

THE LIFE-BOAT,

OR

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AND ILLUSTRATIONS.

RESTORATION OF THE APPARENTLY DROWNED.

THE termination of another summer, with an even longer tale than usual of deaths from drowning, almost instinctively induces the reflection as to whether or not the proper measures to adopt in order to restore suspended animation are as generally known as they ought to be, and whether many valuable lives are not annually lost from want of that knowledge on the part of the rescuers of drowning persons or of bystanders present, and from the delay that must too often be incurred before the aid of a medical man can be obtained.

Hundreds of thousands of copies of the Rules for the restoration of the apparently drowned, based on those of the late Dr. MARSHALL HALL, and combined with Dr. SILVESTER'S mode of artificial respiration, as issued by the ROYAL NATIONAL LIFE-BOAT INSTITUTION, have been circulated throughout the United Kingdom, as have also those adopted by the Royal Humane Society, but, nevertheless, a too frequent ignorance on the matter seems to prevail.

We have already recurred to this important subject from time to time in the pages of this journal, and may no doubt usefully continue to do so.

Very opportunely a highly-interesting lecture on the resuscitation of the apparently drowned was lately delivered at the Training College, at Adelaide, New South

Wales, by the Hon. Dr. CAMPBELL. As it very lucidly and forcibly explains the physiology of the subject, and contains some information which we have not seen in any other treatise on it, we reprint the whole lecture as reported in the *Adelaide Observer*, and add illustrations of the two methods of producing artificial respiration referred to by the lecturer, viz., those of Dr. MARSHALL HALL and Dr. SILVESTER, taken from the published Rules of the NATIONAL LIFE-BOAT INSTITUTION:—

LECTURE AT THE TRAINING COLLEGE, ADELAIDE, NEW SOUTH WALES.

The lecturer remarked that drowning was by no means an infrequent accident. It was always alarming in its nature, and was calculated to create in the minds of ignorant bystanders excitement and confusion. It was well to be able to save a life from drowning by dint of courage and skill, but it was an equally meritorious deed to restore life when it was apparently gone. Very few, however, attempted the latter. Medical men were usually sent for, and probably in the meantime the last chance of restoration was lost. He would now show them that it ought to be esteemed culpable ignorance for any intelligent man or woman to stand by and wait in such a case until the doctor arrived. If instantaneous action was necessary at any time in the history of our life it was when an apparently lifeless body was dragged out of the water and demanded an attempt at restoration. With the object of giving his audience an intelligent view of the subject of drowning, he drew their attention to the general aspects of respiration, as the function of the body immediately interfered with in submersion. Respiration, although seemingly performed with ease and com-

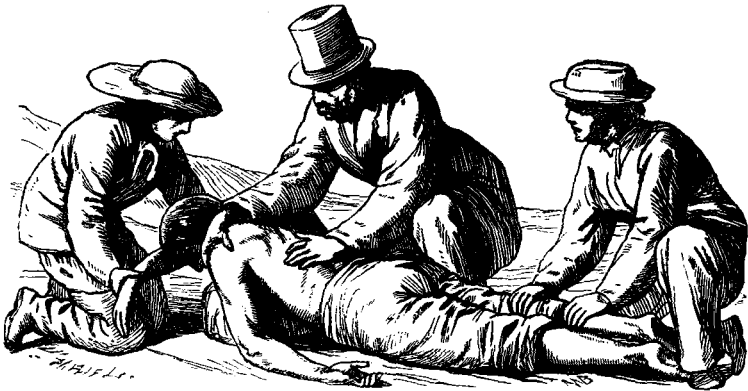
fort, and likewise capable of being to some degree voluntarily interrupted, was yet the most imperious function of the body. No one could voluntarily hold his breath more than one minute, or at the very outside, after long training, two minutes. Pearl divers could remain two minutes under water, but this was accomplished by the artifice of mechanically compressing the nose and keeping the mouth shut. The necessity of supplying the body with food arose according to habit—only

twice or thrice a day—but the hunger of the blood for atmospheric air was constant. Respiration was at the rate of fifteen to eighteen times a minute, or over one thousand times an hour. No rest was given to the lungs, as the interchange of oxygen and carbonic acid was an imperious necessity of every moment of our existence. The life was certainly in the blood, and if the blood did not carry oxygen on its bosom to every cell of the body life fled away. The accident of drowning or

1.—INSPIRATION.



2.—EXPIRATION.



The foregoing two illustrations show the position of the Body during the employment of Dr. Marshall Hall's Method of Inducing Respiration.

entire submersion in water was a complete interference with this important function. The water effectually prevented the admission of atmospheric air, as well as the exit of carbonic acid. This interference gave immediate rise to circumstances of the greatest danger to life; and the answer to the question how long a person could live under water was answered by the reply to the question how long could the body survive on the oxygen retained in the chest after submersion? A word of

explanation was necessary. The amount of air in the chest under ordinary circumstances was somewhere about 230 cubic inches. Thirty inches of this passed actively out and in at each act of inspiration, and was called "tidal air." This 30 inches, by a forced effort, could be increased to 130, the 100 inches of increase being called "residual air." The remaining 100 inches was known as "complemental air," and was stationary in the chest. This complemental air, though stationary,

was yet constantly replaced by the law of the diffusion of gases. Now, in drowning, if a person struggled very hard, and consequently expelled not only the 30 cubic inches of tidal air, but also the 100 of residual air, and by the muscular exertion involved in the struggle increased the demand for oxygen, then the period during which he would live under water was very brief, probably not more than one or two minutes. If, however, he did not struggle, or by any chance fainted, then, retaining

all the available oxygen in the chest, and the waste of the system being at the minimum in consequence of fainting, he might live from three to five minutes. Hence the chances of resuscitating a person who faints on submersion are greater than one who does not, and violently struggles, each being the same length of time in the water. From the venous congestion that ensues, the heart also speedily comes to a stand, although not for three to eight minutes after respiration has ceased.

1.—INSPIRATION.



2.—EXPIRATION.



The foregoing two Illustrations show the position of the Body during the employment of Dr. Silvester's Method of Inducing Respiration.

It is during this period—that is, between the cessation of respiration and the cessation of the heart's action—that resuscitation is possible. If the heart has actually ceased to beat, then resuscitation is impossible. Certain other circumstances influenced the rapidity of the drowning process. The coldness of the water materially hastened the extinction of life; also the amount of water taken into the lungs. If the lungs rapidly fill and become "sodden," by so much is the chance of resuscitation diminished. Those were the simple physio-

logical facts bearing on this question; and while saying so, the inference from them distinctly was that in any accident from drowning not one moment was to be lost in resorting to artificial respiration. On a person being taken out of the water, the first available spot on which to place the body must be accepted, whether it be a small boat, a jetty, or the beach. Protection must, if possible, be had; but it was infinitely more important to resort at once to the means of resuscitation. In view of this statement, the culpability of by-

standers waiting till the doctor arrives becomes self-evident. The precious seconds have probably all fled by the time he comes upon the scene. While setting about the application of one of the proper methods of artificial respiration, other matters have to be thought of. First, send for medical help; second, send for blankets; third, send for dry clothes. With respect to the person drowned, before proceeding to artificial respiration see to the following points:—

1. Cleanse the mouth and nostrils.
2. Open the mouth and draw the tongue forward.
3. Retain the tongue forward.
4. Remove all tight clothing on neck and chest.
5. Hang the head over the edge of table or board, and elevate to some degree the feet, to allow any water to flow from the lungs.
6. Place the body flat on its back, and
7. Support the head and shoulders on something of the form of a cushion or pillow.

Having carefully, and with the greatest possible alacrity, attended to these points, then proceed to practise one or other of the following methods of artificial respiration. He said two methods, for there were two. The two methods were known as Dr. Sylvester's, or the physiological, and Dr. Marshall Hall's, or the "ready" method. The processes in each were different, and, so far as experiments had gone, the results were highly favourable to the first of these methods. Dr. Sylvester's method had resulted in gaining admission to the chest of some forty cubic inches of air as a maximum, while Dr. Marshall Hall's only reached ten cubic inches as a maximum. He then proceeded to show how these were carried out, by placing a young man on the table and going through the several steps of the process. These may be enumerated as follows: 1. Sylvester's method.

a. Grasp the arms above the elbows and raise them above the head.

b. Return them against the side with gentle pressure.

c. Repeat this fifteen times per minute.

This was called the physiological method, because it followed by these movements of the arms the natural movements of the chest in respiration.

The other was:

2. Hall's method, which consisted of—

a. Turning the body gently on the side, and a little beyond.

b. Then briskly on the face.

c. Repeating fifteen times per minute.

They did not require to note by a watch the number of repetitions, for by observing the frequency of their own breathing they would find the means of guidance in this respect. Having, by a patient application of these movements, restored to some extent natural respiration, then they must next seek to establish circulation and warmth. But here he must warn them never to take this step until respiration was in some measure present, or the result would be highly inimical to their efforts. Circulation and warmth would be aided by the application of friction to the limbs and body, dry blankets, hot flannels, hot bottles or bricks to the feet, stomach, armpits, and thighs. Then give some

warm drink, a small amount of brandy-and-water, and by soothing and quietness encourage sleep. Sleep was highly important, not only to restore the disordered brain, but also with the view of warding off the secondary apnoea, which might arise even twenty-four hours after the accident. Several minor points of practical import were noted as the lecturer proceeded. Before concluding, he pointed out that the employment of artificial respiration was demanded in other conditions besides that arising from drowning—in fact, in any condition in which the respiration had been interrupted, as after the removal of a mechanical obstruction in the windpipe, the effects of a poisonous atmosphere, or the results of a poison swallowed.

We have remarked above that Dr. CAMPBELL'S lecture contains some information which we had not before seen in any previous treatise on the subject, and which we may conclude therefore will be new to many of our readers. For instance, how few persons, except medical men, are acquainted with the rationale of the perpetual action of the heart and lungs, of their mutual relation to each other, and of the entire dependence of life itself on the unceasing healthy action of each.

We believe that the ordinary notion of ordinary people is that at every act of respiration the lungs are completely, or almost completely, emptied of air, and that at every inspiration they are re-filled. Dr. CAMPBELL, however, tells us, that but 30 cubic inches of air out of about 230 cubic inches which the lungs contain thus pass out and in during the process of breathing, which quantity of 30 cubic inches is termed "tidal air;" that half the remainder, which can be expelled by muscular effort, is called "residual air," and that the remaining 100 inches, stationary in the chest, is termed "complemental air," whilst the length of time during which a person might live under water would depend greatly on the extent to which the residual air had been exhausted through violent struggling or other effort, the maximum time being when, consequent on fainting, the body had become altogether inert.

Again, the Doctor informs us that the heart does not entirely cease to beat until from three to eight minutes after respira-

tion has ceased, and that it is during that interval—i.e. between the cessation of respiration and the ceasing of the heart to beat—that restoration under proper treatment is possible, and that it is impossible when the heart has absolutely ceased to beat.

From the above two important and highly interesting facts it will be apparent how essential it is that every effort should be made by rescuers of drowning persons to shorten the period of immersion as much as possible, and to restore breathing when immersion has ceased.

Another point to which we would draw attention is that of the admission of water to the lungs. We notice that Dr. CAMPBELL speaks of the lungs as being filled, or sodden with water. On the other hand we believe that other medical men and physiologists have concluded that but little water swallowed ever finds access to the lungs, involuntary spasmodic action, such as we experience on even a drop of any fluid or the smallest particle of solid matter finding its way into the windpipe, causing the valve termed the epiglottis, which had been momentarily at fault, to be instantly on the alert and close the passage.

We will leave this question at issue to be settled by the learned themselves, content, on our part, to point out the vital importance of the discharge of water from the "stomach" when, as is frequently if not generally the case, it has been swallowed in large quantity; well-authenticated instances having been recorded when life was rapidly ebbing, and reaction only took place on relief being afforded to the vital organs by vomiting the water by which their action had been almost suppressed.

It will be noted that Dr. CAMPBELL advocates the Silvester system of producing artificial respiration in preference to the "ready method" of MARSHALL HALL, on the ground that it introduces a larger amount of air to lung action. The question, however, naturally arises whether, when life is at its lowest ebb, and

circulation of the blood scarcely commenced, any large amount of air is required to re-oxidize it in the lungs. If we run or take other violent exercise the action of the heart and consequent circulation of the blood are rapidly increased; but nature instantly provides a remedy, and quicker breathing affords the requisite increased supply of air to the lungs to oxidize and vitalize the augmented flow of arterial blood. Inversely, then, it may be presumed that a greatly diminished circulation and presentation of blood at the lungs would require a proportionally less quantity of air to oxidize it.

Apart, however, from the question whether so great an advantage is obtained as Dr. SILVESTER supposes from the larger amount of air which he supplies to the lungs, the chief objection that we entertain to his system *per se* is, that he takes no sufficient steps to secure the discharge of swallowed water, whilst MARSHALL HALL'S method effectually does so, and hence we advocate the combination of the two systems as adopted by the NATIONAL LIFE-BOAT INSTITUTION.

It will be noticed that Dr. CAMPBELL does not ignore the necessity of encouraging the escape of fluid, whether from the stomach or chest, but that he adopts a different means for doing so than MARSHALL HALL, placing the body on a board, table, or boat, &c., with the head projecting beyond its margin, and with the feet or legs slightly raised. Dr. CAMPBELL does not say if the body is to be turned face downwards; but unless it be so we consider that the merely placing it in a slightly-inclined position, as recommended by Dr. SILVESTER, would not afford sufficient mechanical aid to expel water from either the stomach or chest.

The plan of Dr. BENJAMIN HOWARD, of New York, contained in his "Direct Method," which we published in the eighty-seventh number of this journal, is, we think, much more likely to do so. He places the body face downwards, with a large bundle of tightly-rolled clothing under the stomach, and applies heavy

pressure on the back. We think that MARSHALL HALL's plan, returned to at intervals, in combination with that of Dr. SILVESTER, is better than either.

Where, however, doctors differ, laymen may well hesitate to dogmatize. We will not therefore pronounce absolutely which system for restoring suspended animation, or whose plan for encouraging the discharge of water, is altogether the best; but we will observe that Doctors CAMPBELL and HOWARD, equally with MARSHALL HALL, insist—1st, on the vital importance of acting instantly on the spot, delay in the majority of cases meaning death;—

2nd, that renewed circulation of the blood must in nowise take precedence of renewed respiration; and—3rd, that it is often essential to recovery that water swallowed in large quantity, or inhaled, should be discharged through the mouth.

We would say, then, to every reader of these lines, should opportunity offer, and a drowning person's life at any time depend on your aid, remember those three axioms; carry them into effect to the best of your ability; and, if not too late, you may, with God's blessing, have the supreme satisfaction of restoring a fellow-creature to renewed existence.

BENEFACTORS : *

“NOT OF AN AGE, BUT FOR ALL TIME.”

HENRY GREATHEAD.

[Born 1757. Died 1813.]

It is our national boast that Britannia rules the waves, and so it was only befitting that the honour of inventing the Life-boat should fall to the lot of a Briton. Whether or not Henry Greathead was that particular Briton has been a matter of some discussion, since this credit is claimed on behalf of two others, by name Lionel Lukin and William Wouldhave. The first of these two was a native of Dunmow, an inland town in the county of Essex. He afterwards removed to London, established himself as a coach-builder in Long Acre, and then conceived the idea of constructing a boat partially of wood and partially of cork. He enjoyed the patronage of the then Prince of Wales, afterwards George IV., and in 1784 a boat built by him, and termed “Unimmergible,” passed a successful trial on the Thames. He obtained a grant of letters patent in 1785, but his scheme does not appear to have made any progress except that the Rev. Dr. Shairp, of Bamborough, hearing of his invention, sent him an ordinary cable to be made “unimmergible.” This was done: the

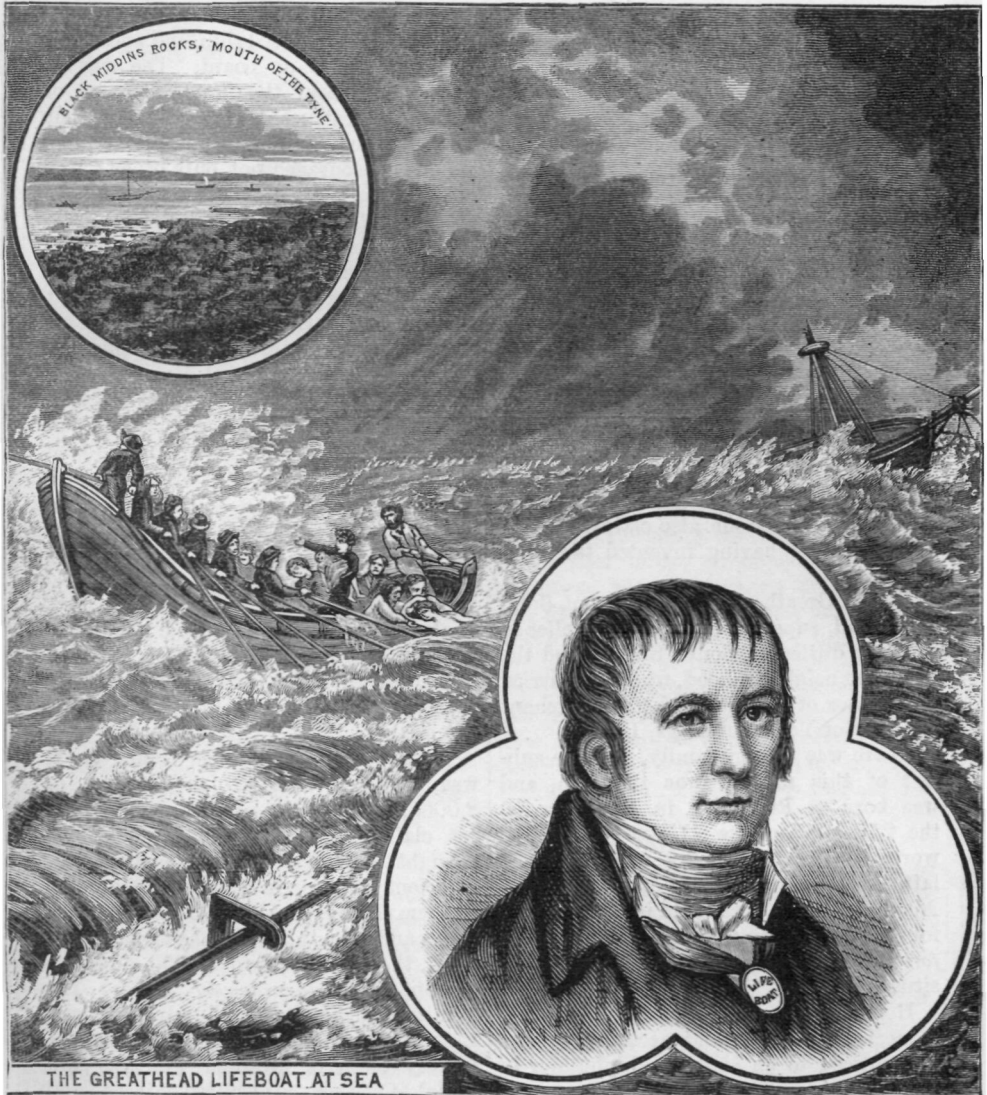
boat was stationed at Bamborough, and it is said to have been instrumental in saving several lives; but whether or not in seas in which no ordinary boat could have lived is unknown.

The subject then dropped until 1789, when a ship, by name the *Adventurer*, of Newcastle, stranded on the Herd Sands at the entrance of the Tyne. A fierce gale was raging, the sea was running mountains high, thousands of spectators were present, and, though but three hundred yards from the ill-fated ship, were unable to afford the slightest succour. The crew dropped off one by one from the rigging; mothers saw their sons, wives their husbands, drowned before their eyes and within the very sight of home. This tragic event caused such an impression that a committee was formed in South Shields, and a premium was offered for the best design of a Life-boat. A great number competed; the final decision lay between William Wouldhave of South Shields, a painter, and Henry Greathead of the same town, a shipbuilder, and in the end it was given in favour of the latter; but the friends of Wouldhave claim that certain features of his design were adopted either by Greathead or the committee. There does not, however, seem to be much, if any proof of this; and probably the

* We are indebted to the courtesy of the Editor of *Social Notes* for permission to republish in our columns this interesting sketch and illustration of Henry Greathead, with whose name the Life-boat must ever be associated. This useful and instructive serial, *Social Notes*, is published weekly, at 16, Southampton Street, Strand, London.

real facts are that the idea originated with Lukin, who, however, was unable to master the practical details, as it is said that the sides of his boat were liable to be staved in, and that the boat itself,

though buoyant, lacked balance; that Wouldhave improved upon the idea, and might have been proclaimed the inventor had Greathead never competed, and that the latter alone was sufficiently master



THE GREATHEAD LIFEBOAT AT SEA

Designed and drawn by ALFRED FISHER.

Engraved by DALZIEL BROTHERS.

of the theory and practice of ship-building to produce anything likely to prove a permanent benefit, and therefore to him must the honour be awarded, not as a privilege but as a right.

Those, however, who may feel inclined

to further inquire into the merits of the case, will find every information in the book entitled the "History of the Life-boat," by the Secretary to the ROYAL NATIONAL LIFE-BOAT INSTITUTION, and it must suffice to add that

Wouldhave afterwards became clerk to St. Hilda's Church, South Shields, and died in 1821, at the age of seventy years. A tombstone erected to his memory bears the following inscription:—

Sacred to the Memory
OF
WILLIAM WOULDHAVE,

Who died September 28th, 1821,

Aged 70 years,

Clerk of this Church,

And inventor of that National blessing to
mankind the Lifeboat.

Below is the following epitaph:—

"Heaven genius scientifick gave
Surpassing vulgar boast, yet he from soil
So rich no golden harvest reaped, no wreath
Nor that ingrate a Palm; unfading this
Till shipwrecks cease and Lifeboats cease to
save."

A model of his invention as well can be seen at the present time suspended from the chandelier of the church.

Lionel Lukin retired from business to Hythe, and died in 1834, and the inscription on his tombstone also claims for him the honour of having invented the Life-boat.

Henry Greathead was the son of John Greathead, supervisor and comptroller of the salt duties in South Shields and the adjoining neighbourhood, who had married a daughter of Henry Raisden, a merchant formerly of York Buildings, London.

There was a large family, and the subject of this memoir was the fifth, and was born at Richmond, in Yorkshire, on the 27th of January, 1757. He was the worthy son of a worthy father, as the latter, to quote the words of the *European Magazine*, 1804, "was held in great esteem for his strict integrity and diligence during forty-six years that he continued in the situation."

Henry, when a boy, it is said, indicated a mechanical turn, and accordingly was apprenticed to an eminent shipbuilder in South Shields. This life, however, proved too monotonous for him. He went to sea at first in the merchant service, but during the American War served in the Royal Navy, and afterwards, in the year 1788, was shipwrecked on the French coast while on a voyage to the West Indies. He then returned to South Shields, set up as a shipbuilder, and in the following

year, as before stated, gained the prize offered by the South Shields Committee.

In 1791 the Life-boat was for the first time called into active requisition. A Sunderland brig again stranded at the entrance of the Tyne, but this time succour was at hand. The Boat was launched, was manned by a brave and sturdy crew, reached the distressed ship, and succeeded in saving those on board. The success of this one Boat, the first messenger of salvation constructed by human skill, but intrusted to the mercy of a Divine Providence, encouraged not only other towns but also other countries to follow the example of South Shields; for in 1803 Greathead had built no less than thirty-one Life-boats, of which eighteen were for England, five for Scotland, and eight for foreign countries.

A year before this he had applied to Parliament for a National reward, and a committee had been appointed to take evidence. The evidence adduced proved two things: it proved that the Life-boat was a blessing, and that Greathead was not alone an inventor, but also a man of the greatest nobility of character; it proved that the Life-boat had already been the means of saving two hundred lives at the mouth of the Tyne alone, but it also proved that Greathead had taken no steps to protect his invention, and had never asked, much less obtained, more than an ordinary trade price for a single one of these Boats.

Upon the report of this committee it was proposed to grant him a sum of 2,000*l.*, and Wilberforce eloquently urged his claims. The Government, however, thought that half this sum would be sufficient; but upon it being represented to them that his and his witnesses' journey up to and stay in London had cost nearly 200*l.*, they consented to 1,200*l.*, and this amount was unanimously voted. The Trinity House added one hundred guineas, Lloyd's subscribed the same amount, the Society of Arts awarded him its gold medal, together with fifty guineas, and the Emperor of Russia presented him with a diamond ring.

On the 23rd of November, 1803, there occurred an episode which showed that Greathead possessed a large amount of physical courage, in addition to a high mental capacity, for on that day the *Bee*, of Shields, put to sea, but encountering

rough weather, the captain determined to re-enter the Tyne. In taking the bar at the mouth the ship struck the ground, lost her rudder, became unmanageable, and finally drove on the rocks known by the name of the "Black Middins." A crowd assembled, and the same tragedy which had been the primary cause of Life-boats ever having been instituted seemed likely to be re-enacted, for all declared that it was too rough for the Boat to put out. Suddenly Greathead stepped forward, and offered to go out himself to the rescue if a crew would volunteer. His words had an electric effect on those present; hundreds stepped forward, and the difficulty now was who to choose without offending the others. A selection, however, was finally made, chiefly consisting of pilots; the Life-boat was launched, reached the ship in reality without any great difficulty, and rescued everybody on board without the loss of a single life.

After 1804 Greathead's career becomes somewhat enveloped in mystery and wrapped up in gloom. It would appear that he embarked in certain speculations, and lost all the money which had been granted him by Parliament, for in 1807 his name appears in the *Gazette* amongst the list of bankrupts. At that period the Napoleonic wars were attracting the attention of the whole country, and amidst the bustle of war this benefactor would appear to have been forgotten. The very date of his death is uncertain, but is believed to have occurred in 1813; and it is beyond a doubt that he was carried to his last resting-place—

"Unwept, unhallowed, and unsung."

This neglect has been continued, for his name can only just be found in biographical dictionaries or encyclopædias,

which cheerfully devote whole columns to the career of a successful nondescript or noted eccentricity.

If this date of his death be correct, he would have died at the age of fifty-six, eight years before the first Life-boat ever built was lost. Some, however, built by him, were recently not only in existence, but even in use. Redcar was the oldest; it bore the date of 1802, and the sight of it some eight years ago inspired the late Viscount de Redcliffe to write some lines. They were set to music by Claribel, and the song was published by Boosey and Co. under the title of the "Life-boat." No statue, even in Shields, has been erected to Greathead's memory. Well, perhaps none is wanted. Of Sir Robert Peel it was said that every policeman was a statue to his memory, and so with equal truth it may be said that every Life-boat is a monument to the memory of Henry Greathead.

The good work begun in 1789, though it flagged for a time, has been carried on up to the present day. The British public is seldom stingy where "Jack" is concerned, and the ROYAL NATIONAL LIFE-BOAT INSTITUTION alone, which is supported by voluntary contributions, and of which her Most Gracious Majesty is patroness, has no less than 269 stations, and was the means of saving no less than 855 precious lives last year.

It is true that the Life-boat in use is somewhat different in construction to that designed by Henry Greathead. They now carry sail, and are chiefly what is technically known by the name of "self-righting;" but, nevertheless, Britain has every reason to be proud of that son of the Tyne whose invention it practically was, since it is blessed by the whole civilized world, and has been the means of preventing untold sorrow and incalculable misery.

C. MICHAEL SALMONSON.

ADDITIONAL STATIONS AND NEW LIFE-BOATS.

EASTBOURNE.—The Life-boat on this Station has been exchanged for a new boat, provided by some friends of the Institution at Manchester, through J. F. MILNE, Esq. At their request it is named the *William and Mary*. It is 34 feet long, 8 $\frac{3}{4}$ inches wide, rows 10 oars double-

banked, and is provided with a transporting carriage. The London, Brighton and South Coast Railway Company readily granted the boat and carriage a free conveyance over their line from London to Eastbourne. On the 9th August last this new Life-boat was formally handed

to the care of the Local Committee, named, and launched. The ceremony was inaugurated by the boat being drawn on its carriage through the principal streets of the town by four fine horses, headed by the band of the 1st Sussex (Eastbourne) Artillery Volunteers. The Life-boat was fully manned by a crew of fishermen in blue jerseys and red caps, the men wearing their cork life-belts. It was gaily adorned with flags, and altogether presented a most imposing appearance. On arriving at the beach, after the Rev. R. ALLEN, Incumbent of Christ Church, had offered up a prayer for the success of the boat, Mr. MILNE of Manchester, who was present as a deputation from the donors, was invited to explain its history, when he stated that the idea started with Miss MARY BRADFORD of Manchester, and having communicated it to a few friends, their united contributions purchased that boat. They then handed it over to the NATIONAL LIFE-BOAT INSTITUTION, by whom it was placed at Eastbourne. He mentioned the gratifying fact that Manchester had presented seventeen Life-boats to the Institution, there being a flourishing Branch of the Institution in that city, of which ROBERT WHITWORTH, Esq., V.P., and A. H. HEYWOOD, Esq., are the Treasurers, and the Rev. E. HEWLETT, M.A., Hon. Secretary. Capt. the Hon. H. W. CHETWYND, R.N., the Institution's District Inspector, then acknowledged the gift in suitable terms, and referred to the work of the Institution, which covered the whole coasts of the United Kingdom and resulted in the saving every year of hundreds of lives from shipwreck. Dr. JEFFERY and Mr. ROPER having expressed the thanks of the local residents, Mrs. MILNE came forward, and, amid general applause, named the boat in the customary manner, expressing a hope at the same time that it might be successful in saving many lives. The Life-boat was then launched, and the crew went through the usual exercise in the presence of a large number of spectators.

THE BRITISH AND FOREIGN SAILORS' SOCIETY.

As our readers are aware, the subjects treated on in this journal have been exclusively those which are either directly, or indirectly, connected with the function of the ROYAL NATIONAL LIFE-BOAT INSTITUTION—the "Preservation of Life from Shipwreck."

On the principle of "sub-division of labour," a principle which has produced such immense results in the world, we have, from the first publication of this journal, in 1852, thought it best to thus restrict our subject matter. Hence we have left politics, theology, &c., to be treated on by those to whom they pertain.

Nevertheless we may, without inconsistency, briefly refer to a good work inaugurated by an excellent society devoted to the promotion of the moral and religious welfare of our merchant seamen, the "British and Foreign Sailors' Society," whose headquarters are the Sailors' Institute, Shadwell, London.

Indeed, when it is remembered how many hundreds of vessels, and probably thousands of lives have been lost through the vice of drunkenness alone, we may truly feel that the moral welfare of our seamen is indirectly connected with our own function, "the Preservation of Life from Shipwreck."

The immediate occasion of our present notice of the above named Society is the circumstance, which deserves to be widely published and commended, that it has offered two prizes, of, severally, 100*l.* and 50*l.* for the two best essays on "The British and Foreign Mercantile Marine, how best to improve, afloat and ashore, the material, mental, and moral well-being of our Sailors."

As far back as the year 1836, the same Society gave a prize of 50*l.* for the best essay on the "Moral Claims of British Seamen."

The essay to which it was adjudged, was written by the late Rev. JOHN HARRIS, D.D., a popular Independent Minister of the day, and was entitled "Britannia," and dedicated to His Majesty King William IV. It was an earnest and eloquent appeal on behalf of our seamen, and we remember reading it with great pleasure and profit at the time.

For the conditions, &c., of the competition for the above prizes, our space being limited, we must refer those who wish to learn them to the zealous Secretary of the Society, the Rev. E. W. MATTHEWS, at the Sailors' Institute.

We may state that the Society is under the general direction of a Committee of Managing Directors, of which THOS. BRASSEY, Esq., M.P., is a prominent member, and that its President is the Most Hon. the Marquis of CHOLMONDELEY, who is also a Vice-President and Member of the Committee of the NATIONAL LIFE-BOAT INSTITUTION.

We will only add that the working machinery by which the Society endeavours to promote the moral and religious welfare of the seamen of our mercantile marine, is the usual one—the distribution of books and tracts, the formation of ships' libraries, and employment of missionaries, and that a detailed account of its proceedings will be found in an excellent monthly periodical published by it, which is appropriately entitled "the *Chart and Compass*, a Sailor's Magazine."

THE WRECK REGISTER AND CHART FOR 1878-79.

THE last Wreck Register of the British Isles published by the Board of Trade continues to tell the same sad tale of fearful disasters at sea as of yore, last year claiming 3,002 as having occurred in the seas and on the coasts of the United Kingdom.

For the past few years the Wreck Register makes no comment whatever, as was its wont, on its figures or tables, but simply leaves them to convey their own terrible force—a force which also speaks that the 3,002 wrecks resulted in the loss of 490 precious lives.

Of course these 3,002 disasters in 1878-79 include all classes of maritime disasters that usually take place. Thus of the whole number of wrecks, casualties and collisions on our shores during the year only 397 cases involved total loss, while loss of life only resulted from 118, or about 1 in 25 of the vessels thus lost or damaged.

When we have deducted these 397 cases from the year's casualties, the balance consists of 797 serious casualties and 1,808 minor disasters.

When, however, we remember the magnitude of the shipping and commercial interests of the United Kingdom—that the number of British vessels alone entering inwards and clearing outwards to and from our ports in one year averages 600,000, representing a tonnage probably of 102,000,000, and having between three and four millions of persons on board on all occasions—we say that when these facts are borne in mind, in conjunction with the certainty of the heavy storms that annually visit our shores, every one who considers the subject at all must be amazed at the comparative fewness, after all, of serious and fatal shipping disasters on our coasts.

Nevertheless the aggregate number of shipwrecks, as given in this Register, for a series of years is somewhat appalling, as the following record of them since 1854 convincingly shows:—1854 (last six

months), 458; 1855, 1,141; 1856, 1,153; 1857, 1,143; 1858, 1,170; 1859, 1,416; 1860, 1,379; 1861, 1,494; 1862, 1,488; 1863, 1,664; 1864, 1,390; 1865, 1,656; 1866, 1,860; 1867, 2,090; 1868, 1,747; 1869, 2,114; 1870, 1,502; 1871, 1,575; 1872, 1,958; 1873 (first six months), 967; 1873-4, 1,803; 1874-5, 3,590; 1875-6, 3,757; 1876-7, 4,164; 1877-8, 3,641; and 1878-9, 3,002; making a total number of wrecks in twenty-five years of 49,322, and what is still more lamentable, the actual loss of 18,319 lives from these very shipwrecks.

It is hardly necessary to say that the loss of life during these twenty-five years would undoubtedly have been increased by thousands in the absence of the noble and determined services of the Life-boats of the NATIONAL LIFE-BOAT INSTITUTION, which are ever ready, in the midst often of storms that are enough to appal the stoutest hearts, to succour the shipwrecked sailor.

Again it appears that the 3,002 wrecks, casualties and collisions, reported as having occurred on and near the coasts of the United Kingdom during the year 1878-79 comprised 3,716 vessels. The number of ships in that period is fortunately less than the total of the previous year by 720. The number of ships is in excess of the casualties reported, because in cases of collision two or more ships are, of course, involved in one casualty. Thus 701 were collisions, and 2,301 were wrecks and casualties other than collisions. On sub-dividing these latter casualties we find that 333 were wrecks, &c., resulting in total loss, 606 were casualties resulting in serious damage, and 1,362 were minor accidents. During the year 1877-78 the wrecks and casualties other than collisions on and near our coasts numbered 2,846, or 545 more than the number reported during the twelve months now under discussion.

The localities of the wrecks, still excluding collisions, are thus given:—East coasts of England and Scotland, 884;



SUMMARY

In 1879 the Number of Vessels lost or damaged on the coasts, and in the seas of the United Kingdom was 3716 and the loss of Life as far as can be ascertained 490.

	Life Boats	Rocket Stations	
There are	216	192	in England.
" "	42	43	Scotland.
" "	33	51	Ireland.

south coast, 407; west coasts of England and Scotland, and coast of Ireland, 761; north coast of Scotland, 74; and other parts, 175. Total, 2,301.

The greatest destruction of human life happened on the east coast of England.

From the accompanying Wreck Chart for the year it will be observed that the site of each of the 3,002 shipwrecks to which we have before referred is delineated with great accuracy. The appearance of this Wreck Chart is, as usual, very striking and instructive. It fails, however, to convey the important and gratifying fact that the Life-boats, the Rocket Apparatus and other means, save every life from shipwreck that it is practicable to save on our coasts.

We observe again that, excluding collisions, out of the 2,301 casualties, 2,013 disasters occurred to vessels belonging to this country and its dependencies, and that 288 disasters happened to ships which belonged to foreign nations. Of these 2,013 British vessels, 1,291 were employed in our own coasting trade, 574 in the (oversea) foreign and home trade, and 148 as fishing vessels. There were 7 casualties to ships belonging to foreign countries and states employed in the British coasting trade, and 234 to foreign vessels bound to or from British ports, although not actually engaged in our coasting trade; while there were 47 casualties to foreign ships which were not trading to or from the United Kingdom.

The Register gives figures showing that between 1861 and 1879 the number of British and Foreign ships that were wrecked on our coast, and from which life was lost, was 3,028, resulting in the loss of 14,480 lives.

We observe with concern that the total number of English ships, excluding collision cases, which appear to have foundered or to have been otherwise totally lost on and near the coasts of the United Kingdom from defects in the ships or their equipments during the year, is 31; while 69 happened through the errors, &c., of masters, officers, crews, or

pilots, 121 through stress of weather, and 53 from other or unknown causes.

The number of casualties arising from the same causes during the year, and resulting in serious damage, is as follows:—Through defects, 39; errors, 105; stress of weather, 227; other causes, 146; and the cases of minor damage were, through defects, 97; errors, 173; stress of weather, 761; and other causes, 201.

The ages of the vessels wrecked during the period under consideration are also thus given in the Register. Excluding foreign ships and collision cases, 168 wrecks and casualties happened to nearly new ships, and 303 to ships from 3 to 7 years of age. Then there are wrecks and casualties to 391 ships from 7 to 14 years old, and to 696 from 15 to 30 years old. Then follow 332 old ships from 30 to 50 years old. Having passed the service of half a century, we come to the very old ships, viz. 32 between 50 and 60 years old, 18 from 60 to 70, 9 from 70 to 80, 2 from 80 to 90, 6 from 90 to 100, and 1 upwards of 100 years old, while the ages of 55 of the wrecks are unknown.

Excluding collisions, 454 steamships, and 1,847 sailing vessels, were lost or injured on our coasts last year. Of the 2,013 British ships meeting with disaster in the year, 999 did not exceed 100 tons burthen, 627 were from 100 to 300 tons, 146 were from 300 to 500 tons, and 241 were above 500 tons burthen. Of the 274 British vessels totally lost, irrespective of collisions, 31 are known to have been built of iron; and of this number, 25 were steamships, and 6 were sailing vessels.

With reference to the force and direction of the wind, this Wreck Register only gives the winds in 902 out of the 3,002 cases of the year. Dealing with these 902 cases only, we find that the winds that have been most fatal to shipping on and near the coasts of the United Kingdom during the year were as follows:—N. to E. inclusive, 283; E. by S. to S. inclusive, 175; S. by W. to W. inclusive, 292; and W. by N. to N. by W. inclusive, 152. Total, 902.

On distinguishing these last-named casualties near the coasts of the United Kingdom, according to the force of the wind at the time at which the disaster occurred, 370 happened with the wind at forces 7 and 8, or a moderate to fresh gale, when a ship, if properly found, manned, and navigated, ought to be able to keep the sea with safety; while 532 disasters happened when the force of the wind was 9 to 11, that is to say, from a strong gale to a storm.

The casualties to ships in our rivers and harbours were not so numerous during the year; the number having been 763, of which 20 were total losses, 194 were serious casualties, and 549 minor casualties.

Of these casualties, collisions numbered 507, foundering 13, strandings 152, and miscellaneous 91.

These 763 casualties caused the loss of or damage to 1,320 vessels, of which 697 were British sailing vessels, 543 British steam-vessels, 59 foreign sailing vessels, and 21 foreign steam-vessels. The lives lost in these casualties were:—In the Thames (above Gravesend) 606, including the 600 poor creatures who perished from the steamer *Princess Alice*; in the Mersey (above New Brighton) 10; and in the Medway 1. Total, 617.

With reference to the collisions on and near our coasts during the year, 39 of the 701 collisions were between two steamships both under way, 201 between two sailing vessels both under way; and 172 between a steam-vessel and a sailing vessel both under way. The importance of this fact cannot be overrated, for it is hardly possible to conceive a casualty more awful in its ultimate consequences than a collision between two ships; and we trust that the new Rule of the Road at Sea, which has been issued by the BOARD OF TRADE, will help materially to diminish

every year in our seas and rivers these fearful catastrophes.

As regards the loss of life, the Wreck Abstract shows that the number was 490, from the various shipwrecks enumerated during the twelve months.

Of the lives lost, 45 were lost in vessels that foundered, 145 through vessels in collision, 146 in vessels stranded or cast ashore, and 100 in missing vessels. The remaining 54 lives were lost from various causes, such as through being washed overboard in heavy seas, explosions, missing vessels, &c.

Of the 118 ships from which the 490 lives were lost, 100 were British, involving the loss of 363 lives, and 18 were foreign, causing the loss of 127 lives.

On the other hand, the Wreck Register for the past year reveals the gratifying fact that by means of the Life-boats of the NATIONAL LIFE-BOAT INSTITUTION, the Rocket Apparatus of the Board of Trade, and other agencies, in conjunction with the successful efforts used on board the distressed vessels themselves, as many as *three thousand three hundred and two* lives were saved from the various wrecks on our coasts last year.

Having exhausted our comments on this accurate record of one year's disasters in the seas and on the coasts of the British Isles, we can, in conclusion, only repeat what we have said on previous occasions, in reference to the Saving of Life from Shipwreck, that, after years of ceaseless toil and experiments, it has become an art, and a most cunning and daring one too, which is mercifully every year robbing the sea of its direst havoc.

Resting firmly, as in years gone by, on the blessing of God on this art, the NATIONAL LIFE-BOAT INSTITUTION appeals with renewed assurance and confidence to the Public for sympathy and support.

SERVICES OF THE LIFE-BOATS OF THE NATIONAL LIFE-BOAT INSTITUTION (*continued*).

RAMSGATE.—At about 2.20 A.M., on the 5th May, during a fresh wind from the N.N.W., signal guns and rockets were fired from the North Sand Head and Gull Lightships. The *Vulcan* steam-tug and Life-boat *Bradford* were manned as quickly as possible, and at 2.50 the Life-boat left

the harbour. The tide at that time being low the tug was aground, but soon floated, overtook the Life-boat before she arrived at the sand, and took her in tow. On nearing the N.W. buoy a large flare light was seen, and the boat was then slipped and made sail for the vessel,

which proved to be the sloop *Nimrod*, of Jersey, 36 tons register, bound from London to Bideford; she had a crew of two men and a boy, and the master's wife was also on board. The sea was breaking over the stern of the vessel, and the master stated that the water was up over the cabin floor. Some of the Life-boatmen went on board and assisted the master's wife into the Life-boat, and then commenced pumping the vessel, while others ran out her large kedge anchor. The steamer then backed in, and her tow-rope was hauled on board and attached. After towing about half an hour the sloop, after striking heavily again on the sand, came afloat, and was towed into Ramsgate Harbour at about 7.30 A.M., the Life-boatmen continuing at the pumps until the vessel was moored in a safe position.

On the 4th June, at 4 A.M., during a fresh breeze from the N. and misty rain, the Life-boat *Bradford* and steam-tug *Aid* went out in reply to signal guns from the Gull Lightship. They proceeded through the Old Cudd Channel, and round to the eastward of the North Sand Head, when they observed a schooner ashore on the N.E. part of the sand. On arriving abreast of the vessel the Life-boat was slipped and proceeded under sail towards her. The anchor was let go about thirty fathoms to windward of her, and the boat was veered as near as possible; all the time a heavy sea was breaking over the vessel and occasionally filling the Life-boat. Two of the Life-boatmen jumped on board, and the boat was hauled off again, to avoid being damaged alongside. The master at once engaged the services of the Life-boat



to assist to get his vessel off. As the tide flowed the sea made, breaking completely over her and causing her to strike heavily on the sand. The canvas, which had been clewed up, was again set, to try to force her over the sand. There was not sufficient water for the steamer to get near in the heavy sea; but as the tide flowed the vessel lifted with the sea, and the current setting her to the eastward, she beat over into deep water, and was then sailed round the North Sand Head into Ramsgate Harbour, where she arrived at 10.15 A.M. The pumps had been continually at work from the time the men went on board the vessel, which proved to be the schooner *Isabella*, of Beaumaris, 79 tons, bound from London to Dublin, with cement; her crew consisted of four men.

RAMSGATE AND NORTH DEAL.—On the 20th September, at about 12.30 A.M., the ship *Paul Boyton*, of Yarmouth, N.S., 1097 tons, bound from Baltimore to Hamburg with a cargo of maize, went ashore on the Goodwin Sands during a fresh wind from the W. and heavy sea. The Ramsgate Life-boat *Bradford* proceeded to the vessel in tow of the harbour steam-tug *Aid*, and the North Deal Life-boat also went to her assistance. Two steam-tugs, the Walmer Life-boat, and some other boats also arrived, and efforts were made by means of towing, pumping, and throwing part of the cargo overboard, to get the ship afloat; but all were in vain, and as it was found that the water was gaining on her, all hopes of saving her had to be abandoned, and the crew determined to leave for the shore. Thirteen of the crew

and nine boatmen were then taken into the Deal Life-boat and safely landed at Deal. The Ramsgate Life-boat took three of the crew on board, but the master and mate refused to leave the vessel. The boat then sheered off to her anchor, where she remained until after high water. The master and mate still refusing to leave the vessel, although she had by this time fourteen feet of water in her hold, the boat made sail for the tug. The master then hailed her to come alongside to take the mate and himself off; but owing to the heavy sea the boat was unable to get alongside; she was, however, dropped under the vessel's stern, and the two men lowered themselves from the end of the spanker-boom into the Life-boat, and were thus saved at great peril to the Life-boat and to themselves. She then proceeded to the steamer, was taken in tow, and arrived in Ramsgate Harbour at 3 P.M.

WEXFORD.—Signals of distress were observed at midnight on the 8th May, from a vessel which had stranded on the Dogger Bank. The wind was blowing from the E.N.E. at the time, and the sea was rough. The *Ethel Eveleen* Life-boat promptly proceeded to render assistance, and on arriving alongside the vessel found she was the schooner *Jonah*, of Wexford, bound for that port from Dublin with a cargo of wheat. As she was full of water, her crew of four men, and two passengers, were taken into the Life-boat and brought safely to land.

WALMER.—At about 3.15 A.M. on the 28th June, it was reported that a ship was ashore on the Goodwin Sands. The Life-boat *Centurion* accordingly proceeded to the inner part of the South Sand Head, and found the ship *Colombo*, of Greenock, ashore there. She was bound from Bassein, India, to Bremen, with a cargo of rice; her crew consisted of 24 men, and the master's wife and child were also on board. The captain engaged the services of the Life-boat men and others to lighten the ship. After throwing over about 250 tons of cargo, they succeeded in removing her from her perilous position, and took her into the Downs. There was a fresh W.S.W. wind at the time and the weather was hazy.

SUTTON, LINCOLNSHIRE.—On the 4th

July the Life-boat *Caroline* proceeded to the assistance of the yawl *Wave*, of Goole, which was showing a signal of distress. On arriving alongside it was found that her foretopmast and foremast-head rigging and head gear had been carried away in a squall, and as the sea was running too high to allow the crew to get the wreckage on board, she had brought up off Sutton and made signals of distress. The Life-boat men stowed the wreckage, got the vessel under way, took her into Boston Deep and anchored her in safety off the Scull Rig Buoy, remaining by her during the night until a tug from Boston arrived and took her in tow for Grimsby. The yawl was on a voyage from London to Middlesborough with a cargo of scrap iron.

PALLING, NORFOLK.—On the morning of the 18th July, during a thick fog, the *s.s. Red Rose*, of Cardiff, grounded on the Hasborough Sand. Some yawls went to her assistance, but finding that these boats did not return, and that the vessel still remained fast, at 3 A.M. on the following day the *British Workman* Life-boat was launched, and with the combined efforts of the boats and steam-tugs the steamer was got off and taken into Yarmouth Roads. She was bound from the Tyne to Alexandria with coal, and had a crew of twenty-two men and two passengers.

BURNHAM, SOMERSET.—Soon after 7 P.M. on the 7th August, the coxswain of the Life-boat saw that the schooner *Brune*, of Bridgwater, had stranded near Highbridge Pill, and that the crew had been compelled to take to the rigging. The wind was blowing a hurricane from W.N.W. at the time. The Life-boat *Cheltenham* was immediately launched, proceeded as quickly as possible to the sunken vessel, and took seven men from the rigging, two of them being in a most exhausted state. The men were safely landed at Highbridge at 9.30 P.M.

PORTHDINLLAEN.—A sudden gale of wind sprang up at about 4 P.M. on the 7th August, accompanied by a heavy cross sea, and four schooners were observed with signals of distress flying. The *George Moore* Life-boat was immediately launched, and proceeded to the

Thetis, of Pwllheli, when it was found that she had struck the ground and was leaking, there being four feet of water in her hold. Two of the Life-boatmen were put on board to assist in keeping her afloat, and the Boat then proceeded to the *James*, of Nefyn, and found that she only required assistance to come to the quay. She then went to the *Jane Eliza*, of Nefyn, but she did not require any help. Finally the Life-boat proceeded to the *Sarah Jane*, of Chester, and as the captain's wife was very ill and wished to be taken ashore, she was taken into the boat and safely landed at Porthdinllaen.

NEWQUAY, CORNWALL.—On the 8th August the Life-boat *Pendock Neale* rescued the crew, consisting of two men, of the smack *Harriette*, of Barnstaple, bound from Swansea for Hayle with coal. The vessel had gone ashore on the rocks at the east end of Crantock Beach, about three miles from Newquay, and became a total wreck in a very few minutes. The two men took to their boat, and remained under the shelter of a large rock called the Goose until rescued by the Life-boat. The wind was blowing a fresh N.N.W. gale, and the sea was very heavy at the time.

WITHERNSEA, YORKSHIRE.—Information was received, at 6 A.M. on the 14th August, that the smack *Excel*, of Grimsby, was on shore off Waxholme Mill. The *Admiral Rous* Life-boat was launched, but was driven back by the heavy surf. After considerable difficulty, the crew and launchers having to go up to their waists in the water to push the boat out, she was at last got off, and succeeded in rescuing four men. One of the crew, against the advice of his shipmates, had tried to get ashore in the smack's boat; but it was filled by the heavy sea, and the man with very great difficulty reached the shore by swimming.

ST. IVES, CORNWALL.—The schooner *Jane Smith*, of Plymouth, bound from Llanelly to Ipswich with coal, was observed running for St. Ives Harbour at about 8 A.M. on the 15th of September, during a strong gale from the N. and heavy sea, with a signal of distress flying. The Life-boat *Exeter* was at once launched, and proceeded to her assistance, but in

the meantime the vessel struck on the "Ridge," and it was with considerable difficulty that the boat managed to get alongside and rescue the crew, consisting of six men. She then returned ashore against the gale, a strong tide setting to the eastward, and reached the harbour at about 9.30, when the men were safely landed in an exhausted state.

CLOVELLY.—At 5.30 A.M. on the 15th of September, the Life-boat on this station was launched during a heavy gale from the N., and rescued the crew, consisting of three men, from the smack *Delabole*, of Fowey, bound from Par to Swansea with a cargo of granite blocks. The vessel had lost her main sheet, mainboom and gaff, and her cargo had shifted; she subsequently sprang a leak, and sank during the following night. At the time of launching the Life-boat the tide was half ebb, with a heavy sea, and the crew were completely drenched before the boat could be got afloat.

HAYLE, CORNWALL.—The schooner *Bonne Adele*, of Isigny, France, bound to that port from Llanelly, with coal, parted her cables and drove ashore about a quarter of a mile west of Hayle Bar during a strong N. gale and heavy sea, at about 3 P.M. on the 16th of September. The Life-boat *Isis* was launched and, after a hard pull against the gale and heavy sea, succeeded in reaching the vessel, took off her crew of five men and landed them safely at Hayle at about 5.15.

The St. Ives Life-boat went out to the assistance of this vessel at about 1 P.M., but the crew refused to leave her, and the Life-boat therefore returned to the shore. At 3 o'clock the Life-boat again went off to her, but found that the men had been rescued by the Hayle Life-boat.

On the occasion of the second launch of the St. Ives Life-boat she was obliged to use her drogue, the tripping line of which got jammed between the rudder and the stern-post, the sea having thrown the stern of the boat over the line. As the line could not be freed, James Murphy, coastguardman and 2nd coxswain of the Life-boat, went over the stern of the boat and got it clear. This service was one of considerable danger as there was a heavy sea running, and the safety of the boat might have been imperilled by the drogue being

unworkable. The Second Service Clasp of the Institution was presented to J. Murphy in acknowledgment of this service, he having already received its Silver Medal for previous gallant services in the Life-boat.

FISHGUARD.—On the 15th of September this place was visited by a very strong gale from the N.N.E., accompanied by a heavy sea. The smack *Catherine*, of Cardigan, bound thence to Swansea, in ballast, and the brigantine *Osnabrick*, of Papenberg, Hanover, bound from Sundsvall, Sweden, to Cardigan, with timber, were at anchor in the roadstead, and, as both were riding very heavily, a sharp look-out was kept on them during the day, as it was fully expected that the services of the Life-boat would be required. At about 5.45 p.m. a signal of distress was hoisted by the smack, and the No. 1 Life-boat, *Sir Edward Perrott*, was at once launched, and went out splendidly through the broken sea. She took off the smack's crew of two men, and then proceeded to the brigantine to ascertain whether any aid was required; the master, however, declined any help as he was in hopes that the gale was breaking up, and he thought that his vessel would be able to ride it out, as she had three anchors ahead. The boat then returned ashore and landed the smack's crew in safety. At 10 o'clock, just as the Life-boat had been placed in her house, the brigantine burnt signal lights, having parted her principal chain. The boat was immediately taken out again and proceeded to the vessel; but before she reached her the two remaining chains had given way and she rapidly drifted on the sands, where a fearful sea was washing over her. As she had stranded in the midst of the broken water, considerable difficulty was experienced by the Life-boatmen in taking off her crew, the boat being several times completely filled; however, this was eventually accomplished in safety, and the crew, consisting of six men and the captain's wife, were brought ashore in safety.

SUMMARY OF THE MEETINGS OF THE COMMITTEE.

THURSDAY, 3rd June, 1880.

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

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

Also the Report of Vice-Admiral J. R. WARD, Chief Inspector of Life-boats to the Institution, on his recent visits to Hull, Withernsea, and Hornsea.

Also the Reports of the five District Inspectors of Life-boats on their visits to the following Stations:—

No. 1. District. Capt. the Hon. H. W. CHETWYND, R.N., London—Brightstone Grange, Brooke, Bembridge, Hayling Island, Shoreham, Brighton, Worthing, and Eastbourne.

No. 2 District. Commander C. LAPRIMAUDAYE, R.N., Bristol—Looe, Burnham, Watchet, Appledore (two Boats), Braunton, Lynmouth, Morte, Ilfracombe, Clovelly, and Bude.

No. 3 District. Lieut. H. T. G. TIPPING, R.N., Dublin—Queenstown, Greencastle, Portrush, Groomsport, Ballywalter, Tyrella, Newcastle, Giles' Quay, and Drogheda (two Boats).

No. 4 District. Lieut. H. A. MONTEITH, R.N., Edinburgh—Ackergill, Huna, Thurso, Stromness, Longhope, Anstruther, St. Andrew's, Broughty Ferry, Buddon Ness, Arbroath, and Montrose (two Boats).

No. 5 District. Commander ST. VINCENT NEPEAN, R.N., Hull—Skegness, Chapel, Sutton, Donna Nook, Theddlethorpe, Whitburn, Sunderland (four Boats), Seaham, Hartlepool (three Boats), West Hartlepool (two Boats), and Seaton Carew.

Reported the receipt of a contribution of 650*l.* from Capt. A. H. GORDON, of Fyvie Castle, Aberdeenshire, to defray the cost of a new Life-boat to be named the *Cosmo and Charles*.

Decided that Capt. GORDON be thanked for his munificent gift, and that it be appropriated to the new Life-boat about to be sent to Fraserburgh, on the coast of Aberdeenshire.

Also the receipt of the following other Special Contributions since the last meeting:—

	£.	s.	d.
Mrs. M. A. COBB, Jersey, per Mr. JAMES BANKS	300	0	0
The Misses BROOKE, Sisters of the late JOHN BROOKE, Esq., Q.C., per JOHN RICHARDSON, Esq., Q.C., in aid of the Balbriggan and Skerries Life-boats	100	0	0
The Marquis of ELY, annual subscription	20	0	0
Canteen Fund of H.M.S. <i>Junna</i> , per Lieut. KELHAM, R.N., additional	5	0	0
—To be severally thanked.			

Reported that the late Capt. MONK, R.N., of Neston, Cheshire, had left a legacy of 500*l.* to the Institution.

Decided that the thanks of the Committee be presented to Mr. DAVID WILLIAMS, principal officer of H.M. Customs at Portmadoc, in acknowledgment of his long and valuable co-operation while holding the office of Honorary Secretary of the Aberdovey branch of the Institution.

Ordered that various works be carried out at the Tramore, Brightstone Grange, and Wells Life-boat Stations at an expense of 337*l.* 5*s.*

Paid 1,449/ 8s. 11d. for sundry charges on various Life-boat Establishments.

Voted 24/ 18s. to pay the expenses of the Wexford No. 1 and Blackpool Life-boats in respectively saving six persons from the schooner *Jonah*, of Wexford, and rendering assistance to the steamer *Columbus*, of Liverpool.

[The reports of these services will be found on pages 178 and 203 of the *Life-boat Journal*.]

Voted also 29/ 4s. to pay the expenses of the Life-boats at Donna Nook, Lizard, and Winchelsea, in assembling their crews or putting off to the aid of vessels showing signals of distress, but not ultimately requiring assistance.

The Ramsgate Life-boat had also been out in reply to distress signals, but her services were not eventually needed.

Voted 2/ to four men for rescuing two other men from a yawl which had been upset while boarding the Norwegian barque *Nora*, off Arthurstown, Co. Waterford, during a gale of wind from S.S.W. on the 21st April.

THURSDAY, 1st July:

The Chairman of the Institution in the Chair.

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

Also the Report of the Chief Inspector of Life-boats on his recent visits to Edinburgh, Dunbar, North Berwick, Anstruther, Broughty Ferry, Rhyl, Barmouth, Portmadoc, Aberdovey, and Aberystwith.

Also the reports of the five District Inspectors of Life-boats, on their visits to the following places:—

1. Hastings, Rye, Winchelsea, New Romney, Lydd, Hythe, Dover, Walmer, Kingsdowne, Broadstairs, North Deal, Kingsgate, Ramsgate, and Margate.

2. Plymouth, Yealm River, Salcombe, Hope Cove, Dartmouth, Brixham, Torquay, Teignmouth, Exmouth, and Sidmouth.

3. Howth, Greystones, Poolbeg, Rogerstown, Balbriggan, Kingstown, Skerries, Wicklow, Courtown, and Arklow.

4. Gourdon, Stonehaven, Newburgh, Cruden, Peterhead, Fraserburgh, Whitelink Bay, Ardrossan, Dunbar, North Berwick, Anstruther, and Broughty Ferry.

5. Redcar, Saltburn, Middlesborough, Whitby (two Boats), Uppang, Staithes, Runswick, Scarborough, Filey, Flamborough (two Stations) Bridlington, Withernsea, Hornsea, and Cambridge.

The Committee expressed their sincere condolence with Lady CAVE, on the occasion of the death of her much lamented husband, the Right Hon. Sir STEPHEN CAVE, G.C.B., who had been for many years a Member of the Committee of Management of the Institution, and one of its Trustees.

[A brief Memoir of Sir STEPHEN CAVE will be found in the *Life-boat Journal* for August, 1880, No. 117, p. 168.]

The Committee unanimously elected EDWARD BIRKBECK, Esq., M.P., V.P., to the vacant Trusteeship of the Institution.

Reported the receipt of the following Special Contributions since the last meeting:—

	£.	s.	d.
Miss DA COSTA, additional	500	0	0
A Lady	20	0	0
In Memoriam by "T. J. M."	20	0	0
MORRIS CARSWELL, Esq., of Pollokshields, N.B., in memory of his Wife	15	0	0

Ipswich Odd Fellows and Foresters Amalgamated Fête Committee, per W. B. JEFFRIES, Esq., additional 5 5 0
—To be severally thanked.

Reported the transmission to its Station of the new Life-boat for Ardrossan.

The Boat had been taken out for trial by the District Inspector of Life-boats on the 10th June, when the Crew were much pleased with its qualities.

The Glasgow and South Western Railway Company had kindly granted free conveyances to the new and old Life-boats between Carlisle and Ardrossan.—To be thanked.

Reported that W. D. O'CONNOR, Esq., Assistant Superintendent of the United States Life Saving Service, had presented to the Institution a copy of a "Sketch of the United States Life Saving Service," written by himself.—To be thanked.

Paid 2933/ 14s. 7d. for sundry charges on various Life-boat establishments.

Reported that the Ramsgate Life-boat had assisted to save the schooner *Isabella*, of Beaumaris, and her crew of 4 men.

[The details of this service will be found on page 202.]

Voted 34/ 7s. to pay the expenses of the North Deal, Walmer, Wexford No. 1, and Carnsore Life-boats, in putting off in reply to signals of distress exhibited by vessels not ultimately requiring the services of the boats.

Also 1/ 10s. to three men for rescuing four persons from a boat laden with seaweed, which was in a sinking condition at Island Crone, Co. Donegal, during a fresh N.E. gale, on the 8th May.

THURSDAY, 5th August:

The Chairman of the Institution in the Chair.

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

Also the report of the Chief Inspector of Life-boats on his recent visits to Yarmouth and Gorleston.

Also the reports of the five District Inspectors of Life-boats on their visits to the following Stations:—

1. Southend, Lyme Regis, Weymouth, and Kimeridge.

2. Barmouth, Portmadoc, Aberdovey, Aberystwith, Abersoch, Porthdinllaen, Rhyl (two Boats), Llandudno, Holyhead, Rhoscolyn, Rhosneigr, Cemaes, Llanddwyyn, Llanddulas, Cemlyn, Moelfre, and Bull Bay.

3. Cahore, Wexford (two Boats), Carnsore, Duncannon, Dungarvan, Youghal, Ardmore, Ballycotton, Queenstown, Courtmacherry, Tralee, and Valentia.

4. Campbelltown, Southend, Ayr, Troon, Irvine, Girvan, Ballantrae, Port Patrick, Port Logan, Whitehorn, and Kirkcudbright.

5. Yarmouth (two Boats), Harwich, Clacton-on-Sea, Peterborough, Grantham, Etford, and Colchester.

Reported the receipt of a contribution of 1000/ from Mrs. TOWNEND, of Puckrup Hall, near Tewkesbury—through the Manchester Branch of the Institution—for a Life-boat Station on the Yorkshire coast, the Boat to be named the *Charles and Ann*.

Decided that Mrs. TOWNEND be thanked for her munificent gift, and that it be appropriated to the Saltburn Life-boat Station.

Reported the receipt of the following other Special Contributions since the last meeting:—

	£.
Ancient Order of Foresters, annual subscription in aid of the support of their two Life-boats, per SAMUEL SHAWCROSS, Esq.	100
A. HUTCHINSON, Esq., and the Misses FANNY and CHARLOTTE HUTCHINSON, additional	24
Worshipful Company of Clothworkers, per OWEN ROBERTS, Esq., additional	21
Oliver Goldsmith Tullio Fund, per Miss ADA GOLDSMITH TULLOH, additional	15
—To be severally thanked.	

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

	£.
The late W. FORBES, Esq., of Glasgow	20
The late JOHN TOMLINSON, Esq., of Lincoln	15

Voted the thanks of the Committee to Mr. ROBERT HUGHES, of Rhyl, in acknowledgment of his long and valuable co-operation as Honorary Secretary of the Rhyl Branch of the Institution.

Ordered various works to be carried out at the Teignmouth, Kimeridge, and Walmer Life-boat Stations at an expense of 193*l.* 10*s.*

Paid 3523*l.* 17*s.* 2*d.* for sundry charges on various Life-boat Establishments.

Reported that the Life-boats at Walmer, Sutton, and Palling, had rendered the following services:—Ship *Colombo*, of Greenock, assisted to save vessel and 26; yawl *Wave*, of Goole, rendered assistance; s.s. *Red Rose*, of Cardiff, rendered assistance.

[The particulars of these services will be found on page 203.]

Voted 9*l.* 18*s.* to pay the expenses of the Lizard Life-boat in putting off in reply to signals of distress, with the view of assisting a vessel which did not eventually require assistance.

The Cemlyn Life-boat had also been launched, but her services were not ultimately needed.

Voted 5*l.* to the master and crew of the schooner *Margaret*, of Fleetwood, in acknowledgment of their services in saving the crew of the schooner *Salus*, of Wigtown, which had caught fire in Wigtown Bay on the 16th of May.

Also 1*l.* 10*s.* to three men for putting off in a curragh and saving two other men from a boat which had been capsized in Ballinakill Bay, Co. Galway, during a fresh S.W. wind, on the 11th of June.

Also 1*l.* 10*s.* to three men for going out in a boat and saving four persons whose boat, while passing through Elbow Sound, Slyne Head, had missed stays and grounded during a N. wind on the 9th of July.

Also 1*l.* 2*s.* 6*d.* to three men for saving three persons from a skiff which, while crossing Carlingford Bar during a S.E. wind, had sunk on the 18th of May, the boat being leaky, and a strong flood tide running at the time.

Also 15*s.* to two men for rescuing two other men from a hooker which, while proceeding from Halfmace to Kinwarra, Co. Galway, with seaweed, had been struck by a sudden squall from the N.W., and capsized about a quarter of a mile S. of Mace Head, on the 2nd of May.

THURSDAY, 2nd September.

Sir EDWARD PERROTT, Bart, V.P., in the Chair.

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

Also the Reports of District Inspectors of Life-boats on their visits to the following Stations:—

1. Chapman's Pool, Swanage, Poole, Hayling Island, Eastbourne, Brighstone, Brooke, Bembridge, and Guernsey.

2. Penarth, Swansea, Pembrey, Carmarthen Bay, Porthcawl, Tenby, Milford Haven, St. David's, Solva, and Fishguard (two Boats).

4. Girvan, Ayr, Irvine, Kildonan, and North Berwick.

5. Aldborough, Thorpe, Dunwich, Southwold (two Boats), Kessingland (two Boats), Hartlepool (two Boats), West Hartlepool, Redcar, Middlesborough, and Saltburn.

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

	£.	s.	d.
HENRY ROBERTSON, Esq., Glasgow	20	0	0
BACUP CO-OPERATIVE STORE (Limited) (additional)	10	0	0
"B. C. M." (A Thankoffering)	5	0	0
Contents of Contribution Box at Plymouth Mercantile Marine Office, per H. M. SHAPCOTT, Esq. (additional)	3	13	10
Offerory in Caister Church (Norfolk), per Rev. E. G. H. MURRELL	1	10	0
—To be severally thanked.			

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

	£.	s.	d.
The late PETER BROWN, Esq., of Castle Douglas, N.B.	100	0	0
The late ALDBOROUGH HENNIKER, Esq., of Catcott, Somerset	100	0	0

Voted the thanks of the Committee to WALTER MALCOLM, Esq., and the Rev. CHARLES HARDY, in acknowledgment of their past valuable co-operation as Honorary Secretaries, respectively, of the North Berwick and Hayling Island Branches of the Institution.

Reported the transmission to their stations of the new Life-boats for Saltburn, Brighstone Grange (Isle of Wight), Sennen Cove (Land's End), Giles' Quay (Ireland), and Fraserburgh (N.B.)

Successful demonstrations had taken place at most of the above places, under the superintendence of the District Inspectors of Life-boats.

Paid 642*l.* 16*s.* for sundry charges on various Life-boat Establishments.

Voted 49*l.* 4*s.* to pay the expenses of the Life-boats at Porthdinllaen, Burnham, Newquay (Cornwall), and Withernsea, in rendering the following services:—

	Lives saved.
Schooners <i>Thetis</i> , of Pwllheli, and <i>Sarah Jane</i> , of Chester. Rendered assistance.	
Schooner <i>Brune</i> , of Bridgwater	7
Smack <i>Harriette</i> , of Barnstaple	2
Fishing Smack <i>Excel</i> , of Grimsby	4

[The particulars of these services will be found on pages 203-4.]

Voted also 111*l.* 7*s.* to pay the expenses of the West Wittering, Pembrey, Fishguard, Padstow, Deal, Broadstairs, and Kessingland Life-boats, in assembling their crews, or putting off, in reply to signals of distress, to vessels which did not after all require their assistance.

ROYAL NATIONAL LIFE-BOAT INSTITUTION.

SUPPORTED SOLELY BY VOLUNTARY CONTRIBUTIONS.

Patroness—Her Most Gracious Majesty the Queen.

President—HIS GRACE THE DUKE OF NORTHUMBERLAND, P.C.

Chairman—THOMAS CHAPMAN, ESQ., F.R.S., V.P.

Secretary—RICHARD LEWIS, of the Inner Temple, Esq., Barrister-at-Law.

Services of the Life-boats of the Institution in 1879.

<i>Adroit</i> , schooner, of Aberystwith	2	<i>Gilded Age</i> , yacht, assisted to save vessel and	3	<i>Ocean Queen</i> , schooner, of Plymouth—assisted to save vessel and	7
<i>Albion</i> , schooner, of Wells—assisted to save vessel and	3	<i>Guiseppina N.</i> , barque, of Genoa	17	<i>Onward</i> , barque, of London, assisted to save vessel and	16
<i>Alert</i> , schooner, of Scarborough—assisted to save vessel and	2	<i>Hallsweil</i> , schooner, of Bridgewater—saved vessel.		<i>Osprey</i> , barque, of Arendal—assisted to save vessel and	16
<i>Allison</i> , brig, of Whitby	4	<i>H. B. Brightman</i> , s.s.—remained by vessel.		<i>Pasitheia</i> , barque, of Liverpool ..	23
<i>Alpheus Marshall</i> , barque, of Digby, N.S.	14	<i>Hede</i> , ship, of Frederickstadt ..	14	<i>Ponthieu</i> , brig, of Vannes	5
<i>Ann Wilmot</i> , smack, of Lowestoft	5	<i>Hermann</i> , schooner, of Berwick—saved vessel and crew	6	<i>Queen of Britain</i> , brig, of Carnarvon	6
<i>Ann</i> , schooner, of Colchester	5	<i>Hesperus</i> , sloop, of Copenhagen—rendered assistance.		<i>Reliance</i> , coble, of Cullercoats—rendered assistance.	
<i>Annie</i> , barquentine, of Salcombe	2	<i>Hester</i> , smack, of Ipswich—saved vessel and	3	<i>Richard Willson</i> , ketch, of London	7
<i>Apollon</i> , schooner, of Bandholm ..	5	<i>Jane and Ann</i> , schooner, of Llanaelhalarn	3	<i>Rival</i> , brig, of Blyth	8
<i>Arabian</i> , s.s., of Liverpool—remained by vessel.		<i>J. H. Lorentzen</i> , s.s., of London ..	17	<i>Sarah Ann</i> , barque, of Sunderland	10
<i>Baroi</i> , s.s., of Newcastle	6	<i>John</i> , brig, of Hartlepool—remained by vessel.		<i>Sarah Ann Dickinson</i> , schooner, of Fleetwood	6
<i>Bertha</i> , schooner, of Stettin, saved vessel and	4	<i>Lady Land</i> , schooner, of Glasgow	6	<i>Scotsraig</i> , brig, of Dundee—saved vessel and	9
<i>Blyth</i> fishing boat—saved boat and	6	<i>Lady Lilford</i> , brig, of Ardrossan	6	<i>Sons of the Wear</i> , coble, of Sunderland	4
<i>Blyth</i> fishing boats—rendered assistance.		<i>Lavinia</i> , brig, of Guernsey—assisted to save vessel and	8	<i>Sunshine</i> , schooner, of Wick	11
<i>Brest</i> , steamer, of Glasgow	40	<i>Leda</i> , ship, of Bremen	19	<i>True</i> , brigantine, of Faversham ..	7
<i>Cheverreul</i> , barque, of Havre	13	<i>Leorette</i> , brigantine, of St. Malo—assisted to save vessel.		<i>Union T.</i> , schooner	7
<i>Christiania</i> , Norwegian barque ..	12	<i>Liberator</i> , lugger, of Wexford ..	1	<i>Violet</i> , smack, of Great Yarmouth—assisted to save vessel and ..	6
<i>Cito</i> , brig, of Arendal	7	<i>Lina</i> , barque, of Tonsberg	9	<i>Weaver</i> , schooner, of Carnarvon—remained by vessel.	
<i>Cleopas</i> , barque, of South Shields	10	<i>Lough Sunart</i> , ship, of Glasgow ..	55	<i>Wellington</i> , schooner, of Carnarvon—assisted to save vessel and	3
<i>Darlington</i> , s.s., of Stockton	9	<i>Margaret</i> , brig, of West Hartlepool—rendered assistance.		<i>Whitby</i> fishing-boats—rendered assistance.	
<i>Diamanten</i> , brig, of Arendal	4	<i>Marian</i> , smack	2	<i>William</i> , dandy, of London	12
<i>Dolphin</i> , lugger, of Wexford	5	<i>Marie</i> , Russian barque—assisted to save vessel and crew	12	<i>Wisdom</i> , cutter, of Shoreham—saved vessel and crew	6
<i>Edith Owen</i> , steamer, of London ..	2	<i>Marie</i> , schooner, of Rostock—assisted to save vessel.		<i>Y. Deryon</i> , cutter, of Carmarthen—remained by vessel.	
<i>Effort</i> , ketch, of Portsmouth	2	<i>Martaban</i> , ship, of Greenock	11	<i>Zephyrus</i> , barque, of Plymouth ..	14
<i>Elizabeth Ellen Fisher</i> , schooner, of Fleetwood	4	<i>Mary Lloyd</i> , schooner, of Portmadoc—rendered assistance.		<i>Zurich</i> , barque, of North Shields	16
<i>Ellen</i> , schooner, of Beaumaris	3	<i>Mary Roberts</i> , schooner, of Nefyn	5		
<i>Elsmore</i> , schooner, of Runcorn	3	<i>Matin</i> , s.s., of Dundee, remained by vessel.			
<i>Esmeralda</i> , smack, of Grimsby, saved vessel and	5	<i>Menai Packet</i> , smack, of Carnarvon	3		
<i>Excelsior</i> , smack, of Grimsby	5	<i>Messenger</i> , brigantine, of Exeter ..	3		
<i>Fanny Bailey</i> , schooner, of Dundalk	5	<i>Mia Madre E.</i> , barque, of Genoa ..	21		
Fishing cibles of Staithe—rendered assistance.		<i>Moidart</i> , s.s., of Glasgow, remained by vessel.			
Fishing boats and other vessels in distress at Montrose—rendered assistance.		Newbiggin fishing-cibles—rendered assistance.			
Fishing boats off Scarborough—rendered assistance.		<i>Nooit Polmakt</i> , Dutch fishing smack—rendered assistance.			
<i>Fraternity</i> , brigantine, of Krageroe, assisted to save vessel and	6				
<i>General Caulfield</i> , barque, of Newcastle	18				

Total lives saved by Life-boats, in 1879, in addition to Twenty-one vessels

During the same period the Institution granted rewards for saving lives by fishing and other boats 218

Total of lives saved } 855
in 1879..... }

THE COMMITTEE OF MANAGEMENT have to state that during the past twenty-two months, the ROYAL NATIONAL LIFE-BOAT INSTITUTION has expended £51,140 on its 269 Life-boat Establishments on the coasts of England, Scotland, and Ireland, in addition to having contributed to the saving of 1,196 persons from various shipwrecks on our coasts, for which services it granted 1 Gold Medal, 14 Silver Medals and 24 Votes of Thanks on *Vellum*, besides pecuniary rewards to the amount of £4,200.

The number of lives saved either by the Life-boats of the Society or by special exertions for which it has granted rewards, since its formation, is 27,247; for which services 93 Gold Medals, 901 Silver Medals, and £61,115 in cash have been granted as rewards.

The Committee desire to acknowledge, with gratitude, the liberal support which they have received from the British public during the past few years, a support which has enabled them to establish their present great Life-saving fleet of 269 boats on the shores of the United Kingdom. Deeply sensible, however, of the great responsibility that rests on them to maintain the Life-boats in a thoroughly efficient state, and their crews practised in the management of the boats, which can only be effected by a large and permanent annual income, they earnestly appeal to all classes of their countrymen to continue to aid them in upholding and perpetuating so great and truly national a work.

The expense of a Life-boat, its equipment, transporting-carriage, and Boat-house, averages £1,000, in addition to £70 a year needed to keep the Establishment in a state of efficiency.

Donations and Annual Subscriptions will be thankfully received by the Bankers of the Institution, Messrs. COURTS AND CO., 59 Strand; Messrs. HERRIES, FARQUHAR, AND CO., 16 St. James's Street; Messrs. HOARE, 37 Fleet Street, London; by all the other Bankers in the United Kingdom; by all the Life-boat Branches; and by the Secretary, at the Institution, 14 JOHN STREET, ADELPHI, London, W.C.—November, 1880.