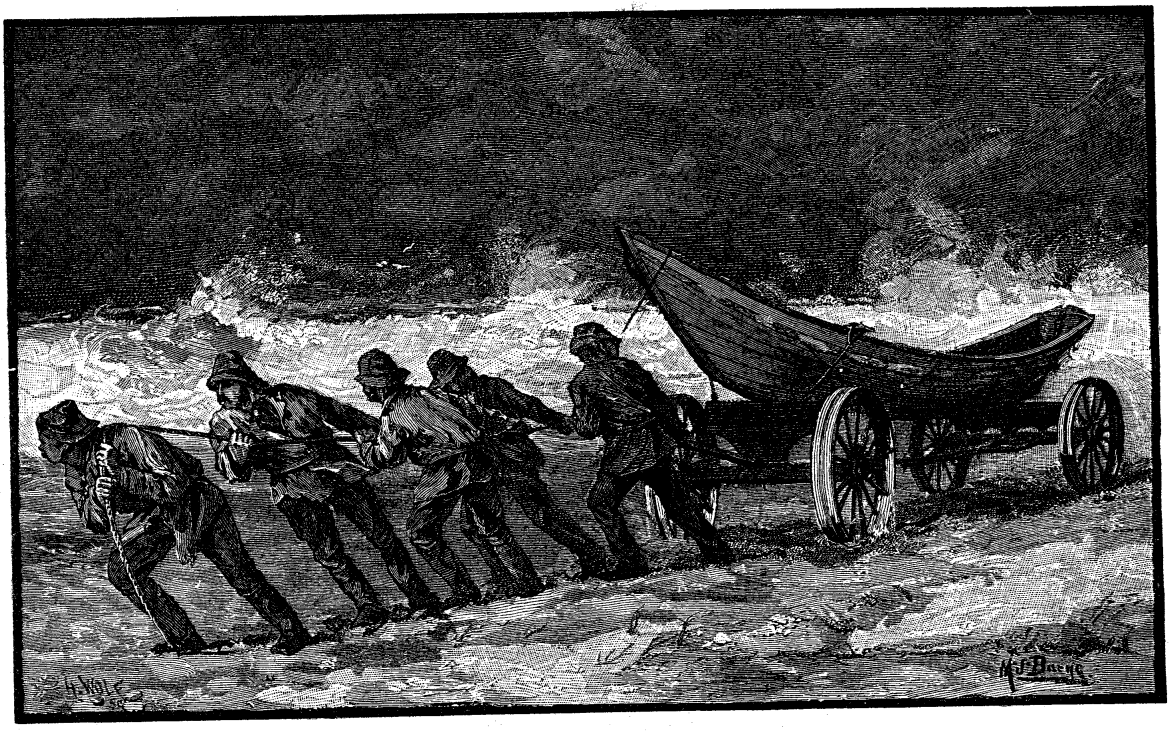
SCRIBNER'S MONTHLY.

VOL. XIX. JANUARY, 1880. No. 3.

THE UNITED STATES LIFE-SAVING SERVICE.



OFF TO A WRECK.

IN the principal newspapers of commercial cities there may be seen, under the caption of "Marine Intelligence," or some such title, a column made up of items, set in nonpareil type, like the following, cut from a recent journal:

Bark Halcyon (of Bath) Dickinson, from Boston for Perth Amboy, in ballast, went ashore on Long Beach, LI, AM of Sept 4. All hands were taken off by the crew of Life-Saving Station No. 32.

Has the reader any idea of the stirring drama a dry paragraph like this may conceal? Let us endeavor to make it apparent.

No portion of the ten thousand and more miles of the sea and lake coast-line of the United States, extending through every variety of climate and containing every feature of coast danger to the mariner, can exhibit a more terrible record of shipwreck than the long stretch of sandy beaches lying between Cape Cod and Cape Hatteras. Of this region the New Jersey coast is notoriously the worst. It has been said that if all the skeletons of vessels lying upon or imbedded in the sand between Sandy Hook and Barnegat could be ranged in line, the ghastly array would reach from one point to the other. Here, in 1848, the government placed a few rude huts that formed the nucleus from which the United States Life-Saving Service has been developed. These were intended to afford shelter to distressed mariners and to contain boats and such other life-saving appliances as were then known, volunteers from among the fishermen being relied upon to use them on occasions of shipwreck. And right gallantly, in many instances, did the brave beachmen respond, though their undertakings and

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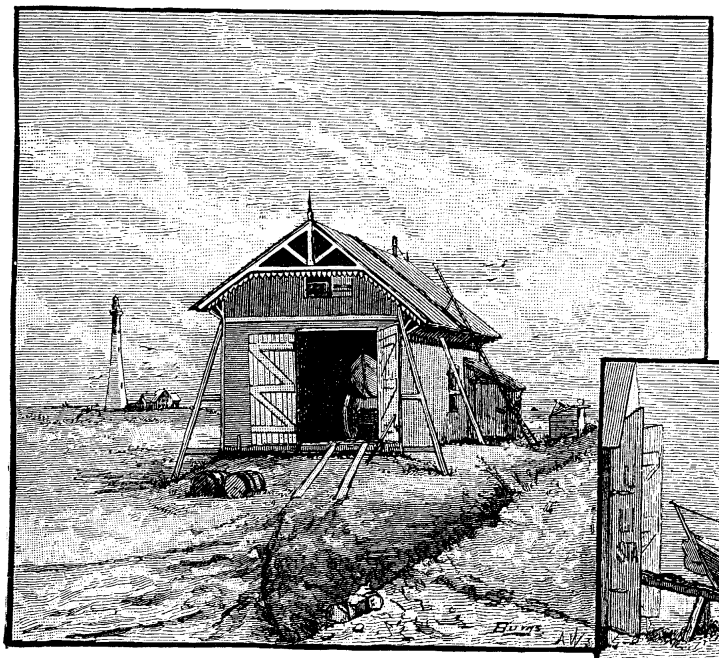
deeds remain mostly unwritten, existing chiefly in the legends of the coast. Congress continued small appropriations from time to time, until Long Island was also provided with huts and a small increase was made to the number on the coast of New Jersey. But from lack of proper direction and want of system the movement languished and subsided. In the meantime, the Royal National Life-boat Institution, a society started in Great Britain under royal patronage nearly forty years prior to our own attempt, had gone on improving its methods and extending its means, and the people of other maritime nations were developing similar humane projects. The hour and the man at length came for our own institution. In 1871, Mr. Sumner I. Kimball, the present able General Superintendent, effected the organization of the service and introduced the existing system.

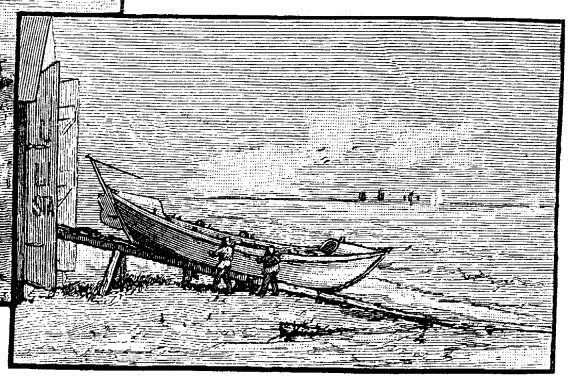
There are now upon the sea and lake coasts nearly two hundred life-saving stations, the greater number being established at the more dangerous and exposed points. The buildings are plain, yet picturesque, and similar in general dimensions and arrangement, though varying somewhat in outward design, according to location—those near cities or popular watering-places being in keeping with their surroundings and presenting a more finished appearance than those on desolate beaches. Those located in harbors or at inlets are each provided with an annex containing a self-righting and self-bailing life-boat, which cannot be launched from a flat beach on account of its great weight and huge size, objections which are unavoidable in securing the valuable qualities that distinguish it.



LIFE-SAVING STATION.

The main building has, below, a boat-room and a mess-room, or kitchen, each provided with convenient closets and lockers, and, above, two sleeping apartments and a store-room. The boat-room contains the surf-boat, which is used on flat beaches and in shoal waters. It is mounted on a light carriage, which may be drawn by the crew when draught animals are not available, unfortunately too often the case on remote outlying beaches. Within the same room also stands the mortar-cart loaded with the wreck ordnance, lines, and various implements, while properly bestowed throughout the apartment are various articles, most of which will come under our notice in the operations to be described. The kitchen and sleeping-rooms are sparingly provided with appropriate furniture, while the store-room is used for the stowage of the season's provisions, cordage, spare oars, etc. Here the keeper and crew live during the active season, which varies according to the latitude of the districts into which the coast is divided.

The keeper commands the crew of six surfmen. His position is one of grave responsibility, demanding long experience in his vocation and rare judgment in the execution of his important trusts. The selection of his men, upon whose fidelity and skill depend not only his success, but oftentimes his life, as well as the fate of those whom he is expected to succor, is very properly confided solely to him. Both keeper and men are chosen from among the fishermen in the vicinity of the stations, who are most distinguished for their ability as surfmen. Draw-



SELF-RIGHTING BOAT ON WAYS.

DRILL AND EXERCISE IN THE SURF-BOAT.

ing their first breath within sound of the surf, they pass through childhood viewing the sea in all its moods. In early youth they make their first essay in the breakers, and from that on to manhood advance from the least important oar through regular gradations, until the most skillful reach the command of the boat. This life gives them familiarity with the portion of the beach upon which they dwell, and its bordering currents, eddies, and bars, and an intimate acquaintance with the habits of the surf. It is an erroneous notion that the experience of the sailor qualifies him for a surf-boatman. The sailor's home is at sea. He gives the land a wide berth, and is never at ease except with a good offing. He is rarely called upon to ply an oar in a small boat, particularly in a high surf, and his vocation gives him little knowledge of the surfman's realm, which is the beach and a portion of the sea extending but little beyond the breakers. The number of mariners who are annually lost in attempting to land from stranded vessels through the surf in their own boats, sorrowfully attests this fact. On the other hand, the most expert surfman may not be, and often is not, a sailor, though generally he has an excellent knowledge of every part of a ship and her apparel, gained in his occupation of stripping wrecks.

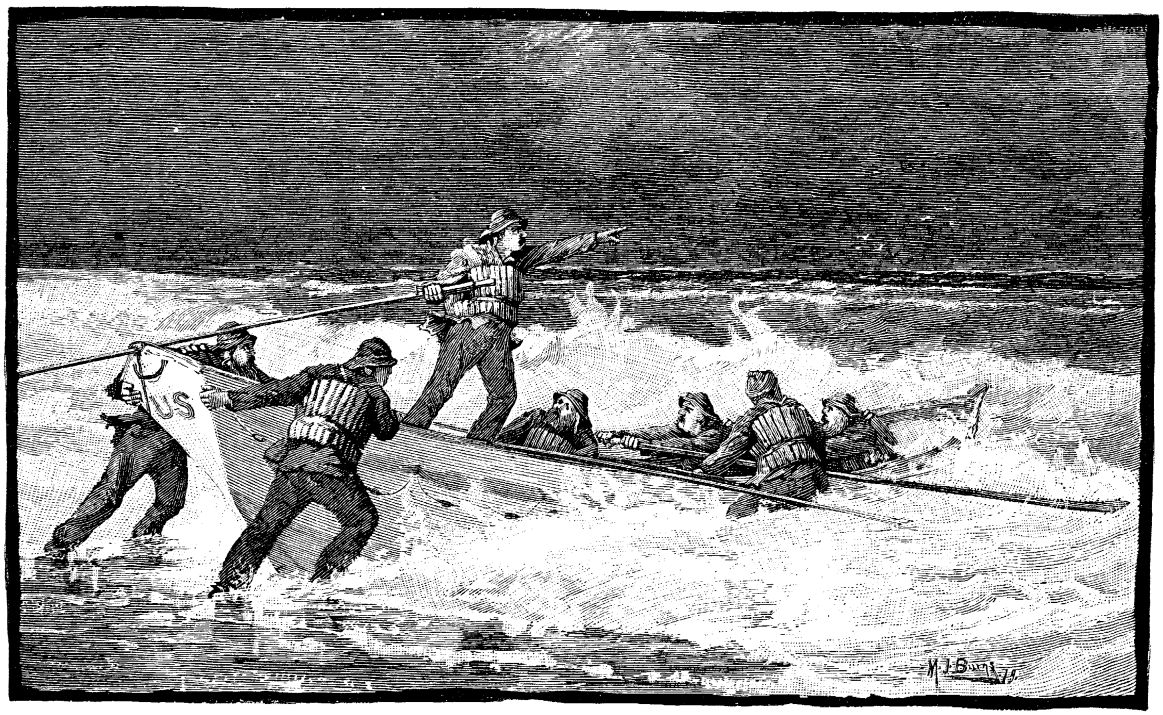
The training of the surfmen as life-saving men is completed by officers of the Revenue Marine, whose own professional training, familiarity with the coast (acquired in their cruises along shore for the prevention of smuggling), and experience in assisting vessels in distress, especially qualify them for the duty.

The life of the station surfmen is rather a monotonous, though not an idle, one. Each day has its portion of drill and exercise in the various methods employed in rendering aid to the shipwrecked, and considerable of the spare time of the men is occupied in keeping the building and apparatus in repair, and in making improvements around the station. At night their duties become severe and often perilous. The interval from sunset to sunrise is divided into three watches. At the beginning of each watch two men set out from the station on patrol duty and follow their beats to the right and left respectively until they meet the patrolmen from the adjacent stations, with whom they exchange certain tokens as proof to the keepers in the morning of the faithful performance of the duty. The relieving watches keep up this scrutiny until sunrise, and, if the weather be foul, throughout the day. The meeting and exchange of tokens is required, of course, only upon continuous beaches, or uninterrupted stretches of coast, where the stations average a distance of from three to five miles apart. At isolated

stations the limits of the patrol are fixed by specific boundaries. This watching of the beach is of cardinal importance, and neglect of the duty is punished by banishment from the service and prohibition of future employment.

The beach guardians are no idle promenaders. A march of four or five miles through the soft sea-sand is a task at any time; what is it in the fury of a winter storm? The prevalent strong winds, which must be encountered in one direction or the other of the beat, drive before them rain, snow, hail, and sleet, or oftener sharp sand, which cuts the face until, smarting with pain, the patrolman turns and walks backward for relief. Such is the force of this natural sand-blast that it soon dulls the glass of the patrol lanterns, and at some of the more exposed stations has made ground-glass of the window-panes. In a snow-storm the ocean beach is the wildest of pathless deserts, and even by daylight, shut out from prominent landmarks, the foam of the breaking surf alone serves to guide the panting patrolman on his way. Leaving it, he would wander helplessly among the sand-dunes that crown the beach. When the darkness of night is added, and his lantern, if not extinguished by the gale, but feebly lights his path through the slush of snow and sand, he strays and stumbles into pitfalls and quick-sands, to recover his way and accomplish his journey only through his life-long acquaintance with every foot of the ground. Sometimes, failing in this, benumbed with cold and bewildered by his mishaps, he is found by his comrades in the snow insensible, or perhaps dead. Then there come, fortunately not often, the blast of the hurricane and the inundation of the tidal wave, pregnant with terrors indescribable. These are the tornadoes which, inland, uproot trees, unroof and prostrate buildings, destroy flocks and herds, and create general havoc. On the beach the stations are sometimes torn from their strong foundation-posts and overset and borne away by the flood, the inmates escaping as best they can. The patrolman cannot stand up against the fury. Again and again he is overthrown as he struggles to reach the top of a sand-hill, his only refuge from the waters which rush upon the land and sweep through the depressions between the hillocks, separating them into islets. In the memorable tempest of October 22 and 23, 1878, the patrolmen suffered severely, and several were in extreme peril. In one instance, a patrolman not returning in the morning, and his fellows not being able to discover him with their glasses from the look-out of the station, a boat expedition was sent in search of him among the still flooded sand-hills, upon one of which, nearly covered with water, he was at length found, barely alive.

When a vessel is driven ashore in a storm, the patrolman, being the first to discover her, takes the initiative steps in the operations for the rescue. He carries at night, besides his lantern, a signal, which ignited by percussion emits a red flame. He is quick to



LAUNCHING THE SURF-BOAT.

observe the slightest indication of a disaster: the glimmer of a light, the white apparition of a sail, the faint outline of a slender spar just beyond the breakers, or at his feet on the strand perhaps a grating, a bucket, or some other article which he knows to have come from a ship. Then with all his faculties bent to the search, he descries a vessel either too close in for safety or actually stranded in the breakers. In either case he burns his signal, whose crimson light flashes far out to sea, and warns the unwary ship to stand off, or assures the shipwrecked that aid is near at hand. Being certain it is a wreck, he hurries to his station, perhaps a mile or two away. His hasty entrance is sufficient to arouse the slumbering inmates. Struggling for breath he makes his report, the nature of which determines to the keeper the means to be employed for the rescue. If the surf-boat is to be taken, at the word of command the wide doors of the boat-room are thrown open and the boat-carriage drawn by willing hands rolls out, bearing the graceful craft fully equipped for service. In the absence of horses, the burden must be hauled by the men, and their laborious task may be conceived, when it is stated that each man must drag nearly one hundred and eighty pounds

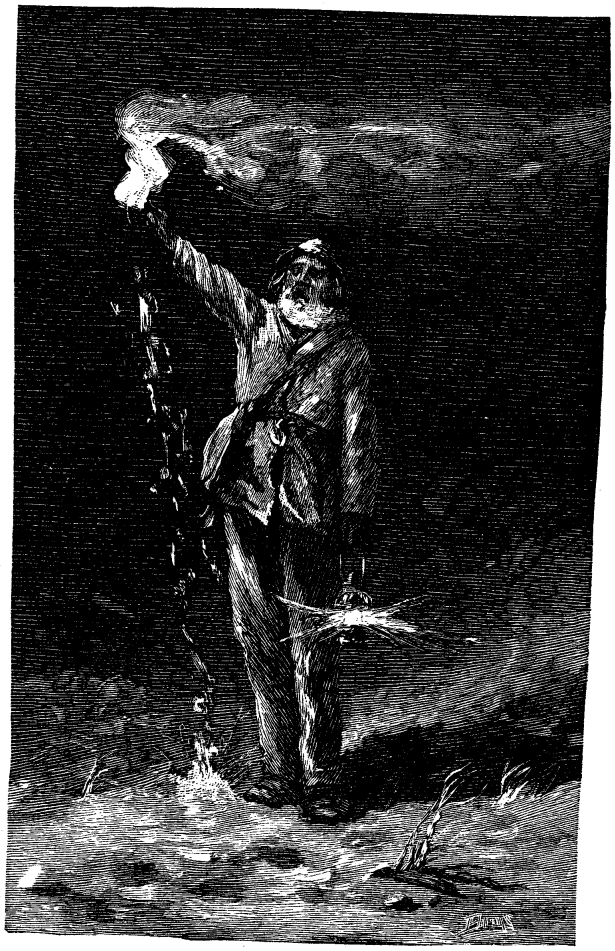
THE NIGHT PATROL.

through soft, yielding sand, whatever the distance may be between the station and the wreck, while one hundred and fifty pounds is the estimated load for a man to draw over a level turnpike.

Arrived at the scene of the disaster, the boat is launched with as little delay as possible from a point opposite the wreck, in order to get the benefit of the slight breakwater which the position of the vessel affords, and is soon off and away on its errand of mercy. The height of human skill is required of the keeper standing at the steering oar to guide the boat safely in its passage through the wild running breakers. The surfmen, with their backs to the dangers lurking in the treacherous seas, do not go blindly to uncertain fate, for they rest their eyes continually upon the keeper, while they ply their oars in obedience to his commands, and mark his slightest gesture. Their first attempt is not always successful. Despite every care, a suddenly leaping sea may break, and fill the boat, compelling a return to the shore, or capsize her, tumbling the men into the water, where they are tossed about in the surf, but are sustained by their cork life-belts until making a foothold they struggle to the beach and righting the boat try again and perhaps a third or fourth time, before finally reaching the wreck. Here the most careful maneuvering is necessary to prevent collision of their light craft against the huge hull of the stranded vessel, or to avoid fatal injury from falling spars and floating wreckage. Taking off as best they can the anxious people, whom the overwhelming seas have driven into the rigging of the vessel, perhaps fast going to pieces, the difficult return to the shore remains before them. The keeper must now decide upon one of several methods of landing, as the nature of the sea may demand. Under favorable conditions he may run in immediately behind a roller, and by quick work keep well ahead of the following one, and so reach the beach in safety. With a different sea he may back in, occasionally pulling ahead to meet an incoming breaker; and again, for a worse sea he may use a drag to check the headway with which a swift rolling comber would otherwise carry the boat high upon its summit until a portion of the keel would be out of water, the bow high in the air and the stern still resting upon the crest,—from which position, on account of the slight hold the boat has in the water, the sea behind is liable, in spite of the efforts of the steersman, to turn it to the right or left, causing it to "broach to" and capsize, or if this be avoided, perhaps to be "pitch-poled," end over end.

When the patrolman has reported at the station that the boat cannot be used, the mortar-cart is ordered out. Like the boat-carriage it must be drawn by the men, and though the load is somewhat lighter, the state of the sea or the weather increases the labor; the one compelling them to take a route close to the low sand-hills in the wash and foam of the spent breakers, or back of the hills in the looser sand by a circuitous course, and the other harassing and retarding them with its fury. Reaching at length their destination, each man, well trained in his duties, proceeds to handle and place in position the portion of the apparatus assigned to his special charge. Simultaneously the different members of the crew load the gun, place the shot-line box in position, dispose the hauling lines and hawser for running, attach the breeches-buoy, put the tackles in place ready for hauling, and with pick and spade begin the digging of a trench for the sand-anchor, while the beach lantern lights up the scene.

And now the gun is fired! The shot



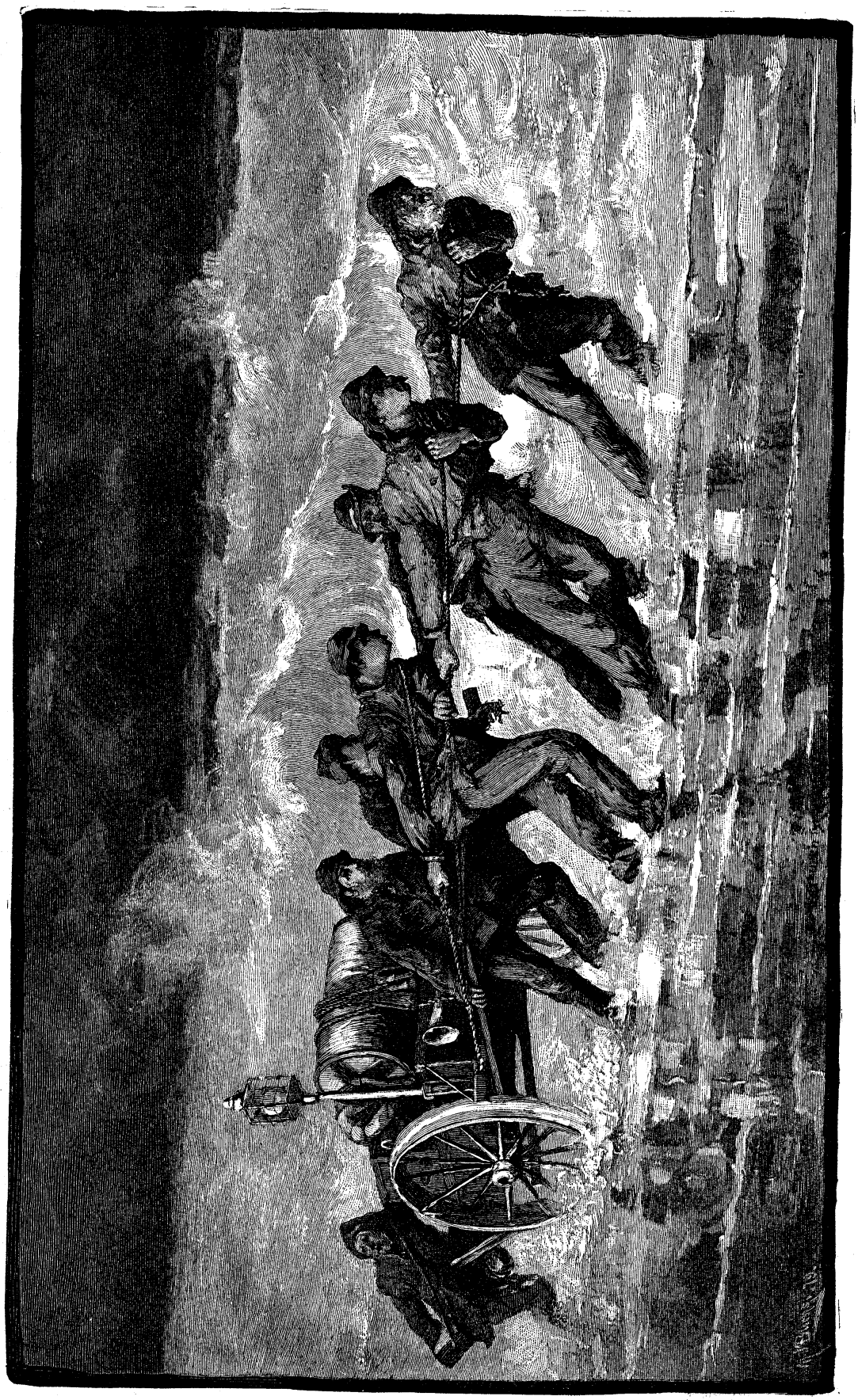
BURNING A SIGNAL.

with its line goes flying against the gale, over the wreck into the sea beyond; the line falls across a friendly spar or rope, and is soon seized by the eager benumbed hands of the imperiled sailors, whose glad shouts, faintly heard on shore, make known to the life-savers their success. The surfmen connect the whip (an endless line), the tail-block and tally-board to the shot-line already being hauled in by the impatient sailors. The whip passes rapidly toward the wreck, and arriving there the sailors make fast the tail-block in accordance with the directions on the tally-board and show a signal to the shore. Hauling upon one part of the whip, the surfmen then send on board, attached to the other part, the hawser and a second tally-board, which directs how and where the end of the hawser should be secured to the wreck. The tackles now connecting the sand-anchor and the shore end of the hawser are hauled upon until the hawser is straight and taut, when it is lifted several feet in the air, and further tightened by the erection of a wooden crotch, which constitutes a temporary pier while the wreck answers for another, and the hawser stretched between the two suggests a suspension bridge in an early stage of construction with but one cable in place. The breeches-buoy is drawn to and fro on the hawser, and by means of it the shipwrecked are brought safely to shore.

This method is expeditious when once well in operation, but is frequently attended with difficulties which evoke every resource and expedient. Often in storms a strong swift current runs along the coast between the outer bar and the shore, called by the surfmen the "set" or "cut," which, in connection with the action of the surf, twists and entangles the lines, as the attempt is made to haul them across from shore to ship, or sweeps them away to a great distance, causing heavy strains that sometimes prove too much for their strength. Occasionally, when the apparatus is well set up for use, the motion of the wreck, as it is lifted and rolled about by the powerful seas, is so violent and constant that, even with the most watchful care, the strong lines snap and break asunder like pack-thread; and at times the careless or bungling manner in which those on board perform their part, allowing the shot-line or the whip to saw across the stiff rigging of the vessel, or chafe against other portions of the wreck until it parts, hinders the work or altogether prevents success. Now and then, in extreme cold weather, the lines become rigid and clogged with ice as soon as they are exposed to the air when lifted out of the water; and again, unless proper care has been observed in the arrangement of the blocks and lines, the velocity with which the freighted ropes run through the blocks, may set on fire the wooden shells, or cases that contain the sheaves or pulley-wheels. These mishaps and reverses tax the patience and resources of the surfmen to the utmost, and often put their courage to the severest test. The breaking of the lines involves the toil and delay of the duplication of their work, and perhaps the anxious suspense necessitated by a return to the station for spare lines. Sometimes it is found necessary to abandon altogether the use of the hawser, and to draw the people ashore through the water with the whip and breeches-buoy, or even without the latter, the shipwrecked persons securing themselves into the whip by tying it around their bodies. In some of these contingencies people have been held suspended in the breakers or ensnarled in the floating cordage and *débris* of the vessel, and only extricated from their perilous positions by the most daring exploits of the surfmen who have worked themselves out through the surf, and, at the most imminent risk of their own lives, released the helpless beings from their bonds, or disentangled them by severing the meshes with their knives, and returned, bearing their gasping trophies safely to the shore.

Other accidents and obstacles are likely to embarrass the efforts of the life-saving crews, who usually arrive at the scene of disaster exhausted by their wearisome march.

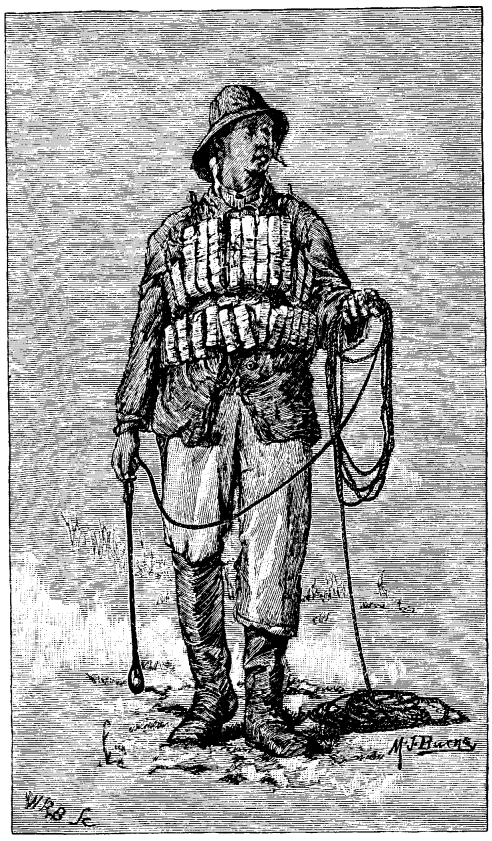
The breeches-buoy, although it is an exceedingly useful contrivance for bringing men ashore, is hardly a suitable one for transporting women and children, or for rescuing a large number of persons with dispatch, or invalids whom it is necessary to protect from wet and exposure. In such cases the life-car is usually brought into requisition and used with the arrangement of ropes already described; or, as externally it is simply a covered boat, under favorable circumstances it may be drawn back and forth through the water by a line attached to each end. More frequently, however, it is connected with the hawser by a simple device, in such a manner as to permit it to float upon the water, while preventing it from drifting, in strong currents, too far from a direct course for the length of the hauling lines. The life-car is about two hundred



HAULING THE MORTAR CAR.

pounds heavier than the breeches-buoy, and accordingly increases to that extent the burden of apparatus to be brought to the scene of a wreck; but it has sufficient capacity for five or six adults, and has carried, at a single trip, nine half-grown children. Practically water-tight, but provided with means for supplying air, its passengers are landed dry and without serious discomfort. The occasions of its use have been numerous, and in one notable instance —the wreck of the *Ayreshire* below Squan Beach, on the coast of New Jersey—two hundred and one persons were rescued by it, when no other means could have availed. Silks, fine fabrics, jewelry, and other valuable goods have often been saved by its use, and from one vessel the car took ashore a large sum in gold bullion belonging to the United States, together with the mails.

The general features of the Lake and Pacific coasts admit of the use of the self-righting and self-bailing life-boat. On the Lakes the stations are situated, with few exceptions, at, or very near, commercial towns, or cities having artificial harbors. These harbors are formed at the mouths of rivers by long piers projecting some distance into the lake. The passages between the piers are quite narrow and difficult to enter when high seas are running at right angles to them; thus vessels in attempting to go in are frequently thrown out of their course at the critical moment and are cast upon the end of a pier to quick destruction, or, escaping that danger, are driven ashore outside. Here the self-righting and self-bailing life-boat is used with good effect. This marvelous product of inventive thought, which has been developed by a century of study and experiment, from the first model, designed by the English coach-maker, Lionel Lukin, in 1780, is the best life-boat yet devised. It has great stability, and is with difficulty upset, but when this happens, it instantly rights itself, and when full of water empties itself in from fifteen to twenty seconds. The attainment of the first of these wonderful qualities is secured by means of a heavy iron keel, weighing from six hundred to fifteen hundred pounds, according to the size of the boat, and two large air-chambers placed in the bow and stern—the keel, when the boat is capsized, being drawn by the force of gravitation back toward and into the water, while the submerged air-chambers seek the surface at the same moment. The property of self-bailing is produced by the insertion of a deck or floor, some inches above the load-line, in which there are placed several tubes extending down through the bottom of the boat, fitted with valves at the top, which open downward by the pressure of any water in the boat, and



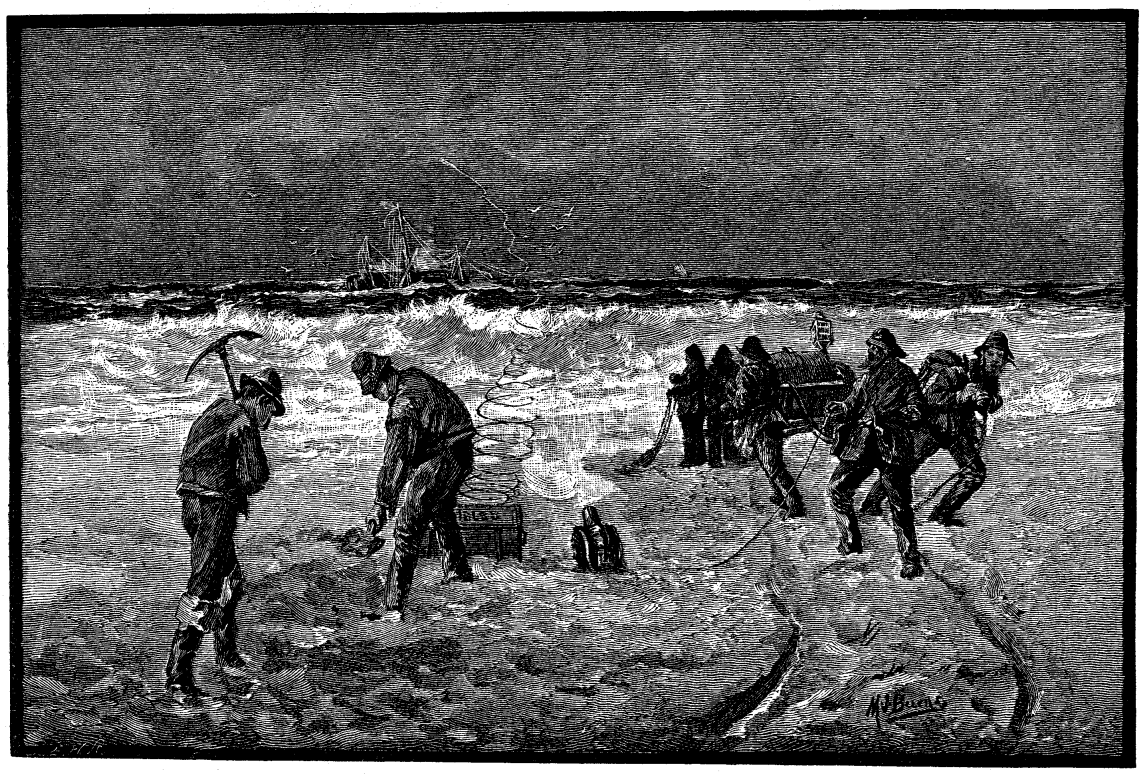
SURFMAN WITH LIFE-BELT.

are self-closing when the pressure ceases. The draught and great weight which the construction of such a boat involves—the smallest weighs scarcely less than four thousand pounds—generally preclude its use, as has been stated, along the sandy flat beaches of the Atlantic. The Lake stations being inside the harbors and fronting directly upon or over comparatively smooth and sufficiently deep water, the heavy boats launched directly from their ways, are propelled by eight oars, or towed by a tug-boat out between the piers to the rescue. Not unfrequently, just before navigation is suspended by winter on the Lakes, a single life-saving crew is employed upon several vessels at a time. Recently four wrecks occupied half a station crew in the vicinity of their station on the same day, while the remainder were at work on a fifth, forty miles away, whither they had been transported by rail, on a special train secured for the occasion. It is a common occurrence for the life-boats to go under sail and oars ten or twelve miles from their stations to the

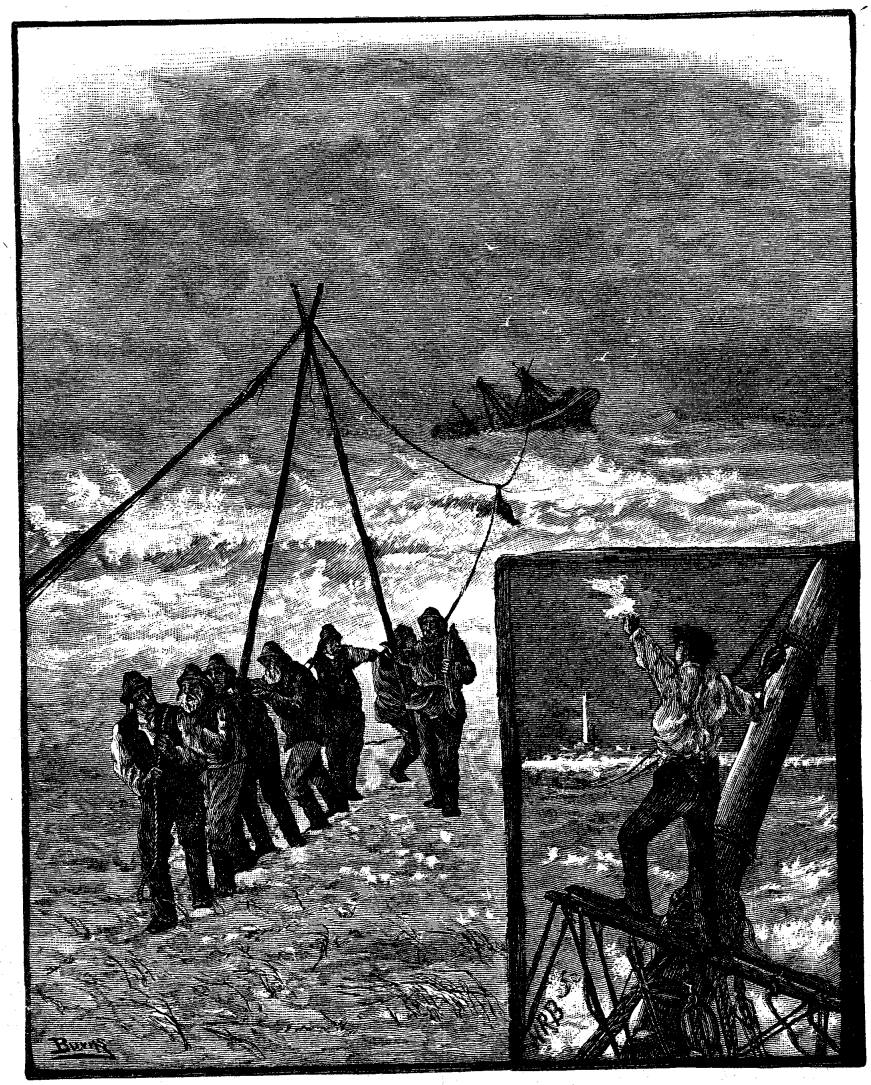
assistance of vessels in distress. On the Pacific coast, where the prevailing gales blow along and not upon the shore, and where there are few outlying dangers, and these at long intervals apart, coast disasters are comparatively rare, and it has been deemed necessary to provide for the establishment of but eight stations. With one exception, these are at points where the self-righting and self-bailing life-boat is available.

But the work of the crews does not always end with the rescue. The pressing necessities of the moment administered to, the sufferers are led, supported, or carried, as their condition will admit, to the station, which is quickly transformed into a hospital. The neglected fire is replenished with fuel; the kitchen stove soon glows with heat; the plethoric clothes-bags and well-filled chests of the surfmen are opened, and dry clothing is put upon all that need it; snow and cold water, and afterward scrapings of raw potatoes from the mess stores, are applied to the frost-bitten; the prostrated are put to bed in the extra cots provided in the upper rooms, and tenderly tucked in by rough hands, suddenly grown gentle; the medicine chest, filled with simple remedies and restoratives, is opened, and stimulants dispensed to the exhausted, while plasters, lint, and bandages are applied to those who have been bruised and wounded by the wreckage. Meanwhile, shipwrecked and surfmen are inhaling the delicious aroma of boiling coffee, which the mess-cook deems it his first duty to prepare. This having been partaken of, the keeper designates the least weary of the crew to attend to the wants of the strangers, while the others retire for rest until required to relieve the watch.

Occasionally, in the exigencies of shipwreck, persons reach the shore senseless and seemingly without life. That the surfmen may be able to act intelligently in such cases, the regulations of the service contain plain directions for the application of a simple method for restoring the apparently drowned, in which the men are regularly practiced, according to the instructions of a medical officer of the Marine Hospital Service, who visits the stations once a year as a member of the board for the examination of the keepers and crews, as to their physical and professional qualifications. The principal features of the method are indicated by the cuts on page 336, one showing the first step taken, by which the chest is emptied of air, and the ejection of any fluids that may have been swallowed is assisted; and the other the position and action of the operator, in alternately producing artificial expiration and inspiration, in imitation of natural breathing, which may be expected to ensue if the patient is not really dead.



FIRING THE MORTAR.



BREECHES-BUOY APPARATUS IN OPERATION. "HAUL AWAY!"

There are many appliances auxiliary to the principal means employed in the operations of the service, of which space will not permit present notice. The life-saving dress, however, which has been made familiar to the public through the exploits and expeditions of Paul Boyton, is one of considerable importance, and on several occasions has been used with great advantage. At the stranding of a schooner in the night on Lake Ontario last year, in a sea which would not admit of the use of the boat, a shot-line was fired over her, with the intention of setting up the lines for the use of the breeches-buoy. The sailors hauled the whip-line on board, and when the tally-board, on which the directions for the method of procedure are printed in English on one side and French on the other, was received, the captain attempted by the light of a lantern to read them. Puzzling over them for some time, he at length contemptuously threw the board down on the deck, finding it impossible to make anything of it, having seen only the French side. Not knowing what else to do, therefore, he simply made the line fast, but in such a manner that it could not be worked from the shore. The surfmen vainly endeavored to convey instruction by signs. In the meantime, the destruction of the vessel and the loss of all on board seemed imminent. In this dilemma, one of the surfmen put on the life-saving dress, and, after a gallant struggle, succeeded in hauling himself along the line through the breakers to the vessel, where he remained and took charge of the operations on board until all were safely landed. On another occasion three sailors, in spite of the warning signals of the life-saving crew, committed the common error of attempting to land in one of the ship's boats. A strong current was running between the ship and the beach, and the water was full of porridge-ice for a long distance from the shore. Knowing what would happen, two of the surfmen put on their life-saving dresses and ran up the beach, with difficulty maintaining their race with the boat, which continued for

THE BREECHES BUOY.

the distance of two miles, until reaching an open space in the ice, the sailors attempted to land, when they were capsized in the surf, but were rescued from drowning by the surfmen, who rushed into the breakers and safely dragged them ashore.

Clad in the life-saving dress, the wearer presents a strange appearance, and to an uninitiated observer he might seem, while engaged in his weekly practice, to be some amphibious monster, disporting one moment in the water and the next on land. Sometimes in cold weather, a surfman thus arrayed, goes on some errand from the station to the mainland, his route being an air-line across deep sloughs or creeks and wet marshes for two or three miles. A surfman once going from an outlying beach in his life-saving dress, had just crossed a wide slough, and rising suddenly among the reeds on its muddy banks, beheld two snipe shooters a hundred yards away, gazing in undisguised astonishment. "I seen they was mighty skeered," said he, "and took me for the devil or some other sea varmint, so I beginned to cut up and prance round like a yearlin' calf in a two-acre medder, a-yellin' and a-screechin' all the time as loud as I could holler, and ye'd jest orter seen them fellers scoot fur the cedars. I guess they's runnin' yit." To a doubting Thomas who asked, "But whar was their guns all this time?" he replied: "Pshaw! them fellers never knowed they had no guns." The hunters' version of the adventure has never reached the beach, but it may easily be imagined.

When the life-saving dresses were first introduced into the service, the surfmen regarded them with as little favor as they usually manifest for any innovation upon the simple devices and methods which were transmitted to them from their fathers, especially as regards appliances for their own safety, such as life-belts and cork jackets. They prefer to rely upon their skill and endurance as swimmers, with unencumbered limbs and bodies. Probably, also, a certain degree of pride disinclines them to wear anything that might suggest the least suspicion of a faint heart. For a long time, to insure their use in the face of these prejudices, firm and judicious measures on the part of the officers of the service were required, and the life-belts were not willingly donned by the men throughout the service until they had been taught a sad lesson, by the capsizing of a surf-boat and the loss of the crew, who had gone to a wreck at night without them. Only recently, a brave volunteer, on taking an oar in a station boat, in a dangerous sea on Cape Cod, was proffered a spare life-belt but declined it, saying: "Oh, no! I don't want to go floating by Highland Light carrying a deck load of cork." The life-belt is manufactured from selected cork, and is so adjusted that the wearer has free use of his limbs in any position. Its buoyancy is sufficient to support two men in the water. Since its adoption by the men, none have been drowned, although many have been thrown into the water by capsized boats.

The life-saving men, of course, must have their hours of relaxation. Among the people of the coast, more than elsewhere,

perhaps, a pronounced religious sentiment prevails; hence, carousing and gaming and other immoralities are rarely indulged in. Especially is this true at the stations, where prohibitory regulations add their restraint. Each station is provided with a substantial library of well-selected books, the donations of generous people, with the view of contributing to the diversion of the crews and the solace of the victims of shipwreck who may be temporarily detained there. These libraries are the source of much entertainment and instruction to the men. In fine, clear weather, when the wind is off shore, and there is little occasion for anxiety, the surfmen gather in the mess-room and while away the time rehearsing the legends of the coast, spinning yarns, singing, or listening to the tuneful strains of violin or flute. Now and then, when the moon is full, there is a "surprise party" at the station. From the mainland or the neighboring settlements come men and women, the friends and relatives of the surfmen, bringing cakes and pastries, and other good things from their homes. Then all is joy unconfined; the boat-room is cleared of carriage and cart, and the merry dance goes round. Do not imagine, however, that in these festivities the patrol is relaxed. Not at all; the rule is inflexible, and its violation would be discovered. Indeed, who knows that the beach watch is not then doubled and that, with wife or sweetheart to share his vigils, the patrolman yearns not for the pleasures at the station?

A mute but interested spectator of the entertainment is perhaps a Newfoundland dog. These noble animals, whose good qualities are so well known, are kept at many of the stations and they often seem instinctively to understand the object of the service, to which they soon become faithfully attached. The celebrated picture of Landseer, entitled "A Distinguished Member of the Humane Society," will readily be recalled by the reader. One remarkable illustration which the service furnishes of the characteristics of this sagacious animal is worthy of note. At the sad disaster to the steamship *Metropolis* on the coast of North Carolina, while the life-saving men were engaged in rescuing the crowd of passengers thrown into the sea by the breaking up of the vessel, a large Newfoundland dog belonging to a gentleman residing in the vicinity, seemed suddenly to comprehend the situation, and joining the throng of rescuers, plunged into the surf, seized a drowning man, and dragged him safely ashore. Shortly afterward he left his master and went to the station of the crew with whom he rendered this first service in life-saving, and there he still remains, steadily resisting every inducement to return to his former master. Every alternate night he

THE SELF-RIGHTING LIFE-BOAT.

sets out with one of the first patrol and accompanies him until the patrolman from the next station below is met, when he joins the latter and proceeds with him to that station, where he remains until the first watch of the next night, when he returns to his own station in the same manner. These self-assumed duties he performs with the peculiar gravity of demeanor that distinguishes his species, changing his station daily, for some good and sufficient dog-reason, no doubt, while very sensibly keeping but one watch each night.

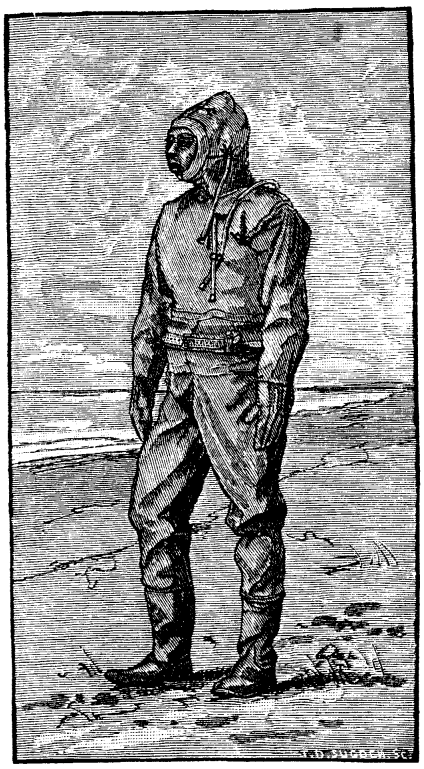
The plan of the organization of the service is simple but effective. The coast-line is divided into twelve districts, there being eight on the Atlantic coast, three on the Lakes, and one on the Pacific. In each of these the stations are distinguished by numbers, from one upward, beginning at the most northerly or easterly. Each district is under the immediate charge of a superintendent, who must be a resident thereof, and familiar with the character and peculiarities of its coast-line. He nominates the keepers of the stations, makes requisition for needed supplies, etc., and pays the crews their wages. To each district is also assigned an inspector, who is the commanding officer of the revenue cutter whose cruising grounds embrace the limits of the district. These officers, under the direction of a chief inspector, who is also an officer of the revenue marine, make stated inspections and drill the crews. The entire service is under the charge and management of a general superintendent, whose office is a bureau of the Treasury Department. All the officers of the service are invested with the powers of customs officers, which enable them to protect the interests of the government in preventing smuggling, and assisting in securing the collection of duties upon dutiable wrecked goods. They are also required to guard wrecked property until the owners or their agents appear.

The officers and men of the service are chosen without reference to any other consideration than those of professional fitness and integrity. In the introduction and maintenance of this principle of selection much opposition and difficulty have been encountered. In the older districts, owing to the fact that until 1871 the keepers of stations were regarded only as custodians of public property, without responsibility in the success or failure of efforts at wrecks, surfmanship was not a standard of qualification, and these positions were generally made the rewards of political service by each of the parties, as they alternately succeeded to power; and so, when the employment of crews was authorized, the local politicians endeavored to control the appointment of these also. Their success soon became only too evident, and it was to

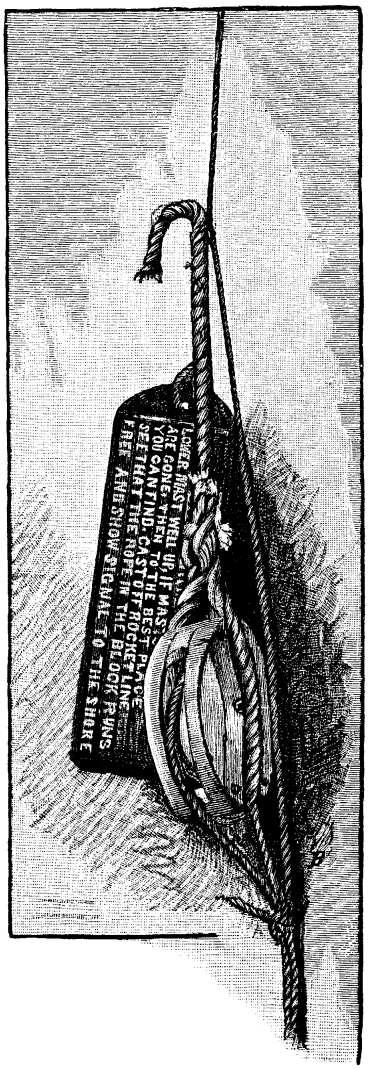
THE SELF-RIGHTING LIFE-BOAT UNDER SAIL.

counteract these injurious influences that the board of examination already mentioned was constituted. A thorough inspection of the service was made; every station was visited, the incompetent were dismissed, and qualified men were employed in their places. These advantageous changes in the corps somewhat altered its political complexion, and the nullification of the effort to subordinate the service to political ends was not quietly accepted. Threats and appeals were in turn resorted to, to overcome the determination of those in charge of the service. Upon the establishment of new districts, similar attempts to gain control of them are generally made, but they are not so tenaciously persisted in. These attempts are not confined to the party in power. No sooner is a keeper appointed from the opposition than he is beset with solicitations and demands to remember his party friends. The official injunction, however, issued yearly, at the commencement of the season, to the superintendents and keepers, that only capability and worth are to be regarded in the choice of their subordinates, supplemented by the action of the examining board, keeps the service well exempt from political domination.

But, it will be asked, what results have been attained by the service? At this writing, the last published report is that of the fiscal year ending June 30th, 1878. From this it appears



LIFE-SAVING DRESS.



TALLY-BOARD AND WHIP-BLOCK.

that during that year there were 171 disasters to vessels within the limits of the operations of the service. There were on board these vessels 1,557 persons. The number of lives saved was 1,331, the number lost 226, and the number of days' succor afforded to shipwrecked persons at the stations was 849. Of the 226 lost, 183 perished at the disasters to the steamers *Huron* and *Metropolis*, the former occurring four days prior to the manning of the stations, which the appropriations for the maintenance of the service did not then permit to take place until the first of December, and the latter occurring at a distance so remote from the nearest station as to render prompt aid impossible;—defects which the reports of the service had repeatedly pointed out, and asked to have remedied. The loss of fourteen others occurred where service was impeded by distance, or where the stations were not open. Making allowance for these, the loss of life legitimately within the scope of life-saving operations, was twenty-nine.

The sad catastrophes of the *Huron* and *Metropolis* contributed largely in securing the passage of the effective bill of June, 1878, which was introduced and warmly advocated by Hon. S. S. Cox, and which established the service on a stable basis, with powers and functions somewhat commensurate with its purposes and capabilities.* From November, 1871, the date of the inauguration of the present system, to the 30th of June, 1878, the number of disasters stated to have occurred within the field of operations of the service was 578; the number of persons on board the vessels involved was 6,287; the number saved was 5,981; the number lost 306,† and the number of days relief afforded to shipwrecked persons at the stations, 3,716.

RESUSCITATION: EJECTING WATER FROM BODY.

It should be observed that during the first of these seven years the service was limited to the coasts of Long Island and New Jersey; the two following years, to those coasts, with the addition of Cape Cod; the next year, to the foregoing, with the addition of the coasts of New England and the coast from Cape Henry to Cape Hatteras; the next, to the foregoing, with the ad-

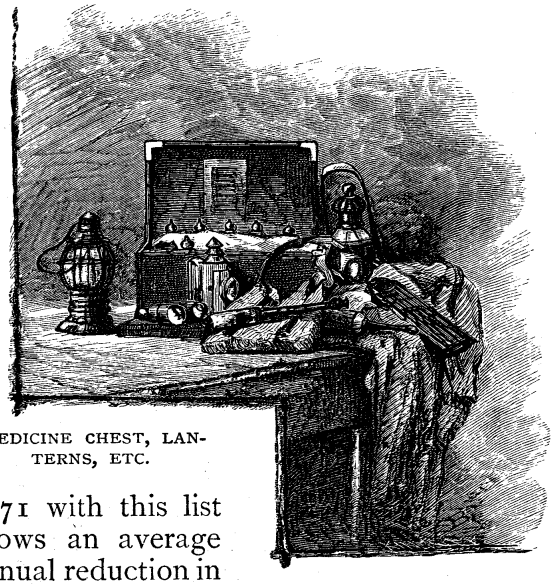
RESUSCITATION: RESTORING RESPIRATION.

* In this connection, acknowledgments are also due to the Hon. Charles B. Roberts, who made an exhaustive report upon the subject from the Committee on Commerce, seconded by an extremely able speech. The measure was also warmly supported by the Hon. Messrs. Covert, Conger, Yeates, Crapo, Dunnell, Brogden, Pugh, and others. In previous years the service was also much indebted to Senators Stockton, Hamlin, Boutwell, Chandler and Frelinghuysen, and to Representatives Newell, Haight, Lynch, Hale of Maine, Hooper, Cox and Conger.

† This number includes the 183 persons who perished at the wrecks of the *Huron* and *Metropolis* and the 14 others above referred to.

dition of the coast from Cape Henlopen to Cape Charles; the next, to all the foregoing, with the addition of Florida and the lake coasts; and the last year, to the coast at present included.

It is not claimed that the entire number of persons designated in the above figures as saved would have perished but for the aid of the life-saving crews, since not unfrequently, in cases of shipwreck by stranding, a portion of the imperiled succeed in escaping to the shore, as did several in the instance of the *Huron;* and it often happens that the sudden subsidence of the sea spares the threatened vessels from destruction. But it is certain that a large proportion of the number would have perished. A closer approximation to the real efficacy of the service could be reached, if statistics of the loss of life in former years upon the coasts where life-saving stations are now established could be obtained. Unfortunately no such record exists, except an imperfect one, consisting of meager data relative to disasters between 1850 and 1870 in the vicinity of the rude station-huts of the Long Island and New Jersey coasts. It is known that this record by no means includes near all the disasters which occurred on these coasts. A comparison, however, of the record of the service since 1871 with this list shows an average annual reduction in the loss of life of about 87 per cent!



MEDICINE CHEST, LANTERNS, ETC.

The record is a shining one. How much of it is due to official organization may readily be conceived, but it is less easy to realize how much of it belongs to the gallant crews of the stations, some of whose hardships, together with the methods they employ, the foregoing pages disclose. The professional skill of these men, their unfaltering energy and endurance, their steady bravery in the hour of supreme ordeal, and at all times their sober fidelity to duty, however

THE MESS-ROOM, "WHEN THE WIND IS OFF SHORE."