

THE
NAUTICAL MAGAZINE.

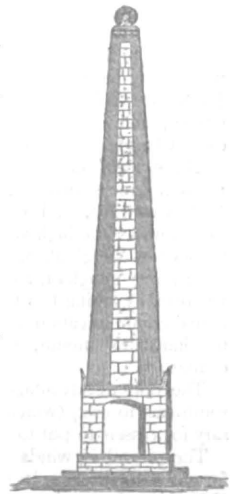
AUGUST, 1834.

HYDROGRAPHY.

"That future pilgrims of the wave may be
By doubt unclouded, and from error free."

39. IMPROVEMENT OF BEACONS. *Nelson's Pillar, the Kicker Tower, and the Beacon on the Hoe.*

A COMMITTEE of the Elder Brethren of the Trinity House have lately returned from a voyage of inspection in the English channel, to consider the colouring of beacons in such a manner as to render them more readily to be distinguished under different states of the atmosphere. The first result of the committee's deliberations has been a proposal to the Lords Commissioners of the Admiralty to paint Nelson's pillar red and white, in the manner described in the annexed sketch; a proposal which has been approved of by their Lordships, and which will accordingly be carried into effect. The middle part of the column will be white, the red being outside. It has also been wisely determined on by the Brethren, to erect an iron railing round the pillar, for the protection of its base; a measure which we are rather surprised was not adopted before.



It is also intended that the Kicker Tower shall be raised twenty feet.

And the beacon on the Hoe, at Plymouth, is to be raised ten feet.

Both of these latter marks are to be painted red and white, in alternate horizontal stripes.

EXPERIMENTS WITH DENNETT'S ROCKETS.—The following particulars of some experiments made at Newcastle, on the efficiency of Mr. Dennett's rockets for conveying a line from the shore to a stranded vessel, will be interesting to our nautical readers. The superiority of a rocket over a spherical shot, in making its way through a resisting medium such as the atmosphere, could never be doubted, the form of it alone being in its favour. We sincerely wish every possible success may attend Mr. Dennett's efforts, and that of the Society which is promoting them in so laudable a design; and we shall consider it one of our first duties to assist them at all times as much as we can:—

The great and humane invention of a simple, portable, and efficient apparatus for forming a speedy communication from the shore to a wrecked or stranded ship, in those cases of distressing accidents and calamities which so frequently occur off our coasts, has at last been completed by the perseverance and ingenuity of Mr. John Dennett, of the Isle of Wight. The public are familiar with the merits of Captain Manby's apparatus, to effect the same object, and which has been for some years in use at Tynemouth, and other stations in the neighbourhood, under the auspices of the Committee and Members of the Shipwreck Society. In order that a fair trial might be made of the comparative merits of Mr. Dennett's and Captain Manby's apparatus, an interesting exhibition of their respective powers took place on the Herd Sand, South Shields, on the 9th July. There were present the Committee and Members of the Shipwreck Society, the Master and Brethren of the Trinity House, the Shipowners' Society, together with a large concourse of the respectable inhabitants of Newcastle, Shields, Sunderland, and the surrounding neighbourhood. Captain Manby's apparatus was superintended by the officers and men of the coast-guard stationed at Tynemouth, who are of course conversant with the method of using it; Mr. Dennett's rockets were fired under his own inspection, that gentleman having been induced to visit Newcastle for the purpose. The following is an accurate account of the operations, collected from our own personal observation:—

The experiments commenced with a shot from Manby's apparatus, directed so as to carry a line between two objects placed on the beach to represent the length of a ship, at a distance of 200 yards: owing to too small an elevation being given to the mortar, the shot fell short of the object. Mr. Dennett, who directed the rocket apparatus in person, then fired one of the rockets, which went off most beautifully, falling considerably beyond the objects, and nearly in the centre of them, and the line fell on the beach between them. The range of this rocket was 314 yards, and its success was greeted by a burst of cheering and applause from the assembled multitude. A second rocket was fired with a view to show the precision with which rockets can be used; its line of direction did not vary from that of the first more than about four yards at the spot where it fell; its range rather exceeded that of the first, being 321 yards; whilst, owing to the strength of the breeze, the line was carried a little to leeward of the objects. A second shot was now fired from Manby's apparatus, with an increased elevation of the mortar, and an increased charge (10 oz.) but with a much better effect than before; the shot fell a few yards beyond the objects, and placed the line well between them; the range of this shot was about 220 yards. Another rocket was now sent off, with the intention of placing the line between the objects, its direction being altered to allow for the breeze; in this instance, the rope was well placed between the objects, and the range of the rocket was 310 yards; it fell before the composition was entirely expended, an attempt having been made to check the progress of the line after the rocket had passed over the marks. At the third shot with Manby's apparatus, the large line was attached, but on firing it parted near

the shot. Mr. Dennett now fired a rocket without any rope attached to it, to show the resistance the rocket has to overcome when it has a rope to carry out. This rocket went away with a most magnificent flight, clearing the air, and ascending to a height of several hundred feet in its course, until its progress was nearly lost to the sight; the presumed range of this rocket was considerably above 2,000 yards; it passed over the heads, and fell several hundred yards beyond some men who had gone out for the shot that had broken away from Manby's apparatus. At this period rain was beginning to fall, and the experiments closed, the company bestowing three hearty cheers on Mr. Dennett and the rockets before they separated, and strongly expressing the delight and satisfaction they had experienced.

The merits of Mr. Dennett's plan may be briefly summed up. When the men appointed to attend each apparatus were in travelling order, and directed to advance to the station appointed for the experiments, the immense advantages to be gained in actual service by the superior portability of the rockets, were at once apparent to the commonest observer. Two men, with the greatest facility, took six rounds of rockets, (each having three,) most conveniently stowed in cartouches, strapped on their backs. The men also carried between them six poles, to which was attached a light chest, containing two hundred fathoms of line, coiled in a peculiar manner, ready for running out, without danger of fouling; and over these was laid the iron frame, or stand from which the rockets are fired. The load to be thus transported is only one hundred weight and two quarters; whilst that of Captain Manby's mortar, and its six corresponding rounds of ammunition, balls, and stores, is little less than six hundred weight, and required the aid of ten men to remove it to its appointed place, nor has this duty ever been performed by a smaller number. On arriving at the spot, the rocket could have been ready for firing in two minutes; but from the anxiety of the spectators to examine it in every part, it was some time before the ground could be cleared for commencing operations. When one or two rockets had been discharged, the most sceptical were convinced that an opinion previously entertained in this neighbourhood, *that the rocket would be uncertain in its direction*, had no foundation; and that, in precision of aim, it is fully equal, if not superior, to Captain Manby's apparatus. In extent of range, it has a decided advantage; and, from the lesser angle with which it flies, a smaller quantity of rope is taken out, and the liability of the rope being taken to leeward of the object fired at, by the action of the wind, is thereby much reduced. It has also another advantage over every other means yet introduced for saving the lives of seamen, in cases of shipwreck during the night; for the explosion of the composition casts so strong a light, that not only the crew in the ship, but the operators on shore, will be instantly enabled to discover whether the shot is a successful one. From the portability, simplicity, and lightness of Mr. Dennett's apparatus, we do not see why ships navigating our coasts ought not to be provided with it; and thus an instant communication be effected, in cases of danger, *from the ship to the shore*. For the above interesting experiments, the public is indebted to the spirit and enterprise of the Shipwreck Society; a most useful and important institution, which, we regret to add, does not receive a tithe of that support from the public which the extent of its operations, and the *invaluable* nature of its services, so imperatively demand. This society has not only incurred great expense in purchasing, but its members have been at considerable personal inconvenience in testing various means devised for snatching our brave sailors from the horrors of shipwreck, and, even in cases where destruction seemed inevitable, it has been the means, under Providence, of restoring many individuals to their families and friends. It is therefore to be hoped, that the

committee having introduced to the notice of the public, a very superior agent for opening a communication from the shore to a ship in distress, the public will not be backward in placing funds at the disposal of the Shipwreck Society, to enable them to procure an adequate supply, not only for their present stations, but even to extend its usefulness to other parts of our dangerous coast. Mr. Dennett attended a meeting yesterday, at the Trinity House, at which the subject of devising the best means for immediately extending the adoption of Rocket Stations on this part of the coast, was taken into consideration, and the resolutions passed as follows:—

“1st, That a letter be written by the Secretary to the Central Committee of the Royal National Institution in London, stating the conviction of this committee, arising from the experiments made on the 18th instant, of the superiority of Dennett's rockets over Manby's apparatus, and requesting the sanction of the Central Committee to six sets of the rocket apparatus being procured for the stations of this society.

“2nd, That the thanks of this Association be presented to Mr. Dennett, for his ingenious invention of the rocket, and its effective application to the saving of lives from shipwreck, and also for his great services in superintending the trial of the rocket apparatus made on the Herd Sand on Wednesday the 18th instant.”

N.B. In consequence of the foregoing resolutions, and of the successful trial of Mr. Dennett's rocket apparatus therein referred to, the Central Committee in London have ordered several sets to be made, and to be stationed at various places in the district of Newcastle; which will add considerably to their annual expenses for life-boats, reward for saving lives, &c.

This Institution is supported entirely by voluntary contributions. Subscriptions are received by Messrs. Willis, Percival, & Co., bankers, Lombard-street. The office of the Institution is at No. 20, Austin Friars, London.

STEAM NAVIGATION TO INDIA.—The following are the resolutions of the Committee on Steam Navigation to India, as reported in the House of Commons:—

“1. Resolved, that it is the opinion of this committee, that a regular and expeditious communication with India, by means of steam-vessels, is an object of great importance both to Great Britain and to India.

“2. Resolved, that it is the opinion of this committee, that steam-navigation between Bombay and Suez having, in five successive seasons, been brought to the test of experiment, (the expense of which has been borne by the Indian Government exclusively,) the practicability of an expeditious communication by that line during the north-east monsoon has been established.

“3. Resolved, that it is the opinion of this committee, that the experiment has not been tried during the south-west monsoon; but that it appears from the evidence before the committee, that the communication may be carried on during eight months of the year, June, July, August, and September, being excepted, or left for the results of further experience.

“4. Resolved, that it is the opinion of this committee, that the experiments which have been made have been attended with very great expense; but, that, from the evidence before the committee, it appears that by proper arrangements the expense may be materially reduced; and, under that impression, it is expedient that measures should be immediately taken for the regular establishment of steam-communication with India, by the Red Sea.

“5. Resolved, that it is the opinion of this committee, that it be left to his Majesty's Government, in conjunction with the East India Company, to consi-