HARPER'S
NEW MONTHLY MAGAZINE.

No. CCXXVI.—MARCH, 1869.—Vol. XXXVIII.

POLICEMEN OF THE SEA.

INCHCAPE ROCK LIGHT-HOUSE.

THERE is no one of the many hard things which foreigners say of us more just than that in which we are accused of a criminal disregard of human life. The saying, which has come to be proverbial abroad, could have been made even more applicable if the words "and property" had been added. There is certainly no country of equal wealth and intelligence with the United States in which private individuals, commercial and benevolent associations, or state and national governments have done so little to organize means for saving life and property. We have invented, and possess almost exclusively, the best of steam fire-engines, yet have the least effective of all existing fire preventive and extinguishing organizations, and are absolutely without a marine or floating fire department, like that which gives such ample security to the magnificent docks of the port of London. We have the greatest length of railroad lines of any country in the world, and the least control over them by law or public opinion; ten persons

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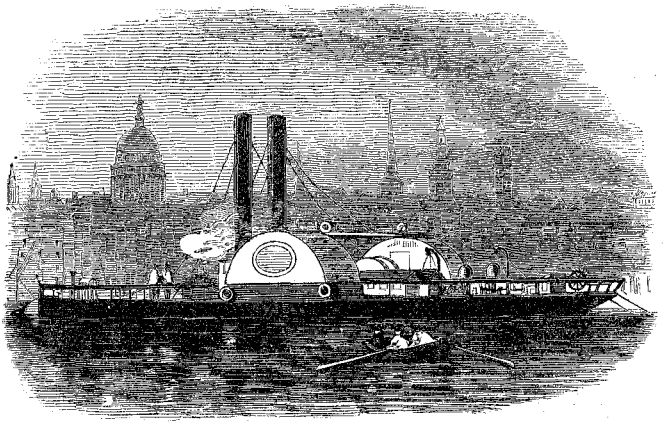


LONDON FLOATING FIRE-ENGINE.

are killed by the criminal negligence or parsimony of railway directors in this country to one in any other; yet not one-tenth as many of the guilty are punished with us as with the French, English, or Russians. We hold the maximum of military stations with the minimum of regular soldiers. We have more miles of inland navigation and a greater extent of sea-coast than any other nation, with the smallest number of light-houses. We are annually afflicted with more than our proportion of wrecks, and yet possess fewer life-boats than any other maritime power, and have no organized force of salvors. We have the highest tariffs, and consequently the greatest number of smugglers, with the smallest number of customs officers, and no coast-guardsmen, as preventives.

The sacrifice of life and property by conflagrations, railway and similar disasters on land, although very heavy, is comparatively insignificant if compared to the losses on our lakes, rivers, and sea-coasts, from causes which might be largely prevented. We have guarded against the lesser evil and shut our eyes to the greater. While the fire brigades of the various cities are large, and the railway force ample, the officers of the United States light-house establishment, the life-boatmen, the salvors or wreckers, and the customs detectives are really insignificant in numbers, and almost wholly without organization. The negligence which leaves our coast comparatively unlighted at night, its dangerous shoals and rocks unmarked by day—which makes no provision for the aid and rescue and comfort of seamen and travelers wrecked on our coast, and which permits the revenue of the country to be constantly affected by the inadequacy and incompetency of the customs employés and the too frequent change of the more experienced ones for political reasons, is culpable, wicked, and extravagant, and should be exposed and condemned. There is no department of the government which stands in greater need of prompt and vigorous reform than that which is responsible for the inefficiency of our "policemen of the sea."

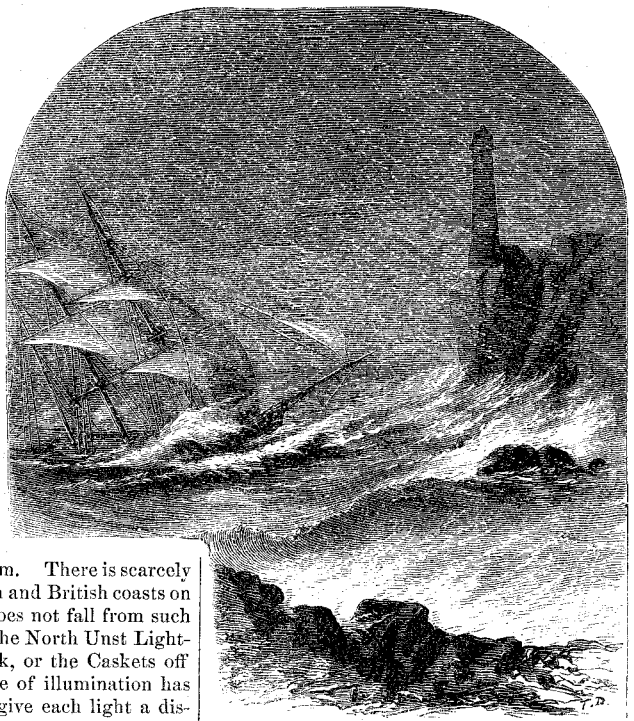
Mr. David Stephenson, the English engineer, and a descendant of the famous Stephensons, relates that on one occasion, while inspecting the light-houses on the coast of the Orkney Islands, he spoke to the master of the small boat which carried him in regard to the dilapidated condition of his sails. The man instantly replied, in a gruff tone and with an injured air,

"Had it been God's will that you came na here wi' your lights, we might 'a had better sails to our boats and more o' other things."

The same authority says that before the building of the light-houses complained of by this pilot, who had doubtless been a wrecker in more ancient and prosperous days, when only the bell of the Abbot of Aberbrothock warned sailors of their dangerous proximity to the Inchcape Rock, disasters to shipping were so frequent on that coast that the Orkney Island farmers and wreckers used claret wine instead of milk in their barley porridge, and fenced their farms with Honduras mahogany! They bitterly opposed the erection of light-houses on their dangerous coasts, and when remonstrated with for their inhumanity were wont to answer, complacently, "that if wrecks were to happen they might as well be sent to their poor islands as any where else." We appear to have fallen into the same complacent state of mind in this country. Our coast is very little better lighted than that of the Orkney Islands eighty years ago, and we do not display any greater disposition to improve affairs than the Orcadians did.

Commodore W. B. Shubrick, as Chairman of the United States Light-House Board, reports the number of light-stations existing on March 31, 1868, to be 486, with 695 keepers and assistants, directed and controlled by 12 inspectors, as many engineers, and 10 members and clerks of the Board in the office at Washington. The whole force is maintained, according to the report of Controller Brodhead, of the Treasury Department, at the annual cost of about $2,194,651 18, or about $4500 per light. Three hundred and sixty-six of these lights are along the Atlantic, Gulf, and Pacific coasts; but 45 of them were extinguished during the rebellion, and have never been relighted. The remainder are along the Hudson River, the only inland stream in the country which is lighted along its entire course. The highest light is visible at sea for only the distance of twenty-eight miles, and that one is on the Pa-

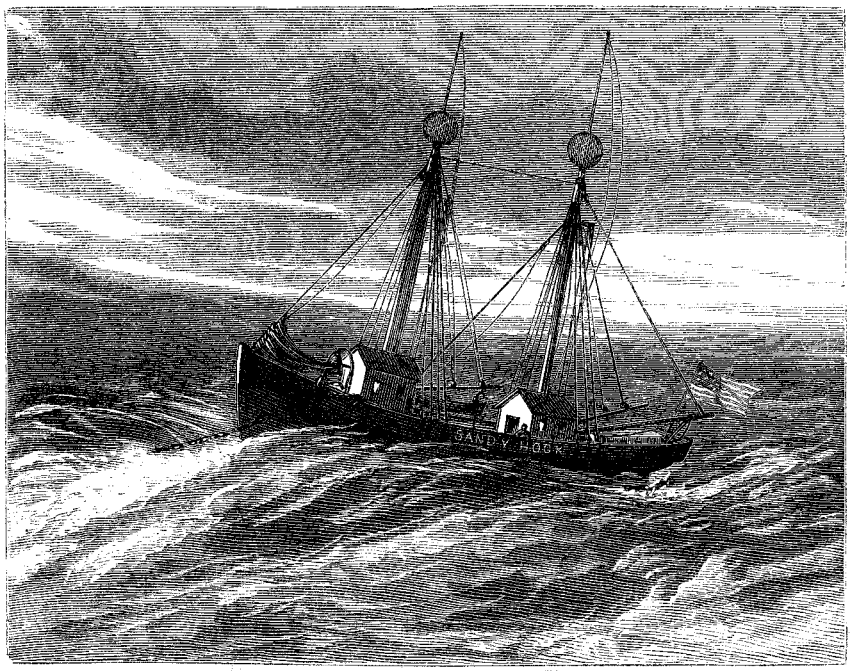
cific, the least frequented of our coasts. As guides to coasting-vessels these lights thus insufficiently distributed are, as a matter of course, wholly inadequate; they serve only to prove or correct the mariner's calculations of latitude and longitude at sea, and as guides to certain harbors and estuaries familiar to him from other fixed objects of nature far more reliable than the lights. Our coasters should never be out of sight of a light-house; and harbors and bays, like that of Boston and New York, should be at all hours as well lighted as in the daytime, or as nearly so as the best character of electric light can make them. There is scarcely a mile of sea on the French and British coasts on which the ray of a light does not fall from such magnificent structures as the North Unst Light-House, the Incheape Rock, or the Caskets off Alderney; and their mode of illumination has been so improved as to give each light a distinctive character, peculiar to itself, to prevent its being mistaken for any other. In this way a system of lighting has been established by means of which the mariner may navigate the English and French coasts by night as by day, in comparative safety.



"NOT LIGHTED."

Under our incomplete system our harbors and coasts are as dark as the boldest river-thief and smuggler could wish; the line of coast between the lights is never patrolled, and no lookout to sea is ever kept for endangered vessels. The light-house keepers are under no surveillance; they are really trusted to perform their highly important duties with only quarterly inspections. And then the various inspection districts are so large, and the inspecting force so small, that not only are the keepers not constantly watched, but often not examined for months. The regulation time for visiting each light-station is once a quarter, but the inspecting force is so inadequate that a new rule of the Board has been lately adopted extending the term to suit the inspectors' convenience. So inefficient, too, is the force of inspectors and supervisors that collectors of customs have been authorized to act as "Superintendents of Lights." Later still (the order is dated January 1, 1868) the Board has been compelled to ask mariners to play the spy on the light-house keepers. The order is a request "to mariners and others interested in commerce and the preservation of life and property from loss by shipwreck, to give prompt information of cases in which lights are not lighted punctually at sunset and extinguished at sunrise," etc. In other words, the mariners for whose guidance and protection the lights are supposed to have been built, are expected occasionally to make their dangerous way into an unlighted harbor to report the failure of the agent to do his duty. Too frequently, trusting to the faithfulness of the light-keeper, he sails on to eventually discover that a light has not been "lighted punctually at sunset" by running ashore at the foot of the unlighted tower. One is too forcibly reminded of the pilot who carried a vessel into a dangerous channel with which he was not any too well acquainted. The captain, suspecting danger and doubting the nautical knowledge of his guide, remonstrated with him. "I thought you knew every rock in this channel." "So I do," persisted the stubborn pilot. As he spoke the ship struck. "There!" he exclaimed, triumphantly; "didn't I tell you so? That's one of 'em."

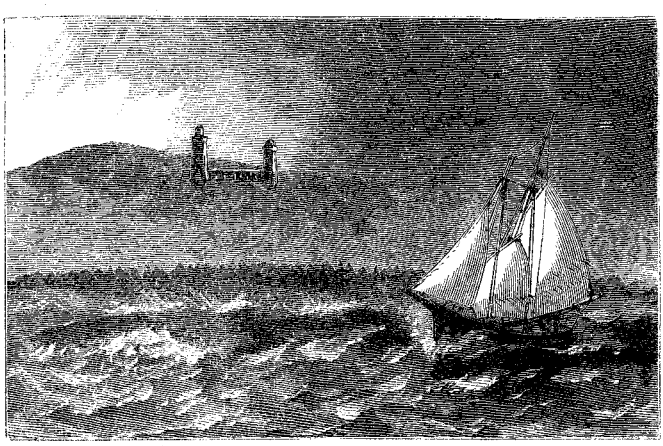
This very unreasonable request of the Board, which all mariners would be glad to comply with, is impracticable in consequence of the inadequate force of inspectors, and the difficulty of reaching them. Sailors are practical people, however, and they generally report information of this character at the nearest newspaper office; and it is mainly through the marine columns of the daily journals of the sea-port cities that the important information first reaches the inspectors, and the Board, and the seafar-



SANDY HOOK LIGHT-SHIP.

ing folk. I have more than once read in the ship-news columns of the New York papers notices of this sort in which it was stated that buoys, or beacons, or light-ships, had been missing from their places for a week or fortnight.

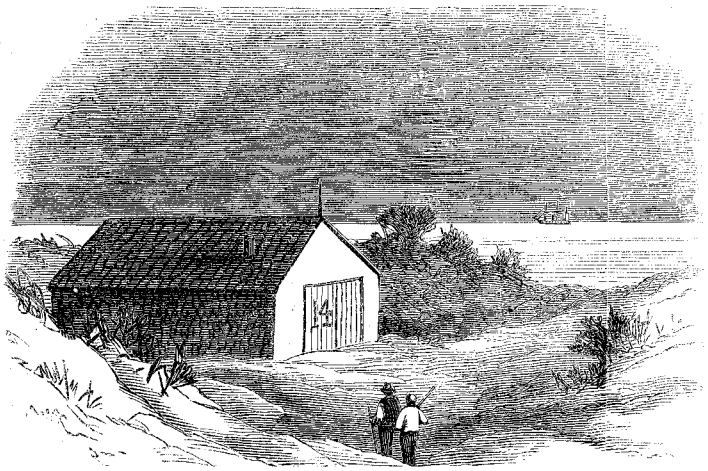
In the minor considerations of architectural proportions, beauty, finish, etc., the quarters of the keepers and their families, the quality of the lights, etc., our Government light-houses and ships are by no means equal to those of England or France, as they should be, and not superior to many less wealthy maritime nations. Sandy Hook light-ship, which stands like a vidette to mark, if not to guard, the entrance to New York Bay, is perhaps the best of all our light-ships, but it is by no means a superior vessel for its peculiar purpose. It carries two very uncertain lights, which mark the locality it is true, but shed no ray on objects temporarily near it, and with which passing vessels might come in contact. It has been more than once swept from its moorings and carried to sea. Of the remainder—there are only thirty-three in all—only half a dozen are of the first-class. Among them it may be interesting to mention the poor old shattered *Arctic*, in which Elisha Kent Kane made his famous cruise in search of Sir John Franklin. She was originally built for a light-ship, but was fitted up at the expense of the Government for the Arctic voyage. Upon the return of the expedition the engines were taken out of her, and she was sent to Smithville, North Carolina, to mark the entrance to Cape Fear River. The rebels seized and sunk her to obstruct the channel which she had been built to mark. She was raised in 1866 and re-



NEVERSINK HIGHLANDS LIGHT-HOUSES.

paired, and now, painted a dull lead-color, with her famous name blotted out, and the uneuphonious title of "Hen and Chickens" painted on either side, she marks the dangerous reef of that name off the Massachusetts coast. The two towers which stand on the Highlands of Neversink, New Jersey, and mark with great clearness the northern coast of that State, are fine structures of much architectural beauty; but they are, in this respect, the exception, and not the rule in our system. They are the highest light-towers on the Atlantic coast, being 248 feet above the sea, and next to Parrallon, Point Conception, and Point Bonita—towers on the California coast—the highest in the country. They are visible at sea for a distance of 19 miles. The keepers' houses here are very neat and comfortable, but the majority of those furnished are little better than huts. In fact, this service, of such incalculable importance to all commercial interests and to the preservation of human life, and which is worthy of the best service of the best men, is in every respect poorly rewarded, and due credit and honor has never been awarded to the self-sacrificing men who have had the immediate charge of our light-houses. "A stormy night," says David Stephenson, "may rudely drift the sleet against our windows and disturb our rest; and perhaps our sympathies may be awakened for the men who patrol our dark streets as guardians of our property; but seldom in those dismal nights do our thoughts extend to the solitary outposts of our land, where, confined to the narrow cabin of a light-ship, or watching in towers perched on bleak headlands or sunken rocks, the true guardians of the country's naval greatness keep their quiet and unostentatious vigil, unthought of because remote and unknown. Whether we consider the important position which our light-ships occupy among the tortuous channels leading to our great ports, or the calm endurance of their ever-tempest-rocked inmates, they can not fail to arrest our interest, and inspire us with thankfulness that men are found ever ready to discharge the most unenviable duties in the important and humane work of protecting the lives of our hardy seamen." The life is one of great hardships, often of danger, and always of care and watchfulness. The man who accepts it must necessarily isolate himself from all the world save his own family, and be content with the society of wife and children only. Generally the men who obtain appointments as keepers are old sailors with families, and their sons, and sometimes their wives and daughters, figure on the pay-roll as assistant keepers. Often it is on the wife and daughter that the whole duty devolves, for the men and boys have often to eke out the subsistence of a large family in other ways. Attached to each dwelling, when the keeper's residence can be built apart from the tower, is a small garden, which the keeper cultivates. He is generally a fisher also; and often in the gloom of night, or that still darker gloom of the storm, the women trim the lamps weepingly.

LIFE-BOAT STATION.



STATION-HOUSE AT BARNEGAT.

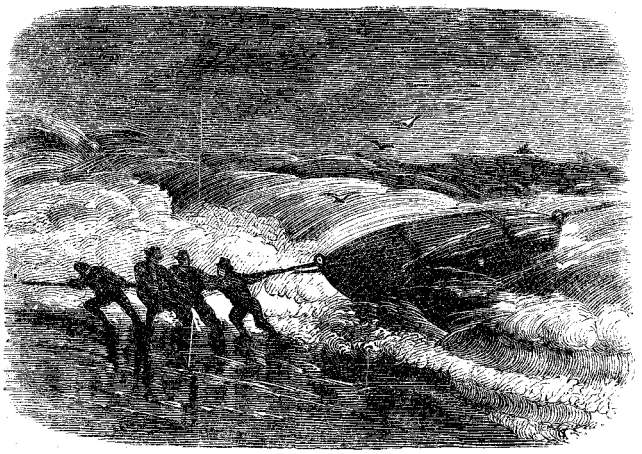
The most neglected branch of our coast service is that which, in all senses, must always be the most important. The life-boat service of the United States, when compared with that of any other nation—whether with "La Société Centrale de Sauvetage des Naufrages" of France, or the "Royal National Life-Boat Institution" of England—is a reproach to the Government. We maintain on our entire coast-line only twenty-four life-boat stations; these are located at the most exposed and dangerous points, but of course in number are wholly inadequate for the purpose. An error not less disastrous to the efficiency of the service is the entire dependence on volunteer efforts in the saving of life. In the vital matter of the national existence we have depended, and may always depend, with confidence in the volunteer military system, but we have found it necessary to have educated and experienced men to direct it. Our life-boat has no such direction. I have seen it stated that the Government employs for each station an officer who takes care of the boat and apparatus, and who in an emergency directs the volunteer crew. I can, however, find no authority for the statement. The stations seem to be left to take care of themselves; and the boats are manned solely by coast farmers, wreckers, light-keepers, etc. There is no reward, pecuniary or honorary, held out to induce any one to save life. A rule of the Admiralty courts renders it necessary that a wrecker in establishing his claim for salvage shall prove that he endeavored to rescue all life endangered before attempting to save property; but this is the only regulation which makes it to the interest of the wreckers to do duty in the life-boats. The hope that rescued persons may prove generous is doubtless an incentive which induces many wreckers to risk their own to save other lives.

The life-boat stations are scattered along the coast, each being numbered. They are generally, but not always, near a light-house or settlement of wreckers, and one of these or some coast farmer or the light-keeper is supposed to have the boat and car and rocket apparatus in charge. Each station-house contains, besides the life-car and life-boat, a sufficiency of kindling-wood or "pine knots" to build a fire in an emergency, rockets to be fired as signals to assemble crews, some rough clothing, medicines, etc. The boat and car are usually mounted on wheels in order to be carried to distant parts of the adjacent coast, but no horses are maintained at Government expense to draw them, those of the nearest farmer being "pressed into" the "volunteer" service.

The life-car is a peculiarity of the American service, and is due to the inventive genius of Joseph Francis. A full account of this very useful invention may be found in this Magazine for July, 1851.

It is difficult to speak of the efficiency of this part of our system, for the simple reason that no reliable data can be obtained from any sources as to the number of lives saved by this means. I asked Mr. J. C. Smith, of the Merchants' Exchange and News Association of New York, from whom I received many of the statistics used in other parts of this article, if he had ever kept any account of the losses of life by shipwreck. "No," he answered. "I did attempt to do it, but I found they were not wanted. Nobody here cared for those figures. I have to condense my statements for the papers and the Board of Underwriters, and the column of 'lives' didn't pay for the room. This, you know, is a mercantile, not a humane society." Not even the numbers of lives lost annually is obtainable. I have found memoranda, among other documents in Mr. Smith's possession, of the lives lost in particular wrecks, as, for instance, in that of the *Arctic*, when 300 souls perished; the *City of Glasgow*, 420; and the *Austria*, 500! In one month of 1861, in which

38 vessels were wrecked, the loss of life was put down at 200 and marked "very heavy." If the average for each week is put down at only thirty lives, it can be shown that during the last ten years 14,649 persons have been lost in American vessels, or about 1500 a year. Think of five drowned bodies being cast daily upon the sands of our coast! Is it any wonder that, before the sun is above the horizon, the industrious wrecker can be found making his "morning round" in search of what fortune the sea has thrown him from her depths? Is it to be wondered at that, grown callous and cold-blooded in long years of intimacy with disaster and death, he sometimes takes his fortune from the pockets of him who will need it no more?



THE LIFE-CAR IN ACTION.

The only official data obtainable at the proper department at Washington are in relation to the number and cost of the stations. Both figures are ridiculous. In 1867 the number of stations existing was twenty-four, and their cost to the Government was $17,155 54, or $714 40 each, though it is probable that the additional expense to the New York Board of Marine Underwriters, which supports the stations in connection with the Government, was much greater.

The recovery of shipwrecked property is very little better provided for than the rescue of human life; and only the pecuniary reward held out in the shape of salvage makes the wrecking service in any degree superior in effectiveness to that of the life-boat. The same complaint which has been made in regard to official ignorance on the subject of the life-boat service is applicable to the wrecking service. Although courts are maintained by the Government at heavy expense to license salvors and to adjudicate their claims, no information is obtainable as to the number of wreckers licensed, amount of salvage awards, the location of the wrecking stations or the regulations governing them, the number of wrecks on the coast annually, the value of property recovered from them, or the number of lives lost or saved. Such a thing as a wreck chart, like the most interesting and highly valuable one which the English Government publishes annually for the guidance of mariners, appears never to have been heard of at Washington, and the hydrography of the Smithsonian Institute is mainly confined to the preparation, two years in advance, of a nautical almanac without the slightest practical value to nine-tenths of the mariners in the merchant service.

I have been enabled to obtain a table of wrecks of American vessels for the past eleven years from Mr. J. C. Smith, which may be relied on as accurate, the figures having been obtained from owners and insurance agents interested in the lost vessels. This table will be found on the next page.

THE MORNING ROUND.

These figures are enormous, and if they were accompanied by the numbers of lives lost would be appalling. The average of vessels lost or partly lost, it will be seen, is over 35 a month, or one a day; in money, the average loss is nearly $1,500,000 a month, or $50,000 per day.

WRECKERS' HUT AT BARNEGAT.

Enormous as this may seem, it is but an insignificant portion of the total casualties of the whole world. In the year 1866, when the total loss of American shipping was 571 vessels, the total casualties of all countries was 11,711. In 1867 our loss was 536 out of a total loss of 12,513 vessels. Of course many of these are but partial losses. Those which attract attention by their magnitude and appalling character are but a small portion of the whole number. I do not mean to say that all of these wrecks happen on our coast. I can not even say what proportion of them do. Twenty per cent. of the 2343 vessels totally lost during the year 1867 were wrecked on the English coast; but it must be remembered that over seven hundred vessels begin or end "over-the-sea" voyages in English ports every day. The loss on the American coast for the same year is said to have been not over three per cent., about seventy vessels, or say about $3,500,000.*

The legal principle involved in the system of salvage prevalent not only in this country, but throughout the world, is a very simple one. If a person finds a sum of money on the street, both law and morality require him to return it to the owner without asking a reward; it was found without risk or expense, and there is no ground on which to base such a claim. But if a ship-captain at sea finds another ship abandoned as lost he may take possession of her, tow her into port, deliver her to her owners, and claim a certain portion of cargo and ship as a reward or as salvage. If a policeman of the city finds a lost child he is legally entitled to no reward, since the recovery of lost children is a part of his duty; but if a "policeman of the sea," cruising his beat in a wrecker's sloop, goes to the aid of a ship in distress he is entitled to a certain share of the proceeds of the sale of the property he may save. The amount awarded by the Admiralty courts having jurisdiction in such cases depends on the following circumstances: first, the degree of danger to the life of the salvor; second, the risk to the property of the salvor; third, value of property saved; fourth, dangerous condition of vessel when saved; fifth, skill displayed by the salvor; and, sixth, the time and labor expended. The average compensation to salvors in this country is said to be something less than fifty per cent.; that is, the salvor is entitled to recover the value of nearly one-half of all he saves; the rest goes to the owners and underwriters, or insurance agents. In 1855 the *Crescent City*, a very large ship from this port, went ashore on the northernmost point of the Bahama reef. The Bahama wreckers, chiefly negroes, saved about $90,000 of the cargo before the vessel went to pieces. The salvage award was 65 per cent. This, and the governor's and the consul's claim, and the auctioneer's fees, left the owner, M. O. Roberts, Esq., five per cent. only of what was saved.

There are said to be about 4000 men engaged in the wrecking business in the United States, but I know no means of fixing the actual number. The great mass of the wreckers of this country live on the most dangerous parts of the sea-coast, a large majority of them being located on the Atlantic. The Maine and Massachusetts coasts, interspersed and broken by numerous islands, are favorite resorts. There is a large colony of them on Nantucket Island

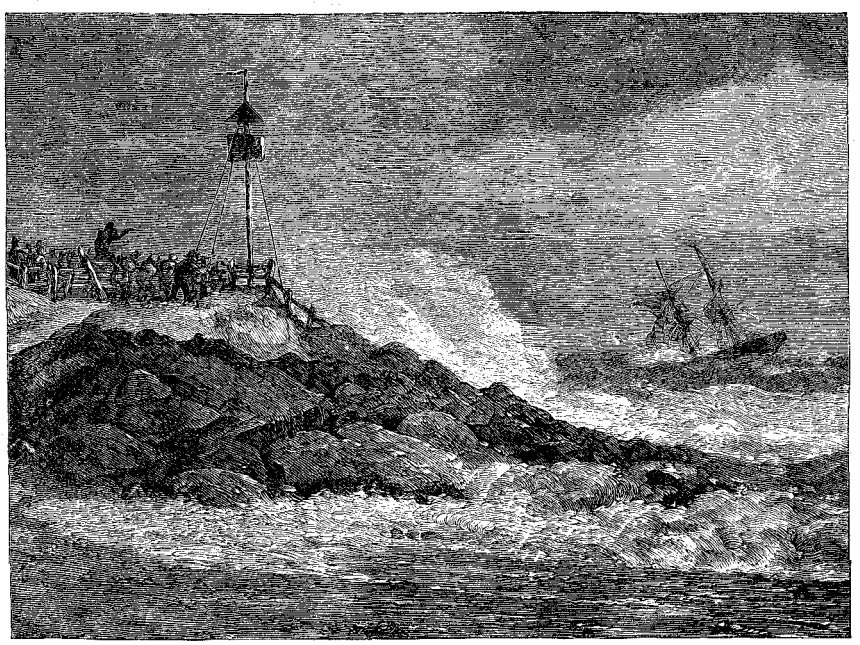
* TABLE OF WRECKS OF AMERICAN VESSELS FROM 1858 TO 1868.

Year.	*No.*	*Value.*
1858	355	$8,897,665
1859 (9 months)	300	8,389,271
1860 (11 months)	405	12,011,030
1861	558	17,367,100
1862	452	12,765,060
1863	452	20,531,800
1864	495	20,449,850
1865	502	33,794,300
1866	571	31,056,100
1867	536	21,742,200
1868 (9 months)	257	11,698,500
Total, 10 years 5 months	4883	$198,702,876

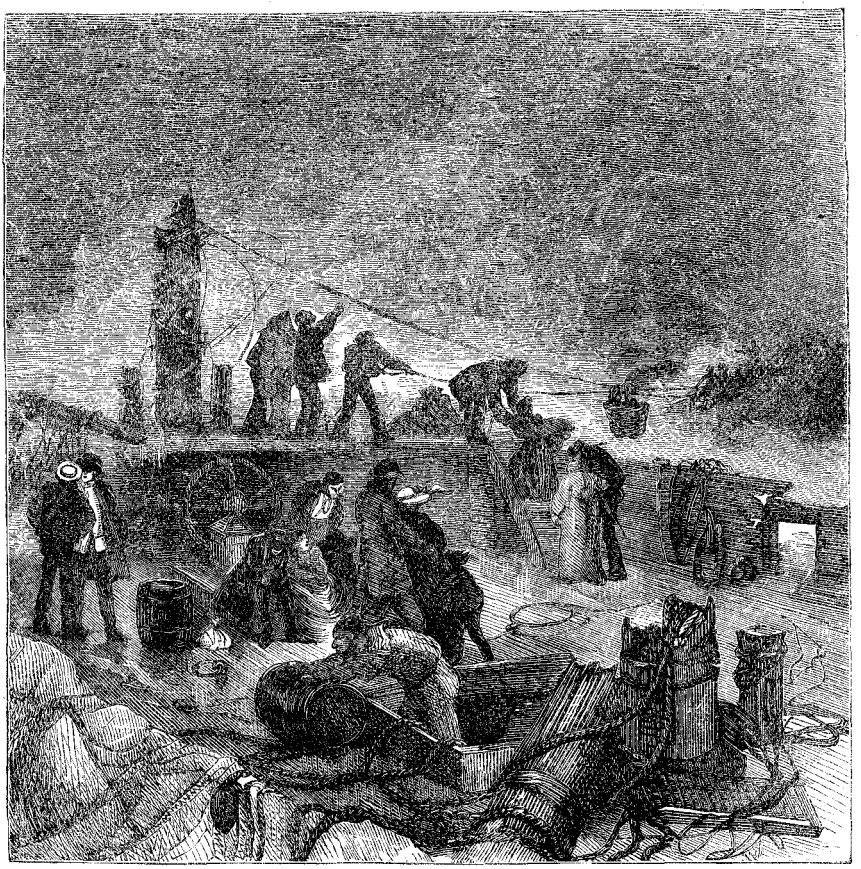
—the region of Martha's Vineyard Sound being one of the most dangerous on the coast. The wreckers' huts, half buried in the sand, may be seen at Barnegat, and along the numberless other inlets of New Jersey, in a profusion which clearly indicates the dangerous character of that coast. Indeed, the whole coast of the "pocket" formed by Long Island, New York, and New Jersey, is well peopled with wreckers, who know that it is one of the most dangerous localities in the country. Key West is also a favorite locality with them, and a large fleet of wreckers' craft may always be found cruising among the dangerous reefs of that region.

The organization among the various colonies of wreckers is not very extensive or complete. A few chief ones are owners of schooners and sloops about the usual size of pilot-boats—say from 20 to 80 tons—and give employment to numerous others. To stimulate the crews to activity no wages are paid, but each man has a proportionate share of the earnings of each cruise, after a certain part is set apart for the "flag" or vessel. As a general rule the most of the wreckers are what would be called "hard characters." They are usually old salts who have found life before the mast unendurable in consequence of the discipline necessary aboard ship. They are by nature brave and daring to an extent bordering on recklessness; careless of the present and indifferent to the future; too easy of conscience and too free of hand; their interests make them enjoy "a strong wind with a nasty swell and hazy wither;" and they look forward with keen zest and eager expectation for the wrecks which swell and fog will bring; yet they are not wholly hardened in feeling. They will spring as readily to rescue life without reward as to save property for pay, and they hesitate not to face any danger to save life. They do it from a love of adventure and its excitements; the dangerous occupation by which they live is the labor of all others they most delight in, and its very hardships and dangers are charms to natures like theirs.

On the low flat coasts, which they most frequent, the storm signals at night or the gun by day readily concentrates the wreckers, in common with the other coast residents, for action in succoring a doomed ship. Owing to the provisions of the law which makes it their interest to save life before property, their first effort at succor, even when their humane feelings do not prompt it, is made in connection with the life-boatmen. Where the facilities of life-boat and life-car are at hand, the wreckers form no small proportion of the crews which risk life in the life-boat; and they are to be found hauling at the rope attached to the life-car. When the apparatus for the preservation of life is not at hand, the best means possible are resorted to. A frequent means of conveying a cable from the ship to the shore is to throw overboard from the former a cask, to which the line is attached. The cask is cast ashore by the waves, and the cable, seized by the wreckers, is soon stretched from ship to shore. A hardy sailor from the ship, or a wrecker or life-boatman from the shore, makes his cat-like way along the line, dragging a second line with him. To this is attached a strong



THE STORM SIGNAL.



WRECKED AND WRECKERS.

basket, or box, or hammock, or any available article to be had on ship or shore; it is swung with block and tackle to the cable, and, human-freighted, it is dragged through the storm to the shore. A second line is attached by which to draw the improvised life-car back again; and it continues its trips until all are saved. The rescued persons are at once taken to the nearest huts, if a government station is not at hand, and are there attended by the wives and daughters of the wreckers. Persons are frequently carried to the wreckers' huts even when a government house is near by, for two reasons: the government houses are very seldom in proper condition to receive weak and exhausted persons; and, in the second place, the rescued persons who are carried to the wreckers' houses may prove to be rich and generous—or they may be robbed! There have been many complaints that the humane actions of wreckers in thus caring for rescued persons cloaked designs of robbery; but I am disposed to think that the motives which prompt such conduct in nine cases out of ten do honor to the wreckers.

All life being rescued the work of saving property at once begins. If the sea is too heavy to admit of a sloop approaching the wreck the life-boat or improvised car lands a few of the crew on the vessel, and every part of the cargo which will float and which will bear wetting is thrown to the waves, and by them carried ashore. Here they are gathered together for future appraisement by the underwriter's agent. They are not broken open and rifled as most persons suppose, but placed under strict guard. Occasionally a basket or two of wine suffers, and the wreckers have "a good time," or a bale of cotton goods or a case of clothing is sometimes confiscated to immediate wants; but the risk incurred of losing all salvage awards by such petty robberies renders them of infrequent occurrence.

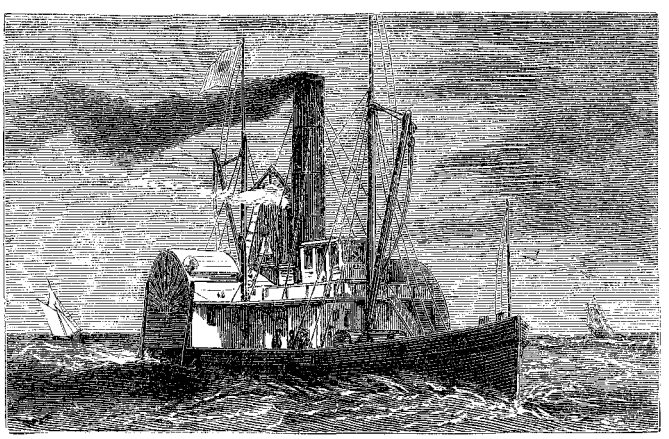
When calmer weather permits the approach of the boats, the stripping of the wreck, if it should not have gone to pieces in the storm (the former process is resorted to only when it is probable that the ship will be totally destroyed), begins in grave earnest. The wreckers' sloops swoop down upon it like carrion birds upon a carcass, and gathering about it, take on board all the available cargo, and such of the rigging and appointments of the ship as are worth preserving. When only the bare and empty car-

cass is left it is abandoned to the winds and waves, and to time which rots it, if the other elements do not scatter it far and near.

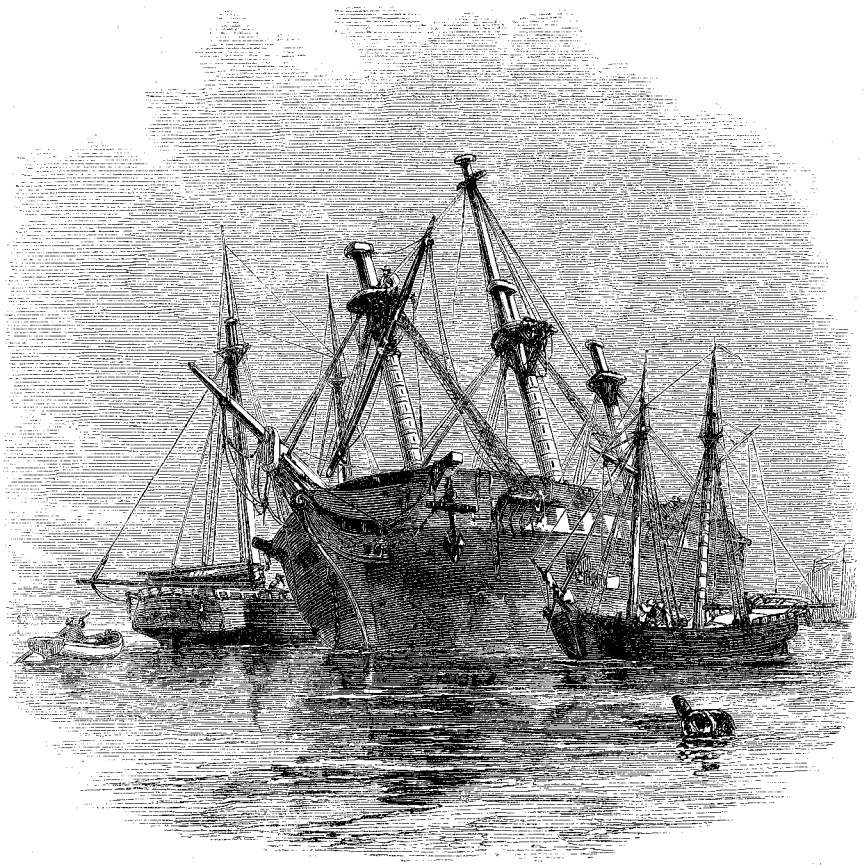
The foregoing account and description of wrecking applies to a system as old as wrecks themselves, but one which is still in existence in nearly all parts of the world. Of late years considerable has been done in the way of organizing and systematizing the wrecking service in certain localities by the establishment of large wrecking companies. There are several such companies now existing at this time in Boston, New York, Norfolk, and New Orleans. Each company has a fleet of steamers of all sizes and all kinds, fitted up with immense pumps for exhausting water from the hold of sunken ships, and a fire apparatus for extinguishing flames. They have also the various lifting powers—from the old style casks and the blocking process to the hydraulic press and the "gutta-percha pontoons." The latter article is a unique invention. The "pontoons" are shaped like a balloon, covered with netting, and attached by hose to air-tanks. A number of them are sunk and attached to a submerged ship by the divers, and being simultaneously inflated with air they lift the ship to the surface. Other means have been found to be cheaper than this, and the "pontoons" are now little used.

As a general rule these boats can not always afford immediate aid in saving life, but the arrangements of the best companies are such that assistance is dispatched in a few hours after a wreck occurs. And in some instances life has been saved. In November last the large packet-ship *Isaac Webb* was rapidly drifting ashore at Sandy Hook in a heavy gale, and was in imminent danger of going to pieces in the breakers. The wrecking-boat *Philip*, belonging to the Submarine Wrecking and Towing Company of New York, was cruising in the vicinity at the time, and, seeing her signal of distress, ran alongside, dangerous as the operation was, and attaching a cable drew her from the reef into deep water, where she sank. "Had the *Philip* been half an hour later," said the captain, "many lives must have been lost." Such instances of prompt aid are necessarily rare, since the vessels can not always be near at hand; but in the ordinary course of business, so perfect are the arrangements of the New York company, that only a few hours elapse before assistance is sent. On Nov. 4, 1868, the packet-ship *Frontier* went ashore at nine o'clock A.M., near Hempstead, Long Island. The telegraph announced the fact to Captain Samuel Samuels, the President of the Submarine Company of New York, at half past nine, and at ten o'clock the wrecking-boat *Rescue* was under way to her aid. The schooner *Mary E. Williams* went ashore at Jones's Inlet, Long Island, and springing a leak, soon had seven feet of water in her hold. The disaster occurred at two o'clock A.M.; at twelve o'clock the same day the pumps of the wrecking-boat *Philip*, Captain Charles Hazzard, were at work on her, and at four o'clock A.M. on October 13—twenty-six hours after the disaster—the schooner was being repaired at the dry-dock in New York. The arrangements are such, indeed, that the organized companies at a distance can act, as far as saving property is concerned, almost if not quite as soon as the wreckers on the very scene of the disaster.

The system of the various companies is not a little singular. The Boston company has a general supervision of the coast of New England; the *beat*, so to speak, of the Submarine Company of New York extends from Montauk Point, Long Island, to the capes of Virginia; Norfolk companies watch the coast to Hatteras; the old style wreckers at Key West cruise in their sailing vessels along the rest of the Atlantic coast and the Gulf coast as far as Mobile; thence westward the New Orleans companies claim and exercise jurisdiction. Let us take one of these beats as an illustration; that, for instance, of the New York company along the Long Island, New Jersey, Delaware, and Maryland coasts. The company has boats stationed at New York, Sandy Hook, Barnegat, and Atlantic City; and along the entire line of coast, living within sight of each other, numerous agents who daily patrol the coast on the look-out for wrecks. After every gale from the east the boats cruise along the coast in search of vessels in distress. Every morning the coast agents of the company, who are generally old farmers or fishermen living along the coast, are out with their glasses on their beat. If they



STEAM WRECKING-TUG.



WRECKERS AT WORK.

discover any vessel ashore or in distress they hastily ride to the nearest telegraph station—a line runs the whole length of the coast—and send a dispatch giving the information. This dispatch is addressed to the President at the head-quarters of the company, 62 South Street; but it is also "dropped" at all the boat-stations, so that the boats may be ready to act on orders from Captain Samuels. On the receipt of the dispatch the President sends by telegraph orders to the nearest boat to proceed to the aid of the wrecked vessel. The process pursued on the arrival at the wreck depends on the condition of the vessel to be aided, and is not materially different from those heretofore described. The superior arrangements and facilities of the company's steam-vessels enable them to act with more promptitude and effect than the coast wreckers with their sailing vessels.

The organization of companies on the plan of the New York Submarine is rapidly producing a great change in our wrecking system; and will doubtless lead to the invention not only of superior appliances but superior boats. The business of these companies is already extending so rapidly as to lead to the hope that in a few years hence the whole United States coast will be patrolled by the steam wrecking boats of organized and responsible companies as regularly as by the sloops and schooners of the old style wreckers.

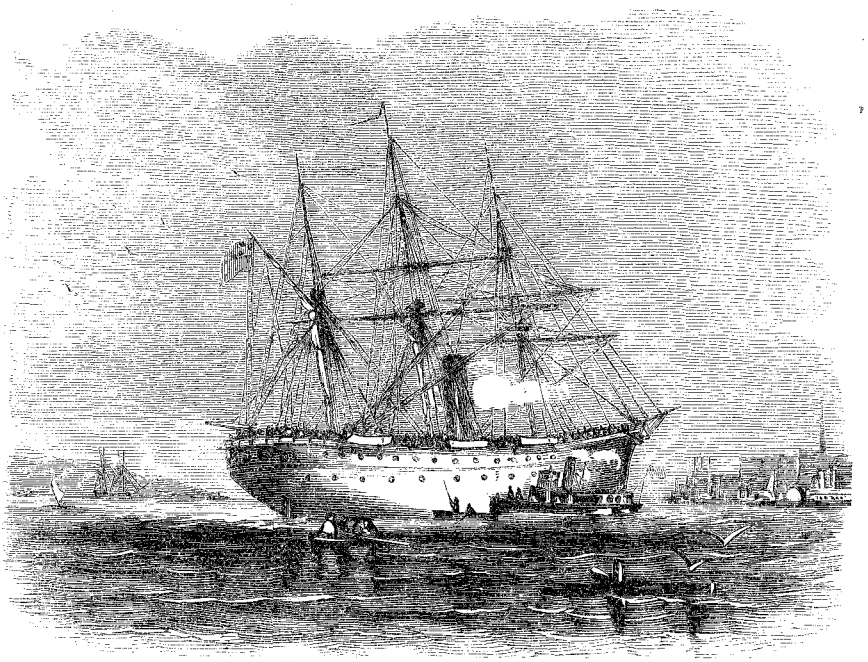
It is a principle of maritime law that no claim for salvage can be established unless proof is adduced of the abandonment of the wreck by its crew, or that the captain or master in command has asked by signal or otherwise for assistance. Often when vessels have been run ashore, or are stranded on a shifting sand or sunk in shoal water, a master may decline assistance from the salvors, or may make a special bargain with them to aid in getting him off. Sometimes the wreckers, on the other hand, persuade a captain, unacquainted with the coast, to abandon his stranded vessel, and then taking advantage of their knowledge of the sands and the tides they manage to get her off and claim salvage. Of course these parleys are held only in regard to vessels to which there is no immediate danger, or where life is not in peril.

Those peculiar "apostles of free trade," the smugglers, have always had their apologists.

Even Buckle, in his "History of Civilization," in portraying the condition to which a too high protective tariff had brought England, has suggested an excuse for them. Blanqui, an extremist among free trade economists, has boldly declared that "to smuggling it is owing that commerce did not perish under the influence of prohibitive laws." The sternest moralist returning from Havana may argue himself into carrying a few hundred cigars above the legal allowance, and yet be thought none the less moral by his fellow-smokers; and one rather admires the tact of the charming creature who tells him, without a conscious blush or the slightest twinge of conscience, that her rich Valenciennes was smuggled from France on some other part of her handsome person than that which it now adorns. But governments have never been known to talk of smugglers in apologetic terms, or look upon their deeds with pardoning smiles. Our government, though peculiar in many respects, is not singular in this, and the most perfectly organized department of our police of the sea is the Revenue Service. The Treasury Department may fail to oil its lights and restore its light-houses, and forget to man its life-boats, but its revenue marine is comparatively full and well served. Still, it is inadequate for its duties.

The extent of smuggling, and the consequent loss to the revenue of the United States, can not from the very nature, and doubtless from the magnitude of such operations, be enumerated in figures. The facilities for smuggling on our extended and varied frontier are so great that it is utterly impossible to entirely suppress and exterminate the smugglers. Mr. Nathan Sargent, United States Commissioner of Customs, and the officer charged with the prevention of smuggling, has declared that the proposed repeal of a law offering inducements to citizens to expose smugglers of whose operations they may become informed, will make "smuggling not only a highly profitable business, but one that may be prosecuted with comparatively little risk." If the additional inducement of a high protective tariff is added, it is the opinion of men experienced in trade and political economy that we will soon become a nation of smugglers. The first step has been taken since Mr. Sargent wrote, and the second may yet be. At various times extensive combinations between large merchants in this country and others in Europe have existed by which the payment of duties may be avoided, much to the damage of all honest merchants. Unwise legislation on this subject may not only extend these, but turn our coast farmers and wreckers into ready and willing aids, or at least lead them to countenance the operations of the smugglers. If the coast residents have no inducements to expose villainy they will not go to expense and trouble to do it; and they will as certainly fail to complain of, or object to, the midnight impressment of their horses and wagons for the conveyance of contraband goods, as is now sometimes done, if an apology for the rudeness in the shape of a bolt of goods or other valuables is left in their stead. "No one," said Commissioner Sargent, alluding to the fa-

THE BARGE OFFICE, NEW YORK CITY.



BOARDING A STEAMER.

cilities for smuggling on our coast, "can fully realize them who has never traveled along our northern boundary line from Eastport, Maine, to Port Angeles, Washington Territory, a distance of from three to four thousand miles, or who has never attempted to stop blockade-running along our southern coast. But perhaps, after all," he adds, "the port of New York—a labyrinthine world of itself—affords as great, if not greater, facilities for defrauding the revenue, by evading payment of duties, as any other locality; and I have reason to believe that the most of what is done there is done on a large scale." And also on a small scale too, if we are to judge from the same officer's report; for he states that of the $1,268,140 40 of seizures made in 1867 by inspectors of passengers' baggage in all the ports of the country, $731,070 35, or considerably over one-half, was made in the port of New York alone.

To prevent smuggling the Government maintains a fleet of steamers, which is called "the Revenue Marine." It consists of 43 vessels, comprising 25 steamers and 18 sailing vessels. The majority of the steamers are large, ranging from 350 tons burden upward to most unwieldy monsters, and all painted black from stem to stern. Four of the steamers, however, are small steam-tugs employed in special boarding and inspecting service at New York, Boston, and New Orleans. The cutters are almost too large, and they are really intended rather to collect the revenue than to prevent its spoilation by smugglers. "They can be seen afar off," says Mr. Sargent, "by the small craft, by means of which smuggling on the coast is done, and long ere the cutters can descry the latter they have taken shelter behind some island, run into some inlet, bayou, or river, within ten miles of which, perhaps, the cutters can not approach. What is needed, in place of these large and very expensive steamers, is small, light-draught boats, that have speed enough to overhaul any water craft, and which will require not more than five hands to man them. With such crafts smuggling along the coast may be prevented; with those now in the service, never."

The manner in which the Marine is used can best be explained by describing the operations of the inspectors in port—say in that of New York. The inspectors and special agents and detectives are required to assemble daily for duty at the Revenue Barge-office, a small, dingy, white, and peculiarly-shaped building located on the Battery, at the extreme southern end of New York city. Here one of the two tugs kept for boarding purposes is always in waiting. When a steamer is telegraphed from Sandy Hook as entering the harbor the tug steams up, and with its detail of inspectors, varied in number according to the size and character of the steamer arriving, puts off to meet the spoken vessel. When the two meet, the steamer, recognizing the Revenue flag with its vertical stripes, at once comes to; the tug runs up alongside, and the inspectors march boldly on board; that is, most of them; but one at least of the

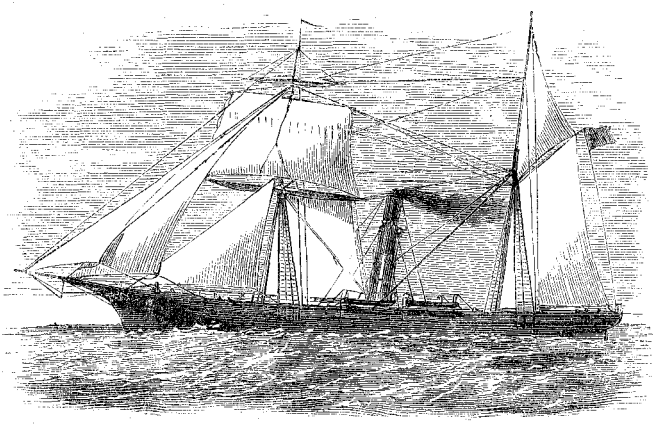
more experienced detectives *smuggles* himself on board unobserved, and at once mingles among the passengers. He observes the actions of each, and picks out, with educated eyes, every smuggler on board; the old ones he knows; the amateurs betray themselves by manner if not by word. In the mean time the chief of the inspectors has examined the passenger-list, and is prepared to begin an examination of the baggage. On reaching the dock communication with the shore is prohibited; the passengers become prisoners, and baggage for once takes precedence of owner. When all the baggage is on the wharf the examination begins. Owners are called upon to point out their trunks, the keys are demanded, and the contents examined. When the passenger is suspected by the special detective, who conveys his suspicions to the inspectors by signs, or by the inspector himself in consequence of nervous manner and uneasy movements, the trunks are searched a second time more thoroughly, or perhaps the person of the passenger is also examined or "gone through." Where nothing contraband is found the trunks are passed through the gates of the dock and the passenger is at liberty. If contraband goods are found, but the manner of the owner leads the inspector to think he is ignorant of the fact, he is allowed to pay the duty and carry off the goods. But those dutiable goods found in suspicious quantities or places in the trunk or on the persons of individuals go to enrich the Government. Professional smugglers have been frequently captured in this port with fifty or more gold watches on each of their persons, with diamonds secreted in their boot-heels, and lace sewed in lap-rugs, soiled linen, and under-skirts. The present system of special inspectors has been only lately introduced, but its signal success will probably lead to its extension. The $1,268,140 40 of extra seizures made in this way in 1867 cost the Government an extra expense of only $116,582, showing a net profit for that year of over a million of dollars to the Government.

The most effective part of the system for preventing coast smuggling belongs to the land service. By an old law of 1799 he who gives information upon which seizures and forfeitures are made is entitled to one-fourth of the forfeiture. It is this hope of gain which has induced farmers, fishermen, and wreckers to give information to the officers of customs of smuggling operations near their habitations. They give such information invariably under an assurance that their names are not to be made known; otherwise their property, if not their lives, would be in danger. In 1867 Congress in part repealed this law by withdrawing the pecuniary inducement. The effect is not yet visible, but it is not difficult to conceive what it will be. Legislation on this branch of the coast service has not been much wiser or more liberal than in the other not less important departments.

We might take a wise lesson in this matter from England. An organization on our coast similar to that known as the Coast-Guard of England would largely add to the efficiency of the light-house, life-boat, salvage, and customs services of the country.

The English coast-guard was first organized during the time of Napoleon I., and was originally intended to defend the coasts from sudden descents of the enemy, and to give warning of the approach of his fleets. The whole coast of England was patrolled day and night, and a semaphoric telegraph, or series of signal stations, encircled the "tight little island," rendering communication easy and rapid. When Napoleon died the English did not disband their coast-guard, but employed it in another direction, and attempted with it to baffle the schemes of the smugglers. At that time smuggling was very remunerative and extensive. The annual sum lost to the British Government by the importation of contraband goods from France alone was estimated at $4,000,000 in gold. In 1822 fifty-two vessels as blockaders, 1500 men of the navy, and the whole coast-guard were engaged in suppressing smugglers. But in the end it was found that the expense of this preventive force was larger than the amount saved to the customs. The free traders came into power, and successive reductions in the duties put an end to smuggling in a cheap, legitimate way. But still the English did not disband the coast-guard; it was employed in still another direction, and was ordered to do battle with the tempests!

The coast-guard is now, and has been since



REVENUE CUTTER ON PATROL.

1857, when it became a part of the Admiralty and ceased to be a branch of the customs service, the marine police of England. It forms both a fleet and an army. The fleet consists of 38 watch-vessels, 12 guard-ships, and 48 cruisers. The force of the army I do not know precisely, but it is near 4000 strong. The coast is divided into districts, each commanded by a captain of the royal navy, with the usual sub-officers as staff. Each district is divided into stations, at each of which a certain proportion —from 10 to 15 men—of the force is lodged. The stations consist of groups of five or six cottages, surrounded by a wall and fronting the sea, and a watch-tower furnished with telescopes, etc. The wives and families of the guardsmen live with them in their cottages free of rent. The pay I do not know, but believe it is about the same as that of a man-of-wars-man, which the guardsman must have been for seven years, and in which he must have distinguished himself, before he can get into the coast service. They are not admitted after the age of 35 years, nor retained after 65, but pensioned ($100 per annum) after twenty years' service. It is the riches cast up by the sea which is the chief reward of the guardsman in active service. In cases of wreck, after all life is saved, the guardsman is permitted to do duty on his own account as a wrecker, and not a little of the aggregate salvage awards of England are made to the coast-guards.

Their duties are simple, but often dangerous. The navy cruises along the coast, keeping a look-out for ships in distress, and a sharp eye on suspicious vessels. The force on shore has little to do by day but to walk the beat or district, watch through their telescopes the sea and the clouds for ships and storms, and to communicate with the next post. At night the coast-guardsmen on their beat watch the light-houses and report their condition—thus proving constant spies on the keepers, and securing, by this surveillance, the faithful execution of their most important duties. They observe and report the movements of all suspicious craft, and by means of the electric telegraph, which now surrounds Great Britain, pass their information from station to station. They watch the barometers, and all the other natural and scientific storm indicators, and telegraph every meteorological change to Greenwich Observatory and the Admiralty House. They man in an emergency the life-boats which are attached to the stations, and often are among the first to volunteer service in the boats of the Royal National Life-boat Institution.

The latter organization, one of the most purely philanthropic associations which has ever existed, may really be considered a part of the coast-guard service. The coast-guard district commander is a member of the district committee of the Institution. Some of the coast-guards volunteer under the coxswain-superintendents in charge of the boats of the Institution in nearly every emergency. Of the 724 gold and silver medals of honor issued by the Institution since 1824 to humane and intrepid persons who have risked their lives in saving others, 207 were given to coast-guardsmen. More coast-guardsmen wear the Albert medal, given by the Queen in person, than men of any other profession, trade, or service. But, though a distinct organization, the Life-boat Institution is now considered a part of the coast-police of England, and as such its operations are well worthy of our attention and emulation.

Its published history does not say so, but it is not improbable that the first idea of the Life-boat Institution was given by Anna Gurney, the "crippled lady of Norfolk," in whose honor Joanna Baillie wrote her "Night Scene by the Sea," and in which Miss Gurney,

> "One with limbs nerve-bound,
> Whose feet had never touched the ground,"

is described as foremost in affording aid to ship-wrecked seamen. Miss Gurney was the first person in England to maintain at private expense a life-boat, and she was accustomed to being wheeled in her chair to the beach during the wildest storms to superintend the operations of the boatmen. Her name does not appear among the list of donors of boats to the present Institution; but it is known that Miss Gurney left, at her death, all her means to establish life-boats on the coast of Norfolk. This example has been largely followed in England since; and the establishment of a life-boat on a dangerous coast is now looked upon by Englishmen as a most practical method of giving thanks to God for some mercy received. Since the organization of the Royal National Life-boat Institution in 1824 donations of this character have gone to swell its fleet until it numbered, in April, 1868, one hundred and sixty-eight boats. (The whole number of life-boats in England, including those of the coast-guard, harbors, and corporations, was 207.) A person giving a life-boat to the Institution has the privilege of naming her and designating the coast on which she shall serve. I find numerous donations of boats attributed, in the report of the Institution for 1868, to persons who had been rescued from shipwreck, or in the name of those lost at sea, and as "thank-offerings."

The Institution has now been in active operation since 1824. In that year the boats of the Institution, aside from those of the coast-guard, saved 124 lives. The number annually saved since has increased regularly with the increase of boats. In 1867 the number of lives saved was 1086; the total for 44 years was 16,987. In addition to the lives saved in 1867 thirty-five vessels were saved from destruction, and assistance was rendered to 19 others. Among other vessels saved from being wrecked by the life-boatmen was the *A. L. Routh*, of New York, with a crew of 16 souls. The lives of 20 other American seamen were saved from the wrecks of the *Nor' Wester*, of Boston; *Thornton*, of New York; and *Ant*, of Boston.