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WEATHER REPORTS AND FORECASTS IN THE DAILY NEWSPAPERS.*

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KNOWING these circumstances, and having accurate statistical observations of these various currents, at selected outlying stations, showing pressure (or tension), temperature, and relative dryness, with the direction and estimated horizontal force of wind at each place simultaneously, the consequences are already measurable approximately.

The facts now weighed and measured mentally—in what may be correctly called "forecasting" weather—are—the direction and force of each air-current or wind, reported telegraphically to the central station in London from many distant stations; their respective tension and temperature, moisture or dryness, and their changes since former recent observations.

These show whether any, or either movement or change is on the increase or decrease; whether a polar current is moving laterally off, passing from our stations towards Europe, or approaching us from the Atlantic; whether moving direct towards the south-westward with great velocity or with slow progress.

If moving fast, in the direction of its length, it will approach England more from the east, its speed direct being twenty to fifty, or eighty miles an hour, while its constant lateral or easterly tendency (like a ship's leeway in a current) being only five miles an hour, is then insensible to us (though clearly deducible from other facts ascertained), and is that much in alteration of actual direction as well as of what would otherwise be the velocity of the polar current.

With the opposite principal current—the equatorial or south-westerly, more briefly and correctly tropical—similar but opposite results occur; the direct motion from a south-westerly quarter is accelerated, sensibly t our perception, by part of the eastward constant (about five miles hourly), and therefore a body of air approaches us sooner (other things being equal) from the westward than it does from the eastward.

To seamen accustomed to navigate in ships making leeway, while in currents setting variously over the ground, such movements, complicated as they may appear, are familiar.

There are the ship's headway, leeway, and drift, to be considered in combination with the motion or current rate of the buoyant water, and that perhaps an upper current, differing from one beneath, while each is passing across the bottom or bed beneath all.

But the circulating movements of motes in a beam of light across dusty air, in a draft, may perhaps show what is meant by such combined and varying motions of fluid, elastic, and mobile air, as are here mentioned.

One notable consideration is the disposal or progress of bodies of air united, or mixed, or contiguous to each other after their meeting—either directly opposed or at an angle—on the earth's (or ocean's) surface.

They do not vanish; they cannot go directly upwards, against gravitation; westward they cannot generally go when there is collision or meeting, because the momentum, elasticity, and extent of the tropical "anti-trade"* usually overpowers any direct polar current, or rises over it, and more or

* Continued from page 124 of the July Number of this Journal.

* Sir John Herschel's excellent term.

less affects the subordinate below by the friction of its eastward pressure.

Downward there is no exit; eastwardly (towards the east) the accumulating air must go; and this tendency continued causes the varieties of wind from the westward, being more or less mixed, more or less purely polar or tropical as either one prevails in combination.

After a body of air has passed, and gone to some distance southward or northward, it may be stopped by an advancing and more powerful mass of atmosphere which is moving in a direction contrary to or diagonally across its line of force.

If their appulse be gradual and gentle, only a check occurs, and the weaker body is pushed back until its special qualities, respecting temperature and moisture, are so masked by those of its opponent as to be almost obliterated.

But if these currents meet with energy, at very different temperatures and tension, rapid changes are noticed as the wind shifts, and circuitous eddies, storms, or cyclones occur.

Otherwise, when their meeting is, as first mentioned, gradual, there is the return of a portion of either current (which previously prevailed) either direct or deflected—deflected even through more than one quadrant of a circle—by its advancing opponent, and retaining for some considerable time its own previous characteristics.

Thus we have, for short times, cold dry winds from the south-west instead of the usual warm and moist ones, or winds of this latter kind from the north instead of cold ones.

The circuitous tendency of air in motion, and the numerous impediments to its horizontal progress, such as land, ranges of mountains, hills, or even cliffs, induce many a deviation from normal directions extremely puzzling to the student of this subject; but so retentive is air of its tension and temperature, for a time, that, like currents in the ocean, each may be traced by its characteristics as long as within our island web of stations.

When the polar current is driven back by a tropical advancing from a southerly direction gradually, their action united becomes south-easterly (from the south-eastward), and as the one or other prevails, the wind blows more from one side of east or from the other.

Time is required to produce motion in the air, horizontally, and time is indispensable for its gradual cessation from movement.

Statical effects are noticed, at observatories, or by careful observers anywhere, hours or days before dynamical consequences occur.

When a body of atmosphere is moving from or towards the pole, its impelling force may cease, while the mass itself has a certain impetus, inertia, or momentum.

Diminishing tension results at the place of checked energy, and the upper current (always there) descends.

At the same time, also, there is an alteration of tension at the further extreme, which is then meeting and mingling with, if not resisted, checked, and deflected by its advancing opponent. Consequent on this, an extent of air, reaching perhaps across some hundred miles, becomes, as it were, isolated. Detached from its original source and maintenance, whether polar or tropical, and then quite surrounded by air of a different character, it is impelled in new and varying directions, still retaining, for a time, more or less of its characteristics until altered entirely and totally incorporated with its conqueror. Hence we sometimes have cold tropical wind with electrical and other polar characteristics, for a limited time only, before the tropical current predominates; or, on the other hand, a warm polar air-current with other tropical peculiarities.

Moreover, in addition to these causes of apparent inconsistency or irregularity, there are the results of circling currents—streams of air retaining their features although changed (it may be even totally) in direction along the earth's surface, besides a variety of merely local alterations, such as are effected by high lands, or valleys, or coast lines. All these, and many other minor considerations, ought to be familiar to a forecaster of weather who would judge according to observed facts and ascertained laws.

Lunarists and astrometeorologists support theories which, if in accordance with facts, would affect our whole atmosphere, or a hemisphere, or at least an entire zone, in a similar way, on account of the supposed influencing causes acting over all the rotating earth, and not only over Europe or its adjacent islands.

At the Board of Trade from thirty to forty weather telegrams are received daily (except Sundays), and the present daily forecasts, or premonitions of weather are

drawn up on the following arrangement. Districts are thus assumed:—

1. Scotland, generally, along the coast.
2. Ireland, generally, around the coasts.
3. West central (Wales to the Solway) coastwise.
4. South-west England.
5. South-east England.
6. East coast.

As newspaper space is very limited, and as some words are used in different senses by various persons, extreme care is taken in selecting those for such brief, general, and yet sufficiently definite sentences as will suit the purpose.

Such words as are commonly found on published scales of force, or nature of wind and weather, are generally understood, and therefore are used in preference to others however expressive.

In saying, on any day, what the probable character of the weather will be to-morrow or the day after, at the foot of a table showing its observed nature that very morning, a limited degree of information is offered for about two days in advance, which is as far as may be yet trusted generally, on an average, though at times a longer premonition might be given with sufficient accuracy to be of occasional use.

Minute or special details, such as showers at particular places or mere local squalls, are avoided; but the general or average characteristics, those expected to be principally prevalent (with but few exceptions) the following day, and the next after it, including the nights—not those of the weather actually present—are cautiously expressed after careful consideration.

Ordinary variations of cloudiness, or clear sky, or rain, of a local or only temporary character, are not noticed usually.

A broad general average, or prevalence, is kept in view, referring to a day or more in advance, and to a district rather than only to one time or place, should be remembered.

The great practical difficulty is in separating the effect, on the mind, of present states of air, weather, and clouds, from abstract considerations of what may be expected on the morrow or next following day.

As meteorological instruments usually foretel important changes by at least a day, or much longer, we have to consider what wind and weather may be expected from the morning observations, compared with those of the day immediately previous, as indicative of the morrow's weather, and of the day after, at each place, to take an average of those expectations, for each district collectively in groups, and then to estimate the dynamical effects which may be anticipated as the legitimate consequences of relative tensions, temperatures, and dryness occasioning more or less irregularity in the atmospheric equilibrium, and thus causing greater or less horizontal motions of air-currents or winds.

Comparisons of the moist and dry thermometers are very useful, if well observed, in telling the hygrometric condition of the air, and thence, with other effects, showing how either current prevails, or has relative influence, a point of much importance in forecasting a change either way, as well as a probability of rainy or dry weather.

Those who are most concerned about approaching changes, who are going to sea, or on a journey, or a mere excursion; those who have gardening, agricultural, or other out-door pursuits in view, may often derive useful cautionary notices from these published expectations of weather, although (from the nature of such subjects) they can be but scanty and imperfect under present circumstances.

Objection has been taken to such forecasts, because they cannot be always correct, for all places in one district. It is, however, considered by most persons that general, comprehensive expressions, in aid of local observers, who can form independent judgments from the tables and their own instruments, respecting their immediate vicinity, though not so well for distant places, may be very useful, as well as interesting; while to an unprovided or otherwise uninformed person, an idea of the kind of weather thought probable cannot be otherwise than acceptable, provided that he is in no way bound to act in accordance with such views, against his own judgment.

Like the storm-signals, such notices should be merely cautionary, to denote anticipated disturbance somewhere over these islands, without being in the least degree compulsory, or interfering arbitrarily with the movements of vessels or individuals.

Certain it is that although our conclusions may be incorrect, our judgment erroneous, the laws of nature and the signs afforded to man are invariably true. Accurate interpretation is the real deficiency.

Seamen know well the marked charac-

teristics of the two great divisions of wind, in all parts of the world, and do not care to calculate the intermediate changes, or combinations, to two or three points. They want to know the quarter whence the gale may be expected, whether northerly or southerly.

Every seaman will admit, that however useful, and therefore desirable, it would be to know exactly the hour of a storm's commencement—as our acquaintance with meteorology does not enable such times to be fixed—the next best thing is to have limits assigned for extra vigilance and due precaution, which limits are clearly stated, in all the printed popular instructions, to be from the time of hoisting the signal until two or three days afterwards.

But, say some, and justly, are ships to remain waiting to avoid a gale that, after all, may not happen? Are fishermen and coasters to wait idle and miss their opportunities? By no means. All that the cautionary signals imply is, "Look out." "Be on your guard." "Notice your glasses and the signs of the weather." "The atmosphere is much disturbed."

Perhaps sufficient thought has not always been given to the consideration of mere loss by wear and tear, risk, accident, delay, and demurrage, caused by a gale at sea, balanced against the results of waiting for a tide or two, perhaps once in two months, when cautioned by a storm signal.

But be this as it may, with coasters, short traders, or even screw colliers, the question is entirely different with ordinary over-sea or foreign-going ships, especially when starting from a southern or from a western port. To such vessels a gale in the Channel, or even during the first day or two after clearing the land, must always be very prejudicial. Officers and men are mutually strange. Things are not in their place, often not secured; and the ship, perhaps, is untried at sea.

Of course, however, these remarks are inapplicable to fine first-class ships, and to powerful, well-managed steamers, independent of wind and weather, which start at fixed hours.

It is scarcely too much to say, even now, that if due attention be paid on the coasts to cautionary signals, and at the central office, to the telegraphed reports, no very dangerous storm need be anticipated, without more or less notice of its approach being generally communicated around the British islands, or to those particular coasts which probably may be most affected by its greatest strength. But this hardly applies to our extreme outposts, such as Jersey, Valencia, and Heligoland especially, because their remoteness, invaluable as that condition is for warning other places nearer the centre, is an obvious reason why they cannot always be forewarned themselves.

In using the daily weather reports, it ought to be kept in mind that only one state of atmosphere in twenty-four hours is there recorded (excepting for rainfall); therefore, it is only by comparisons, and due reference to previous reports, that probable consequences can be fairly inferred.

It is advisable, in considering the forecasts, to look at the second, as in some degree part of the first: time of weather continuing not being a certain or reliable notice.

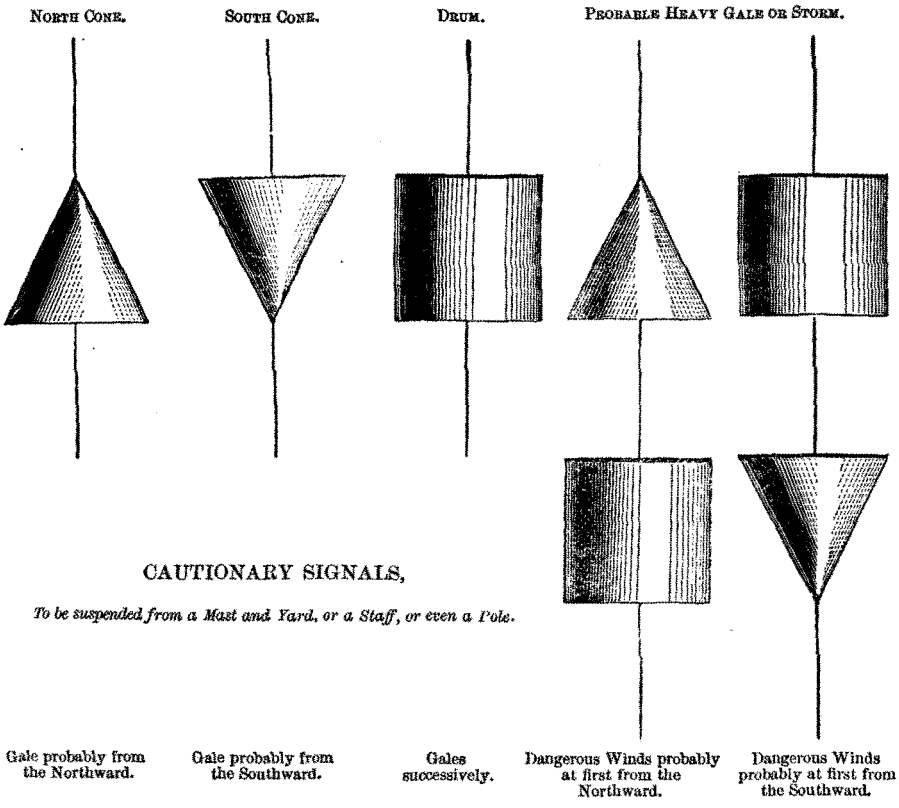
In conclusion, it may be impressed on the reader, that this system is still a tentative experiment. Each month, however, has hitherto added useful facts, and increased our acquaintance with the difficult though not uncertain varieties of the subject.

Nothing, however, could have been well effected in an attempt to apply meteorology to daily practice with confidence, had not a foundation of facts existed in the works of scientific authorities, whose statical records, and invaluable deductions, afforded a sufficiently extensive basis on which to rely while utilising modern powers of communication by telegraph, from any stations, simultaneously.

In the "Station Instructions for Meteorological Telegraphy" are explanatory directions which, with the "Barometer Manual," fifth edition,* will suffice, it is hoped, to give enough information, in a few pages, to satisfy the inexperienced in using weather-glasses, and to show the really weather-wise, or scientific reader, that he may give these weather reports, forecasts, and occasional warnings such weight as is justly due to deductions from facts.

Warnings, or cautionary notices of gales of wind, or storms, are given by the following signals at places on the coasts:—

* Sold by Potter, 31 Poultry, London, E.C.—Price One Shilling.

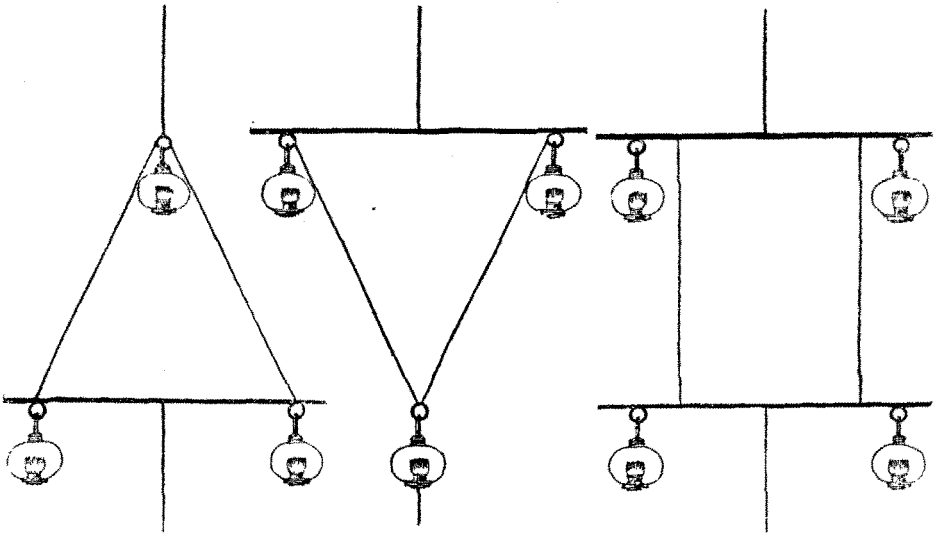


CAUTIONARY SIGNALS,

To be suspended from a Mast and Yard, or a Staff, or even a Pole.

Gale probably from the Northward.	Gale probably from the Southward.	Gales successively.	Dangerous Winds probably at first from the Northward.	Dangerous Winds probably at first from the Southward.

NIGHT SIGNALS (*instead of the above*). Lights in Triangle or Square.



Four lanterns and two yards, each not less than four feet long, will be sufficient—as only one signal will be used at night.

These signals may be made with any lanterns, showing either white, or any colour, but *alike*. *Red is most eligible*. Lamps are preferable to candles. The halyards should be good rope, and protected from chafing. The lanterns should hang *at least* three feet apart.

LECTURE ON LIFE-BOATS.*

Self-righting.—I come now to the explanation of a property which, by comparison, is a novel one, although more than two-thirds of the life-boats in the United Kingdom are now provided with it,—a property the value of which has been disputed by many, and for the adoption of which in its life-boats the NATIONAL LIFE-BOAT INSTITUTION has been accused by some of pursuing a phantom. I allude to the property of self-righting, by which the self-return of a boat to its normal position, after being upset, is effected.

Previous to the year 1852 no self-righting boat existed, although the power to make a boat self-right was ascertained by experiment, and recommended for use by the Rev. JAMES BREMNER, in the year 1792.

That which led to its first practical application was the offer, by his Grace the DUKE OF NORTHUMBERLAND, of a prize of 100*l.* for the best model of a life-boat, in the year 1850, consequent on the upsetting of one of the Shields life-boats, and the drowning of twenty out of twenty-four men, who formed her crew, to which I have already alluded.

In a statement addressed on that occasion to the boat-builders of the United Kingdom, by a committee nominated by his Grace, the different qualities to which a certain value would be attached were named, and amongst them was included that of self-righting, which property was possessed by the boat to which the prize was subsequently awarded.

I shall, under another heading, have more particularly to refer to the circumstances attending, and the results following, the DUKE OF NORTHUMBERLAND'S philanthrophic offer, so will not now break the thread of a progressive definition of the properties of existing life-boats. A most mistaken notion has not uncommonly prevailed amongst those who have not studied the subject, that the property of self-righting was merely a strong tendency to revolve in the water, just as a floating cask, if set in motion on its axis, will complete several entire revolutions round the same before it will stop, and that therefore in the same ratio that a boat is made to possess the property of self-righting must she also have a tendency to upset. This hypothesis is no "Frankenstein" of my own, but one which I have had several times to disprove with a serious countenance.

I think I shall be able to make it clear that the real difference between an ordinary and a self-righting boat is, that whilst the former, on being thrown by a sea or other force on one side beyond a certain angle, offers no further resistance, and cannot return; the latter, on the contrary, continues to oppose such a force in every position in which it can be placed unless nicely balanced with its keel exactly above the centres of gravity and motion, or, in nautical *parlance*, "keel up," a position in which it could not even momentarily remain in a rough sea.

* Delivered by Capt. J. R. WARD, R.N., at the Royal United Service Institution, Jan. 17th, 1862.—Continued from page 135 of the July Number of this Journal.

The only familiar object that occurs to me which will serve as an illustration of the principle, is one of those children's toys called "tumblers," which, into whatever position you may force or throw it, will most obstinately self-right, and certainly show no disposition to revolve on its centre, or even to make a second "somersault" without a second application of physical force. This quality of the child's toy is precisely the same as that in operation in the self-righting life-boat.

To obtain this peculiar property in a boat, all that is required is to attach to her a heavy iron keel, or otherwise ballast her heavily; to give her a fair sheer of gunwale; and to enclose a portion of her bow and stern as water-tight air-chambers. The amount of ballast and the size of the air-chambers are of course matters for careful calculation.

The manner in which the desired effect is produced will be at once perceived on examination of the drawing or model of one of these boats. The bow and stern air-chambers having sufficient buoyancy to support the whole weight of the boat when keel up, she is then floating unsteadily on two points, with the heavy iron keel or other ballast carried in an elevated position above the centre of buoyancy; thus forming, in mechanical language, an unstable equilibrium, in which dilemma the boat cannot remain — the raised weight falls to the one side or the other of the centre of gravity, and drags the boat round to her ordinary position, when the water shipped during the evolution quickly escapes through the relieving tubes, and, those of her crew who have been thrown out of her regaining her, she is again ready for any service that may be required of her.

The NATIONAL LIFE-BOAT INSTITUTION was, at an early period, warned by opponents to the system, that the self-righting of a boat would prove useless, inasmuch as that it would rarely happen that those upset from her could regain her or again get into her. Facts have since proved the invalidity of these prognostications, as these boats have upset and their crews *have* regained them, and again got into them, whilst the crews of other life-boats which have upset have perished.

Notwithstanding this manifest advantage, it might still be questionable if any other important principle should be sacrificed to effect it. But, if it can be shown that it can be introduced without any such sacrifice, it would surely be reprehensible in those who employ others on so dangerous a service as the rescue of shipwrecked persons, not to provide them with this additional means of safety.

Without blinking the question, I will at once point out how far any sacrifice has been made to secure the self-righting property:—

Its requirements are—

1. Ballast.
2. Enclosed air-chambers at bow and stern placed sufficiently above the centre of gravity.
3. Limited breadth of beam.
4. Limited side buoyancy.

1. *Ballast.*—Now the first of these requirements, ballast, is a positive source of safety. It necessarily increases lateral stability, and by adding

to the weight of a boat, gives a greater momentum when rowing against a high broken sea; which is often a source of safety, as she may thereby pass safely through or over a sea, instead of being driven astern by it. From the same cause, also, she can be more readily held back, and be prevented from "running" on a sea when returning to the shore, which is one of the greatest dangers that a boat can encounter.

2. *Raised Air-Chambers.*—The second requirement, raised air-buoyancy at bow and stern, is a great source of safety, by preventing all water or other weights from settling at either extreme end of a boat, and also by preventing much water from breaking over the bow or stern.

It will be readily conceived how advantageous it must be, on a heavy sea breaking over the bow of a boat, to have a buoyant power equivalent to more than a ton weight instantly resisting submersion. I have myself been too many times in the bows of the boats of the NATIONAL LIFE-BOAT INSTITUTION, in heavy surfs, not to have learned to appreciate the advantage. I believe, also, from my personal observation of them, that, placed under the same circumstances, one of the North Country life-boats would take half a ton of water into the bow from a single surf, where a good self-righting boat would scarcely ship a bucketfull.

3. *Limited Beam.*—I admit that great breadth of beam is a source of safety, as giving increased stability, and that some sacrifice of beam is required for self-righting. But great breadth of beam involves loss of propulsion against a heavy sea, which is often loss of safety, and requires the use of longer oars with more men to work them, all which are disadvantages. A self-righting boat with limited beam (say one-fourth of length) has, therefore, the advantage over the wider boat in these respects, whilst the loss of stability from diminished beam is made up for by an equivalent stability derived from ballast.

4. *Limited Side-buoyancy.*—I grant that some sacrifice of stability is made by a reduction of side-buoyancy, but it is the only real sacrifice, and is, I think, more than made up for by the gain of the self-righting power.

A further comparison of the relative advantages of righting and non-righting boats will come more regularly under a special heading devoted to a review of the existing life-boats in the United Kingdom.

Internal Capacity.—Another quality in a life-boat on which some stress has been laid is, what is termed "internal capacity," *i.e.* the amount of unoccupied space within a boat which might be filled with water on the breaking into her of a sea. The amount of "internal capacity" is determined by that of another property already considered. Given a certain amount of "extra buoyancy," and the remaining space still unenclosed constitutes what is usually implied by internal capacity. Practically, however, internal capacity is only that amount of space in which water will remain in a boat when lying on one side, with one gunwale only awash; for, if a boat should be absolutely filled to the level of the gunwales by a surf (a thing which I have never seen myself, and which I suspect is of very rare occurrence, unless in one of the deep, water-laden Norfolk life-boats), the first motion of the sea would throw the greatest portion of it over one side; the small quantity that would then remain in her, and of which her discharging tubes would not relieve her, as shown in figs. 1, 2, and 3 (Plate II., page 133), is then in reality an index of her internal capacity.

Speed and Weight.—After the properties already explained, and which may be more especially termed the safety properties of a life-boat, the next in importance is speed; for there would manifestly be no utility in providing the safest contrivance for taking off the crew of a wrecked vessel if it could not be conveyed to her in time to be of service. Frequently indeed, as stated in a former paragraph, speed constitutes safety, as a slow boat may be carried back by a heavy sea, and up-ended, or turned athwart, when the faster boat would have quickly passed through and over the danger. To obtain speed, or frequently any progressive motion, against a heavy sea—I speak of rowing-boats—fine lines and especially sharpness of bow are necessary, as in an ordinary boat, and that not at the waterline only, but carried up quite to the stem-head, which is immersed by every heavy surf which it meets. So also lightness, which is an advantage in smooth water, is an obstacle against a head-surf, when the momentum of greater weight without increased bulk is required to carry the boat through the moments of sudden resistance from the successive blows of heavy seas; just as the momentum of the familiar "flywheel" is required in many common machines to continue and equalize motion, as in turning a wheel by a crank. The greater the length of a boat in proportion to area of midship section, weight being the same, the greater will be her momentum, and the faster will she be propelled against a head sea. The proportion of four feet of length to one foot of width of midship section is that which is now adopted by the NATIONAL LIFE-BOAT INSTITUTION in its double-banked rowing-boats. In its single-banked boats, which are stationed at places where larger and heavier boats could not be managed, still less proportional width is given.

The preceding are all the important properties that have to be considered in a life-boat, although there are certain other conditions that follow as a matter of course; such, for instance, as sufficient roominess for stowage of a considerable number of wrecked persons, and for the rowers to use their oars with advantage; and great strength of build, to be qualified to stand the violent shocks which such boats must sometimes sustain from collision with wrecked vessels or contact with the shore.

In connection with this last-named condition, I may here state that most of the old classes of life-boats are clinker or clench built, of oak wood. The self-righting boats of the Institution are built of fir, on the diagonal principle, which mode of build affords great strength and elasticity. The

tubular boat of Mr. RICHARDSON is made of tinned iron.

Having explained the especial properties required to be possessed by life-boats, I will briefly state the peculiarities of the principal existing boats, and the history of each, and offer an opinion on their relative merits so far as I have had opportunity for judging of the same. I may first, however, observe, that one of the great obstacles to improvement in life-boats has been, that opportunities have not existed for comparing, one with another, their several qualities. Each boat has been known in its own locality by its own crew, who have been unacquainted with any other. However indifferent as compared with others might be her qualities, if she has been fortunate and met with no accident, she will in general have won the entire confidence of the local boatmen, who will think there is no other boat equal to her.

So also the builders and designers of life-boats have had no opportunity to test their own by comparison with others: such experiments are too costly to be attempted by individuals, for, independently of the great cost of a good life-boat (rarely less than 200*l.*), the expense of its removal from place to place to be brought into contact with other boats, and of its care whilst waiting favourable opportunities of trial, would be considerable; whilst the great cost of making such trials (which the local boatmen would never undertake for any private persons in a sufficiently rough sea to be of value, without very large remuneration) would alone be sufficient to deter most persons from incurring the same, especially as the whole might be thrown away if the boat should after all turn out worthless. Again, supposing such a boat were to upset and drown several of her crew when out for trial, who would undertake the support of their widows and orphans?

I have alluded to these difficulties to show how few persons can be qualified to give a practical opinion on the relative merits of life-boats, although it is not uncommon to hear inventors or partisans of particular descriptions of boats pronounce dogmatically as to their superiority to all others.

Having now held the office of Inspector of Life-boats to the NATIONAL LIFE-BOAT INSTITUTION ten years, and on my periodical rounds on the coasts of the United Kingdom having not only had opportunities for examining and learning the "local character" of every life-boat in the kingdom, but also for going afloat several hundred times in life-boats, and often in the heaviest surfs, I have necessarily some experience of them. I could, nevertheless, wish that it were greater, especially as regards the older classes of boats, which, being less numerous than the newer self-righting boats, and mostly not belonging to the Institution, I have had fewer opportunities for testing in heavy surfs —I give my opinion, however, for as much as it is worth.

III.—*Review of existing Life-boats.*

1. *North Country Life-boat.* Plate I., fig. 1, page 132.—This life-boat is commonly called the "Greathead" boat, as a Mr. HENRY GREATHEAD, boat-builder, of South Shields, who built the first boat of the class in the year 1789, was the reputed inventor of it. Since, however, a Mr. WILLIAM WOULDHAVE always asserted that he was really the original designer of it, although he had not the means of building a boat from his design, I have preferred calling it the North Country Boat —a considerable number of boats, all more or less derived from it, having been placed on the east coast of Scotland, and of England north of the Humber. There are now eighteen of this class of boats on the coasts of the United Kingdom. They mostly belong to harbour and dock corporations, and to local life-boat associations at trading ports on our north-eastern coast, Shields, Sunderland, and Hartlepool being the chief. The oldest life-boat now existing is of this class. She was built in 1802. She is stationed at Redcar, in Yorkshire, and is now the property of the NATIONAL LIFE-BOAT INSTITUTION. As no accident has ever happened to her, the Redcar boatmen have unbounded confidence in her, and would not exchange her for any other boat that could be given to them.

These boats have undoubted advantages: their great breadth and the exclusion of all water from their sides give them much stability, and their great curvature of floor and keel enables them to be turned more quickly to meet a sea, and to run more safely before a surf than a straight-keeled sharp-bowed boat can do. These peculiarities of form are, however, unfavourable to speed, and cause them to steer wildly.

This is the earliest description of life-boat of which we have knowledge. The largest of the class is rowed by 12, the smallest by 8 oars, double banked. They are neither provided with sails nor rudders, being exclusively rowing boats, their great curvature of keel (*vide models*) unfitting them for sailing, and the boatmen preferring to steer them with two long oars at the stern, by the use of which they can turn a boat much more quickly to meet a sea than with a rudder, especially when she has but little way on her, which must always be the case when rowing against a heavy sea and gale. Notwithstanding their great stability, several of these boats have upset from time to time, occasioning the loss of many lives. They cannot be made to self-right after upsetting, and they ship much more sea than do the self-righting boats. On the whole, I much prefer the latter to them.

2. *The Norfolk and Suffolk Sailing Life-boats.* Fig. 2, Page 132.—Of the life-boats now in use, those next in antiquity are the Norfolk and Suffolk sailing life-boats. The oldest of which we have any knowledge was one recently condemned at Great Yarmouth, which was built in 1833.

These are splendid boats for the especial use for which they are required—viz., as sailing boats to proceed to wrecks ashore on outlying banks, and not being required for closer service, which would need to be performed under oars. As exclusively sailing boats, I believe them to be unequalled. Yet, from various causes, there is perhaps scarcely any other part of the coast for which they would

be useful, unless on Deal Beach, for service on the Goodwin Sands.

I have never myself had an opportunity for going out in one of these boats in a very high sea; but the services performed by the crews of some of them have been noble, especially by those at Lowestoft and Pakefield in Suffolk, and at Caistor in Norfolk. As rowing life-boats I have, under another heading, stated that I think them unsuitable.

3. *The Self-righting Life-boats of the* NATIONAL LIFE-BOAT INSTITUTION. — Previous to the year 1852 all the life-boats in the United Kingdom were modifications of one or the other of the two classes of boats just described, excepting four or five on a plan now obsolete, invented by Mr. Plenty, a coach-builder in Berkshire, and the Liverpool life-boats. These latter were simply fine powerful boats, having a large portion of their interior occupied with empty casks as extra buoyancy, but not provided with any means for self-discharge of water.

Under the head of "self-righting" I have already stated that in the year 1850, His Grace the DUKE OF NORTHUMBERLAND offered a prize of 100*l.* for the best model of a life-boat. In response to that offer, no less than 280 models and plans of life-boats were submitted. They were deposited at Somerset House, where they went through a long series of examinations and tests by a committee, ably presided over by CAPTAIN WASHINGTON, R.N., and of which JAMES PEAKE, Esq., the present master shipwright of Devonport Dockyard, was a member. The task that this committee had to perform was a most onerous and difficult one. Here were before them a very large number of plans, the selection from which was a matter, it might be, involving the life or death of many hundreds, perhaps even, looking to the future results of their decision, of thousands of individuals. Yet I believe that no member of the committee had ever been afloat in a life-boat in a high surf, and CAPTAIN WASHINGTON was the only one who had had an opportunity for examining any large number of the life-boats on the coasts. I think that that committee were entitled to the greatest credit for undertaking such a responsible and laborious duty, and for the judicious manner in which they carried it out.

Having decided on the various qualities which a life-boat ought to possess, they appropriated to each quality certain numbers, proportionate to its importance, the total of all the numbers amounting to 100. To each design was then appropriated, after careful deliberation, the proportion of numbers on each quality to which it appeared entitled. To the design possessing the largest total of numbers it was decided to award the prize of 100*l.*, to which was added, by His Grace, another 100*l.* towards the cost of a full-sized boat on the selected plan. The prize was awarded by the committee to MR. JAMES BEECHING, boat-builder at Great Yarmouth.

A large boat, 36 feet long, and rowing 12 oars, was built from this design, which boat was afterwards purchased by the Ramsgate Harbour Commissioners, and a model of which is now on the table. An improvement in the mode of ballasting her was subsequently made, and since that time she has been one of the most frequently used and useful life-boats in the United Kingdom. Some of the most gallant exploits performed by her crew will be familiar to many present through the medium of recent numbers of "Macmillan's Magazine." This was the first self-righting life-boat.

The committee did not, however, propose the adoption of this boat, but deputed their member, Mr. PEAKE, to furnish a design for a life-boat which should, to the best of his judgment, combine all the good qualities of the best of the designs that had been sent in. This was done, and a report of the whole proceedings of the committee prepared, with drawings of the "prize-boat," and of several others to which high numbers had been awarded, as also the design furnished by Mr. PEAKE. The whole, together with other useful information on the subject, forming a handsome volume, was published at the expense of the DUKE OF NORTHUMBERLAND, and gratuitously presented by him to the competitors for the prize, and many others.

A boat from Mr. PEAKE's design was then built at Her Majesty's Dockyard at Woolwich, by direction of the Lords of the Admiralty, as a compliment, I believe, to the DUKE OF NORTHUMBERLAND. After a long series of trials, and after undergoing many alterations, this boat was completed and presented to His Grace, who had three others built similar to it at his own expense, and one on BEECHING's design, with boat-houses and transporting carriages complete, for the use of the fishing stations on the coast of Northumberland.

After these boats had been tested on the coast, by myself, in high surfs, the NATIONAL LIFE-BOAT INSTITUTION proceeded to build others on the same plan, although cautiously at first; which plan, with but slight modification and some improvement in form, it has continued to adopt up to the present time. It now possesses no less than 100 self-righting boats on this plan.

This boat has been called "Peake's Life-boat;" it would, however, with more propriety be called "Beeching's Life-boat, improved by Mr. Peake," or "The Northumberland Prize Life-boat, improved by Mr. Peake," it being a nearer resemblance to BEECHING's prize-boat than to Mr. PEAKE's design, as published in the "Northumberland Report" before alluded to.

Unfortunately, soon after the award of the prize to Mr. BEECHING, accidents happened to three of his boats, which well nigh smothered them altogether, and brought the very principle of self-righting, for a time, into disrepute. One of the requirements selected by the prize committee to which numbers were to be appropriated was lightness for land-transport; to meet which Mr. BEECHING and several others, knowing that weight was required when afloat, adopted water-ballast, to be let in at the moment of launching. This ballast Mr. BEECHING, unfortunately, did not secure properly, and three of the first boats built by him for another society upset through the leaking out of their water-ballast, when on their experimental

trials with large sails set. From want of their ballast they did not self-right, and unhappily on two of those occasions lives were lost.

The self-righting principle was now at a discount, and many who from the first looked on it as the whimsical offspring of a theorist's brain, fit only to contend with storms on Utopian shores, now fully believed that the young visionary had already closed its earthly career. But its nurses thought otherwise, and, satisfied of its practical reality and vigorous growth, were nowise disheartened; so, setting it again on its legs, they sent it forth to make its own way and prove its own worth. It has now a ten years' existence, and is certainly, as yet, showing no signs of premature decay.

Since as I have thought it just to show that the sole authorship of the self-righting life-boat now in use belongs neither to Mr. PEAKE nor Mr. BEECHING, I have here designated it the "Self-righting Life-boat of the National Life-boat Institution."

Now it is not pretended that this boat is infallible—that it cannot be upset—or that it cannot be improved on. I fully believe that no boat can be built which will not be liable to upset under some circumstances. But, after going afloat in these boats numberless times in heavy surfs, and being exactly acquainted with their character, I do not hesitate to give the opinion that, taking them altogether, they are, as rowing boats, more suited for the service for which they are required, and safer to those who man them, than any other description of boat in use. In continuing to adopt this class of boat in preference to any other, the Institution has not been influenced by my reports of them alone, but by the encomiums of the crews who work them; by the noble services they have rendered to shipwrecked persons; by their numberless successes and few failures; and by the results of the few accidents which have happened to them.

Since their first adoption, six of these boats have been upset and one put *hors de combat:* four of that number being a small class of single-banked boat, rowing but six oars, which are placed at stations where there are no local means for managing the larger double-banked boats.

These accidents were as follows:—

1st. *Lyme Regis.*—On the 7th January, 1854, the Lyme Regis life-boat was upset by the falling over of a French schooner upon her, the schooner's deck-cargo of casks of wine being dashed with violence into the boat. Although this boat was seriously damaged, and was for a time held down by the vessel's sails, so that she could not self-right, she was righted after the sails and gear which held her down were cut away, and the crew of the French vessel and the boat's crew were safely carried to shore by her, with the exception of one of the latter, who had unfortunately untied his life-belt, and was last seen struggling amongst the *debris* of the wreck. Had the boat not been a self-righting one, all hands would undoubtedly have perished, the accident happening at a considerable distance from the land.

2nd. *Dungeness.*—On the 19th October, 1858, in the middle of the night, the small six-oared Dungeness life-boat upset, by broaching-to when running through a heavy surf on her return from a deserted wreck. Her crew, eight in number, were thrown into the water, but she instantly righted again, when they all got into her, and returned in her safely to shore, reporting themselves to the officer of coastguard at the station as ready to go out in her again at any moment their services might be required.

3rd. *Aldborough.*—On the 3rd January, 1860, the Aldborough life-boat was hauling off the beach by an anchor and warp to proceed to a stranded vessel, when a tremendous surf struck her, tore the warp out of the hands of the crew who were hauling her off, and upset her. Fifteen men were in her, of whom 14 were thrown into the sea, and 1 remained in the boat clinging to a thwart.

The masts, which were up, broke off on coming in contact with the ground, and the boat directly righted again. Some of the crew were thrown 30 yards or more from the boat by the sea which upset her. Four of them made for the shore, the other 10 returned to the boat. Unfortunately the weather was so intensely cold, the snow being a foot deep at the time, that although the crew, supported by their life-belts, were able to regain the boat, their blood was so chilled, and their limbs so paralysed, that they could not unaided get into her again. The one man who had gone round with her, and who was not even entirely wet through, aided 9 men into the boat; but the tenth man was by that time so benumbed with cold that, finding himself unable to retain his grasp of the life-lines round the boat with his hands, he seized one of them between his teeth. Sad to say, however, before the man within the boat was able to assist him, a heavy lurch of the boat tore his teeth from the jaw, and he was carried away. Two of the 4 men who had made for the shore were with difficulty rescued from the breakers on the beach; but the 2 others and the poor man with the broken jaw perished from cold. Supported by their life-belts, the bodies were swept by the tide to the north, within a short distance of the shore, and followed by a large crowd of persons; but when at last they were got to the beach, a mile northward of the site of the accident, life was extinct.

4th. *Ardmore, Ireland.*—On the 6th of November, 1860, the Ardmore small 6-oared life-boat, when out for exercise, was returning to the shore through a very high surf, when, too much way having been given to her, she ran on a sea, broached-to, and upset. Her crew of 8 men, with 3 amateurs, one of them the local honorary secretary, were thrown into the sea; but she self-righted, and they all regained her, and returned safely to the shore.

5th. *Tramore, Ireland.*—On the 17th February, 1861, the Tramore 6-oared life-boat, when attempting to save the crew of a wrecked vessel, was upset, and her crew, 8 in number, were thrown out of her; she directly self-righted, and a portion of them got into her again; the remainder swam to the shore, supported by their belts. She afterwards saved some of the wrecked men, and a few

days after saved the crew of another wrecked vessel.

6th. *Calais.*—On the 28th February, 1859, the small 6-oared life-boat which had been presented to the town of Calais by the English Government, got stove in alongside a stranded steamer off Calais. Becoming partially filled with water, her stability was thereby injured, and those who got into her from the steamer, all getting to her further side, from fear of injury by her striking against the vessel, her off-gunwale was put under water, and a sea breaking over it at the time, she upset. She righted again; but 3 out of 7 persons who had got into her, and had on no life-belts, unhappily perished. A mixed crew of English and French, and great mismanagement throughout, occasioned this accident.

7th. *Scarborough.*—On the 3rd November, 1861, the Scarborough, 32 feet, 10-oared self-righting, life-boat, which had been only a few weeks on her station, was proceeding to a wrecked vessel, stranded very close to the shore, when she got into a very high and irregular surf, caused by the rebound of the waves from a sea-wall. Her motion became so violent that the steersman was thrown overboard, and the crew, in attempting to save him, got into a still worse position, and some of their oars getting broken and knocked out of their hands, she became unmanageable, and was dashed several times with terrific violence against the sea-wall, her crew being all thrown out of her in succession. This accident is of so recent a date that the circumstances of it will be fresh in the memory of every one; the newspapers having recorded all its details. It will suffice therefore to state, that, to the astonishment of all present, the boat did not upset, and was not broken to pieces; that one of her crew was crushed between the boat and the wall, which caused his death; and that one was drowned, he being the only one who had unfortunately neglected to put on his life-belt.

The above are the only serious accidents that have occurred to this class of boats; for those to the first experimental and immatured life-boats of Mr. Beeching cannot be fairly included in the category.

The result of the seven accidents above enumerated are, that out of 82 persons who were in the boats when the accidents occurred to them, only 9 perished; 3 from cold, 2 from injury, and 4 from drowning, through not having on life-belts. Now had not these boats been self-righting, and had not their crews been supplied with good life-belts, how much larger a number would indubitably have perished!

As a contrast, we have, during the last eleven years only, the upsetting of the Shields life-boat in 1849, with the loss of 20 out of 24 of her crew. On the 4th January, 1857, the upsetting of the Point of Ayr life-boat, on the Liverpool plan, when her whole crew of 13 men perished. And lastly, the upsetting, on the 9th February, 1861, of the Whitby life-boat, when 12 out of 13 of her crew perished. Giving a total of 45 lives lost out of 50 by these three accidents alone.

With such an extraordinary contrast in the results of accidents to self-righting and non-righting life-boats, who will venture to say, that the principle of self-righting is a chimera, or that it is any other than a great practical and valuable truth?

No less than 135 of these self-righting life-boats have been built during the last ten years by the Messrs. Forrestt, of Limehouse, builders to the Institution, of which number 30 have been for foreign governments or for our colonial and foreign possessions. They have, during the same period, saved several hundred lives on our own coasts, and have rendered other valuable services to wrecked vessels on different parts of the world.

(*To be continued.*)

THE WRECK REGISTER AND CHART FOR 1861.

Shakespeare compares England to a fortress, and the Channel to a moat; but if he saw the leviathan steamers now coming up that channel, he would be the first to acknowledge that the comparison did not hold good in the present day. We do not now look upon the sea as itself giving us a defence; it is only our chief medium of defence. But it is now, as in the days of Drake, our great commercial highway and source of our strength, girdling us, if it does not guard us, and bearing into our havens all the products of the known globe. All who leave us or approach us must do so by this great highway, which carries on its bosom in the course of one year alone, to and from our own ports, no less than 267,770 ships, including repeated voyages, and which ships have probably been manned by 1,600,000 souls.

Such is the field of operations over which these dry statistics of the Board of Trade carry us. As usual, they have been most ably drawn up and collated in every possible form. Yet on nearly every page of this Register these startling facts, in admonitory terms, face us, that 1,494 shipwrecks occurred on British shores last year, from which 884 people are known to have perished.

The number of wrecks last year has unfortunately exceeded the number during any of the preceding nine years, and it is 260 in excess of the annual average of the last six years.

It is a lamentable fact that shipwrecks on our coasts have been of late years on the increase. Thus, during the last seven years, we find the following account:—in 1855, 1,141; 1856, 1,153; 1857, 1,143; 1858, 1,170; 1859, 1,416; 1860, 1,379; 1861, 1,494!

The accompanying Wreck Chart clearly shows the spot where each casualty occurred, and the number of lives lost by it.

We are told that this great increase of disasters in 1861 was owing to the fearful gales of January, February, and November of that year, when 842 wrecks took place, principally amongst our rotten collier class of vessels. Gales, even of a moderate character, are always destructive to these ships; or, in other words, they are doomed to certain destruction under circumstances in which a ship, if seaworthy, and properly manned and found, ought to be able to keep the sea. The best harbours of refuge in the world would not, therefore, prevent a tithe of these disasters, which unfortunately too often occur where neither the life-boat nor the rocket apparatus is available to succour their unfortunate crews.

We regret to find that the number of collisions is also on the increase. No calamity is more fearful than that of a collision at sea during a dark, stormy night. Its destructive effects are instantaneous, and frequently a large number of persons go down with either ship. The collisions in British waters were in 1859, 349; in 1860, 298; and in 1861, 323! But what is very remarkable in regard to these fearful collisions is the fact that, during the past six years, 750 collisions have taken place in clear and fine weather, 378 from bad look-out, 264 from neglect of rule of road at sea, and 61 from actual want of seamanship. The gross total of collisions during the past six years having been 1,864.

A natural sequence of the increase of vessels wrecked is the increase of precious lives lost. The number of persons who thus lost their lives in 1861 was, as previously stated, 884; while in 1860, it was only 536.

This, let it be remembered, is not a casual loss. It is a continual, if not an ever increasing one. The drain on our sailors and fishermen goes on year after year, notwithstanding all the benevolent and strenuous efforts made at the present day to stay the ravage. The sea is dreadfully exacting in its demands; and season after season, when the equinoctial gales blow, when the winter sets in, or when the summer, as our last one did, yields to the temporary but powerful influence of storms, our shores are converted into altars, on which the Ocean offers his victims. It is unlikely that we shall ever effectually obtain the mastery over the waves; but, even at this moment, we are able to contend successfully with them in their blind efforts to swallow up life against our endeavours to save. If, for instance, during 1861, eight hundred and eighty-four people lost their lives on our coasts by shipwreck, yet no less than *four thousand six hundred and twenty-four* were directly saved from such a fate. The whole number makes up a considerable fleet of seamen,—men for whom, perhaps, in moments of national emergency, we would give any money,—and many of these were preserved under the most perilous circumstances by the craft of the NATIONAL LIFE-BOAT INSTITUTION.

The total number of casualties in two years is 2,873, out of which 1,660, or about seven-twelfths of the whole, happened to ships of the collier class—a fearful disproportion, and calling loudly for a thorough and searching investigation.

The following table distinguishes clearly the description and tonnage of the ships lost during the past year:—

	Vessels.
Vessels under 50 Tons – –	228
51 and under 100 „ – –	434
101 „ 300 „ – –	639
301 „ 600 „ – –	135
601 „ 900 „ – –	31
901 „ 1,200 „ – –	18
1,200 and upwards – – –	5
Unknown – – – – –	4
Total – – –	1,494

Let us briefly analyse the causes of this great destruction of property:—We find that 10 wrecks took place in a perfectly still sea, 14 in light airs, 51 in light breezes, 43 in

gentle breezes, 103 in moderate breezes, 171 in fresh breezes, 149 in strong breezes, 66 in moderate gales, 124 in fresh gales, 230 in strong gales, 311 in whole gales, 102 in storms, 52 in hurricanes, and 68 in unknown and variable weather. Total wrecks, 1,494. Of these 619 took place amongst ships in the home and coasting trade, commanded by men not required by law to have certificates of competency. 266 wrecks only occurred amongst vessels in the home trade, commanded by masters holding certificates of service; so that the rivalry between ignorance and knowledge is an unequal one, as it ever has been and ever will be.

The estimated loss on these 1,494 wrecks is upwards of one million sterling. But who can estimate the loss of the valuable lives who also thus perished with the ships! Many a widow and orphan in our seaport towns and fishing villages will tell us how severely they have felt their bereavement!

The accompanying roll of the loss of life on British shores and waters during the past twelve years will be perused with melancholy interest. The districts are thus classified:—

	Lives lost.
Farn Islands to Flamborough Head	670
Flamborough Head to the North Foreland	1,068
North Foreland to St. Catherine's Point	514
St. Catherine's Point to Start Point	82
Start Point to the Land's End	460
Land's End to Hartland Point, including Scilly	353
Hartland Point to St. David's Head	473
St. David's Head and Carnsore Point to Lambay Island and Skerries, Anglesey	969
Skerries and Lambay to Fair Head and Mull of Cantire	1,597
Cape Wrath to Buchan Ness	257
Buchan Ness to Farn Islands	280
All other parts of the Coast	922
Total lives lost	7,645

It is thus seen that the most serious wrecks, as was urged in Parliament last session, do not happen on the north-east coast of England, but in those seas and channels mostly frequented by large foreign-going ships. This is a matter deserving earnest public attention. Some hundred thousands of pounds judiciously laid out in improving our great natural harbours of refuge would, we think, be attended with the greatest possible benefit.

Again this fearful list tells us in legible terms that man cannot avert the storm—nor prevent the occurrence of wreck and violent death at sea. The proudest vessels that he builds of wood and iron are but as larger straws before the winds of heaven. A breath can dash them on the shore, and they perish in their pride, and our vanity is humbled. We may never hope to rise superior to every storm or cause of wreck. It is our duty, however, to strive for safety—to continue to wrestle hard with danger—to confine disaster and death within the narrowest limits which human efforts can impose upon them.

How happily then the efforts of the National Life-boat Institution, the Board of Trade, and kindred bodies on the coast have been blessed during the past six years! During that period alone 16,119 persons have been saved from shipwrecks by means of the life-boats, the life-preserving apparatus, shore boats, and other appliances, as the annexed list shows:—

	Lives saved.
1856	2,243
1857	1,668
1858	1,555
1859	2,332
1860	3,697
1861	4,624
	16,119

He must be less than man who can read unmoved and without a glow of admiration the account of such services and of those given in that Institution's Report. Take the rescue of the crew of the brig *Sisters*, of Whitby, on the 26th February last. It will serve as a suitable illustration of the dangers that have to be encountered by the skill, courage, and endurance that are needed of the brave fellows who man the Society's life-saving fleet:—

The *Sisters* was laden with coals, and had been driven on shore on the South Barber Sand off Caistor. Her signals of distress having been seen from the beach, the Caistor boatmen proceeded to launch the life-boat there through a tremendous surf, the wind blowing a heavy gale from the

SUMMARY.

In 1861 the Number of Vessels wrecked on the coasts and in the seas of the United Kingdom was 1494.
Of these 513 were total wrecks, 62 sunk by collision, making the number totally lost 575.
Vessels stranded and seriously damaged 658.
by Collision 261, total 919, making the whole number of Casualties 1494 & the Loss of Life as far as can be ascertained 884.

	Life Boats.	Mortar and Rocket Stations.	
There are	137	169	in England
	20	25	„ Scotland
	22	41	„ Ireland
	179	235	


WRECK CHART
OF THE
BRITISH ISLES
FOR
1861
Compiled from the Board of Trade Register.
SHOWING ALSO THE PRESENT
LIFE BOAT STATIONS
Signifies Total Loss by Stranding or Foundering
Partial loss by Stranding, Dismasting or Leakage.
Sailing Vessels in Collision with Total Loss
with partial Loss.
Collision of Sailing with Steam Vessels with Total Loss.
partial Loss.
Steam Vessels in Collision with partial Loss.
Ditto Total Loss.
Represents a Life Boat.
Scale of Nautic Miles.
10 0 50 100
GERMAN OCEAN
ENGLAND
HOLLAND
BELGIUM
FRANCE
ENGLISH CHANNEL
Buchan Ness
Tod Hd
Red Hd
Button Ness
Fife Ness
St Abb's Hd
Berwick
Sunderland
Newcastle
Hartlepool
Scarborough
Flamborough Hd
Bridlington
Hull
Spurn Hd
MANCHESTER
Preston
Gibraltar Pt
THE WASH
Boston
Winterton
Gt Yarmouth
Lowestoft
Southwold
Aldborough
Orfordness
Ipswich
Harwich
The Naze
LONDON
R. Thames
N. Foreland
S. Foreland
Dover
Dungeness
Beachy Hd
Brighton
Portsmouth
Southampton
Bristol
Bill of Portland
St Albans Hd
C. de la Hague
le Havre
Dieppe
Calais
Boulogne
Dunkirk
Ostende
Rotterdam
Amsterdam
Helder
Ter Schelling
Jersey
Stanbridge & Co Litho Old Jewry London

east at the time, and the night being intensely dark. Under these difficult circumstances, although more than 100 persons were engaged in helping to launch the boat, an hour elapsed before she could be got off the beach and warped to the hauling-off anchor laid down outside the surf. Sail being then made on her, she worked to windward to the scene of the wreck, where the anchor being let go, she was veered down, but owing to the darkness and the fearful sea breaking over the vessel, it then took an hour to get the crew of 9 men into the boat, and that at very great risk, as the life-boat was often lifted by the sea high above the vessel's sides, and several times dashed violently against her and on the sand, thereby incurring considerable damage; also losing one hundred fathoms of her rope gear, which had to be cut away on hauling off from the wreck. It was indeed life for life, but humanity prevailed in the courageous encounter, and the wrecked crew were ultimately got safely in, and landed through a heavy surf. Forty-five pounds were paid by the Institution for this service, viz., 40*l.* to the 20 men forming the life-boat's crew, and 5*l.* to the parties assisting to launch the life-boat.

Englishmen in every part of the world may surely pause with pride over such chronicles of life-boat services on our coast, as also over the reports of the cheerful liberality with which the NATIONAL LIFE-BOAT INSTITUTION is supported to enable it to continue and extend with unabated vigour its merciful operations on our coasts.

We will recapitulate some of these beneficent gifts, and allude briefly to the Society's operations.

Lord Chief Justice ERLE, and the Corporation of London, and the Members of the Royal Thames and the Victoria Yacht Clubs, contributed liberally for the safety of the seamen. A citizen of Newcastle-on-Tyne, to whom a legacy of 19*l.* had been left, passed it over, not to his own banker, but to that of the Institution. "N. L.," residing in Manchester, sent 250*l.* to defray the cost of the Kirkcudbright life-boat; and a stranger, "who would not give his name," left at the Institution a bank-note for 200*l.* Mrs. E. HOPE, carrying out the dying wishes of her husband, the Rev. F. W. HOPE, gives 340*l.* to buy a new life-boat for Appledore, Devon. The ladies of Newbiggin realized for the funds 301*l.* 16*s.* by a bazaar; Mrs. HARTLEY and Miss BERTIE CATOR, promoting life-boat funds, were enabled to raise six hundred guineas; Miss BURDETT COUTTS, in her exhaustless beneficence, gave the cost of the Plymouth and Silloth life-boats; Mr. G. J. FENWICK, of Seaton Burn, contributed 250*l.* to provide the Tynemouth life-boat. Miss BRIGHTWELL, honouring her father, pays the cost of the Blakeney boat, and calls it after his name; and certain travellers in the smoking saloon of the North Kent Railway, bethinking them of the claims of the NATIONAL LIFE-BOAT INSTITUTION, extemporised a subscription to increase its resources. Even from Abo, in Finland, 50*l.* is sent to the Institution in admiration of its services to the shipwrecked crews of all nations.

We have a list before us of the names of upwards of one hundred wrecks, from which, within the space of two years and a half, 726 lives were saved by the life-boats of the Society. It is on this list — this trophy of success—that the committee of this Institution found their latest appeal. During that period its establishments on the coasts of the United Kingdom have cost 27,260*l.* They have voted 2,458*l.* as rewards to the crews of their life-boats, and 572*l.* to those who, by shore-boats and other means, saved 562 shipwrecked persons, in addition to the above 726; making a total of 1,288 persons saved from a watery grave during the last two years and a half. Since its formation, the Institution has been instrumental, by its life-boats and other means, in saving 12,680 lives; and having now 123 life-boats under its management, it requires a large annual income to meet the demands upon its priceless services.

EARL RUSSELL, K.G., ON SAILORS' ORPHANS.

AT the opening, on the 29th July last, of the new Asylum at Snaresbrook for Merchant Seamen's Orphans, EARL RUSSELL, K.G., H.M. Principal Secretary of State for Foreign Affairs, made some appropriate remarks on the occasion.

It is now nearly forty years since EARL RUSSELL, standing by the side of the great WILBERFORCE, the then ARCHBISHOP OF CANTERBURY, and other philanthropists of that day, took part in the establishment of a somewhat kindred society, the ROYAL NATIONAL LIFE-BOAT INSTITUTION, then called the "ROYAL NATIONAL INSTITUTION FOR THE PRESERVATION OF LIFE FROM SHIPWRECK." He was at that time elected one of its Vice-Presidents. His Lordship has ever since continued to occupy that position in the Institution, and to extend to it annually his liberal support.

His early sympathies for the calling of the sailor remain evidently undiminished; and the following remarks of his Lordship will be read with interest by every friend of the sailor's orphan child:—

EARL RUSSELL said he was glad to see that they had provided in that beautiful building for an increased number of boys and girls. In regard to every member of the community there were constantly accidents which deprived children of parents, but the children of sailors were more particularly liable to be placed in this unfortunate position; and therefore such an institution as this ought to inspire all who took an interest—and who in England did not take an interest?—in the sailor to endeavour to benefit his orphans, and alleviate in some degree—and it could be in a small degree only—the loss of parents. He trusted that this institution would flourish, and that it might be instrumental in supporting the commercial marine and the navy, which gave to this country that political strength that made it the admiration of other nations and the support of all that was good and glorious. It was of the greatest importance that the youth—boys and girls—should be well, intellectually, but, above all, religiously instructed. How much did the welfare of families and of the country depend on the success of institutions like these; but above all must the seaman engaged in his arduous and perilous occupation—depending on the Divine Providence whether he should safely reach the port, or whether he should be overwhelmed in the depths of the sea—feel the advantage to him, to his wife, and to his family of such an asylum as this. This was felt by those who went out in the herring boat, and how much more must it be felt by those who went to the tropical regions, or who, in the storms in the Baltic, endeavoured to furl the sails with their nearly frozen fingers! Then he asked them to think, if it was not in their power to control these things, yet was it not in human power to alleviate in some degree those calamities by providing for the children of those who were the victims of the storm, by placing them in an institution where they might receive not only their daily food, but the daily food of religious instruction, such as to secure to them in future the meed of reward due always to honesty, sobriety, and integrity? He thought that these asylums ought to be formed in every port of the United Kingdom. He would only observe to those who were concerned in the merchant shipping of this country, that they should make their ships of the best materials and of the best construction; so that, in the case of storms and shipwrecks, which it was not in their power to avert, they could say at least that they did not send their ships to sea without their being well found or in a state requiring repair. He felt, as they must all feel, that on the navy of this country and on its merchant shipping depended the wealth and prosperity of the country. He felt that, in the case of any emergency arising in this country, it was to the navy and the merchant navy that they must look to preserve its power. They must look to the navy to preserve that freedom which many abominated—to preserve that independence which was one of the anchors by which the freedom and independence of the world were safely moored (applause).

SUMMARY OF THE MEETINGS OF THE COMMITTEE.

Thursday, 5th June, 1862. THOMAS CHAPMAN, Esq., F.R.S., *V.P.*, in the Chair.

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

Read letter from Capt. JENKINS, C.B., of Her Majesty's Indian Navy, late Chairman of the Aberdovey Branch of the NATIONAL LIFE-BOAT INSTITUTION, of the 21st May, calling attention to the recent valuable services of the Aberdovey life-boat in saving the smack *Merrion Lass*, of Aberystwyth, and her crew of 3 men, and to the beneficial effect the services of the boat had had on the seafaring population of the locality.

Ordered a copy of Capt. JENKINS' letter to be sent to Lloyd's.

Read and approved the Inspector's Report of the 3rd inst., of his recent visits to some of the life-boats of the Institution on the Irish and Welsh Coasts.

Read letter from the Deputy-Chairman of the Institution of the 31st May, forwarding a letter from WM. WILSON, Esq., of Mincing Lane, enclosing a draft for 300*l.*, being the amount of the contribution of Miss SARAH LECHMERE for the Withernsea life-boat and transporting carriage.—*To be thanked.*

Also from Her Majesty's Principal Secretary of State for War of the 9th ult., stating, in reply to the application of the Institution, that he had ordered twelve carronades and carriages to be supplied to the Society for the purpose of collecting its life-boat crews at various stations.—*To be thanked.*

Also from R. TEMPEST, Jun., Esq., of Derby, of the 28th May, forwarding 22*l.* 12*s.* 2*d.*, being the amount of contributions collected by him in that town and its neighbourhood in aid of the funds of the NATIONAL LIFE-BOAT INSTITUTION.—*To be thanked.*

Reported—That the late Dr. C. T. WEST, of Kingston-upon-Hull, had left a legacy of 100*l.* to the Hornsea Branch of the Institution, and that it had decided on transmitting the amount when received, to the Parent Institution.

Also that the late Mr. WM. LUPTON, of Salford, had left a legacy of 100*l.*, free of duty, to this Society.

Also that Messrs. PEACOCK and BUCHAN had, in accordance with the instructions of the Committee, forwarded a supply of paint to all the life-boats belonging to the Institution.—Ordered their account, amounting to 143*l.* 15*s.*, to be paid.

Also that Admiral FITZROY, F.R.S., had presented, on behalf of the BOARD OF TRADE, to the Institution, one hundred copies of his Barometer Manual.—*To be thanked.*

Paid 587*l.* 3*s.* for sundry charges on various life-boat establishments.

Voted 4*l.* 10*s.* to pay the expenses of the Howth (Dublin Bay) life-boat in putting off and rendering assistance to the schooner *Liberty*, of Dublin, which was in a disabled condition and rapidly driving on a sand-bank, near Howth, on the 22nd January last, in a strong gale of wind.

Also 2*l.* to the crew of a pilot-boat for saving 4 men who had been capsized from their boat, while entering Arklow River, during blowing weather, on the 5th May.

Also 2*l.* 10*s.* to the crew of a fishing-boat for rescuing, at risk of life, the crew of a boat which had capsized off Findon, on the Coast of Aberdeen, in stormy weather, on the 19th April.

Also 7*l.* to a boat's crew of 7 men for putting off in a fishing-coble and saving 3 men, whose boat had been capsized during a strong gale of wind off Johnshaven, Montrose, on the 11th April last.

Also 2*l.* 10*s.* to the crew of a coast-guard galley for going off, in a strong breeze, and rescuing, at the risk of their lives, the master, his wife, and 2 men, from a boat belonging to the sloop *Robert*, of Barrow, which they had abandoned in a sinking condition off Douglas, Isle of Man, on the 16th Feb. last. When rescued, the boat was fast drifting towards some rocks, and her crew, when providentially saved, were in a most exhausted condition, having been 8 hours drifting about in the current.

Thursday, 3rd July. THOMAS CHAPMAN, Esq., F.R.S., *V.P.*, in the Chair.

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

It was moved, seconded, and carried unanimously:—

That a model of the self-righting life-boat and of the transporting carriage of the ROYAL NATIONAL LIFE-BOAT INSTITUTION be presented to Vice-Admiral ALGERNON, Duke of NORTHUMBERLAND, K.G., as a permanent memorial of the important services rendered to the cause of humanity by His Grace, to whose enlightened and liberal philanthropy is to be ascribed the origin of the self-righting life-boat now successfully used on the coasts of the United Kingdom, and on those of many other parts of the world.

Read letter from J. C. BROMEHEAD, Esq., of Cannon Street, of the 6th June, stating that Mrs. ELLEN HOPE, as executrix of her late husband, the Rev. F. W. HOPE, had decided on presenting 340*l.* to the Institution to pay the cost of the Appledore new life-boat and transporting carriage, and their equipments.—*To be thanked.*

Also from G. S. SLATER, Esq., of Leith, of the 23rd June, forwarding a check for 100*l.* as a donation from "A Lady Friend in Leith," in aid of the funds of the Society.—*To be thanked.*

Also from Mr. JAMES DARLING, of Blyth, of the 18th June, forwarding 6*l.* as an additional contribution to the Institution from the seamen belonging to the port of Blyth.—*To be thanked.*

Also from Mr. J. WILLIAMS, the Hon. Sec. of the Aberystwyth Branch, of the 9th June, stating that the new life-boat had been tried that day in a very high sea, the wind blowing hard. The behaviour of the boat had won the admiration of every one, had given her crew unbounded confidence in her, and a firm belief that she could be taken out in any sea.

Reported that the PENINSULAR and ORIENTAL STEAM NAVIGATION COMPANY had given directions for the free conveyance to Hong Kong of a box for W. H. HARTON, Esq., a Member of the Committee of Management of this Society, which contained sundry papers relative to the operations of the Institution. He had kindly offered to bring its objects under the notice of some of the English residents in China.—*To be thanked.*

Read letter from Capt. TARLETON, R.N., C.B., the newly-appointed Deputy-Controller of the Coast-guard, of the 7th June, stating that it would afford him great pleasure to render the Institution every assistance in his power.

Also from the Rev. J. R. NANKWILL, M.A., of Brixham, Devon, of the 10th June, conveying the thanks of the seamen and fishermen of that place for the Barometer presented to them by the Institution, and stating that the barometer had been fixed in a convenient and public situation.

Also from R. MOSELEY, Esq., the Manager of the EASTERN COUNTIES RAILWAY COMPANY, of the 7th June, acknowledging the receipt of the thanks of the Institution for the free conveyance of the Ipswich and Aldborough life-boats by the Company, and stating that they were pleased at the opportunity they had had of evincing in a small degree their unqualified approval of the numerous benefits which, through the instrumentality of the ROYAL NATIONAL LIFE-BOAT INSTITUTION, had been conferred on the world at large.

Also from the Inspector of Life-boats, of the 19th June, suggesting that a life-boat should be stationed at Tynemouth, Northumberland. P. J. Messent, Esq., Engineer of the new Pier Works at that port, had prepared a plan of a life-boat house, and Mr. Lorton, the Contractor for the Works, had undertaken to build the boat-house at prime cost.— *To be thanked.*

Decided—That the life-boat presented by G. J. Fenwick, Esq., of Seaton Burn, be stationed as early as possible at Tynemouth, and that the boat-house be proceeded with.

Decided also to form a life-boat station at New Brighton, near Liverpool, and that, in accordance with the request of the seamen of the place, the boat be of the tubular class, on the plan of Mr. Richardson.

Reported that information respecting the plan of the life-boat of the Institution had been afforded to Mr. Von Schantz, of the Imperial Russian Navy, and to Mr. Eilert Sundt, one of the Norway Royal Commissioners at the International Exhibition.

Also that, on the application of Admiral Sir George Sartorius, an additional 32-feet single-banked life-boat had been ordered to be built for the Portuguese Government, making altogether six life-boats now being built by the Messrs. Forrestt for that country.

Also that a satisfactory trial of the Dundee life-boat had taken place on the 24th June, under the superintendence of the Inspector of Life-boats to the Institution. The Board of Trade Surveyor-General and several other gentlemen were also present on the occasion.

Ordered life-boat houses to be built at Braunton, North Devon; Withernsea, near Hull; and Tenby, South Wales.

Paid 277*l.* 16*s.* for sundry charges on various life-boat establishments.

Voted 6*l.* to pay the expenses of the Institution's life-boat stationed at Polkerris, near Fowey, Cornwall, in going off and saving, during a heavy gale of wind, and under very adverse circumstances, the Danish schooner *Sylphiden*, of Nakskov, and her crew of 7 men. Much of the success of this valuable service was owing to the highly-meritorious conduct and seamanship of Mr. G. A. Stabb, Chief Officer of the Coast-guard, to whom the Institution presented its thanks inscribed on vellum. The captain of the vessel voluntarily presented 20*l.* to the life-boat's crew for their laudable services on the occasion, Mr. Stabb himself generously foregoing all claim of salvage.

William Rashleigh, Esq., and the Hon. Mrs. Rashleigh, of Menabilly, Cornwall, had contributed 110*l.* in aid of the cost of this life-boat.

Reported the services of the Whitburn life-boat in going off and rescuing from destruction, in a heavy surf, 4 fishing cobles and their crews, consisting of 12 men. The life-boat's crew made no charge for thus saving their fellow fishermen from a watery grave. This boat is called the *Thomas Wilson*, after the principal founder of the Life-boat Institution.

Also the Silver Medal of the Institution to James Gough, fisherman, and John Donovan, chief boatman of the Coast-guard, with 2*l.* to the latter, in testimony of their daring conduct in swimming off through a heavy surf, and, at great risk of life, assisting to rescue 24 men belonging to the ship *Queen of Commerce*, of Liverpool, which was some time since wrecked near Tramore Bay. It appeared that the ship had struck on a rock about 50 yards from the cliff, which being observed from the shore by Gough, he, closely followed by Donovan, swam out to the rock, over which the sea was furiously breaking. They got hold of a life-buoy, which had been thrown from the ship with a line fastened to it, by which means they succeeded in taking a hawser from the vessel to the shore. By this time they had received plenty of help from persons on the beach, and thus the whole of the vessel's crew of 23 men and a pilot fortunately reached the shore in safety. Gough and some fishermen had also received 39*l.* from the shipowners; and the Institution voted 3*l.* to 6 Coast-guard men who had laudably exerted themselves in saving life on the occasion.

Also 2*l.* to an Irish fisherman, named Peter Connor, for his daring conduct in rushing into the surf and rescuing, at much risk of life, the master of the schooner *Fairy*, which, during a gale of wind on the 11th ult., had foundered near the Tuskar Light. The crew had taken to the vessel's boat, which, on their attempting to reach the shore, was overwhelmed in the surf. 2 of the crew managed to reach the shore, and the master, who had apparently been stunned, was rescued through the intrepidity of Connor; but the fourth man, unhappily, perished before help could reach him.

Also 11*l.* 4*s.* to pay the expenses of the Howth (Dublin Bay), Padstow, and Eastbourne life-boats, in putting off, with the view of rendering assistance to vessels in distress, but which on the arrival of the boats had got out of danger, and consequently did not require their services.

Thursday, 31st July. Captain Sir Edward Perrott, Bart., *V.P.*, in the Chair.

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

Read letters from T. J. Agar Robartes, Esq., M.P., stating that he was prepared to give 150*l.* towards the cost of a life-boat for Porthleven, in Mount's Bay, Cornwall.— *To be thanked.*

Also from Inspecting Commander C. J. Austen, R.N., of the Penzance Coast-guard Division, of the 3rd July, promising his cordial co-operation to the undertaking, and stating that he would act as the hon. secretary of the station.— *To be thanked.*

Decided that a life-boat establishment be formed at Porthleven.

Read letter from William Worship, Esq., solicitor, of Great Yarmouth, of the 30th July, stating that the late Miss Alice Gedge had left the National Life-boat Institution a legacy of 100*l.* free of duty.— *To be acknowledged.*

Reported that Lord Calthorpe had transmitted to the Institution 100*l.* towards the cost of the Blakeney life-boat house, Miss Brightwell, of Norwich, having previously given 180*l.* to pay for the boat.— *To be thanked.*

Also that G. H. K., a previous liberal contri-

butor to the Institution, had called and left an additional donation of 100*l.* in aid of its funds.—*To be thanked.*

Also that A. B., of Blackheath, had forwarded the Society 21*l.*, being part of a legacy left to him.—*To be thanked.*

Also that E. HYATT, Esq., of Castle Donington, had transmitted 8*l.* 12*s.* 6*d.*, being the proceeds of a lecture and of some contributions collected by his son in aid of the funds of the Institution.—*To be thanked.*

Read letter from the Maritime Insurance Company of Finland, of the 27th June, transmitted through Messrs. REW, KINGTON, and Co., of Old Broad Street, stating that the Company, whose head office is in Abo, had by a mere chance seen the annual statement of the Society for 1860, and had with feelings of gratitude become acquainted with the blessed results which had attended the efforts of the ROYAL NATIONAL LIFE-BOAT INSTITUTION. The Company being convinced that the Society had also been the means of saving many a Finnish life from a certain death, were desirous of contributing their mite for the support of the Institution, to show that Finland did not view without interest the blessings which foreign aid had afforded to their suffering countrymen, and they forwarded a draft for 50*l.*—*To be thanked.*

Also from Admiral Sir ALEXANDER MILNE, K.C.B., commander-in-chief of H.M. squadron on the North American and West India stations, of the 8th July, transmitting 10*l.* as a donation to the Institution.—*To be thanked.*

Reported that the Kirkcudbright life-boat, transporting-carriage, and stores had been forwarded to their station and had safely arrived there on the 8th July, the Glasgow and South-Western Railway Company taking them free over their line from Carlisle.—*To be thanked.*

Read letter from SAMUEL CAVAN, Esq., the Honorary Secretary of the Kirkcudbright Branch, of the 19th July, stating that a very satisfactory demonstration had taken place on the occasion of the launch of the life-boat, Lord SELKIRK and the Inspector of life-boats of the Institution going off in the life-boat on the occasion. The boat was called the *Helen Lees*, after the name of a deceased sister of the donor (N. L.) of the boat.

Reported that two Portuguese life-boats had had a very satisfactory harbour-trial in the Regent's Canal Dock, Limehouse, on the 23rd July, in the presence of Admiral Sir GEORGE SARTORIUS, MONTAGUE GORE, Esq., and other gentlemen.

Read letter from W. M. FELLOWES, Esq., of Ormsby, of the 17th July, stating that whilst the Caistor life-boat was lying on the beach ready for service, she had her mast struck by lightning in a storm, and 4 persons who were taking shelter under the bow of the boat were injured on the occasion.

Ordered—A new mast to be supplied forthwith.

Also from W. K. VAIL, Esq., of Melbourne, Australia, dated in May, calling attention to his plan of wreck-escape, and stating that he wished to present to the Institution the model and photograph of the apparatus which were in the International Exhibition.—*To be thanked.*

Reported that a barometer had been transmitted to the Carmarthen Bay Branch of the Institution.

The Committee expressed their thanks, through His Grace the President, to T. B. CHANTER, Esq., on his resignation of the office of Honorary Secretary of the North Devon Branch of the Society, in acknowledgment of his long and valuable services, extending over thirty years, in that capacity.

Paid 1144*l.* 2*s.* 10*d.* for sundry charges on various life-boat establishments.

Voted 12*l.* to pay the expenses of the Penmon (Anglesey) life-boat for going off, in a strong gale of wind on the 24th inst., and bringing safely into port the smack *Frodsham*, of Liverpool, and her crew of 2 men.

Also 4*l.* 12*s.* to pay the expenses of the Fleetwood life-boat in putting off, during a heavy gale of wind, and assisting, in conjunction with a steam-tug, to save the sloop *William*, of Liverpool, which was in a disabled state off Fleetwood on the 25th ult. The vessel's crew, 3 in number, and the master's wife and child, were in a very exhausted condition when rescued.

Also 6*l.* 10*s.* to pay the expenses of the Southport life-boat in putting off, with the view of rescuing the crew of the brig *Commodore*, of South Shields, which, during blowing weather, was wrecked on the Horse Bank on the 19th ult. The life-boat found that the crew had previously abandoned the wreck in their own boat, and had fortunately succeeded in reaching Lytham in safety. The master of the brig had been put on board a fishing-smack, from which he was brought on shore by the life-boat.

Also 7*l.* 6*s.* to pay the expenses of the Arklow life-boat in going off, in reply to signals of distress, with the view of rendering assistance to a ship which had struck on Arklow Bank during blowing weather on the 17th July. When about half way to the bank the life-boat observed that the ship had succeeded, with the assistance of a steam-tug, in getting out of danger.

Also 9*l.* to a boat's crew in appreciation of their gallant conduct in putting off in a salmon-coble, during a gale of wind, and rescuing, at great risk of life, the crew of 4 men of the schooner *Thankful*, of Sunderland, which was totally wrecked close to Burghead, N.B., on the 19th July. Every moment the position of the ship was becoming more dangerous as the advancing tide drove her in among the small rocks to the back of the sea-wall, and no boat could live in the terrible surge that was now fast breaking-up the vessel. The crew, 4 in number, along with the pilot, took to the fore-rigging, and in a short time the beach was strewn with pieces of the wreck—the bulwarks nearly all destroyed—the boat washed overboard—and the deck broken up. Though only forty yards from the pier, not the least assistance could be rendered to the crew, whose faces were quite distinguishable as they clung to the swaying rigging. At twenty minutes past six the foremast creaked, and its living freight had hardly time to crawl down to the only bulwark

above water, for the schooner now lay on her beam-ends with a bilge towards the sea, when it fell by the board. In about five minutes more the maintopmast was snapped by the gale as if it had been a reed, while the bowsprit and other gear were carried away, leaving nothing but the gutted hull with the mainmast standing. Another hour of awful suspense passed, during which the 5 men lashed themselves to the bulwark, the sea every other minute breaking over their heads in huge masses. At half-past seven, one of the sailors, a young man, was washed from the wreck, but fortunately succeeded in catching the floating rigging, by which he was able to regain his former position. Another young heroic sailor seemed to be the life of the whole company in this trying emergency, and his efforts to keep up the spirits of his companions were signally successful. About eight o'clock the waves broke over the ship with renewed violence, but still those on the shore could return no answer in the affirmative to the piercing cry that came from the wreck, "Can't we get a boat?" The voice was that of the gallant sailor already referred to; the others were too much exhausted to utter a word. M'Intosh, the pilot from Burghead, expired from sheer cold and exhaustion. None who saw him perish can soon forget the fearful agony of his daughter as she bade her father farewell from the parapet of the breakwater. After renewed efforts a boat was got over the breakwater, and at great risk succeeded in saving the other men, who were in a very exhausted condition.

ADDITIONAL STATIONS AND NEW LIFE-BOATS.

Plymouth.—A life-boat establishment in connection with the Institution has been recently founded at Plymouth, and a splendid boat on the self-righting principle, rowing 7 oars, single-banked, the cost of the same having been presented by Miss Burdett Coutts, was sent there in February last. On this occasion a grand display was made; the boat being drawn through the streets with her crew on board, accompanied by bands of music and a procession headed by the Mayor and other town authorities. Nearly the whole of the large population of the adjoining towns of Plymouth, Devonport, and Stonehouse, and of their neighbourhood, being assembled in the streets to welcome and do honour to the first Plymouth life-boat.

A substantial boat-house has been built for the safety and protection of the boat and her gear, at the local cost, and a considerable annual subscription has been raised for the future support of the establishment, the salary of the coxswain, and the quarterly exercise of the crew.

Kingsgate, Kent.—A new life-boat station has been this year established at Kingsgate by the National Life-boat Institution, and a small 6-oared life-boat and carriage was sent there in January last. As the Institution has another station at Margate, and there are also life-boats at Broadstairs and Ramsgate, the protection of life on the southern shore of the entrance to the Thames may now be considered as amply provided for. A local Committee of gentlemen of the neighbourhood, in accordance with the general custom of the Institution, has been formed for the management of the establishment, and the cost of a substantial boat-house for the reception of the boat and her transporting-carriage was raised in the locality.

Dundee, Scotland.—The local Life-boat Association at Dundee has this year followed the example of the many others which have thrown in their lot with the National Life-boat Institution; and that Society has replaced one of their old boats by another of the latest construction, and refitted their whole establishment. A new and substantial boat-house has also been built at Broughty Ferry, on the north shore of the frith of Tay for the new boat, which has also been provided with an excellent transporting-carriage. The cost of this life-boat and her transporting-carriage was collected through the indefatigable exertions of Mrs. Mary Hartley, formerly of Bideford, Devon. The boat and carriage were built, as usual, in London, by the builders to the Society, and were forwarded to Dundee in February last.

Kingstown, Poolbeg, and Howth, Dublin Bay.—The Ballast Corporation of Dublin having requested the National Life-boat Institution to undertake the management of the three Life-boat stations of Dublin Bay, viz., at Kingstown, Howth, and Poolbeg, and their request having been acceded to, three new life-boats, with transporting-carriages, have been supplied and fully equipped; and new houses have also been erected at the expense of the Institu-

tion at Howth and Poolbeg. The Kingstown and Poolbeg life-boats were forwarded in March last, and that for Howth during the past month. The Ballast Corporation will contribute 50*l.* annually towards the cost of these establishments, leaving the Institution to collect the remainder of the sum necessary for their efficient maintenance, and for the quarterly exercise of their crews and their coxswain's salaries, from the inhabitants of Dublin.

THORPE.—The inhabitants of the town of Ipswich and its neighbourhood having munificently subscribed the sum of 500*l.*, and presented the same to the NATIONAL LIFE-BOAT INSTITUTION, to enable it to place one or more additional life-boats on the coast, and it being especially wished by the subscribers that one such boat should be stationed on the coast of Suffolk, the Thorpeness station was selected, at which place a larger and better boat was required than that already there. Accordingly, in May last, a new 10-oared boat, 33 feet long, and of the latest construction, furnished with a transporting-carriage, was sent to Thorpe, after being first publicly exhibited at Ipswich, and subjected to various experimental tests in the presence of many thousands assembled to witness the same. An account of the exhibition and the enthusiastic reception which the boat received, will be found in the last Number of this Journal, page 141.

WITHERNSEA, YORKSHIRE.—A life-boat station has been recently established at Withernsea, a few miles north of the entrance to the Humber, and a splendid boat, 34 feet long, rowing either 12 oars double banked, or 6 oars single banked, was forwarded there from London by the Institution in August last. The cost of this boat was presented to the Institution by Miss LECHMERE, of Hanley Castle, in Worcestershire. The boat is provided with an excellent transporting-carriage, and a substantial boat-house has been built for her. On the arrival of the life-boat at Withernsea, she was publicly exhibited and tested, and was much approved of by her crew and all who saw her. On account of the large amount of shipping which enters and leaves the Humber, in addition to the great passing trade, it was very desirable that a life-boat should be stationed in this locality.

SERVICES OF THE LIFE-BOATS OF THE ROYAL NATIONAL LIFE-BOAT INSTITUTION.

BRIGHSTONE GRANGE, ISLE OF WIGHT.—At 3·40 A.M. on the 2nd April, the barque *Cedarine*, of Bermuda, stranded near Brighstone Grange, with 234 persons on board, 191 of whom were convicts, whose period of punishment at Bermuda had expired. The Brighstone Grange life-boat at once proceeded to their aid, and conveyed safely to the shore, in eight trips, about 130 of that number, including 18 women and children; the remainder succeeded in landing safely, chiefly by means of a hawser which had been secured to the land.

ABERDOVEY.—On the 22nd April, the smack *Merrion Lass*, of Aberystwyth, stranded on the bar off Aberdovey. The Institution's life-boat stationed there immediately proceeded to her, and although the sea was breaking completely over her, the life-boat's crew, by dint of great exertion, succeeded in getting her off the bar, and in taking her safely into the harbour with her crew of 3 men.

CAISTOR, NORFOLK.—On the night of the 3rd May, or rather at 1 A.M. on the 4th, a very gallant service was rendered by the crew of the Caistor life-boat, in rescuing, under circumstances of much danger, the crew of the schooner *Trial*, of Poole, 7 in number. On this occasion the boat herself was seriously damaged, having broken her stern and injured her sides against the wrecked vessel, and fractured her iron keel. The circumstances of this very distinguished service, for which the Institution awarded 45*l.*—being a payment of 2*l.* each to the life-boat's crew—cannot be better described than in the words of the coxswain of the life-boat, as follows:—

"On Sunday morning, May 4, at about 1 o'clock A.M., the wind being E.N.E. and blowing hard, with a heavy sea breaking on the beach, signal-lights of distress were seen by the night-watch of the Caistor beachmen, in the direction of the Barber Sand. The night-watch immediately gave an alarm, which brought all the company down to the beach, 40 men in number, and likewise some of the villagers. The beachmen, with the help of the villagers, directly commenced launching the life-boat, which was manned by a crew of 22 beachmen, who succeeded in hauling her off the beach and through the breakers, by the large hauling-off warp, shipping some very heavy seas, which filled her several times. We then set sail as quickly as possible, and proceeded in the direction of the signal-lights, which were still burning. On our reaching the sand, we were compelled to cross through the breakers of the sand, in order to board the vessel on the south side, as there were two wrecks standing out of the water close on the other side of her, and in so doing had to encounter the full fury of the sea; but we succeeded in getting a rope from the vessel, which proved to be the schooner *Trial*, of Poole, sunk, with the sea making a complete breach over her. We then hauled the life-boat up alongside to get the crew out of her, but the sea broke so heavily into the life-boat, sea after sea, which followed in quick succession, washing her crew about in all directions, so that we could not hold her, for the sea drove her quite round under the vessel's bow. We again hauled up alongside, and three of the ship's crew succeeded in jumping into the life-boat, when we were again driven by the violence of the sea against the ship, damaging the life-boat, and breaking her mizen-mast; and being again swept round under the ship's bow, the sea breaking heavily and quickly into the life-boat, so much so that she could not free herself; we began to think she had damaged some of her inside air-tanks, as she did not rise, and there was great fear of being swept out of her by the violence of the sea. We then veered away some distance to ascertain, if we could, the cause of her not rising, when we found that the sails were drawn down by the draught into the plug-holes, so as to stop her from freeing herself. Having made all clear, we hauled up again, the ebb-tide coming down so strong causing still more risk and difficulty to get the remainder of the crew out of the ship, as we had to haul up on the north side of her, where the two sunken wrecks lay so close to her. This time one man jumped in, being one of the life-boat's crew who had clung to the ship's bowsprit-gear when she was driven under the ship's bow in the fearful state before mentioned, for he thought she would not rise again. We were again driven away from the ship by the violence of the sea, which broke fearfully over the life-boat: we then hauled up again, doing the life-boat damage against the ship, and between the seas the remainder of the crew succeeded in jumping into the life-boat, being 7 in all. We then had to veer away very cautiously, in order to clear the sunken wrecks before mentioned. Having got clear of the breakers on the sand, we set sail and made for our station. The captain told us that he got his own boat out when the ship first came to the ground, but the first sea took her away. By this time we had reached abreast of our station, when we shortened sail to run her cautiously through the breakers to the beach, where we safely landed at about half past three o'clock, A.M., and procured a conveyance to take the wrecked men to the Sailor's Home at Yarmouth.

(Signed)

"ROBERT GEORGE, Coxswain."

FOWEY, CORNWALL.—On the 11th June the Danish schooner *Sylphiden*, of Nakskov, at anchor in St. Austel Bay, drove into shallow and broken water; when, hoisting a signal of distress, the Institution's life-boat at Polkerris, near Fowey, proceeded to her aid, with Mr. GEORGE STABB, Master, R.N., and Chief Officer of Coast-guard, in her. The wind was blowing a heavy gale from the southward at the time, but the life-boat was rowed readily against it, and on reaching the vessel, which was then in imminent danger, Mr. STABB and a portion of the life-boat's crew were placed on board. The schooner being then put in charge of the above-named officer, he, with

much skill, after making sail on her, and slipping her cable, succeeded in taking her safely out of danger, and into Polkerris Harbour, by which means the vessel and her crew of 7 men were undoubtedly saved from destruction, the gale having still more increased in violence. The behaviour of the life-boat on the occasion was reported to be "beyond praise."

In addition to the usual money payment of 10*s.* each to the life-boat's crew, the captain of the schooner voluntarily presented the life-boat's crew of 8 men with the sum of 20*l.*, and Mr. STABB, who declined to receive anything for his valuable aid in saving the vessel, was awarded the thanks of the NATIONAL LIFE-BOAT INSTITUTION, inscribed on vellum.

HOWTH, DUBLIN BAY.—On the 22nd January, 1862, the schooner *Liberty*, of Dublin, was observed from Howth to be in a disabled state, drifting on to a sand-bank during a strong gale from the south. The life-boat of the Institution stationed there at once proceeded to her aid, and with the assistance of hawsers, after several hours' exertion, succeeded in rescuing the vessel and crew from a very dangerous position, and in getting them safely into Howth Harbour.

WHITBURN, DURHAM.—In the month of March the Whitburn life-boat was launched to the assistance of the crews of three fishing cobles, each with 3 men on board, which were caught in a strong easterly wind, a high surf running on the beach at the time. The crews and their boats were brought safely through the surf to the shore by the life-boat.

Again, on the 12th June, this life-boat proceeded through a high surf, and rescued another coble and its crew of 3 men, under similar circumstances.

PENMON, ANGLESEY.—On the 24th July a smack, which afterwards proved to be the *Frodsham*, of Liverpool, was observed from Penmon at anchor with a flag of distress flying. The Penmon life-boat was at once launched, and proceeded to the aid of her crew; the wind blowing a gale from W.S.W. at the time. Before reaching her, the smack had slipped her cable and was running before the sea, into danger. The crew of the life-boat, however, boarded her, and succeeded in taking her safely into Llandudno Harbour, with the 2 men who formed her crew.

SCHOOLS FOR SAILORS.*

SECOND ARTICLE.

IN my last communication I endeavoured to discuss the question of Schools for Sailors in its general bearings: I now proceed to give a special application of it with regard to a district with which I am familiar—I mean the sea-coast of Wales, from the Severn right round to the Dee.

All along the Welsh coast are numerous small ports and maritime towns and villages, independent of the larger ones, Cardiff, Swansea, Milford, Aberystwyth, Carnarvon, Bangor, &c.; and in each of them, as well as in the larger ports just round them, is always to be found a population of sailors, old and young, with their families. In the summer, most of the able-bodied men and boys are afloat, engaged on board the small coasting-vessels which carry slates, lead and copper ores, coal, lime, timber, &c.; but during the winter months, from the end of November to the beginning of March, or thereabouts, they are all ashore—out of employment. I have taken pains during a series of years to ascertain what is the actual number of individuals so situated; but I have not succeeded in obtaining anything more satisfactory than an approximate guess. It appears that this number is not less than 1,000, and it is believed that it rises at times to 1,200 or 1,300. I do not comprehend in this the ever-fluctuating maritime populations of such places as Cardiff or Swansea: I confine my statement to the number of *bonâ fide* Welsh men and boys employed in the coasting trade, and ashore during the three dead winter months. Some of them live close by the sea-board, others, with their families, a few miles up the country; but they never go far from the ocean; and they retain all their peculiar habits and customs during the short interval of rest from their common occupation.

Now, the following points have been clearly proved concerning them, and they can be verified by application to the county or parochial authorities all along the coast, viz.:—

(1). That no public provision is made for the training and improving, or educating these men and boys anywhere in Wales. All the education they get is from private,

* Continued from page 131 of the July Number of this Journal.

unaided sources alone—often under circumstances of considerable bodily labour and discouragement.

(2). That they are as a class a well-conducted set of men—all circumstances considered—and that they are almost all not only anxious to procure instruction, but willing to pay well for it.

(3). That there are few really competent teachers of navigation practising on their own account along the coast. Application has been made to several public bodies for aid and encouragement in setting up good teachers—such as to the Admiralty—to the Committee of Council on Education—to the Members of Parliament for Wales—all, with the same result—a disclaimer of liability, or a recommendation to forward application elsewhere.

I take up these points as I have arranged them. The only persons who are at all likely to give education and training to the sailors are the parochial schoolmasters along the coast; and navigation classes have been in existence for some years, at such places as Barmouth, &c., with notable success; but, as a general rule, the schoolmasters do not know navigation practically—they are not likely to know it; and their teaching is, therefore, on a limited scale. It is always afforded with great good-will on their part, and gratefully accepted by the men. The general rate of pay is three guineas for the course; which commonly extends over two winters, sometimes over three. In one town, Carnarvon, where the number of men is considerable, the only teachers of navigation was a woman (Mrs. Edwards, widow of a skipper) and her daughter; who have jointly been engaged in this way for more than twenty years. Their labours have been highly successful; and the number of men who have passed, through their means, as mates and captains, is comparatively large. The mother has been failing in health for the last two years; and application has been made to the Government on her behalf for a small pension, but without success.

The truth is, that, with regard to the providing of instruction for sailors, the Government and the country proceed upon the principle of neglect.

To prove that the men are anxious for instruction, I need only appeal to the experience of all schoolmasters living along the coast, or even within reach of it. They are always applied to every winter; and they seldom have any serious difficulty in procuring payment. The men conduct themselves well in school—as well as they can; work hard, and give as little trouble as they know how. It has been my lot for many years past to find men and boys sitting in the same schoolroom with girls and young women—frequenting them day after day; and I have hardly ever heard of their behaving towards the females in any manner that could call for reprehension. They were given to tobacco, poor fellows; but they seldom trouble the schoolmaster with more than this; and a word generally suffices to get the "quid" stuffed into the pocket again.

Schoolmasters are trained for parochial, not for maritime schools; and we must not be disappointed at finding them ill-suited to the office of practical teachers of navigation. They can of course prepare the lads up to the time of their first being apprenticed; but it would be much better for the men that some specially-qualified teachers should be sent down to the Welsh ports for three months every year. Men would have more confidence in them if they knew that they had been passed by some public maritime board; about fifty teachers might be required, and they would find sufficient employment during the period of their being detached on this special duty. There would be a sum of about 20*l.* payable to each teacher by the sailors alone during the three months; and this pay should be raised to 30*l.* or 40*l.* per month, by Government—not through the medium, however, of any body of landsmen in London, talking of "able-bodied seamen being ashore 200 nights in the year," &c.

This apathy, if not ignorance, of the Government and the Legislature, should be broken in upon by some public remembrancer; and as the members of Parliament for Wales do not seem likely to do it, I know of no better method to get the subject discussed and pushed forward than by recommending it to the advocacy of the *Journal of the National Life-boat Institution*, which is generally perused with interest by every one.

The Chaplain
of the Royal Welsh Yacht Club.

Royal National Life-Boat Institution,

For the Preservation of Life from Shipwreck.

(Incorporated by Royal Charter.)

Patroness—Her Most Gracious Majesty the Queen.

President—Vice-Admiral His Grace the Duke of Northumberland, K.G., F.R.S.

Chairman—Thomas Baring, Esq., M.P., F.R.S., *V.P.*, Chairman of Lloyd's.

Deputy-Chairman—Thomas Chapman, Esq., F.R.S., *V.P.*

Secretary—Richard Lewis, Esq.

APPEAL.

The Committee of Management have to state that, since the beginning of the year 1860, the Royal National Life-boat Institution has expended 27,260*l.* on various Life-boat Establishments on the Coasts of England, Scotland, and Ireland.

During the same period the Life-boats of the Institution have been instrumental in rescuing the Crews of the following Vessels:—

Barque *Vermont*, of Halifax, U.S. . 16
Schooner *Wm. Keith*, of Carnarvon. 2
Brig *Flying Fish*, of Whitby 5
Smack *Elizabeth Ann*, of Lyme Regis 3
Steam Dredge, at Newhaven..... 9
Schooner *Admiral Hood*, of Rochester 6
Schooner *Susan and Isabella*, of Dundee..... 5
Schooner *Rose*, of Lynn 3
Brig *Prodroma*, of Stockton..... 11
Brig *Eliza*, of Middlesborough 7
Brigantine *Freia*, of Königsberg... 6
Brigantine *Diana*, of Fredrikshamn 7
Brig *Gloucester*, of South Shields .. 7
Brig *Lovely Nelly*, of Seaham..... 6
Brigantine *Nugget*, of Bideford 5
Schooner *Prospect*, of Berwick..... 6
Schooner *Ann Mitchell*, of Montrose 1
Schooner *Jane Roper*, of Ulverstone 6
Brig *Pallas*, of Shields 3
Ship *Ann Mitchell*, of Glasgow .. . 9
Smack *John Bull*, of Yarmouth ... 5
Schooner *Catherine*, of Newry 4
Barque *Niagara*, of Shields 11
A Barge of Teignmouth 2
Brig *George and James*, of London 8
Brig *Zephyr*, of Whitby 6
Coble *Honour*, of Cullercoats..... 3
Schooner *Eliza*, of North Shields.. 7
Barque *Oberon*, of Liverpool..... 15
Brigantine *Nancy*, of Teignmouth. 9
Smack *Wonder*, of Teignmouth ... 2
Brig *Scotia*, of Sunderland .....] 6
Sloop *Three Brothers*, of Goole ... 5
Sloop *Charlotte*, of Woodbridge ... 5
Brig *Ann*, of Blyth 8
Sloop *Hope*, of Dublin 3
Schooner *Druid*, of Aberystwyth .. 5
Spanish Barque *Primera de Torreviega*—Saved vessel and 1 of the crew 1
Schooner *Hurrell*, of Penzance—Saved vessel and crew 4
Brig *Anne*, of Plymouth—Saved vessel and crew 8
Schooner *Betsey*, of Peterhead—Saved vessel and crew..... 6
Smack *Merrim Lass*, of Aberystwyth—Saved vessel and crew ... 3
Schooner *Fly*, of Whitby—Saved vessel and crew..... 4
Schooner *Sylphiden*, of Nakskov—Saved vessel and crew..... 7
Schooner, *Ceres* of Arbroath—Saved vessel and crew 5
Sloop *Thomas and Jane*, of St. Ives 3
Fishing-boats of Whitburn..... 16
Brig *Arethusa*, of Blyth 8
Schooner *Dewi Wyn*, of Portmadoc 8
Flat *Cymraes*, of Beaumaris..... 2
Schooner *William*, of Morecambe.. 5
Smack *Gipsy*, of Newry 4
Schooner *Margaret Anne*, of Preston 4
Brig *New Draper*, of Whitehaven.. 8
Schooner *William*, of Liverpool ... 5
Lugger *Nimrod*, of Castletown 3
Brig *Providence*, of Shields 8
Brig *Mayflower*, of Newcastle 8
Schooner *Village Maid*, of Fleetwood 4
Barque *Guyana*, of Glasgow 19
Brig *Roman Empress*, of Shields .. 10
Brig *San Spiridione*, of Galaxide .. 2
Schooner *Voador du Vouga*, of Viana 8
French Brig *La Jeune Marie Thérese* 6
Barque *Perseverance*, of Scarborough 5
Schooner *Elizabeth*, of Bridgewater 4
Ship *Danube*, of Belfast 17
Schooner *Hortensia*, of Hanover ... 4
Schooner *Oregon*, of Stonehaven ... 4
Brig *St. Michael*, of Marans..... 8
Schooner *Epimachus*, of Amsterdam 5
Barque *Druid*, of Sunderland 9
Schooner *Bellona*, of Red Bay..... 1
Brig *Pioneer*, of Carnarvon 1
Schooner *Princess Alice*, of Ipswich 5
Brig *Minerva*, of Workington 4
Schooner *Elizabeth and Hannah*, of Newburgh 6
Brig *Sisters*, of Whitby..... 9
Brigantine *Matilda*, of Stockholm.. 4
Brig *Jane*, of North Shields..... 10
Schooner *Liberty*, of Dublin..... 3
Brig *Trial*, of Poole 7
Barque *Frederick*, of Dublin 1
Barge *Peace*, of London..... 2
Lugger *Saucy Lass*, of Lowestoft.. 11
Smack *Adventure*, of Harwich..... 10
Pilot cutter *Whim*, of Lowestoft... 7
Barque *Undaunted*, of Aberdeen .. 11
Wrecked boat on Blackwater Bank, on the Irish Coast 1
Schooner *Skylark*, of Folkestone... 6
Brig *Lively*, of Clay, Norfolk..... 5
Schooner *Rook*, of Liverpool 3
Barque *Robert Watson*, of Sunderland 5
Schooner *Auchincruive*, of Grangemouth 6
Schooner *Friends*, of Lynn..... 4
Schooner *Eliza Anne*, of Dublin ... 5
Brig *Content*, of Sunderland..... 5
Smack *Ellen Owens*, of Cardigan... 3
Barque *Cedarine*, of Bermuda.... 134
Smack *Frodsham*, of Liverpool.... 2
Sloop *William*, of Liverpool 5
Sloop *Elizabeth*, of Teignmouth ... 3
Barque *Cruz*, of Oporto..... 14
Ship *Annie E. Hooper*, of Baltimore, U.S..... 18
Barge *Henry Everist*, of Bochester. 4

Total..... 767

For these and other Life-boat services the Institution has voted 2,458*l.* as rewards to the crews of its Life-boats. It has also granted rewards amounting to 572*l.* for saving 562 shipwrecked persons, by shore-boats and other means, making a total of 1,329 persons saved from a watery grave since the beginning of the year 1860.

The number of lives saved by the Life-boats of the Society, and other means, since its formation, is 12,680; for which services, 82 Gold Medals, 713 Silver Medals, and 16,000*l.* in cash, have been paid in rewards. The Institution has also expended 64,300*l.* on Life-boats, Life-boat Transporting-carriages, and Boat-houses.

The public cannot but sympathise with the vigorous efforts now being made by this Institution, to save the lives of Shipwrecked Crews. Their help was never more needed than at the present time, when, through the extraordinary exertions the Society has made within the past few years, it has now *One Hundred and Twenty-three Life-boats* under its management, for the maintenance of which, in a state of thorough efficiency, a large permanent *annual income* is absolutely needed, if its humane mission is to be perpetuated.

Donations and *Annual Subscriptions* will be thankfully received by the Bankers of the Institution, Messrs. Willis, Percival and Co., 76 Lombard Street; Messrs. Coutts and Co., 59 Strand; Messrs. Herries, Farquhar, and Co., 16 St. James's Street, London; by all the Bankers in the United Kingdom; and by the Secretary, Richard Lewis, Esq., at the Office of the Institution, 14 John Street, Adelphi, London,—W.C.

Payments may be made by Cheques or by Post-Office Orders (crossed), to Messrs. Willis, Percival, and Co., or to the Secretary.

1*st October*, 1862.

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