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WEATHER CHARTS AND STORM WARNINGS.

"STORM warnings may be considered as the most immediate practical application of weather knowledge." Mr. ROBERT H. SCOTT, Director of the Meteorological Department, so commences the eighth chapter of the admirable work to which he has given the title we have placed at the head of this page, and we cannot more fitly introduce the subject than by quoting them, because they express so well a fact which it is most desirable to impress on the public, viz., that storm warnings are not the outcome of fanciful theories or of heaven-sent prophesying powers, but of knowledge—knowledge resulting from careful study and laboriously gathered information by many persons in many lands—knowledge of the kind which can be added to for the general good by a vast number of persons who are so placed by circumstances that, by a little trouble and care, they might continually assist in this great and useful work, but who at present fail to do so.

Mr. SCOTT'S work, while containing most interesting and valuable information for those well acquainted with the subject, also seems to aim at giving to those who have not had their attention particularly drawn to it clear views of the principles on which the different meteorological offices act, how the information necessary is culled, how far it is short of what might be furnished were a more universal interest displayed, and what grounds there are for hoping for increased accuracy in the warnings in the future.

Mainly for the information of many persons at our Life-boat stations personally concerned in the question, who may suffer any day for want of Storm Warnings, and who also have in many cases to give most useful information to the Meteorological Office, we propose to lay before our readers a very brief synopsis of some parts of Mr. SCOTT'S work.

It will best suit our purpose to commence with the eighth chapter of his book, in which he has briefly traced the rise into an acknowledged science of the study of meteorology, and as its outcome the principle of issuing storm warnings, or, in other words, of prognosticating the approach of storms. The first suggestion of the electric telegraph as a method of conveying intelligence of storms is due to Mr. REDFIELD, an American, who shares with Gen. REID the honour of having reduced the "Law of Storms" to a science. REDFIELD'S paper was published in 1847. Certain progress was made by the United States Government up to 1860, when their operations were closed for the time by the civil war.

In 1855 an organisation was created by the French Government, a great impetus having been given to the study of the subject by the celebrated Balaclava storm of November 14th, 1854, of which it was evident effectual notice might have been

given had its earlier progress been noted, and warnings telegraphed to the more southern parts of Europe.

In England the idea of a general European organisation was broached at the meeting of the British Association in 1859, and public attention was arrested by the loss of the *Royal Charter* a month later, from the fact that it seemed probable that had the information of the approaching storm (expected by many meteorologists) been telegraphed to headlands on the coast, the *Royal Charter* might have seen some warning and escaped.

In 1861 our Meteorological Department issued its first warnings, on principles devised by the late Admiral FitzRoy. Since then many improvements have been effected, and vast additions have been made to our knowledge, but the leading features of FitzRoy's system characterise that in use to-day, though his plan of issuing forecasts three days in advance had to be abandoned, not being sufficiently justified by results. It is to be remarked, while on this part of the subject, that this country labours under considerable disadvantages for obtaining information of the approach of storms to the British Islands. The majority of storms in these latitudes come from the westward; in such cases the Signal Office at Washington, for instance, has the whole of America westward of it from which to receive information before the storm reaches the thriving cities and crowded harbours of the east coast, but telegrams sent from America to this country have proved of little value to us, because storms commonly change their character, or die out before they reach Europe, and our storms generally come to us from a more northerly direction. Again, while we may have had no direct warning of a gale approaching the Irish coast, the moment the tempest strikes the most westerly of our stations, all European coasts east of us know what to expect. Thus Hamburg, for instance, which lies about south-east of our most advanced stations on the north-west of Ireland and Scotland, has been kept so well advised by our Meteorological Department since 1867, that 72 per cent. of the warnings sent have been justified by gales following them, and in *three cases only* the storms have arrived before the telegrams. In fact, the stations in the British Islands which report to our office in London form a complete chain of sentinels for the North Sea and its eastern coasts in the direction of the approach of the great majority of storms, while they are too close at home to give nearly so effectual a warning to our own shores. It is manifest from this that one of our requirements is a chain of stations away to the west; but unfortunately there is no land in that direction till we come to Labrador, and the proposal of telegraph wires to the Azores, to the Faroe Islands, or to ships moored off in mid-Atlantic is at present, at least, impracticable.

Mr. SCOTT describes the present practice of Storm Warnings as a moderate advance on M. Le Verrier's plan proposed in 1860. In a letter to Sir George Airy in that year, he says: "The ultimate result of the organisation which we are establishing should be to announce a storm as soon as it appears at any point in Europe, to follow it on its course by means of the telegraph, and to give timely notice of it to the coasts which it may reach." Bearing in mind what has been said as to the course of the majority of storms, it will be seen by a reference to the map of the coasts of Western Europe, attached hereto, and on which are indicated the principal meteorological stations in telegraphic communication with each other, at what a disadvantage this country stands in respect of receiving warnings from the west, and what a valuable outpost it is to the rest of Europe. There are certain conditions, however, by which at least meteorologists themselves are placed on their guard, and on which, to a limited extent, they are able to act, as though they had certain information of the approach of the invader, and by the aid of the great stores of information of the ways and doings of storms now amassed make not

To accompany the Lifeboat Journal.

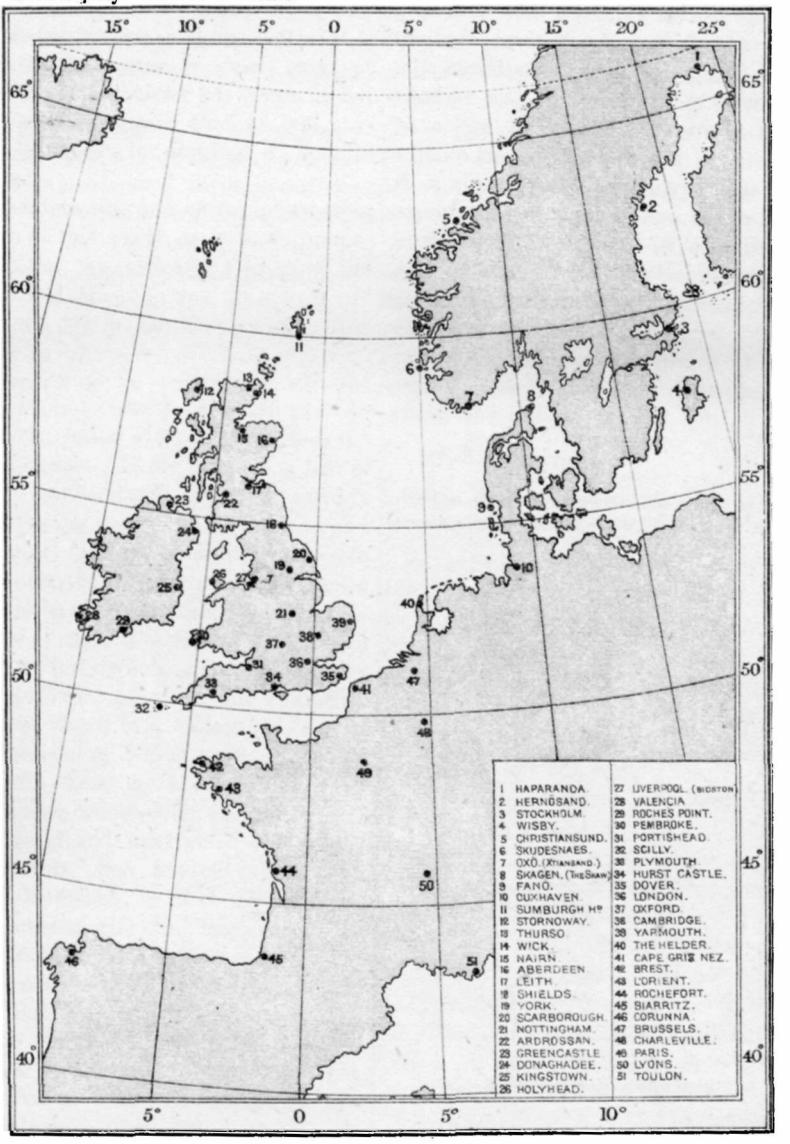


CHART SHEWING THE POSITION OF THE TELEGRAPHIC REPORTING STATIONS JANUARY 1876.

only shrewd forecasts, but feel themselves justified in issuing warnings to the coasts; a course adopted, however, with extreme caution, for to use Mr. SCOTT'S words: "These circumstances, and other premonitions of a similar nature, are not of very frequent occurrence, and in general it is not until the storm is quite close at hand, and the barometer has begun to fall briskly at the outposts, that we feel ourselves justified in issuing a definite warning."

Such interesting and useful information is given at this point, as to these premonitions, that we endeavour to give the substance of it.

Easterly winds on the *northern* side of westerly winds are a nearly sure sign of the approach of southerly winds, the precursors of a cyclonic area, and perhaps of a storm, which will probably affect the whole kingdom. If, for instance, a belt of country—say Scotland—reports an easterly wind sweeping over it, while England and the Channel feels the wind at West, south winds, and then a storm, will be pretty certain to be close at hand; while the appearance of easterly winds on the *southern* side of westerly winds is not followed by any disturbance of a cyclonic character. Of course there is a certain process of sound reasoning which arrives at this rule apart from mere accumulation of facts, but we cannot enter on that here.

"A rapid and unexpected rise of the barometer is often the precursor of a coming depression, so that whenever we see a sudden rise we may expect an equally sudden fall, and must be on the look out for the slightest tendency to give way." But it is also to be remembered, that the actual fall of the mercury on our own coasts must always be taken in connection with the change at distant stations. Thus, in a remarkable storm, which occurred on the 29th November, 1874, the warning was issued the day previously, not merely because of the fall of the barometer at our western stations, but because, at the same time, an increase in the rise of the barometer was occurring at Rochfort, while in the south of France the readings were seven-tenths of an inch higher than in the south of Ireland, and this showed that "pressure was banking up to the southward, and gradients were becoming steeper along the Channel coasts." But if the barometer falls simultaneously at our south-western stations and in the south of France, we have less to fear from westerly winds; while a rise of pressure over France, when it is already relatively high, leads to the expectation of a blow from the westward in this country; and so by a similar process of reasoning and observation, to a certain extent, we can anticipate bad weather from other quarters.

It will be of some interest if we reproduce the exact description of the particular storm in question.

Mr. SCOTT says:—

"The earliest unmistakable signs of its approach (fig. 1) were at 8 A.M., November 28, when

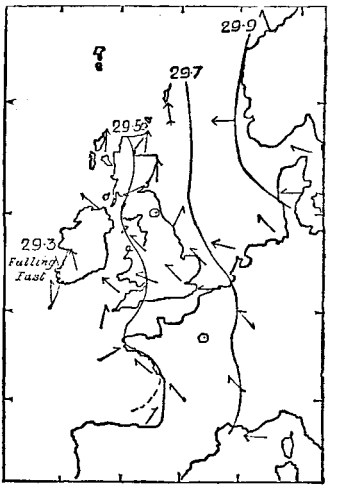


Fig. 1.—November 28, 1874.
8 A.M. Approaching depression.

a rapid fall of the barometer at Valencia, with the southerly wind, and the course of the isobar of 29·3 inches, show that there must be an area of lower readings at sea, outside the coast.

"Over the greater part of England the direction of the wind is south-easterly; a very general phenomenon on the approach of a serious storm, owing apparently to the in-draught of air towards the region of diminished pressure.

"The next chart, for 6 P.M. on the same day (fig. 2), shows the central isobar (of 29·0 inches)

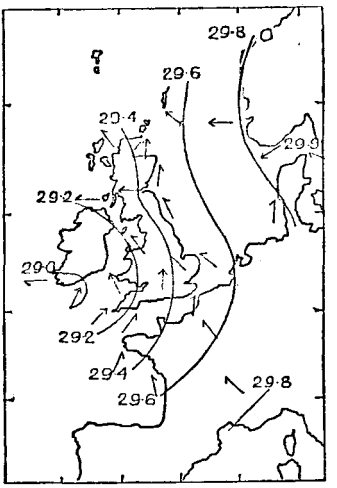


Fig. 2.—November 28, 1874.
6 P.M. Depression advancing.

over the south of Ireland, while the S.E. winds over England have veered to S.W., and the isobars, previously running nearly north and south, show a marked curvature. Even in Norway pressure has given way, the isobar of 29·8 inches having taken the place of that of 29·9 inches.

"During the night the storm made rapid progress, and at 8 A.M. on the 29th (fig. 3) we have the

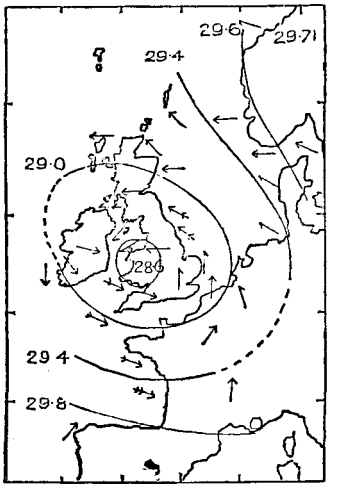


Fig. 3.—November 29, 1874.
8 A.M. Centre over Wales.

centre of the storm lying near Holyhead, and the influence of the depression extending over the whole of western Europe."

If now we compare Figs. 1 and 2, we see that the curve of 29·5 inches passed along the west coast of France at 8 A.M. on the 28th, while at 6 P.M. there had been a rise of a tenth of an inch at Rochefort. At the same time the reading at Valencia had fallen 0·3 inch, and accordingly the total difference between these two stations had increased about 0·4 inch.

Another important sign is the gradual in-draught of the air towards what will be the centre of the coming revolving tempest. For instance, previous to the arrival of a cyclone on the west coast of Ireland, the wind is frequently south-east along the west coast of France, at a time when, as yet, the barometer gives no indications.

Disturbances of the sea, "ground-swells" and the like, are unreliable, although, as most of us know, set great store by on the part of old fishermen. The fact is that unusual disturbances of the sea on our coasts are caused by storms blowing far off at sea, but only when the direction of the wind impels waves *towards* us; but it may well happen—does happen frequently—that though the centre of the storm is marching steadily towards us, the particular side of the cyclone nearest to us is blowing the waves from us, hence the full blast of the storm may reach us without any premonition on the part of the sea. In other cases the wind blows the disturbed sea before it, and gives warning; again, it commonly happens that a great storm in the distance drives a heavy swell towards our shores, while nothing of the wind itself ever reaches us.

Temperature of the air, on the other hand, is an invaluable aid, though the variations of the thermometer have not yet been subjected to strict rules in the manner the barometer has; but it is known that great variations of temperature at adjacent stations are an indication of serious disturbance. On the 13th November, 1875, for instance, at 8 A.M., the thermometer at Scilly stood at 57°, and at Wick, in the north of Scotland, at 21°. On the following day, the 14th, a

heavy gale, accompanied by a high tide and extensive inundations on the south coast, and the banks of the Thames, caused great destruction.

There are other signs and other processes of reasoning; but enough has been said in this place to indicate, howsoever roughly, the kind of aid brought into play by the meteorologist, independently of, or even in the absence of, direct information of the approach of the storm.

The first chapter of "Weather Charts and Storm Warnings" is devoted to a clear and elaborate explanation of the meanings of the different signs and expressions of the daily Weather Report officially issued, and which, of course, we have no space to copy here. But one remark is well worthy of the attention of seafaring and coast people, in the habit of remarking and reporting on the weather. The office in London, in lack of finding suitable reporters, is commonly obliged to employ persons employed in indoor occupations to report to it. "It is obvious," says Mr. SCOTT, "that such a weather report as can be given by a clerk who simply runs out to look at the sky, just before filling up his despatch, cannot be of as much value as that of a man who has been in the open air watching the weather for an hour or so, or even for the better part of the day." Here is a case in which our sea-coast population, from among their numbers, could surely give the necessary aid if their attention was called to the necessity. Another defect felt is the infrequency of the reports, our office only being able to afford to pay for one telegram daily from most of its stations, while that of Washington, for instance, receives three daily from each station. This is a matter of funds, and depends on the Government.

On Sunday, again, information is neither received, nor warnings sent, the branch telegraph offices being closed for most of the day. We are glad to learn, however, that since the beginning of December a Sunday service of weather telegrams and of warnings has been organised. It is simply a financial question as to whether or not this can be continued after the end of March next. Here again all depends on the Government.

Mr. SCOTT commences his chapter on winds with remarks on that one which, according to the popular adage, is "good neither for man nor beast."

We are reminded that, however disagreeable we may find the east wind in this country, this is not a universal law; for if we travel on the same parallel of latitude eastward to the Sea of Ochotsk, or westward to Labrador, we find in those regions the cold, bitter wind comes from the north-west, and the warmest from the south-east, the extreme coldness of the wind in either case being caused by its passage over large tracts of country barren, dry, and frozen, where the mean temperature is lowest. Thus *our* cold east wind in winter flows over Northern Russia, that of Labrador comes from the north-west and the vast frozen regions of the Hudson's Bay territory, and so on. Wind is cold and dry coming from a cold region, warm and moist from a warm one.

It has been commonly said of late years that all cold winds flow from the Poles to the Equator, and become the Trade winds as they approach the tropics, while warm winds flow from the Equator to the Poles, and become the Anti-trades; and although a body of air can hardly be proved to flow the whole way from the Equator to the Poles, or the reverse, it is a fact that over extensive areas "the wind does maintain a constant direction for a considerable period of time." The phenomena of the trade winds and monsoons are well known; but also over large tracts of Europe and the North Atlantic in these latitudes the wind sometimes blows from the east or the west for weeks together, and these great channels or streams of wind flow in opposite directions side by side. "The disturbances which cause our storms appear to occur along the debatable regions between two such currents, and when the currents change their beds, or the lines of

demarcation between them alter their positions, the storms and disturbances move with them."

We have thus the idea presented to us of two great streams passing east and west, with the border line between them from time to time altering its latitude: further, we are informed that the direction and velocity of the air are regulated by the distribution of atmospherical pressure at the surface of the earth, and that pressure is indicated by the barometer. A principle which lies at the foundation of modern weather knowledge is here enunciated. It is called Buys Ballot's law:—

Stand with your back to the wind, and the barometer will be lower on your left hand than on your right.

In the southern hemisphere the words left and right must be transposed. This law is the extension to all cases of wind motion of the law of storms first announced by REDFIELD and REID for the hurricanes of the West Indies and elsewhere.

The best idea we can gain for practical purposes, regarding the winds which pass over the British Islands, is to suppose that "the air over the Atlantic Ocean, north of 40°, is constantly flowing from west to east like a gigantic river. If such a river be flowing rapidly, we often see on its surface small waves, each with its own eddies and circulations, which are carried on with the stream. If we could look at the upper surface of the atmosphere we should see much the same sort of conditions, except that what corresponds to the hollow of the wave would be a patch of defective pressure, while that which corresponds to the crest of the wave would be an area of excessive pressure."

Air is a gas, and is more mobile therefore than water, so that, wherever there is pressure from the atmosphere being piled up, there is an effort to resume perfect equilibrium; that effort causes winds and storms. Pressure or weight of air affects the barometer as we have seen, and here we have the connection between the barometer and the tempest.

Probably the most interesting chapter in the book is that on *gradients*. The word is borrowed from the engineers, who, in measuring an incline, use that word; if a slope rises regularly, for instance, 1 foot in height for every 60 in length, it is called a gradient of 1 in 60. The meteorologists take a gradient referred to a unit of the barometrical scale and miles of horizontal distance. The gradients of our office are expressed in hundreths of an inch of mercury —for every 60 nautical miles of distance. If the difference of gradient is very great between two stations, there is reason to expect, in some shape or another, an immediate effort to recover the equilibrium: the steeper the gradient the more violent the wind that will ensue; as an instance of his meaning, Mr. SCOTT says, "The distance from Penzance to Brest is 113 miles, a gradient of 7 represents a total difference of barometers at the two stations of 0·13 inch, so that whenever a westerly gale is blowing at the entrance of the Channel, bearing in mind Buys Ballot's law, we may expect the barometer at Penzance to be at least 0·13 inch lower than at Brest; but the lower barometer will be shown at Brest when the wind is from the east. The steeper the gradient the stronger the wind. Instances are given of known storms illustrative of this principle; and, furthermore, it is asserted that no serious storm was ever felt in the United Kingdom with less than an absolute difference between two stations of $\frac{1}{2}$ inch of mercury.

Fig. 4, which is a reproduction of Fig. 3 on a large scale, "gives a good example of an area of low pressure, or a 'depression,' or a cyclonic disturbance, for the terms are used almost indiscriminately, developed as fully as it is usual to find them in western Europe.

"The direction and force of the wind are given by arrows, or by a circle if there is a calm.

"The direction is of course shown by the direction in which the arrow is flying.

"The force is indicated by differences in the symbols employed.

"Thus it will be seen that there is a

very heavy gale at Rochefort from W.N.W., a heavy gale at Scarbro' from S.E., a fresh breeze at Aberdeen from E., a light breeze at Brussels from S.S.E., and a calm at Toulon.

"The lowest reading (28·55 inches) is at Holyhead; the highest (30·00 inches) at Corunna.

"The innermost isobar (28·6) embraces almost the whole of Wales. That for 28·8 is oval in shape, and covers nearly all

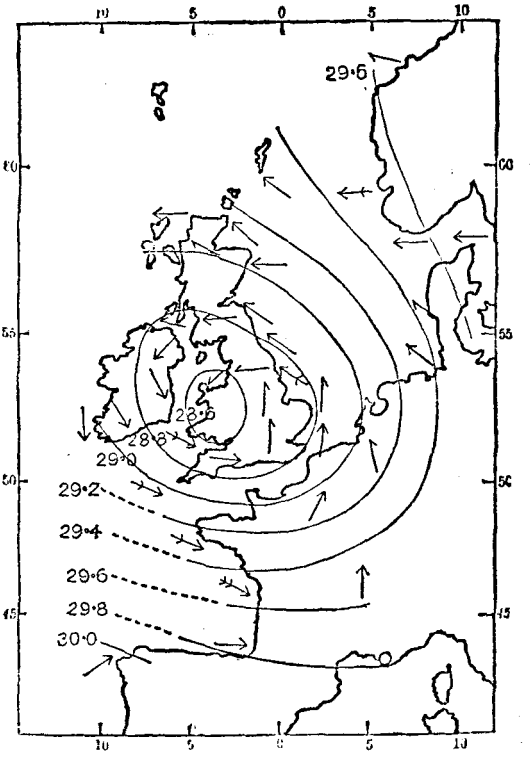


Fig. 4.—Nov. 29, 8 A.M.

England, and the east and north of Ireland. That for 29·0 takes in a little of France and Belgium, and the greater part of Scotland.

"The isobar of 29·2 envelopes the whole of Scotland, but is not carried out over the Atlantic beyond the Orkneys on one side and the coast of Brittany on the other, and it is only dotted in, as being merely inferred, in the absence of observations over the Bay of Biscay.

"If we now turn to the wind arrows we shall find that they show a circulation round the centre of depression.

"In fact, the wind sweeps round the central area of depression, *against watch hands*, and this is the invariable law in all cases of cyclonic disturbances in the Northern Hemisphere. The wind moves in a direction opposite to that of the hands of a watch, and its course is nearly parallel to the isobars."

No very precise relation has yet been established between the steepness of the gradient, and the force of the wind; but a gradient 0·07 inch of the barometer per 60 miles "indicates the probability of as much wind as an ordinary yachtsman would like to meet."

One of the expressions in common use, and appearing in the daily weather reports, is *isobar*, it is derived from two Greek words, meaning equal weight. *An isobar is a line passing through those places where the barometrical pressure is equal.*

The readings of barometers from different stations being different, a chart is constructed as soon as the telegrams are received, and lines drawn through the various places where the barometers read alike; the result is a series of curves extending round one another with a common centre; that centre may show the highest barometer or the lowest, but the circles which environ it show the barometer increasing or decreasing in height in regular succession, though with the more or less steep *gradients* of which we have already spoken. If the centre shows the lowest barometer, the least atmospheric pressure is there, and we have before us evidence of a cyclonic system in the course of being set up; and if the centre readings are high, while the barometer reads lower as the circles widen, we have an anticyclonic. The cyclone generally means storm in a greater or less degree, and the anticyclone means lighter winds and fair weather. In the centre of either system it is calm.

While on the subject of barometers, we notice that the old notion that it was possible to place opposite certain heights of the barometer certain types of weather may be considered obsolete, and though it may often happen with a high barometer the weather is fine, and with a low barometer the reverse is experienced, they have no necessarily correlative bearing on each other. It is true that there is more chance of a strong wind when the barometer is low than when it is high, but this arises from the circumstance that "*cyclonic* areas are usually much smaller than anticyclonic, so that when the barometer is low there is a greater probability of a *steep gradient*, from adjacent higher readings in the neighbourhood causing high winds, than when the barometer is high." But it sometimes happens that the barometer will remain below 29 inches, opposite which we find the words "stormy" printed, for two or more days, and yet no gale follows; the mere height of the barometer, therefore, or the words regarding the weather printed on the scale, taken by themselves, are of no value, as indications of the coming weather at the station where the observations are made.

There is one subject we must briefly allude to, which is fully gone into in one of the earlier chapters of the work we are quoting from—the *veering* and *backing* of the wind. The wind is commonly said to *veer* when it changes from left to right with the sun, blowing first at S.E., for instance, then at S.W., then at N.W. If it changes in the reverse direction, *e.g.* from S.W. to S.E., it is said to *back*. Whether a wind *backs* or *veers* depends on the motion of the systems of circulation to which the wind belongs. The wind *veers* when the area of depression, or centre of the cyclone, passes (on its course from W. to E.) north of the observer, but it *backs* if that centre passes to the south of him; and here, again, the barometer, acting before the actual change of wind, affords hints as to the probable new direction of the storm.

Probably one of the most interesting topics in connection with this subject is the *motion of storms*. On this point all meteorologists are not agreed—that is to say, there is a certain variation in theory as to what the causes of motion are. Certain facts, however, are admitted on all sides. Storms do pass onward over the earth's surface at the same time that the wind is whirling round their centres, and this much appears to have been recognised in America so early as 1747. The direction of this "march of the storm" varies in different parts of the world. On the east coast of the United States it is from S.W. to N.E.; the West Indian hurricanes travel from E.S.E. to W.N.W.; in the Indian Ocean the hurricanes travel first from E.N.E. to W.S.W., but both the West Indian and Indian Ocean hurricanes eventually turn off at a sharp angle and advance to the E. In the British Islands the path of the storm may be in any direction, but as a general rule it is from W. to E.; from E. to W. is very rare indeed. The rate of

advance of a storm is of the highest importance to ascertain as soon as possible, but this can only be ascertained by telegraphic reports from stations it has actually reached. All storms vary in rate, and the speed at which they advance on a given course is no criterion of the rate at which the air whirls round their centres. Some cyclones which have advanced the most slowly have been among the fiercest. The ordinary rate of travelling of a West Indian hurricane is from 10 to 15 or 20 miles a day at first, and subsequently it moves forward faster. But in the British Islands, storms have travelled at the rate of 50 to 70 miles an hour; and this, again, adds to the difficulties of our Meteorological Department in sending timely warning. The course of the storm is sometimes affected in a very marked manner by the contour of the country it approaches. Sometimes a storm which has advanced on a steady course across the greater part of the Atlantic, on striking the high-cliffed coast of Kerry, has put about, as it were, and after standing out to sea, stood away N. till finding the opening of Donegal Bay, has crossed Ireland from Ballyshannon to Dundalk, and off into the Irish Sea, where it sometimes rests awhile before passing on to the E. Professor JOHN PURSER gives as a simile the course of smoke-rings, which we may observe, when drifting before a current of air, turned out of their course by their approach to some projection with which they do not actually come in contact.

When a chart of a large area is examined it is found that the cyclones have frequently a tendency to travel round the anticyclones, and although this motion is not easy to follow out over small areas, it is "from this mutual action of the areas of high and low pressure on each other that we gain some notion of the coasts which are likely to be visited by a storm, of the direction which that storm will take, and of the quarter whence the wind in that storm will blow the hardest."

One of the later chapters of Mr. SCOTT'S book gives us a short account of the different theories advocated by certain leading meteorologists of different nations as to the "origin and motion of storms," which we recommend to the perusal of those who are able to procure the book itself; want of space prevents our following the subject farther; our effort in this paper has been to widen if possible the interest in, and to incite to the intelligent study of, a science of daily increasing importance, and we have selected from Mr. SCOTT'S work certain leading passages which we think cannot be uninteresting to those of our readers who have not the leisure to study solid works.

ACCIDENTS TO LIFE-BOATS.

A RECENT accident to one of our English fleet of Life-boats has once more enlisted the sympathies of the British people, and called forth their admiration of the humanity, courage, and endurance displayed by our sea-coast boatmen in their endeavours to save the lives of others. To-day it is an English Life-boat which has upset, and three of its brave crew have perished; but a few months since an Irish Life-boat capsized, with the loss of one of its crew, and two years previously a similar accident occurred to one on the coast of Scotland. Thus each section of our country shares the danger of this noble work, each provides its quota of the widow's wail and the orphan's tears, and to each belongs the glory and the honour won at duty's call by these martyrs to the storm.

The calamity to which we have now especially to refer has happened to the crew of one of the Life-boats stationed by the NATIONAL LIFE-BOAT INSTITUTION at Whitby, the well-known and picturesque watering-place on the Yorkshire coast. We will briefly relate the details of the unfortunate incident.

At about one o'clock on the night of the 9th January, the schooner *Agenoria* was seen approaching the harbour of Whitby, but as a very heavy surf was breaking off its entrance at the time, whilst there was not sufficient wind to secure the steady management of the vessel, the harbour-master, knowing the great danger to which she would be subjected, endeavoured by signals to warn those on board her from attempting to enter.

Her master, however, being a Whitby man, and acquainted with the port, persevered in the attempt, and when close to its entrance the vessel was swept out of sight by the sea, and subsequently went ashore north of the harbour. In the meantime, as soon as it appeared probable that the schooner would miss the harbour's mouth, the life-boatmen, who were on the alert, manned the smaller of their two Life-boats, and launched through the heavy surf from the beach on the north side of the harbour. Having first rowed outside the broken water, they bore up to where they supposed the vessel would be, first taking the precaution to throw out their "drogue," a strong canvas conical-shaped bag, which, being towed astern, will generally hold back the stern of the boat to seaward, and thus prevent her broaching-to and turning broadside to the waves. Nevertheless, after several heavy seas breaking over the stern, one still heavier completely overwhelmed the boat, and driving the lee bow under water she rolled over, throwing out all her crew except one man, who had his legs entangled in some of the ropes. The boat speedily righted again, when six men regained and were enabled to get into her; one was carried to the shore, and three cork life-belts with their strings broken were washed to it by the sea, and those who wore them were not again seen; nor were any of their bodies recovered from the sea until that of one, JOHN THOMPSON, was washed ashore about 2½ miles north of the harbour on the morning of the 13th.

Whilst this tragedy was being enacted, the crew of the *Agenoria* were being rescued by the coastguard with their rocket apparatus, by which means all of their lives were saved. As the event proved, it would have been well if the work had been left to be done by that apparatus, which was the more suitable means for effecting it; but on such occasions the zeal and anxiety of the life-boatmen cannot always be restrained—they know not what may happen, into what position the endangered craft may be driven, or whether or not the apparatus may be available, whilst they may be only too ready to show their mettle, and not unfrequently are urged on, even against their better judgment, by thoughtless and excited bystanders on the shore, unacquainted with the difficulty and danger of the service, and who, in the event of failure, are sometimes only too ready to blame and upbraid as cowards braver men than themselves. In truth, the moral courage to act in accordance with his own judgment, and resist the importunity, and perhaps upbraidings, of others, is sometimes even more requisite in the coxswain of a Life-boat than the physical courage to face the danger of the stormiest sea.

The names of the poor men who perished on this occasion were SAMUEL LACEY, coxswain, JOHN THOMPSON, and RICHARD GATENBY. All were married men, leaving widows and children to bewail their loss. Happily in this country these poor creatures, thus deprived of their bread-winners, are, in a pecuniary sense, invariably well provided for by public contributions headed by a liberal grant from the funds of the NATIONAL LIFE-BOAT INSTITUTION.

Some important reflections are naturally suggested by the occasional occurrence of these sad disasters. Foremost amongst them is the thought—Is it possible to provide boats or vessels of any description which can be taken with impunity into any sea—which, in fact, cannot be upset? We unhesitatingly reply that it is not. Every description of Life-boat hitherto in use has been upset; and so great is the magnitude and force of some broken waves,

that it is certain that no boats could be exposed to them without being thrown over, or completely overwhelmed, and their crews washed out of them. Even in a comparatively moderate surf it is no uncommon thing for a single broken wave to carry four tons of water into a Life-boat, knocking down the men within her and sometimes washing them out of her, breaking their oars, or wrenching them from their grasp, and carrying away the strong rope laniards by which they are held, as if they were but threads. A second reflection necessarily follows: Are our life-boatmen—and especially those in the employ of the NATIONAL LIFE-BOAT INSTITUTION, to which important Society more than nine-tenths of our coast Life-boats now belong—provided with those of the best and safest description that are known? Are they supplied with the most efficient life-belts? and are their boats equipped with every article that can conduce to their efficacy and safety? To these questions we confidently reply in the affirmative. The NATIONAL LIFE-BOAT INSTITUTION spares no trouble and no expense to meet all these *desiderata* so far as human means can avail; and we have no reason to doubt that the few other bodies which possess Life-boat establishments—such as the Liverpool Harbour Board, the Shields Life-boat Association, and the Harbour Board at Aberdeen—are equally anxious to maintain the efficiency of their several Life-boats, and provide for the safety of their crews.

It would not, however, be sufficient alone to provide the best and safest machinery for the performance of the hazardous work of life-saving on our coasts; a constant supervision and frequent inspection are manifestly likewise indispensable to secure the permanent efficiency of the same, which is effectually secured by the NATIONAL LIFE-BOAT INSTITUTION through the medium of local managing committees, and an annual inspection by one of the three Naval Inspectors in its permanent employ, and by a quarterly exercise of the life-boatmen in their boats.

And yet, when every care and precaution have been taken that human forethought can suggest, the work of the life-boatman must still too often be one of extreme peril, more especially when, as in this instance, it is undertaken in the night; the effects of seas, winds, and tides being so varied and overpowering as to baffle and defeat the utmost skill, and all the power that limited human strength and endurance can bring to the unequal fight. But hence the credit, hence the honour due to those fearless men who, regardless of the risk, unhesitatingly encounter it, not that riches may be poured into their lap, not that their names may be emblazoned on the roll of fame, but with the sole and noble object of saving a fellow creature's life.

THE NATIONAL LIFE-BOAT INSTITUTION has issued the following circular to each of its Life-boat Stations throughout the United Kingdom, consequent on the accident to which the foregoing article refers:—

EFFICIENCY OF THE LIFE-BELT.

On the occasion of a recent accident to one of the Life-boats of the NATIONAL LIFE-BOAT INSTITUTION three lives were lost, attributable, it is believed, to the breaking of the strings of their life-belts, which were washed ashore immediately after the accident referred to with their strings broken.

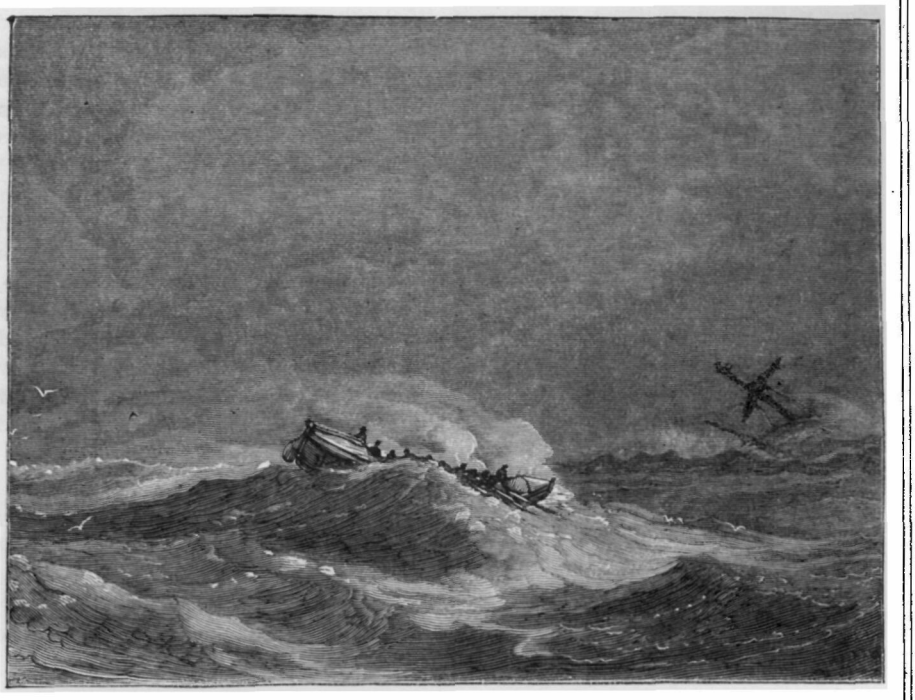
The Committee of the NATIONAL LIFE-BOAT INSTITUTION desire therefore to call the earnest attention of the Local Committees to the subject, and to request that they will severally impress on the coxswains of the Life-boats under their charge the great importance of their frequent examination of the strings of the life-belts, more especially at the termination of each summer, in readiness for the coming winter's use.

Whenever a string has the slightest appearance of being much worn, or of having suffered injury from damp, it should at once be replaced by one of the spare new ones with which the Life-boat Stations are always supplied, being careful to sew on the new string in the strongest manner.

The Committee trust that every coxswain will bear in mind the great responsibility that he incurs in this respect, as the life of one of his crew, in the event of an accident happening to his Life-boat, might at any time be sacrificed through the neglect to remove damaged or weakly strings.

(By Order.)

SERVICES OF THE LIFE-BOATS OF THE NATIONAL LIFE-BOAT INSTITUTION FROM THE 1ST OCT. TO THE 31ST DEC., 1876.



DOUGLAS, ISLE OF MAN.—On the night of Sunday the 1st October, 1876, the No. 2 Life-boat, *John Turner-Turner*, rescued the crew of the brig *Mary Ann*, of Whitehaven, and 4 boatmen, being 10 in all, from that vessel, which had drifted on the Pollock rocks, off Douglas harbour.

HARTLEPOOL.—At 10 o'clock on the night of the 1st October, the No. 1 Life-boat, *Charles Mather*, gallantly rescued, in a heavy surf, 3 men, being part of the crew of the barque *Auffredy*, of Sunderland, which had driven ashore 3½ miles north of Hartlepool. The rest of the crew, 6 in number, had left the vessel in their own boat before she went ashore. In two hours after the crew were taken off, the ship became a total wreck and went to pieces.

IRVINE.—On the 6th October the schooner *Lady Mary*, of Irvine, went ashore near the entrance of that harbour, in a strong south-westerly gale, and hoisting signals of distress, the Life-boat, the *Isabella Frew*, proceeded to her through a heavy sea, and landed her crew, consisting of 4 men.

STONEHAVEN—On the 19th October the Life-boat *Star*, stationed here, took off the crew of 4 men of the Prussian schooner *Katerina*, which had anchored in a dangerous position close to the rocks off the port.

CAISTER.—On the 4th November the small Life-boat, the *Godsend*, was called off to the aid of the fishing-smack *Phœbe*, of Yarmouth, which had got on the "Cockle" Sand. On reaching the spot, her hull was already under water, and her crew, 6 in number, were all in the rigging. The sea was breaking heavily over them, but they were all safely hauled through the water by ropes and got into the Life-boat, which then conveyed them to the shore.

DEAL.—On the night of the 11th November, at 10.30 P.M., the Deal Life-boat, the *Van Kook*, was launched through a heavy surf to the aid of the barque *Tonmaur*, of Fowey, which was fast driving

to the shore near that place. With the assistance and skill of the coxswain and crew of the Life-boat, a spring was put on the cable and sail made, and she was got safely off the land and taken into Ramsgate harbour, both the vessel and her crew, 5 in number, being saved through the instrumentality of the Life-boat.

SWANAGE.—On the 11th November the Swanage Life-boat, *Charlotte Mary*, was the means of saving the smack *Aries*, of Cowes. That vessel was dragging her anchors in Swanage Bay, when the Life-boat went to her aid through a heavy sea, and placing four men on board her, they were enabled to slip her cables, make sail, and run her into shoal water. It was blowing a gale from E.S.E. at the time.

BLYTH.—On November 11th the brig *Camilla*, of Portsmouth, parted her anchors and drove on shore, in an E.S.E. gale, near Blyth; the Life-boat *Salford* was as soon as possible launched, and went to her aid, taking off and safely landing 4 of her crew, one man having been taken off by the rocket apparatus.

CASTLETOWN, ISLE OF MAN.—On the 12th November the schooner *Gleaner*, of Preston, was driven on shore in Castletown Bay, in an easterly gale. The Life-boat *Commercial Traveller* No. 2 was speedily launched, and succeeded in rescuing her crew of 3 men, landing them safely at Castletown.

HORNSEA.—On the 13th November the ketch *Germ*, of Goole, riding at anchor 1 mile south of Hornsea, was seen to hoist signals of distress. The Life-boat *Ellen and Margaret of Settle* was thereon sent off to her aid; but the master declined her services, requiring a tug-steamer only to tow him into a position of safety. The Life-boat therefore returned to the shore; but had not long done so when signals of distress were again hoisted; she was, thereupon, a second time launched, and on reaching the vessel it was found that the latter had leaked so much that the water had risen in her to the cabin floor. The master and his wife and the 2 men forming her crew were then taken off and landed in safety. The vessel soon after parted her cable, and immediately she touched the ground was turned bottom-up; so that had the rescue of those on board been less prompt, they must inevitably have perished.

TYRELLA, COUNTY DOWN.—On the 15th November the French brigantine *Sinai*, of Nantes, drove on outlying rocks off Rathmullan, in Dundrum Bay; one man got into the ship's boat, which soon capsized, but he contrived to hold on to it until driven ashore, where he was rescued by the Coastguard. The Life-boat *Memorial* was quickly launched, and succeeded in saving the remainder of the crew, 6 in number, the vessel afterwards becoming a total wreck.

ABERYSTWITH.—On the 27th November, intelligence being received that 3 young men in a fishing-boat had been blown out to sea and were in great peril, the Life-boat *Lady Haberfield* proceeded in search, and found the boat about 8 miles from the land, with its 3 occupants in an exhausted condition from cold and want of nourishment. They were safely landed; one of them requiring medical aid to restore him to consciousness.

BERWICK-ON-TWEED.—On the 2nd December the small screw-steamer *Clan Alpine*, of Leith, in entering the River Tweed struck on the bar, turned broadside to the sea, and sank. The Life-boat *Albert Victor* was speedily launched and rescued the crew of 4 men.

CULLERCOATS.—On the 2nd December the Life-boat *Palmerston*, stationed here, was the means of saving 1 man of the crew of a fishing coble which was upset in running for the shore. Three others unfortunately perished before the arrival of the Life-boat on the spot.

On the 18th October the same Life-boat was launched, and assisted the fishing coble *Palestine*, of Cullercoats, and her crew of 3 men and a boy, safely into harbour.

GORLESTON, SUFFOLK. — On Sunday morning, the 12th November, the brig *Vulcan*, of Whitstable, during a heavy gale, parted from her anchors, and making sail to clear the pier at the entrance to Yarmouth harbour, ran on the Gorleston

beach. The Life-boat *Leicester*, which had been already conveyed to the spot, was then immediately launched, and after an hour's exertion on the part of her crew, was successful in rescuing the wrecked people, 10 in number, including the master's wife and 2 children. The boat is said to have behaved very well.

FRASERBURGH.—On the 19th November the Life-boat *Charlotte*, in conjunction with a steam-tug, was the means of saving the barque *Octavia* and her crew, and conveying her safely to Cromarty. The wind was S.S.E. at the time, with a very heavy sea.

ARBROATH.—On the 15th December the Life-boat *People's Journal* No. 2, aided by a steam-tug, was enabled to save and get into the harbour the Norwegian schooner *Adjutor*, of Stavanger. There was a strong S. wind and heavy sea at the time.

BALLYWALTER, Co. DOWN.—On the night of the 15th December the brigantine *Jennie Lind*, of Whitehaven, coal laden, was driven on the Pladdie Rocks off Ballywalter. A strong S.E. gale was blowing, with a very heavy sea, and the night very dark. It was therefore felt to be a very dangerous service, and for some time a sufficient number of volunteers could not be obtained to man the Life-boat *Admiral Henry Meynell*. After a while, however, encouraged by the Rev. HENRY WILSON, son of the Rector of Ballywalter, who accompanied them as one of the crew of the boat, she proceeded on her dangerous mission, and in a little more than an hour reached the stranded vessel, taking her crew of 5 men on board, and afterwards landed them safely at Ballywalter. This was altogether a very gallant and praiseworthy service.

SUTTON, LINCOLNSHIRE.—On the morning of the 16th December the barque *Beecher Stowe*, laden with deals, was driven ashore off Mablethorpe. The Sutton Life-boat, the *Caroline*, was then drawn to the spot, 3 miles, by land, and launched to the aid of the distressed crew, 10 in number, all of whom were then taken off and landed safely at Mablethorpe.

TEIGNMOUTH.—On the 20th December the Life-boat *China* rescued the crew of a fishing boat, 3 in number, who had been overtaken by a high wind and sea, and were in danger of being wrecked on the bar off the port, on which a heavy sea was breaking.

SEAHAM.—On the 21st December the barque *Excelsior*, of Sunderland, was driven ashore in an E.N.E. gale in Red Acres Bay, near Seaham. The Life-boat *Sisters Carter of Harrogate* was conveyed to the spot by land on her carriage, and launched through a heavy surf, taking off and landing in safety the crew, 11 in number, the vessel shortly afterwards becoming a total wreck.

CAISTER.—On the evening of the 23rd December flares were seen from a vessel ashore on the Barber Sand. The *Godsend* Life-boat was immediately launched, and on arriving at the sand the barque *Ingleborough*, of Hull, was found to have gone ashore there, having parted from her anchor while lying in Yarmouth Roads. Her crew of 13 men were taken into the Life-boat, and brought safely ashore; the vessel subsequently broke up. A strong easterly wind was blowing at the time, and the sea was heavy on the sand.

ALNMOUTH.—The *John Atkinson* Life-boat rescued, on the 24th December, 3 of the crew of the brig *Unition*, of Guernsey, which vessel had stranded on the Boulmer Rocks. Of the remainder of the ship-wrecked men, 1 was lost, and the others, 4 in number, were saved by the Boulmer rocket apparatus.

MONTROSE. — The *No. 1. Life-boat, Mincing Lane*, put off, and, with considerable difficulty, rescued the crew of 6 men from the schooner *Bellalie*, of Nantes, which had parted from her anchors, and had gone ashore off Montrose during a strong S.E. wind and heavy sea on the morning of the 24th December.

WINTERTON.—On the morning of the 25th December signals of distress were observed from a schooner ashore about 3 miles north of Winterton. The *Ann Maria* Life-boat was thereupon launched, and rescued the crew, 6 in number, from the vessel, which proved to be the schooner *St. Elwine*, of St. Ives. She had stranded at Horsey Gap, and subsequently became a total wreck. The wind was blowing

strongly from E.S.E., and a heavy sea was running at the time.

NEWCASTLE, Co. DOWN.—On the evening of the 26th December a vessel was reported to be ashore in Dundrum Bay. A very severe gale was raging at the time. The Life-boat *Reigate* was promptly launched, and succeeded in rescuing the crew, 4 in number, from the vessel, which proved to be the schooner *Margaritta*, of Newquay, South Wales. She was on a voyage from Swansea to Newry, with a cargo of coal, and had been driven ashore by the severity of the gale.

GREAT YARMOUTH.—Intelligence was received on the morning of the 27th December that the brig *Countess of Zetland*, of Wells, was ashore on the beach. A strong S. by E. wind was blowing, and a heavy sea running at the time. The *Abraham Thomas* Life-boat was immediately launched, and proceeded to the vessel, which had gone ashore north of the Britannia Pier. A line having been passed to the brig by the rocket apparatus, the Life-boat was hauled alongside, and the vessel's crew of 7 men were taken into the boat and brought safely ashore.

BALLANTRAE.—The fishing boat *J. W. R.*, of this port, was seen to have lost halyards and mast, which had been broken by the violence of the gale, on the 30th December, and it being impossible for the crew to run her ashore, the Life-boat *William and Harriot*, proceeded to her assistance, and brought the fishing boat and her crew of 4 men safely to land.

PENMON.—On the 31st December, while a strong S.W. gale was blowing, a brigantine was observed with a signal of distress flying in her main rigging. The Life-boat *Christopher Brown* was launched, and, on boarding the vessel, found her to be the brigantine *Florence*, of Preston, bound from Liverpool to Dublin, with a cargo of iron rails. Her foremast had been carried away, her pumps were broken, and she had lost most of her sails, and was riding heavily. The master and crew of 3 men were thereupon taken into the Life-boat and safely landed at Conway, the Life-boat being unable to regain her station against the heavy seas.

HARWICH.—On the 29th December, fires having been seen in the direction of the Platters Sand, the Life-boat *Spring-well* was launched, and after proceeding some distance, was taken in tow by the steam-tug *Liverpool*. The signals were found to have been shown from the brigantine *Willie*, of Llanelly, which was in a position of great danger near Landguard Point. She was boarded, and, with the assistance of a pilot cutter, a tow-rope was taken to the tug, the vessel's anchors and chains were slipped, and she was towed safely into Harwich.

KESSINGLAND.—On the 22nd December, the schooner *Eliza*, of Sunderland, and the sloop *Firm*, of London, were observed showing signals of distress on Benacre Point. The No. 2 Life-boat, the *Grace and Lally, of Broad Oak*, was promptly launched, and succeeded in getting both vessels afloat, and in taking them safely into harbour. The first-named vessel carried a crew of 4 men, and the latter was manned by 6 men.

ADDITIONAL STATIONS AND NEW LIFE-BOATS.

BROUGHTY FERRY, DUNDEE.—A new 33-feet 10-oared Life-boat and carriage have been sent here in lieu of the old boat and carriage, which were becoming unfit for further service. The expense of the same was defrayed from the Life-boat Fund raised through the medium of the 'English Mechanic and World of Science,' a weekly scientific journal published in London, under the supervision of J. PASSMORE EDWARDS, Esq., whose kind co-operation largely tended to the complete success of this Life-boat subscription. The boat was named the *English Mechanic*, in accordance with the wishes of the contributors. It may be mentioned that the Life-boats placed on the Broughty Ferry Station by the NATIONAL LIFE-BOAT INSTITUTION, have done noble service to shipwrecked crews during the past few years, no less than 68 lives having been saved through their instrumentality. When the new boat reached Dundee it was drawn in procession through the town; the streets were densely crowded all the way, and on reaching the place of

launch at the north side of King William's Dock there was an immense assemblage, men and boys being perched on every conceivable elevation from which a view of the scene might be obtained. As Mr. PASSMORE EDWARDS was unable to be present to hand over the boat to the Institution on behalf of the donors, he had requested JAMES YEAMAN, Esq., M.P., for Dundee, to undertake that duty, and that gentleman, on making the presentation, expressed a hope that the new Life-boat might be as successful as her predecessor, should her services be called into requisition. Colonel ALISON, on behalf of the crew of the boat, said, he felt sure they would do their duty when called on. Other gentlemen having spoken, three hearty cheers were given for the donors, and the boat was named by Mrs. DALGLEISH, and launched, after a suitable prayer had been offered by the Rev. Dr. WATSON. Curiously enough the Life-boat was at once enabled to inaugurate her usefulness, for while she was out on her trial trip, and was passing Broughty Ferry, intelligence was received that a vessel was in difficulties near the Gaa Sandbank. The steamer *Fairweather* at once towed the boat to the spot, and with their joint aid, the vessel, which was the schooner *Brothers* of Sunderland, was soon extricated from her perilous position.

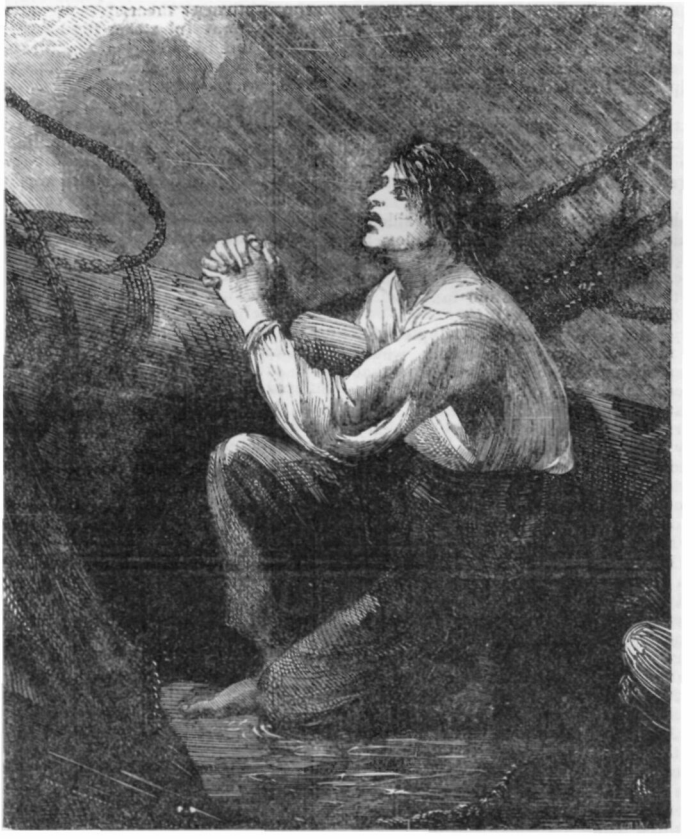
HARWICH.—Since the wreck of the ill-fated emigrant steam-ship *Deutschland* in Dec. 1875 on the Kentish Knock Sands, near the mouth of the Thames, with the loss of 57 lives, the NATIONAL LIFE-BOAT INSTITUTION has been enabled, in concert with the local residents, to form a Life-boat establishment at Harwich. The Society had often previously desired to station a Life-boat there, but its offers had been declined, it having always been considered that the outlying sandbanks, on which vessels were liable to be wrecked, were all so distant, that before a Life-boat from Harwich could reach them the ship-wrecked persons would have been taken off by one of the numerous hovelling smacks which are almost always cruising about, or lying under shelter of the sands, on the look-out for vessels in distress. Indeed, in the case of the *Deutschland*, the spot where she was wrecked was 24 miles from Harwich, and no one on shore knew of her having stranded until fourteen hours had elapsed. As, however, there is now a steam-tug at that port, which was not formerly the case, it is hoped that in the event of any future wrecks the Life-boat may be towed out and be enabled, in conjunction with the steamer, to do good service to the ship-wrecked crews. The Life-boat is 35 feet long, 9 feet wide, and pulls 10 oars double-banked; it was sent to its destination, with its transporting carriage and equipment, in January last year, without waiting for the erection of the boathouse, so that it might be ready for any emergency that might arise, a Norwegian ship having been wrecked on the Shipwash Sandbank, off the coast of Essex, early in January. The Life-boat and its equipment were presented to the Institution by Miss BURMESTER of London, and at her wish the boat is named the *Spring-well*. It should be mentioned that the Life-boat was towed from the Thames to its station free of charge by the steamer *Lord Alfred Paget*, belonging to S. CLARKE, Esq., of St. Dunstan's Alley, while the Great Eastern Railway Company readily granted the transporting carriage and gear a free conveyance to their destination over their line.

A substantial and commodious house has since been erected for the boat on the only suitable site, which was granted to the Society by H.M. Principal Secretary of State for War, and on its completion the public inauguration of the Life-boat establishment took place on the 7th Sept. under the superintendence of Rear-Admiral D. ROBERTSON-MACDONALD, Assistant-Inspector of Life-boats. After going in procession through the town, which was handsomely decorated with flags, the Life-boat was taken to the Esplanade. The Mayor of Harwich, JOHNSON RICHMOND, Esq., who had from the first been indefatigable in his exertions to promote the formation of the Life-boat establishment, then addressed the spectators, and a religious service was conducted by the Rev. S. FARMAN, after which the naming of the boat was performed by the Mayoress, and the boat was launched and put through the customary evolutions. The Mayor afterwards entertained at luncheon a number of the principal inhabitants, while a regatta concluded the proceedings of the day.

GOD HELP OUR MEN AT SEA!

God help our men at sea!
In firelit, pictured rooms, 'mid wine and flowers,
And gleesome company,
The wild winds awe us, in our blithest hours,
To sigh this prayer;
And, lonely, with clenched hands, at night 'tis ours,
"Lord of the waves, O spare!"

God help our men at sea!
I had a brother once. Our love ne'er fail'd
In its intensity.
Smiling on our sweet mother, as he sail'd,
I saw him last.
Ah me! how that sweet mother droop'd and paled
Ere one brief year had pass'd!



God help our men at sea
They saw him, who outlived that deathful night,
In his extremity,—
Kneeling, and looking, in the stormfire's light,
To Heaven for grace.
And angels' glory was upon him, bright
As upon Stephen's face.

God help our men at sea!
Those pilgrim fathers, who leave all to teach
Their Saviour's charity.
May their prayers, like St. Paul's, in tempest reach
His ears, who said,
With an exceeding tenderness of speech,—
"'Tis I. Be not afraid!"

God help our men at sea!
The workers, who at home can find no spheres
For work; whom poverty
Drives from their birthland, strong despite those tears,
To toil, and win;
And then, please God, return for peaceful years
To their own land and kin.

God help our men at sea!
If lust of power or of revenge assail
England's tranquillity,
Using His gracious gifts, we shall prevail,
As oft before;
And Israel see the proud Egyptians pale
And "dead on the sea-shore."

(Rev.) S. R. HOLE.

THE LIFE-BOAT STATIONS OF THE UNITED KINGDOM.

XXV.—ST. MARY'S, SCILLY ISLES.

The *Henry Dundas*, 37 feet long, 9 feet beam, 10 oars.

THIS Life-boat was stationed at St. Mary's, the capital of the Scilly Isles, in 1874. Previous to that time it had been considered by persons there that, as the majority of wrecks occurred in foggy weather with light winds, aid could more rapidly be given by the fast-pulling pilot gigs of the boatmen. Wrecks have occurred, however, from which men have perished for want of more efficient help than the pilot gigs can afford, and whom it is supposed a Life-boat might have rescued. At St. Mary's a crew can always be procured; and there is often a steamer which can tow the Life-boat to the scene of disaster—an advantage not to be counted on at the other islands.

The boat-house is placed on the south side of the Island, and the boat can be launched close to it; or if required for service on the north and western side, she is conveyed on her carriage through the town of St. Mary's, and launched in the harbour down a convenient slip.

The *Henry Dundas* is especially adapted for sailing, and in the absence of a steamer, would have to proceed considerable distances in that way. Her cost was left to the Institution by the will of the late Mrs. DUNDAS DRUMMOND, in 1874.

JOHN BANFIELD, Esq., is the Honorary Secretary of the Scilly Isles Life-boat branch, and to him the Institution is much indebted for the effective manner in which the Station is maintained.

The Isles of Scilly were a favourite rendezvous of the Scandanavian Rovers, being a convenient spot from which to pour down on either the continental or British shores. They are supposed to have been conquered by the Saxon king Athelstan in 926. They were held by the Royalists to a late period of the contest between Crown and Parliament; Prince Rupert, after all immediate chances of success on the mainland had gone, retreated here, and, at the head of 600 officers and 200 men of his late command, formed a doughty addition to the garrison.

In 1649 Sir John Grenville, the Royalist governor, had caused the Islands to be fortified, and they became a stronghold for privateering till the neighbouring seas were swept of British ships; at last the Parliament fitted out a large fleet, commanded by the celebrated Admirals Blake and Ayscue, to whom Grenville ultimately surrendered in June, 1651. Prince Charles found a temporary shelter in the Islands after the overthrow of the Royalists in the West in 1645; but the ships of the Parliament having established a blockade, he escaped through it to Jersey.

The Star fortress, which overlooks the Island of St. Mary, was built in the reign of Queen Elizabeth; it was considered as an important outpost in those days.

The most dangerous parts of the Islands are the labyrinths of shoals, rocks and islands, extending between the Island of Annat to the south-west, towards the Bishop lighthouse—one of the most exposed in the world. It has the appearance, at high water, of rising up out of the ocean, as no surrounding rocks are apparent: the spray rises to a height of more than 100 feet above the top of the lanthorn. The first attempt to erect a lighthouse here was made in 1849, but when nearly completed it was swept away by a storm on the 6th Feb. 1850. The present lighthouse, which is a grand engineering triumph, was completed, and its light first exhibited, on the 1st Sept., 1858, since which time the wrecks have become comparatively very rare.

The lighthouse, however, cannot warn in thick fogs; and the terrible loss of life at the wreck of the *Schiller*, on the night of the 7th May, 1875, has at last convinced every one who has considered the matter, that a want only second in importance to the lighthouses themselves are, at least, two of the most powerful steam fog-horns, at different sides of the Islands. On that occasion, 43 only were saved out of the 354 persons on board the *Schiller* when she struck. She was lost on the Retarrier ledges, not far from the spot where Sir Cloudesley Shovel's ship was lost, and within a short distance of the Bishop lighthouse—which, however, was entirely obscured by the fog.

On St. Agnes a lighthouse was first put in 1680, and for more than 100 years the light was produced by a coal-fire. An old chronicler wrote: "Before the coming of the present keeper, I've known it scarcely perceivable in the night at the Island of St. Mary's, where it now shines like a comet." This was about the year 1700. One cannot help a shuddering regret, as one reads, for all the poor mariners of *pre-lighthouse* times; for he adds, "and some are of opinion that, in the time of the former lightkeepers, it has been suffered to go out, or sometimes not lighted!" In 1790 the St. Agnes lighthouse was furnished with an effective system of lamps and reflectors, according to modern ideas.

An appalling loss of life from shipwreck occurred on this side of the Islands on the night of the 22nd Oct., 1707. The weather was foggy, and it was blowing hard. The greater part of a squadron commanded by Sir Cloudesley Shovel, the celebrated admiral, was wrecked on the reefs and rocks between St. Agnes and the present Bishop lighthouse. His flagship, the *Association*, struck the Gilstone about 8 P.M., and almost immediately foundered, when all on board perished except one man. A similar fate befel the *Eagle*, 70 guns, and the *Romney*, 50 guns. The *Firebrand* and *Phœnix* ran ashore, and the crews were saved. The *St. George*, commanded by Lord Dursley, struck on the same rock as the flagship; but the same wave which was seen to overwhelm that vessel, washed the *St. George* off into deep water, and she escaped. The *Royal Anne*, commanded by Sir George Byng, as she hauled to the wind on discovering breakers ahead, found the Temean Rock under her mainchains, and as she drew ahead her quarter gallery was knocked off, but she also escaped. Altogether 2,000 officers and men perished. Sir Cloudesley Shovel, whose body was washed ashore, was buried first of all on the seashore at Willow Cove in St. Mary's Isle, but afterwards the body was removed to Westminster Abbey: the spot of the grave is still shown at Willow Cove, and it is said that grass cannot be made to grow on it! The same Cove in also remarkable as the spot where the French brig *Nerina*, of Dunkirk, drifted ashore on the 18th Nov., 1840, bottom up, in which condition she had been drifting about for three days, with a remnant of the crew, five in number, entombed alive inside her. After undergoing great suffering from the gradual exhaustion of the atmosphere, they felt the ship strike about midnight of the 18th; at daylight on the 19th they crawled down from their position between the cargo and the kelson, and found a rock sticking through the cabin skylight, and a hole knocked in the quarter,

through which, to his great joy, the captain saw they were nearly dry on a beach, and that a man was walking on it. Still they had no means of letting the man know there were live people inside the overturned stranded vessel, till at last the man had the curiosity to climb up and put his hand into the hole, whereupon it was promptly seized by the poor skipper inside, to the great horror and amazement of the fisherman, who, however, of course soon summoned assistance, and had the half-dead Frenchmen cut out of their prison.

XXVI.—NEWCASTLE (DUNDRUM BAY).

The *Reigate*, 30 feet long, 6 feet 6 inches beam, 6 oars.

DUNDRUM BAY is a deep and dangerous bay situated in the centre of the eastern coast of County Down, facing the south-east, terminating at its north-eastern extremity in St. John's Point, and in southerly gales exposed to very heavy seas.

The south-western side of the bay is overshadowed by the Mourne Mountains, which rise to the height of 2,450 feet. On north and east sides the shores are flat and shallow, with sands extending to a distance of a mile uncovered, or with little water on them at low tide, but with a fair depth close up to the low shore at high water, so that an ordinary coaster running into the bay before a south-east gale may drive nearly up to the low sandhills at the top of high water, and unless the season be very inclement, the crew can generally save themselves by taking to the rigging till the tide falls, when they may get on shore in safety, as the ship being on moderately hard sand will not go to pieces readily, or be engulfed as if on a quicksand; but if the tide be not high, a disabled vessel will strike some distance out, and the sea curling over the bulwarks will sweep off the hatches, fill the ship, and in several cases has caused the total loss of the vessels. In these cases the crews are in imminent danger of being swept away by the overwhelming seas on the return of the tide if not speedily rescued by the Life-boat. From this peril, the *Reigate*, one of the Institution's smallest self-righting Life-boats, has, from time to time, saved many lives. The work is then accomplished at great risk to the Life-boat crew, owing to the peculiarly heavy wall-like seas that break on the edge of the deep water.

This bay was the scene of the stranding of the *Great Britain*, so long the largest steamer afloat, which ran ashore here in 1846, and was, with great efforts, eventually got afloat again in 1847.

After that accident, Dundrum Bay remained for some years without a Life-boat, but when the NATIONAL LIFE-BOAT INSTITUTION became reorganised, and had time to furnish the more important coasts with Life-boat Stations, it turned its attention to Dundrum Bay and the like places, dangerous in themselves, but, from absence of much local over-sea traffic, not showing a large annual list of wrecks; and in 1854 a Life-boat was placed by it at Newcastle: this was a self-righting boat 28½ feet long, and was replaced by the present boat in the year 1859. Since that time 53 lives have been rescued from different vessels wrecked in the bay, and assistance has been rendered to other ships ultimately saved.

THE PRINCE OF WALES AND THE ENGLISH FREEMASONS.

A SPECIAL Grand Lodge of the English Freemasons was held on the 3rd January at Freemasons' Hall, London, to receive and consider the Report of the Special Committee appointed by Grand Lodge on the 6th September last, on the most appropriate mode of commemorating the thankfulness of the Freemasons for the safe return from India of their Grand Master, H.R.H. The PRINCE OF WALES. The EARL OF CARNARVON, Pro Grand Master, presided; and there were also present, The EARL OF DONOUGHMORE, S.G.W., Mr. F. PATTISON, J.G.W., The Right Hon. LORD LEIGH, D.G.M., The Right Hon. LORD DE TABLEY, The Right Hon. The EARL OF LIMERICK, Mr. SAMUEL TOMKINS, Grand Treasurer, Mr. Æ. J. MCINTYRE, Q.C., G.R., and about 600 other members of the craft.

After the usual preliminary business had been transacted, the Grand Secretary read the following Report of the Special Committee:—

"The Committee have carefully considered the matters submitted to them, and beg to report as follows:—

"1st. That the sum of 4,000*l.* be voted for THE ROYAL NATIONAL LIFE-BOAT INSTITUTION for the purpose of founding two Life-boat stations in perpetuity, and in such localities on the English coast as the Sub-Committee hereafter mentioned shall decide.

"2nd. That a Sub-Committee, consisting of the Most Worshipful the Pro Grand Master, the Right Worshipful the Dep. Grand Master, and the Right Worshipful the Senior Grand Warden, be appointed to wait on the Secretary of THE ROYAL NATIONAL LIFE-BOAT INSTITUTION, with full powers to arrange all matters as to locality, detail, &c.

"3rd. That a memorial tablet be erected in Grand Lodge in commemoration of the event."

The EARL OF CARNARVON then rose, and was received with loud and long-continued applause. He said, after some preliminary remarks, "Brethren, as you all know well, my general duty in this chair, and my general desire when I am there, is to discharge simply the duty of a speaker, so to say, in this Grand Lodge. I desire, as a rule, to offer no personal opinion, and to influence in no degree the resolutions to which you may ultimately come. My general duty, to which I desire to confine myself, is so to regulate the order of your proceedings that they may be conducted with that propriety and that dignity which befits this, the general and the great meeting in which the whole of Freemasonry in England is represented and finds its voice. This evening, under very exceptional circumstances, I pass beyond that limit, and take upon myself, as the Chairman of a Special Committee appointed by you, to make a special and exceptional recommendation to this Grand Lodge. Well, now, the proposal I have to make to you, brethren, on behalf of the Committee is simply this: it is that we should establish—not for a few years, not at the mere sport of the wind and waves, to be worn and torn away,

and to disappear after a time, even after a brief career, but to last in perpetuity, and to record so long as the waters wash the shores of Great Britain, the intention and the purpose of this Grand Lodge—that we should establish two Life-boats in honour of the return of the PRINCE OF WALES. Brethren, I have gone carefully into the matter, and I find that by an arrangement with that most admirable and patriotic Institution, the NATIONAL LIFE-BOAT INSTITUTION, it is in the power of this Grand Lodge to found no less than two Life-boats in absolute perpetuity. The cost of a Life-boat will interest Grand Lodge, and therefore I will give them the figures. The cost of a Life-boat, with transporting-carriage and full equipment of stores, is assumed to be about 600*l.* Then there is the boat-house to be erected, so that it may be permanently housed from decay. That represents the sum of 300*l.* or 400*l.* more; in all, say 1,000*l.* But there then comes the question of maintenance; and the maintenance cannot be put at much less than 70*l.* a year; in other words, about 2,000*l.* additional, assuming money at 3½ per cent. You perceive therefore that at that rate two Life-boats would cost no less than 6,000*l.* But, by private communications which we have had with the Life-boat Institution, they, whose operations of course extend over a very much larger area, can afford it at a lesser rate than we could if we undertook to supply two Life-boats for ourselves. They are, therefore, willing to pledge themselves on the strength of their whole funds for 1,000*l.* to maintain each Life-boat. Therefore the cost of one Life-boat being assumed to be 1,000*l.*, and the maintenance in perpetuity being another 1,000*l.*, it will be possible, if Grand Lodge agrees to this vote of 4,000*l.*, for the two Life-boats to be maintained for ever and a day, in honour of the PRINCE OF WALES' return from India. I am not at all surprised at the liberality of the Life-boat Institution in this matter. Now, brethren, I am quite aware, as every one must be, that as regards this memorial of the safe journey and return of His Royal Highness, there may be—there are perhaps—many opinions. One person would like one thing; another person would like another. I would merely put it to them, that each person be content in this matter to forego to a certain degree his own individual opinion. We are met together for a great purpose; we have no private and no selfish interests or objects in it. Let us endeavour for once to act with absolute and entire unanimity. I think that the foundation in perpetuity of these two Life-boats does satisfy all the conditions at least which I mentioned to you. *It is something special and definite; it is something* lasting and permanent; it is unquestionably charitable; it is national as well as Masonic; and no one can doubt that His Royal Highness The PRINCE OF WALES has taken the liveliest interest in it, because, on one occasion at least, he presided at a great annual meeting of the Institution, held at the Mansion House. It is possible that it may be said that in this recommendation we are venturing out of the beaten track, and that we should confine ourselves exclusively to something Masonic. Well, let me remind those who think so that even on board of many a ship, labouring in many a gale, there may be many a brother Mason. Those who have heard the howling of the wind during this last week, while we have been enjoying the festive season; those who still more have listened to the touching service in many of our churches, "For those who are in peril at sea,"—still more, those who under such circumstances have had father or mother, brother or sister, relation or friend on board our great ships, will feel that such a grant as I now ask you to make does not really fall beyond the circle of Masonry. It is true that, in a certain sense, such a vote as this appeals beyond Masonry to the whole outside world; and I for one rejoice when, once in a way, exceptional as it is in this case, we can put forth a hand to the outer world—that we can show that we are united to it by common ties of humanity and sympathy; that we can positively and practically contradict the calumnies which have been so often urged against our Order—that it is a mere selfish body, actuated by selfish motives and selfish feelings—I rejoice to give a practical proof in refutation of such an unworthy calumny as that, and I earnestly trust that you will, if possible, give this proposal your cordial and unanimous approval. I ask this not for the sake of the Committee, not for the sake of the chair from which I now address you, but specially for the sake of the particular object we have in view—our illustrious Grand Master, with whom that object is indissolubly connected, and for whose sake I would not have, if it was possible, the slightest difference of opinion on the subject.

LORD LEIGH, Provincial Grand Master for Warwickshire, in seconding the motion, said that, although he would have to say but very few words, the brethren must permit him, on his own part, and on behalf of the Province over which he had the extreme honour of presiding for some twenty-six years past, to express the great pleasure it had given him to hear the resolution that had been proposed, and which emanated from the committee which was formed to take into consideration this very important subject. He entirely agreed with the remarks the Pro Grand Master had made in his admirable address, concerning the proposed memorial in honour of the successful and happy return of their illustrious Grand Master to this country.

An amendment was moved and seconded by two of the brethren, urging a memorial in a Masonic form, but the amendment was withdrawn, and the original motion was afterwards, amid loud cheers, carried unanimously.

SUMMARY OF THE

MEETINGS OF THE COMMITTEE.

THURSDAY, 5th October, 1876:

THOMAS CHAPMAN Esq., *F.R.S., V.P., Chairman of the Institution*, in the Chair.

Read and approved the Minutes of the previous Meeting, and those of the Finance and Correspondence, and Wreck and Reward Sub-Committees.

Also the Report of Rear-Admiral J R. WARD, Inspector of Life-boats to the Institution, on his recent visits to Broadstairs, Ramsgate ,Margate, and Kingsgate.

Also the Report of Rear-Admiral D. ROBERTSON-MACLONALD, Assistant-Inspector of Life-boats, on his visits to Harwich, Dunbar, Holy Island, Eyemouth, Cruden, Peterhead, Redcar, Saltburn, Middlesborough, Seaton Carew, Whitby, and Upgang.

Also the Report of Captain C. GRAY JONES, R.N., Second Assistant-Inspector of Life-boats, on his recent visits to Rhosneigir, Holyhead, Penmon, Llanddwyn, Llandudno, Colwyn, and Rhyl.

Reported the receipt of the following special contributions since the last Meeting:—

	£.	s.	d.
Proceeds of a Bazaar at Bangor, Ireland, per WM. H. HAMILTON, Esq..	185	7	8
S. W. CAREY, Esq., of New York (100 dollars)	18	16	4
Thank-offerings for Harvest, 1876, from the parish of Rype, Sussex, per Rev. R. S. SUTTON	4	6	10
Portion of Harvest Thank-offering from the parish of Newton-by-Sudbury, Suffolk, per Rev. REGINALD SMITH	2	12	0
Collection in Harby Church, Melton Mowbray, on Sunday, 3rd Sept., per Rev. M. O. NORMAN . . .	1	18	11

—*To be severally thanked.*

Reported that the following legacies had been bequeathed to the Institution:—

	£.	s.	d.
The late Mr. CHARLES ROBERSON, of Long Acre	500	0	0
The late Mrs. M. D. PARKER, of Whippingham, Isle of Wight (duty free).	300	0	0
The late Dr. HENRY LONSDALE, of Carlisle.	100	0	0

Mr. LEWIS, the Secretary, reported that he had, during the months of August and September, visited some of the Life-boat Stations on the coasts of Devon and Cornwall.

He found all the Life-boat Stations in excellent order, and the crews of the boats continued to express their entire satisfaction with their qualities.

Reported the transmission to their stations of the new Life-boats for Portrush (Ireland), and Eyemouth, N.B.

The Portrush boat had been conveyed free of charge from Dublin to its station by the Great Northern (Ireland) and the Belfast and Northern Counties Railway Companies.—*To be thanked.*

Decided that various works be carried out at the Morte and Southend (Cantyre) Life-boat Stations, at an expense of 115*l.* 10*s.*

Decided that Vice-Admiral Sir WALTER TARLETON, K.C.B., Admiral Superintendent of Naval Reserves, be requested to do the Institution the important service to instruct the officers of Her Majesty's Coastguard to give their opinion as to the necessity of additional Life-boats being placed in their several districts.

Also that a similar favour he asked, through the Committee of Lloyd's, of Lloyd's Agents on the coasts of the United Kingdom.

Paid 2,945*l.* 2*s.* 5*d.* for sundry charges on various Life-boat Establishments.

Voted 58*l.* 12*s.* to pay the expenses of the Life-boats at Seaton Carew, Drogheda, Swanage, and Douglas, in rendering the following services:—

	Lives saved.
A West Hartlepool boat	3
Brigantine *Maxim*, of St. John's, N.B. . . .	8
Yacht *Dragon*, of Swanage	2
Brig *Mary Ann*, of Whitehaven.	10

The Swanage and Redcar Life-boats had also rendered the following services:—

Schooner *Maid of Kent*, of London, assisted to save vessel and 5; three-masted schooner *Psyche*, of Swansea, assisted to save vessel and 7; and fishing lugger *Morning Star*, of Redcar, 3; other Redcar fishing cobles, rendered assistance.

Voted 151*l.* 4*s.* 6*d.* to pay the expenses of the Life-boats at Peterhead, St. Andrew's, Penarth, Newhaven, Rhyl, Wicklow, Whitby, Wexford, Drogheda, Greystones, Looe, Brixham, Torquay, Howth, Dunwich, and Dunbar, in assembling their crews or going off to the aid of vessels not ultimately requiring their assistance.

The Ramsgate and Cullercoats Life-boats had also been out to the aid of distressed vessels.

The Committee expressed their deep sympathy with the widow and two sons of the poor man THOMAS WHITE, who was lost from the Kingstown Life-boat when returning to shore with the crew of 7 men of the brig *Leonie*, of Prince Edward's Island, which was in distress off Bray, during a gale of wind and in a heavy cross sea, on the 30th September. The Committee voted 150*l.* in aid of the local fund for the relief of the widow and children, besides granting 2*l.* to each of the men who went off in the Life-boat on that occasion.

Voted 10*l.* to Mr. THOMAS RAVERTY, Chief Officer of Coastguard at Ardglass, Co. Down, and his crew of 7 men, for saving, at great risk, the crew of 6 men from the fishing smack *Olive Branch*, of Arklow, which was wrecked near Ardglass Harbour during a strong S.S.W. gale on the 2nd of August.

THURSDAY, 2nd November:

The Chairman of the Institution, in the Chair.

Read and approved the Minutes of the previous Meeting, and those of the Finance and Correspondence, and Wreck and Reward Sub-Committees.

Also the Report of the Inspector of Life-boats on his recent visits to Brighton, Worthing, Shoreham, Newhaven, Eastbourne, and Hastings.

Also the Report of the Assistant-Inspector of Lifeboats on his visits to the Life-boat Stations at Runswick, Staithes, Upgang, Middlesborough, Redcar, Eyemouth, and Banff.

Also the Report of the Second Assistant-Inspector on his recent visits to Kingstown, Howth, Drogheda, and Dublin.

Reported the receipt of the following special contributions since the last Meeting:—

	£.	s.	d.
Local Government Officers' Life-boat Fund, per Mr. G. C. BIMROSE, Spalding, Lincolnshire	45	1	0
Mrs. ANNE GOMONDE, Pau . . .	20	0	0
Proceeds of Annual Benefit at Prince of Wales's Theatre and Concert Hall, Wolverhampton, Mr. J. S. T. BREWSTER, Proprietor, per Capt. HENRY SEGRAVE	21	0	0
Contributions of Cadets of H.M.S. *Britannia* and their Parents, received through Capt. GRAHAM, R.N.	7	12	2
Collected by Capt. MCRITCHIE, of the S.S. *Elysia*	1	11	6
Portion of Harvest Thank-offering from Chilton, near Sudbury, Suffolk, per Rev. HERBERT SMITH .	1	8	6

—*To be severally thanked.*

Reported that the following legacies had been bequeathed to the Institution:—

	£.	s.	d.
The late T. A. BERTIE MOSTYN, Esq., of St. James's Place	100	0	0
The late Mrs. ELIZABETH KENDRICK, of Philpot Street, Commercial Road, (duty free)	100	0	0
The late Misses MARTHA and MARGARET RIGDEN, of St. Lawrence, Monmouth (duty free)	100	0	0

Reported that the Committee of the Life-ship *Peronelle* having been unable to obtain sufficient assistance from the public for her completion and equipment as a steam life-ship, had presented her, with all her gear, sails, &c., to the NATIONAL LIFE-BOAT INSTITUTION. She is 70 tons burden, and was designed by, and built for, Captain HANS BUSK, the well-known founder, in 1858, of our Volunteer Army.—To be thanked, and ordered the vessel to be sold, and the proceeds appropriated in placing a life-boat, named the *Hans Busk*, on the coast at a convenient opportunity.

Paid 2,553*l.* 4*s.* 2*d.* for sundry charges on various Life-boat Establishments.

Voted 44*l.* 11*s.* 6*d.* to pay the expenses of the Life-boats at Hartlepool, Irvine, and Stonehaven, in rendering the following services:—

	Lives saved.
Barque *Auffredy*, of Sunderland	3
Schooner *Lady Mary*, of Irvine	4
Prussian schooner *Katerina*	4

The Arbroath and Cullercoats Life-boats had also rendered assistance to several distressed fishing boats (*vide* pages 12–14, for particulars of most of these Life-boat services).

Voted also 61*l.* 12*s.* 6*d.* to pay the expenses of the Harwich, Whitehaven, Greencastle, Donna Nook, and Kingsgate Life-boats, in either assembling their crews or putting off to the assistance of vessels in distress, which did not, however, require the services of the Life-boats.

Voted the thanks of the Institution, inscribed on vellum, and 2*l.*, to Mr. WILLIAM CAHILL, Chief Boatman in charge of H.M. Coastguard at Annalong, Co. Down, and 2*l.* each to 5 other men, for rescuing with much difficulty, and at great risk, the crew of 4 men from the barque *Troubadour*, of Liverpool, which was wrecked at Annalong, during a strong wind and in a heavy sea, on the 3rd October.

THURSDAY, 7th December:

The Chairman of the Institution, in the Chair.

Reported the lamented death, on the 28th November, of HENRY WILLIS, Esq., Banker, who had been the Treasurer of the Institution for upwards of twenty-four years.

Decided that a vote of condolence, *in memoriam*, on vellum, be presented to Mrs. WILLIS and members of her family on the occasion of their sad bereavement.

Also that a special meeting be convened for Tuesday, the 19th December, at 4 o'clock, at the offices of the Institution, for the purpose of electing a Treasurer in succession to the late Mr. WILLIS.

Also that a vote of condolence, *in memoriam*, be presented to Mrs. DAVIES, on the occasion of the lamented decease of her husband, Vice-Admiral GEORGE DAVIES, Chief Constable of Cambridgeshire and Huntingdonshire, who was officially connected with the Institution in 1851, and whose intrepid deeds in saving life from shipwreck on several occasions, had been repeatedly acknowledged by this Committee.

Read and approved the Minutes of the previous Meeting, and those of the Finance and Correspondence, and Wreck and Reward Sub-Committees.

Also the Report of the Inspector of Life-boats on his recent visits to Winchelsea, Rye, New Romney, Lydd, Hythe, Dover, Kingsdowne, Deal, and Walmer.

Also the Report of the Assistant-Inspector of Life-boats on his visits to Harwich, Thorpe, Aldborough, Dunwich, Southwold, Kessingland, Pakefield, Lowestoft, Corton, Gorleston, Yarmouth, and Caister.

Also the report of the Second Assistant-Inspector of Life-boats on his visits to Bude, Port Isaac, Padstow, New Quay, Hayle, St. Ives, and Sennen.

Reported the receipt of the following special contributions since the last meeting:—

	£.	s.	d.
"Worcester Cadet" Life-boat Fund, per Capt. J. H. SMITH	339	3	1
"In Memoriam"	50	0	0
Collected by Pupils of Mrs. LAVINGTON, Clevedon, during the half-year ending June 1876, in aid of the Clevedon Life-boat Fund	10	4	9
Contributions of Out-Pensioners in the Birmingham District, on behalf of the support of the *Out-Pensioner* Life-boat at Arklow	7	10	0
Collected in Weston-super-Mare Parish Church on Sunday, 19th November, per Rev. PREBENDARY BUCKLE, Rector, and Capt. R. D. CRAWFORD	14	10	3
Collected in Hadnall Church, near Shrewsbury, on Sunday, 5th November, per Rev. BROOKE C. MORTIMER	5	0	6
Roscoe Place, Leeds, Mutual Improvement Society, per G. V. GASKELL, Esq.	5	0	0
Miss ENGLISH, and Officers and Children of Licensed Victuallers' School, in aid of support of *Licensed Victualler* Life-boat at Hunstanton —*To be severally thanked.*	4	4	0

Also that the following legacies had been bequeathed to the Institution:—

	£.	s.	d.
The late Mrs. EMILY DEWAR, of Vogrie, N.B., for a Life-boat	500	0	0
The late Mr. JOHN WOOD, of High Longthwaite, Cumberland	19	19	0
The late Miss MARIA BUCKMASTER, of Kingston-on-Thames	10	0	0

Read letter from the Secretary of the Llanelly and Pembrey Branch, of the 3rd Nov., stating that the EARL of ASHBURNHAM had readily granted a new site on which to re-erect the Life-boat house at Pembrey.—*To be thanked.*

Read letter from Major-General TULLOH, R.A., C.B., of West Malvern, of the 4th and 10th Nov., stating that his adopted daughter, Miss ADA GOLDSMITH TULLOH, was about to make an effort to collect the cost of a Life-boat, to be named after her collateral ancestor, the great author, OLIVER GOLDSMITH, the General acting as treasurer of the fund.—*To be thanked.*

Read letter from Mr. VERNUM CANTERO, of the Spanish Naval Commission in London, of the 20th Nov., asking for information regarding the work of the NATIONAL LIFE-BOAT INSTITUTION.—*To be acknowledged.*

Voted the thanks of the Institution, accompanied by a Model Life-boat, to Vice-Admiral Sir WALTER TARLETON, K.C.B., late Admiral Superintendent

of Naval Reserves, in acknowledgment of his long and valuable cooperation, extending over many years, in aiding to carry out the great and national objects of the Institution.

Decided that the fine new sailing Life-boat which had just been built for the No. 1 Station at Lowestoft be named the *Samuel Plimsoll*, its cost having been defrayed from funds raised at Derby and Liverpool for the purpose of placing a Life-boat on the coast in honour of Mr. PLIMSOLL, M.P.

Voted a telescope and 20*l.* to Mr. NATHANIEL COLBY, in acknowledgment of his long and gallant services while holding the position of Coxswain of the Pakefield Life-boat, which he was now compelled to resign on account of ill-health.

Paid 2,521*l.* 2*s.* 6*d.* for sundry charges on various Life-boat establishments.

Voted 137*l.* 17*s.* 8*d.* to pay the expenses of the Lifeboats at Caister, Blyth, Falmouth, Swanage, Castletown, Gorleston, Hornsea, Tyrella, Aberystwith, Berwick-on-Tweed, and Cullercoats, in rendering the following services:—

	Lives saved.
Smack *Phœbe*, of Great Yarmouth	6
Brig *Camilla*, of Portsmouth	4
Barque *J. W. Setterwall*, of Stockholm—remained by vessel.	
Smack *Aries*, of Cowes—rendered assistance.	
Schooner *Gleaner*, of Preston	3
Brig *Vulcan*, of Whitstable	10
Ketch *Germ*, of Goole	4
Brigantine *Sinai*, of Nantes	6
Fishing boat of Llanrhystid	3
Steamer *Clan Alpine*, of Leith	4
Fishing coble *George*, of Cullercoats . . .	1

The North Deal, Fraserburgh, Montrose, and Ardrossan Life-boats had also rendered the following services:—Schooner *Ton Mawr*, of Fowey, saved vessel and crew, 5; barque *Octavia*, of Holmestrand—remained by vessel; two Ferryden fishing boats—rendered assistance; and schooner *Rover*, of Wexford—rendered assistance.

[The particulars of most of these services will be found on pages 12-14 of this Journal.]

Voted 233*l.* 13*s.* 2*d.*, to pay the expenses of the Life-boats at Holyhead, Donna Nook, Gorleston, Margate, Penzance, Southend, Scarborough, Wexford, Montrose, Broughty Ferry, Holy Island, Cadgwith, Lizard, Courtown, Newcastle (Co. Down), Winterton, Fraserburgh, Pakefield, Caister, and Weymouth, in either assembling their crews or going off to the aid of vessels not ultimately needing their assistance.

Voted the thanks of the Institution, inscribed on vellum, and 1*l.*, to Mr. JAMES BARRY, Commissioned Boatman of H.M. Coastguard at Elie, N.B.; and 1*l.* each to 4 fishermen for saving 3 men from the lugger *Sea Witch*, of Elie, which had capsized off that port during a strong S.W. gale and very heavy sea on the 10th October.

Also 2*l.* 10*s.* to 10 men for putting off in a coble and landing 5 of the crew of the brig *George and Elizabeth*, of Sunderland, that vessel having been run ashore at Bridlington during an E.S.E. gale on the 12th October.

Also 2*l.* to the crew, consisting of 3 men and a boy, of a Newbiggin coble for saving the crew of 7 men of the brig *Georg*, of Dragör, Denmark, who had taken to their boat on their vessel striking on the rocks near Blyth River on the 18th November.

TUESDAY, 19th December.

A Special General Meeting of the Governors of the ROYAL NATIONAL LIFE-BOAT INSTITUTION was held this day at its House, John Street, Adelphi, to elect a Treasurer in succession to the late Mr. HENRY WILLIS, the Chairman of the Institution in the Chair.

Having stated the object for which this Special General Meeting of the Governors of the Institution had been convened, Mr. CHAPMAN called on the Secretary to read the advertisement convening the Meeting.

The same having been read, the Chairman alluded to the lamented death of the late Treasurer, and proposed, which was seconded and carried unanimously—

That Mr. HENRY WILLIS, Banker, of No. 76 Lombard Street, in the City of London, be elected Treasurer of the ROYAL NATIONAL LIFE-BOAT INSTITUTION for the Preservation of Life from Shipwreck, in the room of his father, the late Mr. HENRY WILLIS.

A cordial vote of thanks to the Chairman closed the proceedings.

CIVIL SERVICE LIFE-BOAT FUND.

THE annual meeting of the committee of this fund was held on the 10th Jan. at the General Post Office, and was presided over by Mr. W. H. HAINES, of the House of Lords. A highly satisfactory balance-sheet was laid before the committee by Mr. CHARLES TURNER, *controller and* accountant general of the Inland Revenue; and the report of the proceedings of the fund for the year 1876 was read by the honorary secretary, Mr. CHARLES DIBDIN, F.R.G.S., of the General Post Office. It stated that the name of LORD HAMPTON has been added to the list of vice-patrons, and that the total number of subscribers for the past year has been 3,268, which is an increase of 652 on 1875, and of 2,800 on 1872. The Life-boats *Civil Service* and *Charles Dibdin*, presented to the ROYAL NATIONAL LIFE-BOAT INSTITUTION by the fund, and still fully supported by it, have, up to the present time, attended 20 wrecks, saved 3 vessels, and the lives of 98 persons. The report concluded with the expression of a hope on the part of the committee that the support now given them by their brother-officers may be continued, in order that they may be in a position at the close of this year to present a third Life-boat to the NATIONAL LIFE-BOAT INSTITUTION. After a cordial vote of thanks had been voted to Mr. CHARLES DIBDIN, the able and earnest honorary secretary of the fund, and other officers of the committee, the meeting adjourned.

NOTICE.

The next number of the "LIFE-BOAT JOURNAL" will be published on the 1st May next.

Vol. IX.—price 18*s.*—of the "LIFE-BOAT JOURNAL" is now ready, and can be had at the Institution, or by order of any bookseller. The Title Page and Index of that Volume can also be obtained separately.

ROYAL NATIONAL LIFE-BOAT INSTITUTION.

SUPPORTED SOLELY BY VOLUNTARY CONTRIBUTIONS.

Patroness—Her Most Gracious Majesty the Queen.
Vice-Patron—His Royal Highness the Prince of Wales, K.G.
President—His Grace the Duke of Northumberland, P.C., D.C.L.

Services of the Life-boats of the Institution in 1876.

A. E. M., brig, of Nantes 8
Alabama, schooner, of Goole 2
Anna, schooner, of Rendsburg ... 4
Arbroath fishing boats—rendered assistance.
Aries, smack, of Cowes—rendered assistance.
Atlantic, barque, of Swansea—assisted to save vessel and..... 16
Auffredy, barque, of Sunderland . 3
Adjutor, schooner, of Stavanger —rendered assistance.
Augusta, schooner, of Sunderland. 4
Bavington, steam wherry, of Newcastle 4
Bebside, s.s., of Newcastle-on-Tyne..... 15
Beecher Stowe, barque, of South Shields 10
Bellalie, schooner, of Nantes 6
Bridget, brigantine, of Dungarvan 8
Brothers, schooner, of Sunderland —rendered assistance.
Brother's Pride, barque, of St. John's, N.B..... 11
Camilla, brig, of Portsmouth 4
Cingalese, s.s., of London—remained by vessel.
Clan Alpine, s.s., of Leith..... 4
Claudine, schooner, of Antwerp—rendered assistance.
Clifton, barque, of Liverpool.... 10
Coonatto, barque, of London—remained by vessel.
Countess of Zetland, brig, of Wells 7
County of Ayr, ship, of Glasgow. 2
Cullercoats fishing cobles—rendered assistance.
Cybele, s.s., of Glasgow—rendered assistance.
Dawn, dandy, of Grimsby—saved vessel and 3
Dragon, yacht, of Swanage 2
Eagle, pleasure boat, of Llandudno 5
Edith, fishing boat, of Lowestoft —assisted to save vessel and... 10
Eliza, schooner, of Sunderland—assisted to save vessel and crew. 4
Elizabeth, schooner, of Llanelly.. 5
Elizabeth, ketch, of Goole..... 2
Ellas, barque, of Spezzia—remained by vessel.
Emerald, schooner, of Montrose . 6
Emily, barque, of Shields 17
Excelsior, barque, of Sunderland. 11
Exhibition, schooner, of Colchester—rendered assistance.
Ferryden fishing boats—rendered assistance.
Firm, sloop, of London—assisted to save vessel and crew 6
Florence, brigantine, of Preston.. 4
Frank, dandy, of Grimsby..... 10
Fred. Thompson, brig, of Dundee—remained by vessel.
Gem, fishing boat, of Eyemouth—vessel and 6
George, fishing coble, of Cullercoats..... 1
George Smeed, three-masted schooner, of Rochester—rendered assistance.
Germ, ketch, of Goole..... 4
Gleaner, schooner, of Preston.... 3
Gustaf, s.s., of Gothenburg..... 14
Ilmatar, barque, of Finland..... 15
Ingleborough, barque, of Hull ... 13
Iona, schooner, of Belfast..... 3
Jenny Lind, schooner, of Whitehaven..... 5
John, schooner, of Runcorn..... 3
J. W. R., fishing boat, of Ballantrae—saved boat and crew..... 4
J. W. Setterwall, barque, of Stockholm—remained by vessel.
Katrina, Prussian schooner..... 4
Killin, schooner, of Greenock.... 5
Lady Mary, schooner, of Irvine.. 4
Lapwing, brigantine, of Liverpool —assisted to save vessel.
Leonie, brig, of Charlotte-Town, P.E.I..... 4
Linwood, brig, of Maryport—rendered assistance.
Lion, schooner, of Goole—saved vessel and..... 4
Lizzie Morton, schooner of St. Ives —vessel and 5
Llanaelhaian fishing boat..... 3
Llanrhystid fishing boat—saved boat and..... 3
Macedonia, brig, of Blyth 7
Maid of Kent, schooner, of London—assisted to save vessel and 5
Marguerita, schooner, of Newquay 4
Mary Ann, brig, of Whitehaven . 10
Maxim, brigantine, of St. John's, N.B..... 8
McNeara, ship, of Boston, U.S.—assisted to save vessel.
Mentor, barque—rendered assistance.
Mignonette, barque, of London... 14
Morning Star, fishing lugger, of Redcar—saved vessel and..... 3
Octavia, barque, of Holmestrand —rendered assistance.
Palestine, fishing coble, of Cullercoats —rendered assistance.
Phœbe, dandy, of Yarmouth..... 6
Providence, fishing yawl, of Lowestoft—rendered assistance.
Psyche, three-masted schooner, of Swansea—assisted to save vessel and..... 7
Redcar fishing cobles—rendered assistance.
Resolute, schooner, of Peterhead . 6
Robert Stevenson, brig, of North Shields..... 9
Rover, schooner, of Wexford—rendered assistance.
Roycroft, barque, of Annapolis, N.S.—rendered assistance.
Rubens, s.s., of Liverpool—remained by vessel.
Sinai, brig, of Nantes..... 6
Speed, brig, of Sunderland—assisted to save vessel and 9
Staithes fishing cobles—rendered assistance.
St. Elwine schooner, of Falmouth 6
Teignmouth fishing boat 3
Tobina, schooner, of Oude Pekela 5
Ton Mawr, schooner, of Fowey —saved vessel and 5
Trader, brigantine, of Portaferry. 4
Turkestan, ship, of Liverpool.... 22
Tweed, schooner, of Greenock.... 6
Unition, brig, of Guernsey 3
Victory, smack, of Hull 5
Vivid, fishing boat, of Ferryden—assisted to save vessel and 6
Vulcan, brig, of Whitstable 10
Walker Hall, barque, of Sunderland 11
Wells, schooner, Goole, assisted to save vessel and 5
West Hartlepool fishing boat 3
Whitby fishing boats 12
William, fishing smack, of Wexford..... 6
William Pitt, ketch, of Poole 1
Wyre, schooner, of Fleetwood.... 2

Total lives saved by Life-boats, in 1876, in addition to 19 vessels. 515

During the same period the Institution granted rewards for saving Lives by fishing and other boats 85

Total of Lives saved in Twelve Months 600

The Committee of Management have to state that during the year 1876 the Royal National Life-Boat Institution expended **£29,355** on its **256** Life-boat Establishments on the Coasts of England, Scotland, and Ireland, in addition to having contributed to the saving of **600** persons from various shipwrecks on our Coasts, for which services it granted **1** Gold Medal, **8** Silver Medals and **18** Votes of Thanks on Vellum, besides pecuniary rewards to the amount of **£2,814.**

The number of Lives saved either by the Life-boats of the Society, or by special exertions for which it has granted rewards, since its formation, is **24,389**; for which services **92** Gold Medals, **876** Silver Medals, and **£50,100** in cash have been paid in Rewards.

It is most gratifying and encouraging to know that, notwithstanding the peril and exposure incurred by the gallant crews last year, only one life was lost from the Life-boats of the Society, although about 12,000 men were out in them on all occasions during the twelve months.

The expense of a Life-boat, its equipment, transporting-carriage, and boat-house, averages **£900,** in addition to **£70** a-year needed to keep the establishment in a state of efficiency.

Donations and *Annual Subscriptions* will be thankfully received by the Bankers of the Institution, Messrs. Willis, Percival, and Co., 76 Lombard Street; by all the other Bankers in the United Kingdom; by all the Life-boat Branches; and by the Secretary, Richard Lewis, Esq., at the Institution, 14 John Street, Adelphi, London, W.C.—*February*, 1877.