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REPORT

ON THE

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TRAWLING INVESTIGATIONS, 1902-3.

WITH ESPECIAL REFERENCE TO

THE DISTRIBUTION OF THE PLAICE.

BY

WALTER GARSTANG.

With 6 Figures in the Text, 2 Appendices, 4 Detailed Tables, and 2 Charts.

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REPORT

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I.—INTRODUCTION.

§ 1. The Area Investigated.

The English area in the International Survey of the North Sea may be described as including the western part of the Dogger Bank and the grounds west and south of it. The meridian of 3° E. indicates roughly the eastern limit * of the English area. It was not, however, considered desirable during the first year's work to observe the conventional limits with any exactitude, since the paucity of pre-existing data concerning the sizes of fish on the different parts of the North Sea area rendered it advantageous for each country to make an independent survey over a larger area. This was particularly necessary in our case, since the irregular and broken character of the ground in the English area presented difficulties of a special kind, the solution of which could be approached with greater confidence after data for comparison had been obtained from the more uniform regions in the eastern part of the North Sea.

The actual work of investigation began in November, 1902. The regions investigated during the following year may be briefly summarised as follows :—

During November and December most of the trawling experiments were carried out on the grounds off the Dutch coast. In January and March a series of hauls was made along the central grounds of the North Sea from the Dogger Bank to the deep water of the Flemish Bight. In April and May the same regions were investigated, as well as the fishing grounds north of Flamborough Head. In May and June a voyage was made to the Eastern Grounds, and lines of trawlings carried across the North Sea from the Horn Reef to Shields, and from Shields to the Norfolk coast. In July a special survey was made of the Shoals of the Leman Banks, and a series of comparative experiments was carried out with the Dutch investigation steamer *Wodan* on the Leman Ground, Brown Bank and the Texel Ground. In August special attention was paid to the inshore nursery grounds off the Yorkshire and Lincolnshire coasts, more especially in Bridlington Bay and the Wash, and the investigation of the Leman Ground was resumed. In September another voyage was made to the Eastern Grounds and comparative investigations were carried out with the German investigation steamer *Poseidon*. In October similar experiments were carried out with the Scottish vessel *Goldseeker* and the Danish vessel *Thor*. During November, after the hydrographic cruise in the English Channel, some investigations were made on the Brixham Grounds in order to provide data for comparing the results of earlier investigations in that region with the present enquiries. In December the investigations were carried out off the Dutch coast and on the Leman Ground. Off Terschelling in this month a large number of hauls was made in a limited area, which provide a means of determining the amount of variation to which the catch of the otter trawl is subject on ground of a fairly uniform character.

One of the first objects of a scientific exploration of a large fishing area consists in the collection of material for mapping out the chief breeding, rearing and feeding grounds for the different species of food fish. An examination of the ground, as well as of the fish, at different seasons of the year is necessary for this purpose.

§ 2. Bottom Deposits.

The bottom deposits have been examined in two ways, partly by the collection of large samples by means of special apparatus, to be subjected to detailed analysis at a later stage in the laboratory, and partly by means of the usual sounding lead. A special sounding has always been taken at the beginning and end of each haul, and in the case of long hauls at intervals while the net was being towed. The

* The limit of 2° E., which was provisionally assigned at the Christiania Conference, was extended eastwards on the recommendation of Committees A and B of the International Council at the Edinburgh meeting in 1902.

results of the laboratory analyses of the bottom deposits are not yet available; the results of the soundings in connection with each haul of the trawl are given in the particulars of the trawling stations (Table VII.). It should be understood that the remarks there made concerning the depth and nature of the bottom are in every case the result of special soundings by experienced fishermen.

§ 3. Invertebrate Fauna.

The invertebrate fauna, so far as it serves either to characterize a ground, to provide food for fishes, or to influence in any way the character of the catch, has also been a subject of special investigation. The detailed results of this investigation are reserved for comprehensive treatment at a later stage. A brief summary of the dominant species observed at each haul of the trawl is however provided in the particulars of the trawling stations. This summary has been prepared by my colleagues Mr. R. A. Todd, B.Sc., and Mr. J. O. Borley, M.A., from the records kept by themselves and Mr. Borley's predecessor, Mr. C. Forster-Cooper, B.A.

§ 4. Trawling Gear.

In regard to the distribution of the different sizes of fish, we have sought from the outset to accumulate data not only concerning the range of size characteristic of particular grounds and the relative frequency of the various sizes *inter se*, but also concerning the comparative abundance of each size on different grounds and on the same ground at different seasons of the year. On this account it appeared essential that the bulk of the trawling work should be carried out with a net of constant width and dimensions of mesh. The so-called 90-foot Otter Trawl has been accepted as the standard net for use during the international investigations, and this net has been employed from the beginning by the *Huxley*. On the other hand there is a large part of the English area where it is impossible to fish successfully with this net, owing principally to the uneven character of the ground (*e.g.*, Leman Banks, Brown Ridges). On this account the *Huxley* was supplied in the spring of 1903 with a Beam Trawl, 43 feet wide, similar to that employed by the Lowestoft trawling smacks. It is therefore desirable to institute a comparison between the catching power of these two nets in order to determine how far the results obtained are comparable.

The dimensions of the nets, and the size of the meshes in different parts, are given in Appendix A, pp. 103, 104. But in comparing the relative width of the two nets it has to be borne in mind that, while the width of the beam trawl is fixed by the length of the beam, the gape of the otter trawl during towing is determined by the degree of divergence of the otter boards, which is dependent upon a variety of circumstances such as the speed of towing and the character of the bottom, as well as upon the dimensions and resistance of the net. In no case is the head line stretched taut by the divergence of the boards: it forms a semicircular curve, the diameter or base of which is assumed by the net makers, according to Fulton,* to be two-thirds of the length. According to current notions, therefore, the normal width of the *Huxley's* otter trawl during towing may be expected to be two-thirds the length of the head-line, *i.e.*, 57 feet. This is exactly one-third as wide again as the beam trawl employed; so that for Plaice and other flat fish, provided the latter are of sufficient size to be retained by the meshes of the net, the relative catching power or efficiency of the *Huxley's* otter and beam trawls may be expected to be as 1·33 : 1, for equal speeds of towing, *i.e.*, for equal distances towed.

* Fulton: *Twentieth Report of the Scottish Fishery Board*, III., 1902, p. 119.

§ 5. Speed of Towing.

Owing to the different principles upon which the two nets are constructed, however, a higher speed of towing is necessary for the otter than for the beam trawl, in order to maintain the full spread of the boards and net. In order to determine the extent of this difference in the present case, we have arranged the *Huxley's* records of otter and beam hauls respectively for 1902–3 in groups of 10 hauls, and, having obtained for each group the total duration of towing, and the total estimated distance towed, have calculated the average speed of towing for each group in miles per hour. The hauls were taken in order from the captain's records ("Particulars of Trawling Stations," p. 134), the only omissions being sundry foul hauls, in which the net was entangled with wreckage or otherwise obstructed, and certain hauls in which the estimated distance towed was not recorded. Altogether 135 hauls of the otter trawl, in 14 groups, and 96 hauls of the beam trawl, in 10 groups, were taken into consideration.

The following Table shows the fluctuation of the average speeds, as determined in this way, together with the general average for the otter and beam trawl respectively :—

Table 1.

Sea-miles per hour.	1·8	1·9	2·0	2·1	2·2	2·3	2·4	2·5	2·6	2·7	2·8	2·9	Average (miles per hour).
Otter trawl	...	...	2	1	2	3	2	2	...	1	...	1	2·295
Beam trawl	1	2	2	1	3	1	...	...	...	...	...	...	2·072

If allowance be made for this difference in the average rate of towing for the two nets, the relative efficiency of the *Huxley's* otter and beam trawls as regards the catch of flat fish should be approximately as 1·47 : 1 for hauls of equal duration.

It should, of course, be understood that these measures of relative efficiency apply only to flat fish or other species which habitually rest upon the bottom, and among these only to such fish as are too broad to escape easily through the meshes of either of the nets. Owing to its smaller meshes the beam trawl may be expected to retain a number of the smallest fish which are able to escape through the otter trawl ; while, on the other hand, the semicircular arch formed by the head line of the otter trawl greatly increases the efficiency of this net, as compared with the beam trawl, in regard to the capture of round fishes, as shown by earlier investigations.*

The former point, in regard to the differential action of the meshes, will be referred to below ; but, as it is not proposed on the present occasion to discuss the distribution of round fishes, except in a summary manner, a comparison between the efficiency of the *Huxley's* nets with respect to this class of fish is reserved for a future occasion.

* Cunningham : *Journal of the Marine Biological Association*, Vol. IV., pp. 114–121. Garstang : *Journal of the Marine Biological Association*, Vol. VI., 1900, pp. 49–52. Fulton : *Twentieth Report of the Scottish Fishery Board*, III., 1902, pp. 122–123.

§ 6. Relative Efficiency of the Otter and Beam Trawls.

Apart from the above-mentioned considerations, based on the construction of the nets and the speed of towing, the catching power of the two nets can be directly compared by analysing the results of several series of hauls, in which the two nets were used consecutively on the same grounds. Of these only the first pair, on the Horn Reef Grounds, was carried out during 1903; the remaining series were made during 1904.

The following table has been prepared to provide the data necessary for comparison. The first pair of hauls shows the results of fishing on the "small fish grounds" off the Danish coast, where the great majority of the plaice were below 20 cm. in length; the second series gives the results of three hauls with each net on the Brown Bank (53° 10′ N. to 53° 20′ N.; 3° 15′ E. to 3° 40′ E.), where the great majority of the Plaice ranged from 21 to 28 cm.; the third series on the Borkum Outer Grounds (54° 15′ N. to 54° 20′ N.; 5° 50′ E. to 6° 15′ E.), and the fourth on the Terschelling Ground (53° 43′ N. to 54° 50′ N.; 4° 40′ E. to 4° 55′ E.), showed a preponderance of large Plaice above 35 cm.

On the Brown Bank the position of the beam hauls lay for the most part a few miles north of the ground covered by the otter trawl, but considerable overlapping took place in that as well as in the third and fourth series. As the soundings recorded a fairly uniform depth and bottom in each series, the chief differences between the results of the hauls of the two nets on each occasion, when reduced to a common standard, may be fairly taken to represent differences in their respective catching powers.

Table 2, showing, for various grounds, the comparative catch of Plaice by the Otter and Beam Trawls of the SS. *Huxley*, distinguishing the duration of fishing for each net and the various size-groups of fish:—

Ground.	Gear and Hauls.	Hours.	Number caught.									Catch per Hour.	
			Centimetres.								Total.	Below 15 cm.	15 cm. and above.
			8–14	15–19	20–24	25–29	30–34	35–39	40–44	45 +			
North of Horn Reef	O. 120 ...	1·92	86	213	87	7	4	...	...	...	397	44·8	161·98
	B. 82 ...	2·0	101	139	62	4	...	...	...	...	306	50·5	102·50
Brown Bank	O. 228–230	14·5	...	8	679	477	27	6	1	1	1,199	...	83·26
	B. 159–161	17·75	...	11	530	417	26	10	3	4	1,001	...	56·39
Borkum Outer	O. 156–157	9·0	...	...	...	3	10	40	34	7	94	...	10·44
	B. 100 ...	4·75	...	...	2	3	2	16	13	4	40	...	8·42
Off Terschelling	O. 263, 264	6·5	...	...	...	1	4	1	4	4	14	...	2·15
	B. 253, 254	10·0	...	...	2	4	3	4	5	7	25	...	2·50

The first pair of hauls is chiefly of interest in throwing light on the differential action of the meshes of the two nets upon the size of the fish caught. It will be observed that in spite of the greater general efficiency of the otter trawl, as compared with the beam trawl, a larger number of the smallest Plaice—below 15 cm. (6 inches)—were caught by the latter net than by the former in the same time. In order to define more closely the limit of size below which this differential action comes into play, the detailed

measurements for each haul may be consulted (*see* Table VI., p. 130), from which it will be observed that the catch of the beam trawl exceeded that of the otter trawl for Plaice of all lengths below 14 cm., but that the otter caught more than the beam at each length from 14 cm. upwards. Arranged in groups of 3 cm., and converted into percentages of the combined catch for each successive size-group, the figures show that the beam trawl caught 63 per cent. of the total catch of small Plaice below 14 cm., from 33 to 43 per cent. for each size-group up to 28 cm., and only 14 per cent. of the Plaice exceeding the latter limit.

TABLE 3, showing the relative catch of Plaice by the Otter and Beam Trawls on the Horn Reef Grounds, distinguishing (1) the sizes of the fish in groups of 3 cm., (2) the catch of each net expressed in percentages of the combined catch, and (3) the actual total catch.

Net.	Below 14 cm.	14+	17+	20+	23+	26+	29+	Total.
Otter Trawl ... ... (Per cent.)	37%	58%	61%	57%	64%	77%	86%	56%
Beam Trawl ... ... (do.)	63%	42%	39%	43%	36%	33%	14%	44%
Total Catch of both nets	90	237	212	126	25	6	7	703

These differences are shown graphically by the following diagram :—

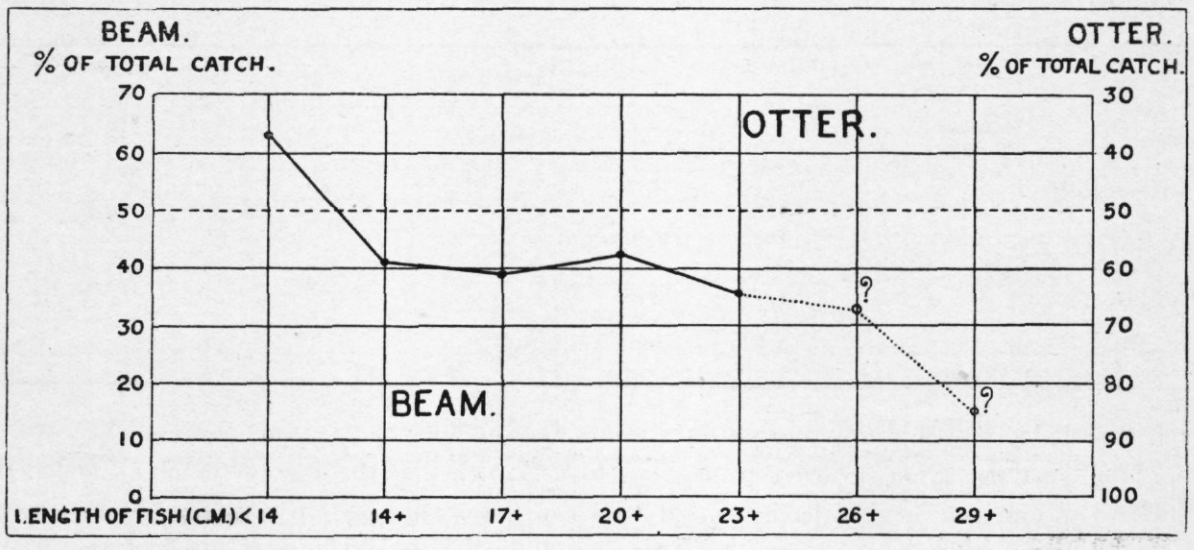

FIG. 1, showing the relative catch of Plaice of different lengths by the Otter and Beam Trawls of the ss. *Huxley* on the Horn Reef Ground (O. 120 and B. 82).

The difference shown between the results for the fishes from 26 to 31 cm. can scarcely be relied upon, owing to the small numbers caught; but the remaining differences indicate that the beam trawl employed was a more effective instrument for the capture of the smallest Plaice below 14 cm. than the otter trawl, and that the greater relative efficiency of the latter was fairly constant for all higher sizes, *i.e.*, so far as these were represented sufficiently in the catch of either net to admit of numerical comparison.

That the exceptional disproportion between the catch of the two nets as regards the largest fishes (above 29 cm.) is an accidental feature may be seen upon inspection of the results of other experiments in Table 2, where similarly small numbers are presented, *e.g.*, on the Brown Bank the catch per hour of the beam trawl actually exceeded that of the otter trawl for fish above 35 cm. The difference in this case may have been indicative of local differences in the distribution of the fish, but it is certainly not indicative of a greater efficiency of the beam trawl as compared with the otter. The same may be said of all other instances in Table 2, where the catch of either net under any of the size-groups amounts to less than 40 or 50 fish.

In order, therefore, to obtain a fairly reliable measure of the different catching powers of the two nets for fishes too large to escape through the meshes of either net, the figures have been combined in the case of each net to show the catch per hour of the Plaice above and below the limit of 15 cm. If the resultant figures for the otter trawl catches are divided by the corresponding figures for the beam trawl, we obtain a measure of the relative efficiency of the otter trawl on each occasion, compared with the beam trawl as the standard.

The results are indicated in the following table, which also gives particulars with regard to the depth and nature of the bottom observed during each series of experiments.

TABLE 4, showing for Plaice the relative catching power of the Otter and Beam Trawls of the S.S. *Huxley* on each of the grounds above mentioned, and the relation of variations in the Otter Trawl's efficiency to differences in the depth and nature of bottom.

Name of Ground.	Depth (fathoms).	Nature of Bottom.	Efficiency : $\frac{\text{Otter.}}{\text{Beam.}}$		
			Below 15 cm.	15 cm. and above.	15 cm. and above.
North of Horn Reef	7–10	Fine sand	0·89	1·58	1·49
Brown Bank	14–15	Fine sand	...	1·47	
Borkum Outer	21–22	Ooze	...	1·24	1·15
Off Terschelling	19–21	Sand and mud ...	...	0·86	

From this Table it would appear that on a sandy bottom the relative efficiency of the otter trawl for all except the smallest Plaice varied from 1·58 to 1·47, *i.e.*, that the average catch exceeded that of the beam trawl by an amount varying from 58 to 47 per cent., and that on soft bottoms of an oozy or muddy character the relative efficiency varied from 1·24 to 0·86, *i.e.*, that the average catch of the otter exceeded that of the beam trawl by 24 per cent. on ooze and fell short of it by 14 per cent. on mud, for equal periods of towing.

Although the results of the last experiment cannot be regarded as possessing an equal validity with those of the remaining experiments, owing to the scarcity of the fish, the general tendency of the experimental results closely accords with practical experience and with theoretical considerations, since the tendency of the otter boards to sink into muddy soils prevents them from diverging so freely as on hard ground, and can only be counterbalanced by an increase in the speed of towing (cf. Fulton, 1 c., p. 119), while the spread of the beam trawl is constant under all conditions.

If we assume generally that the figures representing the efficiency possess a validity proportional to the numbers of fish from which they are derived, and if they be combined accordingly in two pairs representing hard and soft ground respectively, we obtain a relative efficiency of the otter trawl amounting to 1·49 on hard ground, and 1·15 on soft ground.

These figures combined again with the same precautions yield a general average efficiency of the otter trawl, compared with that of the beam, amounting to 1·47 for hauls of equal duration.

This result exactly agrees with the expected efficiency calculated from the dimensions of the two nets and the normal differences in the rate of towing (p. 71), so that it may be regarded as sufficiently accurate for all practical purposes.

Incidentally I may add that the conformity between the experimental results and the calculations based on the practice of the net makers in regard to the dimensions of the otter trawl tends to show that the net makers have correctly estimated the normal effects of towing on the spread of this net. From direct experiments by means of strings stretched between the otter boards of a small trawl on the *Garland*, Dr. Fulton came to the conclusion that the normal spread was less than was usually supposed, viz., little more than one-half the length of headline. His experiments were carried out in shallow water, but it is difficult to determine from the data provided whether the speed of towing was comparable with that usual on larger vessels working the commercial trawl.

In their application to the results of the general trawling investigations described below, we may summarise the results of these preliminary enquiries as follows :—

In general the otter trawl caught 11 per cent. fewer flat fish below 15 cm. in length than the beam trawl ; but for all sizes of fish larger than this limit the otter trawl caught about 47 per cent. more than the beam, varying from about 49 per cent. on sandy grounds to about 15 per cent. on muddy or oozy bottoms.

Conversely the beam trawl caught about 11 per cent. more flat fish below 15 cm. than the otter trawl, but, in general, for all larger sizes, about 32 per cent. less than the otter trawl, varying from about 33 per cent. on sandy grounds to about 13 per cent. on muddy or oozy grounds.

It would be possible to apply a correction to the results of all the hauls made with one or other of the nets accordingly, in order that the figures showing the catch per hour at the various trawling stations might be exactly comparable. Such corrections, however, would be superfluous under the circumstances, for the characteristic features of different grounds are indicated by differences of much greater magnitude, or by radically different relative proportions in the frequency of the different sizes of fish. It has been considered sufficient for present purposes to draw attention to the extent of the difference between the catch of the two nets, and to adopt a system of nomenclature by which the character of the net employed is indicated in the reference number of every haul (*e.g.*, O. 120 = otter haul 120 ; B. 45 = beam haul 45). The differential action of the meshes is only appreciable in the case of the smallest Plaice below 15 cm., whose distribution is limited to the inshore waters. In this area the beam trawl was almost always employed.

§ 7. Fluctuations in the Catch.

It remains to be shown to what extent the catch of either the otter or the beam trawl is constant under the same conditions. As regards the beam trawl, I may refer to the following hauls : Off Saltfleet in August two hauls of the beam trawl were taken in succession in the same depth of water (B. 66 and

67). The figures showing the catches of the net on these two occasions (Table V., p. 106, Table VIII., p. 181) show that they were practically identical. As regards the Plaice, 98 fish below 30 cm., and one fish above 30 cm., were caught per hour in B. 66, 95 small and one large in the case of B. 67. The average size was identical at each haul. The percentage of small Plaice below 20 cm. was 69 per cent. in one case and 63 per cent. in the other.

Again on the Eastern grounds in September two further hauls of the beam trawl were taken in succession in the same depth of water (B. 80, 81). The same Table shows that the differences between the two catches were infinitesimal (p. 188).

As regards the otter trawl I may refer to the large series of hauls made off Terschelling in December (O. 128 to O. 145). In Table V., p. 118, these hauls have been classified into three groups, according to depth and distance from shore. A comparison of the figures given in this Table as regards the catch per hour of Plaice, Dab, Sole, Cod and Haddock shows how slight were the differences between one haul and another for any purpose to which it might be sought to apply the figures of any individual haul.

§ 8. Determination of Positions.

With the exception of voyage VII., when the mate, Mr. J. Tucker, was in charge, the responsibility for the accuracy of the positions recorded for the various trawling stations rests with Captain Caspersen, who was appointed to his position as master of the *Huxley* on account of the satisfactory evidence he was able to adduce as to his skill and long experience in the navigation of the North Sea.

Although direct observations of position have been made when possible, Captain Caspersen has depended for the most part upon the log, controlled by frequent soundings ; and his records represent the results of a careful charting of the course on each voyage, with allowances for tide and leeway. His attention to all these details, and his results, have given us entire satisfaction as to the general accuracy of the positions recorded. Needless to say, an error of two or three miles in position, provided the depths and character of bottom have been carefully recorded, is of little moment in an area like the North Sea, where the bottom is uniform over extensive tracts.

A direct test of the reliability of the positions recorded was furnished by the results of voyage XVII, when the *Huxley* made a trawling voyage from Grimsby to Helder in company with the Dutch research steamer *Wodan*, the navigation of the latter vessel being in the hands of a navigating officer of the Dutch navy.

The following positions at the offshore trawling stations were independently determined on the two vessels as follows :—

Station.	*Huxley.*	*Wodan.*
1	53° 29½′ N. 2° 26′ E. to 53° 24′ N. 2° 28½′ E.	53° 23′ N. 2° 33′ E.
2	53° 22½′ N. 2° 31′ E. to 53° 19′ N. 2° 40′ E.	
4	52° 56′ N. 3° 31′ E. to 52° 58′ N. 3° 38½′ E.	52° 53′ N. 3° 41′ E.
5	52° 58′ N. 3° 38½′ E. to 53° 0½′ N. 3° 46½′ E.	

The positions given for the *Wodan's* stations are extracted from the Dutch report* for 1903, and, although they were clearly intended to indicate only the approximate positions of the two pairs of hauls, they furnish an idea as to the range of error attendant upon such determinations. In the first pair, on the Leman Ground, the positions recorded may be regarded as identical for the two boats ; in the second pair, on the Brown Bank, the longitudes recorded are sufficiently similar, but there is a difference of five miles in the records of latitude, after a voyage of about 130 miles from the port of departure.

§ 9. Methods of Measurement and Registration.

At a joint meeting of Committees A. and B. of the International Council held at Edinburgh in August, 1902, it was decided that the measurements of all except the smallest fishes should be recorded in whole centimetres, fractional parts being omitted. Thus 20·2 and 20·9 were both to be recorded as 20 cm.

This method has been followed by us from the beginning of the investigations, although it involves the consequence that average sizes calculated from such measurements fall short of the true average by half a centimetre, and require correction to that extent (cf. pp. 106, 123).

In all cases except the Skates and Rays the length of the fish has been determined from the tip of the closed jaws to the tip of the middle (axial) rays of the tail fin. This method is to be preferred to that of measuring to the extremity of the longest rays of the tail fin, because not only is the true axial length of the fish indicated by the former means, but the position of the longest rays is variable in different species, being in some cases the middle rays and in others the dorsal or ventral rays. Under such circumstances measurements of length taken to the end of the longest caudal rays would not be comparable. In Gurnards and other fishes in which the tail fin, when expanded, has a truncated extremity, a forked appearance is yielded after death, owing to contraction ; but the inclusion of the extra length of the dorsal and ventral rays under such circumstances would exaggerate the true axial dimensions of the fish, as well as the total length. Moreover, the external rays of the tail fin are much more liable to injury than the middle rays.

In the case of the Skates and Rays the maximum width across the wings (pectoral fins) has been recorded instead of the length.

The tabulation of the naturalists' records of the sizes and quantities of fish caught at sea was carried out for the most part after the return of the boat to Lowestoft, the greater part of the first year's records having been done by Mr. J. Potter under my supervision.

A revision of the tabulated records was carried out under instructions from the Council of the Association during 1904 in order to guarantee the accuracy of the results. The figures were all extracted again from the original log books by other assistants, and all discrepancies examined and corrected. Although the inevitable errors in the original tabulations were few and insignificant, the result of this revision is that the figures in the detailed table of the present report (Table VI.), as well as the summaries compiled from the entire series (Table VIII.), can be submitted with considerable confidence in their accuracy.

* Jaarboek van het Ryksinstituut voor het Onderzoek der Zee, 1903, p. 38.

The Captain's records of positions have also been carefully charted by Mr. Potter after critical investigation of doubtful records (Charts I. and II.).

The weight of the catch of fish was not taken down during the earlier voyages (I. to IX.), but was usually recorded for the more important species after April, 1903, by means of a spring balance. The weights were recorded in pounds until July, and in kilogrammes after that date, but for practical convenience the records have been expressed in both units. Owing to the incomplete series of weights obtained during 1903, their treatment has been reserved for a subsequent occasion, when the extensive series obtained during 1904 will also be available. But the relation between average weight and average size has been found to be so constant in the case of Plaice that the estimated weight of the catch of Plaice at each haul during 1903 has been added by interpolations from the general curve, such records being distinguished from observed weights by being placed in square brackets throughout Table VIII., as well as in the text tables 5 to 12.

We have endeavoured to present a complete analysis of the results of every haul of the trawl, according to species, size, and number of fish. In the few instances where only a sample of the fish was measured, it will usually be seen that the sample was fully representative.

By means of the chart of positions, the system of reference numbers adopted, and the synoptic Table V. (p. 79), I trust that the evidence yielded by our first year's observations on particular points of distribution may readily be found. That the methods adopted have proved adequate for throwing a flood of new light upon the general problems of distribution will be shown, I hope, in the next section of this report, although a full discussion of the results is not yet practicable except in the case of Plaice.

II.—RESULTS OF INVESTIGATIONS.

Area I. Inshore Grounds.

It has been thought desirable to bring together the results of all hauls of the trawl made on the inshore grounds to the end of 1903, in order that a comparison may be made between the characters of the English nurseries and those of the Dutch, German and Danish coasts. The contour line of 20 metres (=11 fathoms) has been adopted as the outer limit of the inshore grounds discussed in this section.

The chief nursery grounds for Plaice and Soles along the east coast of England may be said to be the estuaries of the Tees, Humber, Wash and the Thames. The Tees estuary was not investigated in 1903; it would appear to be the most important nursery for Plaice on the north-east coast of England, but probably exercises little influence on the supply of Plaice on the more important fishing grounds for this species south of the Dogger Bank. The investigations in the Thames were carried out in 1904, and the results, therefore, do not appear in the present report. The records obtained off the mouth of the Humber (Saltfleet) and in the Wash have been summarised in the accompanying table, which also gives particulars of other hauls on the inshore grounds, more particularly in Bridlington Bay (Yorkshire coast), off Blakeney (Norfolk coast), and off Aldeburgh (Suffolk coast). The same table gives a summary of observations made on the Continental nursery grounds.

TABLE 5. showing the catch per hour of Plaice by the large trawls of the ss. *Huxley* on the Inshore Grounds of the English and Continental coasts (Area I.), distinguishing the sizes of Plaice in groups of 5 cm. (2 inches).

Ground.	Month.	Reference Number of Hauls.	Hours.	Total caught.	Catch per Hour.								Weight per Hour (Kilos.).
					Size groups.—Centimetres.							Total.	
					Below 15	15+	20+	25+	30+	35+	40+		
A.—ENGLISH COAST :—													
Bridlington Bay ...	VI.	B. 21 ...	1¾	110	9	31	22	...	...	...	...	63	[4·1]
„ ...	„	B. 32 + 71 ...	3	88	0·7	16	12	0·3	...	...	...	29	[2·3]
Saltfleet	VIII.	B. 66, 67 + 73	6	541	15	47	22	5	0·7	0·2	...	90	6·3
The Wash	„	B. 68–70 ...	5½	101	4	9	4	0·5	...	...	...	18	1·1
Blakeney	„	B. 65 + 76 ...	4	65	0·7	9	6	0·2	...	...	...	16	[1·2]
Aldeburgh	VII.	B. 42 ...	3	99	...	2	20	10	0·7	...	0·3	33	4·6
B.—DUTCH COAST :—													
Egmond	XI.	B. 94 ...	4	879	123	89	7	...	0·2	...	...	220	[8·8]
Egmond and Ymuiden ...	XII.	B. 95, 96 ...	6	992	13	96	52	4	0·3	...	0·2	165	[12·0]
Ameland	XI.	B. 97, 98 ...	4	34	0·2	1	4	3	0·5	...	...	8	[1·2]
C.—EASTERN GROUNDS :—													
Amrum	V.	B. 2	2	50	0·5	5	10	5	4	0·5	...	25	[3·75]
Graa Deep	„	B. 3	1	3,544	1,325	1,266	784	169	...	...	...	3.544	234
South of Horn Reef ...	„	B. 4	1	1,822	868	740	170	44	...	...	...	1,822	80
North of Horn Reef ...	„	B. 5	1½	1,763	257	703	151	63	2	...	...	1,175	67·3
Off Vyl Lightship ...	VI.	B. 6	1	81	...	5	39	30	6	1	...	81	11
„ „ ...	„	B. 7	1	6	...	...	...	2	1	3	...	6	2·75
Amrum	IX.	B. 80, 81 ...	4	905	61	123	22	15	3	0·7	0·5	226	12·5
Sylt Inner	„	O. 107–109 ...	4½	457	9	72	20	0·7	0·2	...	...	102	6·0
North of Horn Reef ...	X.	O. 120 + B. 82	4	703	47	88	37	3	1	...	...	176	11·5
South of Horn Reef ...	„	O. 121 ...	1¼	376	95	138	66	0·8	0·8	...	...	301	17·6

It will be observed that on the English inshore grounds the numbers of Plaice caught with the commercial trawl were always very limited. The region of greatest abundance was found to be off Saltfleet, south of the Humber estuary, where in August 90 Plaice were caught per hour as an average of three hauls. The synoptic table (page 106) shows that the frequency in these three hauls varied from 75 to 99 per hour. The fish below 20 cm. (8 inches) in length formed the chief part of the catch, the frequency being 62 per hour. Small Plaice below the same size-limit also predominated in Bridlington Bay and the Wash, but the total frequency was less (13 to 40 per hour). Off Aldeburgh in July, in 10 to 13 fathoms of water, 33 Plaice per hour were caught, and of these only two were below 20 cm. (8 inches) in length.

Other hauls on the inshore grounds are summarised in the full synoptic table (page 106), but the catch in those cases never exceeded the results in the selected groups of hauls just described, and was generally much less.

These results are in striking contrast to those yielded on the inshore grounds of the Continental coasts, as shown in the table, where it will be observed that the abundance of small Plaice off the Dutch, German and Danish coasts was usually to be reckoned in hundreds, and in certain localities in thousands, per hour.

The chief contrast between the physical features of the English coast and of the Continental coasts consists partly in the greater extent of shallow water off the Continental shores, and partly in the difference of character of the bottom. Both factors are of importance, but the character of the ground is probably of even greater importance than the depth. Off the Humber and Wash the 10-fathom-line lies about 20 miles from the coast in the shallowest part of this region, but gradually approaches closer to the shore off the Yorkshire coast to the north, and off the Norfolk coast to the south. The extent of shallow water in this region is approximately identical with that found off the Dutch coast, but the difference in the character of the ground is very marked. As will be observed from the soundings recorded in the synoptic table (page 106), the bottom deposits off the English coast consist very largely of coarse sand, whereas off the Dutch coast the ground is uniformly composed of soft fine sand, the patches of coarse sand being very restricted in extent.

On the eastern grounds off the German and Danish coasts fine soft sand prevails not only within the ten-fathom zone but seawards over the whole region between the coast and the Dogger Bank, except in the deeper water, where a greater admixture of mud is to be found.

The relation of the size of Plaice to the depth of the ground is well-known, but the series of hauls taken radially from the shore off the Horn Reef in May (B. 3 to 7), and off the west coast of Holland in November and December (B. 94 to 96, O. 8 to 9), shows that small Plaice below 20 cm. (8 inches) in length are not found in any numbers outside a depth of about 12 fathoms. When the full data acquired under the international investigations are brought together, it will doubtless be possible to estimate the total abundance of these small Plaice on the Continental grounds and on the English grounds respectively. Having regard both to the greater extent of the shallow belt off the Continental coast, and also to the greater density of the small Plaice per unit area in the same region, it is plain from the figures already presented that any such estimate must result in showing that the total number of small Plaice annually produced in English waters is insignificant compared with the numbers produced on the Continental shores.

In addition to the hauls with the commercial trawl, investigations were also carried out off the Humber and in the Wash with other gear. The *Huxley* is too large a vessel to work satisfactorily in shallow or confined waters, but our investigations in the Lincolnshire District were greatly facilitated in 1903 by the kind co-operation of Mr. Herbert Donnison, Inspector of Fisheries under the Eastern Sea Fisheries Committee, who kindly permitted us to take several hauls with the Shrimp trawl on board the ss. *Protector*, the small steamer at that time employed by the Committee. The results of these hauls off Mablethorpe, Skegness, and in Boston Deep (voyage XVIII, stations 4, 5 and 6) are recorded in a special table (page 105). The same table also shows the results of a haul with the small meshed Agassiz trawl worked with a rowing boat off Friskney Flats in the Wash (voyage XVIII, station 7) ; together with the results of an examination of the catch of some Shrimp fishermen working the cart trawl or trolloper in the same district (voyage XVIII, station 8).

The total Plaice caught on these occasions amounted to 1,807. Combined into a single series the frequency of the different sizes, expressed in centimetres, yields a curve showing three cusps at 5, 10, and 15 centimetres respectively. (*See* Dr. Wallace's paper in this volume, p. 208, fig. 4).

These cusps appear to represent approximately the mid-size of the yearling, year-old, and two-year-old Plaice in this locality during August. The figures do not, of course, represent the true relative proportions in which these yearly groups were represented in the areas investigated, and it is, therefore, impossible to say whether the abundance of the yearling fish really exceeds that of the year-old fish to anything like the extent indicated.

Area II. North of Flamborough Head.

This area, which lies between the Dogger Bank and the English coast north of Flamborough Head, presents features which are markedly different from those prevailing in the regions south and east of the Dogger Bank.

Physical Features.—The shore gradients are very steep, and deep water exceeding 30 fathoms in depth is found within 15 miles of the coast line. This deep water is continuous with that which extends all along the east coast of Scotland. Owing to this similarity of conditions the distribution of fish in this area approximates much more closely to that which prevails off the Scottish coast than in the southern and south-eastern parts of the North Sea.

General Summary.—The investigations in this area during 1903 were limited to the spring and summer months, from April to August, and were carried out in water from 27 to 44 fathoms in depth. Among the round fishes Cod were taken at each haul, Haddock and Whiting were scarce in April, but plentiful in June. Among flat fish the Long Rough Dab was abundant, a fish which is very rarely found south of the Dogger Bank. Among the Skates and Rays the Starry Ray (*Raia radiata*) was generally taken, a fish which is never found in the more southern waters. The presence of Witches (*Pleuronectes cynoglossus*) is another Scottish character, and, so far as our present records go, the abundance of Lemon Dabs (*Pleuronectes microcephalus*) found in this area was only approached south of the Dogger Bank on the grounds off the Norfolk and Lincolnshire coasts.

Plaice.—Upon reference to the synoptic table (p. 108) it will be observed that Plaice were never caught abundantly in this area, although the average size was high. It is clear that in this region Plaice are practically limited to the shallow belt along the coast, and that few inhabit the deep water exceeding 60 metres (33 fathoms) in depth, which lies between this belt and the Dogger Bank.

Table 6, showing the catch per hour of Plaice on grounds north of Flamborough Head (Area II.).

Ground.	Month.	Reference Number of Hauls.	Hours.	Total caught.	Catch per Hour.								Weight per Hour (Kilos.).
					Size groups.—Centimetres.							Total.	
					Below 20	20+	25+	30+	35+	40+	45+	50+	
Off Whitby and Hartlepool	IV.	O. 53, 54 ...	8	...	...	0·4	0·5	0·9	1·1	1·1	0·5	0·1	5	[2·8]
„ Shields	VI.	B. 14 ..	1	15	1	5	7	2	...	...	...	...	15	3·25
„ Hartlepool	VII.	B. 31 ...	3	8	...	...	...	1	1	...	0·3	0·3	3	[2·0]
„ Flamborough	VIII.	B. 72 ..	1½	4	...	...	...	2	0·7	...	...	...	3	[1·2]

Area III. Dogger Bank and Great Silver Pit.

The Dogger Bank is a large submerged plateau which rises from the bed of the North Sea, about midway between the Yorkshire coast and the peninsula of Jutland, and extends along this line in a north-easterly direction. The gradients of depth along its edges are steeper on its western and southern than on its northern and eastern borders. As defined by the 40 metre (22 fathoms) contour line (*see* Chart 2, annexed), its long axis extends from 54° 35′ N., 1° 10′ E. to 56° 0′ N., 5° 20′ E., a distance of 170 sea miles, the greatest breadth being 65 miles. The north-eastern part of this area, known as the Tail End, is cut off from the main body of the Bank by a furrow, 21 to 24 fathoms deep, which runs north and south in longitude 4° 0′ E., and is known as the Swashway. The Bank proper may thus be more precisely defined by the 20 fathom contour line, according to which its long axis extends from 54° 35′ N., 1° 10′ E. to 55° 30′ N., 3° 50′ E., a length of 105 miles, the breadth varying between 65 miles in the western and 25 miles in the eastern part.

As its name implies, the Bank was first exploited as a fishing ground by Dutch fishing boats, but it lies nearer to the English fishing ports than to those of any other country. The western edge is about 60 miles from the Yorkshire coast, 80 miles from Grimsby, and 90 miles from Shields. The southern edge is about 100 miles from the north coast of Holland, and 125 miles from the Dutch port of Ymuiden. The eastern edge is 195 miles distant from the German port of Geestemunde, and 160 miles from the Danish port of Esbjerg.

The total area of the Bank, excluding the Tail End, is about 4,050 square sea miles, of which about 200 square miles near the northern and western edges consist of rough ground unsuitable for trawling.

Physical Characters.—The Bank is divisible into two fairly natural parts, north and south of latitude 55° 0′ respectively. The south part has a depth of about 12 to 14 fathoms, shoaling to seven or eight fathoms in the south-west (the South-west Patch). There are also several other fairly extensive areas where the depth does not exceed 11 fathoms. One of these in the north-western region constitutes the North Shoal, and another in the south-east part the so-called Easternmost Shoal. The depth on the north part of the Bank is greater than on the south part, the general range being from 16 to 18 fathoms.

The bottom is covered with fine sand, or with a mixture of sand and shells. During the summer months trawling is much obstructed over considerable areas by dense growths of zoophytes, especially by the Hydroid *Obelia longissima* (known to the fisherman as "Oakum") and by the Polyzoon *Alcyonidium gelatinosum* (known as "curly weed"). The sponge *Halichondria panicea* is also abundant on parts of the eastern slopes of the Bank, and is said by experienced fishermen to have overrun a considerable portion of the Bank in certain years.

The Bank is surrounded by deep water exceeding 30 fathoms in depth on its northern, western, and southern sides, forming the Great Silver Pit (33 to 56 fathoms) in the latter region. Between the south-eastern edge of the Bank and the continental coasts lies a broad tract of water from 20 to 26 fathoms in depth, which deepens to 28 fathoms between the Tail End and the Danish coast.

General Summary.—The investigations in this area to the end of 1903 consisted of the following hauls : in March a series of long hauls over the north part of the Bank, the south-eastern slopes, and the Silver Pit ; in April three groups of hauls on the south part of the Bank, viz., one group near the North Shoal, one haul on the edge of Clay Deep, and another group of hauls south of the Easternmost Shoal ; in June two short hauls, one south-east of the Tail of the Dogger, and one on the north part of the Bank, together with a pair of long hauls on the north-western slopes of the Bank ; in July two long hauls in the deep water south-west of the latter region ; and in November two hauls on the south part, west and east of the Easternmost Shoal.

Cod were taken in nearly every haul : they were scarce on the north part in March, and most plentiful north of the South West Patch in April. Haddock were scarce on the north part in March, most abundant on the south part in April, present in fair numbers on the north part in June, and on the south part at the beginning of November. Whiting were absent on the north part in March and June, and were taken only in small numbers on the south part in April and early November. Latchet were entirely absent, with the interesting exception of a single fish taken on one occasion on the south-east part in April.

Soles were absent from our hauls for the most part, but were present, though scarce, on the south-east edge in March and April. Turbot were generally taken in the hauls on the north and south-east parts in March, especially along the edge of Clay Deep. In other hauls they were scarce. Brill were practically absent from our hauls except on the eastern and north-eastern sides. Dabs were scarce on the north part in March, though present in moderate numbers along the south-east edge, and abundant in the Silver Pit, at the same time. Over the south part they were abundant in April and in early November, the larger fish being relatively more numerous in the western half, and the smaller fish in the eastern half. They were absent on the deeper slopes of the north-west part in July. Lemon Dabs were scarce on the Bank itself, but fairly numerous in the deeper water of the north-west slopes.

Skates and Rays were almost entirely absent from our hauls.

Plaice.—An examination of the figures in the synoptic table (p. 110) shows that the distribution of Plaice on the north part of the Bank in March was very uniform. The maximum abundance at this season was shown by haul O. 45 (14 per hour). From this point the abundance diminished both in northerly, westerly and southerly directions, but was fairly uniform (between 8 and 14 per hour) except on the northern and south-eastern slopes. Small Plaice below 30 cm. (12 inches) in length formed an insignificant portion of the catch on the north part of the Bank, but on the south-eastern slopes they were more numerous, both absolutely and relatively to the total catch. The single haul in the eastern part of the Great Silver Pit (O. 34) yielded similar results in all respects to the haul nearest to it on the south-eastern part of the Bank (O. 35).

The distribution of the size-frequencies of Plaice on the Dogger Bank presents several features of interest. A summary of the details is provided in the accompanying table, which shows the catch per hour for different groups of hauls.

TABLE 7, showing the catch per hour of Plaice on the Dogger Bank (Area III).

Month.	Ground.	Hauls.	Hours.	Total Catch.	Catch per Hour.											
					Numbers for each Size group (5 cm.)										Total Number per Hour.	Weight per Hour (Kilos.).
					Below 20	20+	25+	30+	35+	40+	45+	50+	55+	60+		
III.	Northern Edge of Bank.	O. 41, 42 ...	10	46	...	...	0·1	2·3	1·2	0·6	0·3	...	0·1	...	5	[3·0]
	North-Eastern part of Bank.	O. 40, 43–45	26	271	...	0·04	0·2	3	2·5	1·7	1·3	0·7	0·3	0·3	10	[9·2]
	North part (all combined).	O. 40–45 ...	36	317	...	0·03	0·2	3	2·1	1·4	1·1	0·5	0·3	0·2	9	[7·5]
	Edge of Clay Deep (North part).	O. 38, 39 ...	7⅓	61	...	0·1	1·9	5	0·7	0·7	0·1	...	...	...	8	[3·5]
	Edge of Clay Deep (South part).	O. 35, 37 ...	7	33	...	0·1	1·3	2·3	0·4	0·1	0·3	...	0·1	...	5	[2·3]
	Edge of Clay Deep (all combined).	O. 35, 37–39	14⅓	94	...	0·1	1·6	3·6	0·6	0·4	0·2	...	0·1	...	7	[2·9]
	Great Silver Pit ...	O. 34 ...	5¾	20	...	..	0·2	1·4	0·5	0·2	0·9	0·2	0·2	...	3·5	[2·9]
IV.	North of West Shoal	O. 55, 57, 58	14	35	0·1	...	0·1	0·8	0·7	0·6	0·1	...	...	...	2·5	1·6
	Edge of Clay Deep (South part).	O. 59 ...	5	55	...	0·2	2	5	1·6	0·8	0·6	0·4	...	...	11	[5·4]
	South-East part of Bank.	O. 60–63 ...	20	256	0·05	0·1	1	5	4	1·5	0·7	0·1	...	...	13	[6·8]
	South part (all combined).	O. 55, 57 63	39	346	0·1	0·1	0·8	4	2·7	1·1	0·5	0·1	...	...	9	[4·8]
VI.	North-West edge of Bank.	O. 83–84 ...	9	29	...	...	...	0·1	1	1·3	0·4	...	0·2	0·1	3	3·0
VII.	West edge of Bank (Brucey's Garden).	O. 85, 86 ...	12¾	53	...	...	0·1	0·1	1·3	2	0·4	0·1	0·2	0·1	4	[4·2]
XI.	South part of Bank (central).	O. 1, 2 ...	3¾	103	...	...	1·3	11	8	5	1·1	0·5	...	...	27	[16·9]

It will be observed from this table that the range of size on the Dogger Bank, especially on the north part, was very great, although the numbers of Plaice below 30 cm. (12 inches) in length were insignificant (always less than two per hour). The dominant size group in almost every part of the Bank, and at each season represented, consisted of large immature Plaice from 30 to 34 cm. (12–13 inches) in length ; but on the north part of the Bank in March there were relatively large numbers of mature Plaice (5–6 per hour), ranging from 35 to more than 60 cm. (14–24 inches) in length, and in April, on the south-eastern portion of the Bank, there was an equal abundance of mature Plaice although the largest fishes were not so well represented.

The chief results of these investigations are shown graphically in the accompanying diagram (Fig. 2).

This diagram shows the striking difference in the distribution of Plaice of different sizes on the north part and on the eastern slopes of the Bank respectively during March. The dominant size-group consisted of large immature Plaice (30–34 cm.) in both cases. On the north part the Plaice below 30 cm. (12 inches) were practically absent and the mature Plaice were relatively numerous (O. 40–45). On the

other hand, on the eastern slopes the medium immature Plaice came next in frequency to the dominant group, while there was an abrupt fall in the frequency of Plaice exceeding 34 cm., the numbers of mature Plaice being quite insignificant (O. 33–39).

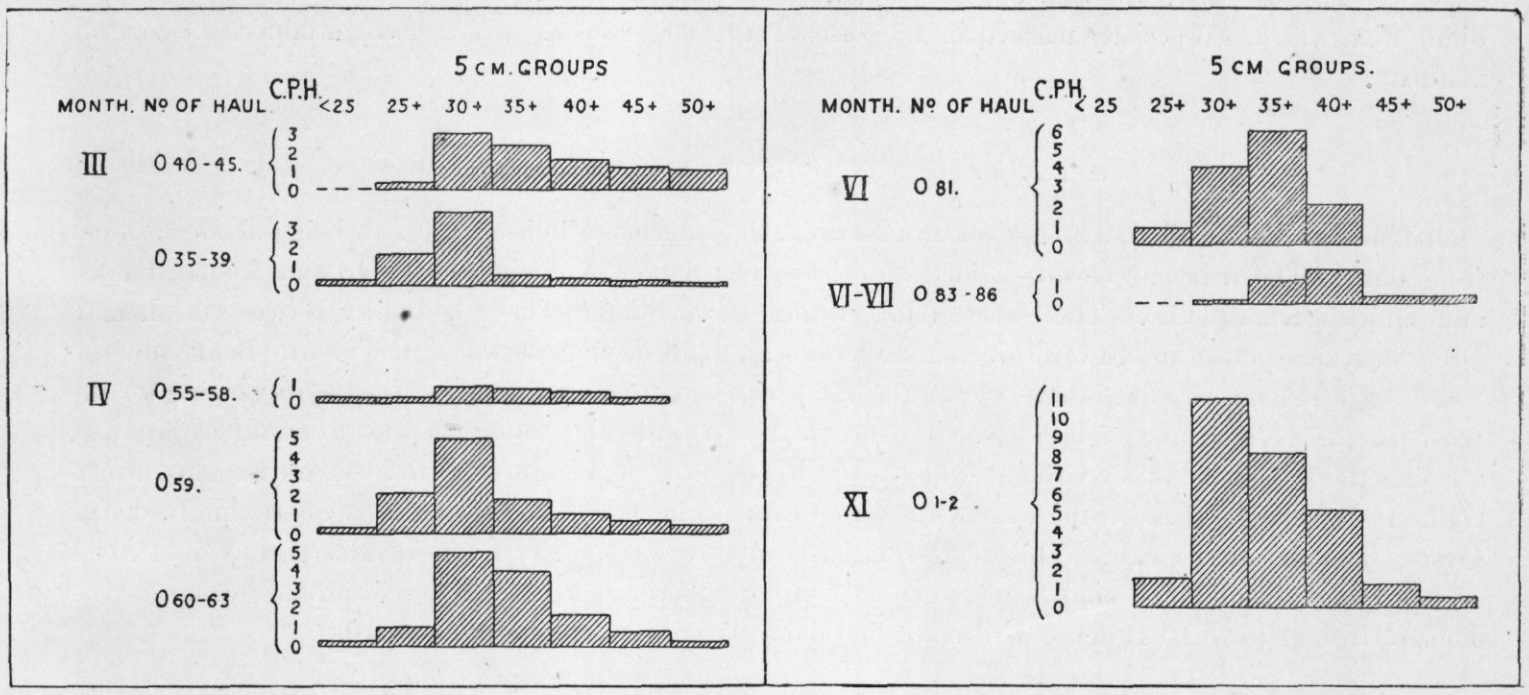

FIG. 2, illustrating Table 7 (Dogger Bank).
C.P.H. = Catch per Hour. For O. 81 *see* Table 12, p. 100.

The difference in April between the north-western, eastern and south-eastern regions of the south part of the Bank are also indicated. Plaice were practically absent in the first-mentioned region (O. 55–58), but in the two eastern regions their total abundance was apparently greater than in the previous month and was practically identical in the two localities.

In the haul on the edge of Clay Deep (O. 59) the relative frequency of the various size-groups closely approximated to the conditions found to prevail along the entire south-eastern edge of the Bank during the preceding month (O. 35–39), but in the southernmost group (O. 60–63) small mature fish (35–39 cm.) attained a greater abundance than in any of the other series of hauls.

The diagrams for June and July represent the conditions on the outermost edges of the Bank, near the Tail of the Dogger (O. 81) and the north-western slopes of the Bank (O. 83–86) respectively. In each case the dominant size-group consisted of mature fish—not large immature fish as was generally the case on the Bank itself; but there was a relatively considerable number of the latter class in the haul off the Tail End, whereas such fish were practically absent on the north-western slopes.

The summer conditions on the Bank were not investigated during 1903, but the figures for hauls 1 and 2 on the south part of the Bank in early November are of interest in representing the proportions of the various size-groups at the season which probably marked the culmination of the summer immigration and growth. It will be seen in the diagram that the numbers of immature Plaice below 30 cm. (12 inches) were exceedingly small even at this season of the year, whereas the dominant size-group, consisting of large immature Plaice, attained a relatively high frequency (11 per hour), and the larger sizes of Plaice up to 45 cm. (18 inches) were proportionately well represented.

It would appear from these data that the annual immigrants to the Dogger Bank consist principally of Plaice above 30 cm. (12 inches) in length, with a relatively small number between 25 cm. and 30 cm. (10 and 12 inches). In the winter, between November and March, a diminution in the abundance of Plaice of all sizes above 30 cm. appears to take place on the south part of the Bank (O. 35–39), a diminution which is especially marked in the case of the larger fishes which have attained the size of maturity.

Area IV. Leman Ground and Leman Banks.

This area lies off the north-east coast of Norfolk, the outermost limits of the area being about 65 miles from shore. The area may be sub-divided into three chief regions, viz., the Leman Ground, Leman Banks, and Smith's Knoll Deep. The Swarte Bank, 40 miles from shore, forms a boundary between the Leman Ground, which lies on its seaward side, and the Leman Banks lying between the Swarte Bank and the coast. The Leman Ground is a very uniform tract, with a bottom of fine sand, the depth varying for the most part between 14 and 17 fathoms. To the north-eastwards the water deepens to about 18 fathoms, forming the so-called Botney Ground, which soon deepens to a depression of from 20 to 24 fathoms, which connects Markham's Hole on the west with Botney Gut to the north, and with the western limits of the Oyster Ground on the east. This depression has a muddy bottom over a considerable part of its extent. A continuous tract of fine sand, with a bottom of fairly uniform depth of 14 to 17 fathoms, connects the Leman Ground with the Dutch coast, which lies about 65 miles to the south-eastward.

The Leman Banks form a series of narrow, elongated ridges, running parallel with the coast between the Leman Ground and the Norfolk coast. The chief of these ridges are Swarte Bank, Well Bank, Ower Bank and Leman Bank. The depth on the top of these ridges varies between 2 and 6 fathoms. The depressions or gullies between the banks have a depth which varies between 10 and 20 fathoms. The bottom is of coarse sand to a very large extent.

The third sub-division of this area is furnished by the grounds lying immediately to the eastward and north-eastward of Smith's Knoll, that is in the south-eastern portion of the area. The bottom here is for the most part between 20 and 22 fathoms, deepening to 24 fathoms in the immediate neighbourhood of Smith's Knoll. This deep water is the northern extremity of the deep water area which extends from north to south along the western half of the Flemish Bight. Several narrow extensions of Knoll Deep run between the various ridges of the Leman Banks, more particularly along the northern edge of the Well Bank, nearly along its whole extent, and for a short distance along the northern edge of the Leman Bank. Isolated patches of deep water (20 to 23 fathoms) are also found west of Smith's Knoll and south of the Leman Bank.

The tidal currents run very strongly over the Leman Banks, with a velocity which is greatest near the coast, and diminishes with increasing distance from shore. At spring tides the current by Smith's Knoll runs about three knots; near Swarte Bank a little over two knots. The rate is naturally influenced to a considerable extent by the direction and force of the wind from time to time. It is probable that the difference in the character of the bottom between the Leman Ground and the Leman Banks is largely due to the scouring action of the tides, coarse deposits prevailing over the Leman Banks, where the current sets strongest, and fine deposits over the Leman Ground, where the current is weakest. A certain amount of mud accumulates in the deeper water near Smith's Knoll.

The region to the west and north of the whole area has an exceedingly rough bottom, which prevents trawling to a large extent.

The area, as a whole, appears to be essentially a summer fishing ground. The Leman Ground, it is true, is visited by steam trawlers at different seasons of the year, but the area west and south of the Swarte Bank is fished almost exclusively by the trawling smacks of Lowestoft and Yarmouth, and by these almost entirely in the summer months. The uneven character of the ground and the strength of the tides render this region unsuitable for the use of the otter trawl—a circumstance which, more than anything else, preserves the ground for the use of the smacks.

General Summary.—The investigations over the area in 1903 ranged from April to December, the observations on the Leman Banks being restricted to the months of July and August, when the fishing in this region is at its height. PLAICE, DAB, SOLE, BRILL, and WHITING were distributed over the whole area, but HADDOCK were practically absent, and COD during the periods investigated were scarcely found except in the southern and western parts of the area. In summer, DABS showed a greater abundance in the outlying parts of the area, from the Leman Ground to Smith's Knoll, than among the Banks themselves; SOLES were most plentiful near Smith's Knoll; TURBOT were practically absent between the Well Bank and the coast, but were generally present in small numbers from Smith's Knoll to the Leman Ground; LEMON DABS were not taken on the Leman Ground, but were fairly numerous among the Banks, and especially west of the Leman Bank.

Certain seasonal changes were also recognisable in the region between Smith's Knoll and the Leman Ground inclusive. LATCHETS (*Trigla hirundo*) were scarce in the spring (April-June), present in most hauls in the summer, but absent on the Leman Ground in December. DABS showed an increase in numbers on the North Leman Ground from spring to summer. TURBOT and BRILL were practically absent from the December hauls. THORNBACK RAYS (*Raia clavata*) were practically absent in the spring, generally present, and sometimes frequent, in the summer hauls, and plentiful on the south part, but not on the north part, of the Leman Ground in December.

Plaice.—If reference be made to the synoptic table, page 112, showing the catch per hour at different trawling stations, it will be observed that in July the frequency of Plaice among the banks, like that of the Dab, was less than on the Leman Ground at the same season. It also appears that there was a distinct difference between the two regions in regard to the proportions of large and small Plaice. On the Leman Ground during the summer months the number of small Plaice below 30 cm. (12 inches) in length always exceeded that of the larger fish by at least two to one, this proportion being much exceeded in certain cases. On the other hand, among the banks, and in the region immediately east of Smith's Knoll, the proportion of the two size-groups approached much nearer to equality, the small fish never exceeding the large by more than 50 per cent., except in the region west of the Leman Bank within about 20 miles from shore. In the hauls made immediately to the west of Smith's Knoll (B. 60 to 63) the proportions of the two size-groups were practically identical, while in the haul made near the Leman Light-vessel (B. 55) the catch of the larger Plaice actually exceeded that of the small. This difference between the two regions in regard to the proportions of large and small Plaice cannot be without significance when it is borne in mind that the Leman Ground, where the small fish predominate, lies some 25 miles further from the coast than the Leman Bank, or Smith's Knoll. For an explanation of the real nature of the differences a minuter analysis of the sizes of the Plaice caught is necessary. For this, reference may be made to Table 8, where the numbers of Plaice caught per hour have been sorted out in size-groups of 5 cm. (2 inches).

The hauls made during July among the banks are as follows: B. 49, 51, 52, 53 and 55. The figures resulting from these hauls have been amalgamated in two groups, a northern group represented by hauls 51 to 53, and a southern group represented by hauls 49 and 55. It will be seen from the table that

TABLE 8, showing the catch per hour of Plaice on the Leman Ground and Leman Banks (Area IV.).

Month.	Ground.	Reference Number of Hauls.	Hours.	Total caught.	Catch per Hour.							
					Size groups.—Centimetres.						Total.	Weight per Hour (Kilos.).
					Below 20	20+	25+	30+	35+	40+		
					Smallest immature.	Small immature.	Medium. immature.	Large. immature.	Mature.			
III.	Markhams Hole	O. 33	3¼	173	...	2·5	10	24	13	4	53	24·3
IV.	North Leman (E.)	O. 66	4	188	4	18	16	6	1·5	1	47	[8·9]
	„ „ „	O. 65, 67 ...	11	414	3	10	13	8	2·6	0·8	38	[8·8]
	West Botney	O. 64	4	62	0·5	2	4	8	0·5	0·2	15	[4·6]
V.	North Leman (W.)	O. 79	2	65	2·5	10	7	11	1·5	...	32	[7·25]
	„ „ (E.)	O. 77, 78 ...	4	163	2·7	12	13	8	2·7	2	41	10·5
	South of Leman (E.) ...	O. 75, 76 ...	12	223	0·6	6	7	3	0·4	1	19	4·3
		O. 74	2	26	1	3	6	2	0·5	...	13	[2·75]
VI.	Extreme N. Leman	B. 28	7½	321	...	5	23	12	2·1	1·3	43	10·2
	South Leman Ground ...	B. 27	8	261	0·9	4	17	8	2·2	0·5	33	7·9
	East of Knoll	B. 24–26 ...	15	67	...	0·2	0·9	1·7	1·2	0·5	4	1·75
	The Would	B. 23	1	0	...	...	...	...	...	...	0	0
VII.	North-West of Leman Bank	B. 58	7	301	5	19	12	4	1·6	0·9	43	8·6
	West of Leman Bank ...	B. 37, 56, 57 ...	13¼	99	0·3	1·2	2·1	1·9	1·4	0·6	7	[2·6]
	„ (all combined) ...	B. 37, 56–58 ...	20¼	400	2·1	7	5	3	1·4	0·6	20	[4·6]
	West of Smith's Knoll ...	B. 60–63 ...	11½	113	0·2	2·3	2·8	2·2	1·2	1·1	10	[3·3]
	Along Well and Ower Banks	B. 51–53 ...	14	363	0·9	4	10	8	2·2	0·1	26	[6·5]
	Between Leman and Well Banks.	B. 49, 55 ...	13	231	0·7	1·5	7	6	2·1	0·5	18	5·4
	Between Leman and Well Banks.	B. 49, 51–53, 55	27	594	0·7	3	8	7	2·1	0·3	22	6·0
	North-East of Knoll ...	B. 43–45 ...	18	524	0·6	4	14	8	2·3	0·4	29	7·75
	South-East of Well Bank ...	B. 46	5	118	0·2	2·6	9	9	2·4	1	24	7·25
	North-East of Knoll and South-East of Well Bank.	B. 43–46 ...	23	642	0·5	4	12	8	2·3	0·5	28	7·6
	South-East of Well Bank ...	B. 47, 50 ...	17	1,117	0·3	11	39	13	2·1	0·1	66	15·2
	North Leman Ground ...	O. 88, 89 ...	4	220	2·5	16	23	8	1·2	0·7	55	10·9
VIII.	South of Cromer Knoll ...	B. 77–79 ...	11	91	0·5	4	2·4	1·1	0·2	...	8	[1·4]
	Knoll Deep	O. 93	2	3	...	0·5	0·5	0·5	...	...	1·5	[0·4]
	North-East of Knoll ...	O. 94	5	127	...	1·8	14	8	1·4	0·8	25	[7·8]
	Extreme South Leman Ground	O. 95, 96, 101...	16	912	0·5	6·1	30	15	3	1·9	57	15·1
	South-West of Leman Ground	O. 95, 96, 97, 101	21	1,487	0·7	9	37	17	4	2	71	18·0
	South-East Leman Ground .	O. 99, 100 ...	10	387	0·6	7	19	8	2·7	1·1	39	9·6
	South of Leman Ground ...	O. 97, 99, 100...	15	962	0·8	12	33	13	3	1·5	64	15·5
	Leman Ground (E. part) ...	O. 102... ...	5¾	186	1·4	13	15	3	0·3	0·2	32	5·6
XII.	South Leman	O. 123, 124 ...	8	34	...	0·4	2	0·5	0·6	0·7	4	[1·7]
	North Leman	O. 125, 126 ...	9	226	0·1	3	14	6	0·8	0·8	25	[6·9]
	Botney Deep	B. 99	2	6	...	...	0·5	1·5	...	1	3	[1·9]

the predominant group of Plaice in each case was that of the medium immature fish (7–10 per hour), in which the sizes ranged from 25–29 cm. (10–11 inches), and that the large immature fish (6–8 per hour) from 30–34 cm. (12–13 inches) predominated over the small fish (1·5–4 per hour) from 20–24 cm. (8–9 inches). The average catch of the smallest Plaice below 20 cm. was less than one per hour in each case. A detailed examination of the table shows that a predominance of large over small immature Plaice was shown to a greater or less extent by other hauls in immediate proximity to the banks (*e.g.*, B. 43–45, B. 46, 47 and 50 ; O. 94, O. 95–97 + 101), whereas the very opposite conditions prevailed on the remoter parts of the Leman Ground. Thus, in hauls 88 and 89, north-east of the Swarte Bank, the dominant size-group as before was represented by the medium immature fish, while the small immature fish were twice as abundant as the large. It is remarkable that this relative excess of small Plaice should have reached its highest extent at the most offshore station in the whole series, namely, O. 102, where the catch per hour of the small exceeded that of the large immature Plaice by 13 to 3. It should be noticed at the same time that in both these localities (O. 88 + 89, O. 102) the catch of the smallest Plaice below 20 cm. (8 inches) exceeded that at any of the stations among the banks or in their immediate vicinity (with the exception of B. 58, which is in close proximity to the coast).

That this result is not an accidental feature is clearly shown by examining the records for other seasons of the year. In April a series of hauls was made from the Leman Ground northwards (O. 67–64). This series shows that at this period of the year the small immature fish actually formed the dominant group on the Leman Ground (O. 66), the fish of this size being three times as abundant as the larger immature fish. Further offshore (O. 65 + 67) the medium immature fish predominated, but the small group still exceeded the large in abundance (10–8). Still further offshore, on the west part of the Botney Ground (O. 64), the general size still further increased, the dominant size-group consisting of large immature fish. This orderly sequence, corresponding as it does with the normal conditions prevailing on coastal grounds of increasing depth and distance from shore, shows satisfactorily that the features exhibited by the sizes of Plaice among the Leman Banks were of quite an exceptional character.

In May a series of hauls was made between the Leman Ground and Winterton Shoal (O. 79–74). The small predominated over the large immature fish in all the hauls except O. 79, and all, with this exception, were taken at a considerable distance from the Leman Banks. The haul in question was taken close along the north side of Swarte Bank.

In June, on the other hand, all the hauls were made in closer proximity to the banks and all showed a relative scarcity of the small immature fish. As evidence of the constancy of this relation the results of haul B. 27 in June may be compared with those of the combined series O. 95, 96, 97 and 101 in August, since the ground sampled on the two occasions was practically the same. It will be observed that, although Plaice of all sizes were more abundant in August than in June, the relative proportions of the different size-groups were practically identical.

The greater range of depth among the banks and on the southernmost part of the Leman Ground than on the north part of the Leman Ground can scarcely be held to provide a sufficient explanation of the observed differences, since the hauls on the north Leman Ground in closest proximity to the Swarte Bank (O. 79 and B. 28) showed an excess of large over small Plaice, although the depth was no greater than on the grounds more remote from the bank.

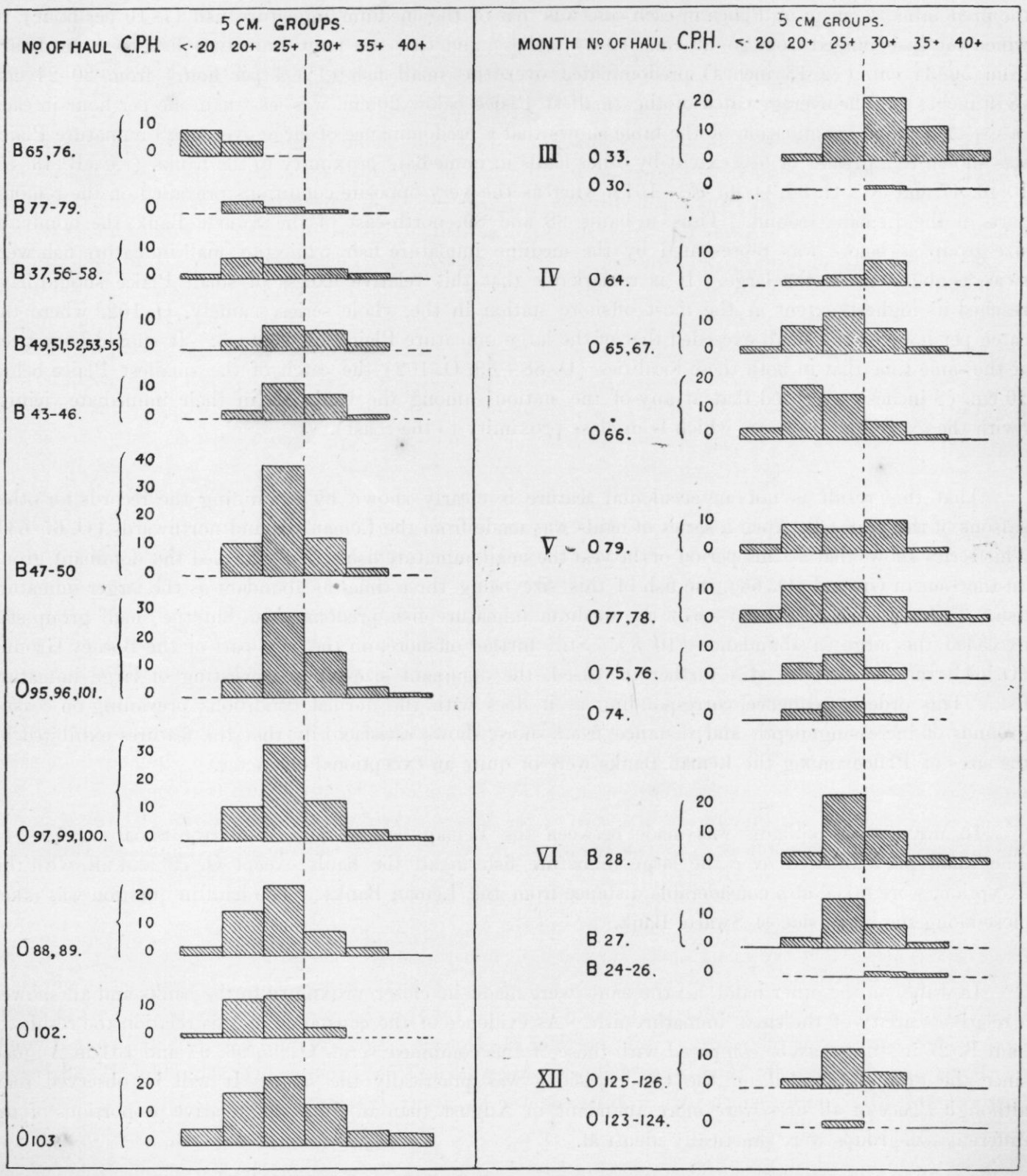

FIG. 3, illustrating Table 8 (Leman Ground and Leman Banks).

The diagrams on the left-hand side of the figure represent the results of a series of hauls during July and August, arranged approximately in geographical order (top = Norfolk coast; bottom = Leman Ground and Black Bank). C.P.H. = Catch per Hour. For B. 65, 76, *see* Table 5; for O. 103, *see* Table 10.

The features which have been described above are graphically represented by the diagrams on FIG. 3. The series of diagrams on the left-hand side of this figure represent the catch per hour of Plaice on a series of grounds in the area under discussion during the months of July and August. The series is arranged

as far as possible in geographical sequence from west to east, the diagrams at the top of the figure representing the western stations closest to shore, and those at the bottom the most offshore stations on the Leman and Botney Grounds. The lowest diagram of all represents a haul on the Black Bank about midway between the Leman Ground and the Dutch coast.

The data illustrated by this series of diagrams show that medium immature fish from 25–29 cm. (10–11 ins.) formed the dominant size-group in all parts of the area except in the three localities nearest to shore, west of the Leman Bank. Off Blakeney (B. 65 + 76), a strictly inshore station, in 10 fathoms depth, very few Plaice were present except the smallest fish, and those in relatively small numbers. Off Cromer (B. 77–79), in from 15–18 fathoms, as well as west of the Leman Bank (B. 37, 56–58), in from 16–20 fathoms, the dominant size-group consisted of small immature fish. It will be noted that the depth in these two localities was as great, or even greater, than the prevalent depths among the Banks and on the Leman Ground. The preponderance of small Plaice is clearly attributable to the proximity to shore (cf. especially B. 58, in which the maximum catch of small Plaice was taken at a depth of 18–20 fathoms). The next diagram represents the conditions prevailing among the Banks. The total abundance of fish was not so great as on the Leman Ground, but the large immature fish were almost as abundant as the medium immature, and each of these groups was three times as abundant as the fish of the small immature group. Very similar relations are shown by the next diagram representing hauls B. 43–46 off the southern extremity of the Well Bank. North of this station, off the south-eastern extremity of Swarte Bank (B. 47 + 50), the results show a closer approximation to the conditions prevailing on the Leman Ground. The medium immature fish attained a high frequency, and the small immature fish nearly approached the level of the large. On the southernmost part of the South Leman Ground (O. 95, 96 and 101) the large immature fish considerably exceeded the small immature in abundance, but in the next group of stations further north (O. 97, 99 and 100) this excess was much reduced, owing chiefly to the marked increase in the abundance of small immature fish. On the North Leman Ground (O. 88 and 89), the small distinctly exceeded the large immature fish, an excess which was still more marked in haul O. 102 on the easternmost part of the Leman Ground, where the large fish were scarcely represented. The abundance of small immature Plaice on the Leman Ground is seen to have been almost identical with that found on the Black Bank, as represented by the lowest diagram in the series. At the same time of the year this group of small Plaice greatly preponderated on the Brown Bank (O. 90, 91) as shown by the figures in Table 10.

In view of the insignificant numbers of these small Plaice in the neighbourhood of the Norfolk coast, as well as among the Leman Banks, there can thus be little doubt, even from the evidence of the trawling experiments alone, that the small Plaice on the Leman Ground are mainly derived, not from the English coast, but from the Dutch nursery grounds, by way of the Brown Bank. The only other route by which small Plaice could approach the Leman Ground from the English shores would be from the Yorkshire and Lincolnshire coasts over the rough ground north of the Dowsing Light-vessel. Unfortunately, our attempts to trawl over this area in 1903 were failures owing to accidents to the gear, but haul B. 28, which partly sampled the south-eastern part in June, showed a scarcity of small Plaice.

Seasonal Changes.—The winter conditions in this area were represented, though imperfectly, by two hauls in March in the most northern and southern portions of the area, viz., in Markham's Hole (O. 33) and Knoll Deep (O. 50), and by a series of hauls on the Leman Ground in December (O. 123–126).

In Markham's Hole large immature fish, 30–34 cm. (12–13 inches) in length, formed the dominant size-group and were remarkably numerous (24 per hour) ; of the remaining fishes those of larger size were slightly more numerous than the smaller. A considerable number of mature Plaice were taken in this haul. During the same month in Knoll Deep exceedingly few Plaice were obtained (only 16 during a haul of 5 hours), although the range of size was the same.

In December the hauls formed a series from the North to the South Leman Ground. Grouping these hauls into two pairs on the North and South Leman respectively, we find that in each pair the dominant size-group consisted of medium immature fish, as during the summer months, but the frequency was much reduced, especially on the South Leman Ground, where the total catch amounted to 34 for eight hours' fishing.

The following table provides a statement as to the hauls, or groups of hauls, which were taken at different seasons on the same grounds. A comparison between the catches per hour (Table 8) for the various groups reveals the nature of the chief seasonal changes observed.

TABLE 9, specifying the hauls, or groups of hauls, taken in the same locality at different seasons, with notes as to the character of any changes in the size frequencies of the Plaice caught in successive months (Area IV.).

Ground.	Month.	Reference Number of Hauls.	Total Catch per Hour.	Notes.
North Leman	December ...	O. 125, 126	25	
	April ...	O. 65, 66, 67 ...	40	Chief increase in small immature fish, from 3–12 per hour.
	May... ...	O. 77, 78	41	No change since April.
	July ...	O. 88, 89	55	Medium immature increased from 13 to 26 per hour.
South-Eastern Leman ...	December ...	O. 123, 124... ...	4	
	May... ...	O. 75, 76	19	Increase for all sizes.
	August ...	O. 99, 100	39	General increase, especially of larger immature fish (25–34 cm.).
South Leman	June ...	B. 27	33	
	August ...	O. 95, 96, 97, 101 ...	71	Frequencies doubled for all sizes.
East of Smith's Knoll ...	June ...	B. 24, 25, 26 ...	4	
	July ...	B. 43, 44, 45 ...	29	Marked increase for all sizes, especially of larger immature fish (25–34 cm.).
	August ...	O. 94	25	

The observed changes were principally as follows :—During the winter months (December-March) Plaice in the region between the Leman Ground and Smith's Knoll were taken less frequently than at any other season, the scarcity being much greater in the southern (O. 30,* 123, 124) than in the northern part (O. 125, 126), and being especially pronounced in the case of the smaller fish (below 25 cm.).

The first change on the North Leman Ground in the spring consisted in the reappearance of the small fish (20–25 cm.) in April, before the larger fish showed any marked signs of increasing abundance. This was followed, between May and July, by a marked increase in the abundance of the medium and a smaller increase among the small immature fish. In the southern and eastern parts of the area a general increase in the frequency of all sizes took place between May and August, the increase being most marked in the case of the larger fish from 25 to 34 cm. in length

* For O. 30, *see* Table 10.

The sudden appearance of small Plaice on the coastal grounds in early spring is a common phenomenon which does not necessarily imply migration, owing to the well-known tendency of small Plaice to bury themselves in the sand during the winter months, and to emerge again on the approach of Spring.

On the other hand, the subsequent increase in the number of all sizes up to a length of 34 cm can only be explained as the consequence of a steady stream of immigration during the summer months. The population of small Plaice off the adjacent portions of the English coast was too small to provide more than a small fraction of the total number of immigrants, which were, therefore, mainly derivable in all probability from the Dutch coasts, especially by way of the Brown Bank.

The fact that Plaice of distinctly mature size, from 35 cm. upwards, did not appreciably increase in numbers at any season of the year in this area, tends to show that an emigration of the largest fishes was taking place simultaneously with the arrival of smaller immigrants, and with the growth of the smaller fishes towards this limit.

These results agree with those of the marking experiments in the same year. A northwestward movement of marked Plaice during the spring and summer months from the west coast of Holland and the central parts of the Flemish Bight towards the Leman Ground was exhibited by experiments 2, 3, 4, 6 and 7, and a continuation of this stream of migration beyond the Leman Ground in the case of the larger fishes (above 30 cm.) was strongly suggested by the combined experiments numbered 5, 8 and 9. The evidence, however, requires to be completed by fuller investigations on the rough grounds to the northwest of the Leman Ground, and by trawling and marking experiments during the spring months on the Brown Bank and adjacent grounds.

In view of the results of the marking experiments, it appears by no means improbable that the difference in average size of the Plaice in the deep water of the Flemish Bight and upon the Brown Bank may have a causal connection with the corresponding differences observed between the Leman Banks and the southernmost part of the Leman Ground on the one hand, and the northern and eastern parts of the Leman Ground on the other. Assuming the existence of a general northwestward tendency of Plaice during the spring months from the former areas, it is manifest from an examination of the chart that the Plaice among the Leman Banks would be recruited to a larger extent from the Deep Water than would those of the Leman Ground, and that the latter would be influenced to a greater extent than the Banks by the smaller migrants from the Brown Bank.

Area V. Flemish Bight.

It seems convenient to distinguish by this name the large gulf* between the English and Dutch coasts which connects the North Sea proper with the English Channel. The area is one of considerable importance, not only because it is the fishing ground for large fleets of English, Dutch, and Belgian trawling smacks, but also because it is the channel along which many migratory fishes pass on their way from the English Channel to the North Sea and *vice versâ*.

Physical Features.—The area is naturally divisible into two parts, occupying the western and eastern halves of the area. In the western part a deep channel, from 20 to 24 fathoms in depth, runs in a north and south direction, generally known as the Deep Water. The south-western part of the area is occupied

* Termed "la mer flamande" and defined by Gilson, *Exploration de la Mer sur les côtes de la Belgique, Brussels*, 1900, p. 61, Pl. II.

by the Thames Estuary. Between the Deep Water on the one hand and the Norfolk and Belgian coasts on the other the grounds are rough with innumerable ross banks. The eastern part of the area is much more uniform in character, except in the north-western portion where the Brown Ridges lie. Between the Brown Ridges and the Dutch coast a uniform depth of about 14 fathoms prevails over a considerable area, known as the Broad Fourteens. The bottom for the most part consists of fine sand, and ross banks are only to be found in the southern portion off the mouths of the Schelde.

General Summary.—HADDOCK were entirely absent from our hauls in this region during 1903. COD were found in the Deep Water and on the Lowestoft Flats during the winter (January to March), but were scarce during the rest of the year. LATCHETS (*Trigla hirundo*) were abundant in the spring and summer months, scarcer in autumn, and absent in winter. This fish is a typical summer migrant into the North Sea from the English Channel. SOLES were chiefly found on the English side. They were fairly numerous in the Deep Water in winter (November to March), but were scarcer there in the spring. LEMON DABS were almost entirely absent, except a few in the Deep Water in the winter (November to January). TURBOT and BRILL were generally scarce, especially the former. In the western half Brill were more numerous than Turbot. In the eastern half Turbot were more numerous than Brill. The distribution of DABS corresponded roughly with that of the Plaice; like the latter, they were very abundant off the Dutch coast.

Plaice.—The following Table shows the catch per hour of Plaice of different sizes in various groups of hauls at the successive seasons :—

TABLE 10, showing the catch per hour of Plaice in the Flemish Bight (Area V).

Month.	Ground.	Hauls.	Hours.	Total Catch.	Catch per Hour.							
					Numbers for each Size-Group (5 cm.).						Total Number per Hour.	Weight per Hour (kilo.).
					Below 20	20+	25+	30+	35+	40+		
I.	Lowestoft Deep	O. 20–23 ...	17	114	0·06	0·9	2·8	1·3	0·7	0·9	7	[2·5]
	Middle Ground	O. 24–26 ...	14½	200	0·5	2·6	6	3	1·1	0·5	14	[3·6]
III.	Lowestoft Flats	O. 31, 32 ...	9½	5	...	...	0·2	0·3	...	...	0·5	[0·2]
	Knoll Deep	O. 30	5	16	...	0·6	0·4	1	0·6	0·6	3	[1·3]
	Gabbard Deep	O. 48, 49 ...	3½	2	...	0·3	...	0·3	...	...	0·6	...
	Hinder	O. 46, 47 ...	8	59	0·6	4	2·1	0·7	...	...	7	[1·1]
V.	Hinder and Eastern Deep ...	O. 68, 70 ...	8	334	0·9	21	17	1·9	0·1	...	42	6·6
	Eastern Deep and Middle Ground.	O. 71–73 ...	16	394	0·6	7	13	4	0·2	0·06	25	4·9
	Winterton Shoal	O. 74	2	26	1	3	6	2	0·5	...	13	[2·7]
VII.	Off Southwold	B. 38	3	16	0·7	4	1	...	...	...	5	[0·7]
	Brown Bank	O. 90, 91 ...	4	491	15	78	22	7	0·5	...	123	15·7
	Texel Ground	O. 92	2	356	28	140	8	0·5	1	...	178	18·9
IX.	Black Bank	O. 103	3	212	6	17	23	14	6	5	71	19·0
XI.	Eastern Deep	O. 122	3	35	...	0·7	2·7	5	1·7	2	12	5·0
	Brown Ridges (W. Part) ...	O. 6, 7, B. 93 ...	6¼	82	0·3	6	5	1·4	0·04	0·04	13	[2·6]
XII.	Broad Fourteens	O. 8, 9	9	1,440	8	95	52	4	0·3	0·3	160	[25·6]

The first year's results do not permit any general sketch of the seasonal changes which take place in this area, owing to the lack of summer observations. A considerable number of observations were made, however, in the winter months, which correspond with the spawning period of the Plaice, and throw some light on the distribution of the spawning fishes at this period. So far as numbers are concerned, the table shows that the abundance of Plaice, irrespective of size, was far greater in the eastern half of the area than in the western, owing to the proximity of the former to the Dutch nursery grounds. Immature fish, however, greatly preponderated over the whole region, as may be seen from the accompanying diagram. Taking 30 cm. (12 inches) as representing approximately the limit between mature and immature fish in this area, it will be observed that the mature fish were never found in any quantity in the localities investigated. In the shallower grounds such as the Hinder (O. 46, 47, O. 68–70), the Brown Ridges (O. 67, B. 93), and the Broad Fourteens (O. 8 and 9), as well as on the Brown Bank and Texel Ground (O. 90–92), which are not represented in the diagram, the dominant size-group consisted generally of small immature Plaice from 20–24 cm. (8–9 inches). In the Deep Water (O. 20–26, O. 71–73) and on Winterton Shoal (O. 74) a larger class of fish prevailed, but their numbers were never so great as on the eastern side (O. 8 and 9), where, however, as we have already seen, the smaller immature fish were present in still greater numbers. In only one case, in the Eastern Deep Water during November (O. 122), did we find mature Plaice forming the chief part of the catch. In this instance the dominant size-group consisted of Plaice from 30–34 cm. (12–13 inches), and there was a considerable admixture of still larger fishes up to 45 cm. (18 inches) in length.

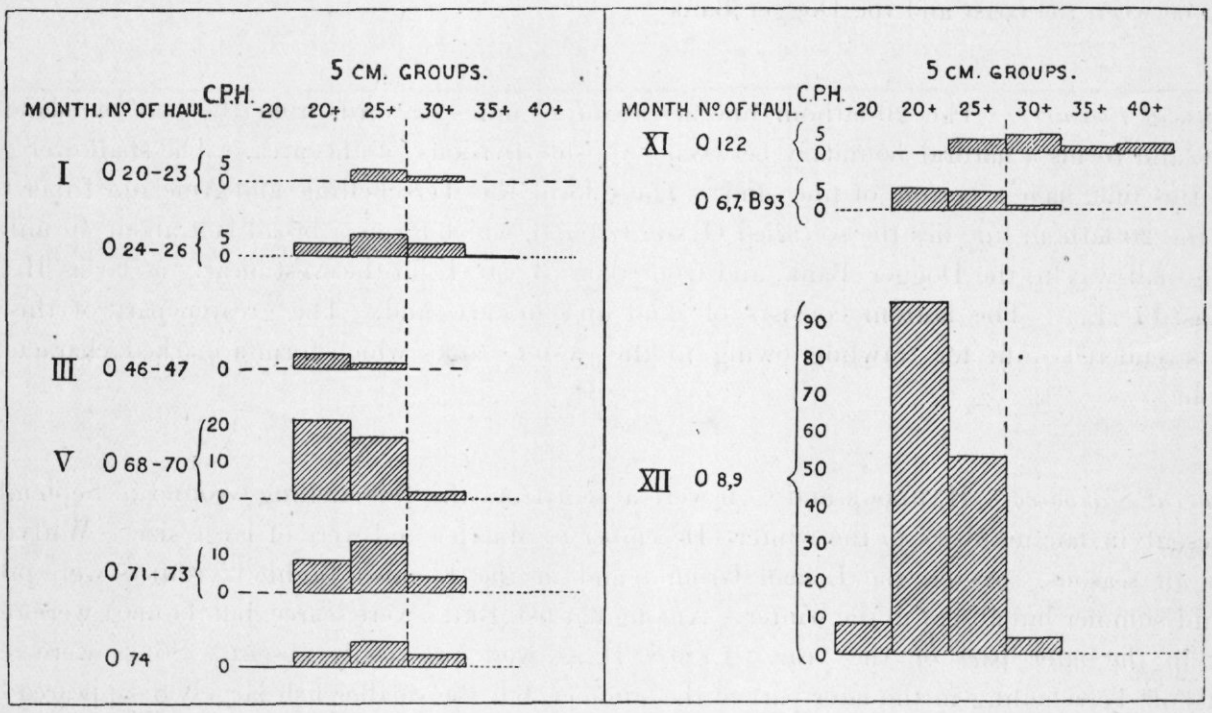

FIG. 4, illustrating Table 10 (Flemish Bight).
C.P.H. = Catch per Hour.

It would thus appear that the whole area is characterised by a predominance of small Plaice, which rarely exceed 34 cm. (13 inches) in length. Large fishes exceeding this size appear to be irregularly scattered over the whole of the area, but more especially in the deep water, during the winter months, but do not appear to form any very localised accumulations during the spawning season. The largest fish obtained within the area during 1903 measured 63 cm. (25 inches) and was caught in the deep water

during January. It must remain for later investigations to show whether these large Plaice from 40 cm. (16 inches) and upwards reside permanently within the area, or whether, as various indications appear to suggest, they are merely winter visitors, forming part of the southward migration from the northern grounds in autumn, which is indicated by the marking experiments, and retiring northwards again on the approach of spring.

The most southern part of this area, near the Straits of Dover, was not investigated during 1903; but trawling investigations during November, 1904, near the Sandettie Bank, have shown that a definite spawning ground undoubtedly exists in this region. The Plaice were not large, and were mostly below 40 cm. (16 inches) in length; but the abundance of those above 30 cm. (12 inches) in length (exceeding an average of 50 per hour) strongly suggests the existence of a tendency on the part of the smaller mature fishes in this area to accumulate during the early part of the spawning season in the most southerly portion of the Flemish Bight.

Area VI. Terschelling Grounds.

This area lies off the north coast of Holland, and embraces the area between Botney Gut and the Black Bank on the west and Borkum Reef on the east. The observations extend from the Dutch coast to about half-way between the coast and the Dogger Bank.

Physical Features.—The 20-fathom line lies about 25 miles seawards from the belt of islands along the coast, and forms a natural boundary between two sub-divisions of the area. The shallower grounds, south of this line, have a bottom of fine sand. These form the Terschelling and Ameland Inner Ground. Beyond the 20-fathom line lies the so-called Oyster Ground, which forms a broad belt about 40 miles wide, extending half-way to the Dogger Bank, and from about 3° 50′ E. in the west nearly as far as Heligoland in the East (7° E.). The bottom consists of mud and muddy sand. The greater part of this Oyster Ground is rendered unfit for trawling owing to the oyster banks which form a marked characteristic of the region.

General Summary.—Haddock and Cod were absent from the Terschelling Ground in September, but were present in fair numbers in the winter (December to March) and were of large size. Whiting were taken at all seasons. As on the Leman Ground and in the Flemish Bight, Latchets were present in spring and summer but absent in the winter. Among flat fish Brill were scarce, but Turbot were relatively frequent in the later part of the year. Lemon Dabs were practically absent. Soles were relatively numerous off Terschelling in the later part of the summer, but the smaller fish largely disappeared between September and December. Dabs were generally present. In September they were taken in considerable numbers off Terschelling, but, like the Plaice and small Soles, they had almost entirely disappeared by December. Thornback Rays (*Raia clavata*) were generally present, but Skate (*Raia batis*) were absent.

Plaice.—The following table provides a summary of the catches of Plaice made in this region at the successive periods of the year. It will be observed that on the inner grounds with a sandy bottom the catch of Plaice was generally very high, largely due to the great abundance of small Plaice in this area

On the other hand, in the deeper water of the Terschelling Outer Grounds and the Oyster Ground, Plaice were never obtained in large numbers, and those that were found were generally of large size.

TABLE 11, showing the catch per hour of Plaice on the Terschelling Grounds (Area VI.).

Month.	Ground.	Hauls.	Hours.	Total Catch.	Catch per Hour.									Weight per Hour. (Kilos.)
					Below 20	20+	25+	30+	35+	40+	45+	50+	Total.	
I.	Oyster, S.W.	O. 19	3	14	0·7	1·7	1·7	0·3	...	0·3	...	...	5	[0·9]
III.	New Zealand	O. 27	5½	51	0·5	2·2	2·4	1·6	2	0·4	...	0·2	9	[2·9]
	Oyster, W. and N.W. ...	O. 28, 29	8	42	0·4	1·1	0·7	0·5	1	0·6	0·4	0·5	5	[2·5]
	New Zealand, and Oyster, N.W.	O. 27–29	13½	93	0·4	1·6	1·4	1	1·4	0·5	0·2	0·4	7	[2·7]
V.	Terschelling	B. 1	1	373	368	4	1	...	...	...	...	...	373	14·5
IX.	Terschelling	O. 104–106	10½	1,758	61	52	32	20	2·7	0·2	...	...	167	22·8
	Vlieland	O. 115–117	8	398	9	19	11	7	2·9	0·5	0·1	...	50	[9·1]
	North of New Zealand ...	O. 114	4	71	...	0·5	10	3	1	0·7	1·2	0·5	18	7·0
XI.	West of Borkum L.V. ...	O. 3	2	511	40	174	35	5	...	...	...	...	255	[30·6]
	Ameland	O. 5	5	2,146	153	227	44	5	0·4	...	...	...	429	[47·2]
XII.	Ameland	B. 97, 98	4	34	1·2	4	3	0·5	...	...	...	...	8	[1·2]
	„	O. 10	4	50	1	2·2	6	3	...	...	...	...	13	[3·1]
	„	O. 11–13	3½	763	83	95	31	7	0·3	...	...	...	218	[23·2]
	Oyster, S.W.	O. 17, 18	5¾	24	...	...	0·5	1·4	0·9	0·9	0·3	0·2	4	[2·7]
	Terschelling	O. 141	5	30	...	...	1·4	0·2	1·4	1·6	0·6	0·8	6	5·6
	„	O. 128, 134, 135 ...	15½	191	0·3	2	3·7	3·4	2·4	1	0·3	0·2	12	5·0
	„	O. 129–133, 136–140, 142–145.	70½	562	0·01	0·4	1·2	1·9	2	1·5	0·6	0·3	8	[5·2]
	„	O. 128–145	91	783	0·07	0·7	1·7	2·1	1·9	1·3	0·5	0·3	9	5·2
	New Zealand	O. 127	7	58	...	1·6	2·9	0·4	1·6	0·7	1	0·1	8	4·0

The records show that a considerable change in the distribution of Plaice took place on these grounds between September and December. Off Terschelling in September the trawl brought up large numbers of Plaice, mostly of small size, which appear to have been still on their offshore migration, and to have been spreading mainly in a north-westerly direction (O. 104–106, 114–117). The observations at stations O. 115–117 showed an average catch of 50 fish per hour, of which the greater number were between 20 and 30 cm. (8 to 12 inches) in length. On the same spot in December (O. 128–145) the large number of hauls which were then made showed that the small Plaice had almost entirely disappeared, and that a different class of large Plaice, which had previously been absent, had made its appearance.

In the accompanying diagram the changes described are shown by means of curves, which represent the catch per hour of the various size-groups of Plaice at three groups of stations off Terschelling. The interrupted curves represent the frequencies of the various size-groups at two groups of stations in September, and the unbroken curve the frequencies observed in December. There can be no doubt that the small fish had emigrated from the region, and that a new population of large mature fish had arrived in the interval between the two months specified. These results should be considered in the light of the marking experiments which were made in September at the same stations

(experiments 24, 25, 27, 28, pp. 25, 26). Those experiments render it probable that the greater number of Plaice present in September migrated southwards shortly afterwards. There is no experimental evidence as to the source of the large Plaice which were found there in December ; but their size renders it probable that they were of northern origin.

The changes in the distribution of Cod, Haddock and other fishes, which took place at the same time, and have been briefly indicated above, tend to show that the southward movement indicated by the marking experiments on Plaice was widely shared by all classes of fish at this season in this locality. The arrival of Haddock between September and December could only be attributed to the effects of a southward migration, since this fish is never found in the Flemish Bight in appreciable numbers.

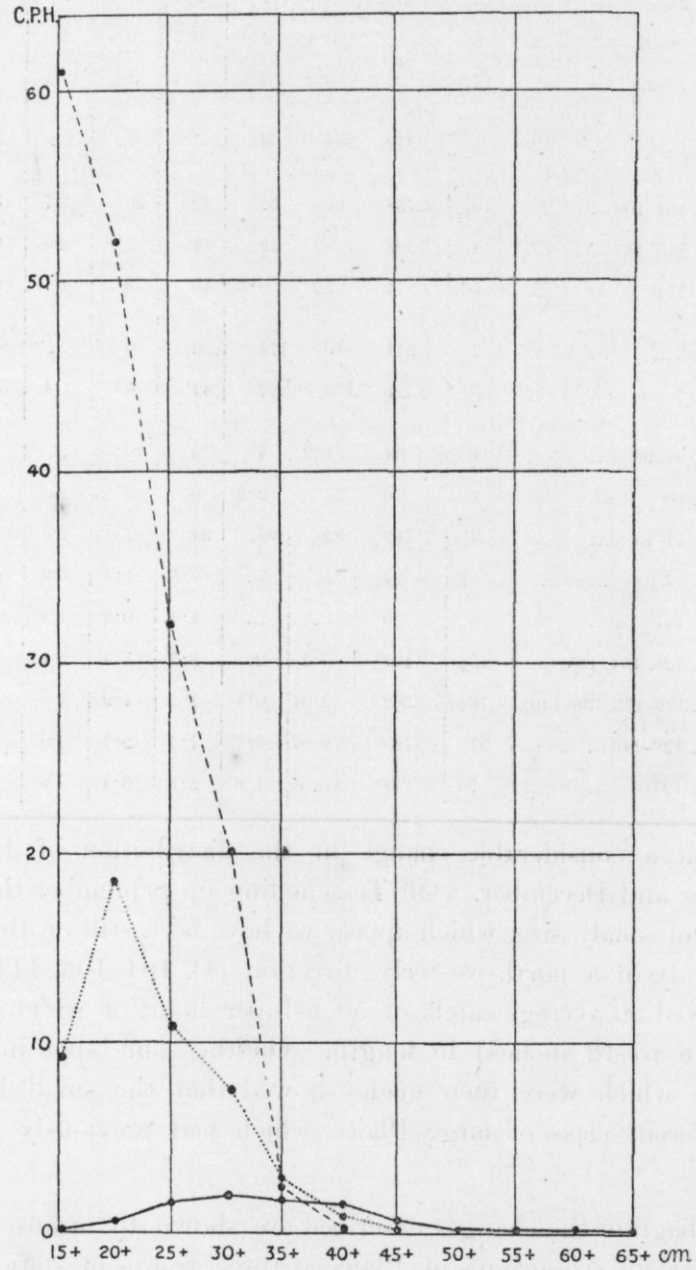

FIG. 5, showing the Catch per Hour of Plaice of different sizes off Terschelling in September and December, 1903.
(C.P.H. = Catch per Hour.)

In same locality { Dotted line O. 115–117 } September.
{ Broken „ O. 104–106 }
{ Unbroken „ O. 128–145 ... December.

The second and third series of hauls were taken in the same locality ; the first was further offshore.

These observations are in agreement with Dr. Redeke's conclusions,* based on statistical data, from which it appears that a marked decrease in the fishermen's catches of Haddock on the Dogger Bank in November, 1903, was accompanied by a simultaneous increase in the average catch in Clay Deep, and followed immediately by a considerable increase in the catches of the fishermen on the Terschelling grounds in December aud January.

Area VII. Eastern Grounds. Deep Water.

Our observations in 1903 in this area are chiefly of interest as indicating the character of the changes which take place in the distribution and sizes of fish on the offshore grounds between spring and autumn. Two areas were examined, one in the deep water near Heligoland in May and September, and another on the Horn Reef Outer Grounds at the same periods. In addition to the latter a haul was taken off the S.E. edge of the Tail End of the Dogger in June. The investigations off Heligoland consisted of single hauls on both occasions ; the results, therefore, can only be taken as rough indications of the seasonal differences in general.

General Summary.—(I.) Heligoland. Cod and Whiting were present, and Haddock were abundant, in the May haul ; all three species were absent in September. Latchets, on the other hand, were taken on both occasions, the frequency being greater in September than in May (5·2 per hour). Soles, Turbot and Brill were all absent in the May haul, but were present in fair numbers in September (4, 6 and 2 per hour respectively). The larger Dabs, exceeding 20 cm., were about equally numerous on each occasion, but small Dabs showed a large increase in September (from 79 per hour in May to 388 in September). A few Lemon Dabs were taken on each occasion.

(II.) Horn Reef Outer Ground. Cod were present in moderate numbers in spring, scarcer in September. Haddock were plentiful in both seasons, small fish markedly predominating in the spring hauls, and large fish in September. This difference, however, may be attributable in part to the employment of the beam trawl in June, and the otter in September. Whiting were present in fair numbers on both occasions. Latchets were absent. Soles and Brill were quite absent in June, but present in each haul, though scarce, in September. Turbot were infrequent on both occasions. Dabs, mostly small, were present at each season, but were far more abundant in June than in September, thus differing remarkably from the Plaice in this respect. Lemon Dabs were scantily taken on each occasion.

(III.) The haul off the S.E. edge of the Tail End of the Dogger in June yielded results which were generally similar to those on the Horn Reef Outer Grounds at the same time, with a few exceptions. Haddock were even more plentiful, and the average size both of Haddock and Cod was slightly greater.† Whiting, on the other hand, were absent. Dabs were much less plentiful, but their average size was greater, owing chiefly to the scarcity of small fish (below 20 cm.), which formed the chief part of the catch on the Horn Reef Outer Grounds.

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* H. C. Redeke. Vangstatistieken van Hollandsche Stoomtrawlers, 1903–1904. *Mededeelingen over Visscherij, XI., 1904.*

† These features are probably attributable mainly to the use of the Otter Trawl, instead of the Beam Trawl, on this occasion.

Plaice.—The following Table shows the catch per hour of the various size-groups of Plaice on the stations investigated in the spring and late autumn respectively :—

TABLE 12, showing the catch per hour of Plaice on the Eastern Offshore Grounds (Area VII.).

Ground.	Month.	Reference Number of Hauls.	Hours.	Total caught.	Catch per Hour.									Weight per Hour (Kilos.).
					Size-groups.—Centimetres.								Total.	
					Below 20	20+	25+	30+	35+	40+	45+	50+		
West of Heligoland... ...	V.	O. 80 ...	1½	119	2	28	33	17	...	...	...	...	79	16·0
,, ,, ...	IX.	O. 110 ...	3	2,230	558	132	45	7	1·7	...	...	...	743	61·0
Horn Reef Outer Grounds...	VI.	B. 8, 9, 10...	7	31	...	0·1	0·6	1·6	1·6	0·4	...	0·1	4	[1·8]
S.E. of Dogger Tail... ...	,,	O. 81 ...	1	13	...	...	1	4	6	2	..	...	13	7·25
Horn Reef Outer Grounds...	IX.	O. 111–113	13	1,288	0·2	10	53	26	8	0·9	0·2	0·8	99	[31·4]

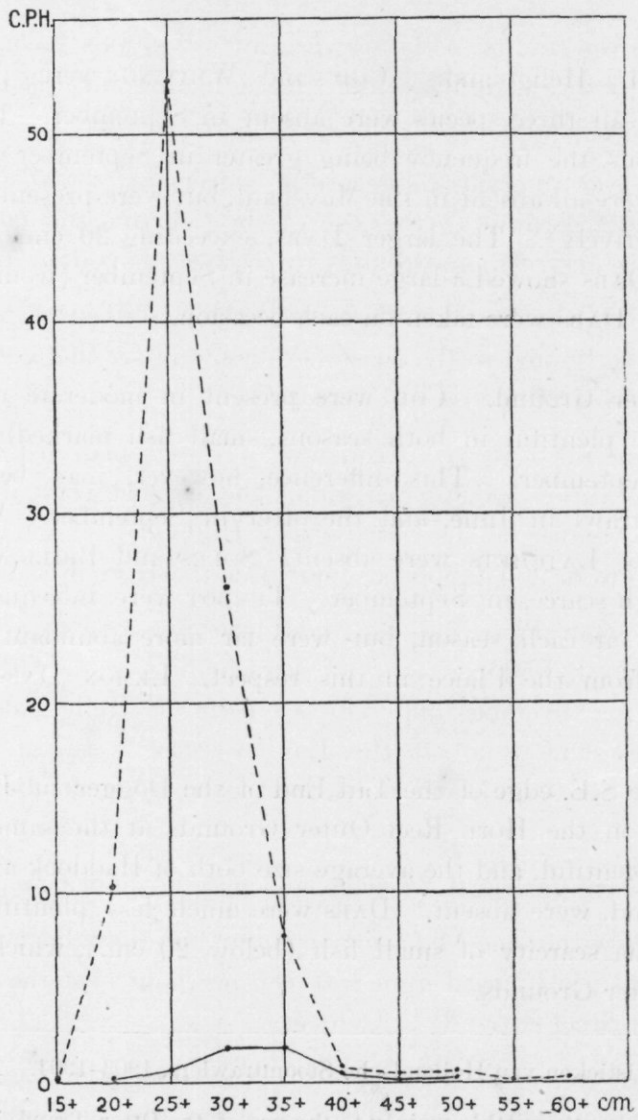

FIG. 6, showing the Catch per Hour of Plaice of different sizes on the Horn Reef Outer Grounds in June and September

Unbroken line B. 8, 9, 10 .. June.
Broken „ O. 111–113 ... September.

Off Heligoland in May the catch of Plaice per hour amounted to 79; in September in the same locality to more than 700. This large increase was chiefly due, as may be seen from the Table, to the great numbers of small Plaice below 25 cm. (10 inches) which were taken on the second occasion.

On the Horn Reef Outer Ground at the beginning of June the average catch of Plaice for seven hours' fishing was only four per hour, although the ground rope was specially weighted. In September in the same locality the catch per hour amounted to 99. There was an increase in the abundance of all sizes of fish, but the greater portion of the large catch in the autumn was made up of immature fish. The dominant sizes in September, as shown by the detailed table of measurements (Table VI., p. 130), ranged from 25 to 32 cm. (10 to 12½ inches). The difference between the two catches is shown graphically in the accompanying diagram by means of curves, which represent the catch per hour of the various size-groups on each occasion.

III.—SUMMARY OF OBSERVATIONS ON THE DISTRIBUTION OF PLAICE ACCORDING TO SIZE.

In the preceding section the results of the trawling investigations have been discussed on a primarily geographical basis, in order to throw light on the distinguishing features of the various fishing grounds, and on the changes which they exhibit at different seasons of the year.

In the present section the observations recorded concerning the distribution of Plaice have been classified in the first instance according to the size of the fish, and the data concerning the abundance of each size-group on the inshore and offshore grounds respectively have then been summarised.

(1.) Plaice below 20 cm. (8 inches) in length may be described as the smallest class of immature fish. They were found to be limited to the coastal waters, and for the most part to the zone between the coast line and the contour line of 20 metres (11 fathoms).

Within the zone defined the observed frequency of these small fish never exceeded an average of 65 per hour in any of the localities investigated along the English coast during the summer months, but exceeded 200 per hour in November off the west coast of Holland, 180 per hour on the Amrum Ground in September, and amounted to from 900–2,500 per hour near the Horn Reef in May.

Large catches of these small Plaice outside the 11-fathom zone were only made off the Dutch coast and on the Eastern Grounds, *e.g.*, 350 per hour off Terschelling in 14 fathoms in May, 150 per hour off Ameland in 15–18 fathoms in November, and 550 per hour off Heligoland in 20 fathoms in September. The highest catches in the same zone off the English coast were on the North Leman Ground in 10–13 fathoms in April (4 per hour), and north-west of the Leman Bank in 18–20 fathoms in July (5 per hour).

(2.) Plaice from 20–24 cm. in length (8–9 inches) may be described as small immature fish.

On the inshore grounds within the 11-fathom contour line they did not exceed a frequency of 25 per hour along the English coast, but varied from 150–780 per hour near the Danish coast in May, and from 35–65 per hour on the Horn Reef Grounds in October.

Outside this zone small immature Plaice of this size along the English coast exceeded an average frequency of 10 per hour only on the Leman Ground, where the maximum observed was 18 per hour in April, and 16 per hour in July. On the Leman Banks, which lie between this ground and the Norfolk coast, the average frequency in July was not more than three or four per hour. On the other hand,

Plaice of this size were far more plentiful off the Continental coasts, *e.g.*, over 75 per hour in July on the Brown Bank, midway between the Leman Ground and the Dutch coast; 140 per hour on the Texel Ground at the same time; 170–220 per hour off Ameland in November; 95 per hour on the Broad Fourteens in December, forming more than half the total catch in each of the localities mentioned; 50 per hour off Terschelling, and 130 per hour off Heligoland in September. On the Dogger Bank, Plaice of this size and under were practically absent from the catches at all seasons.

(3.) Plaice from 25 to 29 cm. in length (10–11¾ inches) may be described in general as medium immature fish.

They were altogether absent from many of the catches made on the English inshore grounds. Their recorded frequency within the 11-fathom zone was highest off Saltfleet, south of the Humber (five per hour), and off Aldeburgh, Suffolk (10 per hour). Their numbers inshore were also small and irregular off the Dutch coasts (*nil* to four per hour), though the observations in this region were limited to the winter months (November and December). Near the Danish coasts they were very abundant in May (44 to 169 per hour), but scarce in October (one to three per hour).

On the outer coastal grounds, exceeding 11 fathoms in depth, immature Plaice of this size composed numerically an important part of the catch in many localities, especially on the Leman Ground and in the central parts of the Flemish Bight, where they formed half or more of the total catch of Plaice. This dominance of relatively small Plaice over the whole of the southern part of the North Sea, south of latitude 53° 30′ N., is a feature of considerable importance, since it shows that the extensive capture of small Plaice is a necessary concomitant of trawl fishing in this region, and cannot be avoided without involving the cessation of trawling altogether. The observed frequency of this size-group on the Leman Ground in summer was about 30 per hour (15 to 39), the total catch of all sizes being about 55 (32 to 66). In the deep water of the Flemish Bight the highest average frequency was 13 per hour out of a total of 25 per hour (in May). Midway between the Leman Ground and the Dutch coast frequencies were recorded of 22 per hour on the Brown Bank (total per hour, 123) in July, and 23 per hour on the Black Bank (total per hour, 71) in September. Other catches in proximity to the Dutch coasts yielded from 32 to 52 per hour between September and December (totals per hour, 160 to 430, mostly small fish).

On the Eastern Grounds our records showed similar frequencies in spring and autumn on the Inner Grounds near Heligoland and the Horn Reef (30–45 per hour). On the Outer Grounds off Horn Reef Plaice of this size were scarce in the spring, but abundant in autumn (53 per hour), at which season they formed the dominant size-group on these grounds.

(4.) Plaice from 30–34 cm. in length (12-13¾ inches) may be described in general as large immature fish, so far as the greater part of the North Sea, north of 53°, is concerned. In the Flemish Bight, on the other hand, as well as in the English Channel, the majority of Plaice are already mature at the size mentioned, and should be described as small mature fish.

On the inshore grounds, Plaice of this size were taken in appreciable numbers only on the Eastern Grounds, the maximum frequency observed being six per hour off the Vyl lightship and four per hour off Amrum, both in spring.

On the offshore grounds, they formed the dominant size-group on the Dogger Bank, their numbers constituting from a third to a half of the total catch at all seasons, and attaining a maximum average frequency of about 11 per hour in autumn. They also formed the dominant group in the Great Silver Pit (1·5 per hour), in Markham's Hole (24 per hour), and on the west part of Botney Ground (eight per hour), in March and April. On the Leman Ground they were constantly present at all seasons, though

considerably outnumbered by smaller fish. Their frequency attained its maximum during the summer months (8 to 17 per hour).

In autumn they were fairly plentiful on the outer grounds off the north-west coast of Holland (Black Bank and Terschelling Grounds—7 to 20 per hour), as well as on the Horn Reef Outer Grounds (26 per hour), though mixed with still larger numbers of smaller fish in each locality.

(5.) Plaice of 35 cm. (14 inches) and upwards may be described in general terms as mature fish.

With insignificant exceptions they were not taken within the inshore waters of less than 11 fathoms depth.

They were found to form two-thirds of the catch or more only on the north part of the Dogger Bank (in March), and along the deeper north-western slopes of the Bank (in June and July). Their numbers, however, were always small (three to six per hour).

They formed about half the total catch in parts of the deep water north of Flamborough Head (two or three per hour), on the south part of the Dogger Bank in spring (maximum, six per hour), and in autumn (14 per hour), on the Terschelling Grounds and Oyster Bank in winter (two or three per hour), and on the Horn Reef Outer Grounds in spring, increasing in numbers towards the Tail of the Dogger (two to eight per hour.)

On the Leman Ground they were generally present in small numbers (two to four per hour, becoming scarcer in winter), but in the Flemish Bight they were always scarce.

The only evidence observed during the year of any special local accumulations of these mature fishes during the spawning season was yielded by a single haul in Markham's Hole in March, when their numbers reached an average of 17 per hour.

IV.—APPENDIX A.

DIMENSIONS OF THE NETS USED IN THE TRAWLING EXPERIMENTS CARRIED OUT BY THE SS. *Huxley* DURING 1902–3.

In the following description the word "top" applies to the end of the net which is at the top during hauling and corresponds to the front of the net during towing.

For diagram illustrating the construction of the otter trawl, *see* Kyle, "Fishing Nets, with Special References to the Otter Trawl," *Journal of the Marine Biological Association*, Vol. VI., No. 4, 1903, p. 562.

The dimensions of the meshes given below represent in all cases one-tenth of the dimensions of ten adjacent meshes. (W. G.)

Otter Trawl.

LENGTH OF GROUND ROPE.—125 feet. The ground-rope has a wire core, without chain.

„ HEADLINE.—86 feet.

DIMENSIONS OF OTTER BOARDS.—Length, 8 feet; height, 4 feet 3 inches; thickness, 2½ inches.

TOP WINGS.—Length, 30 feet; each 90 meshes wide at junction with square, braided down to 10 meshes at top end.
Size of Mesh.—Open, 2·9 inches (7·4 cm.) along each side; taut, 5·6 inches (14·2 cm.) diagonally.

BOTTOM WINGS.—Length, 63 feet, 200 meshes; depth, 55 meshes below, reduced to 45 at top end.
Size of Mesh.—Open, 2·9 inches (7·4 cm.); taut, 5·6 inches (14·2 cm.).

SQUARE.—Length, 30 feet ; 270 meshes across at top braided down to 200 at bottom.

Size of Mesh.—Upper part, open, 3·0 inches (7·6 cm) ; taut, 5·7 inches (14·5 cm.) ; lower part, open, 2·8 inches (7·1 cm.) ; taut, 5·3 inches (13·4 cm.).

BELLY AND BATINGS.—This part of the net commences with 200 meshes and is bated down to 60 meshes, double twine being used for the lower part less than 90 meshes wide.

Size of Mesh.—Upper part, open, 2·5 inches (6·3 cm.) ; taut, 5·1 inches (12·9 cm.).
Middle „ „ 2·3 „ (5·9 cm.) ; „ 4·3 „ (11·0 cm.).
Lower „ „ 1·6 „ (4·1 cm.) ; „ 3·2 „ (8·2 cm.).

COD END.—Length, 16 feet. This part is made entirely of double twine, and is 60 meshes across throughout.

Size of Mesh.—Open, 1·4 inch (3·5 cm.) ; taut, 2·7 inches (6·8 cm.)

Beam Trawl.

LENGTH OF BEAM.—43 feet between the heads.

LENGTH OF GROUND ROPE.—80 feet.

WINGS.—

Size of Mesh.—Open, 2·2 inches (5·6 cm.) ; taut, 4·2 inches (10·6 cm.).

SQUARE.—

Size of Mesh.—Open, 2·2 inches (5·6 cm.) ; taut, 5·1 inches (12·9 cm.).

BELLY AND BATINGS.—

Size of Mesh.—Top part, open, 2·1 inches (5·3 cm.) ; taut, 4·1 inches (10·3 cm.).
Middle part, open, 1·5 inch (3·8 cm.) ; taut, 2·9 inches (7·4 cm.).
Lower part, open, 1·5 inch (3·8 cm.) ; taut, 2·8 inches (7·2 cm.).

COD END.—

Size of Mesh.—Open, 1·1 inch (2·8 cm.) ; taut, 2·5 inches (6·3 cm.).

(Signed) H. H. CASPERSEN,
Master, ss. *Huxley*.

IV.—APPENDIX B.

Measurements of Flat Fish caught with Small Trawls in the Wash District, August, 1903.

Voyage.	Station.	Date.	Locality.	Gear.	Species.	Hour Shot.	Duration (hours).	Centimetres. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	40	60	Total measured.	Net weight (kilos.)
XVIII	4	12/8/03	Near Mablethorpe, ⅛ m. from shore.	Shrimp Trawl.	Plaice ..	2.30 p.m.	2	..	..	25	106	109	68	20	12	22	33	40	40	33	56	55	48	31	12	7	5	4	3	1	..	..	..	..	..	..	..	..	..	..	730	12½
					Dabs ..	..	..	..	7	93	14	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	116	..
					Soles ..	..	..	..	..	2	5	1	..	..	..	1	7	21	10	6	2	2	9	14	11	17	26	20	20	24	14	5	..	3	..	1	1	1	..	..	..	223	15
					Flounders	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	1	..	..	..	..	3	..
					Thornback	..	..	..	..	..	..	..	..	..	..	..	1	4	23	5	..	..	..	..	..	..	..	..	5	8	2	1	..	1	..	1	..	..	..	..	..	51	4½
	5	..	Skegness, ¾ m. from shore.	do.	Plaice ..	8.55 a.m.	1½	..	..	1	32	104	83	34	37	18	15	6	2	1	3	2	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	340	..
					Dabs ..	..	..	..	6	32	6	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	45	..
					Soles ..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	5	..	3	1	1	2	2	..	..	..	..	1	..	..	..	19	..
					Turbot ..	..	..	..	..	..	..	..	..	.	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..
					Thornback	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	3	..
					Homelyn Ray	..	..	..	..	..	..	..	..	..	4	3	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	..
	6	..	Boston Deeps, ½ m. from shore.	do.	Plaice ..	2.50 p.m.	1	..	..	1	7	54	109	44	23	37	36	14	12	5	..	4	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	347	..
					Dabs ..	..	..	..	..	3	8	5	1	2	12	11	10	4	3	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	61	..
					Sole ..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..
					Flounder ..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	2	..
					Thornback	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	5	4½
	7	..	E. of Friskney Flats (1 fm.).	Agassiz Trawl.	Plaice ..	..	¾	..	..	10	57	70	38	14	5	3	4	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	206	..
					Sole ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..
					Dabs ..	..	..	..	..	6	4	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	..
	8	..	Off Friskney Flats.	Trollopers.	Plaice ..	..	..	1	61	87	13	7	5	..	2	2	3	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	184	..
					Dabs ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..
					Sole ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..
..	..	..	All hauls combined.	..	Plaice ..	..	..	1	61	124	215	344	303	112	79	82	91	67	54	39	59	61	48	33	12	7	6	4	3	1	..	..	..	1	..	..	..	..	..	..	1,807	..

V.—SYNOPTIC TABLE OF RESULTS CONCERNING THE SIZE AND

Area I.—

Haul.	Ground.	Month.	Depth (Fms.).	Bottom.	Hours.	Plaice.				Dab.		
						Catch per Hour. Cm.		§ Average Size (cm.).	Per cent. below 20 cm.	Catch per Hour. Cm.		§ Average Size (cm.).
						< 30	30+			< 20	20+	
	A.—English Coast (arranged from North to South).											
B 19	Bridlington Bay... ...	VI	10, 12	c.s., ross.	1	...	...	...	...	...	...	...
B 20	„	„	10, 13	c.s., ross.	4	+	*1*	**32*	—	—	+	—
B 21	„	„	7, 9	f.s.	1¾	63	—	19	65	24	11	18
B 32	„	VII	5, 9	f.s.	1	26	—	20	38	8	6	20
B 71	„	VIII	7, 7, 8	f.s.	2	31	—	19	66	17	2	17
B 66	Saltfleet	„	8, 8	c.s.	2	98	1	19	69	53	6	17
B 67	„	„	8, 8	c.s.	2	95	1	19	63	53	15	18
B 73	„	„	10 to 5	m., s., grv.	2	74	1	18	76	66	14	18
...	(Combined)	„	5–10	...	6	89	1	19	69	57	12	17
B 74	Saltfleet	„	5, 8	c.s., f.s.	2	*8*	+	*17*	*83*	*8*	*2*	*18*
B 22	Inner Dowsing	VI	16, 14	c.s., sh.	1	1	—	—	—	—	1	—
B 33	„	VII	12, 11	f.s.	3½	2	—	20	67	—	—	—
B 34	„	„	12, 11	f.s., c.s.	½	*—	—	—	—	*2*	*24*	*25*
B 75	„	VIII	13, 14	c.s.	1½	**1*	—	—	*100*	*1*	*3*	*23*
B 68	The Wash	„	14, 14	s.	2	32	—	17	78	2	+	16
B 69	„	„	10, 9	c.s., sh.	2	13	—	19	54	17	—	12
B 70	... ...	„	9, 13	c.s., grv., sh.	1½	7	—	18	82	6	—	13
...	(Combined)	„	9–14	...	5½	18	—	18	72	8	+	13
B 65	Blakeney	„	10, 10	c.s.	2	15	—	19	58	6	5	19
B 76	„	„	10–10	s.sh.	2	17	—	19	62	2	4	20
...	(Combined)	„	10–17	...	4	16	—	19	60	4	5	20
B 39	Southwold	VII	11–14	c.s.	2½	—	—	—	—	—	—	—
B 40	„	„	9, 9	sharp s., stones	½	2	—	—	—	4	—	—
B 41	Aldeburgh	„	12, 13	m., f.s.	1	—	—	—	—	—	—	—
B 42	„	„	10, 13	m., s.	3	32	1	23	6	—	2	27
B 92	Margate	XI	10, 10	f.g.s.	¾	—	1	—	—	7	4	18

§ Throughout this table the Average Sizes have been obtained from the calculated averages (of p. 123) and rounded after application of a correction of +0·5 cm. in each case (see p. 77).

FREQUENCY OF SIX CHIEF FOOD FISHES, FOR EACH HAUL OF THE TRAWL.

Inshore Grounds.

Sole.				Cod.				Haddock.			Whiting.			Remarks.
Catch per Hour.		§		Catch per Hour.			§	Catch per Hour.		§	Catch per Hour.		§	
Cm.		Average Size. (cm.)	Per cent. below 20 cm.	Cm.			Average Size. (cm.)	Cm.		Average Size. (cm.)	Cm.		Average Size. (cm.)	
< 30	30+			< 30	30-59	60+		< 30	30+		< 20	20+		
...	...	...	...	...	...	...	...	...	...	...	...	..	...	No fish caught.
—	—	—	—	*1*	*3*	+	*38**	...	...	...	—	—	—	Ground-rope parted; net badly torn.
1	—	—	...	—	—	—	...	...	...	...	1	1	—	
5	2	31	...	—	—	—	—	...	...	...	—	—	—	[Net torn].†
—	—	—	—	—	—	—	—	—	—	—	—	—	—	
6	1	24	8	5	—	—	22	...	...	...	—	1	—	
16	2	26	—	—	—	—	—	—	—	—	—	—	—	
14	1	25	—	+	—	—	...	...	...	...	—	1	—	
12	1	25	1	2	—	—	22	...	...	...	—	1	21	B 66 + 67 + 73.
8	**1*	*25*	*6*	*1*	—	—	**24*	...	...	...	—	+	—	Hole through cod-end.
30	3	24	3	2	—	2	42	...	...	...	2	—	—	
17	1	25	3	—	—	—	...	...	...	...	—	—	—	
8	—	**26*	—	—	—	—	...	...	...	...	—	—	—	Belly torn.
5	—	**25*	—	—	*1*	—	...	...	...	...	—	—	—	Cod end split.
22	7	26	5	+	—	—	...	...	...	...	+	—	—	
9	1	22	33	2	—	—	11	...	...	...	—	1	—	
5	1	26	11	1	—	—	—	...	...	...	9	3	19	
12	3	25	12	1	—	—	12	...	...	...	3	1	20	B 68 + 69 + 70.
11	—	25	—	2	—	—	26	...	...	...	—	1	—	
3	1	24	—	—	—	—	—	...	...	...	—	—	—	
7	+	25	—	1	—	—	26	—	—	—	—	+	—	B 65 + 76.
4	+	25	—	...	—	—	—	—	...	...	—	—	—	
14	2	23	12	—	—	—	—	...	...	...	—	—	—	
6	—	24	17	—	—	—	—	...	...	...	—	—	—	
26	+	23	20	—	—	—	—	...	...	...	—	—	—	
4	5	33	—	—	1	—	...	...	...	...	—	—	—	[Net torn.]†

* Throughout this table *italics* signify that the catch of the net appears to have been affected by the accidents recorded under "Remarks."
† Accidents recorded in brackets appear not to have materially affected the catch.

AREA I.—

Haul.	Ground.	Month.	Depth (Fms.).	Bottom.	Hours.	Plaice.				Dab.		
						Catch per Hour. Cm.		Average Size (cm.).	Per cent. below 20 cm.	Catch per Hour. Cm.		Average Size (cm.).
						< 30	30+			< 20	20+	
	B.—DUTCH COAST.											
B 94	Egmond	XI	8, 9	c. & f.s.	4	219	1	15	97	870	287	18
B 95	„	XII	11, 10	f.g.s.	3	171	1	19	60	56	36	20
B 96	Ymuiden	„	10, 9	f.g.s.	3	159	1	18	73	117	74	19
O 4	Ameland	XI	9, 11	f.s.	1	*4*	*1*	*22*	*60*	*1*	*1*	—
B 97	„	XII	12, 9	f.g.s.	2	9	1	24	19	19	6	17
B 98	„	„	9, 12	f.g.s.	2	6	—	23	8	10		—
	C.—EASTERN GROUNDS.											
B 2	Amrum	V	9, 9, 9	f.g.s.	2	20	4	24	22	16	5	18
B 80	„	IX	10, 10	f.s.	2	217	3	17	82	191	23	16
B 81	„	„	10, 10	f.s.	2	227	4	18	81	236	35	17
...	(Combined)	...	10	...	4	222	4	18	82	214	28	16
O 107	Sylt, Inner	„	8, 8	f.d.s.	2	131	—	18	74	21	10	19
O 108	„	„	8, 7	f.d.s.	½	72	—	17	89	26	12	18
...	(Combined)	„	7–8	...	2½	120	—	18	76	22	10	19
O 109	Sylt, Inner	„	8, 9	f.d.s.	2	78	+	18	87	30	21	17
B 3	Graa Deep	V	8, 8	f.s.	1	3540	—	17	73	13½ kilos.		—
O 121	„	X	7, 7	f.s.	1¼	300	1	17	78	42	5	15
B 4	S. of Horn Reef	V	10, 10	f.s.	1	1822	—	16	88	25½ kilos.		—
B 5	N. of Horn Reef	„	7, 7	f.s.	1½	1172	2	18	82	5 kilos.		—
B 6	Off Vyl lightship ...	VI	11–12	f.d.s.	1	74	7	25	6	282	1	13
B 7	„ „ ...	„	13–13	f.l.s.	1	2	4	33	—	24	—	13
B 82	N. of Horn Reef	X	8, 9	f.s.	2	153	—	17	78	34	4	15
O 120	„ „	„	10, 7	f.s.	1 11/12	205	2	18	75	28	4	16

AREA II.—NORTH OF

O 50	Off Flamborough ...	IV	30, 30, 30	grv. & sh.	1	—	1	—	—	2	3	25
O 51	„ ...	„	32, 32, 34	c.s., m.	3½	+	+	—	—	*3*	*1*	*19*
O 53	Off Whitby	„	30–31	c.s., grv., f.s.	4	+	3	38	—	8	4	20
O 54	Off Hartlepool	„	33–34	f.d.s.	4	1	4	36	—	4	3	19
B 14	Off Shields	VI	27, 28	d.s.	1	1	13	26	7	57	2	16
B 15	„	„	43, 44	mud	2 1/12	—	—	—	—	+	1	27
B 16	Off Hartlepool	„	39, 35	mud	2½	—	+	—	—	—	1	—

INSHORE GROUNDS—*continued.*

Sole.				Cod.				Haddock.			Whiting.			Remarks.
Catch per Hour.		Average Size (cm.).	Per cent. below 20 cm.	Catch per Hour.			Average Size (cm.).	Catch per Hour.		Average Size (cm.).	Catch per Hour.		Average Size (cm.).	
Cm.				Cm.				Cm.			Cm.			
< 30	30+			< 30	30–59	60+		< 30	30+		< 20	20+		
—	—	—	...	—	—	—	—	...	...	...	4	28	25	
—	—	—	...	1	—	+	—	...	...	...	1	9	26	
—	—	—	—	—	—	—	—	...	...	...	3	6	22	
...	...	..	...	—	—	—	—	...	...	...	—	*2*	—	Foul haul; board capsized.
—	—	—	—	—	—	1	—	...	...	...	17	2	17	
—	—	—	—	—	—	—	—	...	...	...	5		...	
—	1	—	...	—	—	—	—	1	2	35	—	17	25	
2	—	—	...	2	—	—	27	...	...	...	3	+	18	
2	2	28	...	3	—	—	24	...	...	...	2	+	17	
2	1	28	...	3	—	—	25	—	—	—	2	+	18	B 80 + 81.
9	5	28	...	—	—	—	—	...	...	...	1	—	—	
2	4	—	...	—	—	—	—	...	...	...	2	—	—	
7	5	29	...	—	—	—	—	...	...	...	1	—	—	
—	—	—	...	—	—	—	—	...	...	...	—	—	—	
—	—	—	—	—	—	—	—	Few.		—	—	—	—	
1	—	—	...	—	—	—	—	...	...	...	65	2	15	
1	1	—	...	—	—	—	—	...	...	...	3	—	16	
3	2	32	...	—	—	—	—	...	...	...	17		—	
—	1	—	—	—	—	—	—	—	1	—	—	2	—	
—	—	—	—	1	...	...	—	1	—	—	—	1	—	
4	—	18	100	+	—	—	—	...	...	...	1	—	—	
1	+	—	—	+	—	—	—	...	...	...	7	+	17	

FLAMBOROUGH HEAD.

—	—	—	—	6	12	1	37	—	—	—	—	1	—	[Net split.]
—	*1*	*37*	—	*1*	*1*	+	*35*	—	+	—	*1*	*4*	*23*	Net split.
—	—	—	—	3	3	+	35	1	2	33	+	2	25	[Belly split.]
—	+	—	—	1	+	1	43	2	2	32	3	2	18	
—	—	—	—	5	2	—	22	32	2	22	17	4	18	[Net split.]
—	—	—	—	7	12	3	40	49	12	27	43	33	20	[Net badly split.]
—	—	—	—	2	3	2	47	38	3	26	127	86	19	

AREA II.—NORTH OF

Haul.	Ground.	Month.	Depth (Fms.).	Bottom.	Hours.	Plaice. Catch per Hour. Cm. < 30	Plaice. Catch per Hour. Cm. 30+	Plaice. Average Size (cm.).	Plaice. Per cent. below 20 cm.	Dab. Catch per Hour. Cm. < 20	Dab. Catch per Hour. Cm. 20+	Dab. Average Size (cm.).
B 17	Off Hartlepool	VI	30–39	m.s.	6	2	1	28	—	26	3	17
B 31	„	VII	32–30	f.d.s., c.s.	3	—	3	38	—	—	—	—
B 72	Off Flamborough ...	VIII	29, 30	f.s.	1½	—	3	33	—	18	1	16
O 118	Off Arbroath	IX	34–36	m.s.sh.	3¼	—	3	43	—	65	3	16

AREA III.—DOGGER BANK

	A.—NORTH PART.											
O 40	W. of Swashway ...	III	17–24	s. & sh.	10	+	10	38	—	—	1	28
O 41	Extreme N. of Dogger ...	„	24–26	f.s. & sh.	4½	+	5	36	—	—	2	25
O 42	„ „ ...	„	24–20	s. & clay & sh.	5 5/12	—	4	38	—	—	—	—
O 43	N. part of Dogger ...	„	20–17	s. & sh.	5	+	14	41	—	—	—	—
O 44	„ „ ...	„	17–17–17	s. & sh.	5½	+	10	37	—	—	—	—
O 45	„ „ ...	„	17–17–17	s. & sh.	5½	+	8	45	—	—	—	—
O 82	„ „ ...	VI	19–20	s. & sh.	2	—	+	—	—	1	2	20
O 83	N.W. of Dogger	„	21–24–27	f.s.	3	—	3	42	—	3	4	22
O 84	„	„	27–32–35	f.d.s.	6	—	3	43	—	15	3	18
O 85	S. of Brucey's Garden ...	VII	39–38–36	f.d.s.	7	—	3	41	—	—	—	—
O 86	„ „ ...	„	32–35	f.d.s.	5¾	+	6	43	—	—	—	—
	B.—SOUTH PART.											
O 35	Edge of Clay Deep ...	III	22–22–22	f.g.s.	2⅜	+	3	38	—	+	9	27
O 37	„ „ ...	„	23–23–23	f.g.s. & m.	4¼	2	3	31	—	—	9	26
O 38	„ „ ...	„	23–23–24	f.s. ooze	3⅝	2	5	31	—	4	19	24
O 39	„ ...	„	24–22–17	f.s., ooze, s. & sh.	3½	*2*	7	*33*	—	—	*3*	*27*
O 55	N. of W. Shoal	IV	13–13–12	f.g.s.	3	—	2	39	—	18	36	22
O 56	„	„	12–12–4	f.g.s.	4	—	—	—	—	+	*3*	*24*
O 57	„	„	14–14–16	f.g.s.	6	—	2	38	—	7	16	32
O 58	„	„	15–14–12	f.g.s.	5	1	3	34	11	21	35	22
O 59	Edge ef Clay Deep ...	„	19–21–22	f.g.s.	5¼	2	8	34	—	64	29	19
O 61	S.E. part of Bank ...	IV	16–16–14	f.s.	4	+	6	38	—	19	34	22
O 62	„ ..	„	14–14–15	f.g.s.	4	+	3	40	—	¼ Kilo.		—
...	(Combined) ...	„	14–15	...	8	+	5	39	—	[12	22]	22
O 60	Hospital	„	20–19–16	f.g.s.	5	1	14	36	—	89	44	19
O 63	W. of Hospital	„	15–15–17	f.g.s.	7	2	18	35	1	61	39	20
...	(Combined)	„	15–20	...	12	2	16	35	+	73	41	19
O 1	W. of Easternmost Shoal	XI	11–13	f.s. sh.	2¼	2	40	37	—	21	189	26
O 2	E. of „ „	„	17–19	f.s.	1½	—	5	40	—	26	60	22
O 34	Great Silver Pit	III	27–37	s. & m.	5¾	+	3	39	—	12	52	24

FLAMBOROUGH HEAD—*continued*.

Sole.				Cod.				Haddock.			Whiting.			
Catch per Hour.		Average Size (cm.).	Per cent. below 20 cm.	Catch per Hour.			Average Size (c.m.).	Catch per Hour.		Average Size (c.m.).	Catch per Hour.		Average Size (c.m.).	Remarks.
Cm.				Cm.				Cm.			Cm.			
<30	30+			<30	30–59	60+		<30	30+		<20	20+		
—	—	—	—	2	4	2	48	55	1	22	25	20	20	
—	+	—	—	—	Few		—	Few		—	Few		—	
1	1	—	—	4	1	—	27	4	1	28	—	3	24	
—	—	—	—	14	5	—	30	191	115	28	—	132	26	

AND GREAT SILVER PIT.

—	—	—	—	—	1	+	51	1	4	41	—	—	--	
—	—	—	—	—	3	—	39	—	3	45	—	—	—	
—	—	—	—	—	1	+	57	—	+	—	—	—	—	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	—	—	—	+	28	1	44	11	17	34	—	—	—	
—	—	—	—	+	2	+	42	—	—	—	—	—	—	
—	—	—	—	1	4	—	34	61	59	31	—	+	—	
—	—	—	—	1	6	1	45	12	34	38	—	+	—	[Net torn.]
—	—	—	—	3	3	+	35	87	29	29	—	—	—	[Net badly torn.]
—	—	—	—	+	—	—	—	1 Basket		—	—	—	—	
—	—	—	—	—	2	—	—	1 Basket		—	—	—	—	
+	+	—	—	—	—	—	—	½ Basket		—	—	—	—	
—	1	—	—	2	6	3	47	83	80	31	Few		—	
1	—	—	—	—	3	1	57	¼ Basket		—	—	1	35	
—	—	—	—	—	+	—	—	*1*	*2*	*32*	—	+	—	Net split.
—	—	—	—	2	30	2	43	—	4	40	1	11	23	
—	—	—	—	*1*	*21*	*3*	*44*	*1*	*17*	*35*	+	*4*	*26*	Ground rope parted, belly split.
—	—	—	—	1	24	2	44	7	102	35	—	8	26	
—	—	—	—	+	3	—	42	1	7	34	+	4	24	
—	+	—	—	1	4	1	44	54	38	30	+	6	28	
—	—	—	—	2	7	+	38	28	90	32	—	24	26	
+	—	—	—	3	4	+	36	25 Kilo.		—	10		—	
+	—	—	—	2	5	+	37	[24	77]	32	17		—	O. 61 + 62.
—	—	—	—	—	2	1	49	36	34	29	—	1	25	
+	—	—	—	1	2	+	42	28	29	31	—	5	30	
+	—	—	—	+	2	+	45	32	31	30	—	3	30	O. 60 + 63.
—	—	—	—	+	15	1	46	59	32	32	—	8	31	
—	—	—	—	1	1	—	39	33	17	29	—	6	26	
+	2	37	—	+	7	3	52	½ Basket		.	Few		...	

Area IV.—Leman Banks, Leman

Haul.	Ground.	Month.	Depth (Fms.).	Bottom.	Hours.	Plaice.				Dab.		
						Catch per Hour. Cm.		Average Size (cm.).	Per cent. below 20 cm.	Catch per Hour. Cm.		Average Size (c.m.).
						< 30	30+			< 20	20+	
	West of Leman Bank.											
B 23	The Would	VI	16–13	c.s.	1	—	—	—	—	—	—	—
B 37	Off Cromer	VII	16–21	s. & sh., ross	5	4	2	29	—	—	+	—
B 56	W. of Leman Bank ...	„	20–19	f.g. & d.s.	4¾	2	5	32	3	3	3	21
B 57	„ „ ...	„	18–18	d.s., c.s.	3½	5	4	29	9	7	7	21
...	(Combined)	„	18–20	f.g.s., f.d.s., c.s.	8¼	3	5	30	6	5	5	21
B 58	N.W. of Leman Bank ...	„	18–20	c.s.	7	36	7	25	13	26	10	18
B 77	S. of Cromer Knoll ...	VIII	15–17	c.s. & ross	3½	7	1	26	4	6	3	19
B 78	„ „ ...	„	17-15	s. & sh.	5	8	2	25	10	11	11	21
B 79	„ „ ...	„	17–18	s., sh., ross	2½	5	0	25	—	2	2	20
...	(Combined)	„	15–18	c.s. ross, s. & sh., s. & sh. ross.	11	*7*	*1*	*25*	*7*	*7*	*7*	*20*
	West of Smith's Knoll.											
B 61	N.W. of Smith's Knoll ...	VII	16–20	f.g.s.	2	7	7	30	4	8	2	17
B 62	„ „ ...	„	20–21	f.g.s.	3	4	3	29	5	4	1	17
...	(Combined)	„	16–21	f.g.s.	5	5	5	30	4	6	1	17
B 60	W. of Smith's Knoll ...	„	22–14	f.g.s.	3	*1*	*1*	32	—	*6*	*3*	*18*
B 63	„ „ ...	„	20–22	f.g.s.	3½	9	8	31	—	16	14	21
	Between Leman and Well Banks.											
B 49	Between Leman and Well Banks.	VII	18–20	f.g.s.	9	8	7	29	4	8	3	18
B 51	Along Well Bank ...	„	20, 7 to 16, 17	f.g.s.	4	18	15	29	1	36	4	16
B 52	Between Ower and Well Banks.	„	17–5–17	f.g.s., c.s.	6½	11	7	28	3	25	4	17
B 53	Ower Bank (N.W.) ...	„	17–17–17	c.s., f.s.	3½	19	13	28	6	49	18	18
B 55	Between Leman and Ower Banks.	„	20–20	f.s., c.s.	4	9	12	29	3	12	6	19
	Botney, Leman, and Smith's Knoll.											
O 33	Markham's Hole... ...	III	33–33–27	mud	3¼	13	41	33	—	31	78	22
O 64	W. Botney	IV	20–18–14	f.g.s.	4	7	9	29	3	53	3	16
O 65	North Leman (E.) ...	„	14–14–10	f.s.	7	33	16	28	8	35	10	18
O 66	„ „ ...	„	10–12–13	f.g.s.	4	38	9	26	9	39	11	18
O 67	„ „ ...	„	13–13–16	f.g.s.	4	14	5	27	9	32	3	17
...	(Combined)	„	10–20	f.s., f.g.s.	15	29	11	27	8	35	8	18
O 75	South Leman (E.) ...	V	19–17	f.d.s.	2	1	3	39	—	9	6	22
O 76	South of Leman (E.) ...	„	17–16–16	f.d.s.	10	16	5	27	3	—	—	—

AND BOTNEY GROUNDS.

Sole.				Cod.				Haddock.			Whiting.			Remarks.
Catch per Hour.		Average Size (cm.).	Per cent. below 20 cm.	Catch per Hour.			Average Size (cm.).	Catch per Hour.		Average Size (cm.).	Catch per Hour.		Average Size (cm.).	
Cm.				Cm.				Cm.			Cm.			
< 30	30+			< 30	30–59	60+		< 30	30+		< 20	20+		
1	1	—	—	—	—	—	—	—	—	—	2	1	21	
1	1	28	—	—	—	—	—	—	—	—	—	—	—	
1	1	30	—	1	4	2	45	—	—	—	+	25	27	[Beam broken.]
1	1	31	—	2	12	1	46	—	—	—	+	44	27	
1	1	31	—	2	8	1	46	—	—	—	+	33	27	B 56 + 57.
2	1	29	4	1	6	2	51	—	—	—	1	25	26	
3	2	29	—	—	1	—	48	—	—	—	+	36	27	[Belly torn badly.]
1	+	27	—	+	—	—	—	—	—	—	—	10	29	[Belly torn.]
1	+	—	—	+	1	—	37	—	—	—	+	2	26	[Belly torn badly.]
2	*1*	*28*	—	+	+	—	*40*	—	—	—	+	*16*	*28*	B 77 + 78 + 79 Belly torn.
5	3	27	7	—	1	+	58	—	—	—	5	15	22	
1	+	—	—	—	+	—	—	—	—	—	2	10	23	
2	1	27	5	—	1	+	58	—	—	—	3	12	23	B 61 + 62.
3	*2*	*28*	*7*	—	*2*	—	*51*	—	—	—	*14*	*65*	*22*	Belly split.
4	4	29	7	—	11	3	57	—	—	—	6	21	22	
1	+	26	9	+	3	+	51	—	—	—	+	79	25	
+	—	—	—	—	—	—	—	—	—	—	+	36	26	
+	+	33	—	+	1	—	40	—	—	—	—	12	26	
2	1	30	—	2	2	—	34	—	—	—	+	48	26	[Belly torn.]
+	—	—	—	+	3	+	48	—	—	—	—	21	25	
+	+	—	—	1	24	1	41	85	617	32	—	14	34	
+	—	—	—	—	+	+	—	3	2	30	11	115	24	
+	+	29	—	—	—	+	—	+	—	—	1	28	25	
+	—	—	—	—	+	+	61	+	—	—	+	21	25	
—	—	—	—	—	—	+	—	—	—	—	1	17	24	
+	+	28	—	—	+	+	77	+	—	28	1	23	25	O 65 + 66 + 67.
2	—	25	—	—	—	—	—	—	—	—	+	76	26	
+	—	—	—	—	—	+	96	—	—	—	—	17	28	

Area IV.—Leman Banks. Leman

Haul.	Ground.	Month.	Depth (Fms.).	Bottom.	Hours.	Plaice. Catch per Hour. Cm. < 30	Plaice. Catch per Hour. Cm. 30+	Plaice. Average Size (cm.).	Plaice. Per cent. below 20 cm.	Dab. Catch per Hour. Cm. < 20	Dab. Catch per Hour. Cm. 20+	Dab. Average Size (cm.).
	Botney, Leman, and Smith's Knoll—*cont.*											
O 77	North Leman (E.) ...	V	16–16	f.d.s.	2	30	13	28	8	—	—	—
O 78	„ „ ...	„	16–15	f.d.s.	2	25	13	28	5	1	8	22
...	(Combined)	„	15–16	f.d.s.	4	28	13	28	7	1	4	22
O 79	N. Leman (W.)	„	15–16	f.s., s. & sh.	2	20	12	27	8	20	10	20
B 24	E. of Knoll	VI	25–21	m. & s.	4	1	3	32	—	12	2	18
B 25	„	„	21–21	m. & f.br. s.	4	2	3	31	—	—	—	—
B 26	„	„	21–18	f.br.s. & sh.	7	1	4	34	—	Few.		—
B 27	South Leman Ground ...	„	18–17–14	f.d.s.	8	22	11	28	3	Few.		—
B 28	Extreme N. Leman ...	„	14–14–15	f.d.s., c.s.	7½	28	15	29	—	Few.		—
B 43	N.E. of Knoll	VII	23–21–21	f.d.s.	8	23	16	30	1	60	9	16
B 44	„	„	21–21	f.g.s.	4	12	7	29	—	22	1	15
B 45	„	„	21–20	f.g.s.	6	15	6	28	6	28	5	17
...	(Combined)	„	20–23	f.d.s., f.g.s.	18	18	11	29	2	41	6	16
B 46	S.E. of Well Bank ...	„	20–21	f.g.s. & sh.	5	11	12	30	1	9	5	19
B 47	„ „ ...	„	21–21	f.s. & sh.	8	38	16	29	—	49	10	17
B 50	„ „ ...	„	20–17	f.g.s.	9	62	14	27	1	45	4	16
...	(Combined)	„	17–21	f.g.s., f.s. & sh.	17	51	15	28	+	47	7	16
O 88	N. Leman	„	18–15	f.g.s.	2	67	17	27	5	198	37	18
O 89	„	„	15–17	f.g.s.	2	22	3	25	2	69	17	18
O 93	Knoll Deep	VIII	26–23	f.d.s.	2	1	+	27	—	—	—	—
O 94	N.E. of Knoll	„	23–20–18	f.d.s.	5	15	10	30	—	12	3	18
O 95	South Leman Ground ...	„	18–17	f.d.s.	6	22	10	29	1	32	5	18
O 96	„ „ ...	„	17–16	f.s.	5	30	22	30	1	29	5	18
O 97	„ „ ...	„	16–16	f.d.s.	5	84	31	28	1	2 Kilo.		—
...	(Combined)	„	16–18	f.s., f.d.s.	16	44	20	29	1	31	5	18
O 99	South of Leman (E) ...	„	16–16	f.d.s.	5	24	11	29	—	56		—
O 100	„ „ ...	„	16–17	f.d.s.	5	29	13	28	3	25	4	18
...	(Combined)	„	16–17	f.d.s.	10	26	12	29	1	42		—
O 101	Extreme S. Leman Ground	„	16–19	f.d.s.	5	59	32	29	1	2·2 kilo.		—
O 102	Leman (E).	IX	17–21–17	f.d.s.	5¾	29	3	26	4	53	2	17
O 123	Extreme S. Leman Ground	XII	18–18	f.s., c.s.	2	3	4	33	—	—	+	—
O 124	South Leman (E.) ...	„	18–18	c.s., f.d.s.	6	2	1	31	—	—	—	—
O 125	Leman (E.)	„	18–16–15	f.d.s.	7	20	7	28	+	—	—	—
O 126	N. Leman...	„	15–18	f.d.s.	2	8	8	31	—	113	4	16
B 99	Botney Deep	„	20–27	f.s., m.	2	+	2	37	—	1	6	23

AND BOTNEY GROUNDS—*continued.*

Sole.				Cod.				Haddock.			Whiting.			
Catch per Hour.		Average Size (cm.).	Per cent. below 20 cm.	Catch per Hour.			Average Size (cm.).	Catch per Hour.		Average Size (cm.).	Catch per Hour.		Average Size (cm.).	Remarks.
Cm.				Cm.				Cm.			Cm.			
< 30	30+			< 30	30–59	60+		< 30	30+		< 20	20+		
1	—	—	—	—	—	—	—	—	—	—	—	75	27	
—	—	—	—	—	—	—	—	—	—	—	—	22	28	
+	—	—	—	—	—	—	—	—	—	—	—	49	27	O 77 + 78.
—	—	—	—	—	—	+	—	—	—	—	—	90	26	
1	+	27	—	—	—	—	—	—	—	—	+	26	26	
+	—	—	—	—	—	—	—	—	—	—	1	59	25	
+	+	—	50	—	—	—	—	—	—	—	3	66	24	
+	—	—	—	—	—	—	—	—	—	—	1	67	25	
—	—	—	—	—	—	—	—	—	—	—	Few.		—	[Net badly torn.]
1	1	31	—	—	1	+	55	—	—	—	3	122	24	
—	+	—	—	—	—	—	—	—	—	—	3	148	24	
+	+	—	—	—	2	4	72	—	—	—	+	36	25	
1	1	31	—	—	1	2	68	—	—	—	2	99	24	B 43 + 44 + 45.
—	+	—	—	—	6	1	53	—	+	—	—	80	26	
1	+	27	—	+	1	—	43	—	—	—	+	38	25	
+	+	30	—	—	—	+	—	—	—	—	—	10	25	
1	+	28	—	+	1	+	45	—	—	—	+	23	25	B 47 + 50.
1	1	—	—	—	—	—	—	—	—	—	—	38	25	
—	—	—	—	—	—	—	—	—	—	—	—	18	25	
1	—	—	—	—	1	+	56	—	—	—	1	107	26	
1	1	31	—	—	2	2	64	—	—	—	+	60	26	
1	+	32	—	—	+	—	—	—	—	—	—	41	27	
+	+	—	—	—	—	—	—	—	—	—	—	8	26	
1	1	31	—	—	—	—	—	—	—	—	—	80	26	
1	1	31	—	—	+	—	—	—	—	—	—	43	26	O 95 + 96 + 97.
+	+	28	—	—	—	—	—	—	—	—	6		—	
1	—	25	—	—	—	—	—	—	—	—	—	9	27	
1	+	27	—	—	—	—	—	—	—	—	7		—	O 99 + 100.
—	+	—	—	—	+	+	—	—	—	—	9 Kilo.		—	
—	+	—	—	—	—	—	—	—	—	—	—	56	25	
1	1	—	—	—	—	1	—	—	—	—	8	71	25	
1	1	32	—	—	—	+	—	—	—	—	1	50	26	
1	+	29	—	—	—	1	101	—	—	—	3	69	25	
—	—	—	—	—	—	—	—	—	—	—	85		...	
—	—	—	—	—	1	+	50	—	1	—	—	—	—	

AREA V.—

Haul	Ground.	Month.	Depth (Fms.).	Bottom.	Hours.	Plaice.				Dab.		
						Catch per Hour. Cm.		Average Size (cm.).	Per cent. below 20 cm.	Catch per Hour. Cm.		Average Size (cm.).
						< 30	30+			< 20	20+	
	A.—WEST OF BROWN RIDGES (3° 20′ E.).											
O 20	Lowestoft Deep	I	23–25	f.g.s.	3	2	3	34	—	—	+	—
O 21	„ „	„	25–23	f.g.s.	3	3	3	32	—	—	1	23
O 22	„ „	„	23–24	f.g.s.	6⅓	4	3	31	2	+	1	21
O 23	„ „	„	24–24	f.g.s.	4¾	4	2	30	—	8	2	18
...	(Combined)	„	23–25	...	17 1/12	4	3	31	1	2	1	19
O 24	Middle Ground	„	24–25	f.g.s.	4⅓	*6*	*3*	*29*	—	*6*	*3*	*19*
O 25	Eastern Deep	„	20–19	f.s.	4⅚	*9*	*3*	*27*	*6*	*22*	*5*	*18*
O 26	Middle Ground	„	22–23	f.g.s.	5⅓	11	7	29	3	1	1	24
O 30	Knoll Deep	III	27–25	c.s., r.s.	5	1	2	32	—	—	—	—
O 31	Lowestoft Flats	„	18–18	ross. & grv.	5½	—	—	—	—	...	...	...
O 32	„ „	„	18–20	c.s.	3 11/12	+	1	31	—	—	—	—
O 46	Hinder	„	19–19–19	c. reddish s., f.s.	2	11	2	26	—	—	8	25
O 47	„	„	19–19–21	f.s.	6⅙	*5*	+	*22*	16	*23*	*6*	*18*
O 48	Gabbard Deep	„	22–22–22	d.s., c.s.	1¾	—	1	—	—	1	2	19
O 49	„ „	„	24–24–23	d.s., c.s.	1¾	+	—	—	—	2	1	19
...	(Combined)	„	22-24	...	3½	+	+	—	—	1	1	19
O 68	Hinder	V	20–23	s. & sh., f.g.s.	6	39	2	25	0·4	+	3	24
O 70	Eastern Deep	„	20–22	br. s. & sh.	2	43	2	25	7	—	2	24
O 71	„ „	„	20–20	s. & sh., f.g.s.	4	12	4	27	3	3	4	22
O 72	Middle Ground	„	20–20	f.spk.s.	5	23	6	27	—	+	3	24
O 73	„ „	„	20–22	f.br.s.	7	23	3	26	4	6	4	20
O 74	Winterton Shoal ...	„	21–21	f.s.	2	10	2	27	8	—	—	—
B 38	Off Southwold	VII	15–15	c.s. & grv.	3	5	—	22	12	10	18	21
O 122	Eastern Deep	XI	21–23	f.g.s.	3	3	8	34	—	1	+	17
	B.—BROWN RIDGES AND DUTCH GROUNDS.											
O 90	Brown Bank	VII	16–16	f.g.s.	2	84	2	23	15	43	16	19
O 91	„	„	16–17	f.d.s.	2	147	11	24	10	93	52	19
...	(Combined)	„	16–17	...	4	115	7	23	12	68	34	19
O 92	Texel Ground	„	17–18	f.g.s.	2	*176*	*1*	*22*	*16*	*15*	*12*	*20*
O 103	Black Bank	IX	13–15	f.d.s.	3	46	25	28	8	85	19	18
O 6	Brown Ridges	XI	16–15	f.s.	1	35	1	25	3	26	6	18
O 7	„ „	„	21–18	f.s.	2¼	5	—	25	—	3	1	19
B 93	„ „	„	14–17	f.s.	3	9	3	27	3	14	1	16
O 8	Broad Fourteens ...	XII	11–13	f.s.	2	125	—	22	26	10	27	22
O 9	„ „	„	14–13	f.s.	7	163	6	25	0·3	79	71	20

Flemish Bight.

Sole.				Cod.				Haddock.			Whiting.			Remarks.
Catch per Hour.		Average Size (cm.).	Per cent. below 20 cm.	Catch per Hour.			Average Size (cm.).	Catch per Hour.		Average Size (cm.).	Catch per Hour.		Average Size (cm.).	
Cm.				Cm.				Cm.			Cm.			
< 30	30+			< 30	30–59	60+		< 30	30+		< 20	20+		
3	4	30	...	—	2	1	55	...	...	...	10		...	
3	2	30	...	—	2	2	61	...	...	...	—	—	—	
3	1	28	...	—	2	2	59	...	...	...	2		...	
2	2	30	...	—	1	1	67	...	...	...	3	22	25	
3	2	29	...	—	2	2	60	...	...	...	10		...	O 20 + 21 + 22 +23.
1	+	*30*	...	—	+	+	*60*	...	...	...	+	*27*	*27*	Belly badly torn.
1	*1*	*31*	...	—	—	*1*	*67*	...	...	...	—	—	—	Net badly torn.
+	1	31	...	—	1	—	38	...	...	...	1	13	24	
+	+	29	...	—	+	+	—	...	...	...	—	+	—	[Net split.]
+	1	34	...	—	19	4	52	...	...	...	—	—	—	
+	1	31	...	—	—	—	—	...	...	...	—	—	—	
—	—	—	...	—	—	—	—	...	...	...	—	27	28	
+	+	*32*	...	—	—	—	—	...	...	...	+	*8*	*25*	Net split.
1	—	—	...	—	2	3	66	...	...	...	—	—	—	[Trawl foul.]
—	—	—	—	—	1	1	—	...	...	...	—	—	—	
+	—	—	—	—	1	2	64	...	...	...	—	—	—	O 48, 49.
—	1	35	...	+	+	—	35	...	...	...	+	6	26	
—	—	—	—	—	—	—	—	...	...	...	+	22	27	
+	+	—	...	—	—	—	—	...	...	...	—	12	26	
+	+	35	—	—	—	1	90	...	...	...	—	—	—	
+	—	—	...	—	+	+	62	...	...	...	—	11	26	[Belly torn.]
—	—	—	...	—	1	+	64	...	...	—	+	75	26	
—	—	—	...	—	—	—	—	...	...	—	—	61	26	
3	2	30	...	—	1	1	58	...	...	...	—	30	29	
—	—	—	—	—	—	—	—	...	...	...	—	—	—	
—	—	—	—	—	3	2	55	...	...	...	—	—	—	
—	—	—	—	...	1	1	55	—	—	—	—	—	—	O 90 + 91.
—	—	—	—	—	—	—	—	...	...	...	—	—	—	Cod-end torn.
—	—	—	—	—	—	—	—	...	...	...	—	19	26	
...	...	...	...	—	—	—	—	...	...	...	1	47	24	
...	...	...	...	—	—	—	—	...	...	...	1	8	24	
1	1	—	...	—	—	—	—	...	...	...	1	9	26	
...	...	...	...	—	1	—	—	...	...	...	1	79	25	
1	1	33	...	+	2	+	44	...	...	...	—	112	27	

AREA VI.—BETWEEN DOGGER

Haul.	Ground.	Month.	Depth (Fms.).	Bottom.	Hours	Plaice. Catch per Hour. Cm. < 30	Plaice. Catch per Hour. Cm. 30+	Plaice. Average Size (cm.).	Plaice. Per cent. below 20 cm.	Dab. Catch per Hour. Cm. < 20	Dab. Catch per Hour. Cm. 20+	Dab. Average Size (cm.).
	A.—OUTER GROUNDS.											
O 114	N. of New Zealand ...	IX	21–23	s. & m.	4	11	7	32	—	131	5	17
O 127	New Zealand	XII	20–20–21	f.d.s. & m.	7	4	4	33	—	—	+	—
O 27	„	III	17–22	f.g.s & m.	5½	5	4	30	6	1	3	22
O 28	Oyster, W.	„	22–23	s. & m.	5	2	3	33	13	3	8	22
O 29	„ N.W.	„	23–24	s. & m.	3	3	3	35	—	1	18	24
O 18	„ S.W.	XII	22–24	s. & m.	3	+	4	39	—	27	7	18
O 17	„ S.W.	„	22–22	mud	2¾	+	4	34	—	16	5	18
O 19	„ S.W.	I	20–22	f.g.s.	3	4	1	26	14	4	1	17
	B.—INNER GROUNDS, WESTERN PART.											
O 115	Vlieland	IX	20–20	mud	1½	7	14	31	3	159	8	17
O 116	„	„	20–18	mud	1½	25	9	26	6	102	3	17
O 117	„	„	18-15	m., f.s.	5	53	11	24	22	27	1	17
O 104	Terschelling	„	15, 16, 17, 19.	f.d s. & m.	7	172	27	23	40	137	8	17
O 105	„	„	19–17–15	f.d.s. & m.	2	82	10	26	13	±100		—
O 106	„	„	15–16–18	f.d.s.	1½	97	19	24	25	106	27	19
O 141	„ (deep water only).	XII	20–19	s. & m.	5	1	5	39	—	—	—	—
O 128	„ (shallow water only).	„	13–13	f.s.	5	6	6	31	3	—	—	—
O 134	„ „	„	14–14	f.s.	5½	5	3	31	7	—	1	26
O 135	„ „	„	14–13	f.d.br.s.	5	8	10	31	—	—	—	—
...	(Combined)	„	13–14	...	15½	6	6	31	3	0	+	26
O 129	Terschelling*	XII	13–13	f.s.	5	2	6	36	—	—	+	—
O 130	„	„	13–15	f.s.	4½	2	6	36	—	—	...	...
O 131	„	„	15–15	f.s. & m.	4⅔	3	10	36	—	...	...	...
O 132	„	„	15–14	f.s.	5	1	7	36	—	—	1	27
O 133	„	„	14–14	f.s.	5	3	6	34	—	...	...	...
O 136	„	„	13–13	f.d.s.	5	2	5	35	—	+	+	24
O 137	„	„	13–15	f.d.s.	6	1	5	39	—	...	...	...
O 138	„	„	15–16	f.s.	5	1	7	38	—	...	...	...
O 139	„	„	18–19	f.s. & m.	5	2	6	36	—	...	...	...
O 140	„	„	19–20	s. & m.	5¼	1	10	38	—	...	...	...
O 142	„	„	19–16	s. & m.	5	2	7	36	—	—	+	...
O 143	„	„	16–14	f.g.s.	5	4	7	34	2	...	...	...
O 144	„	„	14–20–18	s. & m.	5	1	5	36	—	...	+	...
O 145	„	„	18–18	s. & m.	5	—	1	42	—	...	...	...
...	(Combined)	„	13–20	...	70 5/12	2	6	36	+	+	+	27

* In this series (O 129–140, 142–145) the depths recorded do not always indicate the full range of depth during each haul, owing to the steep slope deep water and back again, or *vice versâ*; but the depths recorded refer in

Bank and Dutch Coast.

Sole.				Cod.				Haddock.			Whiting.			Remarks.
Catch per Hour.		Average Size (cm.).	Per cent. below 20 cm.	Catch per Hour.			Average Size (cm.).	Catch per Hour.		Average Size (cm.).	Catch per Hour.		Average Size (cm.).	
Cm.				Cm.				Cm.			Cm.			
< 30	30+			< 30	30–59	60+		< 30	30+		< 20	20+		
—	—	—	—	—	1	—	51	—	2	33	—	—	—	
1	1	31	—	—	+	2	42	3	31	36	—	6	31	
—	1	41	—	—	—	1	85	—	+	—	+	24	28	
+	1	35	—	—	—	1	80	—	—	—	+	27	30	
—	—	—	—	+	+	1	51	—	—	—	—	62	30	
2	3	32	—	1	—	+	38	—	2	53	—	19	28	
—	1	37	—	1	3	4	56	—	2	50	+	54	27	
—	+	—	—	—	1	3	68	—	1	51	—	86	28	
1	1	—	—	—	—	—	—	—	—	—	1	23	25	
1	—	—	—	—	—	—	—	—	—	—	—	150	25	
5	1	26	—	—	—	—	—	—	—	—	—	40	26	
9	2	26	—	—	—	—	—	—	—	—	16 Kilos.		—	
5	3	29	—	—	—	—	—	—	—	—	½ Basket		—	
3	1	28	—	—	—	—	—	—	—	—	—	32	26	
3	5	32	—	—	1	3	73	—	4	51	120		—	
3	2	30	—		4		—	—	—	—	22 Kilos.		—	
3	1	28	—	—	+	1	69	—	—	—	40		—	
+	+	29	—	—	+	+	73	—	—	—	1	42	26	
2	1	29	—	—	+	1	72	—	—	...	[1	40]	—	O 128 + 134 + 135.
1	1	33	...	—	1	3	71	—	+	—	19 Kilos.		—	
2	2	20	7	—	+	4	71	—	+	58	—	147	28	
1	2	30	...	+	3	3	59	—	1	53	111		—	
2	2	31	...	—	2	4	73	+	1	45	—	90	27	
+	2	33	...	—	1	2	71	...	...	...	200		—	
1	+	29	...	—	1	3	74	—	+	...	2	117	27	[Fore-wing twisted.]
2	3	32	...		9		...	—	6	60	137		—	
1	3	34	...	—	2	2	67	—	28	45	96		—	[Belly slightly torn.]
2	2	30	...	—	1	7	68	—	5	50	120		—	
1	2	34	...	—	3	6	68	—	11	47	107		—	
2	2	32	...	—	+	3	74	—	2	54	78		—	
+	+	...	...	—	2	1	61	—	+	—	30		—	
1	1	33	...	—	1	3	66	—	8	51	80		—	
1	+	...	...	—	+	1	66	—	5	51	—	—	—	
1	2	32	1	+	1	4	69	—	5	49	[+	117]	—	O 129 to O 140 + O 142 to O 145.

of the ground, the length of the hauls, and frequent changes in the direction of towing. For the most part the hauls were made from shallow to most of the hauls only to soundings at the beginning and end of the haul.

AREA VI.—BETWEEN DOGGER

Haul.	Ground.	Month.	Depth (Fms.).	Bottom.	Hours.	Plaice.				Dab.		
						Catch per Hour. Cm.		Average Size (cm.).	Per cent. below 20 cm.	Catch per Hour. Cm.		Average Size (cm.).
						< 30	30+			< 20	20+	
	C.—INNER GROUNDS, EASTERN PART.											
B 1	Terschelling	V	14–14–14	br.spk.s.	1	373	—	14	99	22	1	15
O 5	Ameland	XI	15–18	f.g.s.	5	424	5	21	36	62	47	20
O 10	„	XII	15–17–15	f.s.	$3\frac{1}{1}\frac{1}{2}$	10	3	28	1	16	7	19
O 11	„	„	15–15	f.s.	$1\frac{1}{4}$	104	14	23	36	79	55	20
O 12	„	„	15–13	f.s.	$1\frac{1}{1}\frac{1}{2}$	313	8	21	34	123	79	20
O 13	„	„	13–12	f.s.	$1\frac{1}{6}$	230	—	20	44	333		—
...	(Combined)	„	12–15	...	$3\frac{1}{2}$	211	7	21	38	226		—
O 4	Ameland	XI	9–11	f.s.	1	*4*	*1*	*22*	*60*	*1*	*1*	—
B 97	„	XII	12–9	f.g.s.	2	9	1	24	19	19	6	17
B 98	„	„	9–12	f.g.s.	2	6	—	23	8	10		—
O 3	W. of Borkum L.V. ...	XI	16–15	f.s.	2	250	5	22	16	51	34	19

AREA VII.—BETWEEN DOGGER

O 80	W. of Heligoland ...	V	20–20	f.s. & m.	$1\frac{1}{2}$	63	17	26	2	79	33	18
O 110	„ „ ...	IX	21–20	f.d.s.	$2\frac{1}{1}\frac{1}{2}$	756	8	19	75	388	27	17
B 8	Horn Reef Outer ...	VI	24–25	f.g.s.	1	1	4	35	—	142	15	13
B 9	„ „ ...	„	25–27	f.s. & ooze	5	1	2	33	—	257	10	15
B 10	„ „ ...	„	27–27	f.s. & ooze	1	1	12	36	—	176	6	15
O 111	„ „ ...	IX	24–26	mud	5	55	28	30	—	20	1	17
O 112	„ „ ...	„	27–27	f.s. & m.	3	106	49	29	0·4	68	3	17
O 113	„ „ ...	„	27–27	f.s. & m.	5	46	36	30	—	1	1	19
O 81	S.E. of Dogger Tail ...	VI	20–23	f.s.	1	1	12	36	—	8	21	22

AREA VIII.—

B 83	Off Eddystone	XI	32–37	f.g.s.	2	—	—	...	—	...	...	...
B 84	Start Bay	„	9–14	f.g.s.	2	5	28	34	—	5	9	22
B 85	French Ground	„	34–35	c.s., grv. & sh.	3	+	+	...	—	+	3	23
B 87	Torbay	„	5–7	f.s., m.	1	7	12	31	—	88	3	15
B 88	Teignmouth Bay (S.) ...	„	6–8	m. & s.	$1\frac{1}{1}\frac{1}{2}$	19	7	29	7	98	23	16
B 89	Dawlish Bay	„	9–9	s. & m.	$\frac{5}{6}$	6	11	31	—	—	1	...
B 90	Off Beer Head	„	17–18	m. & s.	3	—	—	...	—	99	33	17
B 91	„ „	„	22–26–28	f.g.s.	$5\frac{1}{2}$	1	1	32	—	27	7	17

BANK AND DUTCH COAST.—*continued.*

Sole.				Cod.				Haddock.			Whiting.			Remarks.
Catch per Hour.		Average Size (c.m.).	Per cent. below 20 cm.	Catch per Hour.			Average Size (cm.).	Catch per Hour.		Average Size (cm.).	Catch per Hour.		Average Size (cm.).	
Cm.				Cm.				Cm.			Cm.			
< 30	30+			< 30	30–59	60+		< 30	30+		< 20	20+		
—	—	...	—	—	—	—	—	...	...	...	1	7	24	
1	1	31	...	+	1	1	49	...	...	...	+	35	28	
—	—	...	—	1	+	1	51	...	...	...	—	+	—	
—	—	...	—	—	—	—	—	—	1	—	—	1	—	
—	—	...	—	—	—	—	—	—	—	—	—	—	—	
—	—	...	—	—	—	—	—	—	—	—	—	1	—	
—	—	...	—	—	—	—	—	—	+	—	—	1	—	
...	...	...	...	—	—	—	—	...	...	...	—	*2*	—	Otter board capsized. (?)
—	—	—	—	—	—	1	—	...	...	...	17	2	17	
—	—	—	—	—	—	—	—	...	...	...		5	...	
2	—	25	...	1	+	1	57	...	...	...	—	13	29	

BANK AND EASTERN GROUNDS.

—	—	—	—	1	1	—	36	217	158	30	—	29	26	
2	2	31	...	—	—	—	—	...	...	...	—	—	—	
—	—	—	—	3	1	1	35	53	10	28	21	8	17	
—	—	—	—	1	5	+	36	33	6	28	4	30	24	See note, p. 171.
—	—	—	—	1	3	—	36	30	5	28	5	5	20	
—	+	—	...	—	2	+	41	9	81	34	—	73	30	
+	—	—	...	3	7	—	35	18	81	32	—	29	29	
—	+	—	...	—	—	—	—	10	77	35	—	9	29	
—	—	—	—	1	5	—	38	78	18	29	—	—	—	

ENGLISH CHANNEL.

1	—	—	...	—	—	—	—	...	...	...	—	—	—	
—	—	—	...	—	—	—	—	...	...	...	+	—	—	
1	3	32	...	—	—	—	—	...	...	...	—	3	33	
...	...	...	...	...	...	...	...	...	...	...	4	—	14	
—	—	—	...	—	—	—	—	...	...	...	4	4	19	
—	1	—	...	—	2	—	—	...	...	...	—	—	—	
—	2	35	...	—	—	1	—	...	...	...	5	1	19	
+	+	—	...	—	—	—	—	...	...	...	3	1	20	

VI.—DETAILED MEASUREMENTS OF PLAICE CAUGHT AT

Year.	Voyage.	Station.	Net and No. of Haul.	Month. Day.	Duration (hrs.).	Centimetres. 6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
1902	I	1	O 1	Nov. 2	2¼	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	3	2	3	8	13	14	7	5	5
		2	O 2	„ 2	1½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1	..	..
		3	O 3	„ 3	2	..	..	..	..	..	..	..	..	..	3	6	9	18	45	87	105	75	51	30	34	20	9	4	4	4	3	1	2	1	..	..	..
		4	O 4	„ 3	1	..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..
		5	O 5	„ 3	5	..	..	..	..	..	..	..	..	1	12	24	61	113	172	214	140	101	73	40	47	26	18	12	6	4	6	1	..	1	..	..	..
		6	O 6	„ 4	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	5	..	1	8	2	5	4	3	4	..	1	..	..	..	..	..	..	..
		7	O 7	„ 4	2¼	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	3	2	1	..	..	1	2	..	..	..	..	..	..	..	..
	II	1	O 8	„ 20	2	..	..	..	..	..	..	..	..	..	1	6	14	18	27	36	38	39	35	19	9	4	3	1	..	..	..	..	..	..	..	..	..
		2	O 9	„ 20	7	..	..	..	..	..	..	..	..	..	..	..	..	..	2	11	36	93	126	109	99	67	51	16	15	6	7	4	1	2	..	1	1
	III	1	O 10	Dec. 8	3 11/12	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	1	1	1	6	2	1	4	6	12	2	2	4	3	1	..	..	..
		2	O 11	„ 8	1¼	..	..	..	..	..	..	..	..	2	13	7	14	11	6	14	4	6	10	6	7	9	11	5	5	6	5	3	3	..	..	..	..
		3	O 12	„ 8	1 1/12	..	..	..	..	..	..	..	2	10	19	23	17	23	26	46	47	26	28	14	16	20	9	8	5	5	1	1	1	..	1	..	..
		4	O 13	„ 8	1⅛	..	..	..	..	..	..	..	2	4	23	18	22	20	28	50	31	26	21	8	10	3	..	..	2	..	..	..	..	..	..	..	..
		8	O 17	„ 9	2¾	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	2	1	..	2	..	2
		9	O 18	„ 9	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	3	..	..	1	..	..
1903	IV	1	O 19	Jan. 7	3	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	1	..	3	2	..	1	1	1	..	..	..	..	1	..	..	..
	V	1	O 20	„ 20	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	1	2	1	1	..	2	..	1	1	..	..
		2	O 21	„ 20	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2	3	..	2	1	..	..	..	2	1	1	2	1
		3	O 22	„ 21	6⅓	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	4	2	2	8	2	2	5	2	3	..	1	4	1	1	2	2
		4	O 23	„ 21	4⅜	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	2	5	1	3	4	2	5	..	..	..	1	1	..	1
		5	O 24	„ 21	4⅓	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	2	6	3	7	3	3	..	2	3	1	1	..	2	2	1
		6	O 25	„ 21	4⅝	..	..	..	..	..	..	..	..	..	..	1	..	..	3	2	2	1	2	7	10	5	4	4	5	6	4	..	1	2	1	1	..
		7	O 26	„ 22	5⅓	..	..	..	..	..	..	..	..	..	..	..	1	..	2	1	3	1	3	4	11	6	5	10	11	9	5	3	5	3	1	1	2
	VI	1	O 27	Mar. 1	5½	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..	3	1	4	4	..	3	6	2	2	1	2	5	1	..	2	4	1
		2	O 28	„ 1	5	..	..	..	..	..	..	..	..	..	..	..	..	1	2	1	3	..	1	..	..	..	1	..	1	1	..	..	1	1	..	..	1
		3	O 29	„ 1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	..	1	..	1	1	1	..	..	..	1	..	1	..	1
		4	O 30	„ 3	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	..	1	..	..	1	2	..	1	2	..	1	..	1
	VII	4	O 32	„ 7	3 11/12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	1	1	..	..	..
	VIII	2	O 33	„ 11	3¼	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	6	1	6	7	11	8	14	17	13	14	19	12	13	8
		4	O 34	„ 11	5¾	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	4	1	2	1	..	..	2	1
		7	O 35	„ 12	2⅚	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	..	1	2	..	..	1
		9	O 37	„ 13	4¼	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	4	2	1	3	1	2	2	3	1	..	..
		11	O 38	„ 13	3⅚	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	1	..	1	2	9	5	1	2	..	..	1	1
		12	O 39	„ 13	3½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	4	2	3	4	1	2	8	..	1	1
		14-15	O 40	„ 13-14	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	4	4	4	13	11	12	5	3
		17	O 41	„ 14	4½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	3	1	3	7	3	..	1
		18	O 42	„ 14	5 5/12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	4	1	3	1	1
		19	O 43	„ 14	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	6	4	2	6	6	5	3
		20	O 44	„ 14-15	5½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	3	5	7	8	3	7	4	1
		21	O 45	„ 15	5½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	1	2	..	..	2	3	1	1	
	IX	1	O 46	„ 21	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	1	3	2	3	2	2	2	4	3	2	..	..	..	..	..	..
		2	O 47	„ 21-22	6⅛	..	..	..	..	..	..	..	..	..	1	..	..	1	3	6	2	7	2	4	2	2	..	..	..	1	..	..	..	..	..	..	..	..
		3	O 48	„ 22	1⅜	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
		5	O 49	„ 22-23	1¾	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	X	1	O 50	Apr. 20	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
		2	O 51	„ 20	3½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
		4	O 53	„ 21	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	1	..	..	..	1	1	3

EACH HAUL OF THE COMMERCIAL TRAWLS (ss. *Huxley*).

Centimetres.																															Total for each Sex.	Total Measured.	Average Size.*	Remarks.
38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	50	57	58	59	60	61	62	63	64	65	66	67	68				
6	6	4	4	3	2	5	1	..	2	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	96	36·2	
..	..	..	1	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	39·2	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	511	21·8	
..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	21·4	Net torn, &c.
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,073	21	Part only of catch measured.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	34	24·2	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	24·6	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	250	21·4	
..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	649	24·4	Part only of catch measured.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	50	27·3	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	147	22·3	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	348	20·9	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	268	19·6	
..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	34·0	
..	..	1	1	1	..	..	1	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	38·1	
..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	25·7	Net torn, &c.
..	..	..	..	..	..	..	2	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	33·2	
..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19	31·1	
..	..	1	1	1	2	..	..	1	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	50	30·9	
..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	29	29·1	
..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	42	28·3	Net torn, &c.
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	62	26·6	
2	2	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	96	28·7	
3	1	..	..	2	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	51	29·5	
2	..	1	1	1	1	..	..	2	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24	32·8	
2	1	..	..	..	1	..	..	..	..	..	..	1	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	34·4	
..	1	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	31·9	Net torn, &c.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	30·8	
6	3	3	1	1	2	2	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	173	32·1	
..	..	..	..	..	1	..	2	1	..	1	1	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	20	38·6	
..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	37·7	
..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	23	30·7	
..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	28	30·9	
1	..	..	1	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	33	33·0	Net torn, &c.
5	..	4	3	7	3	4	4	3	1	..	1	1	3	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	98	38·0	
1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	23	35·1	
..	1	..	..	1	..	4	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	23	37·7	
1	1	1	1	9	3	..	3	3	1	2	2	1	3	..	..	..	3	..	1	1	..	1	..	..	1	..	..	..	..	..	..	72	40·7	
1	3	1	1	2	..	..	2	..	1	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	54	36·1	
3	..	1	2	2	..	1	1	2	4	3	1	4	1	1	..	2	..	..	3	..	..	2	2	..	..	..	..	..	..	..	..	47	44·8	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	28	25·9	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	31	21·9	Net torn, &c.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	Net torn, &c.
..	..	2	2	..	..	..	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	37·5	

* Throughout this table the Average Sizes are given as calculated from the figures recorded in the table. A correction of +0·5 cm. should be applied in each case to obtain the true Average. (See p. 77).

Year.	Voyage.	Station.	Net. and No. of Haul.	Month. Day.	Duration (hrs.).	Centimetres. 6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
1903	X	5	O 54	Apr. 22	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	1	1	..	..	1	..	1	1	3	1	1	..	1
		6	O 55	„ 22	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1
		8	O 57	„ 23	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	2	..	2
		9	O 58	„ 23	5	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	2	3	1	2	..
		10	O 59	„ 23	5¼	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	..	..	8	5	8	4	6	4	4	2	1
		11	O 60	„ 25	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	1	..	4	2	8	4	8	7	12	7	3	
		12	O 61	„ 25	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	3	4	3	5	..	
		13	O 62	„ 26	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1	1	..	2	
		14	O 63	„ 26	7	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2	2	1	4	3	6	7	15	22	12	8	12	14		
		15	O 64	„ 26	4	..	..	..	..	..	..	..	..	..	..	..	..	1	1	4	..	2	1	1	1	3	6	4	3	10	8	6	5	3	..	1	1
		16	O 65	„ 27	7	..	..	..	..	..	..	..	..	1	2	5	3	8	8	9	11	18	24	22	21	24	24	27	21	20	16	16	18	11	9	9	5
		17	O 66	„ 27	4	..	..	..	..	..	..	..	1	1	1	4	2	2	5	5	12	16	18	21	18	17	8	9	12	10	8	3	3	2	1	2	1
		18	O 67	„ 27	4	..	..	..	..	..	..	..	..	1	1	1	1	1	2	2	6	1	5	8	7	6	7	5	1	3	2	3	3	1	2	1	..
	XI	1	O 68	May 5-6	6	..	..	..	..	..	..	..	..	..	..	..	..	..	1	4	10	26	41	45	32	33	17	14	9	9	1	..	2	..	..	..	..
		3	O 70	„ 6	2	..	..	..	..	..	..	..	..	..	..	..	..	..	6	2	5	7	16	16	7	10	6	8	3	..	..	1	1	1	1	..	..
		4	O 71	„ 6	4	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	3	2	6	4	5	8	9	4	3	5	4	3	..	1	1	..	..
		5	O 72	„ 6	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	5	4	13	14	22	16	13	16	11	8	10	5	1	3	..	1	..
		6	O 73	„ 7	7	..	..	..	..	..	..	..	..	..	..	..	2	..	6	4	7	11	20	11	21	29	21	18	13	8	7	6	..	2	1	..	..
		7	O 74	„ 7	2	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	2	2	..	2	2	3	1	2	4	1	1	..	2	..	..	1	..
		8	O 75	„ 7	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	1	1	..	..	..	..	..	..	
		9	O 76	„ 7-8	10	..	..	..	..	..	..	..	..	..	..	..	1	2	4	6	7	21	19	15	26	17	18	13	13	17	7	10	4	2	..	3	..
		10	O 77	„ 8	2	..	..	..	..	..	..	..	..	..	..	2	..	2	3	2	2	8	4	8	6	5	6	8	5	4	3	6	1	2	1	1	2
		11	O 78	„ 8	2	..	..	..	..	..	..	..	..	..	..	..	2	1	1	1	3	5	9	7	6	5	3	3	4	1	3	4	3	6	2	1	1
		12	O 79	„ 8	2	..	..	..	..	..	..	..	..	..	..	..	..	..	5	5	3	4	5	3	6	2	4	1	2	3	5	4	6	4	1	1	..
	XII	1	B 1	„ 26	1	..	..	..	..	1	8	48	91	110	82	25	2	1	..	1	1	1	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..
		2	O 80	„ 28	1½	..	..	..	..	..	..	..	..	..	..	..	2	..	1	4	4	7	5	6	11	5	7	2	5	6	2	2	2	1	..	..	..
						..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	4	1	7	4	3	4	4	4	6	3	1	2	..	..	..	..	..	..
		3	B 2	„ 29	2	..	..	..	..	..	..	1	..	..	3	1	1	2	..	1	3	5	2	..	2	..	..	2	..	1	..	..	..	..	..	..	..
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						1	2	9	3	7	16	58	75	49	50	33	37	32	12	20	24	30	16	22	11	1	2	..	..	..	..	..	..	..	..	..	..	..	..
		4	B 3	„ 30	1	..	..	3	..	4	9	53	87	48	79	52	45	38	27	25	17	30	39	28	28	6	5	1	..	..	..	..	..	..	..	..	..
						..	7	26	10	3	4	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
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		5	B 4	„ 30	1	..	..	..	..	1	6	28	98	126	81	58	37	19	13	5	13	8	9	8	9	4	2	..	..	..	..	..	..	..	..	..	..
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		6	B 5	„ 30	1½	..	..	..	..	..	..	10	35	39	51	59	50	27	13	4	8	12	8	12	9	5	..	..	..	..	1	..	..	..	..	..	..
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		7	B 6	June 1	1	..	..	..	..	..	..	..	..	..	..	1	1	..	1	5	6	7	8	5	7	4	3	2	3	..	1	1	..	..	..	..	..
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		8	B 7	„ 1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	1	..	..
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		9	B 8	„ 1-2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
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		10	B 9	„ 2	5?	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	..	..	..	1	..
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		11	B 10	„ 2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	2	..	..	..	..
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		12	O 81	, 2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	3	1	1	..
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		13	O 82	„ 3	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
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Centimetres.																															Total for each Sex.	Total Measured.	Average Size.	Remarks.
38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68				
1	1	2	1	1	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	22	35·6	
..	..	1	1	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	38·8	
..	..	2	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	37·8	Net torn, &c.
1	1	1	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	33·6	
1	..	2	..	1	..	1	1	..	..	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	55	33·9	Net torn, &c.
6	..	2	3	5	1	1	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	79	35·2	
..	1	1	..	1	3	..	1	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27	37·6	
2	..	..	2	..	..	1	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	39·3	
3	7	1	2	2	4	1	1	1	2	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	136	34·8	
..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	62	29·0	
..	2	1	1	..	..	..	1	1	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	340	27·3	
2	..	2	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	188	25·5	
..	1	..	..	2	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	74	26·5	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	244	24·8	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	90	24·5	
..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	63	26·5	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	144	26·6	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	187	25·8	Net torn, &c.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	26	26·2	
1	..	..	..	..	..	..	..	..	..	1	1	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	9	39·0	
1	..	..	1	2	..	..	3	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	214	26·8	
1	1	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	87	27·3	
1	..	1	..	..	..	..	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	76	27·9	
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	65	26·8	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	373	13·9	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	62	119	25·9	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	47			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24	50	23·3	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	26			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	510	1,134	16·7	M. Ordinary cod end. Part only of catch measured.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	624			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	53	82	8·6	M. Fine mesh net round cod end.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	29			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	525	911	15·6	M. Part only of catch measured.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	386			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	343	622	17·1	M. Part only of catch measured.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	279			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	55	81	24·5	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	26			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	6	32·7	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	5	34·8	M.
..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4			F.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	13	32·6	M. Net torn, etc.
1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8			F.
..	1	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	13	35·4	M.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6			F.
..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	13	35·5	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5			F.
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Year.	Voyage.	Station.	Net and No. of Haul.	Month. Day.	Duration (hrs.).	Centimetres. 6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
1903	XII	15	O 83	June 3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..
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		16	O 84	„ 3-4	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	1
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		20	B 14	„ 8	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	2	1	..	..	..	..	1	..	..	..	..	..
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		22	B 16	„ 8	2½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
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		23	B 17	„ 8-9	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	1	..	2	1	1	1	1	1	..	..	..	..	..
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		26	B 20	„ 10	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	1	..	..	..
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		27	B 21	„ 10	1¾	..	..	..	..	..	1	1	2	7	6	2	6	10	2	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
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		28	B 22	„ 11	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
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	XIII	1	B 24	„ 24	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	1	1	..	..
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		2	B 25	„ 24	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	2	1	1	..	..	..	..	1	..
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		3	B 26	„ 24	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	1	3	..	..	..	1	1	1
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		4	B 27	„ 24-25	8	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	1	3	3	10	10	21	23	18	13	12	7	12	2	3	2	2	..
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		5	B 28	„ 25	7½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	2	6	10	19	21	19	18	25	21	10	10	4	6	3	3	..
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		22	O 85	„ 30 / July 1	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1
		27	O 86	„ 1	5¾	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2	2	3
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		31	B 31	„ 3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..
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		39	B 32	„ 3	1	..	..	..	..	..	..	..	..	1	2	1	2	1	3	4	3	3	2	3	1	..	..	..	..	..	..	..	..	..	..	..	..
		40	B 33	„ 4	3½	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
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		44	B 37	„ 5	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	2	1	1	5	..	..	1	..	..	1	..	..	..	..
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	XIV	1	B 38	„ 8	3	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	..	1	..	2	1	..	..	..	..	..	..	..	..	..	..
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		6	B 40	„ 9	½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
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		8	B 42	„ 10	3	..	..	..	..	..	..	..	..	..	..	..	..	3	..	1	3	6	12	5	6	1	1	1	..	..	..	..	..	..	..	..	..
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	XV	1	B 43	„ 14-15	8	..	..	..	..	..	..	..	..	..	1	..	..	1	1	5	4	2	11	20	22	23	24	39	34	25	17	27	13	14	8	10	7
		2	B 44	„ 15	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	9	10	11	7	6	6	7	3	4	3	1	1	2
		3	B 45	„ 15	6	..	..	..	..	..	..	..	..	..	1	1	1	2	2	4	6	6	4	4	13	9	11	18	8	12	6	6	6	2	1	..	3
		4	B 46	„ 15	5	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	1	3	3	4	4	9	13	9	8	12	12	8	1	11	4	4	2
		5	B 47	„ 15-16	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3	10	9	27	41	43	60	70	41	40	29	18	15	9	2	5	2
		7	B 49	„ 16	9	..	..	..	..	..	..	..	..	..	1	1	1	1	2	1	1	3	3	2	8	15	16	12	9	14	8	14	11	7	6	2	3
		8	B 50	„ 16-17	9	..	..	..	..	..	..	..	..	..	..	..	..	3	2	6	18	23	36	61	88	107	91	69	54	46	19	19	14	6	3	9	6

Centimetres																															Total for each Sex.	Total Measured.	Average Size.	Remarks.
38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68				
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	9	41·1	M. Net torn, etc.
..	..	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	7			F.
..	1	..	..	1	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	20	42·7	M. Net torn, etc.
1	..	2	..	..	1	4	1	1	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	12			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	15	25·1	M. Net torn, etc.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	M
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	18	27·9	M.
..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	5	31·2	M. Net torn, etc.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	2			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	41	110	18·06	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	29			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	40			M. and F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	M.
..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	16	32	M.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12			F
..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	19	31	M.
1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11			F.
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	32	34	M.
..	1	..	1	..	..	..	1	1	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	21			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	146	261	28	M.
2	..	2	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	115			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	180	321	29	M. Net torn, etc.
2	..	2	1	1	1	..	1	..	1	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	141			F.
..	2	5	1	1	1	2	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	40·4	M. and F.
2	3	2	2	4	2	2	1	..	..	1	1	..	..	1	..	..	..	1	..	..	1	..	1	..	..	..	..	..	..	..	32	35	42·2	M.
..	..	1	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	8	37·8	M.
..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	26	20·0	M. and F. Net torn, etc.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	6	20·0	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	33	28·7	M.
..	1	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	16	21·8	M
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	M. Net torn, etc.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	39	99	23·0	M.
..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	60			F.
4	3	..	..	..	2	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	319	29·1	M. & F.
1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	76	28·9	
..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	129	27·4	
1	1	..	2	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	118	29·8	
3	1	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	433	28·1	
..	..	1	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	144	28·8	
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	684	26·7	

Year.	Voyage.	Station.	Net and No. of Haul.	Month. Day.	Duration (hrs.).	Centimetres. 6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
1903	XV	9	B 51	July 17	4	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1	4	7	13	10	10	13	12	14	14	8	9	9	2	2	1
		10	B 52	„ 17	6½	..	..	..	..	..	..	..	..	..	..	..	3	1	..	4	5	6	4	7	3	9	11	15	6	11	14	4	3	2	4	4	..
		11	B 53	„ 17	3½	..	..	..	..	..	..	..	..	1	..	2	..	3	1	5	2	5	5	4	11	7	8	4	9	10	7	3	5	3	6	4	3
		13	B 55	„ 18	4	..	..	..	..	..	..	..	1	..	..	..	1	..	1	..	3	..	1	5	4	4	7	5	6	6	6	6	6	6	5	2	3
		14	B 56	„ 18	4¾	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1	2	..	..	2	1	4	1	2	4	1	1	1	1
		15	B 57	„ 18	3½	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1	..	3	..	1	3	1	..	5	1	3	3	1	1	1	2	2	3
		16	B 58	„ 18-19	7	..	..	..	..	..	..	..	..	..	2	6	7	9	15	35	35	17	22	22	20	19	17	13	14	8	8	3	7	5	6	1	..
	XVI	2	B 60	„ 22	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
		3	B 61	„ 22	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	1	..	1	3	..	4	1	1	6	1	1	2	..	..	2	..
		4	B 62	„ 22	3	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	1	3	2	..	1	2	1	..	3	..	2	1	..	..	1
		5	B 63	„ 22-23	3½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	3	6	2	3	6	2	3	3	1	1	5	2	..	4	2	2
	XVII	1	O 88	„ 29	2	..	..	..	..	..	..	..	..	..	..	3	..	4	1	2	4	3	4	12	14	6	10	6	6	1	4	2	1	3	1	1	..
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		2	O 89	„ 29	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	3	3	4	..	1	3	2	..	3	..	..	..	..	..	..
						..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	4	4	2	3	3	1	..	..	1	1	1	..	1	..	..	..	..
		4	O 90	„ 30	2	..	..	..	..	..	..	..	..	..	..	..	..	4	12	19	23	11	10	10	3	4	1	1	2	1	..	1	..	..	..	..	..
						..	..	..	..	..	..	..	..	..	..	..	1	..	10	7	13	11	5	6	6	3	4	2	1	1	1	1	..	..	..	..	..
		5	O 91	„ 30	2	..	..	..	..	..	..	..	..	..	..	..	2	5	14	29	25	28	17	15	19	4	9	2	3	3	5	..	1	1	..	..	..
						..	..	..	..	..	..	..	..	..	..	1	..	2	8	13	19	23	13	15	11	5	6	2	2	1	10	1	1	..	2	..	..
		6	O 92	„ 30	2	..	..	..	..	..	..	..	..	..	..	..	..	10	26	50	47	26	9	5	1	2	3	1	..	..	..	..	..	1	..	..	..
						..	..	..	..	..	..	..	..	..	..	..	1	3	16	41	46	35	13	8	6	3	1	..	..	..	..	..	..	..	1	..	1
	XVIII	1	B 65	Aug. 11	2	..	..	..	..	..	..	..	..	..	2	1	4	1	2	3	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
						..	..	..	..	..	..	..	2	..	2	1	..	2	1	3	3	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		2	B 66	„ 12	2	..	..	..	..	..	..	1	8	13	15	17	15	10	8	5	4	9	3	4	2	3	3	..	3	1	1	..	..	..	..	..	..
						..	..	..	..	..	..	1	1	7	5	7	11	12	6	4	6	..	2	6	1	1	2	1	1	..	..	..	..	..	..	..	..	..
		3	B 67	„ 12	2	..	..	..	..	..	..	1	8	7	12	12	15	12	9	10	10	2	5	3	..	1	..	..	..	..	..	..	..	..	..	..	..
						..	..	..	..	..	..	1	4	6	6	7	9	2	10	7	12	9	3	2	5	1	..	..	..	1	..	..	..	..	1	..
		9	B 68	„ 13	2	..	..	..	..	..	..	..	..	7	4	2	3	2	1	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
						..	..	..	..	1	..	2	5	3	7	4	4	1	4	6	3	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
		11	B 69	„ 17	2	..	..	..	..	..	..	1	2	..	1	2	..	..	1	..	1	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..
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		12	B 70	„ 17	1½	..	..	..	..	..	..	..	..	1	..	1	1	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
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		16	B 71	„ 18	2	..	..	..	..	..	..	..	..	1	2	7	6	8	5	5	1	2	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
						..	..	..	..	..	..	..	..	..	..	2	6	1	3	3	1	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		17	B 72	„ 18	1½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	..	..
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		18	B 73	„ 19	2	..	..	..	..	..	1	2	14	7	13	14	6	8	3	6	2	3	3	..	..	1	1	..	..	..	..	1	..	..	..	..	..
						..	..	..	..	..	..	2	..	6	10	9	11	5	3	7	2	1	3	2	..	..	2	..	1	..	..	..	..	..	..	..	..	..
		19	B 74	„ 19	2	..	..	..	..	..	..	1	1	1	2	2	2	..	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
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		20	B 75	„ 19	1½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
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		21	B 76	„ 19	2	..	..	..	..	..	..	..	..	..	3	..	2	1	4	5	1	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..
						..	..	..	..	..	..	..	..	1	1	4	1	1	3	1	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		22	B 77	„ 19-20	3½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	2	..	1	1	..	..	1	..	..	..	1	..	..	..	..
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		23	B 78	„ 20	5	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	2	3	3	2	..	..	1	..	..	..	..	..	1	..	..	..	..
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		24	B 79	„ 20	2½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..
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CENTIMETRES.																														Total for each Sex.	Total Measured.	Average Size.	REMARKS.
38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68				
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	134	28·8		
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	117	27·5		
2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	112	27·9		Net torn, &c.
1	5	1	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	87	28·3		
2	1	3	..	1	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	32	31·6		Net torn, &c.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	34	28·4		
4	..	3	1	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	301	24·5		
..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	32·0		Net torn, &c.
..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	29	29·9		
..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	21	28·2		
..	2	2	1	2	..	..	1	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	59	30·4		
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	88	169	26·6	M.
..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	81			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27	51	24·9	M.
..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	102	174	22·2	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	72			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	182	317	23·1	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	135			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	181	356	21·1	M. Net torn, &c.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	175			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	31	18·5	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	125	199	18·5	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	74			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	107	193	18·4	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	86			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	23	64	16·6	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	41			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	26	18·7	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	11	17·5	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	40	62	18·6	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	4	32·5	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	85	149	17·2	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	64			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	18	16·8	M. Net torn, &c.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	M. Net torn, &c.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	34	18·7	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	29	25·4	M. Net torn, &c.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	50	24·7	M. Net torn, &c.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	35			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	12	24·1	M. Net torn, &c.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4			F.

Year.	Voyage.	Station.	Net and No. of Haul.	Month. Day.	Duration (hrs.).	CENTIMETRES. 6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
1903.	XIX	1	O 93	Aug. 24	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..
		2	O 94	„ 24	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	6	9	10	18	12	19	9	11	9	6	4	2	..	2
		3	O 95	„ 25	6	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	2	2	6	9	16	25	28	23	21	18	16	3	5	3	5	2	2
		4	O 96	„ 25	5	..	..	..	..	..	..	..	..	..	1	1	..	..	..	2	4	8	9	12	14	23	23	22	31	22	11	14	11	8	11	6	2
		5	O 97	„ 25	5	..	..	..	..	..	..	..	..	..	..	..	..	3	3	6	6	23	26	41	65	67	73	62	45	45	28	24	16	6	3	10	6
		7	O 99	„ 26	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	7	5	10	11	26	22	19	16	11	13	4	7	4	5	3	1
		8	O 100	„ 26	5	..	..	..	..	..	..	..	..	..	1	..	1	4	..	2	10	9	9	15	14	19	15	20	25	11	13	10	6	5	5	1	6
		9	O 101	„ 26	5	..	..	..	..	..	..	..	..	..	..	1	1	2	..	1	4	9	8	21	31	49	52	59	58	41	44	16	19	15	6	6	6
	XX	1	O 102	Sept. 2	$5\frac{3}{4}$	..	..	..	..	..	..	..	..	..	..	1	..	4	..	5	11	5	7	13	13	10	9	12	5	4	5	1	..	..	..	..	..
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		2	O 103	„ 2	3	..	..	..	..	..	..	..	..	..	..	..	1	2	7	6	8	6	2	1	12	12	6	5	5	8	5	4	2	3	1	2	..
						..	..	..	..	..	..	..	..	..	..	..	1	1	5	5	4	3	10	6	8	4	6	5	7	4	6	4	3	4	3	2	2
		3	O 104	„ 2-3	7	..	..	..	..	..	..	..	..	..	..	1	5	18	22	12	2	5	8	9	10	5	3	3	1	2	5	1	2	1	..	..	..
						..	..	..	..	..	..	..	..	..	..	1	7	17	23	9	10	6	4	2	3	4	5	5	1	7	3	5	..	2	2	1	..
		4	O 105	„ 3	2	..	..	..	..	..	..	..	..	..	..	..	2	7	10	4	11	5	9	4	4	4	2	3	7	4	1	2	2	1	..	1	..
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		5	O 106	„ 3	$1\frac{1}{2}$	..	..	..	..	..	..	..	..	..	..	2	4	9	13	11	6	6	7	3	5	4	4	5	3	1	2	3	4	2	..	1	..
						..	..	..	..	..	..	..	..	..	..	1	4	5	5	8	7	..	6	7	4	4	3	6	3	6	4	2	1	1	..	..	..
		6	O 107	„ 5	2	..	..	..	..	1	..	1	4	5	5	24	15	8	8	6	8	2	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..
						..	..	..	..	..	1	3	2	4	16	16	32	27	23	18	12	5	8	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		7	O 108	„ 5	$\frac{1}{2}$	..	..	..	..	..	1	1	..	2	4	11	9	3	1	..	1	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		8	O 109	„ 5	2	..	..	..	..	1	..	4	1	11	19	29	28	28	17	7	5	3	1	1	1	..	..	..	1	..	1	..	..	..	..	..	..
		9	O 110	„ 6	$2\frac{11}{12}$	..	..	..	..	..	..	..	..	..	4	5	12	6	10	3	1	3	3	1	2	1	1	1	..	..	1	1	..	..	..	..	..
						..	..	..	..	..	..	..	..	..	2	4	11	9	3	5	2	2	1	..	1	1	1	1	1	..	1	..	..	..	..	..	..	..
						..	..	..	..	..	..	..	..	2	19	53	62	50	48	30	30	13	9	7	5	8	4	1	6	1	1	..	..	..	1	..	..	..
		10	B 80	„ 14	2	..	..	..	..	..	1	13	39	39	34	30	33	27	10	9	5	..	3	2	1	2	1	1	1	1	..	..	..	..	..	..	..
						..	..	..	..	..	..	4	18	25	17	17	27	19	10	12	6	3	6	3	3	2	6	4	2	2	1	1	1	..	..	..	1
		11	B 81	„ 14	2	..	..	..	..	..	..	5	22	25	37	32	42	23	13	9	4	2	1	3	3	2	6	1	..	1	..	..	1	..	..	..	..
						..	..	..	..	..	1	6	16	31	16	25	40	29	13	9	4	3	2	4	11	6	5	3	..	1	..	2	..	..	..	..	..	..
		12	O 111	„ 15	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	4	2	6	9	14	11	12	6	6	3	6	3	1	1	1	2
						..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	6	4	10	13	17	10	19	9	12	6	3	2	2	1	5
		13	O 112	„ 15	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	7	8	9	10	17	17	7	11	7	6	3	1	1	2	1
						..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	3	..	6	3	7	16	19	11	15	6	11	5	5	2	6	1	1
		14	O 113	„ 15	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	5	5	11	10	12	5	9	6	3	3	..	2	1	1
						..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	2	9	9	8	12	10	12	9	6	7	3	4	6	2
		15	O 114	„ 17	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	2	9	6	2	..	5	2	2	..	1	..	..
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		16	O 115	„ 17	$1\frac{1}{2}$	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	2	3	..	..	2	..	..	..	..
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		17	O 116	„ 17	$1\frac{1}{2}$	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	2	3	..	1	1	..	..	3	1	2	1	..	1	1	..
						..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	4	2	1	1	5	6	6	1	1	..	1	1	..	1	..	1	..	..
		18	O 117	„ 17	5	..	..	..	..	..	..	..	..	..	..	2	4	15	15	24	13	15	12	10	5	6	4	3	5	5	2	1	3	4	3	..	..
						..	..	..	..	..	..	..	..	..	..	..	3	9	22	16	8	15	7	7	14	9	8	7	5	7	3	1	4	5	7	2	1
	XXI	1	O 118	„ 30	$3\frac{1}{4}$	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
						..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		3	B 82	Oct. 8	2	..	..	1	..	..	..	3	19	16	14	9	14	9	12	10	4	3	4	2	1	..	..	1	..	..	..	..	..	..	..	..	..
						..	..	..	..	..	..	9	25	28	15	18	15	13	20	20	11	6	1	1	..	1	..	..	1	..	..	..	..	..	..	..	..	..
		4	O 120	„ 8	$1\frac{11}{12}$	..	..	..	..	..	..	3	16	28	18	18	10	18	18	10	5	5	3	2	..	1	..	..	1	2	..	..	..	..	..	..	..
						..	..	..	..	..	..	2	12	25	29	19	25	28	30	23	18	11	7	3	1	1	1	1	1	1	1	..	..	..	..	..	..	..
		5	O 121	„ 9	$1\frac{1}{4}$	..	..	..	1	3	14	15	8	12	10	11	20	17	19	23	13	4	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..
						..	..	..	..	1	8	15	24	18	17	14	14	22	28	15	9	4	6	5	..	1	..	..	..	..	1	..	..	..	..	..	..	..

Centimetres.																															Total for each Sex.	Total Measured.	Average Size.	Remarks.
38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68				
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	27	
2	1	1	..	2	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	127	29·4	
..	1	3	2	1	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	198	28·6	
3	1	5	4	1	1	3	1	1	..	..	..	..	..	1	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	258	29·4	
3	3	3	..	2	..	..	2	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	575	27·7	
1	..	1	2	1	..	1	1	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	178	28·6	
4	1	..	1	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	209	27·9	
2	1	1	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	456	28·5	
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	106	186	25·2	M.
..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	80			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	98	212	27·9	M.
5	2	3	..	..	2	..	3	1	2	..	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	114			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	115	233	22·5	M.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	118			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	83	186	25·3	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	103			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	95	174	23·8	M.
..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	79			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	91	263	17·9	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	172			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	36	16·7	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	158	17·2	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	55			M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	45	450	18·1	F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	350			M. & F. Part only of catch measured.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	190	442	16·9	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	252			F.
..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	230	463	17·5	M.
1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	233			F.
..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	131	222	29·2	M.
2	..	1	..	..	1	..	..	..	..	..	..	3	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	91			F.
2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	113	232	28·2	M. Part only of catch measured.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	119			F.
1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	77	182	29·4	M. Part only of catch measured.
1	..	1	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	105			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	33	71	31·1	M.
2	..	..	2	1	..	..	..	..	1	2	2	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	38			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	31	30·9	M.
..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19	51	25·8	M
..	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	32			F.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	152	316	23·9	M.
..	1	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	164			F.
..	..	..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	9	42·4	M.
..	..	1	..	..	1	1	2	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	122	306	16·7	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	184			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	158	397	17·5	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	239			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	174	376	16·7	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	202			F.

Year.	Voyage.	Station.	Net and No. of Haul.	Month. Day.	Duration (hrs.).	Centimetres. 6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
1903	XXII	2	B 84	Nov. 16	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	3	1	5	5	8	10	5	5	3	3	3
		3	B 85	„ 16	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..
		5	B 87	„ 17	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	3	..	1	1	4	2	..	1	3	1	..	..
		6	B 88	„ 17	1¼	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	3	2	2	..	2	3	4	3	2	..	1	..	..	..	..	..
		7	B 89	„ 17	⅝	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	2	..	1	5	1	1	..	..	1
		9	B 91	„ 18	5½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	2	1	..	..	..	..	1	..	..
		11	B 92	„ 19	¾	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		12	O 122	„ 20	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..	2	1	4	3	2	4	3	2	..	2	..
	XXIII	1	B 93	„ 28	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	2	..	..	2	1	1	..	2	..	..	..	..	..	..	..
						..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	2	1	4	3	3	1	2	1	3	1	1	1	..	1	..	..
		2	B 94	„ 29	4	..	..	..	..	..	..	16	31	43	26	17	3	4	2	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
						..	..	..	..	..	1	5	39	24	30	15	7	3	1	1	4	3	1	1	..	..	..	..	..	..	..	..	1	..	..	..	..
						..	..	..	..	..	8	69	128	129	102	80	36	17	12	5	7	4	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		3	B 95	Dec. 1	3	..	..	..	..	..	..	..	..	7	24	27	51	33	25	32	28	15	15	8	3	3	3	..	..	..	..	1	..	..	..	..	..
						..	..	..	..	..	..	..	1	8	16	24	37	23	31	24	21	17	19	13	2	3	..	..	..	..	..	..	..	..	..	..	..
		4	B 96	„ 1	3	..	..	..	..	..	..	..	8	24	23	36	46	26	16	14	12	10	5	10	3	2	4	..	1	1	..	..	..	..	..	..	..
						..	..	..	..	..	..	1	6	21	28	38	23	27	23	20	22	14	8	3	2	..	..	..	..	..	..	..	..	..	..	..	..	..
		5	B 97	„ 3	2	..	..	..	..	..	..	..	..	1	..	..	..	1	..	2	..	..	..	..	..	1	..	1	..	1	..	..	..	..	..	..	..
						..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	1	..	..	1	..	5	..	3	..	..	..	..	..	1	..	..	..
		6	B 98	„ 3	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	1	1	2	..	1	..	..	1	..	..	..	..	..	..	..	..
						..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	XXIV	1	O 123	„ 11	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	3	1	2	..	1	..	..	2	..	1
		2	O 124	„ 11	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	4	4	1	1	..	..	..	..	..	..	1
		3	O 125	„ 12	7	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	3	6	8	8	18	20	34	30	13	14	11	8	4	4	2	2	..
		4	O 126	„ 12	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	2	2	6	..	3	2	5	1	4	1	1	..	..
		5	O 127	„ 12	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	2	5	6	7	1	1	5	1	1	1	..	..	3	2	2
		6	O 128	„ 13	5	..	..	..	..	..	..	..	..	..	..	..	..	2	..	3	4	3	..	3	2	2	2	5	2	2	1	2	4	3	3	1	..
		7	O 129	„ 14	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	3	2	1	5	6	1	4
		8	O 130	„ 14	4½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	3	2	1	1	..	2	1	..	..	4	1	2	2	2
		9	O 131	„ 14	4⅔	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	2	2	5	3	..	2	3	3	5	3	3	2	2
		10	O 132	„ 14	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	1	1	..	1	..	3	3	4	2	..	3	3
		11	O 133	„ 14-15	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	1	2	3	..	4	2	2	3	3	2	2	5	..
		12	O 134	„ 15	5½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	1	2	..	2	7	2	..	5	4	1	..	1	2	2	2	2	..
		13	O 135	„ 15	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	8	3	8	3	5	6	5	5	8	11	7	3	3	2	1
		14	O 136	„ 15	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	2	1	2	1	1	1	6	1	3	1	2	2
		15	O 137	„ 15-16	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	1	..	..	2	..	1	1	..	1	3	2
		16	O 138	„ 16	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	3	..	3	2	3	1	1	1	2
		17	O 139	„ 16	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	3	..	1	..	..	1	2	2	2	1	..	4	1	1
		18	O 140	„ 16	5¼	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	..	2	3	3	..	4	5	5	4	2
		19	O 141	„ 16-17	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	1	2	1	..	..	1	..	..	1	1	2
		20	O 142	„ 17	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	5	2	1	2	1	2	3	..	2	..	..	4
		21	O 143	„ 17	5	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2	..	3	3	..	1	3	1	5	1	..	4	2	2	4	4	4	1
		22	O 144	„ 17	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..	4	1	2	4	..	2	1	..	2
		23	O 145	„ 17-18	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
		24	B 99	„ 18	2	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	2	..	..	..

Centimetres.																															Total for each Sex.	Total Measured.	Average Size.	Remarks.
38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68				
3	..	3	1	2	2	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	68	33·9	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	
..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19	30·2	
2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	29	28·7	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	30·7	Net torn, &c.
..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	31·1	
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	Net torn, &c.
2	1	1	1	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	35	33·1	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	38	26·8	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	143			M
.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	136	879	14·6	F
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	600			M. & F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	275	514	18·9	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	239			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	241	478	17·9	M.
..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	237			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	21	24·0	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14			F.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	13	22·5	M.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4			F.
..	..	1	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	32·6	
..	1	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	30·4	
1	..	..	1	1	..	1	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	193	28·0	
1	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	33	30·5	
3	1	2	..	3	..	..	..	1	5	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	58	32·2	Net torn, &c.
..	2	1	2	2	..	1	..	1	..	1	..	2	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	57	31·0	
1	4	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	33	35·3	
1	1	4	1	2	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	37	35·5	
3	3	2	5	3	3	1	3	..	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	64	35·2	
1	4	2	1	1	2	1	..	..	1	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	40	35·5	
3	3	2	..	1	..	1	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	45	33·4	Net torn &c.
..	..	1	1	1	1	3	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	44	30·4	
5	1	..	..	..	1	1	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	90	30·3	
1	1	1	..	2	..	..	1	1	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	35	34·2	Net torn, &c.
3	3	6	2	..	..	..	2	2	..	..	1	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	38	38·3	
3	1	4	3	2	2	2	1	..	2	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	38	37·8	Net torn, &c.
1	1	1	1	3	2	3	2	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	38	35·8	
4	2	5	3	1	3	1	1	2	1	..	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	59	37·1	
2	1	1	3	3	..	1	1	2	..	..	..	1	..	1	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	30	39·0	
3	3	3	2	..	5	..	1	2	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	45	35·8	
3	1	2	..	1	..	2	3	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	57	33·7	
..	3	1	..	2	..	1	1	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	30	35·4	
..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	41·3	
..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	36·5	

VII.—PARTICULARS OF TRAWLING

Explanations of Abbreviations

gl. or grv. = gravel.
m. = mud.
ooze = fine mud of little tenacity.
ross = sand-tubes of **Sabellaria spinulosa**, aggregated in rough masses.
s = sand.
sh. = shells.
br. = brown.

Came fast.—The trawl was stopped by some part of it encountering an obstacle (*e.g.*, wrecks, ross-banks, boulders).
Foul haul.—A haul in which normal fishing was prevented by accident to some part of the trawl or warps.

Voyage	Station.	Month.	Day.	Net and No. of Haul.	Name of Ground.	Position.			Depth (fathoms).			Bottom.		
						Shot.	Course.	Hauled.	Shooting.	Towing.	Hauling.	Shooting.	Towing.	Hauling.
I	1	1902. Nov.	2	O 1	North East of West Shoal of Dogger.	54° 39½′ N., 2° 8′ E. ..	4½ miles E.S.E.	54° 38′ N., 2° 15′ E. ..	13	..	11	f.s. & sh.	..	s. & sh.
„	2	„	„	O 2	South of Easternmost Shoal of Dogger.	54° 41½′ N., 2° 49½′ E. ..	E. ¼ S. 3½ miles	54° 41½′ N., 2° 56′ E...	17½	..	19	f.s.	..	f.s.
„	3	„	3	O 3	N.E. of Ameland	53° 47′ N., 6° 0′ E. ..	S.W. by W. 4 miles	53° 44′ N., 5° 55½′ E. ..	16	..	15	f.s.	..	f.s.
„	4	„	„	O 4	Off „	Ameland Light-house, S.W. ½ W. 4 miles.	E.N.E. 2 miles	Ameland Light-house, S.W. by W. 6 miles.	9¾	..	11½	f.s.	..	f.s.
„	5	„	„	O 5	„ „	Ameland Light, South 14 miles.	N.W. by N. ½ N. 12 miles.	53° 50′ N., 5° 18′ E. ..	15	..	18	f.g.s.	..	f.g.s.
„	6	„	4	O 6	Brown Ridges	52° 44′ N., 3° 32′ E. ..	S.S.W. 1 mile W.N.W. 1 mile.	52° 43½′ N., 3° 31½′ E.	16	..	15	f.s.	..	f.s.
„	7	„	„	O 7	„ „	52° 40½′ N., 3° 21′ E. ..	N. by E. 4½ miles	52° 45′ N., 3° 23′ E. ..	21	..	18	f.s.	..	f.s.
II	1	„	20	O 8	Off Ymuiden	52° 30½′ N., 4° 14½′ E. ..	W. by S. 4½ miles	52° 28½′ N., 4° 7½′ E...	11	..	13	f.s.	..	f.s.
„	2	„	„	O 9	„ „	52° 32½′ N., 3° 57½′ E. ..	W.N.W. 2 miles S.E. 6 miles. S.W. 1½ miles. N.W. 3 miles. E. 1 mile.	52° 31½ N., 4° 0′ E. ..	14	..	13	f.s.	..	f.s.
III	1	Dec.	8	O 10	„ Ameland	Ameland Light, S. ¼ E. 15½ miles.	N. 3 miles and S.S.W. 3½ miles.	53° 41′ N., 5° 28′ E. ..	15	17	15	f.s.	f.s.	f.s.
„	2	„	„	O 11	„ „	53° 42′ N., 5° 30½′ E. ..	S.S.W. 2½ miles	53° 39½′ N., 5° 30′ E.	15	..	15	f.s.	..	f.s.
„	3	„	„	O 12	„ „	53° 39½′ N., 5° 30′ E. ..	S. 2½ miles	Ameland Light-house, S.S.E. 9 miles.	15	..	13	f.s.	..	f.s.
„	4	„	„	O 13	„ „	Ameland, S. by E. 9 miles.	W. 2½ miles	Ameland Light-house, S.E. by S. ½ S. Terschelling Light house, S.W.	13	..	12	f.s.	..	f.s.
„	5	„	„	O 14	„ Terschelling	Ameland Light-house, S.E. by S. ½ S. Terschelling Light-house. S.W.	N.W. by W. 12 miles	53° 39½′ N., 5° 0′ E. ..	12	..	13	f.s.	..	f.s.
„	6	„	„	O 15	Off Terschelling	53° 39½′ N., 5° 0′ E. ..	N.W. by W. 2 miles and N. by W. 7 miles.	53° 46½′ N., 4° 47½′ E..	13	..	20	f.s.	..	f.s. & m.
„	7	„	8-9	O 16	„ „	53° 46½′ N., 4° 47½′ E. ..	N. 10 miles S. by E. 5 miles. S.W. 2 miles.	53° 50′ N., 4° 44′ E. ..	20	..	22	f.s. & m.	..	m.
„	8	„	9	O 17	„ „	53° 50′ N., 4° 44′ E. ..	N. by W. 6 miles W. 1 mile.	53° 55′ N., 4° 36′ E. ..	22	..	22	m.	..	m.
„	9	„	„	O 18	„ „	53° 54½′ N., 4° 33½′ E. ..	N. by W. 7½ miles	54° 1′ N., 4° 28′ E. ..	22	..	24	m.	..	s. & m.
IV	1	1903. Jan.	7	O 19	„ „	53° 49′ N., 4° 53′ E. ..	N.N.E. 7 miles	53° 54′ N., 4° 57′ E. ..	20	..	22	f.s.	..	f.g.s.

STATIONS OF S.S. "*Huxley*."

AND PHRASES.

c. = coarse (Bottom Deposits.)
d. = dark.
f. = fine.
g. = grey.
l. = light.
r. = ross.
spk. = speckled.

c. = common (Bottom Fauna).
fc. = fairly common "
vc. = very common "

Had a pull out, or *Pulled out*.—The trawl came fast temporarily, but resumed its course.

Duration of Haul.			Tide.	Sea.	Weather.		Damage to Net, &c.	Bottom Fauna.	General Remarks. Trawlers Working, &c., Naturalist in Charge and Assistants.
Shot.	Hauled.	No. of Hours.			Wind and Force.	Sun, Rain, &c.			
8 a.m.	10.15 a.m	2¼	..	Heavy swell from North.	N. by W.	Overcast	—	Many Molluscs—*Buccinum undatum*, *Mactra*, *Solen*, *Fusus antiquus* f.c. ; *Callisoma krӧyeri* v.c., *Eupagurus bernhardus* f.c., *Asterias rubens* c.	E. J. Allen, W. Garstang, R. A. Todd.
4.15 p.m.	5.45 p.m.	1½	..	Moderate swell from North.	W. 3	Overcast	—	Sponge c. ; *Eupagurus bernhardus* f.c., some Gasteropods ; *Asterias rubens* c.	
10 a.m.	Noon	2	Last ebb	Smooth	S.W.	Cloudy	—	Large quantity of **Tubularia coronata ;** *Buccinum undatum ;* *Eupagurus bernhardus*, *Corystes*, *Cancer ;* *Astropecten irregularis* c., *Asterias rubens*, c.	
3.20 p.m.	4.20 p.m.	1	First quarter flood.	Smooth	S.W. by W. 5	Cloudy	Foul haul.(?). Board capsized (?)	*Crangon vulgaris ;* Few starfish.	
7 p.m.	Midnight	5	Slack	Choppy	S.W. by W.	Cloudy	—	Night haul ; no record.	
1 p m.	2 p.m.	1	First ebb	Choppy	S. 2	Overcast	—	*Flustra foliacea ;* *Loligo* c. ; *Eupagurus* c. ; *Asterias rubens* c.	
3.45 p.m.	6 p.m.	2¼	Half ebb	Rough	S.E. by S. 5	Overcast	—	*Eupagurus bernhardus ;* .. .. *Asterias rubens.*	Four trawling smacks towing with us.
10.30 a.m.	0.30 p.m.	2	First quarter flood.	Smooth	E. by S.	Fine, hazy	—	Many Hydroids, including *Tubularia*, *Sertularia argentea*, *Hydrallmania falcata ;* *Asterias rubens* and *Ophiura ciliaris* c.	C. Forster Cooper, F. Balfour Browne, R. A. Todd
4 p.m.	11 p.m.	7	Last quarter flood.	Smooth	E. by S.	Fine, hazy	—	Nothing.	
4.15 a.m.	8.10 a.m.	3h. 55m.	First quarter ebb.	Moderately rough.	E. by S. 4	Cloudy	—	Much weed with *Obelia geniculata ;* .. .. *Paratylus swammerdami* v.c. ; Large quantity of **Asterias rubens,** few Brittle-stars, *Echinocardium* v.c. *Cottus scorpius.*	C. Forster Cooper, F. Balfour Browne, R. A. Todd.
8.45 a.m.	10 a.m.	1¼	Last quarter ebb.	Moderately smooth.	E. by S. 4	Cloudy	—	*Paratylus swammerdami* v.c. ; Large quantity of **Asterias rubens,** *Astrospecten irregularis* c., *Ophiothrix fragilis*, *Ophiura albida*, *Ophiura ciliaris*, all f.c. ; *Cottus scorpius.*	
10.25 a.m.	11.30 a.m.	1h. 5m.	2 hours flood.	Moderate	E.S.E. 4	Cloudy	—	Many **Asterias rubens.** Moderate quantity of other Asteroids and of Ophiuroids.	Sea temperature 36° at surface.
0.10 p.m.	1.20 p m.	1h. 10m.	Half flood.	Moderate	E.S.E. 4	Cloudy	—	Sponge ; otherwise as III 3.	
1.40 p.m.	6.40 p.m.	5	First half ebb.	Moderate	E.S.E. 4	Cloudy	—	*Paratylus swammerdami* c ;.. .. .. Large quantity of **Asterias rubens,** dead *Echinocardium cordatum.* Few other Asteroids and Ophiuroids.	Fish not measured.
7 p.m.	11.15 p.m.	4¼	2 hours ebb ; 2 hours flood.	Moderate	E.S.E. 4	Cloudy	—	As III 5	Fish not measured.
(8th) 11.45 p.m.	(9th) 6.45 a.m.	7	Last flood ; 4 hours ebb.	Moderate	E. 4	Cloudy	—	*Obelia longissima* and *geniculata*, *Hydrallmania falcata ;* .. *Asterias rubens* c., many species of Echinoids, Asteroids, and Ophiuroids represented.	Fish not measured.
7.15 a.m.	10 a.m.	2¾	Last quarter ebb.	Moderately rough.	E. 4	Cloudy	—	Several *Actinozoa.*	
11.45 a.m.	2.45 p.m.	3	First quarter flood.	Rough	E. 6	Cloudy	—	Large quantities of **Actinozoa ;** *Pholas crispata* f.c., *Ostrea edulis* f.c., Gasteropods ; *Pycnog num littorale.*	
8.45 a.m.	11.45 a.m.	3	Last ebb ; first flood.	Rough	S.W. by S. 9 half a gale.	Dull, rain	Carried away port brake of winch.	Many *Actinozoa ;* .. .. Several *Ostrea edulis ; Buccinum undatum* f.c. ; Hermit crabs in *Natica* shells.	H. M. Kyle, R. A. Todd.

Voyage.	Station.	Month.	Day.	Net and No. of Haul.	Name of Grouud.	Position			Depth (fathoms).			Bottom.		
						Shot.	Course.	Hauled.	Shoot-ing.	Towing.	Haul-ing.	Shoot-ing.	Towing.	Hanl-ing.
V	1	Jan.	20	O 20	Lowestoft Deep Water (Middle Ground).	52° 13½′ N., 2° 28′ E. ..	N.E. 8 miles	52° 20½′ N., 2° 33½′ E..	23	..	25	f.s.	..	f.g.s.
,,	2	,,	,,	O 21	Middle Ground to Knoll Deep.	52° 20½′ N., 2° 33½′ E. ..	N.E. 9 miles	52° 27½ N., 2° 40½′ E...	25	..	23	f.g.s.	..	f.s.
,,	3	,,	21	O 22	South part of Knoll Deep.	52° 27½′ N., 2° 40½′ E. ..	S.W. by W. 15 miles	52° 17′ N., 2° 25′ E. ..	23	..	24	f.s.	..	f.g.s.
,,	4	,,	,,	O 23	,, ,,	52° 17′ N., 2° 25′ E. ..	N.E. 13½ miles	52° 28′ N., 2° 35½′ E. ..	24	..	24	f.g.s.	..	f.g.s.
,,	5	,,	,,	O 24	South West of Winterton Shoal.	52° 28′ N., 2° 35½′ E. ..	S. by E. 13 miles	52° 16½′ N., 2° 55′ E. ..	24	..	25	f.g.s.	..	f.g.s.
,,	6	,,	,,	O 25	Middle Ground	52° 15′ N., 3° 6½′ E. ..	N.E. by E. 8½ miles, and W. 2½ miles.	52° 16½′ N., 3° 2½′ E. ..	20	..	19	f.s.	..	f.s.
,,	7	,,	22	O 26	North part of Middle Ground.	52° 23½′ N., 2° 57′ E. ..	N.W. by N. 10 miles S.W. by W. 3½ miles.	52° 27′ N., 2° 42½′ E. ..	22	..	23	f.s.	..	f.g.s.
VI	1	March	1	O 27	New Zealand	53° 34′ N., 3° 57′ E. ..	12½ miles N.E. by E. ½ E.	53° 50½′ N., 4° 12′ E. ..	17	..	22	f.g.s.	..	f.g.s. & m.
,,	2	,,	,,	O 28	North East of New Zealand.	53° 50½′ N., 4° 12′ E. ..	N.E. 7 miles and N.N.W. 7 miles.	54° 5′ N., 4° 13½° E. ..	22	..	23	s. & m.	..	s. & m.
,,	3	,,	,,	O 29	Oyster	54° 5′ N., 4° 13½′ E ..	N.E. by N. 4 miles and N. 4 miles.	54° 13′ N., 4° 14′ E. ..	23	..	24	g.s. & m.	..	s. & m.
,,	4	,,	3	O 30	Knoll Deep Water ..	52° 37½′ N., 2° 26½′ E. ..	N. by E. 7 miles E. 2 miles. S.S.W. 4 miles.	52° 40′ N., 2° 29′ E. ..	27	..	25	c.s.	..	r.s.
VII.	3	,,	6	O 31	Lowestoft Flats	Lowestoft High Light, N.W. by N. Southwold Light, W. by S.	8 miles N.E.	Lowestoft High Light, W. by S.	18	..	18	ross & gravel.	..	ross & gravel.
,,	4	,,	7	O 32	West side of Lowestoft Deep Water.	Lowestoft High Light, W. ½ S.	S.W. by S.	Lowestoft High Light, N.W. by N.	18	..	20	c.s.	..	c.s.
VIII.	2	,,	11	O 33	Markham's Hole	53° 47′ N.. 2° 35′ E. ..	N.N.W. 2 miles S.S.E. 2 miles S.E. by S. 2 miles.	53° 47′ N., 2° 37′ E. ..	33	33	27	m.	..	m.
,,	4	,,	,,	O 34	Great Silver Pit	54° 2′ N., 2° 19′ E. ..	E. 5 miles W. by S. 3 miles and N.W 1½ miles.	54° 5′ N. 2° 19′ E. ..	37	..	27	m.	..	s. & m.
,,	7	,,	12	O 35	Clay Deep	54° 30′ N., 3° 8½′ E. ..	E. 6 miles	54° 32′ N., 3° 18′ E. ..	22	22	22	f.g.s.	..	f.g.s.
,,	8	,,	,,	O 36	Clay Deep	54° 34′ N., 3° 20′ E. ..	N.E. ½ E. 4 miles	54° 37′ N., 3° 25′ E. ..	22½	22½	22	ooze	..	ooze
,,	9	,,	13	O 37	Clay Deep to Upper Scruff.	54° 48′ N., 3° 25′ E. ..	N.E. by E. 6 miles and N.N.E. 3 miles.	54° 56′ N., 3° 32½′ E...	23½	23½	23	f.g.s. & m.	..	f.g.s.
,,	11	,,	,,	O 38	Upper Scruff	55° 0½′ N., 3° 42½′ E. ..	N.E. 10½ miles	55° 10′ N., 3° 53′ E. ..	23	23	24	f.s. & ooze.	..	f.s. & ooze.
,,	12	,,	,,	O 39	Between Upper and Lower Scruff.	55° 10′ N., 3° 53′ E. ..	N.N.E. 6 miles, N.N.W. 1 mile.	55° 17′ N., 3° 53′ E. ..	24	22	17	f.s. & ooze.	..	s. & sh.
,, *	14	,,	13	O 40	Dogger Bank, between Elbow Spit and Swashway.	55° 18′ N., 3° 52½′ E. ..	N. 9 miles	55° 26′ N., 3° 50′ E. ..	17	17	17	s. & sh.	..	f.g s.
,, *	15	,,	14	O 40	Dogger Bank West of Tail End.	55° 26′ N., 3° 50′ E. ..	N. by W. ½ W. 12 miles and N.N.E. 3 miles.	55° 41½ N., 3° 42½′ E.	17	20	24	f.g.s.	..	s. & sh.

Duration of Haul.			Tide.	Sea.	Weather.		Damage to Net. &c.	Bottom Fauna.	General Remarks, Trawlers Working, &c., Naturalist in Charge and Assistants.
Shot.	Hauled.	No. of Hours.			Wind and Force.	Sun, Rain, &c.			
5 p.m.	8 p.m.	3	First half ebb.	Smooth	S.S.E. 2	Overcast	—	Several *Eupagurus bernhardus* ; .. .. *Serpula* tubes ; Echinoids and Asteroids.	C. Forster Cooper, C. W. Dance.
8.30 p.m.	11.30 p.m.	3	Last half ebb.	Smooth	S.E. 2	Overcast	—	Large quantity of dead **Hydroids** and **Polyzoa.** *Antennularia antennina* ; **Sabellaria** tubes v.c.	
0.10 a.m.	6.30 a.m.	6h. 20m.	Last half flood.	Smooth	S.S.E. 3	Overcast	—	*Antennularia antennina* and *Hydrallmania falcata* ; A few Echinoids and Asteroids.	
7 a.m.	11.45 a.m.	4¾	Last half ebb.	Smooth	S.S.E. 2	Overcast	—	Rubble of *Serpula* tubes, *Sabellaria spinulosa* ; Few Echinoids.	
0.10 p.m.	4.30 p.m.	4h. 20m.	Last half flood.	Smooth	S.S.E. 2	Overcast	4.30 p.m. Came fast. Had belly badly torn.	No record	Several trawling smacks about.
6.40 p.m.	11.30 p.m.	4h. 50m.	Last three-quarter ebb.	Smooth	S.S.E. 2	Overcast	11.30 p.m. Came fast. Trawl all to pieces.	No record	Several trawling smacks about.
10.40 a.m.	4 p.m.	5h. 20m	Last 2 hours ebb ; first 3 hours flood.	Rough	S. 3	Cloudy	—	No record.	
1 a.m.	6.30 a m.	5½	Ebb	Rough	W.S.W. 5	Dull, overcast.	—	*Nucula nucleus* f.c., many *Mactra* valves ; *Portunus* and *Crangon* c. ; Large quantity of **Ophiura (ciliaris** and **albida),** *Asterias rubens* c.	
7 a.m.	Noon	5	Wind counter acting the tide.	Rough	W.S.W. 6	Dull, cloudy.	—	*Hydrallmania falcata* f.c. ; *Flustra foliacea* f.c. ; *Eupagurus bernhardus* v.c. ; **Asterias rubens** v.c.	
0.30 p.m.	3.30 p.m.	3	Ebb	Very rough	S. by W. 7	Overcast leaden sky.	—	No record. No naturalists on board.	
7 a.m	Noon	5	..	Rough	N.N.W. 7	Dull	Split net.	—	
8 p.m.	1.30 a.m.	5½	Ebb	Smooth	W. by S.	..	—	*Hydrallmania falcata* ; .. .. *Flustra foliacea* ; *Ophiura ciliaris* moderately c.	C. Forster Cooper.
1.35 a.m.	5.30 a.m.	3h. 55m.	Flood	Rough	S.W.	..	—	*Hydrallmania falcata* ; *Flustra foliacea* ; *Ophiura ciliaris* moderately c.	
9.30 a.m.	0.45 p.m.	3¼	Ebb	Smooth	S.S.W.	Fine, cloudy.	—	**Alcyonium digitatum** v.c., *Actinoloba dianthus* c., Hydroids ; **Asterias rubens** v.c., *Ophiura ciliaris* c., *Echinocardium cordatum* c.	C. Forster Cooper. S.S. "Limewold" and S.S. "Robin." both G. Y. trawlers, towing with us.
5.15 p.m.	11 p.m.	5¾	Part ebb, part flood.	Smooth	S.	Fine, hazy	—	*Alcyonium digitatum* c., *Actinoloba dianthus* ; *Sabellaria spinulosa* ; *Buccinum undatum* f.c., *Pecten* ; *Asterias rubens* c. ; *Tunicates.*	
8.10 a.m.	11 am.	2h. 50m.	Nil	Moderately smooth.	S. 3	Fine, hazy	—	Dead Hydroids.. .. .. Very large quantity of yellow **sponge,** filling Cod end. Ophiuroids very numerous (3 species).	1 steam trawler passed going west.
2 p.m.	5 p.m.	3	Nil	Moderately smooth.	S. 3	Fine, hazy	Net torn	As last. Trawl was cut to let out sponge.	
3.15 a.m.	7.30 a.m.	4¼	Nil	Moderately smooth.	S 3	Fine, hazy	—	Large masses of **Oakum** (= **Obelia longissima**), and Crustacea (*Paratylus swammerdami*) v.c. ; *Sabella* f.c. ; *Melita obtusata* v.c.	1 steam trawler towing with us.
9.10 a.m.	1 p.m.	3h. 50m.	Nil	Moderately smooth.	S. 4	Fine, hazy	—	"Oakum," very large quantities of **Alcyonium digitatum ;** Very large quantities of **Alcyonidium gelatinosum,** *Flustra foliacea* ; Small *Asterias rubens* c.	
1.30 p.m.	5 p.m.	3½	Eastern set.	Moderately smooth.	S. 3	Fine, hazy	Trawl split	"Oakum," *Alcyonium digitatum* .. .. *Alcyonidium gelatinosum*, *Flustra* (*foliacea* and *securifrons*) ; *Melita obtusata* c., *Paratylus swammerdami* v.c.	A Grimsby steam trawler with us.
6.30 p.m.	11.10 p.m.	4h. 40m.	Nil	Smooth	S. 2 later 3.	Fine, hazy	—	*Alcyonidium gelatinosum* ; *Asterias rubens*, *Echinocardium cordatum.*	
(13th) 11.40 p.m.	5 a.m.	5h. 20m.	Eastern set.	Smooth	S. by W. 3	Fine, hazy	—	As VIII 14	* Combined hauls. 1 steam trawler and 1 line smack fishing with us.

Voyage.	Station.	Month	Day.	Net and No. of Haul.	Name of Ground.	Position.			Depth (fathoms).			Bottom.		
						Shot.	Course.	Hauled.	Shoot-ing.	Towing.	Haul-ing.	Shoot-ing.	Towing.	Haul-ing.
VIII.	17	March	14	O 41	Lower Edge of Dogger Swashway.	55° 42½′ N., 3° 43′ E. ..	N.N.W. 6½ miles S.W. by S. 4½ miles.	55° 42′ N., 3° 32′ E. ..	25	26	24	f.s. & sh.	..	s. & clay
„	18	„	„	O 42	Lower edge of Dogger Bank.	55° 42′ N., 3° 32′ E. ..	S.E. ½ E. 3½ miles and S.W. 8 miles.	55° 35′ N., 3° 30′ E. ..	24	23-22	20	s. & clay	..	s. & sh.
„	19	„	„	O 43	„ „	55° 35′ N., 3° 30′ E. ..	S.W. ½ W. 6 miles S.W. by W. ½ W. 5 miles.	55° 27′ N., 3° 17′ E. ..	20	19 & 18	17	s. & sh.	..	f.s.
„	20	„	14-15	O 44	„ „	55° 27′ N., 3° 17′ E. ..	W. by S. ½ S. 13 miles.	55° 20′ N., 2° 56½′ E...	17	17	17	s. & sh.	..	s. & sh.
„	21	„	15	O 45	„ „	55° 20′ N., 2° 56½′ E. ..	W. by S. ½ S. 13 miles.	55° 13′ N., 2° 37½ E. ..	17	17	17½	s. & sh.	..	s. & sh.
IX	1	„	21	O 46	Hinder	N. Hinder Light-vessel, S. ½ W. 8 miles.	N.E. 1½ mile N.E. by N. ½ N. 3½ miles.	N. Hinder Light-vessel, S. by W. ½ W. 11 miles.	19	19	19½	coarse reddish sand.	..	f.s.
„	2	„	21-22	O 47	Hinder to Schouwen ..	N. Hinder Light-vessel, S. by W. ½ W. 11½ miles.	N.E. by E. ½ E. 6½ miles. N.E. by E. 4 miles. N.N.E. 2 miles.	51° 57′ N., 2° 49′ E. ..	19½	19	21	f.s.	..	f.s.
„	3	„	22	O 48	Western Deep Water ..	Gabbard Light-vessel, S.W. ½ S. 5 miles.	N.N.E. 6 miles	52° 10½′ N., 2° 8½′ E. ..	22	22	22	d.s.	..	c.s.
„	5	„	22-23	O 49	„ „ ..	Gabbard Light-vessel, S.W. by S. 7 miles.	N.N.E.	Gabbard Light-vessel. S.W. by S. 12 miles.	24	24	23	d.s.	..	c.s.
X	1	April	20	O 50	North of California ..	54° 13½′ N., 0° 12′ E. ..	N.E. 2 miles	54° 15′ N., 0° 14′ E. ..	30	30	30	gravel & sh.	..	gravel & sh.
„	2	„	„	O 51	Flamborough Head ..	54° 17′ N., 0° 16½′ E. ..	N.E. 6½ miles and W. 1 mile.	54° 23′ N., O. 19½ E. ..	32	32	34	c.s.	..	m.
„	3	„	21	O 52	North of Flamborough Head.	54° 22′ N., 0° 19½′ E. ..	E. ½ S. 4 miles. N.W. ½ W. 2½ miles. S.E. by S. 1 mile.	54° 24′ N., 0° 25′ E. ..	34	34	34	m.	..	f.blk.s.
„	4	„	„	O 53	Whitby	54° 32′ N., 0° 21′ W. ..	S.S.E. 2 miles. N.W. by W. 4 miles. S.S.E. 2 miles.	54° 30′ N., 0° 23′ W. ..	31	31	30	c.s. & gravel.	..	f.s.
„	5	„	22	O 54	Hartlepool	Whitby Light, S.W. by S. 15 miles.	E.S.E. 1 mile N.W. ½ N. 4 miles. S. by E. 1½ miles.	Whitby Light, S. by W. ½ W. 15 miles.	33	33	34	f.d.s.	..	f.d.s.
„	6	„	„	O 55	North of Dogger West Shoal.	54° 43′ N., 1° 42′ E. ..	E.N.E. 5½ miles	54° 46½′ N., 1° 50′ E. ..	13	13	12	f.d.s.	..	f.g.s.
„	7	„	„	O 56	North of Dogger West Shoal.	54° 46½′ N., 1° 50′ E. ..	N.E. ¾ E. 5½ miles	54° 51′ N., 1° 55′ E.	12	12	14	f.g.s.	..	f.g.s.
„	8	„	23	O 57	North of Dogger West Shoal.	54° 51′ N., 1° 55′ E. ..	Round	54° 51′ N., 1° 55′ E.	14	14	16	f.g.s.	..	f.g.s.
„	9	„	„	O 58	North and East of West Shoal of Dogger.	54° 51′ N., 1° 55′ E. ..	E.S.E. 9 miles	54° 48′ N., 2° 12½′ E.	15½	14	12	f.g.s.	..	f.g.s.
„	10	„	„	O 59	Edge of Bank, Clay Deep	54° 47′ N., 3° 7½′ E. ..	S.E. ¾ E. 8 miles	54° 44′ N., 3° 20′ E.	19	21	22	f.g.s.	f.g.s.	f.g.s.
„	11	„	25	O 60	Hospital	54° 30′ N., 3° 5′ E. ..	W. ¼ N. 10 miles	54° 29′ N., 2° 49′ E.	20	18	16	f.g.s.	f.g.s.	f.d.s.
„	12	„	„	O 61	East of West Shoal of Dogger.	54° 29′ N., 2° 49′ E. ..	W. 4½ miles E. 3 miles.	54° 27½′ N. 2° 46′ E.	16	16	14	f.d.s.	..	f.g.s.
„	13	„	26	O 62	East of West Shoal of Dogger.	54° 27½′ N., 2° 46′ E. ..	N.W. by W. 2 miles E. 4½ miles. S.W. 1 mile.	54° 27′ N., 2° 48½′ E.	14	14	15½	f.g.s.	..	f.g.s.

Duration of Haul.			Tide.	Sea.	Weather.		Damage to Net, &c.	Bottom Fauna.	General Remarks, Trawlers Working, &c., Naturalist in Charge and Assistants.
Shot.	Hauled.	No. of Hours.			Wind and Force.	Sun, Rain, &c.			
6.30 a.m.	11 a.m.	4½	Nil	Choppy	N.N.E, 4	Dull, rainy	—	*Alcyonium digitatum*, dead Hydroids .. .. *Alcyonidium gelatinosum, Flustra foliacea; Mytilus* c., *Buccinum undatum*. c.; *Echinus esculentus*.	S.S. "Dee," of Grimsby, and another steam trawler with us.
11.45 a.m.	5.10 p.m.	5h. 25m.	Nil	Moderately rough.	N.N.E. 4	Cloudy	—	Sponge; .. .. *Sabellaria* tubes; Large quantity of **Alcyonidium gelatinosum,** *Flustra*; Hermits.	Two steam trawlers passed us.
6.15 p.m.	11.15 p.m.	5	Nil	Moderately rough.	N.E. by E. 5	Cloudy	—	Large quantity of **Alcyonidium gelatinosum;** *Solen* valves; **Asterias rubens** v.c., *Echinus miliaris*.	
(14th) 11.45 p.m.	(15th) 5.15 a.m.	5½	Nil	Moderately rough.	E.S.E. 4	Overcast	—	As VIII 19.	
5.45 a.m.	11.15 a.m.	5½	Nil	Rough	S.S.E. 5	Overcast	—	Large quantity of **Asterias rubens** .. .. .. *Tunicates* c.	Three steam trawlers about us.
6.15 p.m.	8.15 p.m.	2	Ebb	Rough	S.W. 5	Clear sky	—	No record	R. A. Todd, W. Woodland, and J. Potter. Several fishing vessels with us (Flemish).
(21st) 8.50 p.m.	(22nd) 3 a.m.	6h. 10m.	Part ebb and part flood.	Moderate	S.S.W. 5	Clear sky	Trawl torn	*Actinoloba dianthus* c., Hydroids, some species of which were f.c.; *Flustra foliacea* f.c.: *Eupagurus bernhardus* in *Buccinum undatum* shells f.c.	Several Flemish vessels fishing about us.
9.30 a.m.	11.15 a.m.	1¾	Ebb	Rough	S.W. 7	Overcast	Trawl foul	*Hydrallmania falcata* c.; *Flustra foliacea* f.c.; *Coryphella rufibranchialis* c., *Ostrea edulis* f.c.; *Porcellana* c.; **Asterias rubens** v.c.	
(22nd) 10.30 p.m.	(23rd) 12.15 a.m.	1¾	Ebb	Moderately rough.	S.W. by S. 5	Clear, cloudy.	—	*Sabellaria spinulosa* c.; *Spatangus purpureus* and *Asterias rubens* c.	
5.30 p.m.	6.30 p.m.	1	Last ebb	Moderate swell.	S.E. by E. 3	Dull, hazy.	Had a pull out; Hove up; net split.	Hydroids numerous: *Alcyonium digitatum* on *Sabellaria* tubes; *Flustra*; Great quantity of **Queans** (= **Pecten opercularis**); This station was very rich in nearly all groups of Invertebrates.	R. A Todd and C. W. Dance. Three smacks working with us.
7.30 p.m.	11 p.m.	3½	Flood	Moderate	N.E. 4	Cloudy	Net split	Many Hydroids, as in X 1; .. .. *Ophiothrix fragilis* and *Echinus esculentus* c.	Two steam trawlers with us.
1.15 a.m.	6 a.m.	4¾	Flood	Moderately rough.	N. 6	Cloudy	Had part of smack's boat in trawl. Belly torn all to pieces.	*Tubularia indivisa*.	Four steam trawlers with us.
Noon	4 p.m.	4	Ebb	Rough	N. by E. 6	Cloudy, fine, hazy.	Split net (belly) ..	Numerous Hydroids, including *Tubularia indivisa*; .. *Chalina oculata, Halichondria panicea*; *Flustra foliacea*.	Two Grimsby steam trawlers with us.
Midnight	4 a.m.	4	Ebb	Moderately rough.	N. 5	Cloudy, showery.	—	As X 4, but no sponge	One steam trawler with us.
4 p.m.	7 p.m.	3	Nil	Moderate swell.	N.E. 3	Fine, cloudy.	—	**Spawn of Buccinum undatum** and *Natica catena* v.c. *Trachinus draco, Callionymus*.	Several G.Y. steam trawlers with us.
7.30 p.m.	11.30 p.m.	4	Nil	Light swell	N.E. by E. 3	Fine, cloudy.	Belly split and ground rope parted.	**Buccinum undatum spawn** v.c.	Several steam trawlers working with us.
0.30 a.m.	6.30 a.m.	6	Nil	Smooth	N.E. 3	Fine, cloudy.	Fore-wing split ..	As X 7.	Several steam trawlers working with us.
7.30 a.m.	12.30 p.m.	5	Nil	Little swell	N.E. 3	Cloudy	—	*Alcyonium digitatum, Obelia longissima*; .. .. .. *Alcyonidium gelatinosum*; **Spawn of Buccinum undatum** and *Natica catena* v.c., *Mactra stultorum* c.; *Brissopsis lyrifera*; *Callionymus*.	Twenty - five steam trawlers working with us, mostly G.Y.
5.15 p.m.	10.30 p.m.	5¼	Nil	Very rough	N.N.E. 8	Overcast, cloudy.	—	*Alcyonium digitatum, Obelia longissima, Sertularia abietina*; *Aphrodite aculeata* f.c.; *Alcyonidium gelatinosum, Flustra securifrons*; *Fusus antiquus*; *Paratylus swammerdami* c.	Two steam trawlers with us.
2 p.m.	7 p.m.	5	Nil	Moderately smooth.	N.E. by N. 4	Dull, cloudy.	—	**Hydroids** common and numerous, including those of X 9; *Alcyonidium gelatinosum, Flustra securifrons*; **Spawn of Buccinum undatum** and *Natica catena* v.c., *Fusus antiquus*; *Paratylus swammerdami* v.c., *Melita obtusata* v.c.	Two steam trawlers with us.
7.15 p.m.	11.15 p.m.	4	Nil	Smooth	N.E. 4	Dull, rainy.	—	Spawn of *Natica catena* v.c., *Mactra* shells v.c.	Several steam trawlers with us.
Midnight	4 a.m.	4	Nil	Smooth	E.N.E. 4	Dull, rainy.	—	*Obelia* (*longissima* and *geniculata*), *Diphasia pinaster*; .. Spawn of *Natica catena* v.c., *Mactra subtruncata* v.c., *Mactra stultorum* shells v.c.; *Echinocardium cordatum* f.c.	Several G.Y. steam trawlers with us.

Voyage.	Station.	Month.	Day.	Net and No. of Haul.	Name of Ground.	Position.			Depth (fathoms).			Bottom.		
						Shot.	Course.	Hauled.	Shooting.	Towing.	Hauling.	Shooting.	Towing.	Hauling.
X	14	April	26	O 63	East of West Shoal of Dogger	54° 27′ N., 2° 48½′ E. ..	S.W. 1 mile E. 6½ miles. N.W. by W. 4 miles. E.S.E. 2, W.N.W. 2 miles.	54° 30′ N., 2° 53½′ E.	15½	15½	17	f.g.s.	..	f.g.s.
„	15	„	„	O 64	West part of Botney Ground	53° 40½′ N., 2° 48½′ E. ..	S.W. ½ W. 9 miles	53° 34′ N., 2° 40½′ E.	20	18	14	f.d.s.	..	f.g.s.
„	16	„	27	O 65	North East of Leman ..	53° 34′ N., 2° 40½′ E. ..	S.W. by W. 12 miles	53° 25′ N., 2° 26′ E.	14	14	10	f.g.s.	..	f.br.s.
„	17	„	„	O 66	Leman	53° 25′ N., 2° 26′ E. ..	E.S.E. 4½ miles S.S.W. 2½ miles. N.W. 1 mile.	53° 22½′ N., 2° 31′ E.	10	12	13½	f.br.s.	..	f.g.s.
„	18	„	„	O 67	Leman	53° 22½′ N., 2° 29′ E. ..	N.E. 5½ miles N.N.W. 3½ miles. W.N.W. ¾ mile.	53° 29½′ N., 2° 29′ E.	13½	13½	16	f.g.s.	..	f.g.s.
XI	1	May	5-6	O 68	Hinder	51° 52′ N., 2° 28′ E. ..	N.E. 8 miles S.E. by E. 4½ miles. S.W. 4½ miles. S. 2½ miles. N. ½ mile.	51° 53′ N., 2° 34′ E.	23	20	23	s. & sh.	f.g.s.	f.g.s.
„	2	„	6	O 69	Hinder	51° 53′ N., 2° 34′ E. ..	S.S.E. 2½ miles N.N.E. 6 miles.	51° 57′ N., 2° 38½′ E.	23	23	20	f.g.s.	..	c.s. & sh.
„	3	„	„	O 70	East Deep Water ..	52° 3½′ N., 2° 42′ E. ..	N.E. ½ E. 5 miles	52° 7½′ N., 2° 47½′ E.	22½	22½	20½	f.gr.br.s.	..	br.s. & sh.
„	4	„	„	O 71	East Deep Water ..	52° 7½′ N., 2° 47½′ E. ..	N.E. 8 miles	52° 13½′ N., 2° 54′ E.	20½	..	20	s. & sh.	..	f g.s.
„	5	„	„	O 72	Middle Ground	52° 13½′ N., 2° 54′ E. ..	E. 2½ miles N.E. 14½ miles.	52° 25′ N., 3° 14½′ E.	20	..	20	f.s.	..	f.spk.s.
„	6	„	7	O 73	Middle Ground	52° 25′ N., 3° 14′ E. ..	N.W. ¾ N. 14½ miles	52° 33½′ N., 2° 55′ E.	20	20	22	f. spk.s.	..	f.br.s.
„	7	„	„	O 74	Winterton Shoal	52′ 40½ N., 3° 2½′ E. ..	N. by E. ½ E. 8 miles.	52° 52′ N., 3° 0′ E.	21	..	21	f.s.	..	f.s.
„	8	„	„	O 75	South of Leman	53° 10½′ N., 2° 45′ E. ..	E.N.E. 4 miles	53° 13′ N., 2° 50½′ E.	19	..	17	d.s.	..	f.d.s.
„	9	„	7-8	O 76	South of Leman	53° 13′ N., 2° 50½ E. ..	N. ½ W. Westerly 15½ miles.	53° 27½′ N., 2° 40′ E.	17	16	16	f.d.s.	f.d.s.	f.d.s.
„	10	„	8	O 77	Leman	53° 27½′ N., 2° 40′ E. ..	W. by S. ¼ S. 3½ miles.	53° 25½′ N., 2° 35′ E.	16	..	16	f.d.s.	..	f.d.s.
„	11	„	„	O 78	Leman	53° 25½′ N., 2° 35′ E. ..	W.S.W. 4½ miles	53° 23′ N., 2° 29½′ E.	16	..	15	f.d.s.	..	f.s.
„	12	„	„	O 79	Leman	53° 24½′ N., 2° 29′ E. ..	W. by N. ½ N. 7½ miles.	53° 25′ N., 2° 16½′ E.	15	..	16	f.s.	..	s. & sh.
XII	1	„	26	B 1	Terschelling	Brandaris Tower, S. by W. ½ W. 15 miles.	3 miles W.N.W.	Brandaris Tower, S. ½ W. 16 miles.	14	14	14	br.spk.s.	..	br.spk.s.
„	2	„	28	O 80	Heligoland Deep	Heligoland Light, S.E. by E. 5 miles.	W.N.W. 3½ miles	Heligoland Light, E.S.E. 8½ miles.	20	..	20	f.s. & m.	..	ooze.
„	3	„	29	B 2	Off Amrum	Amrum Light, E. by S. ¾ S. 19½ miles,	N.E. by N. 5 miles	Amrum Light, S.E. by E. 19½ miles.	9	9	9	f g.s.	..	f.g.s.
„	4	„	30	B 3	South of Horn Reef ..	55° 24′ N., 8° 10′ E. ..	W.S.W. 2½ miles	55° 22½′ N., 8° 6½′ E.	8½	..	8½	.s.	..	f.s.
„	5	„	„	B 4	South of Horn Reef ..	55° 20½′ N., 7° 57′ E ..	W.N.W. 2 miles	55° 20½′ N., 7° 53½′ E.	10	..	10	f.s.	..	f.s.

Duration of Haul.			Tide.	Sea.	Weather.		Damage to Net, &c.	Bottom Fauna.	General Remarks, Trawlers Working, &c., Naturalist in Charge and Assistants.
Shot.	Hauled.	No. of Hours.			Wind and Force.	Sun, Rain, &c.			
4 a.m.	11 a.m.	7	Nil	Moderately smooth.	E.S.E. 4	Cloudy	—	Hydroids as X 13; .. .. *Melita obtusata* c.; *Fusus antiquus* c., *Loligo media* c. Echinoids.	Three steam trawlers with us.
7 p.m.	11 p.m.	4	Flood	Moderately smooth.	S.S.E. 5	Dull, rainy.	—	*Obelia geniculata*; *Aphrodite aculeata* c.; Gasteropods f.c.; *Corystes cassivelaunus* c.; Echinoids common, and represented by many species.	
Midnight	7 a.m.	7	Part ebb and part flood.	Rough	S.E. by S. 6	Dull, rain	—	*Alcyonium digitatum*; *Buccinum undatum* spawn c., *Mactra stultorum* f.c.; *Corystes cassivelaunus* c., *Portunus holsatus* c., *Eupagurus bernhardus* f.c.	
7.30 a.m.	11.30 a.m.	4	Flood	Rough	S.E. 6	Dull, rain	—	*Obelia geniculata*; *Fusus antiquus* and *Buccinum undatum* f.c.	
11.30 a.m.	3.30 p.m.	4	Ebb	Rough	S.E. by S. 6	Dull, rainy.	—	*Brissopsis lyrifera* and other Echinoids.	
(5th) 9.30 p.m.	(6th) 3.30 a.m.	6	Part ebb, part flood.	Moderate	S.W. 4	Cloudy, overcast.	—	No record	C. Forster Cooper and J. Potter. Four smacks working around us.
4.15 a.m.	7.15 a.m.	3	Part ebb, part flood.	Moderately rough.	S.S.W. 5	Cloudy	Lost belly, batings, and Cod end.	No record	Two smacks in sight.
11 a.m.	1 p.m.	2	Ebb	Moderately rough.	S.S.W. 3	Cloudy	—	No record	Two smacks in sight and two Belgian fishing craft.
1.30 p.m.	5.30 p.m.	4	Flood	Smooth	S.S.E. 3	Dull, overcast.	—	No record	Several smacks and mackerel luggers about.
6.30 p.m.	11.30 p.m.	5	Ebb	Smooth	S.S.W. 4	Thick with rain.	—	No record	Several vessels about us.
Midnight	7 a.m.	7	Part ebb, part flood.	Smooth	Variable, 4 to 2.	Dull, rain.	Wreck; "belly torn"	No record	Two smacks with us.
10 a.m.	Noon	2	Ebb	Smooth	S.W. 4	Dull, cloudy, rainy.	—	No record	Two mackerel drifters and one smack in sight.
3.30 p.m.	5.30 p.m.	2	Flood	Moderate swell.	S.W. by W. 3	Cloudy, overcast.	—	No record.	
(7th) 6 p.m.	(8th) 4 a.m.	10	Part flood, part ebb.	Moderate swell.	E. by S. 2	Hazy, cloudy.	—	No record.	
4.30 a.m.	6.30 a.m.	2	Flood	Moderate swell.	E. 2	Cloudy, overcast.	—	No record	Two steam trawlers passed, going eastwards.
7 a.m.	9 a.m.	2	Flood	Smooth	E. 3	Fine, hazy	—	No record	One Aberdeen steam trawler working with us.
9.45 a.m.	11.45 a.m.	2	Ebb	Moderate swell.	E.N.E. 3	Thick fog	—	No record.	
6.45 p.m.	7.45 p.m.	1	Ebb	Moderately rough.	N.E. 5	Fine, hazy	—	Few Invertebrates at this station .. .. *Astropecten irregularis*.	W. Garstang, J. Potter, and C. W. Dance. Fine mesh net attached to ordinary "cod end." Contained only one Plaice (12 cm.), six Dabs (7-12 cm.), and seven other small fishes. Several small Dutch craft fishing about us.
8.30 a.m.	10 a.m.	1½	Flood	Smooth	N.E. by E. 5	Fine	—	*Alcyonium digitatum*, *Cyanea capillata* f.c.: *Alcyonidium gelatinosum* f.c.; Small *Astropecten irregularis* c.	
4.30 a.m.	6.30 a.m.	2	Ebb	Smooth	E. by N.	Dull, rain, tempest.	—	*Cyanea capillata* c. .. .. Few small crabs, *Eupagurus bernhardus*, *Portunus holsatus*; *Ascidiella*.	Fine mesh net round usual "Cod end"; contained only four Dabs (7-11 cm.) and two solenettes (7 cm.).
6 a.m.	7 a.m.	1	5th hour, ebb.	Smooth	N.E.	Fine, hazy	—	*Buccinum undatum* spawn; .. .. *Hyas araneus*; *Ophiura albida* f.c.; *Callionymus lyra*.	Fine mesh net round "Cod end"; contained 82 Plaice (7-11 cm.), and a few Dabs, Dragonets, and Pogge. Small chain, weighing 85 lbs. (=39 kg.), fastened round "bosom" Several Danish Plaice fishers with us.
8.15 a.m.	9.15 a.m.	1	Low water.	Smooth	N.E	Fine, hazy	Small meshed Cod end torn away.	*Alcyonidium gelatinosum*; .. .. *Mactra* (living and shells); *Hyas araneus*; *Asterias rubens* f.c.; *Callionymus lyra*.	Several Danish Plaice fishers and four steam trawlers with us; small chain on "bosom" (85 lbs.).

Voyage.	Station.	Month.	Day.	Net and No. of Haul.	Name of Ground.	Position.			Depth (fathoms).			Bottom.		
						Shot.	Course.	Hauled.	Shooting.	Towing.	Hauling.	Shooting.	Towing.	Hauling.
XII	6	May	30	B 5	North of Horn Reef ..	55° 35′ N., 7° 44′ E. ..	N. by W. 3 miles	55° 38′ N., 7° 42½′ E. ..	7	..	7	f.s.	..	f.s.
„	7	June	1	B 6	Off Vyl Light-vessel ..	Vyl Light-vessel N. 4½ miles.	2 miles W.N.W	Vyl Light-vessel N.N.E. 2 miles.	11	..	12	f.d.s.	..	f.d.s.
„	8	„	„	B 7	W.S.W. of Vyl Light-ship	Vyl Light-vessel E.N.E. 9 miles.	2 miles W. by N.	Vyl Light-vessel E. by N. ½ N. 10 miles.	13	..	13	f.l.s.	..	f.l.s.
„	9	„	1-2	B 8	Deep Water. West of Horn Reef.	55° 30½′ N., 6° 17′ E. ..	N.W. 1½ miles	55° 31′ N., 6° 15′ E. ..	24	..	25	f.g.s	..	f.g.s.
„	10	„	2	B 9	Muddy Ground. West of Horn Reef.	55° 31′ N., 6° 15′ E. ..	W. by S. 12 miles	55° 26′ N., 5° 54′ E. ..	25	..	27	f.s. & ooze	..	s. & ooze
„	11	„	„	B 10	„ „	55° 26′ N., 5° 54′ E. ..	W. by S. 2½ miles	55° 24′ N., 5° 49′ E. ..	27	..	27	f.s. & ooze	..	f.s. & ooze
„	12	„	„	O 81	South East part of Tail End of Dogger	55° 28½′ N., 4° 50′ E. ..	S. 2 miles	55° 26½′ N., 4° 51′ E...	20	..	23	f.s.	..	f.l.s.
„	13	„	3	O 82	North part of Dogger ..	55° 25′ N., 2° 53′ E. ..	S.W. by W. 5 miles	55° 21′ N., 2° 47½′ E...	19	..	20	c.br.s.	..	f.s. & sh.
„	15	„	„	O 83	North of North West Rough of Dogger.	55° 7′ N., 1° 30′ E. ..	N.W. by W. ½ W. 6 miles.	55° 8½′ N., 1° 20′ E. ..	21	24	27	f.g.s.	..	f.d.s
„	16	„	3-4	O 84	„ „	55° 8½′ N., 1° 20′ E. ..	W. ½ N. 12 miles	55° 6½′ N., 0° 57½′ E...	27	32	35	f.d.s.	..	f.d.s
„	17	„	4	B 11	North of Brucey's Garden.	55° 6½′ N., 0° 57½′ E. ..	W. by N. 4 miles	55° 3′ N., 0° 48′ E. ..	35	36	38	f.d.s.	..	f.d.s.
„	18	„	„	B 12	East of Shields	55° 2½′ N., 0° 5½′ W. ..	W. by N. 6 miles	55° 2′ N., 0° 17′ W. ..	40	..	42	f.g.spk.s.	..	d.s.
„	19	„	„	B 13	„ „	55° 2½′ N., 0° 50′ W. ..	N.E. by E. ½ E. 3 miles.	55° 5′ N., 0° 47′ W. ..	37	..	38	c.d.s.	..	c.d.s.
„	20	„	8	B 14	East of Shields	Shields S. Pier Light W. by N. ½ N. 4½ miles.	N. ½ E. 1½ miles	Shields S. Pier Light W. 4½ miles.	27	..	28	d.s.	..	d.s.
„	21	„	„	B 15	East of Sunderland ..	55° 2′ N., 1° 1′ W. ..	S. by E. ½ E. 8 miles.	54° 56′ N., 0° 52½′ W.	43½	..	44	m.	..	m.
„	22	„	„	B 16	East North East of Hartlepool	54° 50½ N., 0° 53′ W. ..	S. 4 miles	54° 46½′ N., 0° 52′ W.	39	..	35	m.	..	m.
„	23	„	8-9	B 17	Hartlepool	54° 46½′ N., 0° 52′ W. ..	S.E. 6 miles and S.E. by S. ½ S. 9 miles.	54° 39¾′ N., 0°31′ W.	39	35	30	m.	s. & ooze.	sharp s.
„	24	„	9	B 18	Whitby	54° 39¾′ N., 0° 31′ W. ..	S.E. 1 mile	54° 39′ N., 0° 30′ W.	30	..	30	sharp s.	..	s.
„	25	„	„	B 19	Off Smithic Shoal ..	Flamborough Head Light N. ½ E. 5¾ miles.	N. by E. 4 miles	Flamborough Head N. ½ W. 2½ miles.	10	..	12	c.s.	..	c.s.

Duration of Haul.			Tide.	Sea.	Weather.		Damage to Net, &c.	Bottom Fauna.	General Remarks, Trawlers Working, &c., Naturalist in Charge and Assistants.
Shot.	Hauled.	No. of Hours.			Wind and Force.	Sun, Rain, &c.			
1.30 p.m	3 p.m.	1½	½hr. flood, 1 hr. ebb.	Smooth	N. 2	Thick fog	—	No record	Small chain on "bosom" (85 lbs.).
0.30 p.m.	1.30 p.m.	1	3 hrs. flood.	Smooth	E. 2	Fine	—	*Alcyonidium gelatinosum* ; Spawn of *Natica* and *Buccinum* ; *Asterias rubens.*	Small chain on "bosom" (85 lbs.) ; three steam trawlers and one Danish Plaice fisher working with us. Surface temperature 59·5° F. ; bottom temperature 49·0° F.
3.30 p.m.	4.30 p.m.	1	Slack	Smooth	E. 1	Fine	—	*Lanice conchilega* f.c. Eggs of *Buccinum* and *Natica* f.c. ; *Eupagurus bernhardus* f.c. ; *Asterias rubens* f.c.	Light chain on "bosom" (85 lbs.) ; one Danish Plaice fisher working here. Surface temperature 57·2° F. ; bottom temperature 49·0° F. 5 p.m. spoke S.S. "Saturn" of Grimsby.
(1st) 11.30 p.m.	(2nd) 0.30 a.m.	1	Nil	Moderately rough.	N. 4	Dull, cloudy.	—	*Cyanea capillata* f.c. *Portunus holsatus* f.c. ; *Astropecten irregularis* f.c. ; Fourteen large empty Skate purses.	Fine outer "Cod end" attached. The outer net was split, and contained only eight small Dabs from 5 to 12 cm. in length.
1 a.m.	7 a.m.	5 (?)	Nil	Moderately rough.	N. 5	Dull, rain	2 a.m., came fast. Hove up ; nothing wrong with gear.	No record	Small chain round "bosom" (85 lbs.).
7.45 a.m.	8.45 a.m.	1	Nil	Rough	N. by E. 6	Cloudy	—	*Alcyonidium gelatinosum* c.	Small chain round "bosom" (85 lbs.).
3.45 p.m.	4.45 p.m.	1	Nil	Rough	N. 7	Heavy clouds.	—	*Cancer pagurus* c.	6.30 p.m. spoke S.S. "Echo" of Hull, looking for Great Northern fleet.
7 a.m.	9 a.m.	2	Nil	Rough	N.N.E. 7	Cloudy	—	**Spawn of Buccinum undatum** v.c., *Fusus* f.c. *Eupagurus bernhardus* f.c. ; *Echinus miliaris* and *Asterias rubens* c., *Ophiothrix fragilis* f.c.	One steam trawler with us.
5.15 p.m.	8.15 p.m.	3	Nil	Rough	N. by E. 3.	Fine, cloudy.	Net torn	No record	Several steam trawlers about here.
(3rd) 9 p.m.	(4th) 3 a.m.	6	Nil	Moderately rough.	N. 2	Cloudy	Hove up a ship's mast, rigging, and anchor.	*Alcyonium digitatum* on *Buccinum*, *Pecten* and *Cardium* shells c. ; *Buccinum undatum*, and spawn, and *Cardium aculeatum* f.c., *Pecten opercularis* f.c. ; *Asterias rubens* and *Spatangus purpureus* c. ; *Ciona intestinalis.*	
6 a.m.	8 a.m.	2	Nil	Little swell	N. 1	Fine, hazy	Came fast 8 a.m. Had net torn all to pieces.	No record.	
1 p.m.	4 p.m.	3	Nil	Moderate swell.	E. 1	Fine, hazy	Cod end cut to pieces.	**Very rich in Invertebrates,** extremely so in *Nudibranchs : Dendronotus arborescens* v.c. ; Hydroids c., especially *Thuiaria thuja* ; Large Pycnogonids c.	Surface temperature 51·5° F. ; bottom temperature 44° F.
7.30 p.m.	8.30 p.m.	1	Nil	Smooth	S.E. 1	Fine, hazy	Ground rope parted and net split.	Polynoids c. *Ascidians*, including *Ciona intestinalis* c.	
8 a.m.	9 a.m.	1	Last ebb	Smooth	E.N.E. 3	Overcast	Net split	Very varied fauna. Many Hydroids, including *Sertularia abietina* ; Few small crabs : *Astropecten irregularis* c. ; Small *Ascidiella* ; *Callionymus lyra.*	Surface temperature 52° F. ; bottom 44° F. S.S. "Wamba" of Grimsby passed us.
11.30 a.m.	2.25 p.m.	2h. 55m.	3 hours flood.	Smooth	E.N.E. 4	Fine, hazy	Had fore trawl-head pulled out of shape ; broke fore toe eye-bolt ; net badly split.	*Tubularia indivisa*, *Thuiaria thuja* ; *Nephrops norvegicus* and *Eupagurus bernhardus* f.c. ; *Brissopsis lyrifera.*	2.25 p.m. came fast, probably to a wreck. After part of trawl full of mud. Two steam trawlers and three tugs fishing about us. Surface temperature 53° F. ; bottom 44°.
5.30 p.m.	8 p.m.	2½	3 hours ebb.	Moderately rough.	N.E. 4	Fine, hazy	—	*Actinoloba dianthus*, *Tubularia indivisa* ; *Nephrops norvegicus* c.	Surface temperature 52° F. ; bottom 45°. Two tug boats and one steam trawler fishing with us.
(8th) 9 p.m.	(9th) 3 a.m.	6	2 hours ebb ; 4 hours flood.	Moderately rough.	N.E. by E. 5	Overcast	—	No record	Surface temperature 51° F. ; bottom 45° F.
3.45 a.m.	4.45 a.m.	1	4 hours flood.	Moderately rough.	N.E. by E. 5	Overcast	Lost half of aft trawl-head. Net torn very much.	No record	4.45 a.m. came fast, probably to a wreck. Hove up. No fish.
7.30 p.m.	8.30 p.m.	1	4 hours ebb	Moderately smooth	N.E. 5	Overcast	—	*Tubularia indivisa* ; Three or four small pieces of Ross ; *Flustra foliacea* ; *Ophiothrix fragilis* c., *Echinus esculentus* f.c.	Temperature, surface and bottom, 50° F. No fish.

Voyage.	Station.	Month.	Day.	Net and No. of Haul.	Name of Ground.	Position.			Depth (fathoms).			Bottom.		
						Shot.	Course.	Hauled.	Shoot-ing.	Towing.	Haul-ing.	Shoot-ing.	Towing.	Haul-ing.
XII.	26	June	10	B 20	South of Smithic Shoal	Flamborough Head N. 8 miles.	W.S.W. 2⅓ miles E.S.E. 4½ miles	Flamborough Head N. by W. 14½ miles.	10	..	13	c.s.	..	c.s.
„	27	„	„	B 21	South of Smithic Shoal	Bridlington Pier N. by W. 5½ miles.	S.S.E. 4 miles	Hornsea W. 3¾ miles	7	..	9	f.s.	..	f.s.
„	28	„	11	B 22	Inner Dowsing	Inner Dowsing N.W. by N. 3 miles.	N.N.W. 2 miles	Inner Dowsing N.W. ½ N., 1½ miles.	16	..	14	c.s. & sh.	..	c.s. & sh.
„	29	„	„	B 23	The Would	Would Light-vessel S.E. ½ S., and Middle Hasborough Buoy N.E. by E.	W. ½ N. 2½ miles	Hasborough Light S.W. by W. 4½ miles.	16	..	13	c.s.	..	c.s.
XIII.	1	„	24	B 24	Off Smith's Knoll Light-vessel.	Smith's Knoll Light-vessel W. by S. 2 miles.	E.N.E. 8 miles	52° 58½′ N., 2° 27′ E.	25	..	21	m. & s.	..	m. & s.
„	2	„	„	B 25	West of Brown Bank ..	52° 58½′ N. 2° 27′ E. ..	E. by S. 2 miles S. ¼ W. 8½ miles. and N. 2 miles.	52° 52′ N., 2° 31½′ E.	21	..	21	m. & s.	..	f.br.s.
„	3	„	„	B 26	Between Brown Bank and Leman Ground.	52° 52′ N., 2° 31½′ E. ..	N.E. by N. 15½ miles	53° 7′ N., 2° 40′ E.	21	..	18½	f.br.s.	..	f.br.s. & sh.
„	4	„	24-25	B 27	South part of Leman Ground.	53° 7′ N., 2° 40′ E. ..	N. by W. ½ W. 18 miles	53° 21½ N., 2° 25′ E.	18½	17	14	f.br.s.	f.d.s.	f.d.s.
„	5	„	25	B 28	Leman Ground, hauled on Well Bank.	53° 21½′ N., 2° 25′ E. ..	N. by W. 19½ miles	53° 39′ N., 2° 10½′ E. ..	14	14	15	f.d.s.	..	c.s.
„	6	„	„	B 29	Well Bank	53° 44′ N., 2° 2′ E. ..	N. 2 miles	53° 46½′ N., 2° 0½′ E. ..	18	..	18	sharp s.	..	c.s.
„	7	„	„	B 30	Well Bank	53° 46½′ N., 2° 0½′ E. ..	S. by W. 3 miles N.W. by N. 2 miles.	53° 45′ N., 1° 55′ E. ..	18	18	18	c.s.	..	c.s.
„	22	„ July	30 1	O 85	South of Brucey's Garden	54° 43′ N., 0° 58½′ E. ..	N. by W. 13 miles S. 7 miles.	54° 48′ N., 0° 52′ E. ..	39	38	36	f.d.s.	..	f.d.s.
„	27	„	„	O 86	Brucey's Garden	55° 0′ N., 1° 3′ E. ..	W. by N. ¼ N. 7½ miles. N.N.W. 2½ miles. E S.E. 2 miles. N.E. by E. 1 mile.	55° 1′ N., 0° 52′ E. ..	32	..	35	f.d.s.	..	f.d.s.
„	28	„	„	O 87	Brucey's Garden	55° 1′ N., 0° 52′ E. ..	S.S.E. 2 miles N.N.W. 4 miles. S.E. by S. 3 miles. N.N.E. 2 miles.	55° 2½′ N., 0° 52′ E. ..	35	..	35	f.d.s.	..	f.d.s.
„	34	„	3	B 31	Hartlepool	54° 45½′ N., 0° 42′ W. ..	S.S.E. 6 miles	54° 41′ N., 0° 35′ W. ..	32	..	30	f.d.s.	..	f.d.s.
„	39	„	„	B 32	Bridlington Bay	Bridlington, N.N.W., 5 miles.	S. 2 miles	Hornsea S.W. by W. 4½ miles.	5	..	9	f.g.s.	..	f.d.s.
„	40	„	4	B 33	Off Inner Dowsing Light-vessel.	Inner Dowsing Light-vessel W. by N. ½ mile.	S.S.E. 3½ miles and N. by W. 3½ miles.	Inner Dowsing Light-vesssl S.W. ½ W. 1½ miles.	12	..	11	f.g.s.	..	f.d.s.
„	41	„	„	B 34	Off Inner Dowsing Light-vessel.	Inner Dowsing Light-vessel S.W. ¼ W. ½ mile.	S. 1 mile	Inner Dowsing Light-vessel N.N.W. 1 mile.	12	..	11	f.g.s.	..	c.s.
„	42	„	„	B 35	Off Inner Dowsing Light-vessel.	Inner Dowsing Light-vessel W. ½ N. ½ mile.	N.N.W. 2 miles S.E. by S. 6½ miles and N.W. by N. 1 mile.	Inner Dowsing Light-vessel N.W. 4 miles.	12	..	16	f.d.s.	..	ross.
„	43	„	4-5	B 36	North of Hasborough Light-vessel.	Cromer S.W. ¾ S. 11 miles.	E. 6 miles and S.W. 6 miles.	Cromer S.W. by W. ¼ W. 10 miles.	16	..	16	s. & sh.	..	s. & sh.

Duration of Haul.			Tide.	Sea.	Weather.		Damage to Net, &c.	Bottom Fauna.	General Remarks, Trawlers Working, &c., Naturalist in Charge and Assistants.
Shot.	Hauled.	No. of Hours.			Wind and Force.	Sun, Rain, &c.			
0 a.m.	4 a.m.	4	Last flood.	Moderately smooth.	N.E. 5	Fine, hazy	Ground rope parted and net badly torn.	*Tubularia indivisa* c.; .. .. Much **Ross,** *Polynoe;* *Flustra foliacea* c.; *Mytilus modiolus* c.; *Ophiothrix fragilis* and *Echinus esculentus* f.c.	Temperature, surface and bottom, 49·5° F.
5.15 p.m.	7 p.m.	1¾	2 hours ebb.	Smooth	N.E. by N. 4	Dull, thick	—	**Tubularia indivisa** and **Antennularia antennina** v.c. Sponge f.c.; **Flustra foliacea** v.c.; *Loligo media* f.c.	7 p.m. had a "pull out," hove up, nothing wrong.
6.45 a.m.	7.45 am.	1	Slack	Rough	N.E. by N. 6	Overcast, hazy.	—	**Hydroids** very abundant and varied, including those of XII 27. Sponge; *Pandalus montagui;* Small *Asterias rubens* f.c.; *Agonus cataphractus.*	Two steam trawlers passed us. Temperature, surface and bottom, 53° F.
5.10 p.m.	6.10 p.m.	1	Slack	Rough	N.E. by N. 6	Overcast, hazy.	—	Small *Cancer pagurus* f.c.	Several smacks and steamers passing north and south. Temperature, surface and bottom, 53° F.
3.30 a.m.	7.30 a.m.	4	1 hour ebb; 3 hours flood.	Smooth	E.S.E. 3	Fine, hazy	—	A little *Obelia geniculata*	C. Forster Cooper and W. Wallace. Two smacks working with us.
7.30 a.m.	11.30 a.m.	4	3 hours flood; 1 hour ebb.	Moderately smooth.	E.S.E. 4	Cloudy, fine, hazy.	—	No record	Temperature, surface 54° F., bottom 53° F. Several smacks and drifters about us.
Noon	7 p.m.	7	4 hours ebb; 3 hours flood.	Smooth	E.S.E. 3	Cloudy, fine, hazy.	—	*Astropecten irregularis* c., *Ophiura ciliaris* and *Echinocardium cordatum* f.c.	Temperature, surface and bottom, 53° F. Several smacks and drifters about us.
(24th) 7 p.m.	(25th) 3 a.m.	8	3½ hours flood; 4½ hours ebb.	Smooth	E.S.E. 3	Cloudy, fine, hazy.	—	Nothing caught	Several smacks towing southward fore part of haul.
3.30 a.m.	11 a.m.	7½	2 hours ebb; 5½ hours flood.	Smooth	E.S.E. 3	Fine, hazy	Pulled out; had net badly torn.	*Loligo* c., *Buccinum undatum* f.c. .. .. *Portunus holsatus* f.c.; Echinoderms varied but few.	Temperature, surface 54° F., bottom 53·5° F. Two steam trawlers with us.
3 p.m.	4.15 p.m.	1¼	5 hours ebb.	Smooth	S.E. 3	Fine, hazy	4.15 p.m. came fast. Hove up.	A few Hydroids .. .. *Echinus miliaris* f.c.	Fish lost except half a basketful. Two steam trawlers with us.
5 p.m.	8 p.m.	3	3 hours flood.	Smooth	S.E. 3	Fine, hazy	Had net all to pieces	A few Hydroids and *Actinozoa* .. .. Several *Echinus acutus.*	Nearly all fish lost, remainder not measured.
June (30th) 8 p.m.	July (1st) 3 a.m.	7	2½ hours flood; 4½ hours ebb.	Smooth	W. by S. 5.	Dull, cloudy.	—	*Sabella pavonina* f.c.; *Mytilus modiolus* f.c.; A few starfish; *Ciona intestinalis* c.	
0.45 p.m.	6.30 p.m.	5¾	3 hours ebb; 2 hours flood.	Smooth	S.W. 3.	Fine, hazy	—	*Actinozoa;* .. .. *Pecten opercularis* c.; *Pycnogonum littorale* f.c.; *Ophiothrix fragilis* and other Echinoderms; *Tunicates.*	Three steam trawlers with us.
7 p.m.	11.30 p.m.	4½	High water.	Smooth	S.W. 3.	Fine, hazy	Net badly torn—a few lumps of mud brought up.	Nothing caught	No fish. Three steam trawlers with us.
4 a.m.	7 a.m.	3	2½ hours ebb.	Moderately smooth.	W. by S. 5.	Cloudy	—	Many pieces of Hydroids, *Alcyonium digitatum:* .. .. *Alcyonidium gelatinosum, Flustra foliacea;* *Doto* (sp.) c., *Mytilus modiolus* f.c.	Several drifters and two steam trawlers about here.
5.30 p.m.	6.30 p.m.	1	1 hour flood.	Smooth	W. by S. 5.	Hazy, cloudy.	Had fore trawl-head broken and fore wing badly torn.	*Syncoryne gravata*	6.30 p.m. came fast; hove up.
4 a.m.	7.30 a.m.	3½	4½ hours ebb.	Moderately rough.	W. by S. 6.	Cloudy	—	*Flustra foliacea* c.; .. .. *Pandalus annulicornis* f.c.; Asteroids and Ophiuroids.	One steam trawler with us.
8.5 a.m.	8.35 a.m.	½	5 hours ebb.	Smooth	W. by S. 6.	Cloudy	Had belly torn ..	Hydroids, including **Hydrallmania falcata** v.c .. **Alcyonidium gelatinosum, Flustra foliacea** v.c.; Asteroids.	8.35 a.m. came fast, probably to a wreck.
10 a.m.	3.30 p.m.	5½	High water.	Smooth	W. by S. 1.	Cloudy, fine.	Had belly badly torn	**Hydrallmania falcata** v.c. .. .. *Sabellaria spinulosa;* **Flustra foliacea** v.c., *Alcyonidium gelatinosum;* **Asterias rubens** v.c.	No fish.
(4th) 8.30 p.m.	(5th) 3 a.m.	6½	3 hours flood.	Smooth	Variable. 1.	Fine, hazy	Net torn	Hydroids, including *Hydrallmania falcata;* .. .. .. **Flustra foliacea** v.c., *Alcyonidium gelatinosum;* *Hyas coarctatus* f.c., *Pandalus montagui* f.c.; Asteroids.	About two baskets of fish, not measured; very few plaice.

Voyage.	Station.	Month.	Day.	Net and No. of Haul.	Name of Ground.	Position.			Depth (fathoms).			Bottom.		
						Shot.	Course.	Hauled.	Shooting.	Towing.	Hauling.	Shooting.	Towing.	Hauling.
XIII	44	July	5	B 37	North of Hasborough Light-vessel.	Cromer S.W. by W. ¼ W. 10 miles.	E. ¼ N. 10 miles.	53° 6½′ N., 1° 46′ E. ..	16	..	21	s. & sh.	..	ross
XIV	1	„	8	B 38	Off Southwold	Southwold Light N.W. by W. 6 miles.	S.E. 4 miles and W. 2 miles.	Southwold Light N.W. by W. ½ W. 8 miles.	15	..	15	c.s. & gravel.	..	gravel
„	2	„	„	B 39	Off Southwold	Southwold Light-house N.W. by W. 3½ miles.	W. ½ S. 2 miles and S. ½ E. 3 miles.	Southwold Light N.N.W. 5 miles.	11	..	14	sharp c.s.	..	c.s.
„	6	„	9	B 40	Off Southwold	Southwold West and Covehithe Church N. ¼ E.	S.S.W. ¾ mile	Southwold W. by N. ½ N., 1¾ miles.	9½	..	9½	sharp s.	..	stones
„	7	„	„	B 41	Off Sizewell Bank Buoy	Sizewell Bank Buoy N. by W. ¾ mile.	S.W. by S. ½ S. 2½ miles.	Aldeburgh Church W. ¾ N. 2¾ miles.	12	..	13	m.	..	f.s.
„	8	„	10	B 42	Off Aldeburgh	Sizewell Bank Buoy N. 1 mile.	N.E. by N. 1½ miles, and S.W. by S. 5 miles.	Orfordness Light W.S.W. 4½ miles.	10½	..	13	m.	..	m. & s.
XV	1	„	14-15	B 43	Off Smith's Knoll Light-vessel.	Smith's Knoll Light-vessel S.W. ¾ W. 2½ miles.	N.E. ¼ N. 6 miles E.S.E. 12 miles.	52° 57½′ N., 2° 40½′ E.	23	21	21	f.d.s.	..	f.d.s.
	2	„	15	B 44	Off Smith's Knoll ..	52° 57½′ N., 2° 40½′ E. ..	N.W. by W. ¾ W. 8½ miles.	52° 59′ N., 2° 27′ E.	21	..	21	f.g.s.	..	f.g.s.
„	3	„	„	B 45	Off Smith's Knoll ..	52° 59′ N., 2° 27′ E. ..	N.W. 4 miles. S.E. 1½ miles. E. by S. 4 miles. N.E. by E. ¾ E. 3 miles.	53° 1′ N., 2° 30′ E.	21	..	20	f.g.s.	..	f.g.s.
„	4	„	„	B 46	Off Smith's Knoll ..	53° 1′ N., 2° 30′ E. ..	N.W. by N. ¼ N. 12 miles.	53° 9′ N., 2° 16′ E.	20	..	21	f.g.s.	..	f.s. & sh.
„	5	„	15-16	B 47	Off Leman and Ower Light-vessel.	53° 9′ N., 2° 16′ E. ..	E. ¾ S. 7½ miles and W. ½ N. 6½ miles.	53° 9′ N., 2° 18′ E.	21	..	21	f.s. & sh.	..	s. & sh.
„	6	„	16	B 48	Off Leman and Ower ..	53° 9′ N., 2° 18′ E. ..	W. by S. 2½ miles and W. 2½ miles.	South Ower Buoy, W. ½ N. 2 miles.	21	..	18	s. & sh.	..	s.
„	7	„	„	B 49	Between Leman and Ower Banks.	By Leman and Ower Light-vessel.	S.E. 7½ miles. S.S.E. 2 miles. S.E. 3 miles. E.N.E. 2½ miles.	53° 1¼′ N., 2° 26′ E.	18	..	20	s.	..	f.g.s.
„	8	„	16-17	B 50	South End of Well Bank	53° 2½′ N., 2° 24½′ E. ..	N.E. 6 miles E. by N. 5 miles. W.S.W. 7 miles.	53° 8½′ N., 2° 25′ E.	20	..	17	f.g.s.	..	f.g.s.
„	9	„	17	B 51	Off Leman and Ower Light-vessel.	53° 10′ N., 2° 14′ E. ..	W. by S. 2½ miles and N.W. by N. 7½ miles.	53° 14′ N., 2° 1′ E.	20	7 & 16	17	f.g.s.	..	f.g.s.
„	10	„	„	B 52	Between Ower and Well Bank.	53° 14′ N., 2° 1′ E. ..	N.W. by N. 5 miles and W. 6½ miles.	53° 15½ N., 1° 44½′ E.	17	5½	17	f.g.s.	..	c.s.
„	11	„	„	B 53	North of Leman Bank ..	53° 15½′ N., 1° 44½′ E. ..	S.E. ½ E. 5½ miles	53° 13½′ N., 1° 52½′ E.	17	17	7	c.s.	..	f.s.
„	12	„	„	B 54	Off North Ower Buoy ..	North Ower Buoy E.S.E. 1½ miles.	W. ½ mile	Leman and Ower Light-vessel S.E. by S. ½ S. 6 miles.	8	..	10	f.s.	..	f.s.
„	13	„	18	B 55	Between Leman and Ower Banks.	Leman and Ower Light-vessel N.W. by N. ½ N. 4¼ miles.	N.W. by N. 4 miles N.W. 4¼ miles.	Close by North Leman Buoy.	20	..	20	f.s.	..	c.s.
„	14	„	„	B 56	North West of Leman Bank.	North Leman Buoy E. by S. 1½ miles.	S.W. ¾ W. 9½ miles	Hasborough Light-vessel S.W. ½ W. 4 miles.	20	..	19	f.g.s.	..	d.s.

Duration of Haul.			Tide.	Sea.	Weather.		Damage to Net, &c.	Bottom Fauna.	General Remarks, Trawlers Working, &c., Naturalist in Charge and Assistants.
Shot.	Hauled.	No. of Hours.			Wind and Force.	Sun, Rain, &c.			
4 a.m.	9 a.m.	5	2½ hours ebb.	Smooth	Variable. 1.	Fine, hazy	—	**Sabellaria spinulosa** v.c.; *Flustra foliacea ;* **Buccinum undatum** v.c. ; *Eupagurus bernhardus* c. ; Asteroids and Echinoids.	
0.45 p.m.	3.45 p.m.	3	Latter part of ebb.	Moderately rough.	Variable. 2.	Dull, overcast.	—	Hydroids ; .. .. Polyzoa ; *Ostrea edulis ;* Few Asteroids and *Echinus miliaris ;* *Liparis* sp.	W. Wallace, J. Potter, and C. W. Dance. Temperature, surface and bottom, 56° F.
5 p.m.	7.30 p.m.	2½	2½ hours flood.	Moderately rough.	S.S.W. 2	Dull, overcast.	—	Ross ; *Echinus miliaris* and Asteroids.	
5 p.m.	5.30 p.m.	½	Slack	Smooth	E. by N. 2	Fine, hazy, cloudy.	—	No record	Temperature, surface and bottom, 59° F. Foul haul.
8 p.m.	9 p.m.	1	2½ hours flood.	Smooth	Variable. 1	Fine, hazy	—	No record.	
5 a.m.	8 a.m.	3	Last ebb, first flood.	Smooth	S.S.W. 2	Fine, hazy	—	Ross ; Lobsters : *Solaster papposus ;* *Cottus scorpius.*	
(14th) 7 p.m.	(15th) 3 a.m.	8	High water.	Smooth	S.W. by W. 2	Dull, rain.	—	*Eupagurus bernhardus, Portunus holsatus,* and other Crustacea common ; *Echinus miliaris ;* *Agonus cataphractus, Callionymus lyra, Ammodytes* s.p., *Trachinus vipera.*	R. A. Todd and C.W. Dance. Several drifters about. Several smacks and one steam trawler fishing with us.
3.30 a.m.	7.30 a.m.	4	Low water.	Smooth	S.W. 3	Fine, cloudy.	—	*Callisoma kröyeri* c., *Eupagurus bernhardus* f.c., *Portunus holsatus* f.c. ; Various Echinoderms.	Several smacks fishing with us.
8 a.m.	2 p.m.	6	High water.	Moderately smooth.	S.W. by W. 4	Cloudy, fine.	—	*Buccinum undatum ;* .. .. Small Crustacea v.c., *Eupagurus bernhardus* f.c. ; *Astropecten irregularis ;* *Callionymus lyra.*	Several smacks fishing with us.
2.30 p.m.	7.30 p.m.	5	Last hour ebb.	Moderately smooth.	Variable. 1	Fine, cloudy.	—	**Sabellaria spinulosa** v.c. .. .. *Buccinum undatum ;* Small Crustacea v.c., *Eupagurus bernhardus* f.c. ; *Asterias rubens* and *Echinus miliaris* c.	Several smacks fishing with us.
(15th) 8 p.m.	(16th) 4 a.m.	8	Last flood.	Smooth	S. 1	Fine, hazy	—	Many Hydroids, *Obelia longissima* c. .. .. Several species of Crustacea, including *Cancer pagurus* c. ; *Portunus holsatus* c. ; Asteroids.	Several smacks about us.
4.15 a.m.	6.15 a.m.	2	3 hours ebb.	Smooth	S.E. 1	Overcast, hazy.	6.15 a.m. came fast, probably to a wreck ; hauled, had belly badly torn.	No record	Half basket of Plaice ; few Cod, Lemons, and Whiting, one Sole : none measured. Several smacks fishing with us.
8.45 a.m.	5.45 p.m.	9	3 hours ebb.	Smooth	Variable	Tempest, rain.	—	*Tubularia indivisa* f.c. .. .. **Sabellaria spinulosa** v.c. ; Small Crustacea, including *Eupagurus* and *Corystes* c. ; *Echinus miliaris* c.	Several smacks fishing with us.
(16th) 6.30 p.m.	(17th) 3.30 a.m.	9	Slack	Smooth	S.W. by S. 3	Dull, cloudy, rain.	—	Many Hydroids .. .. *Buccinum undatum ;* Small Crustacea common ; *Asterias rubens* c., Echinoids ; *Agonus cataphractus, Callionymus lyra, Trachinus vipera.*	Several smacks and one steam trawler fishing with us.
4.45 a.m.	8.45 a m.	4	Slack	Smooth	S.W. by W. 2	Fine, hazy	—	*Buccinum undatum ;* .. .. *Eupagurus bernhardus* f.c. ; *Asterias rubens* f.c., *Echinus miliaris* f.c. ; *Agonus cataphractus, Callionymus lyra.*	Several smacks and one steam trawler with us.
9.15 a.m.	3.45 p.m.	6½	High water.	Smooth	S. 2	Fine, hazy	—	*Alcyonium digitatum* f.c. ; **Sabellaria spinulosa** v.c. ; *Buccinum undatum, Mytilus modiolus ;* Small Crustacea common ; *Callionymus lyra.*	
4.45 p.m.	8.15 p.m.	3½	Last hours ebb.	Smooth	S.W. 2	Fine, hazy	[Cod end split just above flapper.]—C.W.D. Had belly torn.	Small Crustacea ; .. .. *Agonus cataphractus, Callionymus lyra, Trachinus vipera.*	Two smacks with us.
8.50 p.m.	9.20 p.m.	½	First hours flood.	Smooth	S.S.W. 2	Fine, hazy	Got warps foul when paying out more wire, hauled and got gear clear.	No catch recorded	No fishing.
4 a.m.	8 a.m.	4	4 hours ebb.	Smooth	S.W. 1 later N. 3.	Dull, thick, rainy.	—	*Tubularia indivisa* c. ; .. .. *Sabellaria spinulosa ;* *Alcyonidium gelatinosum ;* *Eupagurus bernhardus* c. ; *Asterias rubens, Echinus miliaris ;* *Callionymus lyra.*	Several smacks about us.
10 a.m.	2.45 p.m.	4¾	Last hour flood.	Moderately smooth.	N. 4	Dull, rain, cloudy.	Had after mortice of beam broken.	As XV 13, but .. .. **Sabellaria spinulosa** v.c.	2.45 p.m. came fast to wreck ; hove up. Two smacks with us.

Voyage.	Station.	Month.	Day.	Net and No. of Haul.	Name of Ground.	Position.			Depth (fathoms).			Bottom.		
						Shot.	Course.	Hauled.	Shooting.	Towing.	Hauling.	Shooting.	Towing.	Hauling
XV	15	July	18	B 57	Off Hasborough Light-vessel.	Hasborough Light-vessel W. by S. ½ S. 4 miles.	N.E. ½ E. 8½ miles	North Leman Buoy N.E. by E. ½ E. 2 miles.	18	..	18	d.s.	..	c.s.
„	16	„	18-19	B 58	North West of Leman Sand.	Leman and Ower Light E. ½ S. 6½ miles.	W. by N. 7 miles E. by S. 6 miles. S.W. by W. ½ W. 2¼ miles.	Hasborough Light-vessel S.W. by W. 9½ miles.	18	..	20	c.s.	..	c.s.
XVI	1	„	21	B 59	Between Smith's Knoll and Winterton Ridge.	Smith's Knoll Light-vessel N.E. by N. 7 miles.	.. ..	.. ..	20	..	..	f.g.s.	..	..
„	2	„	22	B 60	„ „	Smith's Knoll Light-vessel E. ½ S. 2½ miles.	S.W. 2 miles and N. ½ W. 4 miles.	Smith's Knoll Light-vessel E.S.E. 5 miles.	22	..	14	f.g.s.	..	f.g.s.
„	3	„	„	B 61	Between Smith's Knoll and Hewitt's Ridge.	Smith's Knoll Light-vessel S.E. ¾ S. 3½ miles.	N. ½ W. 3 miles	Smith's Knoll Light-vessel S. by E. ¾ E. 6 miles.	16	..	20	f.g.s.	..	f.g.s.
„	4	„	„	B 62	„ „	Smith's Knoll Light-vessel S. by E. ¾ E. 6 miles.	W. ½ N. 2 miles	Smith's Knoll Light-vessel S.E. by S. 7½ miles.	20	..	21	f.g.s.	..	f.g s.
„	5	„	22-23	B 63	Between Smith's Knoll and Winterton Ridge.	Smith's Knoll Light-vessel N.E. by E. 6¼ miles.	N.E. by N. ¼ N 8 miles.	Smith's Knoll Light-vessel S. by E. 4 miles.	20	..	22	f.g.s.	..	f.g.s.
„	6	„	23	B 64	At Smith's Knoll	Smith's Knoll Light-vessel S. by E. 4 miles.	S.W. by S. 6 miles	Smith's Knoll Light-vessel E. 3 miles.	22	..	22	f.g.s.	..	f.g.s.
XVII	1	„	29	O 88	Leman Ground	53° 29½′ N., 2° 26′ E. ..	S. 6 miles.	53° 24′ N., 2° 28½′ E. ..	18	..	15	f.g.s.	..	f.g.s.
„	2	„	„	O 89	„ „	53° 22½′ N., 2° 31′ E. ..	S.E. ¼ E. 6½ miles	53° 19′ N., 2° 40′ E. ..	15	..	17	f.g.s.	..	f.g.s.
„	4	„	30	O 90	North Part of Brown Ridges.	52° 56′ N., 3° 31′ E. ..	E. ¾ N. 4½ miles	52° 58′ N., 3° 38½′ E...	16	..	16	f.g.s.	..	f.g.s.
„	5	„	„	O 91	North East of Brown Ridges.	52° 58′ N., 3° 38½′ E. ..	E. by N. 5¼ miles	53° 0½′ N., 3° 46½′ E...	16	..	17	f.g.s.	..	f.d.s.
„	6	„	„	O 92	Off Haaks Light-vessel	Haaks Light-vessel S.E. 5½ miles.	S. ½ W. 5½ miles	Haaks Light-vessel E. by N. ½ N. 5 miles	17	..	18	f.g.s.	..	f.g.s.
XVIII	1	August	11	B 65	Off Blakeney Overfall ..	By Blakeney Overfall Bell Buoy.	3 miles N.W. ½ W.	Cromer Light S.E. ½ S., and Dudgeon Light N. by E. ¼ E.	10	..	10	c.s.	..	c.s.
„	2	„	12	B 66	Off Saltfleet	Saltfleet Mill W. by N. ½ N., and Trusthorpe Mill S. by W. ½ W.	S.S.E. 3 miles	Saltfleet Mill N.W. ¾ W., and Trusthorpe Mill S.W.	8	..	8	c.s. & gravel.	..	c.s.
„	3	„	„	B 67	Off Saltfleet	Saltfleet Mill N.W. ¾ W., Trusthorpe Mill S.W.	E. ½ N. 2¾ miles	Protector Buoy E. 1 mile.	8	..	8	c.s.	..	gravel
„	9	„	13	B 68	Lynn Deep	Lynn Well Light-vessel E.N.E., and Bar Flat Light-vessel S.W.	S.W. by W. 2 miles and N.E. by E. ¼ E. 2½ miles.	Hunstanton Light S.E. by E. ½ E., and Lynn Well Light E.N.E. ⅛ N.	14	..	14	s.	..	s.
„	11	„	17	B 69	Lynn Deep	Hunstanton Light E.S.E. ⅛ S., and Lynn Well Light-vessel E.N.E. ⅛ N.	E. by S. ½ S. 2½ miles	Hunstanton Light S.E. by E. ½ E., and Lynn Well Light-vessel N.E. ½ N.	10	..	9	c.s.	..	c.s. & sh.

Duration of Haul.			Tide.	Sea.	Weather.		Damage to Net, &c.	Bottom Fauna.	General Remarks, Trawlers Working, &c., Naturalist in Charge and Assistants.
Shot.	Hauled.	No. of Hours.			Wind and Force.	Sun, Rain, &c.			
4.30 p.m.	8 p.m.	3½	4 hours ebb.	Moderately rough.	N. 4	Cloudy, rainy.	Broke port winch brake.	**Sabellaria spinulosa** v.c.; *Pecten opercularis* f.c.; *Buccinum undatum*; *Porcellana longicornis*; *Asterias rubens* c., *Echinus miliaris*.	
(18th) 8.30 p.m.	(19th) 3.30 a.m.	7	High water.	Moderately rough.	N. 4	Dull, cloudy.	—	Numerous Hydroids; **Sabellaria spinulosa** v.c.; *Gemellaria loricata*; *Pecten opercularis, Buccinum undatum*; *Porcellana longicornis*; *Agonus cataphractus, Callionymus lyra, Cottus scorpius, Trachinus vipera*.	
8.20 p.m.	8.30 p.m.	10 min.	First ebb.	Smooth	S. by W. 4	Dull, tempest.	Lost belly batings, cod end and part wings.	No catch recorded	*8.30 p.m.*, came fast to wreck, hove up. R. A. Todd and C. W. Dance.
9.45 a.m.	12.45 p.m.	3	4 hours ebb.	Smooth	S.W. by S. 3	Tempest, heavy rain.	Had belly split ..	*Tubularia* (2 sp.) and *Hydrallmania falcata* c.; *Dendronotus arborescens* f.c.; *Eupagurus bernhardus* c; *Asterias rubens* f.c.; *Callionymus lyra, Trachinus vipera*.	
2.45 p.m.	4.45 p.m.	2	Low water.	Smooth	S.W. by S. 3	Tempest, rain.	—	*Tubularia* (2 sp.) c. .. .. **Sabellaria spinulosa** extremely common; *Porcellana longicornis* extremely common; *Asterias rubens* and *Echinus miliaris*; *Callionymus lyra, Trachinus vipera*.	Several smacks about us.
5 p.m.	8 p.m.	3	3 hours flood.	Smooth	S.W. by S. 2	Tempest, rain.	—	Many Hydroids, *Tubularia* (2 sp.) c. .. .. **Sabellaria spinulosa** v.c.; Small Crustacea v.c.; *Asterias rubens* and *Echinus miliaris* f.c.; *Ammodytes* sp.	Several smacks about us.
(22nd) 11.45 p.m.	(23rd) 3.15 a.m.	3½	Low water.	Smooth	S.W. 3	Fine, hazy	—	*Tubularia* (2 sp.) .. .. **Sabellaria spinulosa** v.c.; *Porcellana longicornis* c.; *Asterias rubens* and *Echinus miliaris*; *Trachinus vipera*.	Several smacks about us.
3.45 a.m.	6.30 a.m.	2¾	3 hours flood.	Smooth	S W. 2	Fine, hazy	Lost the trawl and sprung the after end of beam.	Nothing caught	*6.30 a.m.*, came fast to wreck, hauled.
6.45 a.m.	8.45 a.m.	2	2 hours flood.	Moderately rough.	N.W. by W.	Dull, overcast.	—	*Loligo forbesii, Solen siliqua*; .. .. *Portunus holsatus* f.c.; *Asterias rubens* f.c., *Astropecten irregularis* f.c.	W. Garstang and W. Wallace. Comparative hauls with S.S. "Wodan." Several smacks about us.
9.50 a.m.	11.50 a.m.	2	Half flood.	Moderately rough.	S.W. by W. 3	Overcast	—	As XVII. 1	S.S. "Wodan" and several smacks about us.
4.30 a.m.	6.30 a.m.	2	3 hours ebb.	Moderately rough.	W. 3	Cloudy	—	*Hydrallmania falcata*; .. .. *Loligo forbesii*; *Astropecten irregularis, Asterias rubens*.	S.S. "Wodan" and several Dutch smacks about us.
7.25 a.m.	9.25 a.m.	2	Last hour ebb.	Moderately rough.	W. 4	Fine, cloudy.	—	No record	S.S. "Wodan" with us.
1.15 p m.	3.15 p.m.	2	High water.	Moderately rough.	W. 5	Fine, cloudy, showery.	A hole through cod-end was noticed after return to harbour.	No record	S.S. "Wodan" and 1 steam trawler with us.
7.15 p.m.	9.15 p.m.	2	2 hours flood.	Smooth	S. by E.	Dull, rain	—	*Flustra foliacea, Alcyonidium gelatinosum, Gemellaria loricata*; *Mytilus modiolus, Buccinum undatum*: *Homarus vulgaris* c.; *Echinus* (*miliaris* and *esculentus*); *Cottus scorpius, Cottus bubalis*.	W. Garstang, W. Wallace, R. A. Todd, J. Potter.
6 a.m.	8 a.m.	2	Last quarter flood.	Smooth	N.N.E. 3	Cloudy, fine.	—	*Sertularia abietina*; .. .. *Buccinum undatum* c., *Doris pilosa* c., *Ostrea edulis*; *Pandalus montagui* c, *Portunus holsatus* f.c.; *Asterias rubens* f.c.; *Cottus scorpius, Callionymus lyra*.	One steam trawler with us.
8.25 a.m.	10.25 a.m.	2	1 hours ebb.	Smooth	N. by E. 2.	Fine, hazy	—	*Hydrallmania falcata* and *Sertularia abietina* c.; *Doris pilosa* c., *Ostrea edulis, Loligo forbesii*; *Flustra* (2 sp.), *Gemellaria loricata, Vesicularia spinosa*.	
8.30 p.m.	10.30 p.m.	2	Last hour ebb, first hour flood.	Smooth	S.S.E. 3	Fine, hazy	—	**Very rich in Invertebrates** .. .. Hydroids; *Flustra, Gemellaria loricata*; *Mytilus edulis* c., *Doris pilosa* c., *Pecten* (2 sp.); **Carcinus mænas** v.c., other *Decapods*; *Callionymus lyra, Cottus scorpius*.	Three small vessels fishing about us.
4 p.m.	6 p.m.	2	Last ebb.	Smooth	N.E. 3	Cloudy	—	**Extremely rich station** .. .. **Hydroids** numerous and common; Many Polyzoa; *Nucula nucleus, Mytilus modiolus, Buccinum undatum Syndosmya*—all common; Many Echinoderms; Small Crustacea; *Agonus cataphractus, Callionymus lyra, Cottus scorpius*.	Several small vessels fishing about us.

Voyage.	Station.	Month.	Day.	Net and No. of Haul.	Name of Ground.	Position.			Depth (fathoms).			Bottom.		
						Shot.	Course.	Hauled.	Shooting.	Towing.	Hauling.	Shooting.	Towing.	Hauling.
XVIII	12	Aug.	17	B 70	Lynn Deep	Hunstanton Light, S.E. by E. ½ E., and Lynn Well Light-vessel, N.E. ½ N.	N.E. ⅛ E. 2½ miles	Hunstanton Light, S.S.E. and Lynn Well Light-vessel N.N.E.	9	..	13	c.s.	..	c.s. gravel & sh.
„	16	„	18	B 71	Bridlington Bay	Flamborough Head Light, N.E. ¾ N. 7½ miles.	S. 3 miles	Hornsea Church, S.W. ⅜ W. 2½ miles.	7	7	8	f.s.	f.s.	c.s.
„	17	„	„	B 72	Flamborough Head Ground.	54° 10½′ N., 0° 30′ E. ..	N.N.E. 3 miles	54° 13½′ N., 0° 31½′ E.	29	..	30	f.s.	..	f.s.
„	18	„	19	B 73	Off Saltfleet	Trusthorpe Mill, W. by S. ¼ S. 5½ miles.	N.W. by N. ½ N. 4 miles.	Trusthorpe Mill, S.W. by S. ½ S. 6 miles.	7	10 & 5	5	m. & s.	..	gravel
„	19	„	„	B 74	Off Saltfleet	Trusthorpe Mill, S.W. by S. ½ S. 6 miles.	S. by E. 4½ miles	Trusthorpe Mill, W. by S. ⅛ S. 3½ miles.	5	5 & 8	7	c.s.	..	f.s.
„	20	„	„	B 75	Off Inner Dowsing ..	By Inner Dowsing Light-vessel.	S.E. by S. 3 miles	Inner Dowsing Light-vessel, N.W. 3 miles.	13	..	14	c.s.	..	c.s.
„	21	„	19	B 76	Off Blakeney	Blakeney Overfall Buoy, S. ½ E. 1½ miles.	S.S.E. 2 miles and N.N.E. 2 miles.	Blakeney Overfall Buoy, S.W. ½ S. 2 miles.	10	..	10	s. & sh.	..	s. & sh.
„	22	„	19-20	B 77	Off Hasborough Sand ..	Cromer Light, W. by S.¼S. and Hasborough Light-vessel S. ¼ W.	N.E. 5½ miles	Cromer Light, W. by S. ½ S. and Hasborough Light-vessel, S.W. by S. ½ S.	15	..	17	c.s.	..	c.s. & ross.
„	23	„	20	B 78	Off Cromer..	Cromer, W. by S. ½ S. and Hasborough Light-vessel S. ¼ W.	N.N.W. 6 miles S.W. 3½ miles.	Cromer, S.W. ⅜ S. 10½ miles.	17	..	15	s. & sh.	..	s. & sh.
„	24	„	„	B 79	„	Cromer, S.W. ¼ S. 11 miles.	S.E. 5½ miles	Hasborough Light-vessel, S. ¼ W. 3½ miles.	17	..	18	s. & sh.	..	s. & ross.
XIX	1	„	24	O 93	Smith's Knoll Deep ..	Smith's Knoll Light-vessel, N. ¾ W. 3 miles.	N. by E. 5 miles	Smith's Knoll Light-vessel, S.W. ½ S. 2¼ miles.	26	..	23	f.s.	..	f.d s.
„	2	„	„	O 94	North-east of Smith's Knoll Light-vessel.	Smith's Knoll Light-vessel, S.W. ½ S. 5 miles.	N.E. ½ E. 10 miles	53° 4′ N., 2° 27½′ E. ..	23	20	18	f.d.s.	..	f.d.s.
„	3	„	25	O 95	South of Leman Ground	53° 8′ N., 2° 31′ E. ..	N.E. ¼ E. 14 miles	53° 19′ N., 2° 43′ E. ..	18	..	17	f.d.s.	..	f.s.
„	4	„	„	O 96	South part of Leman Ground.	53° 19′ N., 2° 43′ E. ..	S.W. by W. ½ W. 12 miles and N. 1 mile.	53° 12′ N., 2° 27½′ E...	17	..	16	f.s.	..	f.s.
„	5	„	„	O 97	South-west part of Leman Ground.	53° 12′ N., 2° 27½′ E. ..	N.E. ½ N. 13 miles	53° 24′ N., 2° 36½′ E.	16	..	16	f.d.s.	..	f.d.s.
„	6	„	„	O 98	Leman Ground	53° 24′ N., 2° 36½′ E. ..	W.S.W. 3 miles	53° 22′ N., 2° 32½′ E.	16	..	16	f.d.s.	..	f.d.s.
„	7	„	26	O 99	South part of Leman Ground.	53° 14′ N., 2° 35½′ E. ..	N.E. 12½ miles	53° 24½′ N., 2° 45½′ E.	16	..	16	f.d.s.	..	f.d.s.
„	8	„	„	O 100	Leman Ground	53° 24½′ N., 2° 45½′ E. ..	S.S.W. 6 miles S. ½ E. 5½ miles and S.E. by S. ¾ S. 3 miles.	53° 10′ N., 2° 51′ E. ..	16	..	17	f.d.s.	..	f.d.s.
	9	„	„	O 101	South of Leman Ground	53° 8½′ N., 2° 52′ E. ..	W. ½ N. 13 miles	53° 7′ N., 2° 31′ E. ..	16	..	19	f.d.s.	..	f.d.s.
XX	1	Sept.	2	O 102	South of Botney Ground	53° 22½′ N., 2° 50½′ E. ..	N.E. by E. 4 miles N.E. by N. ½ N. 3 miles. N.E. ½ E. 2 miles. W. 3½ miles.	53° 30′ N., 2° 52½ E. ..	17	21	17	f.d.s.	..	f.d.s.

Duration of Haul.			Tide.	Sea.	Weather.		Damage Net, &c.	Bottom Fauna.	General Remarks, Trawlers Working, &c., Naturalist in Charge and Assistants.
Shot.	Hauled.	No. of Hours.			Wind and Force.	Sun, Rain, &c.			
6.30 p.m.	8 p.m.	1½	First flood.	Smooth	N.E. 2	Cloudy	—	**Rich station in Invertebrates,** much as XVIII 11, but in addition **Asterias rubens** v.c.; **Carcinas mænas** v.c.	Several small vessels fishing about us.
0.30 p.m.	2.30 p.m.	2	First ebb.	Moderately smooth.	N.E. 5	Cloudy	—	Hydroids fairly numerous and common; many Medusae *Gemellaria loricata, Vesicularia spinosa; Cottus scorpius.*	
6.30 p.m.	8 p.m.	1½	Last ebb.	Moderately rough.	N.N.E. 2	Cloudy	—	*Alcyonium digitatum;* .. .. *Natica nitida* and shells c., *Mangelia turricula* and shells, c.; *Eupagurus bernhardus.*	Surrounded by drifters.
5.30 a.m.	7.30 a.m.	2	First ebb.	Moderately smooth.	Variable. 1 to 2.	Cloudy, fine.	—	Many **Hydroids** and **Polyzoa**, both arboriform and encrusting; *Doris pilosa* c., *Ostrea edulis, Loligo media* f.c.; *Portanus holsatus; Callionymus lyra, Cottus scorpius.*	Temperature, s. and b. 58° F. One steam trawler fishing with us.
8.30 a.m.	10.30 a.m.	2	Last ebb.	Moderately smooth.	Variable. 1 to 2.	Cloudy, fine.	Had a hole through cod-end.	*Hydrallmania falcata, Sertularia abietina;* .. .. .. *Vesicularia spinosa, Alcyonidium gelatinosum; Doris pilosa,* v.c., *Buccinum undatum; Portunus holsatus.*	One steam trawler fishing with us.
0.30 p.m.	2 p.m.	1½	First quarter flood.	Smooth	S.W. 4	Cloudy, dull.	Cod-end split and net torn.	Hydroids .. .. *Flustra securifrons; Nucula nucleus* shells v.c. *Pecten opercularis.*	2 p.m. Came fast, had large stone in cod-end.
5 p.m.	7 p.m.	2	Last flood.	Smooth	S.W. 4	Cloudy	—	Hydroids, including *Tubularia indivisa; Flustra securifrons; Homarus vulgaris* and *Mytilus modiolus* f.c.; *Cottus scorpius.*	
(19th) 11.30 p.m.	(20th) 3 a.m.	3½	Last quarter ebb.	.. ..	W.S.W. 5	Cloudy	3 a.m., came fast. Had belly badly torn and port brake of winch broken.	*Hydrallmania falcata* f.c., *Antennularia antennina;* .. .. *Sabellaria spinulosa* c.; *Pecten opercularis* c.; *Eupagurus bernhardus* f.c.; *Echinus miliaris* f.c.; *Ammodytes* sp.	Two smacks fishing with us.
10 a.m.	3 p.m.	5	Last ebb, first flood.	Moderately rough.	W.S.W. 6	Cloudy, rain.	Had belly torn ..	Hydroids and Polyzoa very varied: *Tubularia* (2 sp.), *Sertularia* (3 sp.); *Alcyonidium gelatinosum, Flustra foliacea; Sabellaria spinulosa* c.; *Mytilus modiolus* c.; *Callionymus lyra, Cottus scorpius.*	Two smacks fishing with us.
4 p.m.	6.30 p.m.	2½	Last quarter flood.	Moderately rough.	S. 7	Dull, rain	6.30 p.m., came fast. Had belly badly torn.	Hydroids: *Alcyonium digitatum;* .. .. *Flustra foliacea, Alcyonidium gelatinosum* c.; Many Molluscs, including *Mytilus, Pecten, Buccinum; Cottus scorpius.*	Several smacks "lying to" about us.
3 p.m.	5 p.m.	2	From 3 to 5 hours ebb.	Rough	S. by W. 6	Dull, rainy.	—	Various Hydroids and Polyzoa .. .. **Sabellaria spinulosa** and tubes v.c., Polynoids; *Porcellana longicornis* c., *Portunus holsatus* and *Eupagurus bernhardus* f.c.; *Ciona intestinalis.*	W. Garstang and C. Crossland. A lot of smacks fishing with us.
6.30 p.m.	11.30 p.m.	5	Low water to 5 hours flood.	Rough	S. by E. 5	Tempest, dull, heavy rain.	—	*Trachinus vipera.*	Several smacks fishing with us.
1 a.m.	7 a.m.	6	6 hours ebb.	Rough	S.W. by S. 5	Tempest, heavy rain.	—	*Hydrallmania falcata;* .. .. *Loligo forbesii; Eupagurus bernhardus* and *Portunus holsatus* c.; *Asterias rubens, Astropecten irregularis.*	Several smacks fishing with us.
7.30 a.m	0.30 p.m.	5	Low water to 5 hours flood.	Rough swell.	Variable 2	Cloudy, fine.	—	No record	Several smacks with us.
1 p.m.	6 p.m.	5	High water to 5 hours ebb.	Moderate swell.	N. by W. 4	Cloudy	—	*Alcyonium digitatum* f.c. .. .. *Portunus holsatus* c., *Corystes cassivelaunus; Asterias rubens* f.c., *Ophiura ciliaris.*	Two smacks with us.
6.45 p.m.	8 p.m.	1¼	1 hour flood.	Rough	N. by W. 7	Dull, heavy rain.	—	No record	Interrupted haul; no fish measured. Several Dutch "Boms," about us.
2.30 a.m.	7.30 a.m.	5	4½ hours ebb.	Rough	N.W. by W. 4	Cloudy	—	*Alcyonium digitatum* f.c. .. .. *Eupagurus bernhardus* and *Corystes cassivelaunus* f.c.; *Ophiura ciliaris* f.c.	Two smacks fishing with us.
8 a.m.	1 p.m.	5	From low water to high water.	Moderately rough.	W.S.W. 4	Dull, cloudy.	—	*Tubularia indivisa, Alcyonium digitatum* .. .. .. *Loligo forbesii; Eupagurus* and *Portunus* f.c.; *Echinocardium cordatum* f.c., *Astropecten irregularis* f.c.	Two smacks fishing with us.
1.30 p.m.	6.30 p.m.	5	High water to 5 hours ebb.	Moderately smooth.	W.S.W. 4	Dull, overcast.	—	No record	Five steam trawlers and several smacks fishing with us.
1.30 a.m.	7.15 a.m.	5¾	1 hour ebb to 5 hours flood.	Smooth	Variable, easterly. 2	Fine, hazy, cloudy.	—	*Aphrodite aculeata* .. .. *Fusus antiquus, Loligo forbesii; Portunus holsatus, Corystes cassivelaunus.*	W. Wallace and C. W. Dance.

Voyage.	Station.	Month.	Day.	Net and No. of Haul.	Name of Ground.	Position.			Depth (fathoms).			Bottom.		
						Shot.	Course.	Hauled.	Shoot-ing.	Towing.	Haul-ing.	Shoot-ing.	Towing.	Haul-ing.
XX	2	Sept.	2	O 103	Black Bank	53° 14½′ N., 3° 49′ E. ..	E. ½ N. 6½ miles	53° 16½′ N., 3° 59′ E. ..	15	13	14	f.d.s.	..	f.d.s.
„	3	„	2-3	O 104	Off Terschelling Light-vessel.	Terschelling Light-vessel, S.E. 5½ miles.	N.E. by N. 8 miles N. 4½ miles and E. by S. 3 miles.	53° 42½′ N., 4° 51′ E. ..	15	16 17	19	f.d.s.	..	f.d.s. & m.
„	4	„	3	O 105	„ „	53° 42½′ N., 4° 51′ E. ..	S. by W. 4 miles	53° 38½′ N., 4° 51½′ E.	19	17	15	f.d.s. & m.	..	f.d.s.
„	5	„	„	O 106	„ „	53° 38½′ N., 4° 51½′ E. ..	E. by N. 3½ miles	53° 40½′ N., 4° 57½′ E.	15	16	18	f.d.s.	..	f.d.s.
„	6	„	5	O 107	Sylt Inner	Redcliff Light, S.E. ⅜ S. 9½ miles.	S.S.W. 3½ miles and S.W. by W. ½ W. 1½ miles.	Redcliff Light, E.S.E. 9½ miles.	8	..	8	f.d.s.	..	f.d.s.
„	7	„	„	O 108	„	Redcliff Light, E.S.E. 9½ miles.	S.W. by W. ¾ mile	Redcliff Light, E. by S. ½ S. 10 miles.	8	..	7	f.d.s.	..	f.d.s.
„	8	„	„	O 109	„	Redcliff Light, E. by S. ½ S. 10½ miles.	W. by N. 4 miles	Redcliff Light, E. by S. 14½ miles.	8	..	9	f.d.s.	..	f.br.s.
„	9	„	6	O 110	Off Heligoland	Heligoland, S.E. by E. ¼ E. 8 miles.	E. by S. 3 miles and S. 2½ miles.	Heligoland, E. ¼ S. 5½ miles.	21	..	20	f.d.s.	..	f.d.s.
„	10	„	14	B 80	Off Amrum	54° 32′ N., 7° 54½′ E. ..	W.N.W. 4 miles	54° 33′ N., 7° 47½′ E. ..	10	..	10	f.s.	..	f.s.
„	11	„	„	B 81	„	54° 33′ N., 7° 47½′ E. ..	S.W. 1 mile and E. 3½ miles.	54° 33′ N., 7° 53′ E. ..	10	..	10	f.s.	..	f.s.
„	12	„	15	O 111	Horn Reef Deep Water	55° 21′ N., 6° 22½′ E. ..	N.W. by N. 10 miles and W.S.W. 1 mile.	55° 26½′ N., 6° 7′ E. ..	21	..	26	m.	..	m.
„	13	„	„	O 112	„ „	55° 26½′ N., 6° 7′ E. ..	S.W. by W. ½ W. 1½ miles and W. 6½ miles.	55° 23½′ N., 5° 53½′ E.	27	..	27	f.s. & m.	..	f.s. & m.
„	14	„	„	O 113	Off Horn Reef Deep Water.	55° 23½′ N., 5° 53½′ E. ..	E. 4 miles N. 2 miles. E. 2 miles. N. 2 miles. W. by S. 1½ miles.	55° 28½′ N., 6° 0′ E. ..	27	..	27	f.s. & m.	..	f.s. & m.
„	15	„	17	O 114	South-east of Cleaver Bank.	53° 52′ N., 3° 48′ E. ..	S. 8 miles	53° 44′ N., 3° 50′ E. ..	21	..	23	s. & m.	..	f.s. & m
XX	16	„	„	O 115	North West of Terschelling Light-vessel.	53° 39′ N., 4° 24½ E. ..	S.S.E. 1½ miles and E.S.E. 1½ miles.	53° 38½′ N., 4° 27½′ E	20	..	20	m.	..	m
„	17	„	„	O 116	„ „	53° 38½′ N., 4° 27½ E. ..	S.E. by S. 3 miles	53° 37′ N., 4° 33′ E ..	20	..	18	m.	..	m.
„	18	„	„	O 117	Off Vlieland	53° 37′ N., 4° 33′ E. ..	W. by S. ¼ S. 13 miles.	53° 31′ N., 4° 14′ E. ..	18	..	15	m.	..	f.s.
XXI	1	„	30	O 118	„ Arbroath	56° 36′ N., 1° 30′ W. ..	E.N.E. 8 miles	56° 40′ N., 1° 17½′ W.	34	..	36	s. & m.	..	d.s. & sh.
„	2	Oct.	1	O 119	„ Buchan Ness	57° 23½′ N., 1° 45′ W. ..	N.E. 1½ miles S.W. 1 mile.	57° 24′ N., 1° 44½′ W.	32	..	32	sharp s.	..	sharp s.
„	3	„	8	B 82	North of Horn Reef ..	Blaavand Point. S. by E. ½ E. 7½ miles.	N.N.E. 5 miles	Blaavand Point Light, S. 12 miles.	8	.	9½	f.s.	..	f.s.
„	4	„	„	O 120	„ „ ..	Blaavand Point Light S. ½ E. 12½ miles.	S.W. ¾ S. 5 miles	Blaavand Point Light, S.S.E. 8 miles.	10	..	7	f.s.	..	f.s.

Duration of Haul.			Tide.	Sea.	Weather.		Damage to Net, &c.	Bottom Fauna.	General Remarks, Trawlers Working, &c., Naturalist in Charge and Assistants.
Shot.	Hauled.	No. of Hours.			Wind and Force.	Sun, Rain, &c.			
0.20 p.m.	3.20 p.m.	3	Last half ebb.	Smooth	S.E. by S. 3	Fine, hazy	—	*Fusus antiquus, Loligo forbesii ;* .. .. *Portunus holsatus* c. ; *Asterias rubens, Astropecten irregularis ; Callionymus lyra.*	Temperature, surface, 61° F. ; bottom, 60° F.
(2nd) 8.30 p.m.	(3rd) 3.30 a.m.	7	5½ hours ebb. 1 hour flood.	Moderately smooth.	W.S W. 4	Cloudy	—	*Alcyonium digitatum ;* .. .. *Loligo forbesii, Ostrea edulis ;* Large *Cancer pagurus* f.c., *Nephrops norvegicus ; Asterias rubens.*	Several Dutch fishing craft about us.
4 a.m.	6 a.m.	2	From 1 hour to 3 hours flood.	Moderately rough.	W. by N. 4	Dull, cloudy.	—	As XX 3. In addition, *Actinoloba dianthus* and *Cardium edule.*	Several Dutch fishing craft with us.
6.20 a.m.	7.50 a.m.	1½	Last flood.	Moderately rough.	W.N.W. 4	Fine, cloudy.	—	As XX 3	Temperature, surface, 60·5° F. ; bottom, 60°. Several Dutch craft and 2 steam trawlers fishing with us.
7 a.m.	9 a.m.	2	Slack	Smooth	S. by E. 5	Cloudy, fine, hazy.	—	*Chrysaora* c. ; .. .. *Aphrodite aculeata ; Portunus holsatus* c. ; *Asterias rubens* c. ; *Callionymus lyra.*	With S.S. "Poseidon."
9.30 a.m.	10 a.m.	½	½ hour flood.	Moderately smooth.	S. by E. 4	Fine, hazy	—	No record	S.S. "Poseidon" came fast, and S.S. "Huxley" hauled with her.
10.45 a.m.	12.45 p.m.	2	3 hours flood.	Moderately smooth.	S. by E. 3	Fine, hazy, cloudy.	—	No record	With S S. "Poseidon."
10.35 a.m.	1.30 p.m.	2h. 55m.	Last flood.	Smooth	W.S.W. 2	Fine, hazy	—	*Alcyonium digitatum, Actinoloba dianthus* .. .. .. *Loligo forbesii, Cyprina islandica ; Cancer pagurus, Homarus vulgaris ; Asterias rubens* c., other Asteriods.	Surface temperature, 62° F. With S.S. "Poseidon."
11 a.m.	1 p.m.	2	Last hour ebb, first hour flood.	Moderately rough.	N.E. by E. 5	Cloudy	—	*Aurelia aurita, Chrysaora ; Portunus holsatus ; Asterias rubens.*	
1.30 p.m.	3.30 p.m.	2	Last 2 hours flood.	Moderately rough.	N.E. by N. 5	Cloudy	—	No record.	
8 a.m.	1 p.m.	5	3 last hours ebb, 2 first hours flood.	Moderately rough.	N.E. by E. 5	Fine, cloudy.	—	**Alcyonium digitatum** v.c. ; **Sponge** (*? Halichondria*) v.c. ; *Pecten opercularis*, numerous Molluscs ; **Nephrops norvegicus** v.c.	
2 p.m.	5 p.m.	3	Last half flood.	Rough.	N.E. by E. 5	Fine	—	**Alcyonium digitatum** v.c. ; .. .. *Ostrea edulis* c., *Pecten* f.c. ; **Nephrops norvegicus** v.c. ; **Ophiothrix fragilis** very abundant.	Three steam trawlers with us.
5.45 p.m.	10.45 p.m.	5	6 hours ebb.	Very rough.	N.E. by E. 7	Cloudy, rain.	—	No record	Two steam trawlers with us.
7.15 a.m.	11.15 a.m.	4	Last hour flood. 3 hours ebb.	Moderately smooth.	W.S.W. 3	Cloudy fine.	—	**Alcyonium digitatum** v.c., *Sertularia abietina* c. .. *Aphrodite aculeata ;* Many Molluscs, *Fusus antiquus* f.c. ; *Asterias rubens* c.	One steam trawler with us.
3·20 p.m.	4.50 p.m.	1½	3 to 4 hrs. flood.	Smooth	W. S. W. 1	Fine, hazy	—	*Alcyonium digitatum, Chrysaora ;* .. .. Young *Mytilus modiolus ;* Small Crustacea ; Asteroids.	One steam trawler with us.
5.15 p.m.	6.45 p.m.	1½	Last quarter flood.	Smooth	W. S. W. 1	Fine, hazy	—	No record.	
7 p.m.	Midnight	5	4 hrs. ebb.	Smooth	N. 1	Fine, hazy	—	No record	One steam trawler with us.
2 p.m.	5.15 p.m.	3¼	Last 2 hrs. ebb, first 1½ hrs. flood.	Rough	S. 5	Cloudy	—	Few Hydroids and Polyzoa .. .. Very many species of Echinoderms : **Echinus miliaris** and **Spatangus purpureus** v.c. ; *Ascidians.*	W. Wallace and J. Potter with S.S. "Goldseeker."
6 a.m.	7.30 a.m.	1½	From 1½ hrs. to 3 hrs. flood.	Rough	S. S. W. 5	Cloudy, hazy.	Lost cod-end, belly, batings, and best part of square.	Nothing caught.	
5.20 p.m.	7.20 p.m.	2	Last quarter ebb.	Moderate	E. 6	Dull, rain	—	*Alcyonium hirsutum* c., *Flustra foliacea* c. ; .. .. .. *Portunus holsatus, Crangon vulgaris ;* Asteroids.	With S.S. "Thor."
8.20 p.m.	10.15 p.m.	1-55 min.	First 2 hrs. flood.	Moderate	E. 7	Dull, rain	—	As XXI 3. In addition, *Cyprina islandica ;* .. .. .. *Cancer pagurus ; Echinocardium cordatum.*	With S.S. "Thor."

Voyage.	Station.	Month.	Day.	Net and No. of Haul.	Name of Ground.	Position.			Depth (fathoms).			Bottom.		
						Shot.	Course.	Hauled	Shooting.	Towing.	Hauling	Shooting.	Towing	Hauling.
XXI	5	Oct.	9	O 121	Off Graa Dyb	Graa Dyb Fairway Buoy, E. ½ mile.	Variable, round	Graa Dyb Fairway, Buoy, S.S.E. 1 mile.	7	..	7	f.s.	..	f.s.
XXII	1	Nov.	16	B 83	Eddystone	Eddystone, N.W. by W. 3½ miles.	S. 5 miles	Eddystone, N.N.W. 7½ miles.	32	..	37	f.g.s.	..	f.g.s.
,	2	„	„	B 84	Start Bay	Start Light, S.W. by S. ½ S. 3 miles.	N.E. by E. ⅞ E. 4 miles.	Start Light, S.W. ½ W. 6½ miles.	9	..	14	f.g.s.	..	f.g.s.
„	3	„	„	B 85	French	Start Light, W.N.W. 16½ miles.	W. by S. ½ S. 7¼ miles.	Start Light, N.W. 12½ miles.	34	..	35	c.s.	..	s. gravel and sh.
„	4	„	17	B 86	The "Corner"	Start Light, W. 7 miles	E. by N. ¾ N. 8 miles.	Berry Head, N.W. ¼ N. 7½ miles.	32	..	29	f.m.s.	..	f.m.s.
„	5	„	„	B 87	Torbay	Brixham Breakwater, S. by E. ½ mile.	N.E. by N. 2 miles	Torquay Pier, N.W. ¾ N. 1½ miles.	5	..	7	f.s.	..	m.
„	6	„	„	B 88	Teignmouth Bay.. ..	Hope's Nose, S. ⅜ E. 1½ miles.	N.E. by N. ⅝ N. 2½ miles.	The Ness, N. by W. ½ W. 1 mile.	6½	..	8	m. & s.	..	m. & s.
„	7	„	„	B 89	Dawlish Bay	Clerk Point, W.S.W. ½ mile.	E. ½ N. 1½ miles	Dawlish, W.N.W. 2 miles.	9	..	9	s. & m.	..	s. & m.
„	8	„	„	B 90	Off Beer Head	Beer Head, N. 7¼ miles	E. by S. 4 miles and W. 2 miles.	50° 33½′ N., 2° 58′ W...	17	..	18	m. & s.	..	m. & s.
„	9	„	18	B 91	„ „	50° 29½′ N., 2° 58¾′ W. ..	S.W. ½ W. 5½ miles N.W. by N. ½ N. 3 miles. S. ½ E. 4 miles.	50° 23′ N., 3° 5′ W. ..	22	26	28	f.g.s.	f.g.s.	f.g.s.
„	11	„	19	B 92	Margate	N. Foreland Lighthouse, S.W. by W. N. Goodwin Lightvessel, S. ¼ W.	Coming round	N. Foreland Lighthouse S.W. by W. ¼ W. N. Goodwin Lightvessel, S. ½ W.	10	..	10	f.g.s.	..	f.g.s.
.,	12	„	20	O 122	Eastern Deep Water ..	52° 19¼′ N., 2° 47′ E. ..	S. 2 miles S.S.W. 2 miles. N.W. 2 miles.	52° 15½′ N., 2° 44½′ E.	21	..	23	f.g.s.	..	f.g.s.
XXIII	1	„	28	B 93	North part of Brown Ridges.	52° 48½′ N., 3° 34′ E. ..	W. 6 miles	52° 47′ N., 3° 25′ E. ..	14	..	17	f.g.s.	..	f.br.s.
„	2	„	29	B 94	Between Ymuiden and Egmond.	Ymuiden High Light, S.S.E., and Egmond Light, N.E ¾ E.	N.N.E. 8 miles	Egmond Light, S.E. 4 miles.	8	..	9	c.g.s.	..	f.g.s.
„	3	Dec.	1	B 95	Off Egmond	Ymuiden High Light, S. by E. ½ E. Egmond Light, S.E. by E.	S.W. by S. ⅛ S. 8 miles	Ymuiden High Light, S.E. ¾ E. 10 miles.	11	..	10	f.g.s.	..	f.g.s.
„	4	„	„	B 96	„ Ymuiden	Ymuiden High Light, S E. ¾ E. 10 miles.	S.E. ¼ E. 5½ miles	Ymuiden High Light, S.E. by E. ¼ E. 4½ miles.	10	..	9	f.g.s.	..	f.g.s.
	5	„	3	B 97	Off Ameland	Ameland Light, S.W. 6½ miles.	4½ miles S.E. ½ E.	Ameland Light, W. by S. ½ S. 8½ miles.	12	..	9	f.g.s.	..	f.g.s.
„	6	,	„	B 98	„ „	Ameland Light, W. by S. ½ S. 8½ miles	E.N.E. 4 miles	East End of Ameland, S. by W. ¾ W. 6½ miles.	9	..	12	f.g.s.	..	f.g.s.
XXIV	1	„	11	O 123	South of Leman Ground	53° 5½′ N., 2° 41½′ E. ..	N.N.E. 4½ miles	53° 9½′ N., 2° 42½′ E...	18	..	18	f.s.	..	c.s.
„	2	„	„	O 124	„ „ „	53° 9½′ N., 2° 42½′ E. ..	N.E. ⅝ N. 18⅜ miles	53° 26¾′ N., 2° 54′ E,..	18	..	18	c.s	..	f.d.s.

Duration of Haul.			Tide.	Sea.	Weather.		Damage to Net, &c.	Bottom Fauna.	General Remarks, Trawlers Working, &c., Naturalist in Charge and Assistants.
Shot.	Hauled.	No. of Hours.			Wind and Force.	Sun, Rain, &c.			
0.15 p.m.	1.30 p.m.	1¼	Half flood.	Smooth	Variable from 7 to 4.	Dull, rain	—	*Hydrallmania falcata* ; .. .. *Portunus holsatus* c., *Cancer pagurus* ; **Asterias rubens** v.c. ; *Agonus cataphractus.*	With S.S. "Thor."
9.15 a.m.	11.15 a.m.	2	Last 2 hrs. ebb.	Smooth	N. 4	Cloudy	—	*Alcyonidium digitatum* ; .. .. *Chætopterus variopedatus* ; **Pecten opercularis** v.c., *Loligo forbesii*, *Sepia* ; Small crabs v.c. ; *Callionymus lyra.*	W. Garstang, D. Matthews T. C. Jerrom. Surface Temperature, 12·65° C. Two trawling smacks about 2 miles to westward of us.
3 p.m.	5 p.m.	2	2 last hrs. flood.	Smooth	N. by W. 3	Cloudy	—	**Sertularia abietina** abundant ; .. .. *Eledone cirrhosa* ; *Cancer pagurus* f.c. ; *Callionymus lyra.*	Temperature, surface, 12·07° C ; bottom, 12·09° C.
8 p.m.	11 p.m.	3	First half ebb.	Moderately rough.	N. by W. 5	Cloudy	—	**Sertularia abietina** v.c. ; *Gadus minutus.*	
4 a.m	8 a.m.	4	4 hrs. flood.	Moderately smooth.	N. by W.	Cloudy	Lost belly, batings, and cod-end.	**Sertularia abietina** and **Hydrallmania falcata** v.c.	
0.15 p.m.	1.15 p.m.	1	Nil	Smooth	W. by N. 5	Showery	—	Large quantity of **Sertularia abietina** and **Hydrallmania falcata ;** *Philine aperta* v.c., *Loligo media* f.c. ; *Portunus depurator* v.c. ; *Astropecten irregularis* v.c. ; *Agonus cataphractus*, *Callionymus lyra.*	Trawl with new belly, baitings, and cod-end.
2.15 p.m.	3.20 p.m.	1-5 min.	Last ebb.	Smooth	N. by W. 5	Cloudy, showery.	—	*Actinoloba dianthus* c., *Alcyonium digitatum*, large ; .. .. *Loligo forbesii*, 23 large ; *Portunus depurator* f.c. ; *Callionymus lyra*, *Centronotus gunellus.*	Temperature, surface. 12·29° C. ; bottom, 12·26° C.
4.10 p.m.	5 p.m.	50m.	Nil	Smooth	N. by W. 5	Cloudy	—	*Loligo forbesii* ;	4.45 p.m. had a "pull out," hauled soon after, no damage.
8 p.m.	11 p.m.	3	Last hour flood. 2 hours ebb.	Moderately rough.	N. by E. 5	Cloudy	—	*Gadus minutus.*	
0.30 a.m.	6 a.m.	5½	4 last hours ebb, 2 first hours flood.	Rough	N.N.E. 6 to 7.	Cloudy	—	*Callionymus lyra*, *Gadus minutus.*	
4 p.m.	4.45 p.m.	¾	Last of ebb.	Smooth	N.N.E.	Cloudy	Had a pull out. Ground rope shackle broken, and net very badly split.	*Tubularia*, *Actinoloba dianthus* .. .. *Halichondria panicea* f.c. ; Ross and *Sabellaria spinulosa* c. ; Small crabs.	Surface temperature, 10·4° C.
8 a.m.	11 a.m.	3	Last half flood.	Rough	W. by N. 6	Dull, overcast	—	Large *Loligo forbesii* .. .. *Pagurus* sp. ; *Spatangus* sp.	A great number of Dutch drifters.
8 a.m.	11 a.m.	3	Last half ebb.	Very rough	E.N.E. 6	Cloudy	—	*Sertularia abietina* f.c. .. .. Shells of *Natica* (2 sp.) and *Buccinum undatum* ; *Eupagurus bernhardus* ; *Asterias rubens* ; *Agonus cataphractus*, *Callionymus lyra.*	R. A. Todd and J. O. Borley. One trawling smack in the distance.
9 a.m.	1 p.m.	4	Last half ebb.	Moderately rough.	N.E. by E. 6	Cloudy	—	*Sertularia* 2 sp. .. .. *Natica* 2 sp. ; *Portunus holsatus* ; Asteroids ; *Agonus cataphractus*, *Cottus scorpius*, *Trachinus vipera.*	Throughout Voyage XXIII. Invertebrates, except where otherwise stated, were few in number.
7.30 a.m.	10.30 a.m.	3	Last half flood.	Rough	N.E. 4 to 6	Cloudy, snow showers.	—	Hydroids ; *Portunus holsatus.*	
10.45 a.m.	1.45 p.m.	3	First half ebb.	Rough	N.E. by E. 4 to 7.	Cloudy, snow showers.	—	*Hyas araneus*, *Portunus holsatus* ; *Cottus scorpius*, *Trachinus vipera.*	
8 a.m.	10 a.m.	2	Last 2 hours flood.	Rough	W.S.W. 6	Cloudy	—	*Flustra foliacea* ; *Portunus holsatus* c. ; *Asterias rubens* ; *Agonus cataphractus*, *Cottus scorpius*, *Liparis vulgaris.*	
10.20 a.m.	0.20 p.m.	2	First 2 hours ebb.	Rough	W.S.W. 6	Dull, cloudy.	—	Very small *Eupagurus* c. ; *Vesicularia spinosa.*	
3.45 p.m.	5.45 p.m.	2	First 2 hours ebb.	Moderate	S.W. 4	Overcast	—	Not recorded ; no naturalist on board	C. W. Dance.
6 p.m.	Midnight	6	Last 4 hours ebb, and first 2 hours flood.	Moderate	S.W. by S. 4	Cloudy	—	Do. do.	

Voyage.	Station	Month.	Day.	Net and No. of Haul.	Name of Ground.	Position.			Depth (fathoms).			Bottom.		
						Shot.	Course.	Hauled.	Shooting.	Towing	Hauling.	Shooting.	Towing.	Hauling.
XXIV	3	Dec.	12	O 125	South East part of Lemon Ground.	53° 26¾′ N., 2° 54′ E. ..	W. by N. ½ N. 11⅜ miles.	53° 26½′ N., 2° 35 E. ..	18	16	15	f.d.s.	f.ds.	f.d.s.
„	4	„	„	O 126	Leman Ground	53° 26½′ N., 2° 35′ E ..	N.W. ½ N. 4½ miles	53° 28¾′ N., 2° 29′ E. ..	15	..	18	f.d.s.	..	f.g.s.
„	5	„	„	O 127	New Zealand	53° 33¼′ N., 3° 39½′ E. ..	E. ⅜ N. 10⅜ miles	53° 37′ N., 3° 55½′ E. ..	20	20	21	f.d.s.	..	f.d.s. & m.
„	6	„	13	O 128	Off Terschelling Lightvessel.	Terschelling Lightvessel, S. by W. 1½ miles.	N. ⅜ W. 6⅜ miles S. by W. ½ W. 5 miles. N. by W. 1 mile.	Terschelling Lightvessel, S.S.E. 5 miles.	13	..	13	f.s.	..	f.s.
„	7	„	14	O 129	„ „	53° 31′ N., 4° 46′ E. ..	N.E. ⅜ N. 8⅜ miles S. by W. 7½ miles.	53° 31½′ N., 4° 53′ E. ..	13½	..	13½	f.s.	..	f.s.
„	8	„	„	O 130	„ „	53° 31½′ N., 4° 53′ E. ..	N. by E. ⅜ E. 4 miles S.W. ½ S. 2½ miles. N.W. by N. ⅜ N. 5 miles.	53° 37′ N., 4° 46′ E. ..	13½	..	15½	f.s.	..	f.s.
„	9	„	„	O 131	„ „	53° 37′ N., 4° 46′ E. ..	W. 1 mile S.E. ½ S. 3⅜ miles. N.E. by N. 2½ miles. S.S.E. 4 miles.	53° 39′ N., 4° 56½′ E. ..	15½	..	15½	f.s. & m.	..	f.s.
„	10	„	„	O 132	„ „	53° 39′ N., 4° 56½′ E. ..	S.W. ⅛ W. 10 miles and N.W. ⅞ W. 3½ miles.	53° 33¼′ N., 4° 45′ ..	15½	..	14	f.s.	..	f.s.
„	11	„	14-15	O 133	„ „	53° 33¼′ N., 4° 45′ E. ..	S.E. ⅜ E. 2 miles S.W. by S. ⅜ S. 3 miles N.E. by N. 5½ miles. W. 2 miles.	53° 33¼′ N., 4° 45½′ E.	14	..	14	f.s.	..	f.s.
„	12	„	15	O 134	„ „	53° 33½′ N., 4° 45½′ E. ..	N.E. by E. ½ E. 5¼ miles.	53° 36¾′ N., 4° 51½′ E	14	..	14	f.s.	..	f.s.
„	13	„	„	O 135	„ „	53° 36¾′ N., 4° 51½′ E. ..	S. by W. ¼ W. 7 miles.	53° 30′ N., 4° 51′ E. ..	14	..	13	f.s.	..	f.d.br.s.
„	14	„	„	O 136	„ „	53° 30′ N., 4° 51′ E. ..	N. by W. ⅛ W. 6⅜ miles and S. ⅜ E. 6 miles.	53° 30⅜′ N., 4° 48¼′ E.	13	..	13	f.d.br.s.	..	f.d.s.
„	15	„	15-16	O 137	„ „	53° 30⅜′ N., 4° 48¼′ E. ..	N. by E. 7 miles and S.W. by S. ⅜ S. 4⅞ miles.	53° 32½′ N., 4° 46′ E. ..	13	..	15	f.d.s.	..	f.s.
„	16	„	16	O 138	„ „	53° 32½′ N., 4° 46′ E. ..	N.E. by N. 8¼ miles S. by E. ¼ E. 5¼ miles. N.W. 2½ miles.	53° 37¾′ N., 4° 51′ E. ..	15	..	16	f.s.	..	f.s.
„	17	„	„	O 139	„ „ „ ..	53° 40′ N., 4° 48′ E. ..	S. ⅛ E. 7⅛ miles and N. by W. ⅜ W. 8¼ miles.	53° 40½′ N., 4° 44¼′ E.	18	..	19	f.s. & m.	..	s. & m
„	18	„	„	O 140	„ „	53° 40½′ N., 4° 44½′ E. ..	S.E. ⅜ E. 7 miles and N.W. ¾ N. 8⅛ miles.	53° 42¼′ N., 4° 45′ E. ..	19	..	20	s. & m.	..	s. & m.
„	19	„	16-17	O 141	„ „	53° 42¼′ N., 4° 45′ E. ..	S. by W. ⅛ W. 8 miles N. ½ W. 7 miles.	53° 37½′ N. 4° 41′ E. ..	20	..	19	s. & m.	..	s. & m.
„	20	„	17	O 142	„ „	53° 37½′ N., 4° 41′ E. ..	S.E. by S. ⅜ S. 7½ miles N.E. by N. ½ N. 5 miles.	53° 37′ N., 4° 51′ E. ..	19	..	16	s. & m.	..	f.g.s.
„	21	„	„	O 143	„ „	53° 37′ N., 4° 51′ E. ..	N.E. by N. 1½ miles S.E. by S. 5½ and W. ¾ N. 5¾ miles.	53° 33′ N., 4° 45′ E. ..	16	..	14	f.g.s.	..	f.g.s.
„	22	„	„	O 144	„ „	53° 33′ N., 4° 45′ E. ..	N. 2 miles N.E. ¼ N. 7⅛ miles. S. by E. ¼ E. 3 miles.	53° 38¾′ N., 4° 49′ E. ..	14	20	18	f.g.s.	s. & m.	s. & m.
„	23	„	17-18	O 145	„ „	53° 38¾′ N., 4° 49′ E. ..	S. by W. ⅛ W. 4½ miles N. ½ E. 4½ miles. S.W. ⅜ S. 5½ miles.	53° 35½′ N., 4° 41½′ E. ..	18	..	18	s. & m.	..	s. & m.
„	24	„	18	B 99	Deep Water Botney Ground.	53° 39′ N., 3° 7½′ E. ..	N.W. by W. ½ W. 6 miles.	53° 40½′ N., 2° 56½′ E. ..	20	..	27	f.s.	..	m.

Duration of Haul.			Tide.	Sea.	Weather.		Damage to Net, &c.	Bottom Fauna.	General Remarks, Trawlers Working &c., Naturalist in Charge and Assistants.
Shot.	Hauled.	No. of Hours.			Wind and Force	Sun, Rain, &c.			
Midnight	7 a.m.	7	4 hours flood, 3 hours ebb.	Moderate	S.S.W. to S.S.E. 3	Cloudy	—	Not recorded ; no Naturalists on board.	
7.45 a.m.	9.45 am.	2	Last quarter ebb.	Moderate	S. 3	Cloudy, fine.	—	" " "	
4 p.m.	11 p.m.	7	2 hours ebb, 5 hours flood.	Very rough	S.E. by E. 7	Cloudy, dull.	Had net badly torn while getting it on board, by swell and weight of starfish in cod end.	" " "	No fish escaped.
6 p.m.	11 p.m.	5	ebb.	Moderate	S.S.E. 5	Cloudy, overcast.	—	" " "	
(13th) midnight	5 a.m.	5	Three-quarters flood.	Moderate	S.S.E. 4	Overcast, hazy.	—	" " "	Two steam trawlers about us.
5.30 a.m.	10 a.m.	4½	Last hour ebb, 4 hours flood.	Moderate	S.S.E. 3	Overcast, hazy.	—	" " "	Four steam trawlers about us.
10.20 a.m.	3 p.m.	4h. 40m.	4 hours ebb, 1 hour flood.	Moderate	E.S.E. 4 to 5	Overcast, hazy.	—	" " "	Four steam trawlers fishing with us.
3.30 p.m.	8.30 p.m.	5	3 hours flood, 2 hours ebb.	Moderate	S.E. 3	Overcast	—	" " "	Two steam trawlers with us.
(14th) 9 p.m.	(15th) 2 a.m.	5	3 hours ebb and 2 hours flood.	Moderate	S.E. by S. 3	Overcast	Piece of coir hawser caught in net above flapper.	" " "	Three steam trawlers with us.
2.30 a.m.	8 a.m.	5½	3 hours ebb, 2 hours flood.	Moderate	E S.E. 3	Overcast	—	" " "	Three steam trawlers with us.
8.30 a.m.	1.30 p.m.	5	4 hours flood, 1 hour ebb.	Smooth	S.E. by S. 3	Overcast	—	" " "	One Dutch fishing craft with us.
2 p.m.	7 p.m.	5	4 hours ebb, 1 hour flood.	Smooth	S.E. 3	Overcast, hazy.	Had a turn in "fore wing."	" " "	Three steam trawlers with us.
(15th) 8 p.m.	(16th) 2 a.m.	6	4 hours flood, 2 hours ebb.	Moderate	S.E. by E. 4	Overcast	—	" " "	Four steam trawlers with us.
3 a.m.	8 a.m.	5	4 hours ebb, 1 hour flood.	Moderate	S.E. 4	Overcast	"Belly" slightly torn.	" " "	Five steam trawlers with us.
9 a.m.	2 p.m.	5	4 hours flood, 1 hour ebb.	Moderate	S.E. by E. 4	Overcast, dull.	—	" " "	Two steam trawlers with us.
2.45 p.m.	8 p.m.	5¼	4 hours ebb, 1 hour flood.	Rough	S.E. 5	Overcast, cloudy.	—	" " "	Two steam trawlers with us.
(16th) 9 p.m.	(17th) 2 a.m.	5	4 hours flood. 1 hour ebb.	Rough	S.E. by E. 5.	Overcast	—	" " "	Two steam trawlers with us.
3 a.m.	8 a.m.	5	4 hours ebb, 1 hour flood.	Rough	S.E. by S. 5 to 6.	Overcast, hazy.	—	" " "	Two steam trawlers with us.
9 a.m.	2 p.m.	5	5 hours flood.	Rough	S.E. by S. 4	Overcast	—	" " "	
3 p.m.	8 p.m.	5	5 hours ebb.	Moderate	S.S.E. 3	"	—	" " "	Two steam trawlers with us.
(17th) 9 p.m.	(18th) 2 a.m.	5	5 hours flood.	Moderate	S.S.E. 3	Cloudy	—	" " "	Two steam trawlers with us.
10.30 am.	0.30 p.m.	2	First two hours ebb.	Moderate	S.E. by E. 4.	"	—	" "	Three steam trawlers working here.

VIII.—SUMMARIES OF HAULS, DISTINGUISHING THE SIZES OF FISH IN 10 CM. GROUPS (ARRANGED CHRONOLOGICALLY).

(*a.*) List of Latin Synonyms for English Names of Fishes.

(Systematic names adopted from *Publications de circonstances du conséil permanent internationale pour l'exploration de la mer*, *No.* 12.)

I. FLAT FISH (PLEURONECTIDÆ).

English names.	Latin names.
Brill.	Rhombus lævis.
Dab.	Pleuronectes limanda.
Flounder.	Pleuronectes flesus.
Halibut.	Hippoglossus vulgaris.
Lemon Dab.	Pleuronectes microcephalus.
Long Rough Dab.	Hippoglossoides platessoides.
Megrim.	Zengopterus megastoma.
Plaice.	Pleuronectes platessa.
Sand Sole.	Solea lascaris.
Scaldback.	Arnoglossus laterna.
Sole.	Solea vulgaris.
Solenette.	Solea lutea.
Thickback.	Solea variegata.
Turbot.	Rhombus maximus.
Witch.	Pleuronectes cynoglossus.

II. ROUND FISH (OTHER TELEOSTEI).

English names.	Latin names.
Angler.	Lophius piscatorius.
Cat fish.	Anarrhichas lupus.
Cod.	Gadus morrhua.
Coal fish.	Gadus virens.
Conger.	Conger vulgaris.
Four-bearded Rockling.	Motella cimbria.
Grey Gurnard.	Trigla gurnardus.
Haddock.	Gadus æglifinus.
Hake.	Merluccius vulgaris.
Herring.	Clupea harengus.
Horse Mackerel.	Caranx trachurus.
John Dory.	Zeus faber.

II. ROUND FISH (OTHER TELEOSTEI)—*continued.*

English names.	Latin names.
Latchet.	Trigla hirundo.
Ling.	Molva vulgaris.
Mackerel.	Scomber scomber.
Norway Pout.	Gadus esmarki.
Parrot Gurnard.	Trigla lineata.
Pout or Pouting.	Gadus luscus.
Red Gurnard.	Trigla cuculus.
Red Mullet.	Mullus surmuletus.
Shad.	Clupea alosa.
Sprat.	Clupea sprattus.
Twaite Shad.	Clupea finta.
Weever (Greater).	Trachinus draco.
Whiting.	Gadus merlangus.

III. DOG FISH, SHARKS, SKATES, AND RAYS (ELASMOBRANCHII).

Angel.	Rhina squatina.
Blonde.	Raia blanda.
Homelyn Ray.	Raia maculata.
Lesser Spotted Dog.	Scyllium canicula.
Porbeagle.	Lamna cornubica.
Skate (or Black Skate).	Raia batis.
Smooth Hound.	Mustelus vulgaris.
Spur Dog.	Acanthias vulgaris.
Starry Ray.	Raia radiata.
Sting Ray.	Trygon pastinaca.
Thornback.	Raia clavata.
Tope.	Galeus vulgaris.
White Skate.	Raia alba.

NOTE.—Weights included within square brackets have been estimated by interpolation (*see* p. 78).

(*b.*) Tables.

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23½+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
I 1	N.E. of West Shoal of Dogger.	13	f.s. & sh. ..	8 a.m.	Plaice	..	..	5	69	21	1	.	..	..	..	..	96	[57½	126½]	96	[57½	126½]
O 1	54° 38½′ N., 2° 11′ E.	11	s. & sh.	2 hrs. 15 mins.	Dab	..	48	317	107	1	..	..	..	..	..	..	473	..	..	473	..	..
					Turbot	.	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
					Cod	..	..	1	12	11	11	3	..	..	..	..	38	..	..	38	..	..
					Haddock ..	..	..	134	36	26	6	4	..	..	..	..	206	..	..	206	..	..
					Whiting ..	..	..	9	7	1	..	..	..	..	..	..	17	..	..	17	..	..
					Grey Gurnard	..	4	91	6	..	..	..	..	..	..	..	101	..	..	101	..	..
I 2	South of Eastermost Shoal of Dogger.	17½	f.s.	4.15 p.m.	Plaice	..	..	..	4	2	1	..	..	..	..	..	7	[6	13]	7	[6	13]
O 2	54° 41½′ N., 2° 52′ E.	19	f.s.	1 hr. 30 mins	Dab	..	39	88	2	..	..	..	..	..	..	..	129	..	..	129	..	..
					Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
					Cod	..	..	2	..	1	1	..	..	..	..	..	4	..	..	4	..	..
					Haddock ..	..	..	49	22	4	..	..	..	..	..	..	75	..	..	75	..	..
					Whiting ..	..	..	9	..	..	..	..	..	..	..	..	9	..	..	9	..	..
					Grey Gurnard	..	..	9	..	..	..	..	..	..	..	..	9	..	..	9	..	..
I 3	N.E. of Ameland ..	16	f.s.	10 a.m.	Plaice	..	81	419	11	..	..	..	..	..	..	..	511	[61¼	134½]	511	[61¼	134½]
O 3	53° 46′ N., 5° 57½′ E.	15	f.s.	2 hrs.	Dab	..	103	69	..	..	..	..	..	..	..	..	172	..	..	172	..	..
					Sole	..	..	3	..	..	..	..	..	..	..	..	3	..	..	3	..	..
					Turbot	..	..	2	5	..	..	..	..	..	..	..	7	..	..	7	..	..
					Brill	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
					Cod	..	..	2	1	..	..	..	1	1	1	..	6	..	..	6	..	..

Voyage, Station, No of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ 0+	4+ 10+	8+ 20+	12+ 30+	15¾+ 40 +	19¾+ 50 +	23⅝+ 60 +	27½+ 70 +	31½+ 80 +	35½+ 90 +	39½+ 100+	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
I 3	N.E. of Ameland—*(cont.)*	16 f.s.	10 a.m.	Whiting ..	..	..	18	8	..	..	..	..	..	..	..	26	..	..	26	..	..
O 4		15 f.s.	2 hrs.	Grey Gurnard	..	2	14	2	..	..	..	..	..	..	..	18	..	..	18	..	..
				Latchet ..	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Weever ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Thornback ..	..	..	3	1	2	1	..	..	..	..	..	7	..	..	7	..	..
				Spur Dog ..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
I 4	Off Ameland	9¾ f.s.	3.20 p.m.	Plaice	..	3	1	1	..	..	..	..	..	..	..	5	[½	1]	5	[½	1]
O 4	53° 31′ N., 5° 43′ E.	11½	1 hr.	Dab	..	1	1	..	..	..	..	..	..	..	..	2	..	..	2	..	..
	Foul haul. Board capsized.			Whiting ..	..	..	1	1	..	..	..	..	..	..	..	2	..	..	2	..	..
				Sprat	1	4	..	..	..	..	..	..	..	..	..	5	..	..	5	..	..
I 5	Off Ameland	15 f.g.s. ..	7 p.m.	Plaice	..	383	677	13	..	..	..	..	..	..	..	1073	118	259½]	2146	[236	519]
O 5	53° 45′ N., 5° 25′ E.	18 f.g.s.	5 hrs.	Dab	..	154	118	..	..	..	..	..	..	..	..	272	..	..	541	..	..
				Sole	..	..	5	4	1	..	..	..	..	..	..	10	..	..	10	..	..
				Turbot	..	..	1	2	..	..	..	..	..	..	..	3	..	..	3	..	..
				Brill	..	..	8	3	..	..	..	..	..	..	..	11	..	..	11	..	..
				Cod	..	..	2	3	..	..	..	2	..	1	..	8	..	..	8	..	..
				Whiting ..	..	1	136	40	..	..	..	..	..	..	..	177	..	..	177	..	..
				Grey Gurnard	..	8	30	1	..	..	..	..	..	..	..	39	..	..	39	..	..
				Weever.. ..	..	..	7	4	..	..	..	..	..	..	..	11	..	..	11	..	..
				Rays, mixed ..	..	..	..	6	9	3	..	..	..	..	..	18	..	..	18	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	1	..	..
				Tope	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
I 6	Brown Ridges ..	16 f.s.	1 p.m.	Plaice	..	1	32	1	..	..	..	..	..	..	..	34	[6	13]	34	[6	13]
O 6	52° 43¾′ N., 3° 31¾′ E.	15 f.s.	1 hr	Dab	..	26	6	..	..	..	..	..	..	..	..	32	..	..	32	..	..
				Whiting ..	..	1	47	..	..	..	..	..	..	..	..	48	..	..	48	..	..
				Grey Gurnard	..	2	3	1	..	..	..	..	..	..	..	6	..	..	6	..	..
				Latchet ..	..	..	3	2	..	..	..	..	..	..	..	5	..	..	5	..	..
				Weever ..	..	..	11	2	..	..	..	..	..	..	..	13	..	..	13	..	..
				Spur Dog ..	..	..	..	..	..	1	1	1	..	1	..	4	..	..	4	..	..
I 7	Brown Ridges ..	21 f.s.	3.45 p.m.	Plaice	..	..	11	..	..	..	..	..	..	..	..	11	[2	4½]	11	[2	4½]
O 7	52° 43′ N., 3° 22′ E.	18 f.s.	2 hrs. 15 mins.	Dab	..	6	3	..	..	..	..	..	..	..	..	9	..	..	9	..	..
				Whiting ..	..	2	17	1	..	..	..	..	..	..	..	20	..	..	20	..	..
				Grey Gurnard	..	4	1	..	..	..	..	..	..	..	..	5	..	..	5	..	..
				Latchet ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Weever ..	..	..	5	..	..	..	..	..	..	..	..	5	..	..	5	..	..
II 1	Off Ymuiden.. ..	11 f.s.	10.30 a.m.	Plaice	..	66	184	..	..	..	..	..	..	..	..	250	[28¼	62]	250	[28¼	62]
O 8	52° 29′ N., 4° 10½′ E.	13 f.s.	2 hrs.	Dab	..	20	53	1	..	..	..	..	..	..	..	74	..	..	74	..	..
				Cod	..	..	..	1	1	..	..	..	..	..	..	2	..	..	2	..	..
				Whiting ..	..	3	146	13	..	..	..	..	..	..	..	162	..	..	162	..	..
				Horse Mackerel	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Weever ..	..	..	14	1	..	..	..	..	..	..	..	15	..	..	15	..	..
II 2	Off Ymuiden.. ..	14 f.s.	4 p.m.	Plaice	..	2	623	22	2	..	..	..	..	..	..	649	[110¼	242½]	1189	[202	444½]
O 9	52° 31½′ N., 4° 0′ E.	13 f.s.	7 hrs.	Dab	..	334	298	1	..	..	..	..	..	..	..	633	..	..	1055	..	..
				Sole	..	..	4	7	1	..	..	..	..	..	..	12	..	..	12	..	..
				Turbot	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Solenette ..	2	..	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	2	6	4	1	..	1	..	1	..	15	..	..	15	..	..
				Whiting ..	..	..	332	61	..	..	..	..	..	..	..	393	..	..	786	..	..
				Grey Gurnard	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Latchet ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	.

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ 0+	4+ 10+	8+ 20+	12+ 30+	12¾+ 40 +	19¾+ 50 +	23⅝+ 60 +	27½+ 70 +	31½+ 80 +	35½+ 90 +	39½+ 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
II 2	Off Ymuiden (*cont.*)	14 f.s.	4 p.m.	Mackerel ..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
O 9		13 f.s.	7 hrs.	Weever ..	..	..	45	7	..	..	..	..	..	..	..	52	..	..	52	..	..
				Thornback ..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
III 1	Off Ameland	15 f.s.	4.15 a.m.	Plaice	..	4	34	12	..	..	..	..	..	..	..	50	[12	26½]	50	[12	26½]
O 10	53° 43′ N., 5° 29′ E.	17 f.s.	3 hrs. 55 mins.	Dab	..	62	25	1	..	..	..	..	..	..	..	88	..	..	88	..	..
		15 f.s.		Turbot	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Brill	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Flounder ..	..	..	..	2	..	..	..	..	..	..	..	2	..	..	2	..	..
				Solenette ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	4	1	..	..	1	..	2	1	..	9	..	..	9	..	..
				Whiting ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
III 2	Off Ameland	15 f.s.	8.45 a.m.	Plaice	..	53	77	17	..	..	..	..	..	..	..	147	[19	42]	147	[19	42]
O 11	53° 40′ N., 5° 30′ E.	15 f.s.	1 hr. 15 mins.	Dab	..	99	69	..	..	..	..	..	..	..	..	168	..	..	168	..	..
				Brill	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Flounder ..	..	..	2	2	..	..	..	..	..	..	..	4	..	..	4	..	..
				Haddock ..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Spur Dog ..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..
III 3	Off Ameland	15 f.s.	10.25 a.m.	Plaice	..	120	219	9	..	..	..	..	..	..	..	348	[38¼	84]	348	[38¼	84]
O 12	53° 38′ N., 5° 32′ E.	13 f.s.	1 hr. 5 mins.	Dab	..	135	86	1	..	..	..	..	..	..	..	222	..	..	222	..	..
				Flounder ..	..	..	3	9	1	..	..	..	..	..	..	13	..	..	13	..	..
				Sprat	1	2	..	..	..	..	..	..	..	..	..	3	..	..	3	..	..
III 4	Off Ameland	13 f.s.	0.10 p.m. (noon).	Plaice	..	117	151	..	..	..	..	..	..	..	..	268	[24	53]	268	[24	53]
O 13	53° 36′ N., 5° 30′ E.	12 f.s.	1 hr. 10 mins.	Dab	..	..	..	..	..	..	..	..	..	..	..	..	..	..	400	..	..
				Whiting ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
III 8	Off Terschelling ..	22 m.	7.15 a.m.	Plaice	..	..	2	8	2	..	..	..	..	..	..	12	[6	13]	12	[6	13]
O 17	53° 53′ N., 4° 43′ E.	22 m.	2¾ hrs.	Dab	..	45	15	..	..	..	..	..	..	..	..	60	..	..	60	..	..
				Sole	..	..	..	2	1	..	..	..	..	..	..	3	..	..	3	..	..
				Turbot	..	..	..	1	1	..	..	..	..	..	..	2	..	..	2	..	..
				Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	4	2	3	3	6	3	2	..	..	23	..	..	23	..	..
				Haddock ..	..	..	..	..	3	1	1	..	..	..	..	5	..	..	5	..	..
				Whiting ..	..	1	124	25	1	..	..	..	..	..	..	151	..	..	151	..	..
				Grey Gurnard ..	..	8	..	..	..	..	..	..	..	..	..	8	..	..	8	..	..
				Thornback ..	..	..	..	..	2	2	..	..	..	..	..	4	..	..	4	..	..
				Spur Dog ..	..	..	..	..	..	1	4	1	1	1	..	8	..	..	8	..	..
III 9	Off Terschelling ..	22 m.	11.45 a.m.	Plaice	..	..	1	5	5	1	..	..	..	..	..	12	[9½	21]	12	[9½	21]
O 18	53° 57½′ N., 4° 32′ E.	24 m. & s.	3 hrs.	Dab	..	80	21	..	..	..	..	..	..	..	..	101	..	..	101	..	..
				Sole	..	..	5	9	..	..	..	..	..	..	..	14	..	..	14	..	..
				Turbot	..	..	..	4	..	..	1	..	..	..	..	5	..	..	5	..	..
				Brill	..	..	2	1	..	..	..	..	..	..	..	3	..	..	3	..	..
				Long Rough Dab.	..	2	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Cod	..	..	4	..	..	..	..	..	1	..	..	5	..	..	5	..	..
				Haddock ..	..	..	..	1	..	3	1	..	..	..	..	5	..	..	5	..	..
				Whiting ..	..	..	39	18	..	..	..	..	..	..	..	57	..	..	57	..	..
				Grey Gurnard ..	8	39	1	..	..	..	..	..	..	..	..	48	..	..	48	..	..
				Thornback ..	..	..	1	3	2	3	..	..	..	..	..	9	..	..	9	..	..
				Spur Dog ..	..	..	..	..	..	1	9	2	..	..	..	12	..	..	12	..	.

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ 0+	4+ 10+	8+ 20+	12+ 30+	15¾+ 40+	19¾+ 50+	23⅝+ 60+	27½+ 70+	31½+ 80+	35½+ 90+	39½+ 100+	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
IV 1	Off Terschelling ..	20 f.s.	8.45 a.m.	Plaice	..	2	10	1	1	..	..	..	..	..	..	14	[2¾	6]	14	[2¾	6]
O 19	53° 51′ N., 4° 55′ E.	22 f.g.s.	3 hrs.	Dab	..	13	2	..	..	..	..	..	..	..	..	15	..	..	15	..	..
				Sole	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Long Rough Dab.	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	1	..	1	5	3	2	..	..	12	..	..	12	..	..
				Haddock ..	..	..	..	..	2	2	..	..	..	..	..	4	..	..	4	..	..
				Whiting ..	..	..	179	72	7	..	..	..	..	..	..	258	..	..	258	..	..
				Thornback ..	..	..	1	1	1	1	..	..	..	..	..	4	..	..	4	..	..
				Black Skate ..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..
V 1	Lowestoft Deep Water.	23 f.s.	5 p.m.	Plaice	..	..	7	5	4	..	..	..	..	..	..	16	[7½	16½]	16	[7½	16½]
O 20	52° 17′ N., 2° 31′ E.	25 f.g.s.	3 hrs.	Dab	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sole	..	..	8	10	1	..	..	..	..	..	..	19	..	..	19	..	..
				Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	1	4	2	3	1	..	..	..	11	..	..	11	..	..
				Whiting ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	30	..	..
				Ling	..	..	..	..	..	..	..	1	..	..	..	1	..	..	1	..	..
				Pout	..	..	1	1	..	..	..	..	..	..	..	2	..	..	2	..	..
				Conger	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1	..	..
				Weever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	25–30	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	..	..
V 2	Lowestoft Deep Water, Middle Ground to Knoll Deep.	25 f.g.s. ..	8.30 p.m.	Plaice	..	..	10	7	2	..	..	..	..	..	..	19	[7½	16½]	19	[7½	16½]
O 21	52° 24′ N., 2° 37′ E.	23 f.s.	3 hrs.	Dab	..	..	3	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Sole	..	..	10	5	2	..	..	..	..	..	..	17	..	..	17	..	..
				Turbot	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	..	3	2	1	5	..	..	..	11	..	..	11	..	..
V 3	Lowestoft Deep Water (Knoll Deep) (S. Part).	23 f.s.	12.10 a.m.	Plaice	..	1	27	14	6	2	..	..	..	..	..	50	[19½	43]	50	[19½	43]
O 22	52° 23′ N., 2° 32′ E.	24 f.gr. s.	6 hrs. 20 mins.	Dab	..	2	4	..	..	..	..	..	..	..	..	6	..	..	6	..	..
				Lemon Dab ..	..	..	..	3	..	..	..	..	..	..	..	3	..	..	3	..	..
				Sole	..	..	20	6	1	..	..	..	..	..	..	27	..	..	27	..	..
				Brill	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	1	6	4	8	1	1	1	..	22	..	..	22	..	..
				Whiting ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	..	..
				Ling	..	..	..	..	..	..	1	1	..	..	1	3	..	..	3	..	..
				Weevers ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	..	..
				Ray	..	..	..	..	..	..	..	..	..	..	..	..	..	..	some.	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	..	..
V 4	Lowestoft Deep Water Knoll Deep S. Part.	24 f.gr.s. ..	7 a.m.	Plaice	..	..	19	8	1	1	..	..	..	..	..	29	[8¾	19]	29	[8¾	19]
O 23	52° 23′ N., 2° 32′ E.	24 f.gr.s.	4 hrs. 45 mins.	Dab	..	36	10	..	..	..	..	..	..	..	..	46	..	..	46	..	..
				Sole	..	..	7	7	..	..	..	..	..	..	..	14	..	..	14	..	..
				Flounder ..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	1	4	1	..	2	2	..	2	12	..	..	12	..	..
				Whiting ..	..	14	89	16	1	..	..	..	..	..	..	120	..	..	120	..	..
				Ling	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Shad	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Weever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	some.	..	..
				Ray	..	..	..	..	..	..	..	..	..	..	..	..	..	..	some.	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	some.	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
V 5	Lowestoft Deep Water, S.W. of Winterton Shoal. 52° 23′ N., 2° 50′ E.	24 f.gr.s. ..	0.10 p.m.	Plaice	..	..	28	12	1	1	..	..	..	..	..	42	[11¼	24½]	42	[11¼	24½]
O 24		25 f.gr.s. ..	4 hrs. 20 mins.	Dab	..	26	12	..	..	..	..	..	..	..	..	38	..	..	38	..	..
	4.30 p.m. came fast. "Trawl belly badly torn."			Sole	..	..	4	2	..	..	..	..	..	..	..	6	..	..	6	..	..
				Turbot	..	..	..	..	..	..	..	1	..	..	..	1	10½	23	1	10½	23
				Brill	..	..	..	1	1	..	..	..	..	..	..	2	..	..	2	..	..
				Cod	..	..	..	..	2	..	1	..	1	..	..	4	..	..	4	..	..
				Whiting	..	1	96	21	1	..	..	..	..	..	..	119	..	..	119	..	..
				Twaite Shad ..	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
V 6	Eastern Deep Water, Middle Ground.	20 f.s.	6.40 p.m.	Plaice	..	4	42	16	..	..	..	..	..	..	..	62	[13¼	29]	62	[13¼	29]
O 25	52° 15′ N., 3° 4½′ E.	19 f.s.	4 hrs. 50 mins.	Dab	..	107	26	..	..	..	..	..	..	..	..	133	..	..	133	..	..
	11.30 p.m. came fast. Trawl torn badly,			Sole	..	..	5	4	1	..	..	..	..	..	..	10	..	..	10	..	..
				Flounder ..	..	..	..	3	..	..	..	..	..	..	..	3	..	..	3	..	..
				Cod	..	..	..	..	..	..	2	1	..	..	..	3	..	..	3	..	..
V 7	North part of Middle Ground, Lowestoft Deep Water. 52° 27′ N., 2° 47′ E.	22 f.s.	10.40 a.m.	Plaice	..	3	55	33	4	..	1	..	..	..	..	96	[27¼	60]	96	[27¼	60]
O 26		23 f.g.s.	5 hrs. 20 mins.	Dab	..	4	5	2	..	..	..	..	..	..	..	11	..	..	11	..	..
				Sole	..	..	1	3	..	..	..	..	..	..	..	4	..	..	4	..	..
				Turbot	..	..	..	..	1	..	..	1	..	..	..	2	14½	32	2	14½	32
				Brill	..	..	..	2	..	..	..	..	..	..	..	2	..	..	2	..	..
				Flounder ..	..	..	3	3	..	..	..	..	..	..	..	6	..	..	6	..	..
				Cod	..	..	..	4	1	..	..	..	..	..	..	5	..	..	5	..	.
				Whiting	5	65	3	..	..	..	..	..	..	..	..	73	..	..	73	..	..
				Pout	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
VI 1	New Zealand	17 f.g.s. ..	1 am.	Plaice	..	3	25	20	2	1	..	..	..	..	..	51	[16	35]	51	[16	35]
O 27	53° 42′ N., 4° 4′ E.	22 f.g.s. & m.	5 hrs. 30 mins.	Dab	..	5	15	..	..	..	..	..	..	..	..	20	..	..	20	..	..
				Sole	..	..	..	5	..	1	..	..	..	..	..	6	..	..	6	..	..
				Turbot	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
				Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	..	..	..	..	2	2	1	1	6	..	..	6	..	..
				Haddock	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
				Whiting	2	92	37	3	..	..	..	..	..	..	..	134	..	..	134	..	..
				Thornback	..	2	7	1	4	1	1	..	..	..	..	16	..	..	16	..	..
VI 2	North East of New Zealand.	22 s. & m. ..	7 a.m.	Plaice	..	3	7	6	7	1	..	..	..	..	..	24	[10¾	23½	24	[10¾	23½]
O 28	53° 56′ N., 4° 13′ E.	23 s. & m.	5 hrs.	Dab	..	14	38	2	..	..	..	..	..	..	..	54	..	..	54	..	..
				Sole	..	..	1	2	1	..	..	..	..	..	..	4	..	..	4	..	..
				Cod	..	..	..	..	..	..	2	2	1	..	2	7	..	..	7	..	..
				Whiting	1	79	52	5	..	..	..	..	..	..	2	137	..	..	137	..	..
				Thornback	..	..	..	2	..	..	..	1	..	..	..	3	..	..	3	..	..
VI 3	Oyster Ground ..	23 g.r.s. & m...	12.30 p.m.	Plaice	..	..	8	6	2	2	..	..	..	..	..	18	[9¼	20½]	18	[9¼	20½]
O 29	54° 9′ N., 4° 14′ E.	24 s. & m.	3 hrs.	Dab	..	4	47	6	..	..	..	..	..	..	..	57	..	..	57	..	..
				Cod	..	..	1	1	..	..	1	1	..	..	..	4	..	..	4	..	..
				Whiting	..	..	108	67	10	1	..	..	..	..	..	186	..	..	186	..	..
VI 4	Knoll Deep	27 c.s.	7 a.m.	Plaice	..	..	5	8	3	..	..	..	..	..	..	16	[6¾	14½]	16	[6¾	14½]
O 30	52° 41′ N., 2° 28′ E.	rough s.	5 hrs.	Sole	..	..	2	1	..	..	..	..	..	..	..	3	..	..	3	..	..
	Net split.			Cod	..	..	..	..	1	..	1	..	..	..	..	2	..	..	2	..	..
				Whiting	..	..	1	1	..	..	..	..	..	..	..	2	..	..	2	..	..
				Thornback	..	..	..	9	9	13	12	3	1	..	..	47	..	..	47	..	..
VII 3	Lowestoft Flats ..	18 ross & gravel.	8 p.m.	Sole	..	..	..	1	3	..	..	..	..	..	..	4	..	..	4	..	..
O 31	52° 30′ N., 2° 1¼′ E.	18 ross & gravel.	5 hrs. 30 mins.	Cod	..	..	..	5	53	49	19	5	..	..	..	131	..	..	131	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
VII 4	Lowestoft Flats ..	18 c.s.	1.35 a.m.	Plaice	..	..	2	3	..	..	..	..	..	..	..	5	[2	4½]	5	[2	4½]
O 32	52° 28¾′ N., 2° 3¼′ E.	20 c.s.	3 hrs. 55 mins.	Sole	..	..	1	3	..	..	..	..	..	..	..	4	..	..	4	..	..
				Turbot	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
				Brill	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Skate	..	..	7	8	2	..	1	..	..	..	..	18	..	..	18	..	..
VIII 2	Markham's Hole ..	33 m.	9.30 a.m.	Plaice	..	..	41	119	12	..	1	..	..	..	..	173	[79	174]	173	[79	174]
O 33	53° 47′ N., 2° 35′ E.	33	3 hrs. 15 mins.	Dab	..	101	241	13	..	..	..	..	..	..	..	355	42	92½	355	42	92½
		27 m.		Lemon Dab ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sole	..	..	1	1	..	..	..	..	..	..	..	2	..	..	2	..	..
				Turbot	..	..	..	..	..	1	1	..	..	..	..	2	9¼	20½	2	9¼	20½
				Cod	..	..	5	35	32	11	2	..	..	..	..	85	85½	188	85	85½	188
				Haddock ..	..	..	23	165	2	..	..	..	..	..	..	190	76½	168	2280	917½	2018½
				Whiting ..	..	..	16	18	8	3	..	..	..	..	..	45	..	..	45	..	..
				Grey Gurnard ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
				Herring ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
				Ray (Small) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..
VIII 4	Great Silver Pit ..	37 m	5.15 p.m.	Plaice	..	..	1	11	6	2	..	..	..	..	..	20	[16½	36]	20	[16½	36]
O 34	54° 3′ N., 2° 19′ E.	27 s.	5 hrs. 45 mins.	Dab	..	70	261	36	..	..	..	..	..	..	..	367	..	..	367	..	..
				Sole	..	..	1	5	4	..	..	..	..	..	..	10	..	..	10	..	..
				Turbot	..	..	..	..	1	..	1	..	..	..	..	2	..	..	2	..	..
				Cod	..	..	2	11	12	17	15	1	1	..	..	59	..	..	59	..	..
				Ling	..	..	..	..	..	..	..	1	..	..	..	1	..	..	1	..	..
				Haddock ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3 Baskets.		
				Whiting ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	½ Basket.		
VIII 7	Clay Deep	22 f.gr.s.	8.10 a.m.	Plaice	..	..	1	6	2	1	..	..	..	..	..	10	[7½	16½]	10	[7½	16½]
O 35	54° 31′ N., 3° 13′ E.	22 f.gr.s.	2 hrs. 50 mins.	Dab	..	1	14	10	..	..	..	..	..	..	..	25	..	..	25	..	..
				Sole	..	..	1	..	1	..	..	..	..	..	..	2	..	..	2	..	..
				Turbot	..	..	..	5	2	..	..	..	..	..	..	7	..	..	7	..	..
				Brill	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Haddock ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1 Basket.		
VIII 9	Clay Deep to Upper Scruff.	23½ f.gr.s. & m.	3.15 a.m.	Plaice	..	..	9	13	1	..	..	..	..	..	..	23	[8¾	19	23	[8¾	19]
O 37	54° 52′ N., 3° 29′ E.	23 f.gr.s. ..	4 hrs. 15 mins.	Dab	..	..	31	8	1	..	..	..	..	..	..	40	..	..	40	..	..
				Sole	..	..	..	2	..	..	..	..	..	..	..	2	..	..	2	..	..
				Turbot	..	..	..	3	4	1	..	..	..	..	..	8	..	..	8	..	..
				Cod	..	..	7	12	9	3	5	2	2	1	1	42	..	..	42	..	..
				Haddock ..	..	..	59	47	10	..	..	..	..	..	..	116	..	..	696	..	..
				Whiting ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	¼ Basket.		..
VIII 11	Upper Scruff ..	23 f.s. & ooze	9.10 a.m.	Plaice	..	..	7	19	2	..	..	..	..	..	..	28	[10¾	23½]	28	[10¾	23½]
O 38	55° 5′ N., 3° 47′ E.	23	3 hrs. 50 mins.	Dab	..	17	61	9	1	..	..	..	..	..	..	88	..	..	88	..	..
		24 f.s. & ooze		Lemon Dab ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sole	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Turbot	..	..	..	1	4	1	..	..	..	..	..	6	..	..	6	..	..
				Brill	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	2	4	5	..	1	1	2	..	15	..	..	15	..	..
				Haddock ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1 Basket.		
				Whiting ..	..	..	..	4	1	..	..	..	..	..	..	5	..	..	5	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
VIII 12	Between Upper and Lower Scruff.	24 f.s. ooze ..	1.30 p.m.	Plaice	..	..	8	21	4	..	..	..	..	..	..	33	[15	33]	33	[15	33]
O 39	55° 13′ N., 3° 53′ E.	22	3 hrs. 30 mins.	Dab	..	..	6	3	..	..	..	..	..	..	..	9	..	..	9	..	..
	Net split.	17 s. & sh.		Turbot	..	..	..	..	2	..	..	..	..	..	..	2	..	..	2	..	..
				Cod	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Haddock ..	..	..	3	5	..	1	..	..	..	..	..	9	..	..	9	..	..
				Whiting ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
VIII 14 & 15	Dogger	17 f.grs. ..	6.30 p.m.	Plaice	..	..	1	61	30	5	1	..	..	..	..	98	[77½	170½]	98	[77½	170½]
O 40	55° 27′ N., 3° 48′ E.	24 s. & sh.	10 hrs.	Dab	..	..	5	2	..	..	..	..	..	..	..	7	..	..	7	..	..
			(Two hauls combined).	Lemon Dab ..	..	..	..	1	..	.	..	..	..	..	..	1	..	..	1	..	..
				Turbot	..	..	..	2	1	1	..	..	..	..	..	4	..	..	4	..	..
				Brill	..	..	..	..	2	..	..	..	..	..	..	2	..	..	2	..	..
				Cod	..	..	..	7	3	3	..	2	..	2	..	17	..	..	17	..	..
				Haddock ..	..	..	6	13	18	7	1	..	..	..	..	45	..	..	45	..	..
VIII 17	Lower Edge of Dogger Swatchway.	25 f.s. & sh. ..	6.30 a.m.	Plaice	..	..	1	20	1	1	..	..	..	..	..	23	[12½	27½]	23	[12½	27½]
O 41	55° 42′ N., 3° 37′ E.	26	4 hrs. 30 mins.	Dab	..	..	8	..	..	..	..	..	..	..	..	8	..	..	8	..	..
		24 s. & clay.		Lemon Dab ..	..	..	..	1	1	..	..	..	..	..	..	2	..	..	2	..	..
				Turbot	..	..	..	..	3	..	..	..	..	..	..	3	..	..	3	..	..
				Brill	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	10	3	1	..	..	..	..	..	14	..	..	14	..	..
				Haddock ..	..	..	..	3	5	4	..	..	..	..	..	12	..	..	12	..	..
VIII 18	Lower Edge of Dogger.	24 s. & clay ..	11.45 a.m.	Plaice	..	..	..	15	8	..	..	..	..	..	..	23	[17¼	38]	23	[17¼	38]
O 42	55° 38′ N., 3° 31′ E.	23-22	5 hrs. 25 mins.	Turbot	..	..	..	..	4	..	..	..	..	..	..	4	..	..	4	..	..
		20 s. & sh.		Cod	..	..	..	1	2	..	..	1	1	..	..	5	..	..	5	..	..
				Haddock ..	..	..	..	..	..	..	1	1	..	..	..	2	..	..	2	..	..
				Cat-fish ..								One	large	fish.							
VIII 19	Lower Edge of Dogger.	20 sh.	6.15 p.m.	Plaice	..	..	1	35	25	9	2	..	..	..	..	72	[69	152]	72	[69	152]
O 43	55° 31′ N., 3° 23′ E.	19-18	5 hrs.	Lemon Dab ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
		17 f.s.		Turbot	..	..	..	..	5	2	..	..	..	..	..	7	..	..	7	..	..
				Brill	..	..	..	..	1	1	..	..	..	..	..	2	..	..	2	..	..
VIII 20	Lower Edge of Dogger.	17 s. & sh.	11.45 p.m.	Plaice	..	..	2	42	8	1	1	..	..	..	..	54	[31¾	69½]	54	[31¾	69½]
O 44	55° 23′ N., 3° 7′ E.	17 s. & sh.	5 hrs. 30 mins.	Cod	..	..	1	60	56	23	4	1	1	..	..	146	..	..	146	..	..
		17 s. & sh.		Haddock ..	..	..	29	34	10	3	..	..	..	..	..	76	..	..	152	..	..
				Cat-fish ..								One	large	fish.							
VIII 21	Lower Edge of Dogger.	17 s. & s.h. ..	5.45 a.m.	Plaice	..	..	2	13	17	11	4	..	..	..	..	47	[61	134]	47	[61	134]
O 45	55° 16′ N., 2° 47′ E.	17	5 hrs. 30 mins.	Lemon Dab ..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
		17½ s. & s.h.		Turbot	..	..	..	1	..	..	1	..	..	..	..	2	..	..	2	..	..
				Cod	..	..	1	10	4	..	..	1	..	1	..	17	..	..	17	..	..
IX 1	Hinder	19 c. reddish s.	6.15 p.m.	Plaice	..	..	23	5	..	..	..	..	..	..	..	28	[5½	12]	28	[5½	12]
O 46	51° 46′ N., 2° 31′ E.	19	2 hrs.	Dab	..	..	17	..	..	..	..	..	..	..	..	17	..	..	17	..	..
		19½ f.s.		Flounder ..	..	..	2	1	..	..	..	..	..	..	..	3	..	..	3	..	..
				Whiting ..	..	..	44	11	..	..	..	..	..	..	..	55	..	..	55	..	..
				Weever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..
IX 2	Hinder to Schouwen	19½ f.s.	8.50 p.m.	Plaice	..	5	25	1	..	..	..	..	..	..	..	31	[3¾	8]	31	[3¾	8]
O 47	51° 52′ N., 2° 47′ E.	19	6 hrs. 10 mins.	Dab	..	142	39	1	..	..	..	..	..	..	..	182	..	..	182	..	..
	Trawl Torn.	21 f.s.		Sole	..	..	1	1	1	..	..	..	..	..	..	3	..	..	3	..	..
				Whiting ..	..	2	46	4	..	..	..	..	..	..	..	52	..	..	52	..	..
				Grey Gurnard	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Red Gurnard ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Weever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	36	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
IX 3	Gabbard Deep Water	22 d.s.	9.30 a.m.	Plaice	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
O 48	52° 8′ N., 2° 8′ E.	22 c.s.	1 hr. 45 mins.	Dab	..	1	3	..	..	..	..	..	..	..	..	4	..	..	4	..	..
	Trawl foul.	22		Sole	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	..	..	3	3	..	2	..	..	8	..	..	8	..	..
				Dory	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Thornback ..	..	1	4	4	..	..	..	..	..	..	..	9	..	..	9	..	..
				Skate	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
IX 5	Gabbard Deep Water	24 d.s.	10.30 p.m.	Plaice	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
O 49	52° 10′ N., 2° 10′ E.	24 c.s.	1 hr. 45 mins.	Dab	..	3	1	..	..	..	..	..	..	..	..	4	..	..	4	..	..
		23		Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	..	1	..	1	..	..	..	..	2	..	..	2	..	..
X 1	North of California..	30 gravel & s.	5.30 p.m.	Plaice	..	..	..	1	..	..	..	..	..	..	..	1	1¾	4	1	1¾	4
O 50	54° 14′ N., 0° 13′ E.	30 gravel & s.	1 hr.	Dab	..	2	2	1	..	..	..	..	..	..	..	5	..	..	5	..	..
	Had a pull out, net split.			Lemon Dab ..	..	..	2	1	1	..	..	..	..	..	..	4	..	..	4	..	..
				Cod	..	4	2	5	4	3	1	..	..	..	..	19	12¾	28¼	19	12¾	28¼
				Whiting ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Grey Gurnard	..	..	1	1	..	..	..	..	..	..	..	2	..	..	2	..	..
				Ling	..	..	..	..	..	..	2	..	..	..	..	2	..	..	2	..	..
				Cat fish ..	..	..	..	..	..	..	..	..	..	..	2	2	..	..	2	..	..
X 2	Flamboro' Head ..	32 c.s.	7.30 p.m.	Plaice	..	..	1	..	1	..	..	..	..	..	..	2	..	..	2	..	..
O 51	54° 20′ N., 0° 18′ E.	34 m.	3hrs. 30 mins.	Dab	..	12	3	2	..	..	..	..	..	..	..	17	..	..	17	..	..
	Net split.			Lemon Dab ..	..	..	2	14	1	..	..	..	..	..	..	17	7¾	17	17	7¾	17
				Sole	..	..	..	3	2	..	..	..	..	..	..	5	2¼	5	5	2¼	5
				Long Rough Dab.	..	1	1	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Cod	..	..	2	3	..	..	..	1	..	..	..	6	..	..	6	..	..
				Haddock ..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	4	13	2	..	..	..	..	..	..	..	19	..	..	19	..	..
				Grey Gurnard	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Angler	..	..	..	1	..	2	..	1	..	1	..	5	..	..	5	..	..
				Catfish	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..
				Pout	..	6	3	1	..	..	..	..	..	..	..	10	..	..	10	..	..
				Thornback ..	..	10	16	1	..	..	..	..	..	..	..	27	..	..	27	..	..
X 4	Whitby	31 c.s. & gravel	12 noon	Plaice	..	..	2	6	7	..	..	..	..	..	..	15	10	22	15	10	22
O 53	54° 31′ N., 0° 22′ W.	30 f.s.	4 hrs.	Dab	..	33	13	4	..	..	..	..	..	..	..	50	..	..	50	..	..
	Belly split.			Lemon Dab ..	..	..	7	14	3	..	..	..	..	..	..	24	11	24	24	11	24
				Long Rough Dab.	..	4	3	..	..	..	..	..	..	..	..	7	..	..	7	..	..
				Cod	..	3	8	11	1	1	..	1	1	..	..	26	..	..	26	..	..
				Haddock ..	..	..	3	4	2	..	..	..	..	..	..	9	..	..	9	..	..
				Whiting ..	..	1	7	1	..	..	..	..	..	..	..	9	..	..	9	..	..
				Grey Gurnard	..	2	16	7	..	..	..	..	..	..	..	25	..	..	25	..	..
				Pout	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cat fish ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..
				Anglers ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..
				Thornback ..	..	..	5	1	..	..	..	..	..	..	..	6	..	..	6	..	..
X 5	Hartlepool	33 f.d.s. ..	Midnight.	Plaice	..	..	5	10	6	..	1	..	..	..	..	22	[12½	27½]	22	[12½	27½]
O 54	54° 46′ N., 0° 30′ W.	34 f.d.s.	4 hrs.	Dab	..	18	9	3	..	..	..	..	..	..	..	30	..	..	30	..	..
				Lemon Dab ..	..	..	..	6	..	..	..	..	..	..	..	6	..	..	6	..	..
				Sole	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Long Rough Dab.	..	1	3	..	..	..	..	..	..	..	..	4	..	..	4	..	..
				Cod	..	4	2	2	..	..	..	..	3	1	..	12	..	..	12	..	..
				Haddock ..	..	..	6	4	2	..	..	..	..	..	..	12	..	..	12	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
X 5	Hartlepool—*cont.* ..	33 f.d.s. ..	Midnight.	Whiting ..	..	11	7	1	..	..	..	..	..	..	..	19	..	..	19	..	..
O 54		34 f.d.s.	4 hrs.	Grey Gurnard	..	2	4	2	..	..	..	..	..	..	..	8	..	..	5	..	..
				Cat fish ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
				Angler	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
				Thosnback ..	..	16	9	3	..	..	..	..	..	..	..	28	..	..	28	..	..
X 6	North of West Shoal of Dogger.	13 f.d.s. ..	4 p.m.	Plaice	..	..	..	3	4	..	..	..	..	..	..	7	[6	13]	7	[6	13]
O 55	54° 45′ N., 1° 46′ E.	12 f.gr.s.	3 hrs.	Dab	..	53	106	4	..	..	..	..	..	..	..	163	18¾	41	163	18¾	41
				Lemon Dab ..	..	..	3	2	..	..	..	..	..	..	..	5	..	..	5	..	..
				Turbot	..	..	..	..	..	..	1	..	..	..	..	1	19	20	1	19	20
				Cod	..	..	5	30	52	8	5	..	..	..	..	100	89½	197	100	89½	197
				Haddock ..	..	..	..	8	1	..	2	..	..	..	..	11	..	..	11	..	..
				Whiting ..	..	2	33	..	..	..	..	..	..	..	..	35	..	..	35	..	..
				Grey Gurnard	..	3	19	1	..	..	..	..	..	..	..	23	..	..	23	..	..
X 7	North of Dogger West Shoal.	12 f.gr.s. ..	7.30 p.m.	Dab	..	2	9	3	..	..	..	..	..	..	..	14	..	..	14	..	..
O 56	54° 49′ N., 1° 52½′ E.	14 f.gr.s.	4 hrs.	Lemon Dab ..	..	..	..	2	..	..	..	..	..	..	..	2	..	..	2	..	..
	Trawl belly split, ground rope parted.			Solea sp. ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Scaldback ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	3	27	45	14	11	..	..	..	..	100	104	229	100	104	229
				Haddock ..	..	..	4	59	5	2	..	..	..	..	..	70	33¾	74	70	33¾	74
				Whiting ..	..	2	12	5	..	..	..	..	..	..	..	19	..	..	19	..	..
				Grey Gurnard	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Coal-fish ..	..	..	..	..	..	2	..	..	..	..	..	2	..	..	2	..	..
X 8	North of West Shoal of Dogger.	14 f.gr.s. ..	12.30 a.m.	Plaice	..	..	..	6	4	..	..	..	..	..	..	10	[7¾	17]	10	[7¾	17]
O 57	54° 51′ N., 1° 55′ E.	16 f.gr.s. ..	6 hours.	Dab	..	43	90	6	..	..	..	..	..	..	..	139	16	36	139	16	36
				Lemon Dab ..	..	..	3	4	..	..	..	..	..	..	..	7	..	..	7	..	..
				Turbot	..	..	..	..	..	..	1	1	..	..	..	2	19	42	2	19	42
				Long Rough Dab.	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	4	48	75	20	11	1	..	..	..	159	161	354	159	161	354
				Haddock ..	..	..	20	280	21	4	..	..	..	..	..	325	152¾	336	650	305¾	672
				Whiting ..	..	..	41	4	1	..	..	..	..	..	..	46	..	..	46	..	..
				Thornback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..
X 9	N. & E. of West Shoal of Dogger.	15½ f.gr.s. ..	7.30 a.m.	Plaice	..	2	1	12	3	..	..	..	..	..	..	18	9	20	18	9	20
O 58	54° 49′ N., 2° 4′ E.	14	5 hours.	Dab	..	103	155	16	2	..	..	..	..	..	..	276	41	90	276	41	90
		12 f.gr.s. ..		Cod	..	..	1	5	8	2	..	..	..	..	..	16	13¾	30	16	13¾	30
				Haddock ..	..	..	4	36	..	..	..	..	..	..	..	40	17¼	38	40	17¼	38
				Whiting ..	..	1	19	..	..	..	..	..	..	..	..	20	..	..	20	..	..
				Grey Gurnard	..	13	26	..	..	..	..	..	..	..	..	39	..	..	39	..	..
				Sprats	..	5	..	..	..	..	..	..	..	..	..	5	..	..	5	..	..
				Herring ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
X 10	Edge of Dogger, Clay Deep.	19 f.gr.s. ..	5.15 p.m.	Plaice	..	..	11	35	7	2	..	..	..	..	..	55	[27	59½]	55	[27	59½]
O 59	54° 45½, 3° 13′ E.	21 f.gr.s.	5 hrs.	Dab	..	319	140	3	1	..	..	..	..	..	..	463	..	..	463	..	..
		22 f.gr.s.		Lemon Dab ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sole	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Turbot	..	..	..	1	2	..	..	..	..	..	..	3	..	..	3	..	..
				Cod	..	..	3	12	5	2	6	..	..	..	..	28	..	..	28	..	..
				Haddock ..	..	..	283	184	13	..	..	..	..	..	..	480	..	..	480	..	..
				Whiting ..	..	1	22	10	2	..	..	..	..	..	..	35	..	..	35	..	..
				Grey Gurnard	..	5	6	..	..	..	..	..	..	..	..	11	..	..	11	..	..
				Coal-fish ..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..
				Thornback ..	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
X 11	Hospital Dogger ..	20 f.gr.s. ..	2 p.m.	Plaice	..	..	7	57	15	..	..	..	..	..	..	79	39½	87	79	39½	87
O 60	54° 29½ N., 2° 57′ E.	18 f.gr.s.	5 hrs.	Dab	..	445	196	25	..	..	..	..	..	..	..	666	56½	124	666	56½	124
		16 f.d.s.		Turbot	..	..	..	..	..	..	1	..	..	..	..	1	7¾	17	1	7¾	17
				Cod	..	..	..	5	2	1	3	..	1	..	..	12	16½	36	12	16½	36
				Haddock ..	..	..	182	166	4	..	..	..	..	..	..	352	99½	219	352	99½	219
				Whiting ..	..	..	3	1	..	..	..	..	..	..	..	4	..	..	4	..	..
				Grey Gurnard ..	24	70	1	..	..	..	..	..	..	..	..	95	..	..	95	..	..
				Ling	..	..	..	..	..	..	..	..	..	..	1	1	16½	36	1	16½	36
X 12	East of West Shoal of Dogger.	16 16 f.d.s. ..	7.15 p.m.	Plaice	..	..	1	17	9	..	..	..	..	..	..	27	[20	44]	27	[20	44]
O 61	54° 28′ N., 2° 47′ E.	14 f.gr.s.	4 hrs.	Dab	..	75	121	16	..	..	..	..	..	..	..	212	..	..	212	..	..
				Cod	..	..	7	18	5	4	1	..	..	..	..	35	..	..	35	..	..
				Haddock ..	..	..	111	342	15	2	..	..	..	..	..	470	..	..	470	..	..
				Whiting ..	..	..	84	14	..	..	..	..	..	..	..	98	..	..	98	..	..
				Grey Gurnard ..	1	1	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..
X 13	East of West Shoal of Dogger.	14 f.gr.s. ..	Midnight.	Plaice	..	..	1	7	6	..	..	..	..	..	..	14	11	24	14	11	24
O 62	54° 27′ N., 2° 47′ E.	15½ f.gr.s.	4 hrs.	Dab	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	20
				Sole	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	1	10	9	2	4	2	..	..	..	..	28	..	..	28	..	..
				Haddock ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	100	220
				Whiting ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	40	..	..
				Grey Gurnard ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	..	..
				Latchet.. ..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
X 14	East of West Shoal of Dogger.	15½ f.gr.s. ..	4 a.m.	Plaice	..	1	12	106	14	3	..	..	..	..	..	136	66½	146	136	66½	146
O 63	54° 28½ N., 2° 50′ E.	17 f.gr.s.	7 hrs.	Dab	..	286	165	19	..	..	..	..	..	..	..	470	41¾	92	705	64½	142
				Lemon Dab ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sole	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Turbot	..	..	..	2	5	1	..	..	..	..	..	8	18¼	40	8	18¼	40
				Cod	..	..	4	6	3	5	1	..	..	..	..	19	..	..	19	..	..
				Haddock ..	..	..	65	64	3	1	..	..	..	..	..	133	41¾	92	399	118¼	260
				Whiting ..	..	..	19	17	1	..	..	..	..	..	..	37	..	..	37	..	..
				Grey Gurnard ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	30	..	..
				Coal-fish ..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..
X 15	West Part of Botney Ground.	20 18 f.d.s. ..	7 p.m.	Plaice	..	2	25	34	1	..	..	..	..	..	..	62	[18¼	40]	62	[18¼	40]
O 64	53° 37′ N., 2° 43′ E.	14 f.gr.s.	4 hrs.	Dab	1	211	13	1	..	..	..	..	..	..	..	226	..	..	226	..	..
				Sole	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Turbot	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Scaldback ..	..	2	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Solea sp. ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	..	1	..	..	..	1	..	..	2	..	..	2	..	..
				Haddock ..	..	..	11	8	..	..	..	..	..	..	..	19	..	..	19	..	..
				Whiting ..	..	29	276	30	1	..	..	..	..	..	..	336	41	90	504	61½	135
				Grey Gurnard ..	61	31	..	..	..	..	..	..	..	..	..	92	..	..	92	..	..
X 16	N.E. of Leman Ground.	14 f.gr.s. ..	12 midnight	Plaice	..	27	201	106	5	1	..	..	..	..	..	340	[81½	179]	340	[81½	179]
O 65	53° 29′ N., 2° 33′ E.	10 f.b.s.	7 hrs.	Dab	..	245	66	2	..	..	..	..	..	..	..	313	..	..	313	..	..
				Sole	..	..	2	2	..	..	..	..	..	..	..	4	..	..	4	..	..
				Cod	..	..	..	..	..	..	..	..	..	..	1	1	8¼	18	1	8¼	18
				Haddock ..	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Whiting ..	..	9	180	17	..	..	..	..	..	..	..	206	..	..	206	..	..
				Grey Gurnard ..	8	5	1	..	..	..	..	..	..	..	..	14	..	..	14	..	..
				Thornback ..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
X 17	Leman	10 f.b.s. ..	7.30 a.m.	Plaice	..	16	136	32	4	..	..	..	..	..	..	188	[35¾	78½]	188	[35¾	78½]
O 66	53° 24′ N., 2° 31′ E.	12	4 hrs.	Dab	..	155	43	2	..	..	..	..	..	..	..	200	..	.	200	..	..
		13½ f.gr.s.		Sole	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Turbot	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	..	2	..	..	..	..	1	..	3	10	22	3	10	22
				Haddock ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	2	80	3	..	..	..	..	..	..	..	85	..	..	85	..	..
				Grey Gurnard	..	43	31	1	..	..	..	..	..	..	..	75	..	..	75	..	..
				Weever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
X 18	Leman	13½ f.gr.s. ..	11.30 a.m	Plaice	..	7	48	16	3	..	..	..	..	..	..	74	[15¾	34½]	74	[15¾	34½]
O 67	53° 25′ N., 2° 29′ E.	16 f.gr.s.	4 hrs.	Dab	..	128	13	1	..	..	..	..	..	..	..	142	..	..	142	..	..
				Turbot	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	..	..	..	..	..	..	..	1	1	11	24	1	11	24
				Whiting ..	..	4	66	4	..	..	..	..	..	..	..	74	..	..	74	..	..
				Grey Gurnard	..	..	..	..	..	..	..	..	..	..	..	..	..	..	60	..	..
				Spur Dog ..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..
XI 1	Hinder	23 s. & sh. ..	9.30 p.m.	Plaice	..	1	231	12	..	..	..	..	..	..	..	244	39½	87	244	39½	87
O 68	51° 52½′ N., 2° 31′ E.	20 f.gr.s.	6 hrs.	Dab	..	2	18	2	..	..	..	..	..	..	..	22	..	..	22	..	..
		23 f.gr.s.		Sole	..	..	..	4	..	..	..	..	..	..	..	4	..	..	4	..	..
				Cod	..	..	2	1	2	..	..	..	..	..	..	5	..	..	5	..	..
				Whiting ..	..	1	29	8	..	..	..	..	..	..	..	38	..	..	38	..	..
				Latchet ..	..	..	8	26	11	3	..	..	..	..	..	48	32¾	72	48	32¾	72
				Red Mullet ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Pout	..	1	6	3	..	..	..	..	..	..	..	10	..	..	10	..	..
XI 3	East Deep Water ..	22½ f.gr.br.s. ..	11 am.	Plaice	..	6	80	4	..	..	..	..	..	..	..	90	14	31	90	14	31
O 70	52° 5½′ N. 2° 44′ E.	22½	2 hrs.	Dab	..	..	5	..	..	..	..	..	..	..	..	5	..	..	5	..	..
		20½ br.s. & sh.		Whiting ..	..	1	41	3	..	..	..	..	..	..	..	45	..	..	45	..	..
				Grey Gurnard	..	..	6	..	..	..	..	..	..	..	..	6	..	..	6	..	..
				Latchet ..	..	..	47	41	8	2	1	..	..	..	..	99	39½	87	99	39½	87
				Weever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	40	..	..
XI 4	East Deep Water ..	20½ s.sh. ..	1.30 p.m.	Plaice	..	2	46	14	1	..	..	..	..	..	..	63	13	28½	63	13	28½
O 71	52° 10′ N., 2° 50′ E.	20 f.gr.s.	4 hrs.	Dab	..	14	14	2	..	..	..	..	..	..	..	30	2¼	5	30	2¼	5
				Sole	..	..	1	..	1	..	..	..	..	..	..	2	..	..	2	..	..
				Turbot	..	..	..	..	..	1	..	..	..	..	..	1	3½	8	1	3½	8
				Brill	..	..	..	..	1	1	..	..	..	..	..	2	..	..	2	..	..
				Whiting ..	..	..	44	3	..	..	..	..	..	..	..	47	5½	12	47	5½	12
				Latchet ..	..	..	9	38	12	3	..	..	..	..	..	62	39½	87	62	39½	87
				Mackerel ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
				Red Mullet ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Weever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	30	..	..
XI 5	Middle Deep Water	20 f.s.	6.30 p.m.	Plaice	..	..	116	28	..	..	..	..	..	..	..	144	31¾	70	144	31¾	70
O 72	52° 20′ N., 3° 4′ E.	20 f.spk.s.	5 hours.	Dab	..	1	14	1	..	..	..	..	..	..	..	16	..	..	16	..	..
				Sole	..	..	1	1	1	..	..	..	..	..	..	3	..	..	3	..	..
				Brill	..	..	..	..	1	..	..	..	..	..	..	1	1¼	3	1	1¼	3
				Cod	..	..	..	..	..	..	..	..	1	..	3	..	4	36½	80	4	36½	80
				Latchet ..	..	..	..	23	19	3	..	..	..	..	..	..	45	39	86	45	39	86

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23½+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XI 6	Middle	20 | f.spk.s.	12 midnight.	Plaice	..	8	155	24	..	..	..	..	..	..	..	187	34	75	187	34	75
O 73	52° 29′ N., 3° 4′ E.	20	7 hours.	Dab	..	40	31	..	..	..	..	..	..	..	..	71	5½	12	71	5½	12
	Trawl belly torn by wreck.	22 | f.br.s.		Sole	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Turbot	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	..	1	2	..	..	..	1	..	4	13¾	30	4	13¾	30
				Whiting ..	..	..	73	5	..	..	..	..	..	..	..	78	12¾	28	78	12¾	28
				Grey Gurnard	..	2	28	2	..	..	..	..	..	..	..	32	5½	12	32	5½	12
				Latchet ..	..	..	1	8	12	2	..	..	..	..	..	23	22¾	50	23	22¾	50
				Pout	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Thornback ..	..	..	..	6	3	1	..	..	..	..	..	10	13¾	30	10	13¾	30
XI 7	Winterton Shoal ..	21 | f.s.	10 a.m.	Plaice	..	2	19	5	..	..	..	..	..	..	..	26	[5½	12]	26	[5½	12]
O 74	52° 46′ N., 3° 1′ E.	21 | f.s.	2 hrs.	Cod	..	..	..	1	..	1	..	..	..	..	1	3	9	20	3	9	20
				Whiting ..	..	1	138	13	..	..	..	..	..	..	..	152	22¾	50	152	22¾	50
				Latchet ..	..	..	..	..	3	1	..	..	..	..	..	4	4½	10	4	4½	10
XI 8	S. of Leman	19 | d.s.. ..	3.30 p.m.	Plaice	..	..	3	2	2	2	..	..	..	..	..	9	6½	14	9	6½	14
O 75	53° 12′ N., 2° 48′ E.	17 | f.d.s. ..	2 hrs.	Dab	..	18	8	4	..	..	..	..	..	..	..	30	2¾	6	30	2¾	6
				Sole	..	..	3	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Whiting ..	..	1	133	19	..	..	..	..	..	..	..	153	20	44	153	20	44
XI 9	S. of Leman	17 | f.d.s.	6 p.m.	Plaice	..	7	155	44	6	2	..	..	..	..	..	214	45½	100	214	45½	100
O 76	53° 20′ N., 4° 45′ E.	16 | f.d.s.	10 hrs.	Sole	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Turbot	..	..	..	..	1	1	..	1	..	..	..	3	7¾	17	3	7¾	17
				Brill	..	..	..	..	..	1	..	..	..	..	..	1	2¼	5	1	2¼	5
				Cod	..	..	..	..	..	..	..	..	1	1	2	4	37¼	82	4	37¼	82
				Whiting ..	..	..	145	26	1	..	..	..	..	..	..	172	27¼	60	172	27¼	60
				Latchet ..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
XI 10	Leman	16 | f.d.s.	4.30 a.m.	Plaice	..	7	54	22	3	1	..	..	..	..	..	87	21	45	87	21	45
O 77	53° 26′ N., 2° 38′ E.	16 | f.d.s.	2 hrs.	Sole	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Turbot	..	..	..	..	..	1	..	..	..	..	..	1	4½	10	1	4½	10
				Whiting ..	..	..	126	24	..	..	..	..	..	..	..	150	27¼	60	150	27¼	60
				Grey Gurnard	..	..	52	32	..	..	..	..	..	..	..	84	16¾	37	84	16¾	37
XI 11	Leman	16 | f.d.s.	7 a.m.	Plaice	..	4	46	22	3	1	..	..	..	..	..	76	21	46	76	21	46
O 78	53° 24′ N., 2° 32′ E.	15 | f.s.	2 hrs.	Dab	..	3	16	..	..	..	..	..	..	..	..	19	..	..	19	..	..
				Brill	..	..	..	1	1	..	..	..	..	..	..	2	2¼	5	2	2¼	5
				Whiting ..	..	..	35	10	..	..	..	..	..	..	..	45	7¾	17	45	7¾	17
				Grey Gurnard	..	8	85	..	..	..	..	..	..	..	..	93	9	20	93	9	20
XI 12	Leman	15 | f.s.	9.45 a.m.	Plaice	..	5	35	25	..	..	..	..	..	..	..	65	14½	32	65	14½	32
O 79	53° 25′ N., 2° 22¼′ E.	16 | s. & sh.	2 hrs.	Dab	..	41	19	1	..	..	..	..	..	..	..	61	2¼	5	61	2¼	5
				Turbot	..	..	..	..	1	..	..	..	..	..	..	1	1	2	1	1	2
				Brill	..	..	..	..	..	1	..	..	..	..	..	1	3½	8	1	3½	8
				Cod	..	..	..	..	..	..	..	..	..	..	1	1	9	20	1	9	20
				Whiting ..	..	..	172	8	..	..	..	..	..	..	..	180	27¼	60	180	27¼	60
				Grey Gurnard	..	52	120	..	..	..	..	..	..	..	..	172	13¾	30	172	13¾	30
XII 1	Terschelling	14 | br.s.spk. ..	6.45 p.m.	Plaice	..	368	5	..	..	..	..	..	..	..	..	373	14½	32	373	14½	32
B 1	53° 40′ N., 5° 20′ E.	14	1 hr.	Dab	..	22	1	..	..	..	..	..	..	..	..	23	..	..	23	..	..
		14 | br.s.spk.		Whiting ..	..	1	7	..	..	..	..	..	..	..	..	8	..	..	8	..	..
				Latchet ..	..	2	3	..	..	..	..	..	..	..	..	5	..	..	5	..	..
				Weever ..	..	..	3	..	..	..	..	..	..	..	..	3	..	..	3	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15½+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XII 2	Heligoland Deep ..	20 f.s.m. ..	8.30 a.m.	Plaice	..	3	91	25	..	..	..	..	..	..	..	119	24	53	119	24	53
O 80	54° 12′ N., 7° 47′ E.	20 ooze.	1½ hrs.	Dab	..	119	49	..	..	..	..	..	..	..	..	168	12¼	27	168	12¼	27
				Lemon Dab ..	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Cod	..	..	2	..	..	1	..	..	..	..	..	3	..	..	3	..	..
				Haddock ..	..	..	325	223	9	2	3	..	..	..	..	562	172¾	380	562	172¾	380
				Whiting ..	..	..	38	6	..	..	..	..	..	..	..	44	..	..	44	..	..
				Grey Gurnand	..	28	70	1	..	..	..	..	..	..	..	99	9	20	99	9	20
				Latchet ..	..	..	2	1	..	..	..	..	..	..	..	3	..	..	3	..	..
XII 3	Off Amrum	9 f.gr.s. ..	4.30 a.m.	Plaice	..	11	30	9	..	..	..	..	..	..	..	50	[7¼]	16½	50	[7¼]	16½
B 2.	54° 45′ N., 7° 53′ E.	9	2 hrs.	Dab	..	33	11	..	..	..	..	..	..	..	..	44	..	..	44	..	..
		9 f.gr.s.		Sole	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Haddock ..	..	..	1	2	1	..	..	..	..	..	..	4	..	..	4	..	..
				Whiting ..	..	..	32	2	..	..	..	..	..	..	..	34	..	..	34	..	..
				Grey Gurnard	..	42	8	1	..	..	..	..	..	..	..	51	..	..	51	..	..
				Latchet ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Thornback ..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Weever ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
XII 4	South of Horn Reef	8½ f.s.	6 a.m.	Plaice	18	811	305	..	..	..	..	..	..	..	..	1134	75	165	3540	234	515
B 3	55° 23′ N., 8° 8′ E.	8½ f.s.	1 hr.	Dab	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13½
				Brill	..	..	..	2	..	..	..	..	..	..	..	2	1	2	2	1	2
				Flounder ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Haddock ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2 or 3	small	..
				Thornback ..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Skate	..	..	..	2	1	..	..	..	..	..	..	3	..	..	3	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
XII 5	South of Horn Reef	10 f.s.	8.15 a.m.	Plaice	1	803	107	..	..	..	..	..	..	..	..	911	40	88	1822	80	176
B 4	55° 20½′ N., 7° 55′ E.	10 f.s.	1 hr.	Dab	..	..	..	..	..	..	..	..	..	(¾ basket)		..	..	..	..	25½	56
				Lemon Dab ..	..	1	1	..	..	..	..	..	..	..	..	2	..	..	..	2	..
				Sole	..	..	1	1	..	..	..	..	..	..	..	2	..	..	..	2	..
				Whiting ..	..	3	..	..	..	..	..	..	..	..	..	3	..	..	..	3	..
				Grey Gurnard	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	55	..
XII 6	North of Horn Reef	7 f.s	1.30 p.m.	Plaice	..	508	113	1	..	..	..	..	..	..	..	622	33¾	74	1762	101	222
B 5	55° 36′ N., 7° 43′ E.	7 f.s.	1 hr. 30 mins.	Dab	..	..	..	..	..	..	..	..	..	(¼ Basket)		..	..	..	..	7¼	16
				Sole	..	..	5	1	2	..	..	..	..	..	..	8	2¼	5	8	2¼	5
				Whiting ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	25	..	..
				Grey Gurnard	..	..	..	..	..	..	..	..	..	..	..	..	..	..	76	6¾	15
				Thornback ..	..	..	1	5	1	..	..	..	..	..	..	7	..	..	7	..	..
XII 7	Off Vyl Light Vessel	11 f.d.s. ..	0.30 p.m.	Plaice	..	5	69	7	..	..	..	..	..	..	..	81	11	24	81	11	Gutted. 24
B 6	55° 20′ N., 7° 47′ E.	12 f d.s.	1 hr.	Dab	11	271	1	..	..	..	..	..	..	..	..	283	6¼	14	283	6¼	14
				Sole	..	..	..	..	1	..	..	..	..	..	..	1	¾	1½	1	¾	1½
				Turbot	..	..	..	2	..	..	..	..	..	..	..	2	1¾	4	2	1¾	4
				Haddock ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Grey Gurnard	..	4	8	..	..	..	..	..	..	..	..	12	..	..	12	..	..
XII 8	S.W. of Vyl L. Vessel	13 f.l.s. ..	3.30 p.m.	Plaice	..	..	2	4	..	..	..	..	..	..	..	6	2¾	6	6	2¾	6
B 7	55° 21′ N., 7° 30′ E.	13 f.l.s.	1 hr.	Dab	2	22	..	..	..	..	..	..	..	..	..	24	..	..	24	..	..
				Turbot	..	..	..	1	..	..	..	..	..	..	..	1	1¼	3	1	1¼	3
				Cod	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Haddock ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Grey Gurnard	..	1	10	..	..	..	..	..	..	..	..	11	..	..	11	..	..
				Thornback ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ 0+	4+ 10+	8+ 20+	12+ 30+	15¾+ 40 +	19¾+ 50 +	23⅝+ 60 +	27½+ 70 +	31½+ 80 +	35½+ 90 +	39½+ 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XII 9	Deep Water W. of Horn Reef.	24 f.gr.s. ..	11.30 p.m.	Plaice	..	..	1	2	1	1	..	..	..	..	..	5	[2½	5½]	5	[2½	5½]
B 8	55° 31′ N., 6° 16′ E.	25 f.gr.s.	1 hr.	Dab	32	110	14	1	..	..	..	..	..	..	..	157	..	..	157	..	..
				Lemon Dab ..	..	1	1	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Cod	..	1	2	1	..	..	..	1	..	..	..	5	..	..	5	..	..
				Haddock ..	..	..	53	9	1	..	..	..	..	..	..	63	..	..	63	..	..
				Whiting ..	..	21	8	..	..	..	..	..	..	..	..	29	..	..	29	..	..
				Ray	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
XII 10	Muddy Ground W. of Horn Reef.	25 f.s. ooze ..	1 a.m.	Plaice	..	..	3	10	..	..	..	..	..	..	..	13	4½	10	13	4½	10
B 9	55° 28′ N., 6° 54′ E.	27 s. ooze.	5 hours (6 hours altogether, but one hour deducted. *See* Station lists, p. 143).	Dab	2	319	12	..	..	..	..	..	..	..	..	333	11¼	25	1332	45	100
				Lemon Dab ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Turbot	..	..	..	2	2	1	..	..	..	..	..	5	12¼	27	5	12¼	27
				Cod	..	..	5	22	2	1	..	1	..	..	..	31	17¼	38	31	17¼	38
				Haddock ..	..	1	162	24	3	2	..	..	..	..	..	192	40	88	192	40	88
				Whiting ..	..	18	139	10	3	..	..	..	..	..	..	170	23¾	52	170	23¾	52
				Grey Gurnard	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	23¾	52
				Ling	..	..	..	..	..	..	..	..	..	..	1	1	6¾	15	1	6¾	15
				Thornback ..	..	..	4	1	..	..	..	..	..	..	..	5	..	..	5	..	..
XII 11	Muddy Ground W. of Horn Reef.	27 f.s. ooze ..	7.45 a.m.	Plaice	..	..	1	10	2	..	..	..	..	..	..	13	5½	12	13	5½	12
B 10	55° 25′ N., 5° 51′ E.	27 f.s. ooze.	1 hour.	Dab	..	176	6	..	..	..	..	..	..	..	..	182	..	..	182	..	..
				Cod	..	..	1	2	..	1	..	..	..	..	..	4	..	..	4	..	..
				Haddock ..	..	..	30	4	1	..	..	..	..	..	..	35	9	20	35	9	20
				Whiting ..	..	5	4	1	..	..	..	..	..	..	..	10	..	..	10	..	..
				Grey Gurnard	..	2	20	1	..	..	..	..	..	..	..	23	..	..	23	..	..
				Cat-fish ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
XII 12	S.E. part of Tail End of Dogger.	20 f.s.	3.45 p.m.	Plaice	..	..	1	10	2	..	..	..	..	..	..	13	7¼	16	13	7¼	16
O 81	55° 23½′ N., 4° 50½′ E.	23 f.l.s... ..	1 hr.	Dab	..	8	21	..	..	..	..	..	..	..	..	29	3¼	7	29	3¼	7
				Cod	..	..	1	4	..	1	..	..	..	..	..	6	..	..	6	..	..
				Haddock ..	..	1	77	17	1	..	..	..	..	..	..	96	22¾	50	96	22¾	50
				Grey Gurnard	..	..	9	1	..	..	..	..	..	..	..	10	..	..	10	..	..
XII 13	North part of Dogger	19 c.br.s. ..	7 a.m.	Plaice	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
O 82	55° 23′ N., 2° 50′ E.	20 f.s. & sh.	2 hrs.	Dab	..	3	4	..	..	..	..	..	..	..	..	7	..	..	7	..	..
				Lemon Dab ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	3	6	2	..	..	..	..	..	..	11	..	..	11	..	..
				Haddock ..	..	..	122	96	19	2	..	..	..	..	..	239	86½	190	239	86½	190
				Whiting ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Ling	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..
XII 15	North of N.W. Rough of Dogger.	21 24 f.g.s. ..	5.15 p.m.	Plaice	..	..	..	5	3	..	1	..	..	..	..	9	7¾	17	9	7¾	17
O 83	55° 8′ N., 1° 25′ E.	27 f.d.s.	hrs.	Dab	..	10	10	2	..	..	..	..	..	..	..	22	..	..	22	..	..
	Net torn.			Lemon Dab ..	..	..	1	3	1	..	..	..	..	..	..	5	..	..	5	..	..
				Cod	..	..	2	7	5	7	2	..	..	..	..	23	30	66	23	30	66
				Haddock ..	..	..	36	61	20	13	8	..	..	..	..	133	100	220	138	100	220
				Whiting ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Halibut ..	..	..	..	..	..	1	..	..	..	..	..	1	1¼	3	1	1¼	3
				Grey Gurnard	..	..	10	1	..	..	..	..	..	..	..	11	..	..	11	..	..
				Ling	..	..	..	..	1	1	..	1	..	..	..	3	..	..	3	..	..
				Thornback ..	..	2	3	..	..	..	..	..	..	..	..	5	..	..	5	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15½+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31¼+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XII 16	North of N.W. Rough of Dogger.	27 | f.d.s. ..	9 p.m.	Plaice	..	..	..	5	13	2	..	..	..	..	..	20	19	42	20	19	42
O 84	55° 7¼′ N., 1° 8′ E.	32 35 | f.d.s.	6 hrs.	Dab	..	91	17	1	..	..	..	..	..	..	..	109	7¾	17	109	7¾	17
	Net badly torn by wreckage.			Lemon Dab ..	..	..	4	2	..	..	..	..	..	..	..	6	..	..	6	..	..
				Cod	..	..	21	15	4	2	..	1	2	..	..	45	31¾	70	45	31¾	70
				Haddock ..	..	..	210	53	14	1	1	..	..	..	..	279	79	174	697	201	442
				Long Rough Dab.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	..	..
				Hake	..	..	..	..	..	..	..	1	..	..	..	1	3½	7	1	3½	7
				Ling	..	..	..	..	..	..	..	..	..	..	1	1	4½	10	1	4½	10
				Coal Fish ..	..	..	..	..	..	..	1	..	..	..	..	1	2¾	6	1	2¾	6
				Cat Fish ..	..	..	..	..	..	1	..	..	..	..	..	1	1¾	3½	1	1¾	3½
				Skate	..	..	..	..	1	1	..	..	..	..	..	2	..	..	2	..	..
				Starry Ray ..	1	30	24	4	..	..	..	..	..	..	..	59	19	42	59	19	42
XII. 20	E. of Shields.. ..	27 | d.s.	8 a.m.	Plaice	..	1	12	2	..	..	..	..	..	..	..	15	3¼	7	15	3¼	7
B. 14	55° 2′ N., 1° 20′ W.	28 | d.s.	1 hour.	Dab	3	54	2	..	..	..	..	..	..	..	..	59	1¾	4	59	1¾	4
	Net split.			Lemon Dab ..	..	..	3	3	..	..	..	..	..	..	..	6	2¼	5	6	2¼	5
				Cod	..	5	2	..	..	..	..	..	..	..	..	7	..	..	7	..	..
				Haddock ..	..	11	21	2	..	..	..	..	..	..	..	34	4	39	34	4	39
				Whiting ..	..	17	4	..	..	..	..	..	..	..	..	21	..	..	21	..	..
				Grey Gurnard ..	..	27	26	..	..	..	..	..	..	..	..	53	3¼	7	53	3¼	7
				Long Rough Dab.	..	100	1	..	..	..	..	..	..	..	..	101	3¾	8	101	3¾	8
				Norway Pout ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Starry Ray ..	1	1	1	..	..	..	..	..	..	..	..	3	..	..	3	..	..
XII 21	East of Sunderland..	43½ | m.	11.30 a.m.	Dab	..	1	3	1	..	..	..	..	..	..	..	5	..	..	5	..	..
B 15	54° 59′ N., 0° 57′ W.	44 | m.	2 hrs. 55 mins.	Lemon Dab ..	..	..	3	4	1	..	..	..	..	..	..	8	..	..	8	..	..
	Net split; trawl head, &c., damaged.			Witches ..	..	..	..	1	2	..	..	..	..	..	..	3	..	..	3	..	..
				Long Rough Dab.	..	354	30	..	..	..	..	..	..	..	..	384	..	..	384	..	..
				Cod	..	5	15	26	4	4	..	2	7	..	..	63	76¼	168	63	76¼	168
				Haddock ..	..	8	135	35	1	..	..	..	..	..	..	179	36¼	80	179	36¼	80
				Whiting ..	..	127	84	12	..	..	..	..	..	..	..	223	15½	34	223	15½	34
				Grey Gurnard ..	..	2	1	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Ling	..	..	..	..	..	..	..	..	1	..	..	1	..	..	1	..	..
				Angler	..	..	..	2	1	..	..	..	..	..	..	3	..	..	3	..	..
				Four-bearded Rockling.	..	..	1	..	..	..	..	..	..	..	..	1	..	..	4	..	..
				Starry Ray ..	..	1	2	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Skate	..	..	2	1	..	2	..	..	..	..	..	5	..	..	5	..	..
XII 22	E.N.E. of Hartlepool	39 | m.	5.30 p.m.	Plaice	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
B 16	54° 48′ N., 0° 52½′ W.	35 | m.	2 hrs. 30 mins.	Dab	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Witches ..	..	..	3	..	1	..	..	..	..	..	..	4	..	..	4	..	..
				Long Rough Dab	..	163	4	..	..	..	..	..	..	..	..	167	5	11	167	5	11
				Lemon Dab ..	..	..	6	12	..	..	..	..	..	..	..	18	6	13	18	6	13
				Cod	..	2	3	7	1	..	..	..	4	1	..	18	..	..	18	..	..
				Haddock ..	..	1	94	6	1	..	..	..	..	..	..	102	16½	36	102	16½	36
				Whiting ..	..	318	192	22	1	..	..	..	..	..	..	533	39½	87	533	39½	87
				Grey Gurnard ..	..	1	2	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Herring ..	..	2	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Coal Fish ..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1	..	..
				Angler	..	..	..	6	1	..	..	..	..	..	..	7	6¼	14	7	6¼	14
				Four-bearded Rockling.	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..

Voyage, Station No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15⅝+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XII 23	Hartlepool	39 m.	9 p.m.	Plaice	..	..	13	4	1	..	..	..	..	..	..	18	3¼	7	18	3¼	7
B 17	54° 43′ N., 0° 41′ W.	35 s. & ooze.	6 hrs.	Dab	..	154	16	3	..	..	..	..	..	..	..	173	5½	12	173	5½	12
		30 sharp s.		Lemon Dab ..	..	..	13	20	2	..	..	..	..	..	..	35	17¼	38	35	17¼	38
				Turbot	..	..	..	..	..	1	..	..	..	..	..	1	3¼	7	1	3¼	7
				Long Rough Dab.	..	174	4	..	..	..	..	..	..	..	..	178	6¾	15	178	6¾	15
				Cod	..	4	8	10	2	13	1	5	1	1	2	47	92¼	203	47	92¼	203
				Haddock ..	..	95	234	4	..	..	..	..	..	..	..	333	41¾	92	333	41¾	92
				Whiting ..	..	149	108	10	..	..	..	..	..	..	..	267	19	42	267	19	42
				Grey Gurnard	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	..	..
				Witch	..	..	8	2	..	..	..	..	..	..	..	10	..	..	..	..	..
XII 26	South of Smithic Shoal.	10 c.s.	Midnight	Plaice	..	..	1	4	..	..	..	..	..	..	..	5	[2	4½]	5	[2	4½]
B 20	53° 54′ N., 0° 5′ E.	13 c.s.	4 hrs.	Dab	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
	Net torn badly, ground rope parted.			Lemon Dab ..	..	..	8	..	..	..	..	..	..	..	..	8	..	..	8	..	..
				Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	2	1	6	3	2	1	..	..	..	..	15	..	..	15	..	..
XII 27	South of Smithic Shoal.	7 f.s.	5.15 p.m.	Plaice	..	71	39	..	..	..	..	..	..	..	..	110	[7¼	16]	110	[7¼	16]
B 21	53° 57′ N., 0° 7′ W.	9 f.s.	1 hr. 45 mins.	Dab	..	42	18	2	..	..	..	..	..	..	..	62	3¼	7	62	3¼	7
				Sole	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Brill	..	..	..	..	..	2	..	..	..	..	..	2	2¾	6	2	2¼	6
				Whiting ..	..	1	..	1	..	..	..	..	..	..	..	2	..	..	2	..	..
				Grey Gurnard	..	93	11	4	..	..	..	..	..	..	..	108	5½	12	108	5½	12
				Sprat	2	4	..	..	..	..	..	..	..	..	..	6	..	..	6	..	..
				Herring ..	..	3	..	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Thornback ..	..	..	..	1	4	1	..	..	..	..	..	6	16¾	37	6	16¾	37
XII 28	Inner Dowsing ..	16 c.s. & sh. ..	6.45 a.m.	Plaice	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
B 22	53° 18′ N., 0° 40′ E.	14 c.s. & sh.	1 hr.	Dab	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Lemon Dab ..	..	..	3	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Sole	..	1	29	3	..	..	..	..	..	..	..	33	2¼	5	33	2¼	5
				Cod	..	1	1	..	..	..	2	..	..	..	..	4	..	..	4	..	..
				Whiting ..	..	2	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Grey Gurnard	..	2	1	1	..	..	..	..	..	..	..	4	..	..	4	..	..
				Thornback ..	..	..	..	1	..	1	1	..	..	..	..	3	..	..	3	..	..
				Skate	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
XII 29	The Would	16 c.s.	5.10 p.m.	Lemon Dab ..	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
B 23	52° 53′ N., 1° 38′ E.	13 c.s.	1 hr.	Sole	..	..	1	1	..	..	..	..	..	..	..	2	..	..	2	..	..
				Whiting ..	..	2	1	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Grey Gurnard	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Thornback ..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..
XIII 1	Off Smith's Knoll Light Vessel.	25 m. & s. ..	3.30 a.m.	Plaice	..	..	4	12	..	..	..	..	..	..	..	16	6¼	14	16	6¼	14
B 24	52° 56′ N., 2° 22′ E.	21 m. & s.	4 hrs.	Dab	..	47	7	..	..	..	..	..	..	..	..	54	..	..	54	..	..
				Sole	..	..	2	1	..	..	..	..	..	..	..	3	..	..	3	..	..
				Turbot	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	1	91	13	..	..	..	..	..	..	..	105	14½	32	105	14½	32
				Grey Gurnard	..	1	14	4	..	..	..	..	..	..	..	19	..	..	19	..	..
				Red Gurnard ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XIII 2	West of Brcwn Bank	21 m. & s. ..	7.30 a.m.	Plaice	..	..	7	10	2	..	..	..	..	..	..	19	6½	14	19	6½	14
B 25	52° 55′ N., 2° 29′ E.	21 f.br.s.	4 hrs.	Lemon Dab ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sole	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	5	225	11	..	..	..	..	..	..	..	241	23¾	52	241	23¾	52
				Grey Gurnard	..	1	58	20	..	..	..	..	..	..	..	79	10	22	79	10	22
XIII 3	Between Brown Bank and Leman Ground.	21 f.br.s.	12 noon	Plaice	..	..	6	21	5	..	..	..	..	..	..	32	13¾	30	32	13¾	30
B 26	53° 1′ N., 2° 35′ E.	18½ f.br.s. & sh.	7 hrs.	Dab	..	..	..	..	..	..	..	..	..	..	..	..	3½	7	..	3½	7
				Sole	..	1	..	..	1	..	..	..	..	..	..	2	..	..	2	..	..
				Turbot	..	..	..	..	..	1	..	..	..	..	..	1	3½	8	1	3½	8
				Brill	..	..	..	..	1	1	..	..	..	..	..	2	..	..	2	..	..
				Whiting ..	..	8	197	3	..	..	..	..	..	..	..	208	23½	52	484	55	121
				Grey Gurnard	..	4	66	7	..	..	..	..	..	..	..	77	9	20	77	9	20
				Red Mullet ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
XIII 4	South part of Leman	18½ f.br.s.	7 p.m.	Plaice	..	7	168	82	4	..	..	..	.	..	..	261	63¾	140	261	63¾	140
B 27	53° 14′ N., 2° 32′ E.	17 f.d.s.	8 hrs.	Dab	..	..	..	..	..	..	..	..	..	..	..	..	..	..	½ bas	ket.	..
		14 f.d.s.		Sole	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	8	520	15	..	..	..	..	..	..	..	543	59	130	543	59	130
				Grey Gurnard	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	..	..
				Latchet ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
XIII 5	Leman–Hauled on N. Well Bank.	14 f.d.s.	3.30 a.m.	Plaice	..	..	208	103	10	..	..	..	..	..	..	321	76¾	169	321	76¾	169
B 28	53° 30′ N., 2° 17′ E.	14	7 hrs. 30 mins.	Dab	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1½	3
	Pulled out : net badly torn.	15 c.s.		Turbot	..	..	..	1	1	..	..	..	..	..	..	2	1¾	4	2	1¾	4
				Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11¼	24½
				Grey Gurnard	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8¼	18
XIII 22	South of Brucey's Garden.	39 f.d.s.	8 p.m.	Plaice	..	..	..	6	12	..	..	..	..	..	..	18	[16¾	36½]	18	[16¾	36½]
O 85	54° 45′ N., 0° 55′ E.	38	7 hrs.	Lemon Dab ..	..	..	3	19	5	..	..	..	..	..	..	27	..	..	27	..	..
		36 f.d.s.		Cod	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Haddock ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6 Ba	skets.	
				Halibut ..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..
				Coal-fish ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	..	..
				Angler	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
XIII 27	Brucey's Garden ..	32 f.d.s. ..	12.45 p.m.	Plaice	..	..	1	12	18	3	1	..	..	..	..	35	[36¾	80½]	35	[36¾	80½]
O 86	55° 0½′ N., 0° 58′ E.	35 f.d.s.	5 hrs. 45 mins.	Lemon Dab ..	..	..	2	8	1	..	..	..	..	..	..	11	..	..	11	..	..
				Halibut ..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	..	..
				Haddock ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6 bas	kets.	
				Coal-fish ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..
				Ling ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
				Angler ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..
XIII 34	Hartlepool	32 f.d.s. ..	4 a.m.	Plaice	..	..	..	6	1	1	..	..	..	..	..	8	[6	13]	8	[6	13]
B 31	54° 43′ N., 0° 38′ W.	30 c.s.	3 hrs.	Lemon Dab ..	..	..	3	12	2	..	..	..	..	..	..	17	..	..	17	..	..
				Sole	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2 or 3	..	..
				Haddock .. / Whiting ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	½ bas	ket (mixed)	
				Cat-fish ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
				Angler	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XIII 39	Bridlington Bay ..	5 f.g.s. ..	5.30 p.m.	Plaice	..	10	16	..	..	..	..	..	..	..	..	26	[2½	5½]	26	[2½	5½]
B 32	54° 0′ N., 0° 7½′ W.	9 f.d.s.	1 hr.	Dab	..	8	6	..	..	..	..	..	..	..	..	14	..	..	14	..	..
	Came fast; trawl head broken; wing badly torn.			Lemon Dab ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sole	..	..	5	1	1	..	..	..	..	..	..	7	..	..	7	..	..
				Brill	..	..	..	3	4	1	..	..	..	..	..	8	..	..	8	..	..
				Grey Gurnard	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	..
				Ray	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
XIII 40	Off Inner Dowsing Light Vessel.	12 f.g.s. ..	4 a.m.	Plaice	..	4	2	..	..	..	..	..	..	..	..	6	[½	1]	6	[½	1]
B 33	53° 20′ N., 0° 35′ E.	11 f.d.s.	3 hrs. 30 mins.	Lemon Dab ..	..	1	3	1	..	..	..	..	..	..	..	5	..	..	5	..	..
				Sole	..	2	56	5	..	..	..	..	..	..	..	63	..	..	63	..	..
				Brill	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Grey Gurnard	..	..	..	..	..	..	..	..	..	..	..	..	..	..	½ basket		
XIII 41	Off Inner Dowsing Light-vessel.	12 f.g.s. ..	8.5 a.m.	Dab	..	1	11	1	..	..	..	..	..	..	..	13	..	..	13	..	..
B 34	53° 20′ N., 0° 33½′ E.	11 c.s.	30 mins.	Sole	..	..	4	..	..	..	..	..	..	..	..	4	..	..	4	..	..
	Belly torn.			Grey Gurnard	..	..	..	..	..	..	..	..	..	..	..	..	..	..	¼ basket		
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	..
XIII 44	North of Hasborough Light-vessel.	16 s. & sh. ..	4 a.m.	Plaice	..	..	22	9	2	..	..	..	..	..	..	33	[9¼	20½]	33	[9¼	20½]
B 37	53° 5′ N., 1° 39′ E.	21 ross.	5 hrs.	Dab	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Lemon Dab ..	..	1	20	2	..	..	..	..	..	..	..	23	..	..	23	..	..
				Sole	..	..	6	4	..	..	..	..	..	..	..	10	..	..	10	..	..
XIV 1	Off Southwold ..	15 c.s. gravel	12.45 p.m.	Plaice	..	2	14	..	..	..	..	..	..	..	..	16	[2	4½]	16	[2	4½]
B 38	52° 15′ N., 1° 52′ E.	15 grv.	3 hrs.	Dab	..	30	53	1	..	..	..	..	..	..	..	84	12¼	27	84	12¼	27
				Sole	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Whiting ..	..	..	169	13	..	..	..	..	..	..	..	182	28	62	182	28	62
				John Dory ..	..	1	..	..	1	..	..	..	..	..	..	2	..	..	2	..	..
				Horse Mackerel	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Smooth Hound	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2 small		..
XIV 2	Off Southwold ..	11 sharp s. ..	5 p.m.	Sole	..	..	11	1	..	..	..	..	..	..	..	12	..	..	12	..	..
B 39	52° 18¾′ N., 1° 48′ E.	14 c.s.	2 hrs. 30 mins.	Brill	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Horse Mackerel	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	..	..
				Conger	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
				Post Larval Herrings.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Numerous		..
XIV 6	Off Southwold ..	9½ sharp s. ..	5. p.m.	Plaice	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
B 40	52° 20′ N., 1° 44′ E.	9½ stones.	30 mins.	Dab	..	2	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..
	Came fast; no damage to net.			Lemon Dab ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sole	..	1	6	1	..	..	..	..	..	..	..	8	..	..	8	..	..
				Flounder ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Horse Mackerel	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
				John Dory ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
XIV 7	Off Sizewell Bank Buoy.	12 m.	8 p.m.	Sole	..	1	5	..	..	..	..	..	..	..	..	6	..	..	6	..	..
B 41	52° 11½′ N., 1° 40½′ E.	13 f.s.	1 hr.	Flounder ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22¾	50
XIV 8	Off Aldeburgh ..	10½ m.	5 a.m.	Plaice	..	6	90	2	1	..	..	..	..	..	..	99	13¾	30	99	13¾	30
B 42	52° 9½′ N., 1° 40½′ E.	13 m. & s.	3 hrs.	Dab	..	..	5	..	..	..	..	..	..	..	..	5	..	..	5	..	..
				Sole	..	16	62	1	..	..	..	..	..	..	..	79	8¼	18	79	8¼	18
				Flounder ..	..	..	45	7	..	..	..	..	..	..	..	52	10	22	52	10	22
				John Dory ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Horse Mackerel	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Several		..
				Thornback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Some		..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Some		..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ 0+	4+ 10+	8+ 20+	12+ 30+	15¾+ 40 +	19¾+ 50 +	23⅝+ 60 +	27½+ 70 +	31½+ 80 +	35½+ 90 +	39½+ 100 +	Measured. No.	Kilo.	Lbs.	Total Catch. No.	Kilo.	Lbs.
XV 1	Off Smith's Knoll Light-vessel.	23 f.d.s. ..	7 p.m.	Plaice	..	3	184	128	4	..	..	..	..	..	..	319	86½	190	319	86½	190
B 43	52° 55′ N., 2° 28′ E.	21	8 hours.	Dab	18	465	71	3	..	..	..	..	..	..	..	557	..	..	557	..	..
		21 f.d.s.		Lemon Dab ..	..	..	4	5	..	..	..	..	..	..	..	9	..	..	9	..	..
				Sole	..	..	7	10	1	..	..	..	..	..	..	18	..	..	18	..	..
				Turbot	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Brill	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
				Long Rough Dab.	..	1	1	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Scaldbacks ..	..	4	..	..	..	..	..	..	..	..	..	4	..	..	4	..	..
				Solenette ..	6	7	..	..	..	..	..	..	..	..	..	13	..	..	13	..	..
				Cod	..	..	..	1	2	8	2	1	..	..	..	14	25	55	14	25	55
				Whiting ..	..	13	468	16	2	1	..	..	..	..	..	500	67	147½	1000	134¼	295
				Grey Gurnard	..	19	38	..	..	..	..	..	..	..	..	57	..	..	57	..	..
				Red Mullet ..	..	2	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Weever.. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
				Red Gurnard..	..	..	4	..	..	..	..	..	..	..	..	4	..	..	4	..	..
				Pout	..	4	4	..	..	..	..	..	..	..	..	8	..	..	8	..	..
				Thornback ..	..	1	6	12	2	1	..	..	..	..	..	22	..	..	22	..	..
				Homelyn ray or Blonde.	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
XV 2	Off Smith's Knoll ..	21 f.g.s. ..	3.30 a.m.	Plaice	..	..	47	29	..	..	..	..	..	..	..	76	19	42	76	19	42
B 44	52° 58′ N., 2° 34′ E.	21 f.g.s.	4 hrs.	Dab	..	87	3	..	..	..	..	..	..	..	..	90	..	..	90	..	..
				Sole	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Turbot	..	..	..	..	..	2	..	..	..	..	..	2	4	9	2	4	9
				Brill	..	..	..	..	..	1	..	..	..	..	..	1	1¾	4	1	1¾	4
				Scaldback ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	11	578	15	..	..	..	..	..	..	..	604	72¾	160	604	72¾	160
				Grey Gurnard	..	27	41	..	..	..	..	..	..	..	..	68	..	..	68	..	..
				Red Gurnard..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Red Mullet ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Horse Mackerel	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Thornback ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Spur Dog ..	..	..	..	..	..	..	2	..	..	..	..	2	..	..	2	..	..
XV 3	Off Smith's Knoll ..	21 f.g.s. ..	8 a.m.	Plaice	..	7	83	36	2	1	..	..	..	..	..	129	34	75	129	34	75
B 45	53° 0′ N., 2° 27′ E.	20 f.g.s.	6 hrs.	Dab	1	165	27	2	..	..	..	..	..	..	..	195	10	22	195	10	22
				Lemon Dab ..	..	..	1	1	..	..	..	..	..	..	..	2	..	..	2	..	..
				Sole	..	..	2	2	..	..	..	..	..	..	..	4	..	..	4	..	..
				Brill	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
				Scaldback ..	..	2	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Cod	..	..	..	..	4	11	2	11	3	11	..	42	181	398	42	181	398
				Whiting ..	..	1	207	12	..	..	..	..	..	..	..	220	29½	65	220	29½	65
				Grey Gurnard	..	..	..	..	..	..	..	..	..	..	..	..	..	..	½ Basket		..
				Horse Mackerel	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
				Red Mullet ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Weever.. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Several		..
				Thornback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..
XV 4	Off Smith's Knoll ..	20 f.g.s. ..	2.30 p.m.	Plaice	..	1	56	56	5	..	..	..	..	..	..	118	36¼	80	118	36¼	80
B 46	53° 5′ N., 2°123′ E.	21 f.s. & sh.	5 hrs.	Dab	..	45	27	..	..	..	..	..	..	..	..	72	4½	10	72	4½	10
				Lemon Dab ..	..	..	2	2	..	..	..	..	..	..	..	4	..	..	4	..	..
				Sole	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	2	12	15	4	1	1	..	..	35	59	130	35	59	130
				Haddock ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Scil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XV 4	Off Smith's Knoll—*cont.*	20 f.gr.s. ..	2.30 p.m.	Whiting ..	..	..	217	11	1	..	..	..	..	..	..	229	34	75	401	59	130
B 46		21 f.s. & sh.	5 hrs.	Grey Gurnard	..	37	53	4	..	..	..	..	..	..	..	94	..	..	94	..	..
				Latchet ..	..	..	2	..	1	..	..	..	..	..	..	3	..	..	3	..	..
				Ling	..	..	..	..	..	1	1	..	..	..	..	2	..	..	2	..	..
				Horse Mackerel	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Mackerel ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Red Mullet ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Weever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Several		..
				Thornback ..	..	..	1	1	1	1	..	..	..	..	..	4	..	..	4	..	..
XV 5	Off Leman and Ower Light-vessel.	21 f.s. & sh. ..	8 p.m.	Plaice	..	..	307	124	2	..	..	..	..	..	..	433	[108½	238¾]	433	[108½	238¾]
B 47	53° 9′ N., 2° 22′ E.	21 s. & sh.	8 hrs.	Dab	22	367	77	2	..	..	..	..	..	..	..	468	22¾	50	468	22¾	50
				Lemon Dab ..	..	..	10	3	..	..	..	..	..	..	..	13	..	..	13	..	..
				Sole	..	..	10	2	..	..	..	..	..	..	..	12	..	..	12	..	..
				Turbot	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Scaldback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Several		..
				Solenette ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	..	..
				Cod	..	..	2	1	5	4	..	..	..	..	..	12	11¼	25	12	11¼	25
				Whiting ..	..	4	290	15	..	..	..	..	..	..	..	309	41¾	92	309	41¾	92
				Grey Gurnard	..	34	18	..	..	..	..	..	..	..	..	52	..	..	52	..	..
				Latchet ..	..	..	..	2	4	1	..	..	..	..	..	7	..	..	7	..	..
				Red Gurnard ..	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Angler	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
				Thornback ..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
XV 7	Between Leman and Ower Banks.	18 s. ..	8.45 a.m.	Plaice	..	6	70	65	3	..	..	..	..	..	..	144	41	90	144	41	90
B 49	53° 4½′ N., 2° 12′ E.	20 f.gr.s.	9 hrs.	Dab	2	72	27	..	..	..	..	..	..	..	..	101	..	..	101	..	..
				Lemon Dab ..	..	..	7	9	1	..	..	..	..	..	..	17	..	..	17	..	..
				Sole	..	1	7	3	..	..	..	..	..	..	..	11	..	..	11	..	..
				Turbot	..	..	..	..	..	1	1	..	..	..	..	2	..	..	2	..	..
				Solenette ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
				Scaldbacks ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
				Cod	..	..	2	..	10	13	3	..	..	1	..	29	43¾	96	29	43¾	96
				Whiting ..	..	3	449	25	1	..	..	..	..	..	..	478	103¾	228	478	103¾	228
				Grey Gurnard	..	69	87	1	..	..	..	..	..	..	..	157	..	..	157	..	..
				Latchet	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Ling	..	..	..	..	..	1	1	..	..	..	..	2	..	..	2	..	..
				Red Gurnard ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Pout	..	..	3	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Angler	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Thornback ..	..	..	..	5	3	..	..	..	..	..	..	8	..	..	8	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
XV 8	South of Well Bank	20 f.gr.s. ..	6.30 p.m.	Plaice	..	5	553	126	..	..	..	..	..	..	..	684	150	330	684	150	330
B 50	53° 5′ N., 2° 25′ E.	17 f.gr.s.	9 hrs.	Dab	16	390	38	1	..	..	..	..	..	..	..	445	19½	43	445	19½	43
				Sole	..	..	3	3	..	..	..	..	..	..	..	6	..	..	6	..	..
				Turbot	..	..	..	..	..	1	1	..	..	..	..	2	10½	23	2	10½	23
				Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Solenette ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Common		
				Cod	..	..	..	..	..	..	1	..	..	..	..	1	3½	8	1	3½	8
				Whiting ..	..	..	82	6	..	..	..	..	..	..	..	88	11¾	26	88	11¾	26
				Grey Gurnard	..	..	..	..	..	..	..	..	..	..	..	..	..	..	½-Basket		
				Latchet	..	..	3	1	9	..	..	..	..	..	..	13	..	..	13	..	..
				Pout	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Weever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Several		
				Thornback ..	..	..	..	1	..	1	..	..	..	..	..	2	..	..	2	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XV 9	Off Leman and Ower Light-vessel.	20 f.gr.s. ..	4.45 a.m.	Plaice	..	1	72	61	..	..	..	..	..	..	..	134	35½	78	134	35½	78
B 51	53° 12′ N., 2° 7′ E.	17-16	4 hrs.	Dab	..	145	14	1	..	..	..	..	..	..	..	160	6¾	15	160	6¾	15
		17 f.gr.s. ..		Sole	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Brill	..	..	..	..	1	1	..	..	..	..	..	2	..	..	2	..	..
				Whiting ..	..	1	120	12	..	..	..	..	..	..	..	133	20	44	133	20	44
				Grey Gurnard	..	35	28	..	..	..	..	..	..	..	..	63	6¼	14	63	6¼	14
				Latchet ..	..	..	2	3	..	..	..	..	..	..	..	5	..	..	5	..	..
				Weever.. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Several.		
XV 10	Between Ower and Well Bank.	17 f.gr.s. ..	9.15 a.m.	Plaice	..	4	70	43	..	..	..	..	..	..	..	117	27¼	60	117	27¼	60
B 52	53° 15′ N., 1° 53′ E.	15½	6 hrs. 30 mins.	Dab	1	161	22	2	..	..	..	..	..	..	..	186	10½	23	186	10½	23
		17 c.s.		Lemon Dab ..	..	1	2	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Sole	..	..	3	1	2	..	..	..	..	..	..	6	..	..	6	..	..
				Turbot	..	..	..	..	..	1	..	..	..	..	..	1	4	9	1	4	9
				Scaldback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Common.		
				Solenette ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Common.		
				Cod	..	..	1	2	2	1	..	..	..	..	..	6	..	..	6	..	..
				Whiting ..	..	..	73	4	..	..	..	..	..	..	..	77	11¼	25	77	11¼	25
				Grey Gurnard	..	57	22	..	..	..	..	..	..	..	..	79	4½	10	79	4½	10
				Thornback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
				Conger	..	..	..	..	..	..	..	1	..	..	..	1	..	..	1	..	..
				Weever.. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	..
				Angler	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
XV 11	North of Leman Bank.	17 c.s.	4.45 p.m.	Plaice	..	7	60	43	2	..	..	..	..	..	..	112	[29	64]	112	[29	64]
B 53	53° 15′ N., 1° 48′ E.	17	3 hrs. 30 mins.	Dab	..	171	60	4	..	..	..	..	..	..	..	235	..	..	235	..	..
	Belly torn (cod end just above flapper).	7 f.s.		Lemon Dab ..	..	2	11	6	..	..	..	..	..	..	..	19	..	..	19	..	..
				Sole	..	..	6	1	1	..	..	..	..	..	..	8	..	..	8	..	..
				Cod	..	..	6	3	4	..	..	..	..	..	..	13	..	..	13	..	..
				Whiting ..	..	1	160	9	..	..	..	..	..	..	..	170	..	..	170	..	..
				Grey Gurnard	..	28	24	1	..	..	..	..	..	..	..	53	..	..	53	..	..
				Latchet ..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Red Gurnard..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Thornback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
XV 13	Between Leman and Ower Banks.	20 f.s.	4 a.m.	Plaice	..	3	35	46	3	..	..	..	..	..	..	87	29½	65	87	29½	65
B 55	53° 9′ N., 1° 59′ E.	20 c.s.	4 hrs.	Dab	1	49	22	4	..	..	..	..	..	..	..	76	..	..	76	..	..
				Lemon Dab ..	..	1	3	1	..	..	..	..	..	..	..	5	..	..	5	..	..
				Sole	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Scaldback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
				Cod	..	..	2	..	5	7	1	..	..	..	..	15	..	..	15	..	..
				Whiting ..	..	..	79	4	..	..	..	..	..	..	..	83	..	..	83	..	..
				Grey Gurnard	..	65	57	..	..	..	..	..	..	..	..	122	..	..	122	..	..
				Ling	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
				Tope	..	..	..	..	..	..	..	..	1	..	..	1	..	..	1	..	..
				Thornback ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
XV 14	N.W. of Leman Bank	20 f.gr.s.	10 a.m.	Plaice	..	1	7	18	5	1	..	..	..	..	..	32	13¾	30	32	13¾	30
B 56	53° 6′ N., 1° 45′ E.	19 d.s.	4 hrs. 45 mins.	Dab	..	14	12	3	..	..	..	..	..	..	..	29	..	..	29	..	..
	Came fast to wreck at 2.45; mortice of beam broken.			Lemon Dab ..	..	1	13	8	..	..	..	..	..	..	..	22	..	..	22	..	..
				Sole	..	..	6	2	1	..	..	..	..	..		9	..	..	9	..	..
				Brill	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	6	4	14	8	1	2	..	..	..	35	41	90	35	41	90
				Whiting ..	..	2	97	23	..	..	..	..	..	..	..	122	18¼	40	122	18¼	40
				Grey Gurnard	..	10	23	1	..	..	..	..	..	..	..	34	..	..	34	..	..
				Ling	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
				Horse Mackerel	..	..	3	1	..	..	..	..	..	..	..	4	..	..	4	..	..
				Angler	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	small.	

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XV 15	Off Hasborough Light-vessel.	18 d.s.	4.30 p.m.	Plaice	..	3	15	16	..	..	..	..	..	..	..	34	11	24	34	11	24
B 57	53° 4½′ N., 1° 44′ E.	18 c.s.	3 hrs. 30 mins.	Dab	..	25	22	3	..	..	..	..	..	..	..	50	..	..	50	..	..
				Lemon Dab ..	..	..	5	2	..	..	..	..	..	..	..	7	..	..	7	..	..
				Sole	..	..	2	4	..	..	..	..	..	..	..	6	..	..	6	..	..
				Brill	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	8	2	30	10	3	2	..	..	..	55	63¾	140	55	63¾	140
				Whiting ..	..	1	128	27	..	..	..	..	..	..	..	156	27¼	60	156	27¼	60
				Grey Gurnard	..	..	15	..	..	..	..	..	..	..	..	15	..	..	15	..	..
				Ling	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
				Sprat	1	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Horse Mackerel	..	..	3	1	..	..	..	..	..	..	..	4	..	..	4	..	..
				Angler	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
				Lesser Spotted Dog.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
XV 16	N.W. of Leman Sand	18 c.s.	8.30 p.m.	Plaice	..	39	214	42	6	..	..	..	..	..	..	301	60	132	301	60	132
B 58	53° 7½′ N., 1° 42′ E.	20 c.s.	7 hrs.	Dab	1	183	60	10	..	..	..	..	..	..	..	254	18¼	40	254	18¼	40
				Lemon Dab ..	..	1	9	9	..	..	..	..	..	..	..	19	..	..	19	..	..
				Sole	..	1	13	9	..	..	..	..	..	..	..	23	..	..	23	..	..
				Brill	..	..	..	3	..	..	..	..	..	..	..	3	..	..	3	..	..
				Scaldback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
				Cod	..	..	7	3	24	17	5	3	1	2	..	62	..	..	62	..	..
				Whiting ..	..	5	156	17	1	..	..	..	..	..	..	179	27¼	60	179	27¼	60
				Grey Gurnard	..	31	24	1	..	..	..	..	..	..	..	56	..	..	56	..	..
				Ling	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
				Angler	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
				Thornback ..	..	..	1	2	1	..	..	..	..	..	..	4	..	..	4	..	..
XVI 2	Between Smith's Knoll and Winterton Ridges.	22 f.gr.s. ..	9.45 a.m.	Plaice	..	..	2	1	..	1	..	..	..	..	..	4	[1¾	4]	4	[1¾	4
B 60	52° 52′ N., 2° 8′ E.	14 f.gr.s.	3 hrs.	Dab	..	19	10	..	..	..	..	..	..	..	..	29	..	..	29	..	..
	Belly split.			Sole	..	1	8	6	..	..	..	..	..	..	..	15	..	..	15	..	..
				Scaldback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
				Solenette ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
				Cod	..	..	..	..	2	3	..	..	..	..	..	5	..	..	5	..	..
				Whiting ..	..	43	192	3	..	..	..	..	..	..	..	238	..	..	238	..	..
				Grey Gurnard	..	8	19	..	..	..	..	..	..	..	..	27	..	..	27	..	..
				Spur Dog ..	..	..	1	10	16	3	..	..	..	..	..	30	..	..	30	..	..
				Horse Mackerel	..	..	5	2	..	..	..	..	..	..	..	7	..	..	7	..	..
				Thornback ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
XVI 3	Between Smith's Knoll and Hewett's Ridges.	16 f.gr.s. ..	2.45 p.m.	Plaice	..	1	13	12	2	1	..	..	..	..	..	29	[9¾	21½]	29	[9¾	21½]
B 61	52° 56′ N., 2° 7½′ E.	20 f.gr.s.	2 hours.	Dab	..	17	4	..	..	..	..	..	..	..	..	21	..	..	21	..	..
				Lemon Dab ..	..	..	..	3	..	..	..	..	..	..	..	3	..	..	3	..	..
				Sole	..	1	9	4	1	..	..	..	..	..	..	15	..	..	15	..	..
				Turbot	..	..	..	..	1	1	..	..	..	..	..	2	..	..	2	..	..
				Brill	..	..	..	..	1	1	..	..	..	..	..	2	..	..	2	..	..
				Scaldback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
				Cod	..	..	..	..	..	3	1	..	..	..	..	4	..	..	4	..	..
				Whiting ..	..	11	31	..	..	..	..	..	..	..	..	42	..	..	42	..	..
				Grey Gurnard	..	10	20	1	..	..	..	..	..	..	..	31	..	..	31	..	..
				Latchet ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	About 30.		
				Greater Weever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XVI 4	Between Smith's Knoll and Hewett's Ridge. 52° 57′ N., 2° 5½′ E.	20 f.g.s. ..	5 p.m.	Plaice	..	1	12	7	1	..	..	..	..	..	..	21	[5½	12]	21	[5½	12]
B 62		21 f.g.s.	3 hrs.	Dab	1	10	2	1	..	..	..	..	..	..	..	14	..	..	14	..	..
				Lemon Dab ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sole	..	..	2	1	..	..	..	..	..	..	..	3	..	..	3	..	..
				Cod	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	5	28	1	..	..	..	..	..	..	..	34	..	..	34	..	..
				Grey Gurnard	..	24	13	..	..	..	..	..	..	..	..	37	..	..	37	..	..
				Latchet ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				HorseMackerel	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Red Mullet ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	About 100 (medium).		
XVI 5	Between Smith's Knoll and Winterton Ridge. 52° 52′ N., 2° 9′ E.	20 f.g.s. ..	11.45 p.m. 3 hrs. 30 mins.	Plaice	..	..	32	19	7	1	..	..	..	..	..	59	[21½	47½]	59	[21½	47½]
B 63		22 f.g.s.		Dab	1	55	38	12	..	..	..	..	..	..	..	106	..	..	106	..	..
				Lemon Dab ..	..	..	3	8	2	..	..	..	..	..	..	13	..	..	13	..	..
				Sole	..	2	13	12	1	..	..	..	..	..	..	28	..	..	28	..	..
				Brill	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	1	12	24	4	5	..	1	1	48	..	..	48	..	..
				Whiting ..	..	22	73	1	..	..	..	..	..	..	..	96	..	..	96	..	..
				Grey Gurnard	..	5	10	2	..	..	..	..	..	..	..	17	..	..	17	..	..
				Red Mullet ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Conger	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1	..	..
				Pout	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Thornback ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3 or 4 dozen.		
XVII 1	Leman	18 f.g.s. ..	6.45 a.m.	Plaice ..	..	9	126	32	2	..	..	..	..	..	..	169	[35½	78]	169	[35½	78]
O 88	53° 26′ N., 2° 27′ E.	15 f.g.s.	2 hrs.	Dab	..	397	73	1	..	..	..	..	..	..	..	471	27¼	60	471	27¼	60
				Sole	..	..	1	1	..	..	..	..	..	..	..	2	..	..	2	..	..
				Whiting ..	..	..	77	..	..	..	..	..	..	..	..	77	9	20	77	9	20
				Grey Gurnard	..	28	23	..	..	..	..	..	..	..	..	51	..	..	51	..	..
				Latchet ..	..	..	3	3	..	..	..	..	..	..	..	6	..	..	6	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	1	..	..
				Weever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
				Thornback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
XVII 2	Leman	15 f.g.s. ..	9.50 a.m.	Plaice	..	1	43	6	1	..	..	..	..	..	..	51	8¼	18	51	8¼	18
O 89	53° 21′ N., 2° 35′ E.	17 f.g.s.	2 hrs.	Dab	..	138	35	..	..	..	..	..	..	..	..	173	10½	23	173	10½	23
				Turbot	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	..	35	1	..	..	..	..	..	..	..	36	4	9	36	4	9
				Grey Gurnard	..	40	14	..	..	..	..	..	..	..	..	54	..	..	54	..	..
				Latchet ..	..	..	3	2	2	1	1	..	..	..	..	9	..	..	9	..	..
				Horse Mackerel	..	..	8	1	..	..	..	..	..	..	..	9	..	..	9	..	..
				Weever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
XVII 4	North part of Brown Ridges. 52° 57′ N., 3° 34′ E.	16 f.g.s. ..	4.30 a.m.	Plaice	..	27	142	5	..	..	..	..	..	..	..	174	20	44	174	20	44
O 90		16 f.g.s.	2 hrs.	Dab	..	87	32	..	..	..	..	..	..	..	..	119	7¾	17	119	7¾	17
				Turbot	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Brill	..	..	..	1	1	..	..	..	..	..	..	2	..	..	2	..	..
				Grey Gurnard	..	20	30	..	..	..	..	..	..	..	..	50	..	..	50	..	..
				Latchet ..	..	..	1	1	2	2	..	..	..	..	..	6	..	..	6	..	..
				Red Mullet ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Weever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27	..	..
				Tope	..	..	..	..	..	..	..	..	1	..	..	1	..	..	1	..	..

Voyage, Station No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40+	19¾+ / 50+	23⅝+ / 60+	27½+ / 70+	31½+ / 80+	35½+ / 90+	39½+ / 100+	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XVII 5	N.E. of Brown Ridges	16 f.g.s. ..	7.25 a.m.	Plaice	..	32	260	25	..	..	..	..	..	..	..	317	43¼	95	317	43¼	95
O 91	52° 59′ N., 3° 42′ E.	17 f.d.s.	2 hrs.	Dab	..	187	104	1	..	..	..	..	..	..	..	292	22¼	49	292	22¼	49
				Brill	..	..	..	1	1	..	..	..	..	..	..	2	..	..	2	..	..
				Cod	..	..	..	..	3	3	3	1	..	..	..	10	16¾	37	10	16¾	37
				Grey Gurnard	..	31	63	..	..	..	..	..	..	..	..	94	7¾	17	94	7¾	17
				Latchet ..	..	..	7	4	3	1	..	..	..	..	..	15	8¾	19	15	8¾	19
				Horse Mackerel	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Red Mullet ..	..	3	2	..	..	..	..	..	..	..	..	5	..	..	5	..	..
				Weever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	116	..	..
				Thornback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
XVII 6	Off Haaks Light-vessel.	17 f.g.s. ..	1.15 p.m.	Plaice	..	56	297	3	..	..	..	..	..	..	..	356	37¾	83	356	37¾	83
O 92	53° 0′ N., 4° 10′ E.	18 f.g.s.	2 hrs.	Dab	..	30	24	..	..	..	..	..	..	..	..	54	4	9	54	4	9
	Hole in cod-end.			Turbot	..	..	..	3	..	..	..	..	..	..	..	3	..	..	3	..	..
				Grey Gurnard	..	26	24	..	..	..	..	..	..	..	..	50	..	..	50	..	..
				Latchet ..	..	..	3	4	2	2	..	..	..	..	..	11	..	..	11	..	..
				Red Mullet ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Weever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	38	..	..
				Smooth Hound	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1	..	..
XVIII 1	Off Blakeney Overfall.	10 c.s.	7.15 p.m.	Plaice	..	18	13	..	..	..	..	..	..	..	..	31	[2¼	5]	31	[2¼	5]
B 65	53° 4½′ N., 1° 2′ E.	10 c.s.	2 hrs.	Dab	..	13	11	..	..	..	..	..	..	..	..	24	..	..	24	..	..
				Lemon Dab ..	..	5	9	..	..	..	..	..	..	..	..	14	..	..	14	..	..
				Sole	..	..	22	..	..	..	..	..	..	..	..	22	..	..	22	..	..
				Cod	..	..	4	..	..	..	..	..	..	..	..	4	..	..	4	..	..
				Whiting ..	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Grey Gurnard	..	3	12	..	..	..	..	..	..	..	..	15	..	..	15	..	..
				Pout	..	10	32	1	..	..	..	..	..	..	..	43	..	..	43	..	..
				Homelyn Ray	..	..	7	2	3	..	..	..	..	..	..	12	..	..	12	..	..
				Thornback ..	..	..	2	1	4	2	..	..	..	..	..	9	..	..	9	..	..
				Tope	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
XVIII 2	Off Saltfleet	8 c.s. & gr. ..	6 a.m.	Plaice	..	137	60	2	..	..	..	..	..	..	..	199	14½	32	199	14½	32
B 66	53° 24′ N., 0° 18½′ E.	8 c.s.	2 hrs.	Dab	..	106	13	..	..	..	..	..	..	..	..	119	6	13	119	6	13
				Lemon Dab ..	..	9	5	..	..	..	..	..	..	..	..	14	..	..	14	..	..
				Sole	..	1	10	1	..	..	..	..	..	..	..	12	..	..	12	..	..
				Brill	..	..	1	1	..	..	..	..	..	..	..	2	..	..	2	..	..
				Long Rough Dab.	..	2	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Cod	..	2	8	..	..	..	..	..	..	..	..	10	..	..	10	..	..
				Whiting ..	..	..	3	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Grey Gurnard	..	6	15	8	..	..	..	..	..	..	..	29	4	9	29	4	9
				Flounder ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Pout	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
XVIII 3	Off Saltfleet	8 c.s.	8.25 a.m.	Plaice	..	121	70	2	..	..	..	..	..	..	..	193	14	31	193	14	31
B 67	53° 24′ N., 0° 22′ E.	8 Gravel.	2 hrs.	Dab	..	106	30	..	..	..	..	..	..	..	..	136	7½	16½	136	7½	16½
				Lemon Dab ..	..	6	2	..	..	..	..	..	..	..	..	8	..	..	8	..	..
				Sole	..	..	32	3	..	..	..	..	..	..	..	35	..	..	35	..	..
				Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Grey Gurnard	..	19	47	4	..	..	..	..	..	..	..	70	..	..	70	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
				Lesser Spotted Dog	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XVIII 9	Lynn Deep	14 s'	8.30 p.m.	Plaice	..	50	14	..	..	..	..	..	..	..	..	64	3½	7½	64	3½	7½
B 68	52° 58¾′ N., 0° 20′ E.	14 s.	2 hrs.	Dab	..	3	1	..	..	..	..	..	..	..	..	4	..	..	4	..	..
				Sole	..	3	40	13	..	..	..	..	..	..	..	56	..	..	56	..	..
				Brill	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Solenette ..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Grey Gurnard	..	1	1	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Thornback ..	..	12	8	1	1	2	..	..	..	..	..	24	..	..	24	..	..
				Skate	..	2	1	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Homelyn Ray	..	2	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..
XVIII 11	Lynn Deep	10 c.s.	4 p.m.	Plaice	..	14	12	..	..	..	..	..	..	..	..	26	[2	4½]	26	[2	4½]
B 69	52° 58′ N., 0° 22′ E.	9 c.s. & sh.	2 hrs.	Dab	1	33	..	..	..	..	..	..	..	..	..	34	..	..	34	..	..
				Sole	..	6	11	1	..	..	..	..	..	..	..	18	2	4½	18	2	4½
				Brill	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	4	..	..	..	..	..	..	..	..	..	4	..	..	4	..	..
				Whiting ..	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Thornback ..	..	1	4	..	..	1	..	..	..	..	..	6	..	..	6	..	..
				Homelyn Ray	..	1	1	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Tope	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
XVIII 12	Lynn Deep	9 c.s.	6.30 p.m.	Plaice	..	9	2	..	..	..	..	..	..	..	..	11	[¾	1½]	11	[¾	1½]
B 70	52° 59′ N., 0° 24′ E.	13 c.s., gr. & sh.	1 hr. 30 mins.	Dab	..	9	..	..	..	..	..	..	..	..	..	9	..	..	9	..	..
				Lemon Dab ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sole	..	1	6	2	..	..	..	..	..	..	..	9	..	..	9	..	..
				Cod	..	1	1	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Whiting ..	..	14	4	..	..	..	..	..	..	..	..	18	..	..	18	..	..
				Grey Gurnard	..	..	1	1	..	..	..	..	..	..	..	2	..	..	2	..	
				Red Mullet ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Angler	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
				Thornback ..	..	..	1	..	..	..	1	..	..	..	..	2	..	..	2	..	..
				Tope	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	..
XVIII 16	Bridlington Bay ..	7 f.s.	12.30 p.m.	Plaice	..	41	21	..	..	..	..	..	..	..	..	62	[4½	10]	62	[4½	10]
B 71	53° 58½′ N., 0° 9′ W.	7 f.s.	2 hrs.	Dab	..	34	4	..	..	..	..	..	..	..	..	38	..	..	38	..	..
		8 c.s.		Grey Gurnard	..	8	..	1	..	..	..	..	..	..	..	9	..	..	9	..	..
				Thornback ..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
XVIII 17	Flamborough' Head	29 f.s.	6.30 p.m.	Plaice	..	..	..	4	..	..	..	..	..	..	..	4	[1¾	4]	4	[1¾	4]
B 72	54° 12′ N., 0° 30½′ E.	30 f.s.	1 hr. 30 mins.	Dab	1	26	1	1	..	..	..	..	..	..	..	29	..	..	29	..	..
				Lemon Dab ..	..	..	..	3	..	..	..	..	..	..	..	3	..	..	3	..	..
				Sole	..	..	1	1	1	..	..	..	..	..	..	3	..	..	3	..	..
				Long Rough Dab.	..	2	4	..	..	..	..	..	..	..	..	6	..	..	6	..	..
				Cod	..	..	6	2	..	..	..	..	..	..	..	8	..	..	8	..	..
				Haddock ..	..	..	6	2	..	..	..	..	..	..	..	8	..	..	8	..	..
				Whiting ..	..	.	4	..	..	..	..	..	..	..	..	4	..	..	4	..	..
				Grey Gurnard	..	32	19	..	..	..	..	..	..	..	..	51	..	..	51	..	
				Angler	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	.
XVIII 18	Off Saltfleet	17 m. & s.	5.30 a.m.	Plaice	..	114	34	1	..	..	..	..	..	..	..	149	9½	21	149	9½	21
B 73	53° 24′ N., 0° 22½′ E.	10-5 Variable	2 hrs.	Dab	..	133	28	..	..	..	..	..	..	..	..	161	10	22	161	10	22
		5 gravel.		Lemon Dab ..	..	2	2	..	..	..	..	..	..	..	..	4	..	..	4	..	..
				Sole	..	..	28	2	..	..	..	..	..	..	..	30	4½	10	30	4½	10
				Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Long Rough Dab.	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XVIII 18	Off Saltfleet—*cont.*	17 | m. & s.	5.30 a.m.	Cod	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
B 73		10-5 | Variable	2 hrs.	Whiting ..	..	..	3	..	..	..	..	..	..	..	..	3	..	..	3	..	..
		5 | gravel.		Grey Gurnard	..	29	45	4	..	..	..	..	..	..	..	78	8	17½	78	8	17½
				Latchet ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Mackerel .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
				Blonde	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Tope	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
XVIII 19	Off Saltfleet	5 | c.s.	8.30 a.m.	Plaice	..	15	2	1	..	..	..	..	..	..	..	18	[1	2]	18	[1	2]
B 74	53° 23½′ N., 0° 20½′ E.	5-8	2 hrs.	Dab	..	17	5	..	..	..	..	..	..	..	..	22	..	..	22	..	..
	Hole through cod-end	7 | f.s.		Sole	..	1	14	1	..	..	..	..	..	..	..	16	2	4½	16	2	4½
				Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Flounder ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	3	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Whiting ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Grey Gurnard	..	..	4	1	..	..	..	..	..	..	..	5	..	..	5	..	..
				Horse Mackerel	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sting Ray ..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Thornback ..	..	..	1	..	2	..	..	..	..	..	..	3	..	..	3	..	..
				Spur Dog ..	..	..	..	..	1	1	..	..	1	..	..	3	..	..	3	..	..
XVIII 20	Off Inner Dowsing..	13 | c.s.	12.30 p.m.	Plaice	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
B 75	53° 19′ N., 0° 36′ E.	14 | c.s.	1 hr. 30 mins.	Dab	..	1	5	..	..	..	..	..	..	..	..	6	..	..	6	..	..
	Came fast; cod-end split.			Lemon Dab ..	..	1	1	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Sole	..	..	7	..	..	..	..	..	..	..	..	7	..	..	7	..	..
				Cod	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Grey Gurnard	..	..	6	..	..	..	..	..	..	..	..	6	..	..	6	..	..
				Homelyn Ray	..	..	..	1	2	..	..	..	..	..	..	3	..	..	3	..	..
XVIII 21	Off Blakeney ..	10 | s. & sh. ..	5 p.m.	Plaice	..	21	13	..	..	..	..	..	..	.	..	34	[2½	5½]	34	[2½	5½]
B 76	53° 4½′ N., 1° 1′ E.	10 | s. & sh.	2 hrs.	Dab	..	4	8	..	..	..	..	..	..	..	..	12	..	..	12	..	..
				Lemon Dab ..	..	4	2	..	..	..	..	..	..	..	..	6	..	..	6	..	..
				Sole	..	..	6	1	..	..	..	..	..	..	..	7	..	..	7	..	..
				Grey Gurnard	..	2	18	7	..	..	..	..	..	..	..	27	..	..	27	..	..
				Homelyn Ray	..	..	..	2	1	..	..	..	..	..	..	3	..	..	3	..	..
				Thornback ..	..	..	..	4	5	5	..	..	..	..	..	14	..	..	14	..	..
				Tope	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
				Lesser Spotted Dog.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
XVIII 22	Off Hasbro' Sand ..	15 | c.s.	11.30 p.m.	Plaice	..	1	23	5	..	..	..	..	..	..	..	29	[5½	12]	29	[5½	12]
B 77	53° 2′ N., 1° 36½′ E.	17 | c.s. & ross.	3 hrs. 30 mins.	Dab	..	20	11	..	..	..	..	..	..	..	..	31	..	..	31	..	..
	3 a.m. came fast; belly torn; port winch broke.			Lemon Dab ..	..	2	9	..	..	..	..	..	..	..	..	11	..	..	11	..	..
				Sole	..	..	11	7	..	..	..	..	..	..	..	18	..	..	18	..	..
				Cod	..	..	..	..	2	1	..	..	..	..	..	3	3	6½	3	3	6½
				Whiting ..	..	1	94	31	1	..	..	..	..	..	..	127	21½	47½	127	21½	47½
				Grey Gurnard	..	..	1	4	..	..	..	..	..	..	..	5	..	..	5	..	..
				Red Gurnard..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Thornback ..	..	..	1	..	..	..	1	..	..	..	..	2	..	..	2	..	..
				Spur Dog ..	..	..	..	3	10	3	..	..	..	..	..	16	..	..	16	..	..
				Lesser Spotted Dog.	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XVIII 23	Off Cromer	17 s.sh. ..	10 a.m	Plaice	..	5	36	9	..	..	..	..	..	..	..	50	8½	18½	50	8½	18½
B 78	53° 3½′ N., 1° 30′ E.	15 s.sh.	5 hrs.	Dab	..	54	53	3	..	..	..	..	..	..	..	110	11	24	110	11	24
	Belly torn.			Lemon Dab ..	..	8	27	1	..	..	..	..	..	..	..	36	..	..	36	..	..
				Sole	..	..	4	2	..	..	..	..	..	..	..	6	..	..	6	..	..
				Brill	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	..	34	16	..	..	..	..	..	..	..	50	10½	23	50	10½	23
				Grey Gurnard	..	4	51	8	..	..	..	..	..	..	..	63	9½	21	63	9½	21
				Red Mullet ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Weever.. ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Blonde	..	..	2	1	..	..	..	1	..	..	..	4	..	..	4	..	..
				Homelyn Ray	..	..	..	1	2	..	..	..	..	..	..	3	..	..	3	..	..
				Thornback ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	66	(Small)	
				Tope	..	..	..	..	..	..	..	1	2	..	..	3	..	..	3	..	..
XVIII 24	Off Cromer	17 s.sh. ..	4 p.m.	Plaice	..	..	12	..	..	..	..	..	..	..	..	12	[2	4½]	12	[2	4½]
B 79	53° 4′ N., 1° 30′ E.	18 s. ross	2 hr. 30 mins.	Dab	..	5	6	..	..	..	..	..	..	..	..	11	..	..	11	..	..
	6.30 came fast; belly badly torn.			Lemon Dab ..	..	..	12	..	..	..	..	..	..	..	..	12	..	..	12	..	..
				Sole	..	..	2	1	..	..	..	..	..	..	..	3	..	..	3	..	..
				Cod	..	..	1	1	..	1	..	..	..	..	..	3	..	..	3	..	..
				Whiting ..	1	..	2	2	..	..	..	..	..	..	..	5	..	..	5	..	..
				Grey Gurnard	..	1	5	..	..	..	..	..	..	..	..	6	..	..	6	..	..
				Blonde	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	(Small)	
XIX 1	Smith's Knoll Deep	26 f.s.	3 p.m.	Plaice	..	..	2	1	..	..	..	..	..	..	..	3	[¾	1½]	3	[¾	1½]
O 93	52° 51½′ N., 2° 15½′ E.	23 f.d.s.	2 hrs.	Sole	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	..	1	2	1	..	..	..	..	4	6	13	4	6	13
				Whiting ..	..	3	194	21	..	..	..	..	..	..	..	218	30	66	218	30	66
				Angler	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
				Thornback ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
XIX 2	Smith's Knoll Light-vessel.	23 f.d.s. ..	6.30 p m.	Plaice	..	..	77	46	4	..	..	..	..	..	..	127	[39¼	86½]	127	[39¼	86½]
O 94	53° 0′ N., 2° 22′ E.	20	5 hrs.	Dab	..	60	13	..	..	..	..	..	..	..	..	73	4	9	73	4	9
		18 f.d.s.		Lemon Dab ..	..	..	2	1	..	..	..	..	..	..	..	3	..	..	3	..	..
				Sole	..	..	3	4	..	..	..	..	..	..	..	7	..	..	7	..	..
				Brill	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	..	1	10	3	3	3	..	..	20	62	136½	20	62	136½
				Whiting ..	..	2	277	22	..	..	..	..	..	..	..	301	40	88	301	40	88
				Grey Gurnard	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Angler	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Thornback ..	..	19	3	2	..	..	..	..	..	..	..	24	..	..	24	..	..
				Skate	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Blonde	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Spur Dog ..	..	..	..	7	4	1	..	..	..	..	..	12	..	..	12	..	..
XIX 3	South of Leman ..	18 f.d.s. ..	1 a.m.	Plaice	..	2	133	55	7	1	..	..	..	..	..	198	48	105½	198	48	105½
O 95	53° 13′ N., 2° 37′ E.	17 f.s.	6 hrs.	Dab	..	193	26	2	..	..	..	..	..	..	..	221	12	26½	221	12	26½
				Sole	..	..	4	..	2	..	..	..	..	..	..	6	..	..	6	..	..
				Turbot	..	..	..	3	1	..	..	..	..	..	..	4	..	..	4	..	..
				Brill	..	..	..	1	1	1	..	..	..	..	..	3	..	..	3	..	..
				Cod	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	..	226	21	..	..	..	..	..	..	..	247	35	77	247	35	77

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XIX 3	South of Leman—*cont.*	18 f.d.s. ..	1 a.m.	Grey Gurnard	..	2	14	..	..	..	..	..	..	..	..	16	..	..	16	..	..
O 95		17 f.s.	6 hrs.	Latchet ..	..	..	1	4	..	1	..	..	..	..	..	6	..	..	6	..	..
				Red Mullet ..	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Thornback ..	..	11	2	..	..	2	..	..	..	..	..	15	..	..	15	..	..
				Spur Dog ..	..	..	..	3	8	1	1	..	..	..	..	13	..	..	13	..	..
XIX 4	South part of Leman	17 f.s. . ..	7.30 a.m.	Plaice	..	2	148	89	16	3	..	..	..	..	..	258	76	167	258	76	167
O 96	53° 15′ N., 2° 35′ E.	16 f.s.	5 hrs.	Dab	..	145	22	2	..	..	..	..	..	..	..	169	9	20	169	9	20
				Sole	..	..	2	1	..	..	..	..	..	..	..	3	..	..	3	..	..
				Brill	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	..	38	2	..	..	..	..	..	..	..	40	3	6½	40	3	6½
				Grey Gurnard	..	8	20	..	..	..	..	..	..	..	..	28	..	..	28	..	..
				Latchet ..	..	..	..	3	..	3	..	..	..	..	..	6	..	..	6	..	..
				Thornback ..	..	2	3	1	..	..	..	..	..	..	..	6	..	..	6	..	..
				Spur Dog ..	..	..	..	10	31	6	4	..	..	..	..	51	..	..	51	..	..
XIX 5	S.W. part of Leman	16 f.d.s. ..	1 p.m.	Plaice	..	6	414	144	9	2	..	..	..	..	..	575	137	301½	575	137	301½
O 97	53° 18′ N., 2° 31′ E.	16 f.d.s.	5 hrs.	Dab	..	..	..	..	..	..	..	..	..	..	..	(Same size as previous haul.)			..	10	22
				Sole	..	..	5	6	..	..	..	..	..	..	..	11	..	..	11	..	..
				Turbot	..	..	..	1	2	..	..	..	..	..	..	3	..	..	3	..	..
				Brill	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	..	..	..	..	..	..	..	..	..	..	(Same size as previous haul.)			..	30	66
				Grey Gurnard	..	3	23	..	..	..	..	..	..	..	..	26	..	..	26	..	..
				Latchet ..	..	..	..	1	2	2	..	..	..	..	..	5	..	..	5	..	..
				Thornback ..	..	..	..	1	1	..	..	..	..	..	..	2	..	..	2	..	..
				Spur Dog ..	..	..	..	1	4	1	..	..	..	..	..	6	..	..	6	..	..
XIX 7	South part of Leman	16 f.d.s. ..	2.30 a.m.	Plaice	..	..	121	49	7	1	..	..	..	..	..	178	46	101	178	46	101
O 99	53° 19′ N., 2° 40′ E.	16 f.d.s.	5 hrs.	Dab	..	..	..	..	..	..	..	..	..	..	..	..	..	..	278	13	28½
				Sole	..	..	2	2	..	..	..	..	..	..	..	4	..	..	4	..	..
				Turbot	..	..	..	2	1	..	1	..	..	..	..	4	..	..	4	..	..
				Brill	..	..	..	1	..	1	..	..	..	..	..	2	..	..	2	..	..
				Whiting ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	28	2	4½
				Grey Gurnard	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Latchet ..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
				Weever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
				Thornback ..	..	5	..	..	..	..	..	..	..	..	..	5	..	..	5	..	..
				Skate	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Spur Dog ..	..	..	..	4	7	..	..	..	..	..	..	11	..	..	11	..	..
XIX 8	Leman	16 f.d.s. ..	8 a.m.	Plaice	..	6	138	62	3	..	..	..	..	..	..	209	50	110	209	50	110
O 100	53° 17′ N., 2° 48′ E.	17 f.d.s.	5 hrs.	Dab	..	123	22	..	..	..	..	..	..	..	..	145	9	20	145	9	20
				Sole	..	..	4	..	..	..	..	..	..	..	..	4	..	..	4	..	..
				Turbot	..	..	..	..	2	..	..	..	..	..	..	2	4	9	2	4	9
				Brill	..	..	..	1	3	..	..	..	..	..	..	4	4	9	4	4	9
				Megrim ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	..	39	4	..	..	..	..	..	..	..	43	..	..	43	..	..
				Grey Gurnard	..	12	32	1	..	..	..	..	..	..	..	45	5	11	45	5	11
				Latchet ..	..	..	..	6	3	2	..	..	..	..	..	11	9	20	11	9	20
				Pout	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Angler	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Horse Mackerel	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Weever	..	..	8	2	..	..	..	..	..	..	..	10	..	..	24	..	..
				Thornback ..	..	2	2	1	..	1	..	..	..	..	..	6	..	..	6	..	..
				Spur Dog ..	..	..	..	12	35	8	1	..	..	..	..	56	..	..	56	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XIX 9	South of Leman ..	16 f.d.s. ..	1.30 p.m.	Plaice	..	4	292	156	4	..	..	..	..	..	..	456	118	259½	456	118	259½
O 101	53° 8′ N., 2° 41′ E.	19 f.d.s.	5 hrs.	Dab	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	24
				Sole	..	..	..	2	..	..	..	..	..	..	..	2	..	..	2	..	..
				Turbot	..	..	..	4	2	..	..	1	..	..	..	7	15	33	7	15	33
				Cod	..	..	..	..	..	1	1	..	..	..	..	2	..	..	2	..	..
				Whiting ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1 Bas.	44	97
				Grey Gurnard ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	Sm	all
				Latchet ..	..	..	..	1	4	..	..	..	..	..	..	5	..	..	5	..	..
				Skate	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
XX 1	South of Botney ..	17 f.d.s. ..	1.30 a.m.	Plaice	..	8	158	19	1	..	..	..	..	..	..	186	32	70½	186	32	70½
O 102	53° 26′ N., 2° 51′ E.	21	5 hrs. 45 mins.	Dab	1	307	11	..	..	..	..	..	..	..	..	319	14	31	319	14	31
		17 f.s.sh.		Sole	..	..	..	2	..	..	..	..	..	..	..	2	..	..	2	..	..
				Turbot	..	..	..	1	1	..	..	..	..	..	..	2	..	..	2	..	..
				Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Wihting ..	..	..	313	7	..	..	..	..	..	..	..	320	39½	87	320	39½	87
				Grey Gurnard ..	9	11	..	..	..	..	..	..	..	..	..	20	..	..	20	..	..
				Latchet ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Weever.. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
XX 2	Black Bank	15 f.d.s. ..	12.30 p.m.	Plaice	..	17	121	60	12	2	..	..	..	..	..	212	57	125½	212	57	125½
O 103	53° 15′ N., 3° 54′ E.	13	3 hrs.	Dab	..	255	54	2	..	..	..	..	..	..	..	311	21	46	311	21	46
		14 f.d.s.		Turbot	..	..	..	2	1	1	..	..	..	..	..	4	6	13	4	6	13
				Brill	..	..	..	1	..	1	..	..	..	..	..	2	..	..	2	..	..
				Whiting ..	..	..	52	6	..	..	..	..	..	..	..	58	9	20	58	9	20
				Grey Gurnard ..	42	24	..	..	..	..	..	..	..	..	..	66	5	11	66	5	11
				Latchet ..	..	..	..	1	2	1	..	..	..	..	..	4	..	..	4	..	..
				John Dory ..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Weever.. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	83	..	..
				Thornback ..	3	1	3	..	..	..	..	..	..	..	..	7	..	..	7	..	..
				Tope	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
XX 3	Off Terschelling Light-vessel.	15 f.d.s. ..	8.30 p.m.	Plaice	..	94	107	32	..	..	..	..	..	..	..	233	32	70½	1398	192	422½
O 104	53° 33′ N., 4° 48′ E.	16-17	7 hrs.	Dab	..	192	11	..	..	..	..	..	..	..	..	203	33	72½	1018	165	363
		19 f.d.s. & m.		Sole	..	..	62	16	..	..	..	..	..	..	..	78	12¾	28	78	12¾	28
				Turbot	..	..	5	15	2	1	..	..	..	..	..	23	20	44	23	20	44
				Brill	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	..	..	..	..	..	..	..	..	..	..	(4	bask	ets)	..	112	246½
				Grey Gurnard ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	..	..
				Latchet.. ..	..	..	..	..	..	..	..	..	..	..	..	(1	bask	et)	..	16	35
				Weever.. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	..	..
				Thornback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..
				Tope	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	Sm	all
XX 4	Off Terschelling Light-vessel.	19 f.d.s.& m...	4 a.m.	Plaice	..	24	141	21	..	..	..	..	..	..	..	186	24½	54	186	24½	54
O 105	53° 40′ N., 4° 51′ E.	17	2 hrs.	Dab	..	..	..	..	..	..	..	..	..	..	..	..	..	(som	e not	coun	ted)
		15 f.d.s.		Sole	..	..	9	4	1	..	..	..	..	..	..	14	..	..	14	..	..
				Turbot	..	..	..	4	1	..	..	..	..	..	..	5	..	..	5	..	..
				Whiting ..	..	..	..	..	..	..	..	..	..	..	..	..	..		(1	bask	et)
				Latchet ..	..	..	..	2	2	..	..	..	..	..	..	4	..	..	4	..	..
				Thornback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15⅝+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XX 5	Off Terschelling Light-vessel.	15 f.d.s. ..	6.20 a.m.	Plaice	..	43	102	27	2	..	..	..	..	..	..	174	23	50½	174	23	50½
O 106	53° 39′ N., 4° 54′ E.	16	1 hr. 30 mins.	Dab	..	159	40	1	..	..	..	..	..	..	..	200	13	28½	200	13	28½
		18 f.d.s.		Sole	..	..	4	2	..	..	..	..	..	..	..	6	..	..	6	..	..
				Turbot	..	..	1	5	1	..	..	..	..	..	..	7	6½	14¼	7	6½	14¼
				Brill	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	..	47	1	..	..	..	..	..	..	..	48	6	13	48	6	13
				Grey Gurnard ..	6	3	..	..	..	..	..	..	..	..	..	9	..	..	9	..	..
				Latchet ..	..	..	1	1	1	..	..	..	..	..	..	3	..	..	3	..	..
				Red Mullet ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
XX 6	Sylt Inner	8 f.d.s... ..	7 a.m.	Plaice	..	195	68	..	..	..	..	..	..	..	..	263	17	37½	263	17	37½
O 107	55° 0½′ N., 8° 5½′ E.	8 f.d.s.	2 hrs.	Dab	3	39	18	2	..	..	..	..	..	..	..	62	5	11	62	5	11
				Sole	..	..	17	10	..	..	..	..	..	..	..	27	6	13	27	6	13
				Turbot	..	..	4	1	..	..	..	..	..	..	..	5	3	6½	5	3	6½
				Whiting ..	2	..	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Grey Gurnard ..	..	7	10	..	..	..	..	..	..	..	..	17	5	11	17	5	11
				Thornback ..	..	1	1	6	4	2	..	..	..	..	..	14	..	..	14	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19	..	..
				Tope	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	..	..
XX 7	Sylt Inner	8 f.d.s. ..	9.30 a.m.	Plaice	..	32	4	..	..	..	..	..	..	..	..	36	[2	4½]	36	[2	4½]
O 108	54° 58′ N., 8° 3¾′ E.	7 f.d.s.	30 mins.	Dab	..	13	6	..	..	..	..	..	..	..	..	19	..	..	19	..	..
	SS. "Poseidon" hauled; SS. "Huxley" with her.			Lemon Dab ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sole	..	..	1	1	1	..	..	..	..	..	..	3	..	..	3	..	..
				Turbot	..	..	1	1	..	..	..	..	..	..	..	2	..	..	2	..	..
				Whiting ..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Grey Gurnard ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Latchet ..	..	..	1	1	..	..	..	..	..	..	..	2	..	..	2	..	..
				Thornback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	..	..
				Tope	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..
XX 8	Sylt Inner	8 f.d.s. ..	10.45 a.m.	Plaice	..	138	19	1	..	..	..	..	..	..	..	158	8	17½	158	8	17½
O 109	54° 56½′ N., 7° 59′ E.	9 f.b.s.	2 hrs.	Dab	1	60	42	..	..	..	..	..	..	..	..	103	8	17½	103	8	17½
				Brill	..	..	..	4	..	..	..	..	..	..	..	4	4	9	4	4	9
				Grey Gurnard ..	..	..	9	10	..	..	..	..	..	..	..	19	5	11	19	5	11
				Latchet ..	..	..	3	4	..	..	..	..	..	..	..	7	..	..	7	..	..
				Thornback ..	..	..	..	..	4	1	2	..	..	..	..	7	..	..	7	..	..
				Tope	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
XX 9	Off Heligoland ..	21 f.d.s. ..	10.35 a.m.	Plaice	..	338	107	5	..	..	..	..	..	..	..	450	37	81½	2230	183	402¼
O 110	54° 12½′ N., 7° 41½′ E.	20 f.d.s.	2 hrs. 55 mins.	Dab	4	515	36	..	..	..	..	..	..	..	..	555	29	64	1210	63	138½
				Lemon Dab ..	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Sole	..	..	6	5	1	..	..	..	..	..	..	12	3	6½	12	3	6½
				Turbot	..	..	3	13	1	..	..	..	..	..	..	17	15	33	17	15	33
				Brill	..	..	2	5	..	..	..	..	..	..	..	7	3	6½	7	3	6½
				Grey Gurnard ..	75	79	..	..	..	..	..	..	..	..	..	154	12	26½	154	12	26½
				Latchet ..	..	..	4	7	3	..	..	..	..	..	..	14	6	13	14	6	13
				Horse Mackerel ..	..	..	..	2	..	..	..	..	..	..	..	2	..	..	2	..	..
				Sprats	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
				Thornback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
				Tope	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XX 10	Off Amrum	10 f.s.	11 a.m.	Plaice	..	363	72	7	..	..	..	..	..	..	..	442	23	50½	442	23	50½
B 80	54° 32½′ N., 7° 51′ E.	10 f.s.	2 hrs.	Dab	..	382	47	..	..	..	..	..	..	..	..	429	16	35	429	16	35
				Sole	..	..	3	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Turbot	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Solenette ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	3	2	..	..	..	..	..	..	..	..	5	..	..	5	..	..
				Whiting ..	..	6	..	1	..	..	..	..	..	..	..	7	..	..	7	..	..
				Grey Gurnard	..	..	5	1	..	..	..	..	..	..	..	6	..	..	6	..	..
				Latchet ..	..	..	8	4	..	..	..	..	..	..	..	12	..	..	12	..	..
				Thornback ..	..	..	..	5	3	1	..	..	..	..	..	9	..	..	9	..	..
				Tope	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..
XX 11	Off Amrum	10 f.s.	1.30 p.m.	Plaice	..	376	78	7	2	..	..	..	..	..	..	463	27	59½	463	27	59½
B 81	54° 33′ N., 7° 50′ E.	10 f.s.	2 hrs.	Dab	1	216	32	..	..	..	..	..	..	..	..	249	8¾	19¼	542	19	42
				Sole	..	..	4	3	..	..	..	..	..	..	..	7	..	..	7	..	..
				Solenette ..	1	1	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Cod	..	..	7	..	..	..	..	..	..	..	..	7	..	..	7	..	..
				Whiting ..	..	4	1	..	..	..	..	..	..	..	..	5	..	..	5	..	..
				Grey Gurnard	..	2	16	2	..	..	..	..	..	..	..	20	..	..	20	..	..
				Latchet ..	..	..	9	5	..	..	..	..	..	..	..	14	..	..	14	..	..
				Pout	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Thornback ..	..	..	1	7	2	3	1	..	..	..	..	14	..	..	14	..	..
				Tope	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	..	..
XX 12	Horn Reef Deep Water.	24 m.	8 a.m.	Plaice	..	..	147	66	4	4	1	..	..	..	..	222	82¼	181	415	158	347½
O 111	55° 23′ N., 6° 14′ E.	26 m.	5 hrs.	Dab	1	97	3	..	..	..	..	..	..	..	..	101	..	..	101	..	..
				Lemon Dab ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sole	..	..	..	1	1	..	..	..	..	..	..	2	..	..	2	..	..
				Turbot	..	..	..	..	2	..	1	..	..	..	..	3	..	..	3	..	..
				Brill	..	..	..	1	2	..	..	..	..	..	..	3	..	..	3	..	..
				Long Rough Dab.	..	59	118	..	..	..	..	..	..	..	..	177	..	..	177	..	..
				Cod	..	..	..	7	2	..	..	1	..	..	..	10	..	..	10	..	..
				Haddock ..	..	..	9	72	8	1	..	..	..	..	..	90	34½	76	450	172	378½
				Whiting ..	..	..	95	87	..	..	..	..	..	..	..	182	..	..	364	..	..
				Grey Gurnard	..	9	19	..	..	..	..	..	..	..	..	28	..	..	28	..	..
				Hake .. .	..	..	..	..	..	..	1	7	2	..	2	12	45	99	12	45	99
				Ling	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1	..	..
				Witch	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Angler	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
				Mackerel ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		Few	
				Horse Mackerel	..	..	..	..	..	..	..	..	..	..	..	..	..	..		Few	
				Skate	..	..	..	..	2	..	..	..	..	..	..	2	..	..	2	..	..
				Tope	..	..	..	..	..	..	..	..	..	..	..	..	..	..		Several	
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		Several	
XX 13	Horn Reef Deep Water.	27 f.s. & m. ..	2 p.m.	Plaice	..	1	158	73	..	..	..	..	..	..	..	232	[61½	135]	464	[123	270]
O 112	55° 25¼′ N., 6° 0′ E.	27 f.s. & m ..	3 hrs.	Dab	..	153	7	..	..	..	..	..	..	..	..	160	..	..	213	..	..
				Sole	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Turbot	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Long Rough Dab.	..	6	14	..	..	..	..	..	..	..	..	20	..	..	20	..	..
				Cod	..	..	9	12	7	1	..	..	..	..	..	29	..	..	29	..	..
				Haddock ..	..	..	18	80	1	..	..	..	..	..	..	99	..	..	297	..	..
				Whiting ..	..	..	54	32	..	..	..	..	..	..	..	86	..	..	86	..	..
				Grey Gurnard	..	57	44	..	..	..	..	..	..	..	..	101	..	..	101	..	..
				Hake	..	..	..	..	..	1	..	1	..	..	..	2	..	..	2	..	.
				Black Skate ..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XX 14	Off Horn Reef Deep Water.	27 f.s.m. ..	5.45 p.m.	Plaice	..	..	102	77	3	..	..	..	..	..	..	182	[56½	124]	409	[126¾	278½]
O 113	55° 26¼′ N., 5° 57′ E.	27 f.s.m.	5 hrs.	Dab	..	6	3	..	..	..	..	..	..	..	..	9	..	..	9	..	..
				Sole	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Brill	..	..	..	1	..	1	..	..	..	..	..	2	..	..	2	..	..
				Long Rough Dab.	..	..	3	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Haddock ..	..	..	19	148	5	..	..	..	..	..	..	172	..	..	430	..	..
				Whiting ..	..	..	27	18	..	..	..	..	..	..	..	45	..	..	45	..	..
				Witch	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Ling	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	..	..
				Hake	..	..	..	..	..	..	..	..	1	..	..	1	..	..	1	..	..
XX 15	S.E. of Cleaver Bank	21 s.m. ..	7.15 a.m.	Plaice	..	..	43	18	8	2	..	..	..	..	..	71	28	61½	71	28	61½
O 114	53° 48′ N., 3° 48½′ E.	23 f.s.m.	4 hrs.	Dab	..	225	8	1	..	..	..	..	..	..	..	234	..	..	544	..	..
				Lemon Dab ..	..	..	3	3	..	..	..	..	..	..	..	6	..	..	6	..	..
				Turbot	..	..	..	1	3	..	1	..	..	..	..	5	..	..	5	..	..
				Cod	..	..	..	..	3	3	..	..	..	..	..	6	..	..	6	..	..
				Haddock ..	..	..	..	7	..	..	..	..	..	..	..	7	..	..	7	..	..
				Grey Gurnard	..	31	9	..	..	..	..	..	..	..	..	40	..	..	40	..	..
				Latchet ..	..	..	..	2	..	..	..	..	..	..	..	2	..	..	2	..	..
XX 16	N.W. of Terschelling Light-vessel.	20 m.	3.20 p.m.	Plaice	..	1	9	19	2	..	..	..	..	..	..	31	[12	26½	31	12	26½]
O 115	53° 39′ N., 4° 26′ E.	20 m.	1 hr. 30 min.	Dab	..	238	12	..	..	..	..	..	..	..	..	250	..	..	250	..	..
				Sole	..	..	1	1	..	..	..	..	..	..	..	2	..	..	2	..	..
				Turbot	..	..	..	..	2	..	..	..	..	..	..	2	..	..	2	..	..
				Whiting ..	..	1	33	1	..	..	..	..	..	..	..	35	..	..	35	..	..
				Grey Gurnard	..	4	2	2	..	..	..	..	..	..	..	8	..	..	8	..	..
				Thornback ..	..	..	..	2	..	..	..	..	..	..	..	2	..	..	2	..	..
				Tope	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..
				Spur Dog ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
XX 17	N.W. of Terschelling Light-vessel.	20 m.	5.15 p.m.	Plaice	..	3	35	13	..	..	..	..	..	..	..	51	10¼	22½	51	10¼	22½
O 116	53° 37′ N., 4° 30′ E.	18 m.	1 hr. 30 mins.	Dab	..	153	5	..	..	..	..	..	..	..	..	158	..	..	158	..	..
				Sole	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Turbot	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	..	71	4	..	..	..	..	..	..	..	75	.	..	225	..	..
				Grey Gurnard	..	4	9	..	..	..	..	..	..	..	..	13	..	..	13	..	..
				Thornback ..	..	3	..	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Tope	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
XX 18	Off Vlieland	18 m.	7 p.m.	Plaice	..	70	193	50	3	..	..	..	..	..	..	316	[50½	111]	316	[50½	111]
O 117	53° 34′ N., 4° 23½′ E.	15 f.s.	5 hrs.	Dab	..	135	6	..	..	..	..	..	..	..	..	141	..	..	141	..	..
				Sole	..	..	26	4	1	..	..	..	..	..	..	31	..	..	31	..	..
				Turbot	..	..	..	1	3	..	..	..	..	..	..	4	..	..	4	..	..
				Whiting ..	..	..	191	11	..	..	..	..	..	..	..	202	..	..	202	..	..
				Grey Gurnard	..	1	3	..	..	..	..	..	..	..	..	4	..	..	4	..	..
				Thornback ..	..	2	8	..	1	1	..	..	..	..	..	12	..	..	12	..	..
XXI 1	Off Arbroath.. ..	34 s.m... ..	2 p.m.	Plaice	..	..	..	1	8	..	..	..	..	..	..	9	[9½	21]	9	[9½	21]
O 118	56° 38′ N., 1° 23¾′ N.	36 d.s.sh.	3 hrs. 15 mins.	Dab	..	135	7	..	..	..	..	..	..	..	..	142	..	..	222	..	..
				Lemon Dab ..	.	..	2	3	..	..	..	..	..	..	..	5	..	..	5	..	..
				Turbot	..	..	..	..	..	2	..	..	..	..	..	2	..	..	2	..	..
				Long Rough Dab.	..	68	38	..	..	..	..	..	..	.	..	106	..	..	128	..	..
				Cod	..	..	47	7	8	1	..	..	..	..	..	63	16	35	63	16	35
				Haddock ..	..	..	243	145	1	..	..	..	..	..	..	389	89	196	997	207	455½
				Whiting ..	..	..	206	9	..	..	..	..	..	..	..	215	31	68	429	62	136½

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XXI 1	Off Arbroath—*cont...*	34 s.m ..	2 p.m.	Grey Gurnard	..	26	94	23	..	..	..	..	..	..	..	143	20	44	572	80	176
O 118		36 d.s.sh. ..	3 hrs. 15 min.	Ling	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..
				Angler	..	..	..	..	..	2	..	..	..	..	..	2	..	..	2	..	..
				Starry Ray ..	..	2	3	2	..	..	..	..	..	..	..	7	..	..	7	..	..
XXI 3	N. of Horn Reef ..	8 f.s.	5.20 p.m.	Plaice	1	239	66	..	..	..	..	..	..	..	..	306	18	39½	306	18	39½
B 82	55° 42½′ N., 7° 59½′ E.	9½ f.s.	2 hrs.	Dab	5	63	8	..	..	..	..	..	..	..	..	76	..	..	76	..	..
				Sole	..	7	..	..	..	..	..	..	..	..	..	7	..	..	7	..	..
				Cod	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	3	..	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Grey Gurnard	..	..	..	5	..	..	..	..	..	..	..	5	..	..	5	..	..
				Thornback ..	..	..	..	2	3	11	1	..	..	..	..	17	..	..	17	..	..
				Spur Dog ..	..	..	..	..	..	..	3	3	..	1	..	7	..	..	7	..	..
XXI 4	N. of Horn Reef ..	10 f.s.	8.20 p.m.	Plaice	..	299	94	4	..	..	..	..	..	..	..	397	27	59½	397	27	59½
O 120	55° 42¾′ N., 7° 58½′ E.	7 f.s.	1 hr. 55 mins.	Dab	4	50	7	..	..	..	..	..	..	..	..	61	..	..	61	..	..
				Sole	..	..	2	..	1	..	..	..	..	..	..	3	..	..	3	..	..
				Cod	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	14	1	..	..	..	..	..	..	..	..	15	..	..	15	..	..
				Grey Gurnard	..	..	2	1	..	..	..	..	..	..	..	3	..	..	3	..	..
				Thornback ..	..	..	..	1	6	7	..	..	..	..	..	14	..	..	14	..	..
				Spur Dog ..	..	..	..	..	..	..	2	3	..	..	..	5	..	..	5	..	..
XXI 5	Off Graa Deep ..	7 f.s.	12.15 p.m.	Plaice	1	290	84	1	..	..	..	..	..	..	..	376	22	48½	376	22	48½
O 121	55° 26′ N., 8° 15′ E.	7 f.s.	1 hr. 15 mins.	Dab	8	45	6	..	..	..	..	..	..	..	..	59	..	..	59	..	..
				Sole	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Flounder ..	..	..	5	6	..	..	..	..	..	..	..	11	..	..	11	..	..
				Whiting ..	1	80	2	..	..	..	..	..	..	..	..	83	..	..	83	..	..
				Skate	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1	..	..
				Thornback ..	3	..	..	..	1	6	6	..	..	..	..	16	..	..	16	..	..
				Spur Dog ..	..	..	..	..	..	..	2	4	2	..	..	8	..	..	8	..	..
XXII 1	Eddystone	32 f.g.s. ..	9.15 a.m.	Sole	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
B 83	50° 9′ N., 4° 12′ W.	37 f.g.s.	2 hrs.	Grey Gurnard	..	32	18	..	..	..	..	..	..	..	..	50	..	..	50	..	..
				Red Gurnard..	1	12	2	1	..	..	..	..	..	..	..	16	..	..	16	..	..
				Thickbacks ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Scaldback ..	3	18	..	..	..	..	..	..	..	..	..	21	..	..	21	..	..
				Parrot Gurnard	..	..	5	..	..	..	..	..	..	..	..	5	..	..	5	..	..
				John Dory ..	2	..	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Homelyn Ray	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Spur Dog ..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	1	..	..
				Lesser Spotted Dog.	..	..	..	3	..	..	..	..	..	..	..	3	..	..	3	..	..
XXII 2	Start Bay	9 f.g.s. ..	3 p.m.	Plaice	..	..	11	45	12	..	..	..	..	..	..	68	32	70½	68	32	70½
B 84	50° 17′ N., 3° 37′ W.	14 f.g.s.	2 hrs.	Dab	..	10	18	..	..	..	..	..	..	..	..	28	4	9	28	4	9
				Brill	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Thickback ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Scaldback ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Grey Gurnard	..	3	4	2	..	..	..	..	..	..	..	9	..	..	9	..	..
				Latchet ..	..	..	3	1	..	..	..	..	..	..	..	4	..	..	4	..	..
				Red Gurnard..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				John Dory ..	..	..	2	2	..	..	..	..	..	..	..	4	..	..	4	..	..
				Thornback ..	..	..	..	1	..	1	..	..	..	..	..	2	..	..	2	..	..
				Angel	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
				Spur Dog ..	..	..	..	..	2	..	..	..	..	..	..	2	..	..	2	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XXII 3	French Ground, S.E. from Start Point.	34 c.s.	8 p.m.	Plaice	..	..	1	1	..	..	..	..	..	..	..	2	..	..	2	..	..
B 85	50° 10′ N., 3° 17′ W.	35 s.g.sh.	3 hrs.	Dab	..	1	8	1	..	..	..	..	..	..	..	10	¾	1½	10	¾	1½
				Sole	..	..	3	8	..	..	..	..	..	..	..	11	3½	8	11	3½	8
				Thickback ..	..	19	3	..	..	..	..	..	..	..	..	22	1½	3	22	1½	3
				Megrim ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Scaldback ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sand Sole ..	..	..	4	..	..	..	..	..	..	..	..	4	1	2	4	1	2
				Brill	..	..	..	1	1	..	..	..	..	..	..	2	¾	1½	2	¾	1½
				Whiting ..	..	..	1	8	..	..	..	..	..	..	..	9	2	4½	9	2	4½
				Latchet ..	..	..	2	2	1	..	..	..	..	..	..	5	½	1	5	½	1
				Red Gurnard..	..	83	87	1	..	..	..	..	..	..	..	171	19½	43	171	19½	43
				Angler	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..
				Pout	..	..	6	..	..	..	..	..	..	..	..	6	½	1	6	½	1
				Blonde	..	1	19	2	..	1	..	..	..	..	..	23	..	..	23	..	..
				Homelyn Ray	..	..	12	2	..	..	..	..	..	..	..	14	..	..	14	..	..
				Thornback ..	..	..	1	..	1	1	..	..	..	..	..	3	..	..	3	..	..
				White Skate ..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Angel	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2 (large)		..
XXII 5	Torbay	5 f.s.	12.15 noon	Plaice	..	..	7	11	1	..	..	..	..	..	..	19	6	13	19	6	13
B 87	50° 25′ N., 3° 30½′ W.	7 m.	1 hr.	Dab	..	88	3	..	..	..	..	..	..	..	..	91	3	6½	91	3	6½
				Solenette ..	..	3	..	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Scaldback ..	..	9	..	..	..	..	..	..	..	..	..	9	..	..	9	..	..
				Whiting ..	..	4	..	..	..	..	..	..	..	..	..	4	..	..	4	..	..
				Grey Gurnard	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Latchet ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Red Gurnard..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				John Dory ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Herring ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
XXII 6	Teignmouth Bay (South).	6½ m.s. ..	2.15 p.m.	Plaice	..	2	19	5	2	1	..	..	..	..	..	29	9¾	21½	29	9¾	21½
B 88	50° 30′ N., 3° 28′ W.	8 s.m.	1 hr. 5 mins.	Dab	..	106	25	..	..	..	..	..	..	..	..	131	6½	14	131	6½	14
				Solenette ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Scaldback ..	1	6	..	..	..	..	..	..	..	..	..	7	..	..	7	..	..
				Whiting ..	..	4	4	..	..	..	..	..	..	..	..	8	..	..	8	..	..
				Grey Gurnard	1	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Latchet ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Thornback ..	..	16	16	2	..	..	..	..	..	..	..	34	..	..	34	..	..
				Blonde	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Lesser Spotted Dog.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3 (large)		..
				Angel	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11 (large)		..
XXII 7	Dawlish Bay	9 s.m. ..	4.10 p.m.	Plaice	..	..	5	9	..	..	..	..	..	..	..	14	3½	8	14	3½	8
B 89	50° 34′ N., 3° 27′ W.	9 s.m.	50 mins.	Dab	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
	4.45 p.m. had a pull out ; no damage.			Sole	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Brill	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	..	1	1	..	..	..	..	..	2	..	..	2	..	..
				Thornback ..	..	1	7	7	6	..	..	..	(1 basket)			21	21	46	21	21	46
				Angel	..	..	..	..	..	..	..	..	(2 large and 1 medium).			..	..	..	3	..	..
				Lesser Spotted Dog.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3 (large)		..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XXII 8	Spion Kop off Beer Head.	17 | muddy s..	8 p.m.	Dab	..	278	99	..	..	..	..	..	..	..	..	397	23	50½	397	23	50½
B 90	50° 33′ N., 2° 59′ W.	18 | m.s.	3 hrs.	Sole	..	..	..	6	..	..	..	..	..	..	..	6	2½	5½	6	2½	5½
				Turbot	..	..	..	..	..	1	..	..	..	..	..	1	3¼	7	1	3¼	7
				Brill	..	..	..	..	3	..	..	..	..	..	..	3	3¼	7	3	3¼	7
				Scaldback ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Solenette ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	..	..	..	1	..	..	1	..	2	9¼	20½	2	9¼	20½
				Whiting ..	..	16	2	1	..	..	..	..	..	..	..	19	..	..	19	..	..
				Grey Gurnard	..	4	11	..	..	..	..	..	..	..	..	15	..	..	15	..	..
				Latchet ..	..	..	3	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Pout	1	60	..	..	..	..	..	..	..	..	..	61	..	..	61	..	..
				Thornback ..	..	1	10	5	..	..	..	..	..	..	..	16	5½	12	16	5½	12
				Homelyn Ray	..	1	2	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Lesser Spotted Dog.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13 (large)		..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2 (small)		..
				Smooth Hound	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
XXII 9	"Biscuit Dust," off Beer Head.	22 | f.g.s. ..	12.30 a.m.	Plaice	..	..	7	3	1	..	..	..	..	..	..	11	4	9	11	4	9
B 91	50° 26′ N., 3° 2′ W.	26 | f.g.s. ..	5 hrs. 30 mins.	Dab	..	149	40	..	..	..	..	..	..	..	..	189	..	..	189	..	..
		28 | f.g.s. ..		Sole	..	..	1	2	..	..	..	..	..	..	..	3	..	..	3	..	..
				Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Solenette ..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Scaldback ..	..	3	..	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Whiting ..	..	17	6	1	..	..	..	..	..	..	..	24	..	..	24	..	..
				Grey Gurnard	1	6	4	..	..	..	..	..	..	..	..	11	..	..	11	..	..
				Latchet ..	..	..	6	1	..	..	..	..	..	..	..	7	..	..	7	..	..
				Red Gurnard..	..	3	..	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Pout	..	15	..	..	..	..	..	..	..	..	..	15	..	..	15	..	..
				Angler	..	..	..	1	3	..	..	1	..	..	..	5	..	..	5	..	..
				Homelyn Ray	..	8	4	..	..	..	..	..	..	..	..	12	..	..	12	..	..
				Thornback ..	..	1	2	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Angel	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..
				Lesser Spotted Dog.	..	..	..	1	..	1	..	..	..	..	..	2	..	..	2	..	..
				Spur Dog ..	..	..	..	21	3	1	1	..	..	..	..	26	..	..	26	..	..
				Smooth Hound	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
XXII 11	Margate	10 | f.g.s. ..	4 p.m.	Plaice	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
B 92	51° 25′ N., 1° 31′ E	10 | f.g.s.	¾ hr.	Dab	..	5	3	..	..	..	..	..	..	..	..	8	..	..	8	..	..
	Ground rope shackle broken; net badly torn.			Sole	..	..	3	2	2	..	..	..	..	..	..	7	..	..	7	..	..
				Cod	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Grey Gurnard	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Latchet ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Pouting ..	..	1	9	2	..	..	..	..	..	..	..	12	..	..	12	..	..
				Whiting ..	..	..	1	1	..	..	..	..	..	..	..	2	..	..	2	..	..
				Thornback ..	1	..	1	..	1	..	..	..	..	..	..	3	..	..	3	..	..
				Spur Dog ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
XXII 12	Eastern Deep Water	21 | f.g.s. ..	8 a.m.	Plaice	..	..	10	19	6	..	..	..	..	..	..	35	15	33	35	15	33
O 122	52° 17′ N., 2° 46′ E.	23 | f.g.s.	3 hrs.	Dab	..	4	1	..	..	..	..	..	..	..	..	5	..	..	5	..	..
				Lemon Dab ..	..	..	2	1	..	..	..	..	..	..	..	3	..	..	3	..	..
				Sole	..	..	9	6	..	..	..	..	..	..	..	15	3½	8	15	3½	8
				Scaldback ..	..	2	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Cod	..	..	..	1	1	..	1	2	..	..	..	5	10	22	5	10	22
				Whiting ..	..	..	61	29	..	..	..	..	..	..	..	90	19	42	90	19	42
				Grey Gurnard	..	1	10	..	..	..	..	..	..	..	..	11	..	..	11	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Fathoms Depth and Soil.	Hour Shot and Duration.	Species. Ins. / Cm.	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XXII 12	Eastern Deep Water—*cont.*	21 f.g.s. ..	8 a.m.	Latchet ..	..	..	1	1	2	..	..	..	..	..	..	4	..	..	4	..	..
O 122		23 f.g.s.	3 hrs.	Red Mullet ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Horse Mackerel	..	..	2	2	..	..	..	..	..	..	..	4	..	..	4	..	..
				Herring ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Pouting ..	..	4	11	1	..	..	..	..	..	..	..	16	..	..	16	..	..
				Conger	..	..	..	..	..	..	..	1	..	..	..	1	..	..	1	..	..
				Weever.. ..	..	..	7	(sample sizes)			..	..	..	..	..	7	..	..	¾ bas.	18½	40½
				Thornback ..	..	..	..	11	..	1	..	..	..	..	..	12	11½	25¼	12	11½	25¼
				Lesser Spotted Dog.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	(large)	
				Spur Dog ..	..	..	..	1	5	1	(sample sizes)			..	..	7	..	..	878	290	638
				Porbeagle ..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
XXIII 1	North part Brown Ridges.	14 f.g.s. ..	8 a.m.	Plaice	..	1	27	9	..	1	..	..	..	..	..	38	[8½	18½]	38	[8½	18½]
B 93	52° 31′ N., 4° 25′ E.	17 f.br.s.	3 hrs.	Dab	..	43	4	..	..	..	..	..	..	..	..	47	..	..	47	..	..
				Sole	..	..	3	2	..	..	..	..	..	..	..	5	..	..	5	..	..
				Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Scaldback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
				Whiting ..	..	3	21	6	..	..	..	..	..	..	..	30	..	..	30	..	..
				Pout	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
				Blonde	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Thornback ..	..	..	3	3	1	..	..	..	..	..	..	7	..	..	7	..	..
XXIII 2	Between Ymuiden and Egmond.	8 c.g.s. ..	9 a.m.	Plaice	..	848	30	1	..	..	..	..	..	..	..	879	[35½	77½]	879	[35½	77½]
B 94	52° 35′ N., 4° 30′ E.	9 f.g.s.	4 hrs.	Dab	..	348	114	1	..	..	..	..	..	..	..	463	30	66	4630	300	660
				Flounder ..	..	1	11	15	..	..	..	..	..	..	..	27	..	..	27	..	..
				Solenette ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	17	104	7	..	..	..	..	..	..	..	128	..	..	128	..	..
				Thornback ..	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
XXIII 3	Off Egmond	11 f.g.s. ..	7.30 a.m.	Plaice	..	307	206	1	..	..	..	..	..	..	..	514	[41	90]	514	[41	90]
B 95	52° 36′ N., 4° 23′ E.	10 f.g.s	3 hrs.	Dab	..	167	106	2	..	..	..	..	..	..	..	275	..	..	275	..	..
				Flounder ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Turbot	..	..	..	3	1	..	..	..	..	..	..	4	..	..	4	..	..
				Cod	..	..	..	2	..	..	..	1	..	..	..	3	..	..	3	..	..
				Whiting ..	..	2	27	1	..	..	..	..	..	..	..	30	..	..	30	..	..
XXIII 4	Off Ymuiden	10 f.g.s. ..	10.45 a.m.	Plaice	..	346	130	1	1	..	..	..	..	..	..	478	[31	68]	478	[31	68]
B 96	52° 31′ N., 4° 25′ E.	9 f.g.s.	3 hrs.	Dab	..	352	221	..	..	..	..	..	..	..	..	573	..	..	573	..	..
				Scaldback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
				Flounder ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting ..	..	9	18	..	..	..	..	..	..	..	..	27	..	..	27	..	..
XXIII 5	Off Ameland	12 f.g.s. ..	8 a.m.	Plaice	..	4	15	2	..	..	..	..	..	..	..	21	[3¼	7]	21	[3¼	7]
B 97	53° 32′ N., 5° 45′ E.	9 f.g.s.	2 hrs.	Dab	..	38	13	..	..	..	..	..	..	..	..	51	..	..	51	..	..
				Cod	..	..	..	..	..	..	..	1	2	..	..	3	..	..	3	..	..
				Whiting ..	..	35	3	1	..	..	..	..	..	..	..	39	..	..	39	..	..
				Flounder ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Thornback ..	3	5	..	..	..	1	..	..	..	..	..	9	..	..	9	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
XXIII 6	Off Ameland	9 f.g.s. ..	10.20 a.m.	Plaice	..	1	12	..	..	..	..	..	..	..	..	13	[1¾	3½]	13	[1¾	3½]
B 98	53° 33′ N., 5° 52′ E.	12 f.g.s.	2 hrs.	Dab	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	..	..
				Brill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1 small.		
				Whiting ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	..	..
				Spur Dog ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..

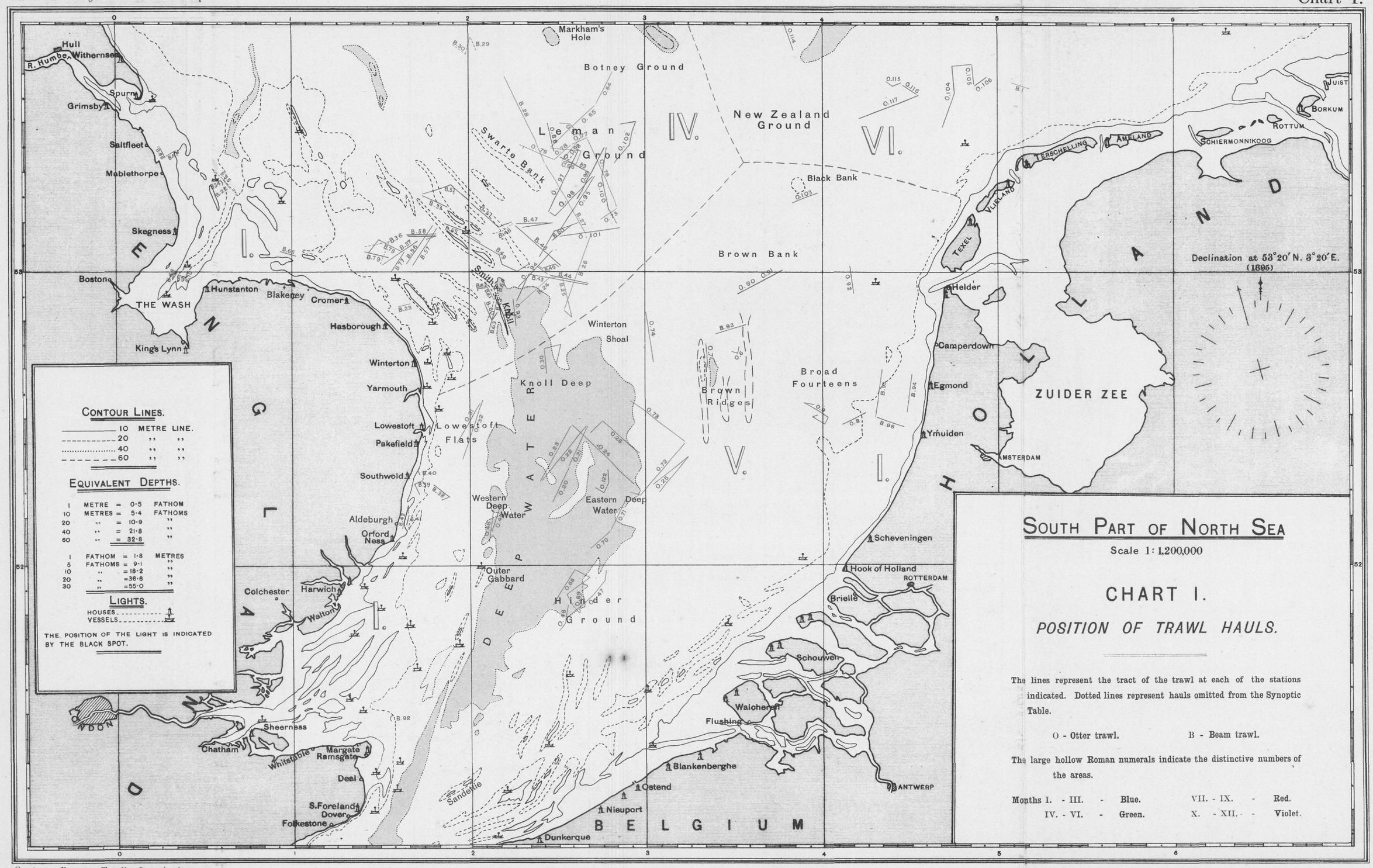
Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.		0+	4+	8+	12+	15½+	19¾+	23⅝+	27½+	31½+	35½+	39½+	Measured.			Total Catch.		
				Ins. ..																	
				Cm. ..	0+	10+	20+	30+	40 +	50 +	60 +	70 +	80 +	90 +	100 +	No.	Kilo.	Lbs.	No.	Kilo.	Lbs.
XXIV 1	South of Leman Ground.	18 f.s.	3.45 p.m.	Plaice	..	..	7	6	2	1	..	..	..	..	..	16	[7	15½]	16	[7	15½]
O 123	53° 7½′ N., 2° 42′ E.	18 c.s.	2 hrs.	Dab	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sole	..	..	2	..	1	..	.	..	..	..	..	3	..	..	3	..	..
				Cod	..	..	..	..	..	..	1	1	1	..	..	3	..	..	3	..	..
				Whiting	17	128	14	..	..	..	..	..	..	..	..	159	..	..	159	..	..
				Pout	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Thornback	1	6	7	2	3	..	..	..	..	..	..	19	..	..	19	..	..
XXIV 2	South of Leman Ground.	18 c.s.	6 p.m.	Plaice	..	..	12	3	3	..	..	..	..	..	..	18	[6½	14]	18	[6½	14]
O 124	53° 18′ N. 2° 48½′ E.	18 f.d.s.	6 hrs.	Sole	..	..	5	5	2	..	..	..	..	..	..	12	..	..	12	..	..
				Turbot	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	..	..	..	..	2	..	..	..	2	..	..	2	..	..
				Whiting	4	133	17	1	..	..	..	..	..	..	..	155	23	50½	310	46	101
				Thornback	..	2	6	5	..	1	..	..	..	..	..	14	..	..	14	..	..
XXIV 3	S.E. part of Leman Ground.	18-16 f.d.s. ..	Midnight,	Plaice	..	1	141	46	5	..	..	..	..	..	..	193	[50¼	110½]	193	[50¼	110½]
O 125	53° 26½ N., 2° 44½′ E.	15 f.d.s.	7 hrs.	Sole	..	..	6	3	..	..	..	..	..	..	..	9	..	..	9	..	..
				Cod	..	..	..	..	..	..	..	..	1	2	3	6	..	..	6	..	..
				Whiting	6	147	13	2	..	..	..	..	..	..	..	168	23	50½	504	72	158½
XXIV 4	Leman	15 f.d.s. ..	7.45 a.m.	Plaice	..	..	16	15	1	1	..	..	..	..	..	33	[12¼	27]	33	[12¼	27]
O 126	53° 27½′ N., 2° 32′ E.	18 f.g.s.	2 hrs.	Dab	..	226	9	..	..	..	..	..	..	..	..	235	10	22	235	10	22
				Whiting	..	..	..	..	..	..	..	..	..	..	..	..	..	..	170	24	53
XXIV 5	New Zealand	20 f.d.s. ..	4 p.m.	Plaice	..	..	31	14	12	1	..	..	..	..	..	58	28	61½	58	28	61½
O 127	53° 35½′ N., 2° 47½′ E.	20	7 hrs.	Dab	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
	Net badly torn by the swell and star fish when getting it on board [no fish escaped].	21 f.d.s. & m.		Lemon Dab	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sole	..	..	4	4	1	..	..	..	..	..	..	9	..	..	9	..	..
				Turbot	..	..	..	2	..	2	..	..	..	..	..	4	10	22	4	10	22
				Cod	..	..	3	4	2	6	..	..	..	..	..	15	10	22	15	10	22
				Haddock	..	..	9	80	12	..	1	..	..	..	..	102	60	132	240	135	297
				Whiting	..	..	25	16	4	..	..	..	..	..	..	45	14	31	45	14	31
XXIV 6	Off Terschelling Light-vessel.	13 f.s.	6 p.m.	Plaice	..	2	26	18	8	2	1	..	..	..	..	57	28	61½	57	28	61½
O 128	53° 31′ N., 4° 46′ E.	13 f.s.	5 hrs.	Sole	..	..	16	6	3	..	..	..	..	..	..	25	..	..	25	..	..
				Turbot	..	..	1	7	..	..	2	..	..	..	..	10	..	..	10	..	..
				Brill	..	..	1	3	..	..	..	..	..	..	..	4	..	..	4	..	..
				Cod	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19	116	255
				Whiting	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4 bks.	112	246½
				Thornback	..	..	..	..	..	..	..	..	..	..	..	..	..	..	100	315	693
XXIV 7	Off Terschelling Light-vessel.	13½ f.s.	Midnight,	Plaice	..	..	1	29	3	..	..	..	..	..	..	33	18¼	40	33	18¼	40
O 129	53° 34¾′ N., 4° 50½′ E.	13½ f.s.	5 hrs.	Dab	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sole	..	..	3	5	2	..	..	..	..	..	..	10	..	..	10	..	..
				Turbot	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Brill	..	..	1	1	..	..	..	..	..	..	..	2	..	..	2	..	..
				Cod	..	..	..	1	..	2	7	3	1	2	2	18	..	..	18	..	..
				Haddock	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Whiting	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3 bks.	95	209
				Thornback	..	..	..	..	..	..	..	..	..	..	..	..	..	..	36	..	..
XXIV 8	Off Terschelling Light-vessel.	13½ f.s.	5.30 a.m.	Plaice	..	..	11	14	10	..	2	..	..	..	..	37	25	55	37	25	55
O 130	53° 34¼′ N. 4° 49½′ E.	15½ f.s.	4 hrs. 30 mins.	Lemon Dab	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sole	..	1	6	7	..	..	..	..	..	..	..	14	..	..	14	..	..
				Turbot	..	..	1	5	..	..	..	..	..	..	..	6	..	..	6	..	..
				Brill	..	..	..	1	..	..	..	..	..	..	..	1	68	149½	1	68	149½
				Cod	..	..	..	..	..	..	2	9	3	6	..	20	(Gutted)		20	(Gutted)	

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. / Cm.	0+ / 0+	4+ / 10+	8+ / 20+	12+ / 30+	15¾+ / 40 +	19¾+ / 50 +	23⅝+ / 60 +	27½+ / 70 +	31½+ / 80 +	35½+ / 90 +	39½+ / 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XXIV 8	Off Terschelling Light-vessel—*cont.*	13½ f.s.	5.30 a.m.	Haddock ..	..	..	..	..	..	1	1	..	..	..	..	2	..	..	2	..	..
O 130		15½ f.s	4 hrs. 30 mins.	Whiting ..	..	..	100	33	2	..	..	..	..	..	..	135	28	61½	660	126	277¼
				Red Mullet ..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Thornback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	25	..	..
XXIV 9	Off Terschelling Light-vessel.	15½ f.s.m. ..	10.20 a.m.	Plaice	..	..	15	29	19	1	..	..	..	..	..	64	38	83½	64	38	83½
O 131	53° 38′ N., 4° 51¼′ E.	15½ f.s.	4 hrs. 40 mins.	Sole	..	..	5	8	..	..	..	..	..	..	..	13	5	11	13	5	11
				Turbot	..	..	..	10	1	..	..	..	..	..	..	11	10	22	11	10	22
				Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	1	2	3	10	7	4	1	..	1	29	82	180½	29	82	180½
				Haddock ..	..	..	..	..	..	3	..	..	..	..	..	3	..	..	3	..	..
				Whiting ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	520	115	253
				Twait Shad ..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Thornback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17	37	81½
XXIV 10	Off Terschelling Light-vessel.	15½ f.s	3.30 p.m.	Plaice	..	..	7	23	9	1	..	..	..	..	..	40	23	50½	40	23	50½
O 132	53° 36⅛′ N., 4° 50⅜′ E.	14 f.s	5 hrs.	Dab	..	..	3	..	..	..	..	..	..	..	..	3	..	..	3	..	..
				Sole	..	..	10	6	1	1	..	..	..	..	..	18	..	..	18	..	..
				Turbot	..	..	3	2	..	..	..	..	..	..	..	5	..	..	5	..	..
				Brill	..	..	1	1	2	..	..	..	..	..	..	4	..	..	4	..	..
				Cod	..	..	..	..	1	10	7	4	4	..	7	33	150	330	33	150	330
				Haddock ..	..	..	..	2	1	2	..	..	..	..	..	5	..	..	5	..	..
				Whiting ..	..	..	133	27	1	..	..	..	..	..	..	161	28	61½	450	87	191½
				Thornback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	48	..	..
XXIV 11	Off Terschelling Light-vessel.→	14 f.s.	9 p.m.	Plaice	..	..	14	25	5	1	..	..	..	..	..	45	25	55	45	25	55
O 133	53° 31′ N., 4° 46½′ E.	14 f.s.	5 hrs.	Sole	..	..	2	6	2	..	..	..	..	..	..	10	..	..	10	..	.
				Turbot	..	..	2	2	..	..	..	..	..	..	..	4	..	..	4	..	..
				Brill	..	..	2	..	..	..	..	..	..	..	..	2	..	..	2	..	..
				Cod	..	..	..	..	..	3	3	2	2	2	..	12	65	143	12	65	143
				Whiting	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1000	155	341
				Thornback	..	..	..	..	..	..	..	..	..	..	..	..	..	..	62	..	..
XXIV 12	Off Terschelling Light-vessel.	14 f.s.	2.30 a.m.	Plaice	..	..	3	23	10	8	..	..	..	..	..	44	17	37½	44	17	37½
O 134	53° 35½′ N., 4° 48½′ E.	14 f.s.	5 hrs. 30 mins.	Dab	..	..	..	3	..	..	..	..	..	..	..	3	..	..	3	..	..
				Sole	..	..	..	16	8	..	..	..	..	..	..	24	..	..	24	..	..
				Turbot	..	..	..	2	3	..	..	..	..	..	..	5	..	..	5	..	..
				Cod	..	..	..	..	..	1	1	2	1	1	..	7	33	72½	7	33	72½
				Whiting	..	..	..	..	..	..	..	..	..	..	..	..	..	..	220	38	83½
				Thornback	..	..	..	..	..	..	..	..	..	..	..	..	..	..	26	..	..
XXIV 13	Off Terschelling Light-vessel.	14 f.s.	8.30 a.m.	Plaice	..	..	40	46	4	..	..	..	..	..	..	90	32	70½	90	32	70½
O 135	53° 33⅜′ N., 4° 51¼′ E.	13 f.d.br.s.	5 hrs.	Sole	..	..	2	1	..	..	..	..	..	..	..	3	..	..	3	..	..
				Turbot	..	..	3	4	..	1	1	..	..	..	..	9	..	..	9	..	..
				Brill	..	..	..	2	..	..	..	..	..	..	..	2	..	..	2	..	..
				Cod	..	..	..	..	1	1	..	1	..	..	1	4	20	44	4	20	44
				Whiting	..	5	143	22	..	..	..	..	..	..	..	170	..	..	215	38	83½
				Thornback	..	..	1	4	8	14	3	..	..	..	..	30	83	182½	30	83	182½
XXIV 14	Off Terschelling Light-vessel.	13 f.d.br.s. ..	2 p.m.	Plaice	..	..	9	19	6	1	..	..	..	..	..	35	19	42	35	19	42
O 136	53° 33′ N., 4° 47½′ E.	13 f.d.s	5 hrs.	Dab	..	1	2	..	..	..	..	..	..	..	..	3	..	..	3	..	..
	Had a turn in the fore wing of net.			Sole	..	..	3	2	..	..	..	..	..	..	..	5	..	..	5	..	..
				Turbot	..	..	..	3	..	..	..	..	..	..	..	3	..	..	3	..	..
				Brill	..	..	..	2	..	..	..	..	..	..	..	2	..	..	2	..	..
				Cod	..	..	..	..	..	5	4	3	4	5	..	21	118	259½	21	118	256½
				Haddock	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..
				Whiting	..	2	122	21	..	..	..	..	..	..	..	145	28	61½	595	120	264
				Thornback	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.	Ins. .. / Cm. ..	0+ 0+	4+ 10+	8+ 20+	12+ 30+	15¾+ 40 +	19¾+ 50 +	23⅝+ 60 +	27½+ 70 +	31½+ 80 +	35½+ 90 +	39½+ 100 +	Measured. No.	Measured. Kilo.	Measured. Lbs.	Total Catch. No.	Total Catch. Kilo.	Total Catch. Lbs.
XXIV 15	Off Terschelling Light-vessel.	13 f.d.s. ..	8 p.m.	Plaice	..	..	5	16	13	4	..	..	..	..	..	38	29	64	38	29	64
O 137	53° 34′ N., 4° 48′ E.	15 f.s.	6 hrs.	Sole	..	..	12	15	4	..	..	..	..	..	..	31	11	24	31	11	24
				Turbot	..	..	2	4	1	..	..	..	..	..	..	7	..	..	7	..	..
				Brill	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	..	..	..	..	..	..	..	..	..	..	..	56	276	607¼
				Haddock	..	..	..	..	3	15	13	2	1	..	..	34	73	160½	34	73	160½
				Whiting	..	..	..	..	..	..	..	..	..	..	..	..	..	..	820	180	396
				Thornback	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	..
XXIV 16	Off Terschelling Light-vessel.	15 f.s.	3 a.m.	Plaice	..	..	4	17	16	1	..	..	..	..	..	38	27	59½	38	27	59½
O 138	53° 35½ N., 4° 48½′ E.	16 f.s.	5 hrs.	Sole	..	..	3	12	4	..	..	..	..	..	..	19	11	24	19	11	24
	Belly and net slightly torn.			Turbot	..	..	1	..	..	1	..	..	..	..	..	2	..	..	2	..	..
				Brill	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	1	..	7	1	6	2	1	..	18	82	180½	18	82	180½
				Haddock	..	..	..	65	27	35	12	2	..	..	..	141	177	389½	141	177	389½
				Whiting	..	..	..	..	..	1	..	..	..	..	..	1	..	..	481	106	233¼
XXIV 17	Off Terschelling Light-vessel.	18 f.s.m. ..	9 a.m.	Plaice	..	..	8	15	14	1	..	..	..	..	..	38	25	55	38	25	55
O 139	53° 36¼′ N., 4° 47′ E.	19 s.m.	5 hrs.	Lemon Dab	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sole	..	..	8	9	..	..	..	..	..	..	..	17	..	..	17	..	..
				Turbot	..	..	1	7	1	..	2	..	..	..	..	11	21	46	11	21	46
				Brill	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..
				Cod	..	..	..	1	2	3	19	8	5	2	..	40	159	350	40	159	350
				Haddock	..	..	..	7	5	11	4	..	..	..	..	27	45	99	27	45	99
				Whiting	..	..	..	..	..	..	..	..	..	..	..	..	..	..	600	112	246½
				Thornback	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13	..	..
XXIV 18	Off Terschelling Light-vessel.	19 s.m. ..	2.45 p.m.	Plaice	..	..	6	32	20	1	..	..	..	..	..	59	48	105½	59	48	105½
O 140	53° 39¼′ N., 4° 50′ E.	20 s.m.	5 hrs. 15 mins.	Sole	..	..	7	8	5	..	..	..	..	..	..	20	9	20	20	9	20
				Turbot	..	..	1	..	..	1	..	..	..	..	..	2	..	..	2	..	..
				Cod	..	..	..	4	2	10	13	8	6	3	3	49	211	464	49	211	464
				Haddock	..	..	..	25	8	18	6	..	1	..	..	58	74	163	58	74	163
				Whiting	..	..	..	..	..	..	..	..	..	..	..	..	..	..	560	114	251
XXIV 19	Off Terschelling Light-vessel.	20 s.m. ..	9 p.m.	Plaice	..	..	7	8	11	3	1	..	..	..	..	30	28	61½	30	28	61½
G 141	53° 39¼′ N., 4° 43′ E.	19 s.m.	5 hrs.	Sole	..	..	14	23	4	..	..	..	..	..	..	41	16	35	41	16	35
				Turbot	..	..	..	4	..	..	..	..	..	..	..	..	4	..	..	4	..	..
				Cod	..	..	..	..	..	3	7	1	3	4	..	18	87	191½	18	87	191½
				Haddock	..	..	..	5	5	7	4	1	..	..	..	22	37	81½	22	37	81½
				Whiting	..	..	..	..	..	..	..	..	..	..	..	..	..	..	900	118	259½
XXIV 20	Off Terschelling Light-vessel.	19 s.m. ..	3 a.m.	Plaice	..	..	12	18	13	2	..	..	..	..	..	45	30	66	45	30	66
O 142	53° 35½′ N., 4° 47′ E.	16 f.g.s.	5 hrs.	Dab	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
				Sole	..	..	9	12	..	..	..	..	..	..	..	21	8	17½	21	8	17½
				Turbot	..	..	1	6	..	.	..	..	..	..	..	7	12	26½	7	12	26¼
				Cod	..	..	..	..	..	2	6	2	4	1	1	16	85	187	16	85	187
				Haddock	..	..	..	1	2	3	3	..	..	..	..	9	17	37½	9	17	37½
				Whiting	..	..	..	..	..		..	..	..	..	..	..	..	..	390	..	..
				Thornback	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27	..	..
XXIV 21	Off Terschelling Light-vessel.	16 f.g.s. ..	9 a.m.	Plaice	..	1	19	25	10	..	2	..	..	..	..	57	32	70½	57	32	70½
O 143	53° 34½′ N., 4° 50½′ E.	14 f.g.s.	5 hrs.	Sole	..	..	2	1	1	..	..	..	..	..	..	4	..	..	4	..	..
				Turbot	..	..	3	4	..	..	..	..	..	..	..	7	..	..	7	..	..
				Brill	..	..	..	1	..	..	..	..	.	..	..	1	..	..	1	..	..
				Cod	..	..	..	1	..	8	3	2	1	..	..	15	45	99	15	45	99
				Haddock	..	..	..	..	..	2	..	..	..	..	..	2	..	..	2	..	..
				Whiting	..	..	..	..	..	..	..	..	..	..	..	..	..	..	150	..	..
				Thornback	..	..	..	..	..	..	..	..	..	..	..	..	..	..	120	..	..

Voyage, Station, No. of Haul.	Fishing Ground and Central Position.	Depth (Fms.) and Soil.	Hour Shot and Duration.		Ins. ..	0+	4+	8+	12+	15¾+	19¾+	23⅝+	27½+	31½+	35½+	39½+	Measured.			Total Catch.		
					Cm. ..	0+	10+	20+	30+	40 +	50 +	60 +	70 +	80 +	90 +	100 +	No.	Kilo.	Lbs.	No.	Kilo.	Lbs.
XXIV 22	Off Terschelling Light-vessel.	14	f.g.s.	3 p.m.	Plaice	..	..	7	15	5	2	1	..	..	..	..	30	22	48½	30	22	48½
O 144	53° 36¾′ N., 4° 45¼′ E.	20	s. m.	5 hrs.	Dab	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
		18	s. m.		Sole	..	..	5	2	2	..	..	..	..	..	..	9	4	9	9	4	9
					Turbot	..	..	1	5	..	1	1	..	..	..	..	8	18	39½	8	18	39½
					Brill	..	..	..	2	..	..	..	..	..	..	..	2	..	..	2	..	..
					Cod	..	..	..	1	..	6	9	1	1	3	..	21	73	160½	21	73	160½
					Haddock ..	..	..	..	5	19	12	5	1	..	..	..	42	69	152	42	69	152
					Whiting ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	400	..	..
					Thornback ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17	..	..
XXIV 23	Off Terschelling Light-vessel.	18	s. m. ..	9 p.m.	Plaice	..	..	..	1	2	..	..	..	..	..	..	3	[3	6¼]	3	[3	6¼]
O 145	53° 34½′ N., 4° 45¼′ E.	18	s. m.	5 hrs.	Sole	..	..	3	1	..	..	..	..	..	..	..	4	..	..	4	..	..
					Turbot	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..
					Cod	..	..	..	..	2	..	1	2	..	1	..	6	20	44	6	20	44
					Haddock ..	..	..	..	3	9	9	3	..	..	..	..	24	40	88	24	40	88
XXIV 24	Deep Water of Botney.	20	f.s.	10.30 a.m.	Plaice	..	..	1	3	2	..	..	..	..	..	..	6	[3¾	8]	6	[3¾	8]
B 99	53° 29¾′ N., 3° 2′ E.	27	m.	2 hrs.	Dab	..	3	12	..	..	..	..	..	..	..	..	15	..	..	15	..	..
					Turbot	..	..	..	..	1	..	1	..	..	..	..	2	..	..	2	..	..
					Cod	..	..	..	1	1	1	1	..	..	..	..	4	..	..	4	..	..
					Haddock ..	..	..	..	2	..	..	..	..	..	..	..	2	..	..	2	..	..
					Conger	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	..	..

Chart 1.



Contour Lines.

————	10 metre line.
- - - - - -	20 ,, ,,
.....	40 ,, ,,
— — — —	60 ,, ,,

Equivalent Depths.

1	metre =	0·5	fathom
10	metres =	5·4	fathoms
20	,, =	10·9	,,
40	,, =	21·8	,,
60	,, =	32·8	,,
1	fathom =	1·8	metres
5	fathoms =	9·1	,,
10	,, =	18·2	,,
20	,, =	36·6	,,
30	,, =	55·0	,,

Lights.

Houses ⍋
Vessels ⍋

The position of the light is indicated by the black spot.

South Part of North Sea

Scale 1: 1,200,000

CHART I.

POSITION OF TRAWL HAULS.

The lines represent the tract of the trawl at each of the stations indicated. Dotted lines represent hauls omitted from the Synoptic Table.

O - Otter trawl. B - Beam trawl.

The large hollow Roman numerals indicate the distinctive numbers of the areas.

Months I. - III. - Blue. VII. - IX. - Red.
IV. - VI. - Green. X. - XII. - Violet.

Garstang. Report on Trawling Investigations, 1902-3.

HELIOZINCOGRAPHED AT THE ORDNANCE SURVEY OFFICE, SOUTHAMPTON 1905.

MIDDLE PART OF NORTH SEA

Scale 1:1,500,000

CHART 2.

POSITION OF TRAWL HAULS.

The lines represent the tract of the trawl at each of the stations indicated. Dotted lines represent hauls omitted from the Synoptic Table.

O - Otter trawl. B - Beam trawl.

The large hollow Roman numerals indicate the distinctive numbers of the areas.

Months I. - III. - Blue. VII. - IX. - Red.
IV. - VI. - Green. X. - XII. - Violet.

CONTOUR LINES.

10 METRE LINE
20 " "
40 " "
60 " "
80 " "

LIGHTS.

HOUSES ⚓
VESSELS ⚓

THE POSITION OF THE LIGHT IS INDICATED BY THE BLACK SPOT.

EQUIVALENT DEPTHS.

1	METRE	= 0·5	FATHOM
10	METRES	= 5·4	FATHOMS
20	"	= 10·9	"
40	"	= 21·8	"
60	"	= 32·8	"

1	FATHOM	= 1·8 METRES
5	FATHOMS	= 9·1 "
10	"	= 18·2 "
20	"	= 36·6 "
30	"	= 55 "

Garstang. Report on Trawling Investigations, 1902-3.

HELIOZINCOGRAPHED AT THE ORDNANCE SURVEY OFFICE, SOUTHAMPTON, 1909.