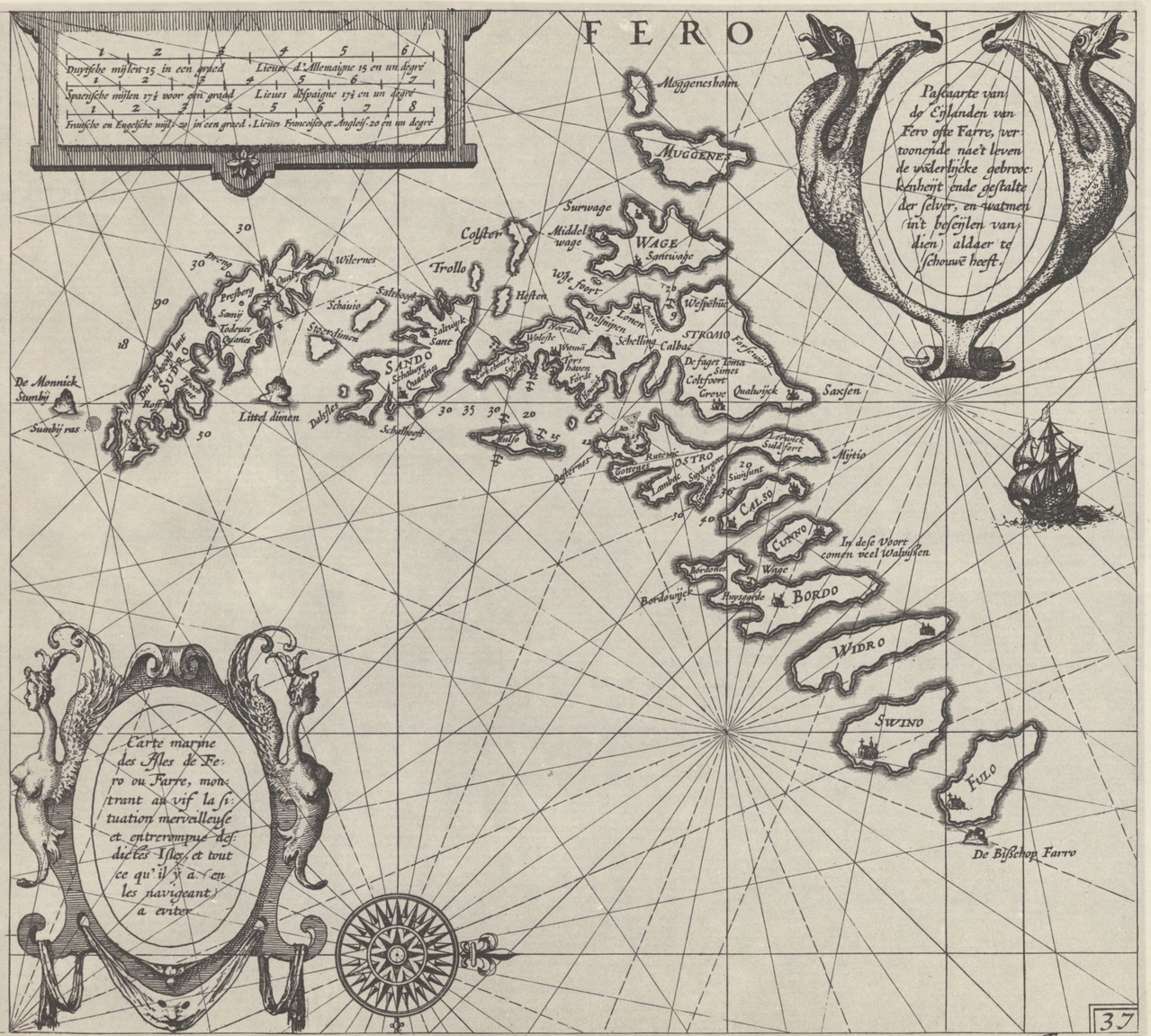
Mogghenes and the northeaſt ende of Fero lye diſtant eaſtnortheaſt, or a litle northerlyer, and weſtſouthweſt about ſixteene leagues. Betweene them both there lye tenne Ilands, and betweene each Iland there is a faire deepe chanel or river, whereof the fourth from Mogghenes is called Somſond: all theſe chanels reach moſt northnorthweſt and ſouthſoutheaſt through the land, and upon all thoſe Ilands there ſtand churches, except it be Oſtra, which never the leſſe is a great Iland. Somſond.

From the ſoutheaſt ende of Suydro to Schalhooft, or the ſoutheaſt ende of the Iland Sando, the courſe is north and by weſt about five leagues. Betweene Suydro and Sando there lye the Ilands of Luttledymen, Stoerdymen, Schavo and Dalſſles.

From Schalhooft till you be within the Iland Mulſo, lying before Stromo, the courſe is north and by weſt four leagues, there you may ancker in everie place when you will, at twentie, thirtie or fortie fathome. If you come out of the Sea, and deſire to finde a good rode under the Ilands of Fero, you muſt hold the middlemoſt great Iland (named Stromo) northweſt and northweſt & by weſt from you, then in the middle of the Iland Stromo you ſhall ſee a high ſteepe hill called Schellinck, which you muſt ſayle up unto, then you ſhall come to the Iland Mulſo aforeſaid, which is a lowe Iland, which you may goe about on both ſides. but it is beſt to goe into it on the ſouth ende: and under this Iland it is all over good ancker ground. Right over againſt this Iland, on the great Iland lyeth Torſhaven, the principall haven of Fero, where all their trade of merchandiſe is uſed. Schellinck. Torshaven.

From Torſhaven or the Iland Mulſo to the northeaſt ende of Fero the courſe is northeaſt and northeaſt and by eaſt, about twelve


Foele
Fulo
Feril
Schawey
S Magni
foort
De Suydtbroeck
Schotsche Ree
Hamburgher
bauen offe
Bremerhaven
Breefort
Hanglip
Schetland anders Hitland
IELLO
IELLO
Ielleſondt
Fetla
Bloemeſondt
OLSTO
Wiſchetren
Eygentlycke afbeeldinghe vande Eylanden Hitlande anders Scotlandt, Fulo, en Fayerinl naer hare rechte gelegenthenit ontworpen.
Vive pourtraicture des Isles Hitlande autrement dict Schetlande, Fulo et Feriul, selon leurs vraiyes situations
Duytsche mylen 15 in een graed. Lieues dallemaigne 15 en un degré
Spaensche mylen 17½ voor een graad. Lieues dispaigne 17½ en un degré
Vranſche en Engelſche mijlen 20 in een graed. Lieues Francoises et Angloiſ. 20 en un degré


FERO
Duytſche mijlen 15 in een graed. Lieues d'Allemaigne 15 en un degré
Spaenſche mijlen 17½ voor een graad. Lieues dEſpaigne 17½ en un degré
Vranſche en Engelſche mijlen 20 in een graed. Lieues Francoiſes et Angloiſ. 20 en un degré
Miggenesholm
MUGGENES
Surwage
Middel wage
Colster
WAGE
Santwage
Trollo
Hesten
Wolfshuis
STROMO
Saxsen
Qualuyck
Wilernes
Saltkoogt
Schauio
Stuerdtimen
SANDO
Litted dimen
Dalsteo
Schellingh
Calbac
De fuget Toma
Simes
Colefoort
Greve
De Monnick
Suenbij
Suenbij ras
Mytio
OSTRO
Swinſant
CALSO
CLAYRO
WIDRO
SWINO
FULO
Wage
BORDO
Bordauwijck
Koningarde
In deſe Voort comen veel Walvisſen
De Biſschop Farro
Paſcaarte van de Eylanden van Fero ofte Farre, vertoonende nae't leven de woderlycke gebrocken, heuvelen ende geſtaltte der ſelver, en watmen (in't beſeylen van dien) aldaer te ſchouwe heeft.
Carte marine des Isles de Fero ou Farre, montrant au vif la situation merveilleuse et entrerompue desdictes Isles, et tout ce qu'il y a (en les navigeant) a eviter

twelve or thirteene leagues. Betweene them both there lye ſeven Ilands, and betweene each Iland (as I ſaid before) there goeth a wide chanel through the land, reaching about northweſt, northweſt and by north and northnorthweſt. The north ende of Fero is about four leagues broade, and reacheth northweſt and ſoutheaſt: it is called Fulo: againſt it lyeth the Biſhop.

Fulo. Biſhop.

If you deſire to ſayle from Mulſo into Somſond you muſt goe northeaſt and by north three leagues, to the point of Bordenes, then from Bordenes northeaſt, then you ſhall ſee a church upon the Iland of Calſo, which you muſt leave on ſtarborde, & goe in weſtnorthweſt, till you be in the bought of the Iland Oſtro, and there ancker at ſeventeene or eighteene fathome.

Somſond.

Theſe Ilands of Fero lye in a Triangle forme: from the southeaſt ende of Suydro to Fulo or the north ende of Fero it is northnortheaſt and ſouthſouthweſt one-and-twentie leagues.

II.

The ſituation of Hitland.

THe ſouthweſt coaſt of Hitland, that is, from the ſouther-lyeſt point to the northweſt point reacheth northweſt & by north ſeven or eight leagues. On the ſame northweſt ſide right over againſt the Iland Fulo, there lyeth a ſandie Baye, where you may ancker, but on the eaſt ſide of that Baye it is altogether foule. From the northweſt & weſt point to the north ende, the land of Hitland reacheth northeaſt and ſouthweſt about eighteene or nineteene leagues.

Three leagues north from the aforeſaid weſt point lyeth the haven of S. Magnus, which is a wide river, and there is good ancker ground within it: within it is ſixteene or ſeventeene fathome deepe, as you are farre within the land. On the north ſide there lyeth a high rock, from which you muſt goe in ſouth: and on the ſouth ſide there lye two or three rockes, which you muſt leave on ſtarborde when you will ſayle in.

S. Magnus haven.

Right eaſt about the ſoutheaſt point of Hitland there lyeth a faire ſandie Baye, where you may ancker at twelve or thirteene fathome: and from thence to Hanglip the courſe is northeaſt, and ſomewhat eaſterlyer tenne or eleven leagues.

Hanglip.

Betweene Hanglip and the ſouth point there lyeth an Iland which you may ſayle about on both ſides, and behinde it lyeth Hamburgher haven or the Scotiſh haven: it is a lading place for the Hamburghers and Scottes: it is alſo called Bremer haven. There lyeth alſo a high ſteepe point ſouth from Hanglip, which you muſt goe by into the Breeſond, which is the principal haven of all Hitland, for it is deepe, and hath faire ground, and there you lye ſafe againſt all windes.

Hamburgher haven.

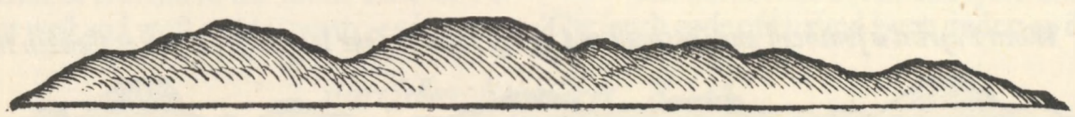
Breeſond.

North from Hanglip the land of Hitland reacheth north, north and by eaſt, and northnortheaſt, and laſtly north: and in ſome places you may ſayle through Hitland, ſpecially north from Hanglip, where there goeth a river northweſt through it, and it is a faire wide river, and there in ſome places it is good ancker ground, for ſuch as knowe it, and are forced to ſeeke it. Frō Hanglip to the northeaſt point of Hitland it is northnortheaſt eleven leagues: there lye ſome out-rocks, which are called the Out-ſcheren. From thence to the north point of Hitland it is north about four leagues.

Right about the north point, there is a faire haven, which runneth in ſouthſouthweſt, which is all ſandie ground. On the weſt ſide there lyeth a long rock, you muſt ſayle in by it on the eaſt ſide, and ancker right within the haven: it is all faire and good rode within it. This haven is called Blomeſond, and goeth in right weſt from the northeaſt point: and firſt (as I ſaid) reacheth in ſouthſouthweſt, then ſouth, and ſouth and by eaſt: on both ſides it is good ancker ground, you may there ſayle cleane through, and come through Ielleſond into the Sea againe about the Iland Fetlo.

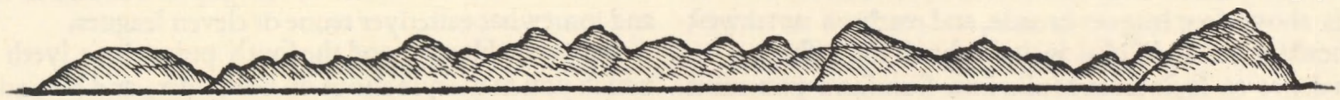
Blomeſond.

Thus Hitland ſheweth when it is northweſt and by weſt about four leagues from you.



Thus Hitland ſheweth between Hanglip and Hamburgher haven.

Bremerhaven. Point of Breeſond. Hanglip.



Five leagues north from Hanglip the land ſheweth thus, when you are about a league from it, and there Hitland runneth into a great bought with manie Ilands.



Thus Hanglip ſheweth when it is northweſt from you eight leagues.



When the north ende of Hitland is ſoutheaſt and by eaſt from you then it ſheweth thus.



III.

The ſituation of the Ilands Fayrhil and Fulo.

Fayrhil. THe Iland of Fayrhil lyeth from the ſouth ende of Hitland ſouthſouthweſt ſeven or eight leagues. Fulo and Fayrhil lye diſtant northweſt and by north, and ſouth-

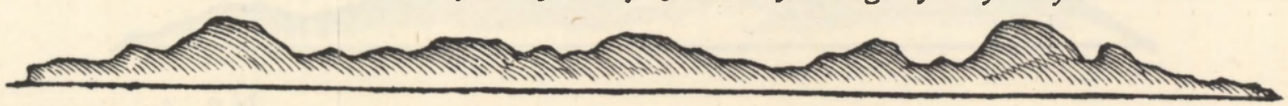
Fulo. eaſt and by ſouth eleven leagues. But Fulo lyeth about weſt and by north four leagues from the aforeſaid ſouth point of Hitland. The ſouth point of Hitland lyeth betweene Fulo and Fayrhil.

On the weſt ſide of Fayrhil in ſome places it is foule ground, but on the ſoutheaſt ſide it is good ancker ground, where you may lye at rode. Fayrhil and the eaſt point of Orcanes lye diſtant from each other ſouthweſt and northeaſt.

When Fayrhil is weſt and by ſouth four leagues from you it ſheweth thus.



When Fayrhil is ſoutheaſt and ſoutheaſt and by eaſt three or four leagues from you it ſheweth thus.



Thus

Thus Fayrhil ſheweth when it is five leagues ſouthweſt and by weſt from you.



When Fulo lyeth northnortheaſt from you four leagues it ſheweth thus.



Thus the Iland Fulo ſheweth when it lyeth northweſt from you, and then you may ſee it out of the top of the maſt.



Thus Fulo ſheweth when it lyeth five leagues eaſtnortheaſt from you.



IIII.

Of the Tydes and running of the ſtreames about theſe Ilands.

IN the Ilands of Fero a north and ſouth moone maketh high water.

Under the Ilands of Fero there runneth a hard ſtreame, which commeth out of the weſt and weſtnorthweſt, and from the eaſt and eaſtſoutheaſt, and ſo falles through the Ilands, ſo that you muſt there look unto it, and reckon your Tydes well, when you will ſayle from one Iland to another, for there the ſtreame drives hard, and there are two principal welles or Maelſtreames, the one on the ſouthende of Suydro, and the other a league within Schalhooft or Qualenes. But although the ſtreames runne ſo ſtifly through theſe Iles, yet it floweth there hardly four foot.

Maelſtreames.

In Hitland within the Rivers and havens a ſouthſouthweſt & northnortheaſt moone maketh high water. The ſtreames there goe eaſt and weſt about, ſpecially on the ſouth and north endes of Hitland, and ſo fall croſſe through the rivers and havens.

V.

How theſe Countreys are diſtant from each other, and alſo from other Countreys.

FRom the north ende of Hitland to the ſouth ende of Fero the courſe is weſt and weſt and by north 59 leagues.

From the ſouth ende of Hitland to Fero it is weſtnorthweſt & northweſt and by weſt — — — 61 leagues.

From the ſouth ende of Hitland to the Iland Rona weſtſouthweſt — — — — — — 47 leagues.

From the north ende of Hitland to the rockes of Rocol weſtſouthweſt — — — — — 127 or 128 leagues.

From the ſouth ende of Fero to Rona Iland by e. 45 or 46 leag.

From the ſouth ende of Fero to Rocol ſouthweſt & ſomewhat weſterlyer — — — — — 81 leagues.

From the Iland Fayrhil to the northeaſt ende of Orcanes ſouthweſt — — — — — 10 or 11 leagues.

The Iland Fayrhil lyeth from the ſouth ende of Hitland ſouthſouthweſt and ſouth and by weſt — 7 or 8 leagues.

From Hitland to the eaſt point of Yſland northweſt & by weſt about — — — — — 133 leagues.

In the thirteenth Chapter it is ſufficiently ſhewed how theſe Ilands lye diſtant from the havens and Ilands of Norwaie both in breadth and length.

VI.

Vnder what heigth theſe Countreys lye.

THe north ende of Fero lyeth under 62 degr. 10 minutes.
The ſouth ende of Fero lyeth under 61 deg. 15 minutes.
The north ende of Hitland lyeth under 60 degr. 45 min.
The ſouth ende of Hitland lyeth under 59 degrees 48 minutes.

Heere followeth the Carde N. 38.

A DE-

A DESCRIPTION OF

the Ilands lying behinde the Northweſt point of Scotland.

I.

The ſituation and names of the ſaid Ilands.

WEſt from Scotland and north from Ireland there lye manie Ilands, whereof I will heere deſcribe ſome, in ſuch manner as they are knowne at this day.

Names of the Ilands.

The names of the principall Ilands lying there are theſe, Aren, Ila, Iona, Mulla, Bragedul, Hun, Iuſt, Leeus, S.Patricius, S.Maria, S.Colane, S.Petous, Epth and S.Kilda: theſe are the greateſt and principaleſt. There are alſo ſome ſmall Ilands, as Rona, Cheut, Trauta, Fladde, Grand Melul, Petit Melul, Scalpan, Cannay, Rum, Egghe, Mule, Cutte, Carndenburgh, Gronſay, S.Karbo, Liſmont, Swinoy, Machare, Gegay, Caray and Naverſay. All theſe Ilands lye about, & belong to Scotland, & are thoſe which by the Coſmographers are called *Inſulæ Hebrides*.

Barre or Rona.

The Iland Barre or Rona is the northerlyeſt Iland behinde Scotland, it lyeth diſtant from Fulo about weſtſouthweſt eight-and-thirtie or nine-and-thirtie leagues, & it lyeth by two other ſmall Ilands, more then a league each from other.

S.Kilda.

The Ilands of Leeus are diſtant from Rona ſouthweſt ſixteene or ſeventeene leagues, and from the north ende of Leeus to S. Kilda it is ſouthweſt and by weſt ſixteene leagues.

Upon the eaſt ſide of S.Kilda there is a good rode for a weſt, and northweſt winde: this Iland lyeth by the other Ilands, whereof two are not verie great, on that which lyeth weſt you may ſee ſome houſes ſtanding, and thoſe ſmall Ilands lye eleven leagues diſtant weſt from the great Iland of Leeus. Upon the coaſt of Leeus there lye two faire great rockes, as if they were Ilands, they lye ſouth and north and ſomewhat eaſterlyer and weſterlyer from each other, about ſeven or eight leagues.

The ſoutherlyeſt lye by three Ilands, but the northerlyeſt lye by eight ſmall Ilands or rockes. You muſt underſtand that the Iland of Leeus is divided into manie peeces, through the which you may ſayle to manie places. Leeus with his Ilands reacheth ſouthſouthweſt and ſouth and by weſt about 29 leagues. Leeus.

But on the eaſt ſide there is a great River or haven through, of ſixe or ſeven leagues. You muſt ſayle into it cloſe by the Iland of Leeus, about ſ. ſ. w. till you be before the Iland of Cheut.

From thence the river betweene the great Iland Bragadul, & Leeus reacheth through ſouth and ſouth & by weſt to the weſt ende of Leeus, which is called the Epths, and then you leave Mulla and Ila with manie other Ilands on the left hand. Epths.

Iona, Ila, Mulla and Bragedul, are four of the greateſt Ilands that lye on the weſt coaſt of Scotland, they lye cloſe by the firme land, but there are manie havens and rivers, ſo that you may ſayle in and round about them all. Iona, Ila, Mulla, Bragedul.

Upon the northweſt point of Ireland there lye alſo ſome Ilands, which alſo you may ſayle through and round about.

Betweene Rona and Orcaneſſe there lye alſo Ilands, which may alſo be ſayled into and round about.

Whoſoever travileth into theſe parts may help himſelf with that deſcription which we have heere made, till ſuch time as we can gette further and fuller knowledge of them.

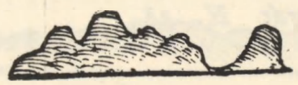
He that falleth upon anie of theſe Ilands muſt looke well to him ſelf, for the moſt part of them are inhabited by wilde and cruell men.

In Leeus and the Ilands there abouts a ſouthweſt and northeaſt moone maketh high water. The like alſo without the northpoint of Scotland.

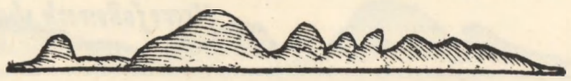
Thus S.Kilda ſheweth when it is northnortheaſt 4 leagues from you, & then the rockes lye weſt.



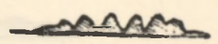
When S. Kilda is about five leagues ſ.w. frō you then it openeth thus.



When the Iland of Leeus lyeth right leagues from you it ſheweth thus, and then you are within S.Kilda.



This Iland lyeth alſo upon the coaſt of Leeus.



Thus



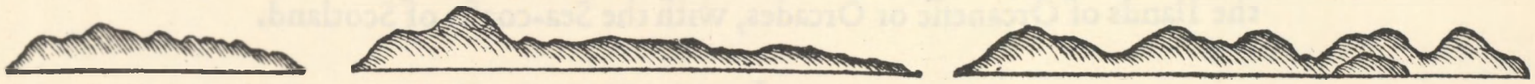
Pascaarte, verthoonende in wat ghestalte de Eylanden (Hebrides ghenaemt) achter de noordwesthoek van Schotlandt gheleghen zyn.

Carte marine de les Isles Hebrides situez vers norouest arriere l'Escoße

Thus the Iland Barro or Rona ſheweth, when it is 4 leagues ſouthſoutheaſt from you.

This Iland lyeth weſtſouthweſt from Scotland.
Withert.

This Iland lyeth on the northweſt point of Scotland towards Locherme.



II.

How theſe Ilands are diſtant from each other, and from other Lands.

FRom Rona to Leeus ſouthweſt — — 16 leagues.
From the north ende of Leus to S. Kilda ſ. w. 16 leagues.
From the ſouth ende of Leeus to the northweſt point of Ireland ſouthſouthweſt about — — 27 leagues.
From S. Kilda to the north ende of Hitland northeaſt and by eaſt — — — — — — 70 leagues.

III.

Vnder what degrees theſe Ilands lye.

THe Iland of Rona lyeth under 58 degrees 46 minutes.
The north ende of Leeus lyeth under 58 degrees 18 min.
The rock Rokol lyeth under — 58 degrees 20 minutes.
The northweſt point of Scotland lyeth under 58 deg. 30 min.

Heere followeth the Carde N. 39.

THE DESCRIPTION OF

the Ilands of Orcaneſſe or Orcades, with the Sea-coaſts of Scotland.

I.

Of the Ilands of Orcaneſſe.

The north eaſt point of Orcaneſſe.

THe Iland Fayrhil and the northeaſt ende of Orcanes lye diſtant ſouthweſt and northeaſt tenne or eleven leagues. This northeaſt point is a high hil, whereby there are manie points and Creeks: when you come out of the ſouth and are about it, then the land falleth downward towards the weſt, and you may goe there in everie where. Betweene Rona and Orcanes you ſhall finde an Iland or two, under the which you may make a rode.

Ways or Elhoy.

The Ilands of Orcanes are one-and-thirtie in number. The Iland Ways or Elhoy lyeth neareſt to Scotland five leagues weſtward about the point of Catenes. About northnortheaſt from the point Catenes there lye two Ilands, which are called Pits and Pichlandſkarres, you may there goe through betweene Ilhoy and Scotland towards the weſt.

Pits and Pichland ſkarres.

Heynda.

Platta,

Ponoma.

North from thence lyeth an Iland called Heynda, and another Iland called Platta. North from Platta lyeth Mayland or Ponoma. On the north ſide of this great Iland lye all the havens where the ſhippes enter into.

On the eaſt ſide of this great Iland there lyeth another Iland, called Kabunſa, north from it on the northeaſt point of that great Iland there lyeth another Iland: when you will lye in the haven thereof you muſt goe in there: you may goe through there to Papeweſter, and leave Sanda on ſtarborde.

Papeweſter.

Fara.

Cloſe by Papeweſter lyeth Fara, ſouth from it lyeth Sirza. Eaſt from Sirza and Fara there lye two Ilands in the middle of all the Ilands, called Eeda and Chapuoza.

Sanda.

Papa.

Stronſa.

Ronalſe.

Sanda lyeth north from all theſe Ilands; Papa and Stronſa lye ſouth from Sanda. Eaſt from Stronſa lyeth an Iland called Cruiſtella, that is the eaſterlyeſt Iland of them all: the norther-lyeſt is named Ronalſe or Nordernanſe.

Eleven or twelve leagues northweſt frō the great Iland there lye two rockes, one under the water, the other above: if you come out of the weſt you muſt look unto them.

You may ſayle in through theſe Ilands of Orcanes in manie places, to wete, by Catenes, and ſouth from Sanda, and come out north againe.

Thus the northeaſt point of Orcanes ſheweth when you ſayle along by it.



Thus the land of Catenes ſheweth, when you ſayle along by it.



II.

The ſituation betweene Catenes and the River or Creeke of Edenborowe.

FRom Catenes to Buquhamneſſe the courſe is ſoutheaſt one-and-twentie leagues. Betweene them both there lyeth a great creeke, wherein there are manie havens, which are deepe ynough for great ſhippes to enter into them, and where ſhippes may well lye at rode.

Cabo Terbate.

Dornock.

Roſſe.

Lovernes.

Boeckenes

Southweſt & by ſouth from Catenes about ſixteene leagues there lyeth an out-point called Cabo Terbate: north from it lyeth Dornock, and ſouth from it lyeth the haven of Ros and Luvernes: from thence the land reacheth eaſt and eaſtnortheaſt to Buquhamneſſe or Boeckeneſſe.

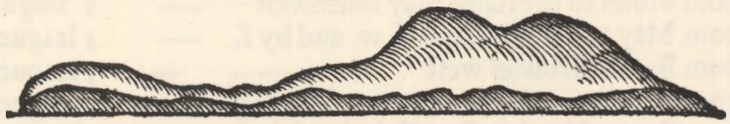
Boeckeneſſe


Ware afbeeldinghe vande Oostelijcke Zeecusten van Schotlandt, van alle Suwijcken Havenen ende Rivieren daer aen geleghen, hoemen deselve besen len, ende voor wat Clippen, Droochten, en ondiepten men hem wachten ende hoeden sal, alles correctelijck gestelt na zijne rechte streckinghen ende distantien van mijlen.
Duytsche mijlen 15 in een graad
Lieues d'Allemaigne 15 en un degré
Spaensche mijlen 17½ in een graad
Lieues d'Espaigne 17½ en un degré
Engelsche en Fransche mijle 20 in een graad
Lieues Anglois. et Francois. 20 en un degré
Vraije contrafaicture des costes Orientales de Schotlande, de touts Goulfes Havres et Rivieres la situez, comment on les navigera, et de quels rochers escueils et lieux secs on se faut garder.
DE OOST VAN SCHOTLAND
CUSTE
Edenborch
Kijngorne
Zethon oste Liet
Heinkief
De sant
Warwijck oort
Hadington
Bass
Anstrate
S. Andreas
Athen
Castel
Donde
Brought
Albrot
Roothoost
T'Schaep
May
Dunbar
Churlyd
Barwijck
S.t Abenhoost
Deustaborgh
Bamborgh
T'heylige eylant
Goutsteen
Ploegh
Stapels
De Schassen
Coket oste Coggen eylant
S. Jans
Menros
Northeske
Steenbay
Steenhoost
De torre
Abberdin
Out Aberdin
Fuurne
Ethan
Slaves
Boekeness
Boekeness
Luvernes
Rosse
Norne
Finderne
Culane
Banse
Douem
Pesloge
Spijloort
Spij
Dornok
C. Terhatt
Vuisse
Dunketh
Barradul
Mandenpaupes
Denet
Catenesse
Abergil
Nois
Olde wijs
Ways Ilhoy
I. Conet
Plata
Dungiske
Pitslantschare
Pichlantschare
Orcanesse
Orcades Insulæ
C. Strathat
I. S. Martin
I. Hiplant
C. de Hobrune
De Noordt Zee
39

Boeckneſſe is a high hill which lyeth on the ſouth ſide of the point: right north from Boeckenes there lyeth a faire Creeke, as if it were a haven, which is called Spie or Spieloort, on the ſouth ſide there is a ſingle ſtrand, there you goe in by it.

Spyloort.

Thus Boeckeneſſe ſheweth when you ſayle along by it.



From Boeckeneſſe to Aberdin the courſe is ſouthſouthweſt twelve or thirteene leagues: but betweene them both there lyeth a Tyde-haven. On the ſouth ſide of Aberdin there lyeth a rock half a league from the land, which you muſt ſhunne. The north point is all foule: you muſt goe in by the ſouth point at three or four fathome, till you be within the haven, and you may ſayle further weſtward up to the towne, and ancker there at four or five fathome. Northward alſo there is a great water, which is verie flatte, and drie on both ſides, from thence there goeth a chanel to Old Aberdin which is a decayed towne.

Aberdin.

Three leagues ſouth from the haven of Aberdin lyeth the out-point of Stone-head, or the Torre, whereon there ſtandeth a caſtle: right ſouth from thence the Stonebay goeth in, it is a deepe creeke, where you may laye manie ſhips ſafely at ancker: it is a good haven for ſhippes that will goe ſouth.

Stonehead

Four leagues ſoutheaſt and by ſouth from the Stonebay or Torre lyeth the haven of Monros, it is alſo a good haven: you muſt ſayle in weſtnorthweſt through both the lands, in the midle of the chanel, then you muſt turne up north, and ancker before the towne.

Monros

More then a league ſouth from Monros there lyeth an out-point called Readhead, on the land there ſtandeth a high ſteeple called Albroed. Four or five leagues ſouth from thence lyeth the river of Donde or Dunday. which alſo is a faire haven, it goeth in betweene two high lands weſt and by north, till you be before the towne. Within upon the River there lyeth a town called S. Iohns, which you may goe unto with a high water.

Readhead. Albroed. Dunde. S. Iohns.

About ſoutheaſt frō the River of Dunde almoſt two leagues there lyeth a great rock under the water, whereon it raveleth continually, it is called the Sheepe, if you come from the River of Edenburgh and will goe northward, or if you come out of the north and will goe into the ſaid river you muſt take heede of it. Betweene the river of Dunde & Fiſnes or the north point of the creeke lyeth the creeke of S. Andrewes, where there is a good rode for a weſterlie winde.

The Sheep S. Andrewes.

Thus the land of Scotland ſheweth north from Aberdin, when you ſayle along by it three leagues from the land.



III.

How you muſt ſayle up the river to Edenburgh, and the ſituation from thence to Coket Iland.

ABout a league ſouth from Fiſnes lyeth the Iland May, it is a great Iland when you are in it, but no man can gette upon it, unles he be drawne up upon it in a carre or veſſel: if you will goe up the River you muſt goe about on the ſouth ſide of May, and leave the Ilands Bas and Heynkief on the left hand. The Iland of Bas lyeth diſtant from May ſouthweſt and by ſouth three leagues: but from Bas to Heynkief or Inchkiet the courſe is weſt three leagues: you muſt ſayle north about Heynkief, for on the ſouth ſide, along to the firme land it is all full of rockes and verie foule ground.

The Iland May. Bas. Heynkief.

From Heynkief to Lieth or Seton the courſe is ſouth and by weſt three leagues, there over all it is deepe ynough, and there you may ancker on which ſide you will, you have good rode in all places. On the ſouth ſide thereof lyeth Edenburgh, the chief citie of Scotland.

Lieth or Seton. Edenburgh.

From the Iland Bas to S. Abbenhooft or S. Tabs head the courſe is eaſt five leagues, and from S. Abbenhead to the uttermoſt ende of Schaſſen it is ſoutheaſt ſeven or eight leagues.

S. Tabshead.

To goe through within the Schaſſen place the caſtle of Bamburgh or Badenburgh right over againſt the ſteeple of Denſtenburgh, and ſayle up upon it, then you goe through betweene the Ploegh and Goldſtone, which are two rockes lying between the Schaſſen and Holie Iland, which lye even almoſt with the water.

The Schaſſen. Ploegh & Goldſtone.

Holie Iland or Land.

The Schaſſen reach northeaſt into the Sea three leagues from the land, and north from them lyeth the Holie Iland. South from the Holie Iland there is a Creeke, wherein you lye ſafe againſt all windes, and againſt the caſtle is the beſt rode.

Barwick.

To ſayle into Barwick comming out of the ſouth, you muſt ſayle weſtnorthweſt from the north point of Holie Iland, till you come before the haven, there you ſhall ſee two beacons, you muſt ſayle in betweene thē both, & ſo forward between the two points in the middle of the chanel right before the towne.

From the Schaſſen to Coket Iland the courſe is ſouthſouthеaſt eight or nine leagues. There a man may ſayle round about and ancker at four fathome. There abouts alſo there runne manie litle rivers into the land, but at lowe water they are moſt of them drie.

IIII.

What Moone in theſe places maketh high water, and of the falling and running of the ſtreames.

AT Orcanes and Buquhamneſſe a ſouthweſt and northeaſt moone maketh high water.

In the haven of Lieth a ſouthweſt and by weſt moone maketh a high water.

The ſtreames come behinde Scotland from the weſt, and ſo fall through betweene Orcanes and Fayrhil, and there a ſouthweſt and northeaſt moone maketh high water.

From Bokeneſſe to Lieth the flood falleth ſouth and north along by the land. And from Lieth along by the Schaſſen and Coket Iland ſouthſoutheaſt.

In this chanel it is 40, 50 and 60 fathome deepe, and at 45 & 50 fathome a man may ſee the land. In this chanel the firſt herrings are yeerely taken.

V.

How theſe Countreys lye diſtant from each other.

FRom Cattenes to the Iland Hoy w.n.w. — 5 leagues.
From Catenes to C. Terbate ſ. w. and by ſ. 15 or 16 leag.
From the haven of Ros or Luvernes to the point of Elgin eaſt and by north and ſomewhat northerlyer — 7 leagues.
From the point of Elgin to Spilort eaſt — — 11 leagues.
From Spilort or Philort to Boeckenes ſ. ſ. e. — 3 leagues.
From Catenes to Boeckenes ſ. e. and by ſ. — — 21 leagues.
From Boeckenes to Aberdin ſ. ſ. w — 12 or 13 leagues.
From Stonebay to Monros ſ. w. and by ſ. — 4 leagues.
From Monros to Readhead ſouth — — 3 leagues.
From Dunde to Fiſnes ſouthſoutheaſt — — 5 leagues.
From Fiſnes to the Iland May ſouthweſt — 1 league.
From May to the Iland Bas ſ. w. and by ſ. — 3 leagues.
From Bas to Heinkief weſt — — — 3 leagues.
From Heinkief to Lieth or Zeton ſ. and by w. — 3 leagues.
From Bas to Abenhooft or Tabs head weſt — 4 or 5 leagues.
From May to Tabshead ſ. e. and by e. about — 4 leagues.
From Tabs head to Barwick ſouthſoutheaſt — 5 leagues.
From Cattenes to Boeckenes ſ. e. and ſ. e. & by ſ. 21 leagues.
From Boeckenes to Lieth in Scotland ſ. ſ. w. — 33 leagues.
From Fiſnes to S. Tabs head ſ. e. and by ſ. — 4 leagues.
From S. Tabs head to the Schaſſen ſoutheaſt — 8 or 9 leagues.

VI.

How theſe Lands are diſtant from other points and places.

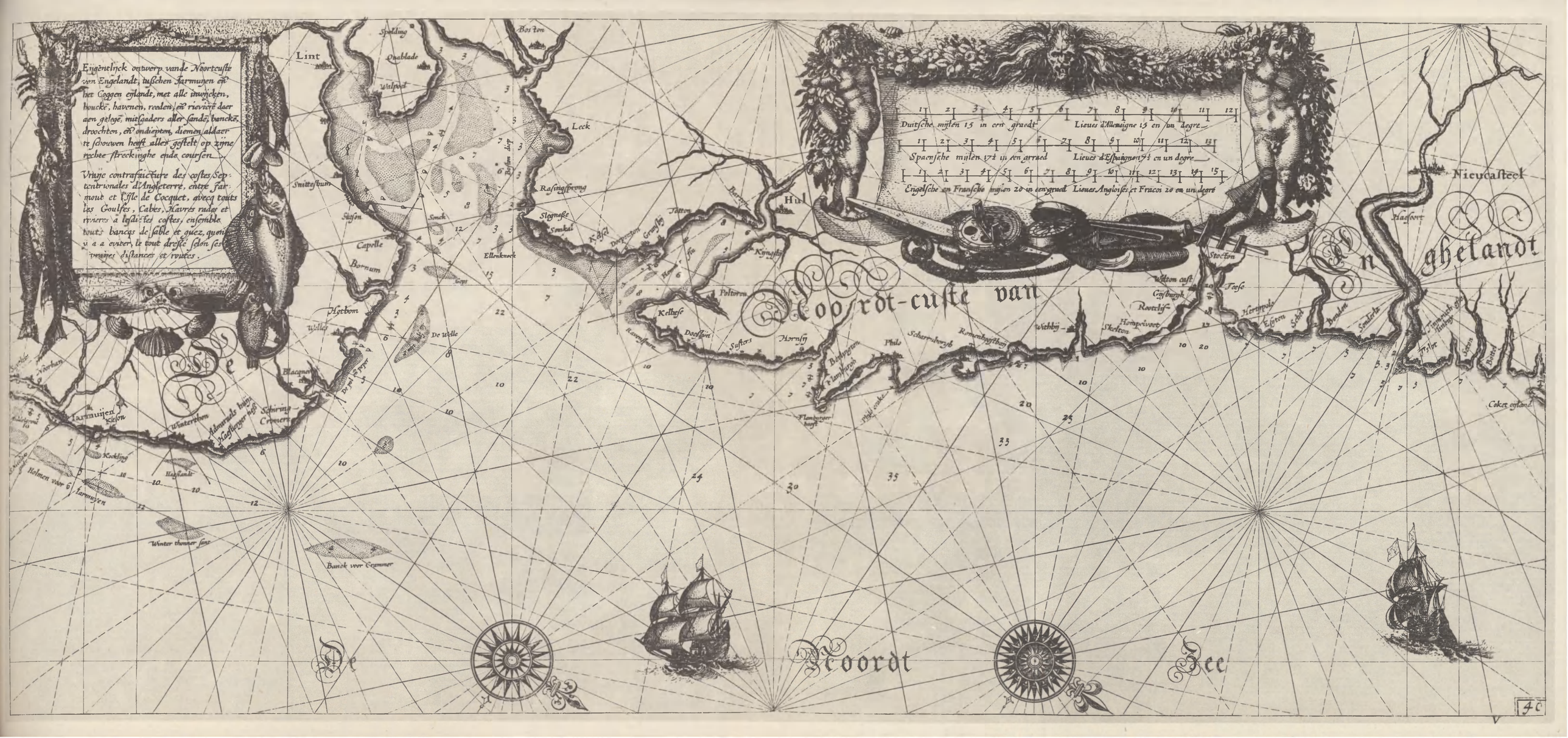
FRom Boeckenes to the uttermoſt Iland of Orcanes north and north and by weſt — — 32 or 33 leagues.
From Boeckenes to der Neus eaſt and ſomewhat ſouterly — — — — — 88 or 90 leagues.
From Boeckenes to the Texel ſoutheaſt and ſomewhat ſouterlyer — — — — — 118 leagues.
From Lieth to der Neus e.n e. & ſomewhat eaſterlyer 103 leag.
From Schaſſen to the Teeſe ſouthſoutheaſt — 21 leagues.
From Schaſſen to Flamborowe head ſoutheaſt and ſomewhat ſoutherlyer — — — — — 29 leagues.
Frō Aberdin to the haven of Yarmouth ſ. e. & by ſ. 93 leagues.

Vnder what heigth theſe Countreys lye.

THe greateſt uttermoſt Iland of Orcanes lyeth under — — — — 59 degrees 8 minutes.
Catenes lyeth nnder — 58 degrees 32 minutes.
Boeckenes lyeth under — — 57 degrees 50 minutes.
S. Tabs head lyeth under — 56 degrees 12 minutes.

Heere followeth the Carde N. 40.

A DE-


Eijgentlijck ontwerp vande Noortcuste van Engelandt, tusschen Jarmuijen en het Coggen eijlandt, met alle inwijcken, houcke, havenen, reeden, en rievieren daer aen gelege, mitsgaders aller sande, bancke, droochten, en ondiepten, diemen aldaer te schouwen heeft alles gestelt op zijne rechte streckinghe ende coursen.
Vraije contrafaicture des costes Septentrionales d'Angleterre, entre Jarmout et l'Isle de Cocquet, avecq touts les Goulfes, Cabes, Havres rades et rivieres a lesdictes costes, ensemble touts bancqs de sable et guez, quon y a a eviter, le tout dressé selon ses vraijes distances et routes.
Duitsche mijlen 15 in een graedt
Lieues d'Allemaigne 15 en un degre
Spaensche mijlen 17½ in een graed
Lieues d'Espaignon 17½ en un degre
Engelsche en Fransche mijlen 20 in een graed
Lieues Angloises et Fracoi 20 en un degre
Lint
Spolding
Quablade
Walpoel
Boston
Leck
Rasingsprong
Slegnesse
Somkal
Snittesbum
Sutson
Capelle
Bornum
Sonck
Ellenknock
Hul
Kingshy
Poltoren
Kelbese
Doesslyn
Susters
Hornsy
Philo
Scharruborgh
Romenhoogsbaij
Withbij
Skelton
Hompelvoet
Rootclif
Gijsburgh
Wilton cast
Stocton
Teese
Hertypolo
Eslon
Schel
Bonden
Sonderle
Nieucasteel
Haesoort
Coket eijland
Hogbom
Welles
De Welle
Blacquer
Schiring
Cromer
Winterthon
Admiraels huijs
Haesberger neß
Kockling
Haesandt
Holmen voor Jarmuijen
Winter thonner sant
Banck voor Crammer
Noorhan
Jarmuijen
Kleson
De Noordt-custe van Enghelandt
De Noordt Zee
40

CHAPTER XIX.

A DESCRIPTION OF

the North coaſt of England, from north of Newcaſtle to Yarmouth.

I.

How a man ſhall ſayle into the River of Newcaſtle and into the Teeſe.

Tinmouth or Tinbuy.

Sonderla.

SEven or eight leagues ſouth from Coket Iland lyeth Tinbuy or Tinmouth, which is diſtant from the Schaſſen ſouthſoutheaſt fiveteene or ſixteene leagues. South from Tinmouth there lyeth an out-point called Sonderla: betweene this point and Tinmouth the River of Newcaſtle runneth in, wherein there is twelve foot water at half flood. From the point of Tinmouth there ſhooteth off a ſtonie banck, which you muſt ſayle in by, but the ſoutheaſt ende is flatte, there you may goe in with the lead at tenne foot half flood. The markes to ſayle into this River are theſe: there are two fire towres which ſtand on the north ſide of the haven, you muſt ſet them one over againſt the other, and ſayle in upon thē, along by the ſaid ſtonie banck, until you are in, and when you are within, firſt you muſt ſayle all along by the north ſide till you are paſt the towne of Tinmouth, then you muſt turne over to the other ſide, and ſo you come into a crooked waie which ſtriketh up northward, & having paſt that you muſt goe ſouthward to Haeſoort, and ſo forward about Haeſoort to the towne of Newcaſtle.

Hartlepool.

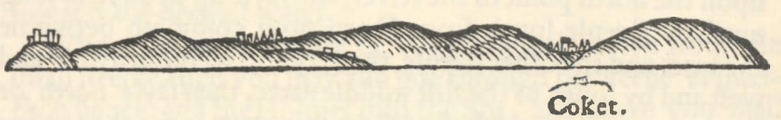
From Tinmouth to the Teeſe or Hartlepoole the courſe is ſouthſoutheaſt eight or nine leagues. Hartlepool is a Peere or Head, behinde it at lowe water you may lye drie with your ſhip. Right ſouth from it the Teeſe goeth in, it is a great wide and deepe river, and reacheth in weſtſouthweſt, with ſeventeene eighteene or nineteene fathome water, and there is nothing in the waie that can hurt or hinder you, you muſt ſayle in through the middle of the chanel, and ancker before the caſtle of Wiſten. In the innermoſt part of this haven, that is before the towne of Stockton, it is but four fathome deepe. Right eaſt or ſouth from the Teeſe there lye two chalck hilles, called Humplefoot and Read hil.

The Teeſe.

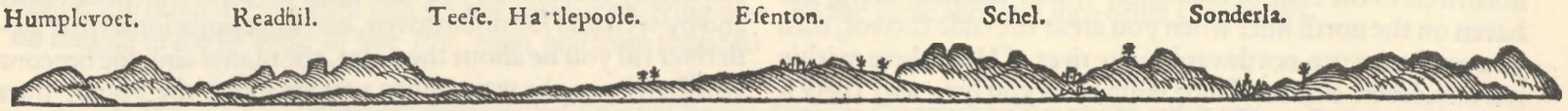
Humplefoot.

Reddehil.

Thus the land betweene Coket Iland and Tinmouth ſheweth, when you ſayle againſt it.



Thus the land ſheweth betweene Tinmouth & the hilles of Humplevoet & Readhil ſouth from the Teeſe, when you ſayle along by it.



II.

The ſituation betweene the Teeſe and Flamborowe head.

Whitbye.

FRom Teeſe to Scarborowe the courſe is ſoutheaſt and by eaſt 11 leagues. Betweene thē both lyeth Whiteby, which is a Peere or Tydehaven, which at lowe water is drie, ſo that as thē you may there lye drie. On the eaſt ſide therof there ſhooteth off a ſtone-banck, which you muſt ſhūne. If you will goe into Whitby you muſt ſayle in betweene the two beacons, till you come betweene both the lands. Betweene Whitbye & Scarborowe lyeth Robbenhoods baye: it is a faire rode for a ſouthſouthweſt and weſt windes, there you may ancker at ſeven or eight fathome.

Skarborowe hath two peeres or heads, you may goe behinde them at high water, and at lowe water lye drie: you muſt ſayle in ſouth from them. Skarburgh

From Skarborowe to the point of Philo the courſe is ſouth-eaſt three leagues. Southward about you may ſayle into the Bay of Philo: it is a round Baye, which at lowe water is drie. But without the head of Philo there lyeth a rock under the water, which is called Philo cracke. Betweene this ſtone and the Peere a man with a ſhippe of two hundred tonne may lye aflote at five fathome lowe water, and there lye ſafe againſt a northeaſt and eaſt windes. Philo. Philo crake.

Three leagues weſt from Philo lyeth Flamborowe head, which is diſtant from Scarborowe ſoutheaſt and northweſt five leagues. Flamborowe head hath manie white patches & chalck hilles, ſpecially on the north ſide to Philo: on the ſouth ſide it hath a head or peere, and a league weſt about the point lyeth Berlington, which alſo hath a peere, you may ancker there in the Baye or Creeke at ſixe or ſeven fathome. Flamborowehead. Berlington.

This is the forme of the land betweene the Teeſe and Flamborowe head, when you ſayle along by it.



III.

How you ſhall ſayle up the River of Humber to Hul, into Boſton, and to Lin.

FRom Flamborowe head to Kelbeſe or Ravenſpurre the north point of Humber, the courſe is ſouth and by eaſt about eight or nine leagues, there is is all flatte water five, ſixe, ſeven and eight fathome deepe. To ſayle into the River of Humber when you come out of the ſouth, ſet Poltoren right upon the north point of the River, and ſayle up upon it, ſo long untill the ſteeple ſouth from Doepenton commeth betweene the trees and the other ſteeple, then ſayle in weſtſouthweſt and weſt and by ſouth to the firſt middle flatte, then ſayle north or ſouth about till you be before Grimsby, there is the rode at ſixe or ſeven fathome, and there you lye behinde a Middle-flat: from thence further inward the courſe is weſt and by north, and weſt northweſt to the ende of the banck, which reacheth along the haven on the north ſide: when you are at the ende thereof, then you muſt turne up northward in the river of Hul, there within it is ſixe, ſeven, eight and nine fathome as you lye, and there it floweth three fathome up and downe, with dead ſtreame. An eaſt and weſt moone maketh a high water there. Kelbeſe. Humber.

If you will goe into Boſton river you muſt goe along by the land of Slegneſſe, and ſayle cloſe in by the foot ſtrand, and ſo you ſhall not ſayle by Elleknock. When the three trees ſtand ſouth frō Somkil or the ſpeere ſteeple, then Elleknok lyeth right to ſeaward from you, then you may ſayle forward along by the land of Leeck, at three or four fathome, to the river of Boſton. Boſton river.

You may alſo come againe into the Sea betweene Elleknock and Long ſand, at three fathome. Betweene the chanel of Boſton and the chanel of Lin it is all full of Sands and ſhallowes, ſo that it is verie needfull there to take a Pilot for him that will ſayle there, it floweth there three fathome up and downe, ſo that with ſhippes that drawe not much water you may goe over the ſands at high water. An eaſt and weſt moone maketh there a full Sea betweene the Sands. Longſand.

From Flamborowe head to Chappel or the Sonck it is ſouth and by eaſt nineteene or twentie leagues. The Sonck is a Sand which at lowe water is ſeene: weſt from it the eaſt chanel of Lin goeth in.

To ſayle into the haven of Lin ſayle weſtward about the Sonck, & place the heap of trees over againſt the point of Sitſem or Suytſom, and Chappel eaſt from you, and then goe in ſoutheaſt and by ſouth, then you ſhall finde the firſt tonne, then ſouth and by weſt and ſouthſouthweſt, and ſometimes ſomewhat weſterlyer till you be about the point, the tonnes and the beacons will ſhewe you the waie: when you are about the point, then you may runne through the ſands into the north chanel, and ſayle through it into the Sea againe, by the tonnes and markes thereof. This north chanel reacheth northeaſt and northeaſt & by eaſt, it is verie well marked and beaconed. Lin.

When you will ſayle into the aforeſaid eaſt chanel of Lin cōming out of the north, then you may ſayle in weſt from Sonck, that is, ſouth and by eaſt in, and ſo goe betweene the Sonke and

Chappel

Chappell ſouth and by weſt to the firſt tonne: and ſo from the tonne by the beacons, along to Lin before the towne. When you come out of the eaſt, you may goe along by the land within through the Sonck, cloſe by Chappel, and ſo ſouth and by weſt to the firſt tonne aforeſaid.

IIII.

The ſituation of the Havens and Banks lying betweene Chappel and Yarmouth.

FRom Chappel to Cromere the coaſt reacheth eaſtnortheaſt, eaſt and by north, eaſt, and eaſt and by ſouth: betweene them both lyeth Burnham, Wels and Blancknye, which
Burnham. are tyde-havens. From Chappel to Burnham the courſe is eaſt ſoutheaſt three leagues. If you will put into Burnham you muſt goe in at a high water, you muſt place the ſteeple againſt the black, & ſo ſayle in by the beacons, leaving them on baghborde.

Betweene Burnham and Welles there lyeth a banke which you may ancker behinde at five or ſixe fathome, but upon the banke it is but two fathome deepe at half flood.

Pol or Peper. Five leagues eaſt from Burnham lyeth Wells: betwene Wells & Blakny there lyeth a Sand called the Pol & the Peper, it lyeth faſt to the land, and there it is ſhallowe or flatte far into the Sea, which you muſt ſhūne. On the weſt ſide of this Sand the haven
Welles. Welles goeth in, and the beacons ſtand all along by the Peper, when Hobrom ſtandeth ſouthſoutheaſt from you, then you are weſt from the Peper, and there is good rode (as I ſaid before) at ſixe fathome. Then Welles lyeth ſoutheaſt from you, and then the trees ſtand againſt the ſteeple, you may then ſayle openly into the haven of Welles, along by the beacons.

Blackney. Blackney is a Tyde haven going in on the eaſt ende of the Pol: at Blackney there ſtandeth a high ſteeple, which may be ſeene a great waie into the Countrey, when that high ſteeple is againſt the ſmall ſteeple, then you ſee the firſt tonne, lying upon the eaſt or ſouth ende of the Pol, then goe from tonne to tonne till you are within the haven.

From Blackney to Cromere the courſe is eaſtſoutheaſt four leagues, and from thence the land reacheth ſoutheaſt and by eaſt Cromere.
to Haesberghernesse four leagues. Right ſouth from the Admirals houſe lyeth Haeſſant or the banck of the Admirals houſe, you may ſayle through betweene this Banck or Sand and the land at two fathome. But without it is eight or nine fathome deepe: when Winterthon lyeth weſt from you, then you are Winterthon.
ſouth from this banck. A litle to ſeaward from this banck lyeth Winterthon Sand: when Winterthon lyeth ſouthweſt from you, then you are at the north ende of Winterthon ſand.

About northnorthweſt and north and by weſt from Winterthon ſand lyeth the banck before Cromere, which lyeth at leaſt Banck before Cromere.
five leagues from the coaſt of England. When you come out of the north, you may goe through betweene Winterthon ſand & the Banck of the Admirals houſe at tenne or twelve fathome within the bankes, till you come to Yarmouth. But betweene Kockling & the land it is but four or five fathome deepe. Kockling is a Banck lying againſt Keſon: when Keſon is againſt the bunch of trees which ſtand there, & upon the flat ſteeple which ſtandeth upon the water ſide, then you are ſouth from Kockling.

Againſt Kockling there is a chanel in the Sea along through the Holmes: if you will goe through it out into the Sea, then ſet Keſon againſt the wood, and then ſayle out of that chanel, you ſhall there have five or ſixe fathome deepe, but on the ſouth ſide it is the deepeſt water.

When the ſpeere ſteeple of Winterthon is north from the ſmall ſteeple, then you may alſo goe through betweene Winterthon banck, and the Holmes into the Sea, and there you ſhall have tenne or twelve fathome deepe.

Theſe ſtreames aforeſaid are the principall places, where the greateſt number and beſt herrings are taken, which men keepe all the yeere and ſend into other Countreys.

Thus the north coaſt of England ſheweth betweene Cromere and Yarmouth, when you ſayle through betweene the bankes.



of the

V.

Of the running and falling of the ſtreames about theſe places.

NOrth from the Teeſe the flood falleth ſouthſoutheaſt along by the land.

Againſt the river of Newcaſtle and the Teeſe the flood falleth ſoutheaſt, and the ebbe northweſt.

Againſt Scarborowe and Flamborowe head the flood falleth ſoutheaſt and the ebbe northweſt.

From Flamborowe head to Blackney the flood falleth ſoutheaſt and the ebbe northweſt.

Againſt the bancks of Cromere & Winterthon the flood falleth ſouthſoutheaſt, and the ebbe northnorthweſt.

VI.

What moone maketh high water in theſe places.

BEfore the River of Newcaſtle a ſouthweſt and northeaſt moone maketh high water.

In the Teeſe and Hartlepool a ſouthweſt and northeaſt moone maketh high water.

At Robbinhoods baye and Scarborowe a ſouthweſt and northeaſt moone maketh high water.

At Philo and Flamborowe in the Peere a weſtſouthweſt moone maketh high water.

Before Humber & Lin a w. ſ. w. moone maketh high water.

In the river of Humber and of Lin an eaſt and weſt moone maketh full Sea.

At Burnham, Welles, and Blackney an eaſt and weſt moone maketh full Sea.

Before Cromere a ſoutheaſt moone maketh high water.

Without the banks of Yarmouth a ſoutheaſt moone maketh high water.

VII.

Of the depths againſt theſe Countreys, and at what depths you may ſee them.

YOu may ſee Scarborowe upon the hatches of the ſhippe at five-and-fortie fathome.

You may ſee Flamborowe head alſo at 45 fathome.

North from Humber you may ſee the land at 25 fathome.

When you come from Flamborowe head and will goe to Flanders or the Heads, then you goe over a Sand of nine or tēne fathome: this Sand is called the Welle, which goeth through the whole north Sea, againſt Heliger haven, and there it endeth, by our ſaylers it is called Dogghers ſand or White Banck, by Englands ſide it is the ſhalloweſt, for there it is but tenne fathome and, ſometimes deeper as twelve, thirteene, fourteene, fiveteene and ſixteene, and ſo forth ſtill ſomewhat deeper till you be at the Holie land. That which lyeth ſouth from this banck towards the Heads is called Deepewater, which is in the place where the Buyſes fiſh in Harveſt time: there it is two-and-twentie, four-and-twentie, ſix-and-twentie and eight-and-twentie fathome deepe.

That which lyeth north is called Bynorth, it is thirtie, five-and-thirtie, fortie, five-and-fortie and fiftie fathome, and ſometimes ſixtie fathome.

North and by eaſt from Blackney there lyeth a banck, whereon at half flood there is no more then five fathome water, and at eighteene fathome you may ſee the land: there to the point of Chappel it is all flatte or ſhallowe.

Northeaſt and northeaſt and by north from Cromere there lyeth alſo a banck, whereon there is but four fathome water at half flood, from thence you may eaſily ſee the land.

Winterthon ſand lyeth about four or five leagues from the land, and northweſt from Winterthon.

Againſt Winterthon and Cromere ſeven or eight leagues into the Sea, it is eighteene and nineteene fathome deepe, and there you may ſee the land.

VIII.

How theſe Places lye diſtant from each other.

FRom Coket Iland to Tinmouth ſ. ſ. e. — 7 or 8 leagues.
From Tinmouth to Hartlepoole or the Teeſe ſouthſoutheaſt — — — — — 8 or 9 leagues.
From Teeſe to Whitbye eaſtſoutheaſt — — 7 leagues.
From Whitbye to Scarborowe ſoutheaſt — 5 leagues.
From Scarborowe to Philo ſoutheaſt — — 3 leagues.
From Philo to Flamborowe head ſoutheaſt — 3 leagues.
From Flamborowe head to the north point of Humber ſouth and by eaſt — — — — 8 or 9 leagues.
From Raven ſpurre to Elleknock ſouth, and ſouth and by eaſt — — — — — — 7 leagues.

From

From Elleknock or the north point of Boſton haven to Chappel ſouthſoutheaſt about — — — 5 leagues.
From Chappel to Burnham eaſtnortheaſt — — 3 leagues.
From Burnham to Blackney through within the ſands it is eaſt — — — — — — 7 leagues.
From Blackney to Cromere eaſtſoutheaſt — — 4 leagues.
From Cromere to Hasberghneſſe ſoutheaſt & by eaſt 4 leagues.
From Haſebergneſſe to Keſon ſouthſoutheaſt and ſomewhat eaſterlyer — — — — 7 leagues.
From Keſon to Yarmouth more then — — a league.
From Tinmouth or Newcaſtle to Robbenhoods baye ſoutheaſt — — — — — 19 leagues.
From Teeſe to Flamborowe ſoutheaſt and by eaſt 19 leagues.
From Flamborowe head to Chappel or the Sonck ſouth and by eaſt — — — — — 19 or 20 leagues.
From Flamborowe head to Blackney or Schilt ſoutheaſt or ſomewhat ſoutherlyer — — — 24 leagues.
From Flamborowe head to Winterton ſand or the Holmes of Yarmouth ſoutheaſt — — — — 29 leagues.

IX.

The ſituation of theſe Countreys from others.

FRom Tinmouth or Newcaſtle to Schuytenes northeaſt — — — — — — 104 leagues.
From Tinmouth to der Neus northeaſt and by eaſt and ſomewhat eaſterlyer — — — 104 leagues.
From Tinmouth to Schaghen eaſtnortheaſt — 136 leagues.
From Tinmouth to Heyligheland eaſt, and eaſt and by ſouth — — — — — — 106 leagues.
From Tinmouth to the Texel eaſtſoutheaſt and ſoutheaſt and by eaſt — — — — — 90 leagues.
From Scarborowe to der Neus northeaſt and ſouthweſt about — — — — — — 95 leagues.
From Scarborowe to Bovenberghen eaſtnortheaſt and ſomewhat northerlyer — — — — 101 leagues.
From Scarborowe to Heylighe land eaſt & ſomewhat ſoutherly — — — — — — 93 leagues.
From Flamborowe head to the Eems eaſt and ſomewhat ſoutherly — — — — — 85 leagues.
From Flamborowe head to Marſdeepe or Texel eaſtſoutheaſt — — — — — — 61 leagues.
From the point of Cromere or Schilt to the Texel eaſt about — — — — 40 or 42 leagues.

X.

Vnder what degrees (as the Cardes ſhewe) theſe Lands lye.

TInmouth or Newcaſtle river lyeth under — 55 degrees.
Scarborowe lyeth under — 54 degrees 12 minutes.
Flamborowe head lyeth under 54 degrees 5 minutes.
The eaſt point of Humber lyeth under 53 degrees 20 minutes.

Heere followeth the Carde N. 41.

THE DESCRIPTION OF

the Sea-coaſts of England from Yarmouth to the Foreland: and alſo the ſituation of the famous River of London.

I.

How to ſayle into the Rodes of Yarmouth and Leyſtaf.

TO ſayle into the rode of Yarmouth through the Holmes, place the ſpeere ſteeple which ſtandeth within the land north from Yarmouth, right againſt the broad caſtle, or place the mille on the north ſide of the towne: keepe theſe markes ſtanding ſo, and ſo goe in weſtnorthweſt, you ſhall not finde leſſe water in that chanel then eight or nine fathome at half flood. This rode is called S. Nicholas rode, and on the north ſide it is deepeſt: when you are within it, then the rode is five or ſixe fathome right before the towne.

S. Nicolas Rode.

Againſt the haven of Yarmouth there goeth a chanel alſo through the Holmes: to ſayle through it comming from the ſouth, then ſet Suython over againſt the north ſide of the havē, and the great tree betweene Northon and the flat houſe or caſtle, and ſayle upon them, and keepe thoſe markes ſtanding ſo, till you are within the Holmes, and when you are within, then there lyeth a Sand on the right hand, right north from the haven, called the Middle ground, you may goe about it on both ſides, to landward at five fathome, but towards the Holmes, or eaſt about from them eight or nine fathome. This banck reacheth north to Keſon and Cockling.

Middle-ground.

To goe into the rode of Yarmouth comming from the north you muſt goe along by the land, as I ſaid before: you may alſo ſayle ſo along by the land to Leyſtaf.

Leyſtaf.

To ſayle through the Holmes of Yarmouth into the rode of Leyſtaf, then marke the brew-houſe which lyeth north from Leyſtaf: when the mille which ſtandeth on high is over againſt the Brew-houſe, then there goeth a chanel weſt and weſt and by ſouth through the Holmes, there at half flood it is two fathome deepe, and before the brew-houſe there the rode is five fathome deepe. When Leyſtaf ſteeple is weſt and by north and weſtnorthweſt from you, then you are at the ſouth ende of the Holmes, you may ſayle in there to the ſouth or north rode, and ancker ſouth from Leyſtaf, or els north, before the brewhouſe, that is the beſt rode.

II.

The ſituation betweene Leyſtaf and the Naſe.

FOur leagues ſouth frō Leyſtaf there ſtandeth a high ſpeere ſteeple called Cochey, againſt it to Seaward there lyeth a banck, but you may ſayle through betweene the land and this banck at three fathome with half flood: when the ſteeple of Cochey is weſtnorthweſt from you, then you are ſouth from the banck, but when Ees is ſouthweſt and by weſt from you, then you are on the north ſide of the banck.

A banck againſt Cochey.

South from Cochey lyeth Swolle, which hath a haven that at half flood is two fathome deepe: but betweene Swolle and Orfordneſſe lyeth Dunwich.

Swolle.

Dunwich.

From Leyſtaf to Orfordneſſe or Abre the courſe is ſouth tēne or eleven leagues. Southeaſt eight leagues from Orfordneſſe lyeth the Naſe. Betweene them both lyeth the haven of Harwich. More then a league eaſtſoutheaſt from Abre lyeth Abreknock: and betweene Abreknock and Orfordneſſe lyeth Whiton or Whiteſand.

Orford-neſſe.

The Naſe.

Eaſt northeaſt from Abre, about half a league from the land there lyeth another banck, which at lowe water is no deeper then a fathome and an half, and is fully as bigge as Witting-ſand or Abreknock: betweene the land and this banck it is at leaſt tenne fathome deepe: this banck is flatte ſo that you may ſound it round about with the lead.

To ſayle from north into the Sands of Harwich, you muſt keepe the north ſide at ſeven or eight fathome, ſo long untill that

Harwich.


Ware afbeeldinge der Zeecusten van Engelant gelegen tusschen Doveren en Yarmuyen, waerinne beneffens alle anders havenen, reeden, sanden, en bancken, aende selve custe gelegē ock vertoont wert de gelegentheyt vāde mont der vermaerde Riviere van Londen, item aller ondiepten daer voor hoenē dē selve beter te sal.
Vraye pourtraicture des costes maritimes de Angleterre entre Douvres et Yarmout, en laquelle voignant tous autres haures rudes et sables situez auxdictes costes est aussi representé la situation de l'embouchure de la fameuse Riviere de Londres ensemble toutes impressonditez, guez, et bancqs de sable devant la dicte Riviere, et comment on la navigera.
Afbeldinghe vande vermaerde Rivier van Londen de Teemse genaemt, hoe die met zijne crommen strecht voorde mont af tot aende stadt van Londen
Pourtraict de la fameuse Riviere de Londres nommee la Teemse, monstrant la situatio avecq toutes les courbures de ladicte riviere, de la bouche iusques a la ville de Londres
Duitsche mijlen 15 in een graedt
Lieues d'Allemaigne 15 en un degre
Spaensche mijlen 17½ in een graet
Lieues d'Espagne 17½ en un degre
Engelsche en Fransche mijlen 20 in een graedt
Lieues Angloises et Françoises 20. en un degre
ANGLIAE PARS
Rochester
Gravesent
Tilborch
Schapen
Cliff
Groenhey
Oorits Rick
Groenoyts
Ditfort
Clemens Rich
Porflier
Grey
Wolvits
Wolvits dagh
Langegers gat
London
Blackwal
Rotkliff
Barking
Gravesend
Tilburij
Shelhaven
Löhaven
Blacktyl
Colchester
Brikelzey
Canterbury
Vlistaple
Rochesters
Sandwijchs
Margat
Dogns
Goeryoth
Kintes knock
Galper
S. Osyes
Manitre
Walton
De Naes
Orwel flu
Ipsuich
Orwel haven
Bandsy gte Bassa
Basels dief
Orfordhaven
Oudsorthaussi
Abre
Oldorp
Duinwitz
Basselsant
West rock
Sollchaven
Es
Kochey
Caslin
Leystaf
Barnard
Noorthan
Suythan
Middelgront
De Holmen voor Yarmuyen
Mieuwsant
41

that Abre be north and by weſt from you, then you are north from Whitſand, then you come againſt Orwel haven, then you muſt put ſomewhat off from the land, and goe on ſouth and by weſt, about without Baſil ſand, untill Baſil commeth on the ſouth ſide of the Clif, and when Baſil is on the ſouth ſide of the Cliffe, and Harwich againſt the north ſide of the haven, there it is good rode at five fathome half flood. Betweene Baſil and Harwich there lye two Sands more, whereof the ſoutherlyeſt is called Talguer or Taliver, which you muſt ſhunne.

Taliver.

You may alſo goe in betweene Abreknock and Whitſand at ſixe fathome, but within it is tenne fathome deepe: being there within, you may goe along by the Koert or Koertſand at five fathome, to the Naſe. When you come ſo farre that Harwich ſteeple commeth into the valley of Heyningh, then you goe forward ſouthſouthcaſt, till you be about the Naſe. This Koerſand (which alſo is called Koert) lyeth right before Harwich, and along from the Naſe to Abreknock.

Betweene Abreknock and Koerſand there alſo runneth a chanel eaſt and by north into the Sea: when Baſil is behinde that redde Cliffe, then you may goe out there eaſt and by north, and in weſt and by ſouth.

Harwich haven.

To ſayle into the haven of Harwich, when you come out of the north, then marke a flatte ſteeple, which ſtandeth within the land, with a heap of trees: when that ſteeple is againſt the trees, then goe in a cables length from the north land northnorthweſt and northweſt and by north, (for that is indifferent faire) till you are within the fiſhing-place. In the middle of the mouth of the haven there lyeth a Sand called Otter: when you have paſt the fiſhermens ſtakes, then turne up weſtward before the town, and there ancker at ſixe or ſeven fathome half flood, or at lowe water at five or ſixe fathome.

Otter.

But if comming out of the ſouth from the Naſe you will goe into Harwich, then place Harwich ſteeple in the valley of Heyningh, which ſtandeth upon the land, and hold it ſtanding ſo, (going northnorthweſt) till you come by the north land, then ſayle upon the north point of the haven, untill Harwich ſteeple commeth without the point of the land, then ſayle in about a cables length by the north ſide, and doe as I ſaid before.

III.

How you ſhall ſayle into the River of London, called the Thames.

SOuth from Koerſand or Koert there goeth a chanel eaſt and by north, and eaſtnortheaſt into the Sea: to ſayle into it, place Walton, (which lyeth ſouth from the Naſe) weſt and by ſouth and weſtſouthweſt from you, and ſayle ſo right upon it weſt & by ſouth, and weſtſouthweſt, until Harwich ſteeple commeth in the aforeſaid valley of Heyningh: if then you will goe to Harwich doe as I ſaid before. But if you will goe to the Spits, then goe ſouthweſt along by the north land, for that is faire & flatte, and you may well ſound it, and leave the long ſand Goenvliet on baghborde, & goe not neere unto it, for there it is verie ſhoaling, the nearer to it the deeper water, ſayle forward as I ſaid before, untill S. Oges ſteeple, which ſtandeth there upon the high land (being a ſpeere ſteeple, which is alſo called the Spits) be over againſt the redde tyled houſe, which ſtandeth on the water ſide againſt the white Cliffe, & they will then ſtand about north and by weſt from you, keepe them ſtanding ſo, and goe ſouth and by eaſt, and ſouthſoutheaſt along over the Sands, there at half flood it is three fathome water, but look well to your ſtreames, for the flood falleth ſtrongly along by the north land to Colcheſter haven: not long ſince there hapned a ſhip to be caſt awaie on the eaſt ſide upon Long ſand, which lyeth ſoncke there, the maſt thereof ſtill ſhewing above the water, being now a verie faire beacon, and a certaine marke, for thoſe that will goe in or out that waie, for when you come againſt the Sand, you ſhall preſently ſee it, leave it on baghborde when you will goe inward, and ſayle your courſe aforeſaid, untill you finde deeper water againe, to wete, ſix or ſeven fathome, there you ſhall finde a tonne: when you come to the tonne, then goe ſoutheaſt to Whitakers beacon, and from thence forward ſouthſouthweſt and ſouthweſt & by ſouth to the beacon upon the Shooe, from the Shooe beacon to Black tayle weſtſouthweſt, and being paſt it, then you come into the reach of the Sea or the chanel, and then the beacon upon the Noore or the Loer ſtandeth about ſouthweſt from you, leave it on baghborde, and goe then in the middle of the chanel to Graveſende.

Goenvliet ſand.

Whitakers beacon.

Shooe beacon.

To ſayle up the River of Thames from Margat, ſayle along by the land, two cables length from it, untill the Recolvers be ſouthſouthweſt or ſouth from you, then you come againſt the beacon called the Spill, then you muſt put ſomewhat off from the land to the Laſſen. and ſayle betweene the tonne & the beacon, there you ſhall finde it three fathome deepe at lowe water, and five fathome at high water. From thence goe forward to the Ile of Sheppie, and ſayle along by it within two cables length from the land, and when you are paſt Quinborowe, then put

To ſayle from Margat up the Thames.

Sheppie.

ſomewhat off from the ſouth ſide, to ſhunne the Noore or Loer, which commeth ſhooting off from the point of the ſouth land, but there ſtandeth alwaies a beacon upon it, whereby you may knowe it, you muſt ſayle along by it, leaving it on baghborde, when you are paſt it, then you enter betweene both the lands into the chanel of the Thames, it reacheth eaſt and weſt, there you muſt ſayle in the middle of the chanel to ſhunne the Sands, which lye on the north ſide of the river, and ſayle ſo forward inwards to Graveſende.

To ſayle into the north chanel off from the Foreland, then place Margat ſteeple over againſt the white ſandbaye, which lyeth weſt from Margat, and goe northweſt and by weſt, then you ſhal finde the firſt tõne, lying on the ſouth ſide of the north Laſſen, from thence to the ſecond tonne the courſe is weſt and weſt and by north, it lyeth upon the point of Laſſen, you muſt leave them both on ſtarborde, ſouthward over againſt the ſecond tonne ſtandeth the beacon upon the Spil, leave it on baghborde when you goe in: when you are againſt this tonne, then the Recolvers ſtand ſouth from you. From the tonne upon the Laſſen, or the beacon upon the Spill, over the Swalve to Sheppie the courſe is weſt and by north, and weſtnorthweſt, but look well to your ſtreames, for the flood falleth verie ſtrongly into the Swalve: when you come to Sheppie, then hold Quinborowe over againſt the trees, which ſtand in the middle upon the Ile of Sheppie, or without upon the point of the land, and goe cloſe by Sheppie, within two cables length of the land, to ſhunne the point of the Spaniard, which commeth ſhooting toward Sheppie, and then goe forward to the chanel, as I ſaid before. In the chanel betweene the tonne upon the Laſſen and Sheppie it is flatte water, and is not uſed by ſhippes that drawe much water, but ſuch as will goe with great ſhippes along by the Foreland up the river, they ſayle through the fiſhermens chanel, and as ſoone as they are paſt the tonne upon the Laſſen, they goe firſt northward, & ſo come out againſt the point of Blacktayle, from thence they ſayle weſtſouthweſt to the chanel, as I ſaid before.

The Spaniard.

Fiſhermẽs chanel.

IIII.

How to fayle out of the River of London.

IF you will ſayle out of the River of Thames, then goe from the beacon upon the Noore eaſtnortheaſt to the beacon upon the Shooe. Now when the beacon upon the Shooe is on your left hand, then you are in a good waie, for there it is eight or nine fathome deepe. From the beacon upon the Shooe to Whitakers beacon the courſe is northeaſt, and northeaſt and by north, when you are ſomewhat paſt it, holding the ſame courſe, there you ſhall finde a tonne, which comming to, you ſhall ſee a ſpeere ſteeple ſtanding on the land, and a white or redde houſe upon the ſide of the land, place that houſe and the ſteeple one againſt the other, and ſayle north and by weſt upon them, then you ſhall goe over a Sand of three fathome deepe at half flood, which Sand is called the Spits: when you are over that Sand, & have ſixe or ſeven fathome deepe againe, then goe northeaſt towards the point of the Naſe, till you come to it, thẽ leave Goenvliet on ſtarborde. From the Naſe there reacheth a chanel eaſt and by north, and eaſtnortheaſt into the Sea, if you will ſayle out there, then place Walton in the valley ſouth from the Naſe, and then goe eaſt and by north and eaſtnortheaſt into the Sea, through betweene Goenvliet and Coerſand.

When you come off from the beacon of the Shooe and are paſt Whitakers beacon, and come neere unto the tonne, then there runneth a chanel eaſtnortheaſt into the Sea, of five, ſixe or ſeven fathome deepe: this chanel is called the Kings or Queenes chanel. There lyeth a Sand on the ſouth ſide called the Muys, the foot whereof reacheth far into the north. They that ſhould deſire to ſayle out at this chanel, comming eaſtnortheaſt from Whitakers beacon, ſhould eaſily miſcarie behinde a point or foot of Sand, which reacheth about half waie out frõ the Muys. On the north ſide of the chanel lyeth Goenvliet, which at lowe water or half flood is drie. Againſt the north ende of the drie ſand there lyeth a banck ſhooting off, which is two fathome deepe at half flood, which banck is called Weſtrocks, it is verie ſtonie and uneven: you muſt ſhunne it.

The Kings chanel.

The Muys

Weſtrocks

But if you will ſayle from the Thames to the Recolvers, then place the ſteeple which ſtãdeth above Lee haven a lever or bowe length ſouth from the heap of trees, keepe it ſtanding ſo, & ſayle to it, untill the ſteeple of Whitſtaple commeth againſt the black hillock, which is there within the land, now when thoſe markes are one againſt the other, then you are againſt the Spaniard, and you can not ſayle by it from Lee haven with ſuch markes.

Markes of the Spaniard.

V.

Of the running and falling of the ſtreames againſt theſe places.

BEtweene the Holmes & Yarmouth, & the bankes of Harwich the flood falleth ſouth and the ebbe north.

Betweene

Betweene Orfordnes in the chanel the ſtreame falleth ſouth-ſoutheaſt. Betweene Orfordnes and the Foreland the ſtreames fall without the Sands ſouth and by eaſt and ſouthſoutheaſt. From Dover to the Foreland the flood runneth within Goodwin ſands, through over the Quernes north, and the ebbe ſouth. But by the Foreland in to the Recolvers the flood falleth weſt-ſouthweſt and weſt and by ſouth. About without Goodwin ſands the flood falleth north and by weſt and northnorthweſt, then alſo the flood commeth there from the north and meete together, and ſo falles into the Sands and chanels.

North from the Galper you can recon no ebbe, but that which goeth along by England about the nor nor no flood more then that which goeth ſouth about. The ſtreames (as I ſaid before) fall there moſt as the Coaſt ſtretcheth.

The floods out of the north and from the ſouth meete each other about the Galper, and ſo fall with great raveling over the ſands towards Flanders.

In the chanel betweene the Flemiſh Bankes and the Heads the ſtreame goeth about with the Sonne, ſo that it falleth but litle along the Seas.

VI.

What Moone maketh high water in theſe Places.

VVithout the bankes of Yarmouth a ſoutheaſt and northweſt moone maketh high water.

But at Yarmouth a ſouthſoutheaſt moone maketh ful Sea.

At Leyſtaf and Orfordnes a ſouthſoutheaſt moone maketh high water.

And at Harwich alſo a ſouthſoutheaſt moone doth the like.

Before the Thames a ſouthſoutheaſt moone maketh high water.

Within the Thames a ſouth and by eaſt moone maketh high water.

At the Foreland a ſouth and north moone makes full Sea.

VII.

Of the depths and Bankes about theſe Places, and at what depths you may ſee the land.

FOur leagues about eaſt and by ſouth without the Bankes or Holmes of Yarmouth, there lyeth a banck called the Newe Sand, it is but two fathome deepe.

Five or ſixe leagues without Yarmouth & Leyſtaf ſoutheaſt and by eaſt in the Sea, it is ſeven-and-twentie and eight-and-twentie fathome, and being there you may ſee the land.

Againſt Orfordnes you may ſee the land upon the hatches at two-and-twentie fathome.

About eaſt from the Naſe ſeven or eight leagues into the Sea there lyeth a banck called the Galper, it is five, ſixe and ſeven fathome deepe, and lyeth about thirteene leagues northeaſt and by north from the Foreland. On it the ſtreame alwaie raveleth much.

The weſt Rockes lye ſoutheaſt from the Naſe about three leagues diſtant, there on them it is but two fathome water at half flood, and it is ſtonie ground.

Without the Sand of Harwich five leagues from the Naſe it is twentie and two-and-twentie fathome deepe, and there you may ſee the land.

Five or ſixe leagues north and by eaſt and northnortheaſt from the Foreland, or from Margat, there lyeth a banck called Kintersknock, it is three fathome deepe, being there you may ſee the land juſt upon the hatches. Five leagues northward frō this banck it is twentie fathome deepe.

Without Goodwin ſands it is eight-and-twentie & nine-and-twentie fathome deepe, and you may ſee the land of Dover and the Forelands but goe no nearer to Goodwin ſands by night then ſixteene fathome.

In the middle betweene the Heads it is two-and-twentie and three-and-twentie fathome deepe.

VIII.

How theſe Lands and Places are diſtant each from other.

FRō Yarmouth to Leyſtaf within the bāks it is ſ. 5 leagues.
From Leyſtaf to Abre or Orfordnes ſ. 10 or 11 leagues.
From Abre to Abreknock e. ſ. e. more then — a league.
From Orfordnes to the Naſe ſouthweſt — 8 league.
From Orfordnes to the Galper ſ. ſ. e. — 10 or 11 leagues.
From Orfordnes to Kinterknock ſouth & by weſt 16 leagues.
From the Naſe to the Foreland ſouth and ſomewhat eaſterlyer — — — — — — 13 leagues.
From Kinters knock to the Foreland ſ. ſ. w. about 7 leagues.
From the Foreland to the north ende of Goodwin ſands ſoutheaſt and by eaſt — — — — — 1 league.

The point of Dover and the ſouth ende of Goodwin ſands lye diſtant ſouthweſt and northeaſt.

IX.

How theſe Places are ſituate from other Countreys.

FRom Yarmouth or Leyſtaf to the Texel or Marſdeepe eaſt and eaſt and by north — — 33 or 34 leagues.
From Yarmouth or Leyſtaf to the Maſe eaſtſoutheaſt and ſomewhat ſoutherlyer — — — 37 leagues.
From Yarmouth or Leyſtaf to Walcheren or the Wielings ſoutheaſt, and ſoutheaſt and by eaſt about 34 or 40 leagues.
From Orfordnes or the Naſe to Texel e. n. e. — 37 leagues.
From the Naſe or Harwich to the Maſe eaſt & weſt 29 leagues.
From the Foreland to the Texel or Marſdeepe n. e. 45 leagues.
From the Foreland or Goodwin ſands to the Maſe eaſtnortheaſt and ſomewhat eaſterlyer — — — 33 leagues.
From the Foreland to the Wielings eaſt and ſomewhat northerly about — — — — — 26 leagues.
From Dover or the Heads to the Texel or Marſdeepe northeaſt and ſomewhat northerlyer — — 53 or 54 leagues.
From Dover to the Maſe or Goree n. e. and by e. 35 leagues.
From Dover to the Wielings eaſtnortheaſt — 26 leagues.
From the Heads to der Neus in Norwaie north and by eaſt — — — — — — 153 leagues.
From the Heads to the Rif the courſe is n. n. e. — 120 leagues.

X.

Vnder what degrees theſe Lands lye, as writings do witneſſe.

YArmouth lyeth under — 52 degrees 52 minutes.
Orfordnes lyeth under — — 52 degrees 12 minutes.
The Foreland lyeth under — 51 degrees 35 minutes.
Dover lyeth under — — — 51 degrees 12 minutes.

Ende of the ſecond Book.

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