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MANAGEMENT OF BOATS IN A SURF AND BROKEN WATER.

SECOND ARTICLE.

IN our last Number we published some remarks on the management of boats in a surf and broken water, embodying the substance of inquiries made on various parts of the coasts of the United Kingdom, together with our own comments on the same and our own views on the subject. As regards the latter, we stated that "in offering our opinion on so important a matter, we desired to do so with all deference to those who had already experience for a guide—who would be able to compare our suggestions with their own experience, and then be guided by their own judgment in a matter wherein their own safety was concerned." We had nevertheless clear and definite notions of what we conceived to be the proper management of a boat in the broken water on a beach; nor after mature re-consideration of the subject do we see reason to materially alter the conclusions we had come to.

Since the publication of our last Number, we have received a letter from an officer of well-known experience and competency, Capt. CHARLEWOOD, R.N., late Inspecting Commander of Coastguard in the Deal district, which, as it disputes the correctness of our opinions under some circumstances, we feel called on to place before our seafaring readers, and to which we beg to solicit their attention, that our varying opinions may be compared together, and, above all, that each may be tested by individual experience; for we may presume that Capt. CHARLEWOOD, like ourselves, cannot have had opportunities for personally testing the proper management

of every description and size of boat in every variety and magnitude of beach surf.

On comparing his subjoined letter (*vide* p. 109) with the paper on this subject in our last Number, it will be seen that his opinion is opposed to our own and to the practice of many of our coast-seamen only as regards steep beaches; whilst, where the shore is flat, we agree as to the proper management; and that he traces an important distinction between the character of the waves in the two cases and the corresponding management required, which we have not done. In the paper above referred to, we stated that the practice of the Deal boatmen was the reverse of that of the greater number of experienced boatmen on other parts of the coast, both when rowing against a heavy broken sea and when running before it; they, in the latter case, giving a boat all speed possible, and in the former checking her way on the approach of a sea. Capt. CHARLEWOOD coincides with them in considering this the proper management. Although, however, his opinion is backed by so high an authority, we cannot say that we are convinced of its correctness.

It will be observed, by comparing his argument with our own, that he chiefly apprehends danger through a sea breaking into a boat and filling her, over the bow or stern, according as she may be proceeding towards it or running before it; whereas we conceive the greater danger to arise, in a really heavy sea, from a boat's being driven back by a broken wave or roller, and either thrown end over end, or driven down stern foremost when rowing against it; and from being overborne and driven down bow foremost, or turned round broadside to a sea, and then capsized when running before it.

On the general question of difference of management on flat and steep beaches, upon which Capt. CHARLEWOOD lays some stress, we do not think that there is any greater difference of management called for than that, as regards the latter, the attempt should be made to avoid the breaking wave altogether if it be possible, which it perhaps generally is. On flat beaches, where broken water extends to a much greater distance from the land, it is almost impossible to evade the successive seas which a boat must encounter, or to choose the most propitious moment for meeting each; the most favourable manner of meeting them is therefore, under such circumstances, the only point which has to be considered.

On the 1st question, of rowing against a broken sea, Capt. CHARLEWOOD states, "that if all speed be given to a boat against, or rather into a green sea, almost perpendicular, with the crest just beginning to topple over, she is sure to be buried; but that, if the oars be eased and the way checked, there will be every probability that her bow will have time to rise, and she will ride over it." Now, on this point, with the qualification above expressed, of avoiding the sea if possible, we see no reason for a different management on a flat or a steep beach; if it be wrong to give a boat all speed in the one case, we conceive that it must be so in the other also. As stated in our former Article, p. 83, if a boat be small, with a low bow, it would be folly to row her right into the crest of a heavy roller at the moment of its curling over, as it would then fall into and fill the boat; but that we believe it would do still more certainly if her motion were slow than if it were rapid, provided she entered it at the same moment; for as a boat instantly accommodates itself to any change of level, such as the advancing surface of a wave which precedes its crest, she would meet the crest of the wave at the same angle in the one case as in the other, whilst in proportion as she passed more rapidly through it would she, we believe, be the less likely to fill with water. The only hope, even though it be a "forlorn hope," of such a boat, under such circumstances, we must still believe to be in propelling her as

rapidly as possible through the approaching wave which threatens to overwhelm her, unless by very skilful management she can be balanced, as it were, between the ridges of the advancing seas, allowing their fury to be half spent before she be taken through them. The heavier and longer the sea, the more true, we think, will be the practice above recommended. We are not practically acquainted with the character of the sea on Deal Beach, but owing to its proximity to the opposite coast of Europe, and being protected, in a great measure, by the Goodwin Sands themselves, we have no doubt that it is a shorter and less heavy sea than is to be found on many of the more exposed parts of our coasts.

On the 2nd point, running before a broken sea, Capt. CHARLEWOOD, after stating generally that his opinion is almost diametrically opposed to our own, quotes the facts that the Deal luggers, of from 8 to 15 or 20 tons burden, always carry a press of sail through the surf when running for the shore; and that they positively do *run as fast as the wave*, when assisted by the run of the sea which makes towards the beach in advance of the crest of the wave.

Now we do not mean to dispute the able management of their boats by the Deal boatmen, which is acknowledged by every one; and we have no doubt that under the three conditions, of large boats such as theirs, ranging from 8 to 20 tons, a steep beach, and, comparatively speaking, not very heavy sea, the rule which we have laid down may, with impunity, be set at defiance; nevertheless, we are positively informed that boats have been lost by broaching-to when running for the shore at Deal; and we have known a Suffolk yawl, of 18 or 20 tons burden, broach-to, upset, and drown the greater part of her crew, when running under sail for the shore on as steep a beach as that at Deal.

Capt. CHARLEWOOD acknowledges that "if landing in a smaller rowing-boat it is not possible at all times to row with sufficient speed to beat the wave, and that when such is the case, the speed should be checked, and the breaking water be received against the stern, should the boat be too long to turn to receive it." This opinion, therefore, so far

coincides with our own, and he may be said only to differ from us as regards those cases where, either from the peculiarity of the beach or the character of the boats, the latter are enabled to outrun and keep ahead of the sea. We will only further remark on this head, that if it be acknowledged, which it generally is, that there is greater danger in running before a broken sea or surf in an open boat than in advancing against it, and that that danger arises chiefly from the liability to broach-to, or be turned round by the force of the sea, it must follow that the more nearly the retreating motion can be approximated to the advancing (which can only be by checking the speed), the less liability there will be of incurring the danger of broaching-to.

Indeed, on what other theory can the phenomenon be accounted for than on that which we endeavoured to explain in our former Article, page 85? With reference to our statement (page 86), that "no boat can be propelled so fast but that the waves will overtake her," we certainly had more especially in view the sea on a flat beach, and we will now so far qualify that opinion, as to acknowledge that, on a steep beach, in some localities, a powerful sailing-boat may generally be enabled to outrun the sea. As a *general rule*, however, we consider our previous recommendation to "down mast and sail, and lash all loose gear in the boat before entering the broken water," to be by far the safer course, regarding as we do the phenomenon of broaching-to to be the chiefest risk to which an open boat is exposed; and that the danger of upsetting, under such circumstances, is greatly increased by the top weight of a mast and sail, which, when a boat is thrown on her beam ends across a sea, must in most cases make it impossible for her to right again.

With reference to our recommendation (page 86) "to turn a square-sterned boat round, head to the sea, and back her in," we take this opportunity to record our opinion that no boats which are ever liable to encounter a heavy sea or broken water should be built with square sterns; but that, as is the case with life-boats and whale-boats, the sterns and bows should be made of nearly the same form, so that either end might, with

equal impunity, encounter a broken sea; in that case there would never be occasion for a boat to turn round bow to the sea, and such boats could not but be better sea-boats in every sense of the word than they would be if built with square sterns.

The operation of beaching a boat we regard to be distinct from that of running through broken water for the shore, although the one merges into the other. It is undoubtedly one which is more especially influenced by the character of the beach and the peculiarities of the boat itself. As it is also one respecting which the boatmen of the locality will probably, in general, have become correctly informed by experience.

We can easily conceive the probability of such an occurrence as that quoted by Capt. CHARLEWOOD, as having occurred at Walmer, near Deal, when one small boat, which her crew attempted to beach in a different manner from that they were accustomed to, was upset, while her 19 or 20 companions safely landed by their usual mode of handling. Without other evidence, however, one such instance would afford insufficient proof on which to build or reject a theory. A workman may perform better with an inferior tool to which he is accustomed than on his first essay with a new one, however superior it might be. A circuitous route, known to us, may be travelled over in a shorter time than a more direct one that we are unacquainted with. So also must it be in all human operations, whether of mind or body, and especially so in one of so difficult, varying, and practical a character as the management of a boat when landing in a heavy surf.

Capt. CHARLEWOOD next comments on our statement, "that the first effect on a boat's being overtaken by a sea is the upheaving of her stern and its becoming buried in its crest." This action of the sea we conceive to be the immediate cause of boats broaching-to, and of their turning end over end, by its overbearing and driving a boat's stern before it, whilst no such action is at the same time taking effect on its bow. Captain CHARLEWOOD observes that this is true with large boats but not with small. Now this we at once dispute; if it is not true as regards one it is not true with either. Like him,

we have seen boats with half their keels out of water, but we pronounce, both practically and theoretically, that the risk of broaching-to is then past. We can pronounce it practically from having ourselves been in a boat when she broached-to, and was thrown on her beam ends by a heavy roller, and when we especially observed the manner of the same being effected. Theoretically, we will endeavour to further explain it as best we can. On a boat being overtaken by a wave, its first effect on her is to throw up her stern, but this it can only do by immersing it; otherwise the buoyant power of the stern, which lifts the boat into this oblique position to its natural horizontal one, could not be brought into play; if the boat be stationary, or is advancing with much less velocity than the crest of the wave, so as to have some disposable inertia—if we may use the term—to oppose to it, it quickly passes from her stern to her midships; she must then, in obedience to the laws of gravity and of flotation, change her position from a descending plane, nearly parallel to the front face of the wave, to a horizontal one, being for a moment poised amidships on the top of the wave. As the crest, or apex, of the latter progresses to the forepart of the boat her stern and the afterpart of her keel will frequently be out of water until the summit of the wave being under her bow it is raised in the same manner as was her stern, and she then lies on the water parallel to the ascending plane of the rear face of the wave. In illustration, we may observe that the change of position she has undergone is precisely analogous to that of a plank balanced on its centre, and being made to oscillate upon it by a person standing on either end: the plank is brought to an oblique position to the surface of the ground by the muscular action of one of the persons on it; by a similar action on the part of the other it passes gradually to a horizontal plane, and then to an oblique one, the reverse of what it was at first. The persons on the plank ends here correctly represent the bow and the stern of the boat as acted on in succession by a following sea. Now, when a boat broaches-to she never leaves the first of these positions until she is sud-

denly turned broadside to the sea; but she remains on the front face of the wave, the crest of which never passes her quarter: if not too heavy for her, she may be taken safely to the shore by it, but if heavier than she can bear, it throws her so much out of a horizontal position that her own gravity, which induces her to run down the descending plane, aided by the force of the top of the sea, which is urging her on from behind, causes her to "run herself under," as it is termed, when the water, coming over her bow, she loses all buoyancy at that end and is driven down bow foremost, or turned end over end; or if again she happens to have a high bow, or to be furnished with an end air-box there, as in some life-boats, which prevents its being immersed, the sea, which is carrying her along rapidly before it, presently catches her a little on one quarter, and in an instant turns her round broadside towards it, and throws her on her beam-ends.

Such we believe to be the real character of this peculiar effect of the sea, which is more dreaded by our coast mariners than any other of its dangerous attributes.

In bringing to a close our second paper on this, as we think, most interesting subject, we desire to express our thanks to Captain CHARLEWOOD whose communication has caused us to return to it. Although he has failed to convince us of the incorrectness of our previous opinions, yet it is not our desire to dogmatically pronounce them as infallible. We both respect his opinions and the public spirit which induced him to address us on the subject; and we beg a careful and candid consideration for them, in conjunction with local experience, as well as for our own. We could have wished to have received other communications from experienced coast seamen on the subject, but Captain CHARLEWOOD is the only individual who has addressed us on it, and canvassed it in detail.

THE USE OF THE LEAD.

THE great necessity of constantly using the lead or sounding has been recognised from the earliest period in the history of navigation. In the present day, when so many

thousand vessels are engaged in carrying on the commerce of the world, it is hardly possible to over-estimate the importance of using the lead by sailors; for if duly attended to, the operation cannot fail to warn them of dangers, which would otherwise frequently prove fatal to their lives and destructive to their ships. In No. 13 of the *Life-boat Journal* we devoted an Article exclusively to this important subject; and it is with much gratification that we find that the neglect of the use of the lead on the part of mariners has recently aroused the attention of shipowners and underwriters. A short time since the Liverpool Association of Underwriters called the attention of the Board of Trade to the neglect of shipmasters to use the lead, which has elicited the following satisfactory reply from the Board:—

“Office of Committee of Privy Council
for Trade, Marine Department,
Nov. 20, 1855.

“SIR,

“I AM directed by the Lords of the Committee of Privy Council for Trade to acknowledge the receipt of your letter of the 9th inst., relative to the neglect of shipmasters to use the lead, and stating that the Liverpool Underwriters' Association are of opinion that an important advantage would be gained were this Board to issue a notice to masters of vessels that such neglect would be considered as misconduct. In reply, I am to request you to inform the Underwriters' Association that my Lords have directed their serious attention to the many cases of shipwreck which have recently been investigated under the provisions of the Merchant Shipping Act 1854, in most of which, as they conceive, the casualty might have been avoided had the simple and obvious precaution of taking soundings been observed. My Lords are impressed with a belief that from a desire to avoid trouble and delay, or for other reasons, the proper use of the lead, even in thick or foggy weather, or when upon a dangerous coast, has become so habitually neglected in many branches of the merchant service, that masters appear no longer to look upon it as a necessary part of their duty. My Lords gladly take this opportunity of expressing their decided opinion that such conduct cannot be justified by any

custom or practice, however prevalent; and the fact that this neglect has become common affords, in their Lordships' opinion, the strongest reason for taking every possible means to check it; and they believe that there would be great public benefit, and little individual hardship, in visiting with the severest penalties persons who are found guilty of a fault so fatal in its consequences. My Lords have no doubt, from the terms of your letter, that the Underwriters' Association will concur with them in the views they take, and they are glad to have the opportunity of expressing those views, and of intimating, in as public a manner as possible, their intention to use all the means with which the law has intrusted them to enforce the proper use of the lead on board merchant ships.—I am, &c., T. H. FARRER.”

“To the Secretary of the Underwriters' Association, Liverpool.”

CORRESPONDENCE.

MANAGEMENT OF BOATS IN A SURF AND BROKEN WATER.

To the Editor of the Life-Boat Journal.

SIR,—I HAVE read with considerable interest your Article in the *Life-Boat Journal*, on the management of boats in a surf and broken water, and must beg to offer some remarks upon it; for, ably as that Article is written, and proving as it does that you have paid great attention to the subject, there are points in the recommendations with which the Article winds up which, in my opinion, if they are acted upon, will, on very many parts of the coast, assuredly end in disaster. Whilst reading the Article in question, an impression was given me that the writer of it fully understood the subject of launching and beaching boats through the surf, where the coast was *flat*, and consequently broken water extended to a considerable distance. Under such circumstances I approve most thoroughly of every portion of the recommendations in question. But it appears to me that you have devoted your attention to *flat shores only*; and I warn you that the recommendations offered will not

stand good for steep beaches; and I heartily wish that, instead of offering advice as to passing through surf *generally*, the subject had been divided into two distinct heads—1st, launching and beaching upon flat coasts; 2nd, launching and beaching upon steep beaches.

I beg, therefore, that you will fully understand that every observation I now make is with reference to steep beaches, such, for instance, as are generally found along the south-eastern coast of England, including the far-famed Deal Beach.

And first, at page 86, in launching from the beach, the Article says, "our opinion is, that, unless from the steepness of the beach and nature of the sea, she (the boat) can, by skilful management, be made to avoid it by watching a favourable opportunity, the safest plan is to give her all the speed which can be obtained by rowing."

To get the boat out of the way of the sea which is actually breaking upon the beach, it is very desirable to give all possible speed; but when this is done, a huge green sea is approaching, almost perpendicular, the crest just beginning to topple over, give all speed against, or rather *into* it, and you are sure to be buried; ease your oars and there is every hope that your bow may have time to rise and allow the boat to ride over. Such is the practice here, and my own experience satisfies me that the suggestion of forcing the boat into it would be *fatal*.

2nd. In running through broken water for the land, your "unqualified opinion," page 86, is, "that the greatest danger consists in following the natural impulse to escape from the advancing seas as rapidly as possible;" "*no boat can be propelled so fast but the waves will overtake her.*" You advise "that the sail should be taken in, spars unshipped and lashed, and, if the boat is square-sterned, her head should be turned to the sea, and she should then be carefully backed to the beach," &c., &c.

All this is most excellent, sound advice to the crews of boats landing upon a flat beach, but beware of following it when landing on steep shores.

My advice is then almost diametrically

opposite. I give it from my own experience, from the practice adopted by the most experienced boatmen in the world, and I think I can prove to you the soundness of my views. Assuming that the boat is a substantial one, of from eight to fifteen or twenty tons burden (such as the Deal boats), and drawing from two to four feet water, keep your masts and sails standing, and push in with all possible speed for the beach, and, when close to it, "turn her" *partially* "towards that side from which the sea is running."

The object of thus running with all speed is twofold—first, on a steep beach the sea seldom breaks more than two hundred yards from the shore. Experience has proved, over and over again, that, with a fresh wind, this class of boat positively *can run as fast as the wave* when assisted by the run of the sea which makes towards the beach on the top of the crest of the wave; these boats consequently, with their sails, *do succeed* in keeping ahead of the next wave, and by their impetus arrive high up on the beach before the crash of the wave reaches them. From the above, the second object of speed is evident, namely, to force the boat well up on the beach, with the view of avoiding as much as possible the fury of the breaking surf, and to prevent the receding water from dragging the boat with it.

If landing in a smaller rowing-boat, it is not possible at all times to row with sufficient speed to beat the wave, and, when this is the case, then check the speed and receive the breaking water against the stern when the boat is too long to turn to receive it (as the two-oared punts on this coast do to each successive wave); but of all things *avoid backing in stern foremost*: it is *impossible* to run the boat in this way high up on the beach, and the chances then are that the surf will fill the boat and drag her back into deep water, thus drowning the crew.

A most remarkable proof of the soundness of this advice occurred on the Walmer beach three years ago. About twenty small two and four oared boats were employed fishing a mile or two off the shore, when (as occasionally happens on this coast) a very violent N.E. wind and sea set in quite sud-

denly. The boats made for the beach with all speed, having to encounter a very heavy surf in landing. All the poor fishermen decided to beach in the usual manner—that is, pulling for the beach as quickly as possible, excepting when the waves overtook them, and beaching bow foremost—excepting one boat, which was manned with two experienced fishermen, but who it appears were so alarmed at the unusual height of the seas, that they decided upon trying to beach their boat stern foremost. Now mark the result: every boat landed in perfect safety, excepting this one; she could not get up high enough on the beach for those on shore to help her, she was swamped, her gear lost, and the lives of the two poor fellows all but lost also.

I have lengthened this letter to a much greater extent than I at first contemplated, and will therefore conclude with the remark, that I do hope, with the sole view of offering sound advice on so difficult a subject as this one is, my arguments will be carefully looked into, and the opinions expressed in the *Life-Boat Journal* Article on *Beaching and Landing on Steep Shores corrected*.

One other observation I must add. At page 85 you say—"From our own observation we have formed the opinion, that it is not the case that the stern of a boat is thrown out of water, and the rudder therefore ceases to act" "on a boat encountering a heavy broken sea or roller end on," this being one cause of a boat broaching-to; and further you say, "but so far from her rudder being out of water, both it and her stern are buried in the crest of the wave." This is quite true with large boats; but when I tell you that I have myself seen the no uncommon occurrence of a six-oared galley coming to the beach with not only her stern, but at least four feet of her keel, out of water, you will concur, I think, that I am justified in my belief that you had not, in the Article in question, sufficiently studied steep beaches before committing your remarks to print.—Yours, &c.,

E. P. CHARLEWOOD,
Capt. R.N.

Shrubbery, Walmer, 2nd October, 1855.

THE NEW YORK LIFE-SAVING BENEVOLENT ASSOCIATION.

It can scarcely fail to be interesting to such of our readers as take an interest in the subject of saving lives from shipwreck to know what is being done in furtherance of that humane object in other countries than our own. To learn how far a calamity of so world-wide a character has awakened a world-wide sympathy. To know if the British seaman or the British emigrant is provided in other and far-off lands with the same succour in his distress as one of the subjects of foreign countries whom the intercourse of nations brings to our own shores. To ascertain whether the means provided to rescue shipwrecked persons are similar in amount, character, system of maintenance and management, on the shores of other kingdoms to those in use around the British isles.

In pursuit of this information our thoughts are naturally, in the first place, directed to those transatlantic shores peopled by a race that has sprung from the loins of our own, who possessing the same enterprise, and the same maritime and commercial spirit as ourselves, have already erected a mercantile navy only second to our own, and which, in accordance with the colossal proportions of most other things in that vast country which they inhabit, bids fair ere long to leave ours in its wake. We are not aware that prior to the year 1847 any efforts of a public or national character were made to afford rescue to shipwrecked persons in the United States of America; but we find that in that year Congress made an "appropriation for furnishing the lighthouses on the Atlantic coast with means of rendering assistance to shipwrecked mariners, of five thousand dollars, to be under the control and direction of the Secretary of the Treasury." This appropriation was expended mostly on the coasts of Massachusetts.

In 1848 an appropriation was again made by Congress, not confined to lighthouses, but "to be expended on the coast of New Jersey, between Sandy Hook and Little Egg Harbour, to the extent of ten thousand

dollars, under the supervision of such officers as should be detailed for this duty by the Secretary of the Treasury, to provide surf-boats, rockets, carronades, and other apparatus, for the better preservation of life and property from shipwreck."

In succeeding years Congress has made grants of a similar character.

In the year 1849, a number of gentlemen resident in the city of New York, and personally connected with its maritime commerce, prominent amongst whom was WALTER JONES, Esq., who is its present Chairman, formed an Association to aid in the good work that had already been commenced by the government of their country, and which, under the title of "The Life-Saving Benevolent Association," was incorporated as a benevolent and charitable society by the Legislature of the State of New York in March 1849, and authorized to hold property to the extent of ten thousand dollars of annual income. Its objects, as expressed in its charter, are, "To encourage meritorious conduct, to grant rewards, donations, and premiums in money and medals, to procure and use life-boats, boat and stationhouses, with articles and materials to afford facilities in saving life, in cases of shipwreck or otherwise, and, by themselves or others, to perform any similar services of benevolence and charity."

Impressed with a sense of the urgent necessity for placing life-boats and forming stations for refuge and shelter in the neighbourhoods of the places of most frequent shipwrecks, the earliest endeavours of the Association were directed to the provision of those means for saving life.

From the first institution of the Society, it appears that it has acted in unison with the Legislature of the State, which, in fact, has confided to it (in concert with a Government Agent selected by the Secretary of the Treasury) the expenditure of the sums voted by the Congress, for the erection of boat-houses, purchase of life-boats, apparatus, &c. Accordingly we find that out of 8,881 dollars expended in 1850, on life-boats, boat-houses, boat-carriages, and mortar apparatus, as much as 8,467 dollars were contributed by the appropriation of Congress.

In that year ten life-boats were procured, ten houses built to receive them, and four were furnished with carriages. Each station was also provided with cooking apparatus and other articles for relieving the immediate wants of shipwrecked persons. In 1851 three more life-boats and one surf-boat were stationed.

In January 1854, when a Report of the Association was published, it possessed 27 life-boat stations on the coasts of Long Island, New York, and of New Jersey, an extent of about 300 miles. Each of these stations, besides a life-boat or surf-boat, with a carriage for its conveyance, and all necessary gear for its proper management, is also provided with a rocket and a mortar apparatus for effecting a communication with stranded ships, with a life-car for drawing shipwrecked persons by a line through the surf, and with ample supplies of shot, rockets, lines, and such other gear as is necessary or useful.

We have not an exact return of all the lives saved by the life-boats and other apparatus of the Life-saving Association, but we are told that many hundreds have been rescued from drowning by means of the life-boats and apparatus. Amongst others are recorded the saving of 204 emigrants and the crew of the English ship *Henry* by the surf-boat at Bridgehampton Station on Long Island in June 1851. Of 270 emigrants and crew from the English ship *Catherine* by the life-boat and apparatus at the Amaganset Station on Long Island. Of 100 persons from the ship *Chauncey Jerome Jun.*, by the life-boat and life-car of the Long Branch Station, New Jersey, in January 1854. Of 201 passengers and the crew of the ship *Ayrshire*, through a terrific surf and during a severe snow-storm, by the apparatus and life car of the Squam Beach Station, New Jersey, on the 12th January 1850. Of 290 persons from the ship *Georgia*, by the apparatus and life car of the Long Beach Station, Long Island, in December 1852. Of 234 persons from the ship *Cornelius Grinnell* by the apparatus and life-car of the Squam Beach Station, New Jersey, on the night of the 13th January 1853. Of 200 passengers and the

crew of the ship *Seaduck* by the apparatus and life-car of the Long Beach Station, New Jersey, in April 1853.

The above-quoted instances alone, accounting for the saving of upwards of 1,500 persons within the short space of two and a half years, form a striking illustration of the important services to humanity rendered by the instrumentality of the Association, as also of the serious character of the wrecks on those parts of the American coast, so large a number of them being Emigrant ships, numbering their inhabitants by hundreds.

It will be observed that two-thirds of the persons saved, as above quoted, viz., 1,000 out of 1,500, have been so through the instrumentality of a life-car drawn through the surf by lines, after a communication has been effected with the stranded ship by means of a mortar or rocket apparatus; to us a striking circumstance, as in this country a much greater number of persons are saved by life-boats than by the mortar and rocket apparatus: indeed, we are not aware of any instance where so great a number as even 100 persons have, on any one occasion, been rescued by means of the apparatus on our own coasts. Judging from the descriptions given of the life-car in use in America, we conceive that it must be of a superior character to anything of the kind in use in this country. It is said to convey ordinarily four or five persons perfectly dry and unexposed through the heaviest surf, and to have brought from the wreck of the *Chauncey Jerome Jun.*, as many as six children and one woman at one time. At the wreck of the *Ayrshire*, it is stated that "every soul, men, women, children, and infants, came through the surf during that cold snow-storm, dry and comfortable."

The life-car was invented by Captain DOUGLAS OTTINGER, of the United States Revenue Service, in 1849. It is constructed of galvanized iron, and encloses its occupants entirely within it, excluding the water from without, yet affording ventilation of air. Captain OTTINGER has not patented it, fearing that his doing so might restrict its adoption.

The life-boats of the Association are also made of iron, and are known as "FRANCIS'S galvanized iron life-boats." One of them

has been tried in this country, but was not approved of; and indeed, judging from the description given of them in the Report of the Association, and notwithstanding the valuable services rendered by them, we cannot conceive them to be equal to the life-boats now placing by the National Life-boat Institution, on Mr. PEAKE'S design. For instance, it is stated in approbation of one of FRANCIS'S boats, "that with 25 persons on board, she floated with her gunwale 9 inches above the surface of the water, after shipping a sea, and steered steadier than when without water in her." Now one of Mr. PEAKE'S 30-foot life-boats, with 25 persons in her, would, if filled by a sea, relieve herself of nearly the whole of it in 25 seconds, leaving only from 2 to 3 inches in depth of water above the deck, and floating with the gunwale from 18 to 20 inches above the water's surface, in addition to which quality, and to very great stability, they will self-right if upset, which we believe FRANCIS'S boats will not do: they are also very fast.

In concluding this sketch of the New York Life-Saving Association, we would draw attention to the circumstance, which we think reflects much credit on the United States Legislature, that it has from the first incorporation of the Society, given it a support worthy of the magnitude and the national character of its objects, and has heartily co-operated with it in its endeavours to fulfil what we must consider to be, in every maritime country, a national duty.

We trust that, with God's blessing on its "labour of love," the Association may long continue, through the aid of the American public, and the support and co-operation of their Legislature, to extend a helping hand to every hapless crew whose tempest-driven barque may be stranded on their shores!

THE USE OF A LINE THROWN TO WRECKED VESSELS FROM THE SHORE.

It is a commonly-received opinion, that if a line can only be thrown over a stranded vessel, the salvation of those on board her is almost secured. It seems to be presumed that those at either end of this slender com-

munication, after getting over that chief difficulty, must be acquainted with the right means to avail themselves of it, and that the minor difficulty of using it as a viaduct through the raging surf is one then readily surmounted. Such, however, is a mistaken notion: apart from the possibility of a wrecked crew being numbed by cold, or otherwise unable to avail themselves of the aid placed in their hands, they may be ignorant of its proper use, and a mismanagement of it either by them or the parties using it from the land may, and indeed too often has, marred all, and left them to perish.

In No. 9 of the *Life-Boat Journal*, in an Article on the subject of effecting communication with shipwrecked vessels, we described the proper manner of using the rocket and mortar apparatus in each stage of the operation, from the projection of the shot or rocket, with line attached, to the safe conveyance to *terra-firma* of the shipwrecked persons. We also illustrated the ignorance of its proper use amongst merchant-seamen, by recounting the fact of a whole crew on one occasion tying a rocket-line round them collectively, and all jumping in a body into the sea, when, as a matter of course, the greater number of them were drowned in the operation of dragging them to the land.

We have been led to these remarks by the circumstance of another crew having recently lamentably perished within a few yards of the shore, through the *misuse* of a line which had been thrown by hand from the shore to their vessel.

On the 26th of October last, the *Enchantress*, with a crew of 13 persons, was driven on shore, in a heavy gale, on the western side of Dungeness Point, on the coast of Kent. The shore being there very steep, she came close to the beach, and a line was thrown on board her by a coast-guardman or other person on the spot: a stouter line had been previously fastened to it, which, if it had been hauled on board by the shipwrecked crew, might have been made the medium of saving them all; but, unhappily, the man who first caught hold of it, either from ignorance or from the selfish feeling of consulting his own safety alone,

quickly secured it round his own arm, and then jumped overboard into the boiling surf, where becoming entangled in some of the floating wreck, he perished ere he could be drawn to the shore. All subsequent attempts to throw another line on board failed, and one man only was, by the great daring of a fisherman on the beach, rescued out of the surf, and his life saved. With such authenticated instances before us, we have a right to presume that there are many crews in our merchant-service who, amidst the terrors and anxieties of shipwreck, would be at a loss to know what to do with a line thrown over them from the shore. We feel called upon, therefore, even at the risk of being tedious, to again repeat what is the proper course to be adopted after a communication by a line has been effected between a wrecked ship and the shore.

In the first place, then, as the line thrown on board, whether by the mortar or rocket-apparatus, or by hand, is necessarily of a small and light description, the greatest care should be taken, both on board the ship and on the shore, not to risk the breaking it by over-strain, lest the communication should be lost, which all subsequent efforts might fail to regain.

For a similar reason we should have supposed it scarcely necessary to warn any seaman not to jump overboard with the end of the line fast to him, had not this lamentable instance of the necessity of such a warning so recently occurred on board the *Enchantress*.

After communication has been effected by a *single* line, the most important point is to secure a connection by a double line, or whip, as it is termed by seamen, through the instrumentality of which a sling or seat, or floating buoy of some description, may be conveyed to and fro between the wreck and the shore, until all the living occupants of the latter have been safely conveyed to the land. To perform this effectually it is self-evident that the control of the lines, both the one freighted with its costless treasure of human life, and the other conveying the ark of mercy back, to be in like manner freighted again, should be, when possible, entirely in the hands of the persons on the

land. For they will generally have more efficient material at command: being themselves in security they are more likely to preserve their presence of mind: they will probably also be present in greater numbers, be possessed of greater experience in that particular work, and they will be able to assist the last man from the wreck as readily as the first, which he could not do for himself.

The most perfect means by which to effect this object is to send off to the wreck by the line first thrown over it, a single block with a rope rove through, both ends of the rope being retained on shore. The block, which has a long tail fitted to it for the purpose, is then made fast to the rigging or mast, or other available part of the wreck, and the persons on shore having command of the ends, make them fast together, and so form an endless rope, by which they can themselves, without the aid of the shipwrecked men, either haul off to the wreck a hawser along which to convey them in succession to the shore, or may, if no hawser is on the spot, haul them through the water in a floating buoy by the whip itself. In either case all the bodily exertion required of the shipwrecked men is to haul on board the block and whip by the line thrown over them in the first instance.

For a fuller description of the whole operation, we beg to refer to the article before alluded to, in the ninth Number of the *Life-Boat Journal*.

But we desire now emphatically to impress on the mind of every seaman into whose hands this may fall, that in every instance in which a line is thrown over his vessel from the shore, whether by hand or otherwise, he is to haul it on board, unless distinctly signalized to the contrary, and never to let it go from the vessel, so as to break off the communication with the shore.

We think it a very desirable thing that the Board of Customs, who supply the mortar and rocket apparatus round the coasts of the United Kingdom, should, to secure its proper use, issue clear and concise instructions for its proper management and the use to be made of it. These might either be printed on a card, or in the form

of a small book, and not only given to the Coastguard who have the management of the apparatus on shore, but be also issued to the master of every vessel by the Custom-house authorities at the different ports of the United Kingdom. Until some such arrangement is made we may still expect that lives will be lost through the misuse of the means which would otherwise be available to save them.

LOWERING SHIPS' BOATS AT SEA.

ON a former occasion we brought to the notice of our readers Mr. LACON's improved plan for lowering boats, intended to prevent the recurrence of such lamentable accidents and fearful loss of life as had then recently taken place in the cases of the *Amazon*, the *Orion*, and the *Birkenhead*. We then expressed the opinion, that Mr. LACON's plan was a very great improvement on the ordinary mode of lowering ships' boats. The danger of the usual method of lowering boats by tackles hooked at bow and stern, arises, 1stly, From the difficulty of lowering them uniformly, as the tackle-falls are attended by two men at a distance of many feet from each other, and neither of whom can see the boat herself during the operation. 2ndly, From the liability of one or other of the tackle-blocks to become prematurely unhooked from the boat, by the action of the sea in rough weather, which is always attended with danger, and especially if the bow-tackle should be so unhooked. 3rdly, From the tackle-blocks being ordinarily hooked to ring-bolts or slings attached to a boat's keel, below the centre of gravity; whereby she is liable to fall over on one side and throw her contents, whether gear or human beings, into the sea. Mr. LACON's invention was intended to meet these evils, and did so. For a description of his plan we refer our readers to the sixth Number of this Journal, page 162.

Shortly after the publication of Mr. LACON's plan, in 1852, Mr. G. F. RUSSELL, of London and of the Isle of Man, invented and publicly exhibited another plan which also successfully avoided the dangers of the

ordinary method. By this plan, as, in Mr. LACON'S, the boat is lowered by one man, within the ship, who does so by attending a wheel or winch (fixed to the inner bulwarks) round which the tackle falls are passed, and which having a break attached to it, enables him to regulate the velocity of the boat's descent at pleasure. The boat can then be instantaneously disconnected from the tackles at any moment of its descent by one man within her. This is effected by the motion of an iron rod, placed longitudinally in the boat immediately over the keel, of corresponding length to the distance between the davits or cranes to which the boat is suspended. To either end of this rod is attached one end of a short iron lever, the other end of which is furnished with a clip, which is made to grasp or to release the tackle-block, or the pendant by which the boat is hoisted up, by the simple motion of the iron rod: this motion is given to it by the action of a third lever attached to its centre, which is worked by one man within the boat, who has thus the power of disconnecting the boat from the ship, at any moment, in his own hands.

The inventor attaches some importance to the capability of detaching a boat, and letting her fall with her crew on board, from the davit ends, without her being submitted to the more tedious process of lowering. We notice this idea merely to warn against its being carried into practice, as we think it would be attended with much danger; even if it could be insured that the weights within the boat should be so equally distributed that her equilibrium should not be disturbed, and that she should fall into the water in the same position as when let go from the davits, yet if let go from any considerable height above the surface of the water, the concussion would be so great as to run risk of seriously injuring persons within the boat, and possibly to strain, or otherwise damage the boat herself. We were ourselves lowered in a boat, from the *Queen*, river steamer, fitted with Mr. RUSSELL'S apparatus, on which occasion she was detached and let fall when not more than 3 feet above the water, yet the concussion, to a person sitting

on one of the thwarts, was too great to be pleasant. The experiment was in all other respects satisfactory, and the steamer was going at full speed at the time.

An improved description of crane or davit forms a portion of this apparatus, and the whole together is patented by Mr. RUSSELL, under the title of "Stowing, lowering, and disengaging apparatus for ships' boats." We are informed that it has been fitted to some of the ships of the General Screw Navigation Company, and to some of the river steamers.

A third, and a very clever invention has now recently been brought out by Mr. C. CLIFFORD, of London, which appears admirably calculated to effect the desired end, and the success of which has been tested on board steamers on the Thames and elsewhere.

Mr. CLIFFORD has published a pamphlet, embellished with designs and sketches illustrative of his plan, and of the inefficiency of the ordinary modes of lowering boats, to which we beg to refer our readers for a more complete description of it.

In the preamble to the description of his plan, he observes that—"The unslashing, lowering, and disengaging are all done by *one man in the boat*, whose simple weight, irrespective of any additional assistance whatever, is made to hold in equilibrium the weight or descending momentum of the boat with its entire crew, which he has thus the power to check or control at will. Each separate operation is the natural consequence of one act (slacking off a rope), and they are also necessary sequents, one of the other.

"The means of reducing the weight of the boat to that of the man lowering is made the means for preventing the boat canting in its descent; and the passage of the ropes by which the boat descends, through a block of an entirely novel character and action, accomplishes this end."

We will proceed to describe his invention, with the aid of one or two illustrations taken from his pamphlet.

We will premise that Mr. CLIFFORD proposes to hoist boats up with the usual description of tackles, or pendants to davits,

FIG. 1.

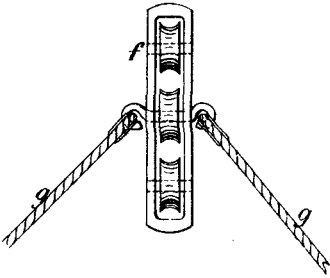


FIG. 2.

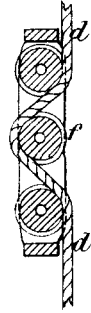


FIG. 3.

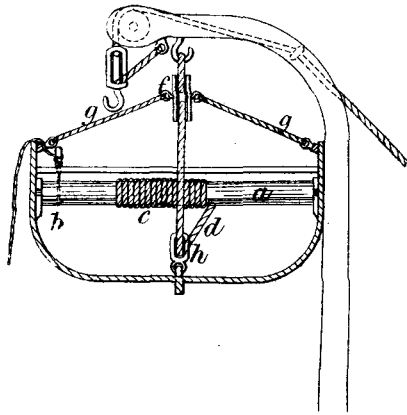
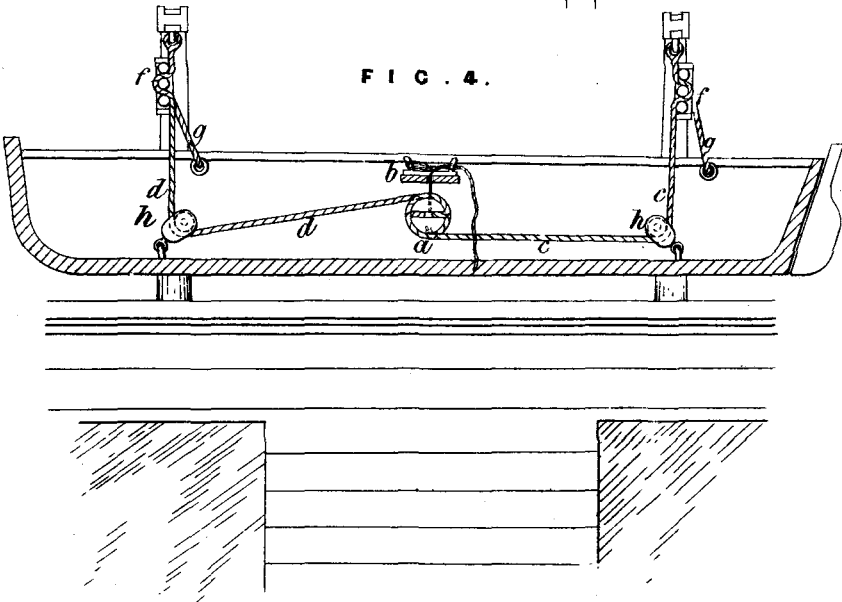


FIG. 4.



of the ordinary kind; his apparatus being solely employed to lower boats and disengage them. The instruments used for this purpose are—

1st. Two blocks of a peculiar construction, invented by himself: these blocks have three sheaves, not placed side by side as in an ordinary three-fold block, but one below the other in a straight line, and in the same plane: *vide* Figs. 1 and 2.

2nd. A cylinder or barrel, turning on an axis, and fixed athwart the boat amidships, and at right angles to her sides, immediately below the central thwart. Fig. 3, *a*.

3rd. Two leading single blocks secured to eye-bolts in the keel, at the same distance apart as the davits are to which the boat is hoisted up. Figs. 3 and 4, *h, h*.

4th. A pendant or rope spliced to an eye-bolt at each davit end (similar to the usual man-ropes or life-lines, of which men retain a hold when lowered in quarter or stern boats). These ropes, for distinction, we will call lowering pendants. Figs. 3 and 4, *c, d*.

The blocks, *f*, Figs. 1 and 2, have an eye-bolt on each cheek, to which short pendants are spliced, and the other ends of which, fastened to eye-bolts in the boat's side, form slings or lifts, *g*, Figs. 3 and 4, and prevent any possibility of the boat's canting.

The cylinder or barrel, *a*, Figs. 3 and 4, is furnished with a rope, secured to it at one end near the side of the boat, and which we shall call a winding-rope, its action being to regulate the revolutions of the barrel, and to wind and unwind the lowering pendants on it. This rope by the act of lowering is wound on to one end of the barrel as the lowering pendants run off from the centre. It must be somewhat longer than the height of the boat from the water when hoisted up. Hauling on it reeves the two lowering pendants equally, and slacking it off, unreeves them alike by allowing the barrel to turn, insuring not only a descent on an even keel, but the release of each end of the boat at the same moment.

The striking feature of this invention is the block *f*, which has this peculiarity, that when a rope is rove between the upper and middle, and the middle and lower sheaves,

it will pass freely between them, and round the centre sheave when slack, but will nip all the sheaves when tightened (without chafing the rope), thereby enabling a person having control of the rope to have perfect command over any weight either attached to the rope if the block be fixed, or attached to the block if the rope be fixed, and the block allowed to traverse on it, which latter is the case in the operation of lowering a boat on Mr. CLIFFORD's plan. The resistance of this block to the free passage of the rope through it (or, in other words, its power) is regulated by the relative positions of the sheaves to each other and the space between them, greater space giving freer action to the passage of the rope, but less power, consequently. Now, while it is required in lowering ships' boats to obtain such power as will enable one man lowering by the winding rope to have perfect control over the descending weight of the boat, it is of equal importance that all resistance to the free run of the lowering pendants should cease with the necessity for it; and both these important ends are insured by the block, on the proportions of those given in Figs. 1 and 2.

The mode of proceeding is as follows:—When the boat is hoisted up, reeve the lowering pendants *c* and *d* through the blocks *f*, as shown in Figs. 3 and 4, then through the leading blocks *h*, and lastly, having, by revolving the barrel *a*, wound up on it the winding-line *b*, Figs. 3 and 4, point the extreme ends of the lowering pendants through a hole or holes made for the purpose through the centre of the barrel. By hauling on the winding-rope *b*, the barrel then revolves and winds equally on it the lowering pendants, in the same manner as in winding up a common humming-top. The end of the winding-rope is then led through a hole in the thwart, immediately above it, where it is made fast to a cleat. The ordinary tackles, by which the boat has been hoisted up, being next slacked up and unhooked from her, she remains suspended by the lowering pendants, and is at the sole command of any person attending the winding-rope. By slacking up that rope, the barrel revolves and unwinds the lowering pendants. As the latter are thus slacked up, the strain is (proportionately)

taken off the sheaves of the blocks, and the blocks are drawn down the lowering pendants by the weight of the boat to which they are fastened, at a speed regulated by the man attending the winding-rope, and at whatever point of contact the boat touches the water; letting go the winding-rope releases it, as the ends of the pendants not being fastened to the barrel, but merely put into a hole in it, unreeve themselves. Thus is secured, by one act, the lowering the boat steadily, in an upright position, at any speed desirable, and, what is of still more importance, her detachment from both lowering pendants at the same moment.

When fitted to a stern boat, Mr. CLIFFORD proposes that the lowering pendant at the boat's bow should be somewhat longer than that at the stern, so that the latter becoming first unwound, and the revolution of the barrel stopped, by the man lowering holding on the winding-rope, the boat would immediately swing round with her head to the direction in which the ship was going, and the boat could be safely towed by the bow lowering pendant, instead of being detached instantaneously broadside on to the direction of the ship's motion, which might be attended with danger if she were going at all rapidly through the water.

An important distinction between the three inventions to which we have alluded is deserving of notice. In LACON's plan, the boat is both lowered and disconnected by a man on board the ship, the lowering chains falling down into the boat. In RUSSELL's plan, the boat is lowered by a man in the ship, but disconnected by another in the boat herself. Whilst in CLIFFORD's plan, both the lowering and disconnecting are entirely in the hands of a man in the boat. Opinion will doubtless be divided as to the relative advantages of these modes. On the whole, we consider it is preferable that the lowering and disconnecting should be in the hands of a man in the boat; there are, however, arguments on both sides, but our space will not admit of our discussing them.

Of the plans above named the last is, doubtless, by far the least expensive. The fixing the barrel or roller (a round spar of 3 or 4 inches diameter) under the seat,

the blocks, and the cleat on the seat, is all the fitting required, which any ship's carpenter might easily accomplish who understood the mode of working, and which any sailor would readily comprehend.

Mr. CLIFFORD has also introduced, in connection with his plan, self-releasing gripes or lashings, so as to place the whole operation of disconnecting the boat from the ship in the hands of one person: a description of them will be found in his pamphlet;* as also of a simple kind of plug that is never out of its place, on the principle of a cock with a hole through the bottom.

Mr. CLIFFORD informs us, that this is one only of several distinct and different ideas he has endeavoured to work out, but that he considers it superior to any of the others.

We trust that some of our steam-packet companies and owners of emigrant ships will not be slow to make trial of an invention which appears to be of so great utility, and which can be effected at so trifling an expense.

The relative advantages of the two inventions, which we have above described, can perhaps only be known by experience. Of this, however, we feel certain, that one or other of them, or some other plan equally calculated to effect the same object, ought to be adopted. Such was the opinion of the Parliamentary Committee appointed to inquire into the causes of the loss of the *Amazon*, in 1852; who reported as follows: "The means of lowering boats evenly, and of readily disengaging the tackles, together with plugs which are self-acting, are *desiderata* wanting throughout the naval service;" yet we are now informed by Mr. CLIFFORD, who, with others, has been encouraged by the Report above quoted to incur great expense and to devote much time to the endeavour to supply this want, that on introducing it to the authorities at the Admiralty, he has in reply been told that the Navy is not in need of any such plans. We feel bound to state that we entirely dissent from the Admiralty authori-

* "How to Lower Ships' Boats." By C. Clifford. London: Simpkin & Co., and all Booksellers.

ties on this point. Although undoubtedly accidents of all kinds from mismanagement less frequently occur aboard men-of-war than in our merchant ships, owing to the superior discipline that is maintained on board them, the constant superintendence of intelligent officers, and the more liberal supply of all necessary stores and appurtenances; yet the serious defects of the ordinary mode of lowering boats at sea has long been apparent to every man-of-war's man, and numerous are the accidents arising therefrom which have been witnessed by most naval officers who have been any length of time in the service.

We repeat, then, that not only on board our merchant steamers and emigrant vessels, but also in our men-of-war, the adoption of an improved system of lowering the boats *at sea* is much required, and must sooner or later be adopted.

ADDITIONAL STATIONS AND NEW LIFE-BOATS.

HAUXLEY, NORTHUMBERLAND.—A new life-boat on PEAKE's design has been recently placed at Hauxley by the National Life-boat Institution, in lieu of the one previously stationed there, which was found to be too heavy, and to draw too much water for so flat a beach.

This boat, which is one of a class that this Institution is now placing on the coasts, is of a very superior character, and well deserving the attention of all persons interested in the subject of saving life from shipwreck. She is a similar boat to that placed at Boulmer last year. She is 30 feet long, with 7½ feet beam, and rows 10 oars. She possesses both great stability and speed, and would self-right if upset. Her crew have expressed much satisfaction with her. She was conveyed to her station in August last.

LYTHAM, LANCASHIRE.—A new life-boat on Mr. PEAKE's design, in all respects similar to that above described, was placed at Lytham by this Institution in August last, in lieu of the one previously stationed there by the Shipwrecked Fishermen and Mariners' Society, which was considered to be too

small, and to be otherwise unsuitable for the locality. She was conveyed by the North Western Railway to Liverpool, and thence taken by water to her station. She is much approved of by her crew, and considered in all respects suitable to the locality.

BERWICK-ON-TWEED.—A new life-boat, similar in dimensions and properties to the preceding, has been stationed at Berwick-on-Tweed, at the joint expense of this Institution and of subscribers in the locality, to replace the boat previously stationed there, which was completely worn out. Her crew have expressed themselves as much satisfied with her.

Some idea may be formed of the exertions now being made by the National Life-boat Institution to supply the coasts with efficient life-boats, when we state that this is the fifth boat of this description placed by it during the past twelvemonths, and that the first cost of each is 156*l.*, independently of gear, carriages, and houses to contain them.

KESSINGLAND, SUFFOLK.—In the account we gave, in our 15th Number, of the establishment of a life-boat by the seamen of Scratby, in Norfolk, we stated that we hoped to see this novel feature in the cause of "preservation of life from shipwreck," exhibit itself in other localities; nor has our wish been long unanswered, as we have now the gratification to record the establishment of two other "seamen's life-boats."

The boatmen at Kessingland, in emulation of their brethren in the neighbouring county of Norfolk, and having often experienced the want of a life-boat in their locality, *determined to exert themselves to procure one*; and having first put their own shoulders to the wheel, and collected amongst themselves the sum of 73*l.*, they applied to this Institution in July last for assistance; and as they could not hope to raise a sufficient amount to build a new boat suitable to the locality, the cost of which would have been 200*l.*, they purchased one which happened to be for sale at Southwold, and which, with some repairs and refitting, could be made efficient. The

application to the Institution was answered by a grant of 10*l.* and a set of life-belts, value 14*l.*, for the use of the boat's crew. Thus, through the enterprise and humanity of the coast seamen themselves, another life-boat has been provided on a dangerous part of the coast for the relief of the shipwrecked mariner, who might otherwise have been left to perish.

The Kessingland life-boat is 40 feet long, with 11 feet beam, and is similar in character to the sailing life-boats on the Norfolk coast.

GORLESTONE, SUFFOLK.—The second instance, which we have now with much gratification to record, of the establishment of a life-boat in a manner so honourable to the coast-seamen themselves, is that at Gorleston, near the south entrance to the port of Great Yarmouth. Encouraged, no doubt, by the success which had attended the creditable efforts of their brethren elsewhere, and aided and encouraged in their undertaking by a gentleman of Great Yarmouth, who has always taken much interest in the life-boat cause—**MATTHEW BUTCHER, Esq.**,—they set to work, and shortly, through their own subscriptions, the assistance of friends to the cause, and a donation of 50*l.* from this Institution, they were enabled to order a first-class life-boat at a cost of 200*l.*, from Messrs. **BEECHING and SONS**, of Great Yarmouth. This boat is 40 feet long, and similar in other respects to the Scratby life-boat described in the 15th Number of this Journal. She was placed on her station at the latter end of October last, and has already rendered important service by saving the lives of a vessel's crew, who would in all probability have otherwise been drowned,—an account of which we had hoped to receive in time for insertion in this Number of our Journal.

SERVICES OF LIFE-BOATS.

BRIDLINGTON.—On the 22nd of March last, at 3 A.M., the wind blowing strong from E.N.E. at the time, and a heavy sea running, signals of distress were observed from Bridlington Quay on board the schooner *Albion*, which had on the previous evening driven from her anchors into a dangerous

position about three-quarters of a mile from that place.

The life-boat, manned by 12 men, was quickly launched, and proceeded to the vessel, which had stranded, and which they reached at 4.50 A.M. They succeeded in taking off the crew, consisting of 7 persons, and landed them in safety at Bridlington Quay at 5.30 A.M. The boat is reported to have behaved well on the occasion. The crew received the award of 1*l.* to each man according to the now uniform and liberal scale of payment for a night service, which has been fixed by the Board of Trade, in conjunction with this Institution, as that which will in future be paid to the crews of such life-boats as are placed in connection with it, or to the proprietors of others which avail themselves of the assistance of that Board.

RAMSGATE.—On the 20th October, in a heavy gale from S.W., the fishing-smack *Maria Ann*, of Colchester, in attempting to enter Ramsgate Harbour was thrown against the pier-head, and presently foundered within a few yards of it. A great number of other vessels were running for and into the harbour at the time, and the pier was crowded with spectators. One of the crew managed to get from the rigging to the pier before she fell over to seaward and swamped; another was immediately drowned, having been injured by the broken bowsprit, and prevented ascending the rigging. The remainder of the crew, 3 in number, took to the rigging, and repeated attempts were made to throw lines to them from the pier, but without success, owing to the force of the wind, although the distance was said not to be more than 30 feet. The only hope of saving the unfortunate men appeared to be by the life-boat, which after some little delay, in consequence of the seamen who were required to man her being engaged in assisting the various vessels which were every moment crowding into the harbour, was towed out of it by the steamer *Aid* through a very heavy sea in the entrance, which repeatedly filled the life-boat. In the mean time a French man-of-war gunboat, the *St. Barbe*, had driven athwart the mast

of the wreck, which impeded the efforts of the life-boat to approach the shipwrecked men, but which enabled one of them to jump into the Frenchman's rigging. The life-boat having anchored, veered and backed into the surf, and succeeded in taking one of the two remaining men from the wreck, but in doing so she got seriously damaged by striking violently on the wreck herself. Her crew then threw a life-buoy, with line attached, to the remaining smacksmen, and he succeeded in placing himself within it, but the life-boat's crew were unable to haul him on board in consequence of his legs being inextricably entangled and held by the rigging and gear of the wreck, to which, indeed, it was said, that he had lashed himself. In endeavouring to extricate himself he was drawn out of the life-buoy and engulfed in the sea. The water within the life-boat being now nearly up to the thwarts, she made sail and ran into Broadstairs with the rescued man on board, where he was safely landed. The life-boat was towed back to Ramsgate by the *Aid* steamer in the afternoon, where she was immediately hauled up, and after being repaired by torch-light, under the direction of the indefatigable Harbour-master Captain Martin, was again ready for service by daylight on the following morning. She is stated to have behaved extremely well on this occasion; and it was the opinion of Captain Martin, that after being stoved in and water-logged, as far as she could be so, she would have supported at least 20 persons in addition to her crew.

We have entered rather minutely into a description of this service, in consequence of its having obtained some notoriety through the publication of anonymous letters in the newspapers, in which the writers endeavoured to throw great blame on the life-boat's crew, and on the authorities, and especially on the Harbour-master, for not saving the life of the unfortunate man who was last drowned, despite of the efforts of the life-boat. After carefully considering all the circumstances, we are satisfied that nothing more could have been done to save this man, who lost his life solely through being either lashed to the rigging of his vessel, or becoming inextricably

cably entangled amongst it. We believe that the life-boat's crew did all that they could have done; and we have abundant evidence that the experienced, active, and kind-hearted old seaman, Captain Martin, was unceasingly and energetically employed for a period of eight hours in the performance of his arduous duties on this trying occasion, during which time about 40 vessels, all more or less in distress, ran into the small harbour of Ramsgate for shelter.

On the 25th November, at 9·25 P.M., the services of the Ramsgate life-boat were again in requisition. [Alarm-guns from the light-vessel on the northern end of the Goodwin Sands were heard at Ramsgate, the wind blowing a gale at the time from N.E. to East, and a heavy sea running. At 9·40 the tug-steamer *Aid*, belonging to the Ramsgate Harbour Commissioners, with the life-boat in tow, left the harbour and proceeded to the North Sand-head Light-vessel, where they learned that a barque had been seen on the Goodwin Knoll, but that she had forged over it and had gone to the westward; they then skirted the sand through a heavy sea, and closely examined it between the North Sand-head and the Gull Light-vessels; when learning from the latter that the barque had passed through the Gull stream, they returned to the harbour, where they arrived at 1·30 A.M.

At daybreak alarm-guns were heard on board the Gull Light-vessel, when the steamer *Aid* and the life-boat again put to sea. On arriving near the sands, they perceived the mast of a sunken vessel on the Goodwin Knoll, with her crew clinging to the masthead. The life-boat having cast off from the steamer made sail through heavy broken water until within a suitable distance from the wreck; when, having let go her anchor, she veered down to it, and succeeded, by much exertion on the part of her crew, in taking off the wrecked men, five in number, from the only mast standing. These poor men were much exhausted, having been in their perilous situation twelve hours. They were landed safely in Ramsgate harbour at 8·30 A.M. One of the crew, a lad, had been washed from the mast during the night and drowned.

The vessel proved to be the brigantine *Marié Roche* of Nantes. The life-boat is reported to have behaved admirably on this occasion. This was the 16th or 17th time of her having been taken off to the Goodwin Sands in reply to signals of distress or alarm-guns from the light-vessels during the last two years. She was on this occasion off twice within twelve hours, manned by a separate crew on each occasion, at a cost of 23*l.* 12*s.* to the Ramsgate Harbour Commissioners, who we think are entitled to much credit for having their steamer and life-boat always in readiness to proceed to the assistance of vessels in distress on the Goodwin. Being a large boat, more manageable under sails than oars, she is generally towed out to the neighbourhood of the Sands by the tug-steamer, and then managed under sail. We cannot but think that a somewhat similar life-boat stationed on Deal beach, and manned by the experienced Deal boatmen, might often render valuable service by saving the crews of wrecked vessels on the Goodwin, at times when they could not be rescued by their own open luggers. We think that the establishment and maintenance of an efficient life-boat at Deal is an object quite worthy of the ambition of the many naval men, and others of the gentry resident in the neighbourhoods of Deal and Walmer, and to effect which we doubt not they would be readily aided by this Institution.

Intelligence has just reached us, or the total loss, on the 19th December, on the Goodwin Sands, of the schooner *Lelean*, of Fowey. Early the next morning, on signals being made, the Ramsgate life-boat, with commendable promptitude, put off and received the crew from the *Gull* light-vessel, to which they had already escaped.

FILEY.—On the 30th October, at 10 A.M., the brig *Hebe*, of Wisbeach, ran on shore, in a sinking state, near Filey, on the Yorkshire coast. It was blowing a heavy gale from the N.E. at the time, with rain and a heavy sea running. The life-boat belonging to the Filey branch of the National Life-boat Institution was immediately launched and taken to the rescue of her crew, six in number, whom they succeeded

in taking safely on board, and landing within a short time afterwards.

LOWESTOFT AND PAKEFIELD, SUFFOLK.—

At daybreak on the 2nd November, it blowing a heavy gale from S.S.E., with squalls of hail and rain, the Coastguard observed a brig on shore on the Holm Sand, with the sea breaking over her, and a signal of distress in her rigging. By 7 o'clock the Lowestoft life-boat, manned by 19 men, was launched through a heavy sea on the beach, and made sail for the wreck, which proved to be the *Louisa*, of Newhaven, and which she reached at 9 o'clock, A.M., but in endeavouring to close it, she herself got aground, and the tide leaving her, she remained there immovable, but with the sea beating over her, until 1.30 P.M. In the mean while the crew of the brig, consisting of 9 persons, had been taken on board the life-boat, which landed them at 2 P.M. in safety. The Pakefield life-boat put off to the assistance of the other so soon as it was perceived she was aground on the Sand, but she could not approach her on account of the shallowness of the water around her.

ALDBOROUGH, SUFFOLK.—On the 3rd November, it blowing a heavy gale of wind from the E.S.E., the barque *Corregio*, of Poole, was driven on shore off the town of Aldborough. The life-boat belonging to the Aldborough branch of this Institution was immediately launched, and proceeded to her assistance, taking on board her crew of 9 persons, and landing them in safety. Six other vessels ran ashore, and became total wrecks: their crews were all saved, chiefly through the instrumentality of lines thrown to them from the beach.

BROADSTAIRS.—On the 3rd November, at 2.30 P.M., the wind blowing a heavy gale from E.S.E., with rain and sleet, a brig, which turned out to be the *Hope*, of Portsmouth, was observed to part from her cables, and to run ashore on the rocks near Broadstairs. A small life-boat, attached to the Broadstairs life-lugger, the *Dreadnought*, was immediately launched, manned by six men, and proceeded to the rescue of her crew, whom they succeeded in taking on board, and landing in safety.

MEETINGS OF THE COMMITTEE.

THURSDAY, 5th July, 1855. THOMAS CHAPMAN, Esq., F.R.S., in the Chair.

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

Read and approved the Inspector of Life-Boats' Report of his recent tour of inspection of the life-boats on the coasts of Somerset, Devon, Cornwall, and Dorset.

Resolved—

1. That the Teignmouth life-boat be brought to London and altered to Mr. PEAKE'S plan.

2. That a carriage be supplied to the Sennen life-boat as early as practicable.

Read letter from Mr. BRYANT, Receiver of Admiralty Droits at Padstow, stating the necessity of a life-boat in that locality, and adding, that if one of a light description were supplied, the inhabitants would probably provide hauling and launching apparatus for the boat, and also annual subscriptions for her maintenance.—Decided that measures be taken to form a branch of the Institution at Padstow.

Voted the silver medal of the Institution to COMMANDER THOMAS KISBEE, R.N., in testimony of his services to nearly 90 persons, who had been wrecked at different periods, from ten vessels on the coast of Norfolk.

Also 2*l.* to four men for their services to three out of four persons who belonged to a boat laden with sea-weed, which was swamped on the 29th May last, near Rutland, on the coast of Donegal.

Also 2*l.* to two boats' crews of eight men who put off to the assistance of five persons, whose boat, being laden with sea-weed, had shipped a heavy sea and filled, near Innisfree Island, Rutland, county Donegal, on the 1st May last.

Also 6*l.* to six men of Solva, Pembroke-shire, for their prompt services to the crew of the ship *Simoon*, of Liverpool, which, during foggy weather, struck on a sunken rock in St. Bride's Bay, on Sunday, the 25th Feb. last. While the men were coming from church on that evening, the

firing of a cannon was heard by them in the direction of the bay, which intimated that a vessel was in distress, and the distinctness with which the report was heard indicated that she was near the rocks. Although a very thick fog prevailed at the time, the six men readily volunteered to go off to her assistance in a shore boat, and after some difficulty they succeeded in making out the ship. She had struck several times on a sunken rock, and was soon afterwards abandoned by her crew; but, on hearing a gun fired from the shore, and probably observing the boat making towards them, they returned to their ship, which they regained at the same time as the shore boat. Had the boat with the ship's crew *not* turned back, but continued her course, every one on board would, in all probability, have met with a watery grave, as they were making for a place where there was a heavy ground-sea on. The weather having cleared up, the vessel got off, and proceeded in charge of a pilot to Liverpool. The Committee were of opinion that the men were clearly entitled to salvage for their services on the occasion; but the owners having refused to grant them the same, the above reward was voted to the men.

Thursday, Aug. 2, 1855. Captain LAMBERT PERROTT in the Chair.

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

Mr. C. N. NIXON brought under the notice of the Committee his patent rudder-fittings. The chief advantages claimed for them by the inventor are that, in the event of a vessel taking the ground, or sailing on a reef or bank, the rudder will rise of itself and fall into its place when again afloat; it may be easily shipped or unshipped in harbour without docking the vessel, or at sea if required. From the even working of the rudder, no damage can be done to it except under extraordinary circumstances. The fittings have been tried to some of the Coastguard boats, and the results have been satisfactory. Mr. Nixon offered to fit the

rudders of the life-boats of the Institution on liberal terms.

Decided that one of the life-boats of the Institution should be fitted with Mr. NIXON'S apparatus.

Read letters from Mr. B. THOMPSON, of Kessingland, Suffolk, stating that the Kessingland Company of Boatmen had purchased one of the Southwold old life-boats, which is 40 feet long; and adding that when their life-boat establishment would be completed, its expense would be about 160*l.* Towards that amount the boatmen had collected amongst themselves 73*l.* They solicited a grant from the Royal National Life-Boat Institution in aid of their undertaking.

Resolved—

That a grant of 10*l.*, and a set of cork life-belts, be made in aid of the Kessingland boatmen's life-boat.

Approved of an estimate, amounting to 24*l.* 10*s.*, for altering the Teignmouth life-boat carriage, in accordance with the recommendation of the Inspector of Life-boats to the Institution.

Read and approved the Inspector's report of his recent visit to the Dungeness life-boat station.

Resolved—

1. That a suspension two-wheeled carriage, after a design by Captain WARD, R.N., with Messrs. BOYDELL and GLASIER'S patent endless railway apparatus attached, be supplied to Dungeness, in lieu of the present carriage; and that the same be built by Messrs. RANSOMES and SIMS.

2. That a second-class life-boat, after Mr. PEAKE'S design, be ordered to be built by the Messrs. FORRESTT, to be placed at Newcastle, Dundrum Bay, instead of the present life-boat there, which was found unsuitable for the locality.

Reported that the London and North Western Railway Company had declined to convey the Lytham life-boat to Liverpool free of charge, and that they required 7*l.* for her conveyance.

Decided that, as the boat could not conveniently be sent otherwise to her station, she be forwarded accordingly.

Reported that on the application of John H. PHILLIPPS, Esq., M.P., the Great

Western and the South Wales Railway Companies had kindly offered a free pass on their lines, as far as Haverfordwest, to the Fishguard life-boat.—Gave instructions to have the boat so sent.

Resolved—

1. That a set of life-belts and some other stores be supplied to each of the six life-boats on the Anglesey coast.

2. That the account, amounting to 69*l.*, of Messrs. HARVEY & Co., of Smithfield, for making the Budehaven life-boat carriage, be paid.

Voted the silver medal of the Institution to Dr. F. S. Cahill, of Berwick-on-Tweed, in testimony of his prompt and gallant conduct to two persons whose boat was observed to be in a perilous situation while passing along the coast of that place on Sunday, the 17th June last. Owing to the gale of wind which had prevailed on the coast on the previous day, a high sea was rolling in-shore, when the boat was first seen, which caused much fear to be entertained for the safety of the two persons who were in her. The boat was seen rapidly to approach some dangerous shoals, where it was feared she would be swamped. It was deemed utterly hopeless to attempt their rescue in a shore boat; but in this extremity, Dr. Cahill prevailed on the crew of a small steam-boat, and two other men, to accompany him in the steamer to the assistance of the boat. They made as fast as possible towards the point of danger, and reached the boat just in time to save her crew from impending destruction, for had they been ten or fifteen minutes later, the boat would have been in such a position that it would have been impossible for the steamer to follow her.

A subscription, amounting to 37*l.*, to which the 4th Royal Lancashire Militia had liberally contributed 24*l.*, had been collected locally to reward the men, who received 5*l.* each for their services on the occasion, and the surplus 12*l.* was given in aid of the Berwick Life-boat Fund.

Also 1*l.* 10*s.* to three Coastguard men for their prompt services, in a small punt, to two men whose boat had capsized near St. Alban's Head, Dorset, on the 28th June last.

THE SELF-RIGHTING PRINCIPLE IN LIFE-BOATS.

IN December 1849 one of the South Shields life-boats upset alongside a wrecked vessel on the Herd Sand, on which occasion 20 out of 24 men who formed the crew of the boat, perished. This melancholy accident, which in one moment prematurely cut off so large a number of brave seamen, and carried desolation and misery into so many a household, was the immediate cause of the introduction of the self-righting life-boats. The Duke of NORTHUMBERLAND, as is generally known, shortly afterwards offered a prize of 100 guineas for the model or plan of a life-boat which should possess in the greatest perfection those qualities which it was considered that such a boat ought to possess. Amongst those qualities, the Committee appointed to define the various requirements, and to decide on the merits of the several plans, &c., of the different competitors, assigned a prominent place to that of self-righting; most justly and most fortunately so we conceive; as the result has been the introduction of a life-boat, which, in addition to qualities of the highest order in other respects, possesses that of self-righting.

In a paper on this subject in the 5th Number of this Journal, it is narrated that, Of 16 disasters to life-boats recorded in the Northumberland Report, 9 were caused by their upsetting and drifting on shore bottom up, involving a loss of 56 lives. Surely such a fact was of itself sufficient evidence of the desirability of enabling life-boats to self-right, provided they could be made to do so without sacrificing or impairing other qualities of still more importance. Nevertheless there have not been wanting those who declaimed against the introduction of self-righting, and who have maintained that it cannot be obtained without sacrificing both stability and speed. Unfortunately accidents, accompanied with loss of life, occurred to three of the first self-righting life-boats that were built, which tended to foster prejudice against what was considered a dangerous innovation. Those accidents, however, were occasioned by causes quite

independent of the self-righting power, chiefly from an imperfect mode of ballasting. We believe we shall be able to show, not only that self-righting may be obtained without impairing any other desirable qualities, but that the very means which are employed to produce it increase the stability and speed of the boat, and afford increased shelter to her crew.

We at once concede that these two points, stability and speed, are of prior importance to self-righting; without the first, a boat would not be safe in a heavy sea, and would be constantly liable to upset, whilst without the second all her other good qualities would be useless, since she could not be transported against a heavy sea and gale of wind to the assistance of a wrecked crew. If, however, it can be shown that a boat can be made to self-right without reducing either her stability or speed, we maintain that it is the duty of all who provide life-boats to furnish those who man them with this additional security to their lives.

1st. As regards stability. GREATHEAD and the earlier designers of life-boats appear to have considered that stability was only to be obtained by great breadth of beam; and accordingly we find that the beam of their boats was generally one-third at least of their length, which is about the proportion of length and breadth which is possessed by the Shields and other north country life-boats at the present day. A few of these boats have also water ballast, but for the most part they have none. Now great breadth of beam is unquestionably unfavourable to self-righting, as it is also to speed, and the beam in the self-righting boats has accordingly been reduced to about one-fourth of their length; but by building them with a very flat floor, and by giving them heavy iron keels, their stability is made equal, or more than equal, to that of the older and wider boats, whilst their speed is necessarily greater.

In illustration of the great stability which may be obtained with the reduced beam, we may mention that a life-boat with 30 feet length and $7\frac{1}{2}$ feet beam, such as those now built by the National Life-boat Institution, will bear the weight of 24 men standing on

one gunwale only, without forcing it under water.

A further reason for want of stability in these boats, apart from breadth of beam, has been advanced; in order to the comprehension of which it will be necessary shortly to explain the principle on which the self-righting capacity is obtained. The object desired is to establish what in mechanics is termed an "unstable equilibrium," or, in vulgar phrase, make the boat "top heavy," when keel up. This is effected, 1stly, by giving considerable sheer of gunwale and enclosing the space at the extremities of the boat, to 3 or 4 feet from the stem and stern posts, so as to form water-tight compartments, or tanks, as they are called, on which the boat will float when keel up; and, 2ndly, by adding an iron keel, or other weights placed as low in the boat or as near to the keel as practicable. Thus an unstable equilibrium is established when the boat is keel up; for floating on the two points of buoyancy at the extremities of the bow and stern, the slightest lateral motion or unequal distribution of weight within the boat brings the iron keel on one side of the centre of gravity, when its weight pressing downwards on that side, and the buoyant power of the enclosed ends lifting upwards on the other, speedily restores the boat to her original position.

The charge of reduced stability above referred to, which has been made by celebrated boat-builders, who have adopted a straight gunwale and low extremities to their life-boats, is, that the top-weight of the raised extremities must, when the boat heels over, render her more crank than she otherwise would be.

To this we reply, that, up to a certain angle of heeling, such would be slightly the case, but that even to that point it would be more than counteracted by the weight of the heavy iron keel which forms one part of the self-righting power: beyond that angle, however, and before the boat was on her beam-ends, the bow and stern air tanks would begin to be immersed, when, owing to their greater height, and consequent greater distance from the iron keel, both they and it would act with greater power in resisting whatever

force might be exerted to capsize the boat, inasmuch as they would each be resisting that force with a longer leverage than they would do if the sheer of the gunwale were less and they were brought closer together. We have proved, therefore, that a boat's stability at the most dangerous moment, viz., when on her beam-ends, is *increased by the self-righting power.*

With regard to the second charge, that the speed of a life-boat is decreased by the self-righting power, we think that we can quite as successfully refute it as we have done that which affected stability.

1stly. As to the additional weight of the iron keel. Without doubt in calm weather and smooth water, with the limited power obtainable by oars and men's arms, a light boat may be propelled faster than a heavy one; but exactly in proportion as the force of an adverse wind and the blows of a head sea are increased in amount and in power, in that proportion will the additional inertia derivable from weight tell in a boat's favour, husbanding and regulating the force which has been applied to the oars precisely as the fly-wheel does that of a steam-engine or other machine.

2ndly. As to height of extremities of bow and stern. If the bow be kept sharp to gunwale height, and if its height be not excessive, it is favourable to speed; for if the bow be low every heavy broken sea will break over it and fill or half fill the boat, which, rushing fore and aft within her, apart from the inconvenience or injury which it might occasion to her crew, would impede her progress through the water far more than the cloven exterior blow of the heaviest sea would do.

Perhaps some of the earlier life-boats built for this Institution on the self-righting principle (from Mr. PEAKE'S designs), had greater height of bow and stern than was necessary to secure their self-righting; in its later boats, however, it has been reduced to its minimum amount. Thus a boat 30 feet long and $7\frac{1}{2}$ feet wide, with 3 feet 8 inches depth amidships (inclusive of keel), has only 5 feet 4 inches height of bow and stern, or 1 foot 8 inches sheer of gunwale. Now this is not a greater height

of bow and stern than every life-boat ought to have to keep the sea from breaking over it; and it therefore follows that the speed of a life-boat cannot be impeded by any height of ends which the self-righting principle calls for, any more than its stability is diminished thereby.

In addition, however, to the assertion that the self-righting power impairs the other qualities of a life-boat, it has been said that in nine cases out of ten, the crew could never avail themselves of it, as the wind and sea would beat a boat so quickly to leeward after self-righting, that those thrown out of her would not be able to swim fast enough to follow and get into her again. The validity of this charge can only be proved or disproved as time will develop; but on the only two occasions when the self-righting boats of this Institution have upset, the crews have been enabled to get into them without difficulty, after their righting, and their lives have been thereby saved. An account of one of these instances, which occurred at Lyme Regis, will be found at page 124 of this Journal; the other occurred at Teignmouth in Devonshire, when the life-boat was upset by a heavy roller breaking on her broadside on the bar off the entrance of the harbour. This last-named boat is one of BEECHING'S; but previous to this accident she had had some alterations made in her by the Shipwrecked Fishermen and Mariner's Society prior to her being transferred, with the other boats of that Society, to this Institution. Her crew, on that occasion, without difficulty, got into her again, although the coxswain nearly lost his life through having neglected to put on his life-belt.

In juxtaposition with these two instances, when the advantage of self-righting was so forcibly manifested, may be placed those of the Shields life-boat above alluded to; the Tug Steam Company's life-boat at Liverpool, which upset on the 18th of February, 1854 (*vide Life-boat Journal*, page 149), when 10 persons out of 11 were drowned; and lastly, that of a life-boat at Spurn Point, at the north entrance of the Humber, so lately as the 19th of November last: this boat was upset when fastened by a tow-

rope astern of a stranded brig, there were only two men in her at the time, and both were drowned.

Had this boat been possessed of self-righting power, who can say that both these poor fellows might not now be basking in the sunshine of life?

With so recent a warning sounding in our ears, we feel that we should have neglected a duty had we not endeavoured to call the attention of all proprietors of life-boats to the subject, and laid before them the explanation of the principles and advantages of the self-righting power, which, to the best of our ability, we have now attempted to do.

FRENCH REWARD TO A BRITISH SEAMAN.

IN the year 1854 a French ship, named the *Aigle*, was lost on the Spanish Main; but, owing to the exertions of Captain JONES, of Portmadoc, then in command of the British ship *Enterprise*, the crew of the *Aigle* were fortunately saved. Captain JONES, in acknowledgment of his act of humanity, has lately received from the French Minister of Marine a gold medal. Along with the medal were two documents,—one a diploma engrossed on vellum, authorizing Captain JONES to wear the insignia; the other a letter from the French Minister, stating that the medal had been transmitted in consequence of a decree of the Emperor Louis Napoleon to that effect. The medal, which is a very beautiful one, hangs from a tricoloured riband; on one side is the head of Louis Napoleon, with the words "Napoleon III., Empereur," and on the other an inscription, stating that the medal had been presented to Captain JONES as a well-deserved reward for succour and assistance rendered to the French Marine. That is a trophy which any man may justly be proud of, as glorious at least as those gained upon the field of battle; and such recognitions, on the part of the French ruling powers, of British humanity and valour tend materially to draw closer the bands of alliance and friendly feelings betwixt two nations who had too long remained at enmity with and in ignorance of each other.

ROYAL NATIONAL LIFE-BOAT INSTITUTION, For the Preservation of Life from Shipwreck.

Founded in 1824.—Supported by Voluntary Subscriptions.

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PRESIDENT—REAR-ADMIRAL HIS GRACE THE DUKE OF NORTHUMBERLAND, K.G., F.R.S.

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LIFE-BOAT INSPECTOR—Commander J. R. WARD, R.N.

The Committee have to state that this is the only National Institution which has for its object the "Saving of Life from Shipwreck;" and they would earnestly call the attention of the public to the fact that, although the Life-boats of the Institution have saved 132 lives during the past year, more than 1500 persons have been lost by Shipwreck on the Coasts of the United Kingdom and adjoining Seas during the same short period—many of whom might have been saved had more ample means been supplied to place Life-boats on the Coasts.

Great and extraordinary efforts have during the last two years been made by the Institution to provide Life-boats where most urgently required, and also to make thoroughly efficient the Life-boats already established. To accomplish this object, the funds of the Institution have not only been seriously diminished, but its present liabilities for Life-boats, Life-boat-carriages, and Life-boat-houses, amount to 1500*l.*

During the past month the Committee have granted upwards of 150*l.*, besides honorary distinctions, to meritorious parties, in testimony of their laudable exertions in rescuing by the Life-boats in connection with the Institution, shore boats, and other means, more than 220 persons, who were cast away from the recent calamitous shipwrecks on the coast.

To enable the Committee, therefore, to prosecute with undiminished vigour their hitherto successful exertions in so benevolent a cause as the "Preservation of Life from Shipwreck," the generous co-operation of the public is earnestly solicited.

The Committee gratefully acknowledge the following additional Contributions:—

	£.	s.	d.		£.	s.	d.
Ellesmere, The Earl of (3rd Donation)	5	0	0	Linton, Colonel (Donation)	5	0	0
De Saumarez, The Rev. Lord . . (2nd Donation)	5	5	0	Mitchell, W. R., Esq., Camberwell (Donation)	10	10	0
A. R. A. (Donation)	25	0	0	Pepys, John, Esq. (Donation)	21	0	0
Bristol Merchants' Society (Annual)	2	2	0	Spalding, Miss Sara, Hull (Annual)	1	1	0
Colling, Joseph, Esq. (Donation)	5	0	0	Sparrow, James, Esq., Hull (Donation)	10	10	0
Drinkald, Joshua, Esq. (Donation)	10	10	0	Talbot, J. H., Esq., High Sheriff, Wexford (Don.)	2	0	0
Grove, Captain, R.N. (Donation)	1	0	0	Watkins, The Rev. H. G. (Donation)	5	5	0
Herring, Robert, Esq., Cromer (Donation)	1	0	0	Wodehouse, Mrs., Norwich (Donation)	0	10	0
Hill, Mrs., East Sheen (Donation)	5	0	0	Wollaston, Lieutenant I. N. (Annual)	0	5	0
Johnston, John, Esq., Ryde (Annual)	1	1	0	Various small donations	1	5	0

Donations and Subscriptions will be thankfully received by Messrs. WILLIS, PERCIVAL, and Co., 76 Lombard Street, Bankers to the Institution; Messrs. HERRIES, FARQUHAR, and Co., 16 St. James's Street; Messrs. COUTTS and Co., 59 Strand; LONDON and COUNTY BANK, 21 Lombard Street; by the several Metropolitan Army and Navy Agents; and at the House of the Institution, 14 John Street, Adelphi, London.

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