

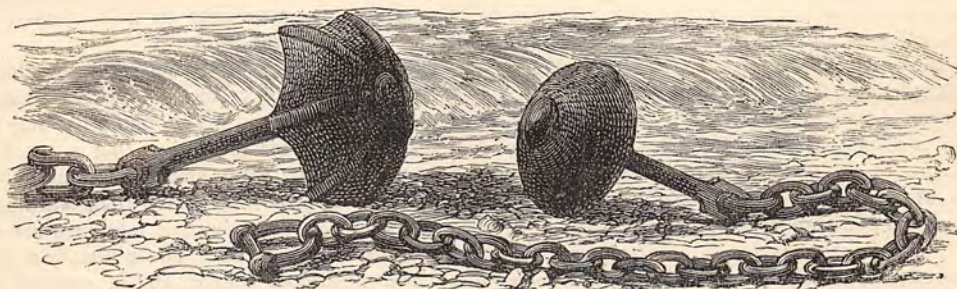
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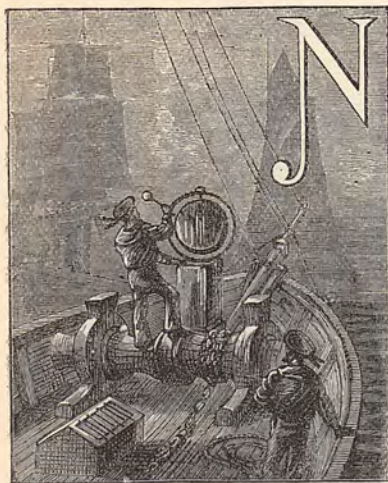
bloom of flow'r and song."
still more rare and bright."
won my love at last.

colla voce.

D.S.



THE WORK OF THE LIGHT-VESSELS.



NOT the least important branch of the public duties which the Legislature entrusts to the Corporation of the Trinity House, an account of which body appeared in this Magazine not long ago, is that pertaining to light-vessels.

The first light-house under the management of the Trinity House was, as stated in that account, erected in 1680, but it was not until 1732 that the first light-vessel was instituted; and to the Nore belongs the honour of being the station at which that vessel was placed. Only four other light-vessels appear to have been

established by the Trinity House during the last century, viz., the *Dudgeon*, the *Owers*, the *Newarf*, and the *Goodwin*; but during the present century light-vessels have been moored at suitable stations all round the coast of England and Wales, and there are at the present time forty-three such ships under the control of the Trinity House. These vessels perform a most useful service. Even a landsman does not require to be told that there exist around our coast perilous rocks and sands—many of the latter of a movable nature—which do not afford a proper foundation for the erection of a lighthouse, but the presence of which it is nevertheless essential, in the interests of our maritime commerce, to indicate by marks that shall be visible both day and night. Such, for example, are the Seven Stones rocks, midway between the Land's End and the Scilly Islands; and the ill-famed Goodwin Sands on the east coast of Kent.

To guard the mariner from dangers like these our light-vessels are brought into requisition.

The earliest of these ships were rough and imperfect craft that had often been originally old Dutch galliots, but were bought up, and set to do their warning work, by the English lighthouse authorities; and there is still to be seen a model of one of them—

the *Dudgeon*—with the lights suspended at the ends of the cross-yards, not unlike, as has been humorously observed, “a Chinese junk celebrating a feast of lanterns.” Light-vessels of the present day are, however, fine ships (usually wooden) of from 130 to 212 tons, and their cost, including outfit, averages—according to size, description of illuminating and fog-signal apparatus—from £5,000 to £10,000 each. Their shape is, of course, determined chiefly with a view to their riding well, and not to their fast sailing. A fair speed is, however, to be got out of them when requisite; and they are all provided with complete sets of sails, for use in case of necessity.

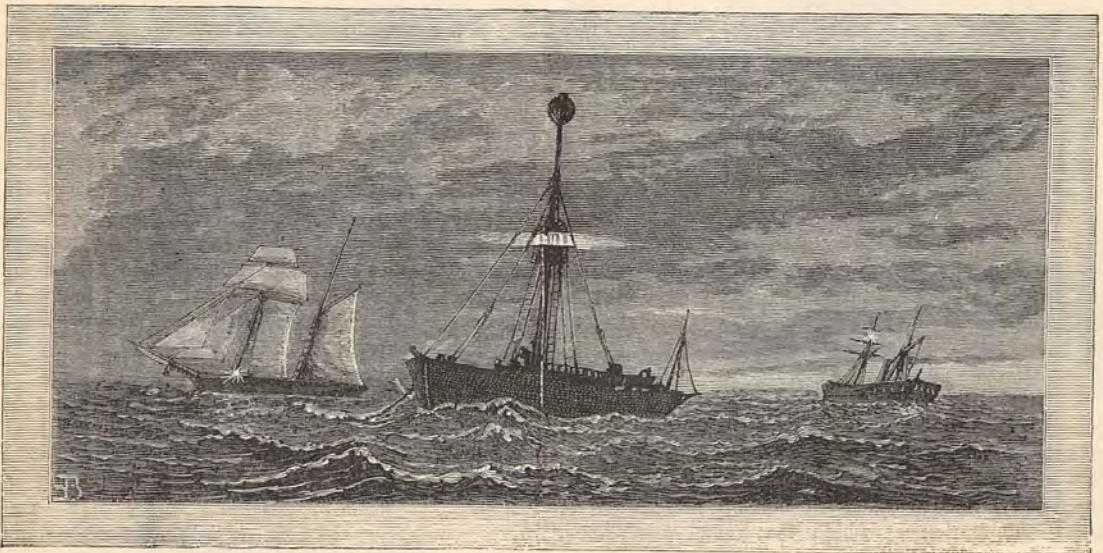
Light-vessels have one, two, and sometimes three masts, from the tops of which they exhibit their lights, the lanterns being built around the masts, up and down which they are constructed to slide. At sunset the lanterns are hoisted to their full height, averaging, according to the vessel, from 14 to 38 feet; and at sunrise they are lowered into a house built to receive them on the vessel's deck, where they remain until the next sunset. The light-vessels of England and Wales are painted red, and have their names written in large, plain letters on both of their sides. They are further distinguishable during daylight by balls, triangles, &c., hoisted at their mastheads.

The lantern in which the light is shown from a light-vessel is usually octagonal, six feet across from external angle to angle, three feet high at the sides, and four feet ten inches to top of roof. The roof and bottom of the lantern are copper, and the framing is gun-metal. The lantern is made in halves, so as to ship on the mast, and is glazed with three-eighth-inch plate-glass. The lamps, which are Argand, gim-balled to counteract the rolling of the vessel, are fitted in the centre of twelve-inch diameter parabolic silver-faced reflectors, and are ranged side by side in one, two, and three circles in the lantern. The light, which is produced by colza oil, is sometimes fixed and some-

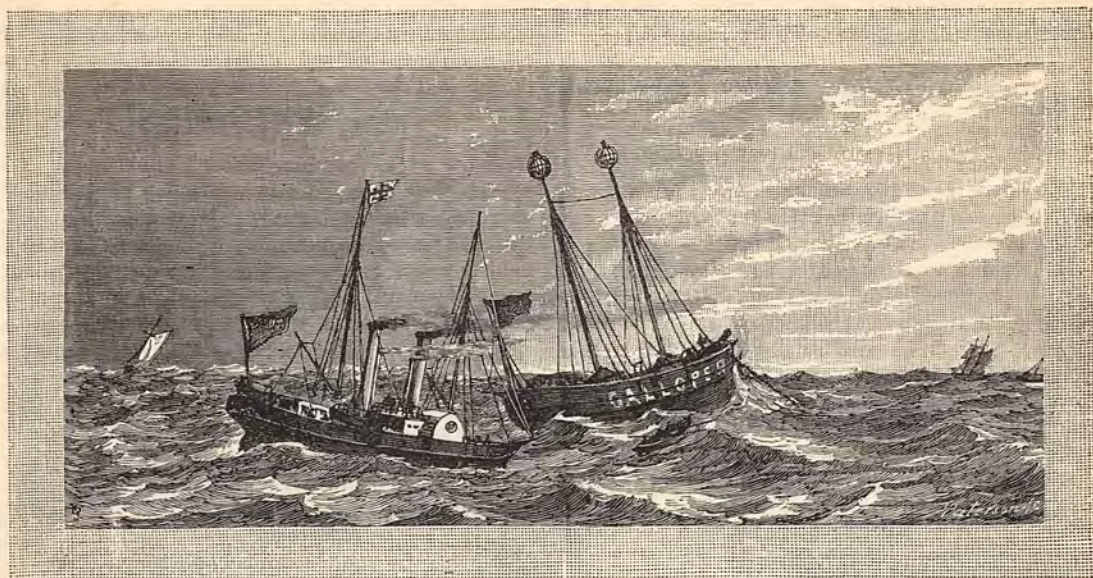
times revolving. When revolving, the optical apparatus is driven by clockwork. Ten miles, in clear weather, is the usual maximum distance at which the beacon-light of one of these ships may be seen.

The foregoing description of the lantern and illuminating apparatus applies to light-vessels generally. In some recent cases, however, important improvements have been effected in these parts of the ship. The lantern has been made larger for receiving reflectors of twenty-one inch instead of twelve-inch diameter, and for more convenient access to its interior; iron has been substituted for gun-metal in the framing; the shape of the lantern has been altered from octagonal to cylindrical, thereby reducing to a minimum the obstruction offered to the beams of light by the framing; and, lastly, the lamps and reflectors have been arranged to produce groups of flashes, followed by a comparatively long interval of darkness, the main net result of which modifications is that the consumption of oil is less than with the fixed or constant-light system, the intensity of the light considerably greater, and the scope for imparting distinguishing characteristics to a station—a most essential point—widely developed.

A matter of primary importance in connection with light-vessels is that they should not break adrift from their moorings. Their doing so might not only prove a dangerous thing for themselves, but a much more dangerous thing for those ships that should thus be deprived of the protection which their warning presence affords. Accordingly their moorings are of the most substantial character. These usually consist of a 40 cwt. mushroom anchor, and a vertical riding cable of 1½-inch chain cable, though, in narrow channels, a smaller anchor is sometimes used at each end of a 1½-inch chain, which lies along the ground for a considerable distance, and from the middle of which another chain of the same size rises as a bridle, or veering cable.



A LIGHT-SHIP AT NIGHT.



RELIEVING THE "GALLOPPER" IN A GALE.

Until within the last few years, the only fog-signals in use on board light-vessels were gongs and guns. The gongs, which were of Chinese make, were suspended by a line, and beaten by hand with a gong-stick. (Our initial shows a man engaged in this act.)

We have said the only fog-signals in use until lately were gongs and guns; recently, however, these have been largely superseded in favour of siren trumpets, worked by caloric engines, and audible in fine weather at a distance of ten miles. On the first indication of fog, the trumpets are blown, and are kept sounding until the fog disappears. The blasts of these instruments are described as excruciating to the men on board; and, recently, a man was allowed to change into a light-vessel where there was no such fog-signal, the bellowing of the siren having made him positively ill. As a small set-off against the noise and nuisance of that apparatus, each of the crew of a fog-siren light-vessel is paid an extra fee of one penny per hour while the signal is in operation.

The crew of a light-vessel consists of a master, a mate, three lamplighters, and six seamen, one of whom may be a carpenter. Seven of these eleven men are always on board, and the remaining four on shore, at any given time. The master and mate are each alternately a month afloat and a month on land, but the rest of the crew are three months on board and one month on shore. Promotion is generally from the ranks, both seniority and good conduct influencing the selection for higher posts. The usual order of rising is from seaman to lamplighter, from lamplighter to mate, and from mate to master. The officer in charge of the light-vessel, whether the master or the mate, observes personally that the lamps are in good order, and that they are lit every evening at sunset, and kept constantly burning bright and clear till sunrise, and

visits the masthead, to inspect their condition, once at least in every watch. He sees that the lamps and reflectors are cleaned and polished every morning, and the lantern-glazing rubbed free from dirt. He keeps the accounts of the ship, and maintains habits of frugality, cleanliness, and order on board; after 8 a.m. every day, appearing himself, and seeing that those under him appear, in the uniforms with which he and they are provided. He takes care that the guns and fog-signal are kept in good order, ready for immediate use; and, once every year, has the whole of the cables hauled up on deck, one at a time, carefully examined and blacked. He is specially cautioned, lest detriment should be caused to Her Majesty's revenue, against permitting any goods to be brought on board the light-vessel from any other ships, unless they are in distress; and is prohibited from allowing any of the crew to leave the light-vessel for any purpose whatever, save for the preservation of life, and then only when, in his opinion, assistance can be given without prejudicing the efficiency of the vessel. He sees that a watch of at least two persons is constantly kept upon the deck of the vessel, by day and by night. He causes constant attention to be given to the deep-sea lead, which is kept overboard, and takes such further proceedings, either by bearings or otherwise, as may best enable him to determine whether the vessel retains her proper station, causing the spare anchor, which is always kept in readiness for use, to be promptly let down, should any sign of drifting be observed. And, finally, he once at least on every Sunday assembles the crew, with the exception of the watch upon deck, either in his own cabin or other convenient place, and reads to them the Church Service for the day, and also a sermon or homily from the volume with which each light-vessel is provided.

The following is the scale of wages paid to the masters, mates, and crews of light-vessels, viz. :—

Masters	£80 per annum.		
Mates, according to seniority.	54 6 0 to	£61 10 0	per an.
Carpenters "	41 2 0 "	42 12 0 "	
Lamplighters "	37 16 0 "	40 10 0 "	
Seamen "	34 10 0 "	36 0 0 "	

The whole of the crew are victualled on board, and when on shore, are each allowed 1s. 7d. per day in lieu of provisions.

In addition to these wages and allowances, each man is provided with a suit of uniform clothing annually, and is superannuated when past active service. The crews are usually selected from the merchant service, and many of them belong to the Royal Naval Reserve, leave to attend drill in connection with which is granted during four separate weeks in the year, without deduction of wages.

On the whole, the men, as will be seen, are very well cared for; and it is only just to say that in return for the good treatment they receive, they are proud of, and a credit to, the service to which they belong.

It only remains for us, in conclusion, having now exhausted the official part of our subject, to afford the reader a glimpse into the unofficial, or leisure-life, of a light-vessel, which we cannot do more effectually than by quoting the following description, with which we have been favoured by one of the oldest and most respected of the Trinity House district superintendents. The account is given in our correspondent's own words :—

"Most of them (the crew) have something to do. Some are cobblers, make shoes and repair them for their own families; others rig models of vessels—smacks, brigs, and full-rigged ships; others make small wheelbarrows and toys gaily painted, veneered workboxes, &c. One man is an excellent hand at needlework; he has a frame of canvas with an outline picture prepared on shore, which he fills in with wool-work when at leisure on board. One man I knew some years ago, who painted his own portrait with the help of a looking-glass. The majority of them do employ themselves upon some of the various things I have mentioned; and, when a man has a hobby of that sort, it takes away the monotony of his life, and keeps up his intelligence; but I have known a few among them who are too idle to do anything except lie about upon the lockers and smoke their pipes; but such men become stupid in time, after serving some years of such a life, and are fit for nothing beyond their daily routine of keeping a look-out on foggy nights at some of the vessels. At certain times of the year they catch a good many small birds—larks more especially, which fly against the lanterns.

They catch a few fish, but not so many as one might expect; either the running tide, or the sweep of the cable near the ground, destroys their sport. Upon the whole, I may say they are a good and steady lot of men, and do their duty very well. (The wild ones soon leave us.)"

Such is a brief account of our light-vessels. Notwithstanding the various compensating circumstances which have been noticed, one cannot help thinking that existence on board them must be a terribly dull, cheerless sort of thing. The life of an ordinary sailor—though Dr. Johnson has not less truthfully than wittily described it as "imprisonment, with the chance of being drowned"—can scarcely be styled monotonous, its conditions being, indeed, as variable as the fickle elements which govern them. The finely-graduated alternations of weather between the one extreme of a dead calm, when the mariner whistles to the breeze that will not be wooed by any such device, and the other extreme of a hurricane, when, in the words of the song—

"The rushing waters rave,
And the winds their revels keep,"

impart an ever-changing novelty and colour to his experience. But to lie lazily, and apparently aimlessly, at anchor on board a light-vessel, whose only varieties of motion consist in the less or greater degree of her rolling—to see glide gaily past the craft of every build and nation, from the little fishing-smack to the great ironclad, each urged not less by a living human impulse than by the wind or the steam which physically propels them, and to feel that *his* unromantic mission is for ever to occupy the same small spot of waters amid the infinite circles of the mighty deep, must, one is tempted to suppose, be intolerably irksome to a seaman's enterprising nature. One would

think that the fingers of the hardy tar thus circumstanced must often itch to—

"Hoist the sails and make the breeze!
Blow him along the liquid sea,
Out of the regions where life doth freeze,
Into the regions where he would be."

And yet—we speak from our own observation—these light-vessel men seem cheerful, contented fellows enough. Perhaps that use, which is second nature, has reconciled them to their floating gaol; perhaps even the most unemotional of them have "glimpses that make them less forlorn" of the noble end, that of saving life and property, to which their labours are directed. But anyhow, as we have said, these light-vessel men seem cheerful, contented fellows enough, and are certainly an honour to the honourable service of which, to quote the words of our opening sentence, their ships form not the least important branch.

