Divers and Their Work.

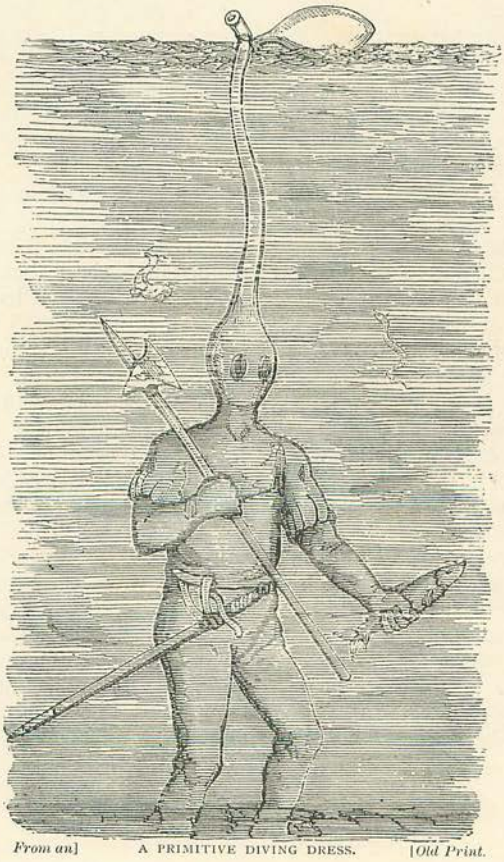
By Framley Steelcroft.

AS a rule, scientific mechanism eliminates the romantic and picturesque element from every calling into which it is introduced; an exception to this rule, however, is the art of diving, whose scope has merely been widened with the invention of elaborate appliances. To trace the history of diving is, colloquially speaking, "a large order." If memory serve, Homer compares the fall of Hector's charioteer to the action of a diver; and specially trained men were employed in subaqueous work during the siege of Syracuse, their mission being to laboriously scuttle the enemy's vessels.

The accompanying illustration is from an old print, dated 1511. On seeing this for the first time, we instantly realized that the inception of scientific diving was due to the action of an elephant when crossing a deep river; for we remembered an exceedingly uncomfortable quarter of an hour we spent with a truculent bull elephant, on whose back we crossed the Ganges below Benares. Notwithstanding the touching traditions of his kind, this particular brute disregarded our commands and caresses, and swam or walked beneath the water, breathing through his elevated trunk, with the result that we were drenched with evil-smelling water.

The London headquarters of diving, and sub-aqueous work generally, is in the Westminster Bridge Road. Wedged in between a baker's shop and a cheap clothing emporium is the modest approach to the immense establishment of Messrs. Siebe and Gorman, without doubt the greatest submarine engineers in the world. Hundreds of diving suits are made here annually for the nations of the world; and in one huge room is a deep tank wherein divers are trained.

The modern diving dress was invented in 1839 by Mr. Augustus Siebe, the founder of the above firm, whose divers were at that time engaged on the wreck of the *Royal George*. It is made of solid sheet india-rubber covered on both sides with tanned twill; it has a double collar, the inner one to pull up round the neck, and the outer one of red india-rubber to go over the breast-plate and form a water-tight joint. The helmet is of tinned copper, and has a segment bayonet screw at the neck, corresponding with that of the breast-plate, so that it can be removed from the latter by one-eighth of a turn. The helmet itself, as may be seen in the illustration reproduced on the next page, has a circular glass panel protected by guards in the front and two oval panels at the sides. With its twenty-five candle-power electric lamp, its telephone, and perfect system of air supply, it is obviously a vast improvement on the first diver's helmet made, which is also shown; this latter helmet dates from 1829. The air-pipes are in lengths of from 30ft. to 60ft., and are made of vulcanized indiarubber and canvas, stiffened with steel wire. By means of the air-pump, air can be compressed to a pressure of 240lb. per square inch.



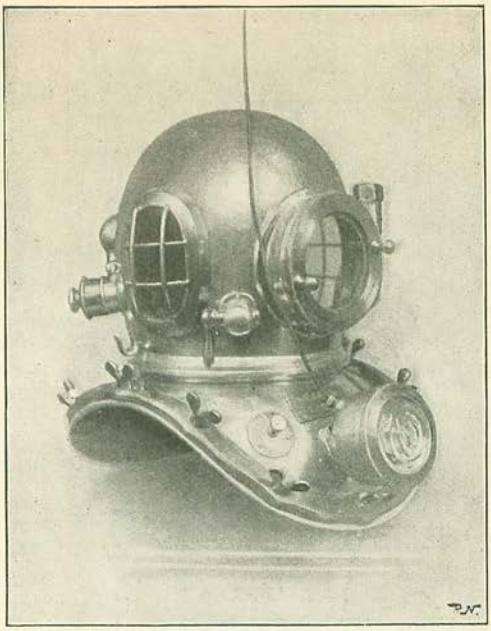
From an] A PRIMITIVE DIVING DRESS. *[Old Print.*

The dress of a fully equipped diver weighs 169½lb., and costs about £100. First of all comes 8½lb. of thick underclothing; then follow the dress itself, weighing 14lb.; boots, 32lb.—monstrous things with leaden soles; breast

and back weights, 80lb.; and, lastly, the helmet, which weighs 35lb. The moment the latter is screwed on, the air-pumps commence working, and the diver receives a pat on the helmet to intimate that he may descend with safety.

The first illustration on the next page not only shows a fully equipped diver and his attendants, but is the more interesting in that the scene depicted is the deck of the *Camperdown* immediately after that battleship had rammed her consort, the ill-fated *Victoria*; the photograph was taken on board the *Camperdown*. We should mention that the Admiralty adopted the diving dress fully thirty years ago; and, as time went on, the apparatus became more generally used throughout the service, until at the present day every flagship carries eight fully qualified divers, and every cruiser four. Among the principal duties of a diver in the Royal Navy are the repairing of any damage sustained by the vessel below the water-line, either by accident or during warfare; clearing the propellers in the event of their being fouled by wreckage; the recovery of anchors and chains which may be lost overboard, and the removal from the ship's bottom of sea-weed and other accumulations which tend to retard the speed.

We may mention in this connection that Messrs. Siebe and Gorman were commissioned to clean the hull of the *Great Eastern* while that monstrous vessel was being loaded with the cable for the Indian submarine telegraph. The contract price for the work was £1,800, and it was completed in six weeks by twelve divers. After the cleaning, the *Great Eastern* lifted fully two inches in the water, and her speed increased by three knots an hour. Nor is this surprising in view of the fact that the incrustations were more than a foot thick.



From a] MODERN DIVER'S HELMET. *[Photograph.*

A practised diver can work from four to seven hours daily below the bottom of a vessel, and can clean from seven to fifteen square yards per hour, according to the condition of the bottom. The instruments used in this work are: a couch-grass brush, a brush made of brass wire, a deck mop weighted with lead, and an iron scraper. The diver also takes with him a hanging stage or step, which is hooked on to a rope ladder beneath the keel, and on which he sits while at work. Incredible as it may seem, it is nevertheless a fact that deep-sea divers occasionally have a quiet nap far beneath the surface; and surely no more convincing testimony to the perfection of modern diving appliances could be adduced. One man was cleaning a ship's hull when he resolved to "knock off" and go to sleep seated on his step. He forgot, however, to secure his couch-grass brush to his wrist. Consequently, the moment the tired diver obeyed one law of Nature and fell asleep, his brush obeyed another law, and sped swiftly to the surface. The brush was

THE FIRST DIVING HELMET MADE.
From a Photograph.

DIVER ON BOARD H.M.S. "CAMPERDOWN" DRESSING TO REPAIR THE BREACH.
From a Photo. by W. Gregory & Co.

seen by the officer on duty on the vessel; the somnolent diver was awakened with no little difficulty, and, after having irretrievably committed himself in a telephonic altercation with his superior, he was called up and discharged.

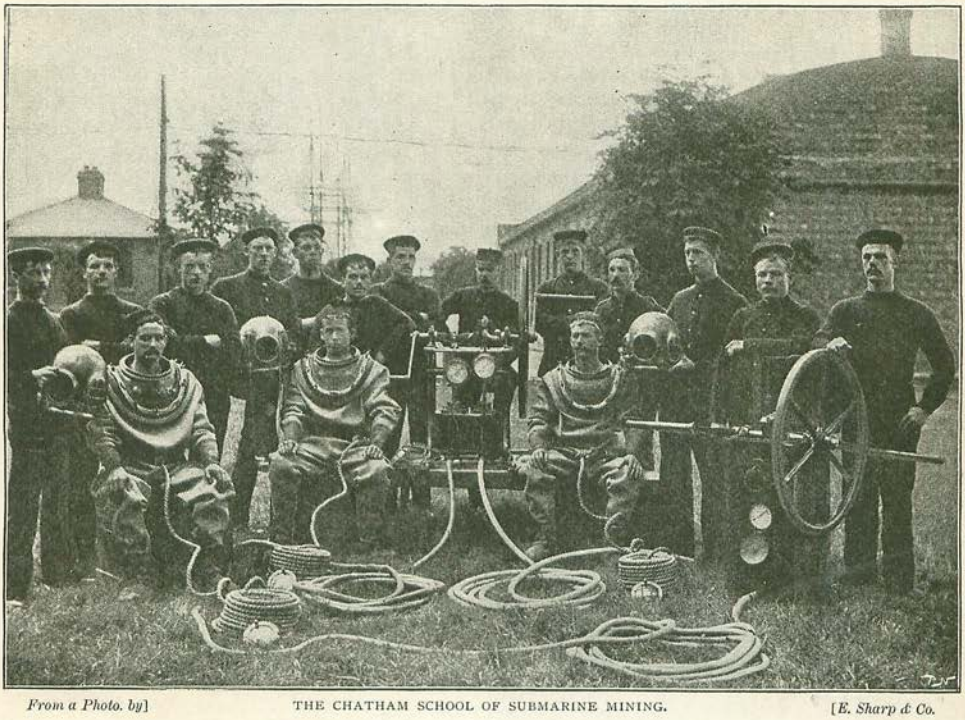
Another diver, engaged on a wreck, once went down with the sole intention of sleeping away a few hours. This man, on reaching the bottom, lashed his air-pipe and life-line to a spar, and then settled himself to sleep on a rock. After a time his attendant noticed that the life-line showed no movement, so he gave two pulls on it to signify, "Are you all right?" Not only was no reply received, but it was found impossible to draw the diver to the surface. After an anxious interval, a second diver was sent down, and the wrath of this man on seeing his comrade asleep may be better imagined than described.

We give here a portrait of Mr. W. A. Gorman, one of the greatest living experts in diving, and the present head of the Westminster firm. According to this gentleman, the greatest depth at which a diver may safely work is 150ft. One of Mr. Gorman's men, however, has descended into 204ft. of water, at which depth the daring man sustained a pressure of 88½lb. on every square inch of his body. Strangely enough, the coming up is even more dangerous than the descent, owing to the rush of blood to the head when the pressure on the brain is removed. The most experienced diver rarely ascends from great depths faster than 2ft. per second, nor does he take any food for at least two hours before commencing operations. In short, divers are picked men in every sense of the word, and have to undergo a searching medical examination before being trained.

It is decidedly interesting to watch a diver being dressed. First of all, he removes his own clothes,

MR. W. A. GORMAN.
From a Photo. by T. Bennett & Sons, Worcester.

and puts on a surprising quantity of underclothing—stockings, guernseys, and the like. Then comes the woollen cap, and, if the diver be venturing very deep, a crinoline, which serves to relieve the pressure of water. The shoulder-pad is then put on, after which the attendants literally force the diver into the dress itself. Outside stockings are worn, also a canvas overall to protect the dress. The diver presently steps on to the ladder, and two men are told off to man the pump; the weights are then put on, and finally the centre bull's-eye of the helmet is screwed in, after which the submarine explorer disappears beneath the surface.



From a Photo. by] THE CHATHAM SCHOOL OF SUBMARINE MINING. *[E. Sharp & Co.*

At one time divers under water used to walk backwards, lest they should collide with something and break the glass panel of the helmet. Modern invention, however, has obviated this inconvenience. A guide-line is carried, in order that the diver may retrace his steps without entangling his air-pipe or life-line. Although a telephone for deep water divers has been invented, together with a speaking apparatus for men at a depth of 60ft., the signal code is still in force, and constant communication is maintained between the men below and their attendants. Should the latter give one pull on the life-line, it signifies, "How are you getting on?" If all is well, the diver gives an answering pull to reassure those above. Two pulls on the air-pipe mean "More air" (pump faster), and so on throughout the code. It would be difficult to find steadier or more trustworthy men than divers' attendants; this is as it should be, for they literally hold in their hands the lives of the subaqueous workers.

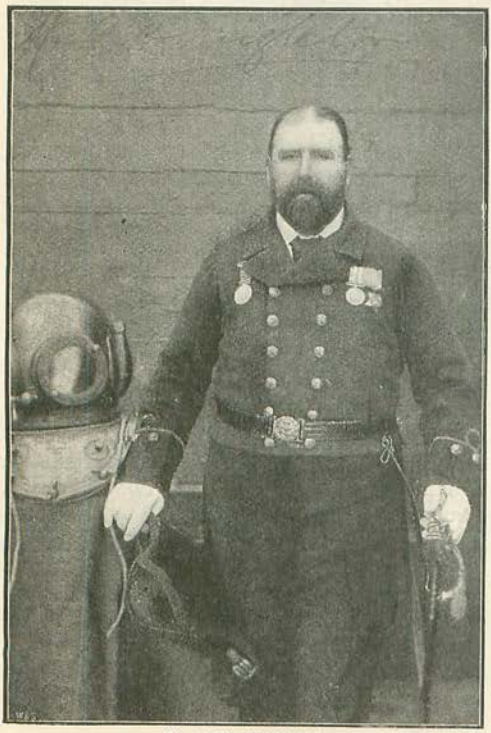
There is at Chatham a school of submarine mining, the Royal Engineers having adopted the diving apparatus about twenty-seven years ago; and we reproduce here a group of the stalwart pupils thereof. Behind the air-pump in the middle is seen Quartermaster-Sergeant White, R.E., the diving instructor. When fully qualified, the men are engaged in laying torpedoes and harbour defence generally. By the way, the Royal Engineers' diving school owes much to Colonel Fraser and General Lennox, V.C., who were mainly instrumental in establishing it. The former officer descended to a depth of 90ft. the first time he used the dress. Each harbour is now provided with two trained divers (Royal Engineers) and a complete set of apparatus.

Mr. White was good enough to send us certain details connected with his queer academy. The subjects taught are as follows: Taking the pump to pieces; attendance on

diver; examining moorings; finding a buoyed anchor; sending and receiving "Morse" on a life-line; and placing charges round a wreck. Altogether, the course of training lasts two months; and sixteen men were fully trained last year. Most of these divers can work 6½ hours in from 35ft. to 50ft. of water. The Duke of Connaught himself, when training at Chatham some years ago, descended to a depth of 30ft., and enjoyed the novelty of his situation so much, that it was with difficulty he was prevailed upon to come up.

The new-comer to this school is first dressed in a complete diving suit, with the exception of the front and back weights. When the bull's-eye of the helmet is screwed on and the air-pumps commence working, the pupil is allowed to sit down for a few minutes to gain confidence—for it is a ticklish business, this penetrating into "the dark, unfathomed caves of ocean," particularly if the mission be to lay charges of gun-cotton. Each man at the Chatham Submarine School is a volunteer for the work, and commences operations in 10ft. of water.

Divers for the Navy are trained at Sheerness, and are allowed a course of thirty-two working days; in the training school, each class is limited to twenty-five men. The work consists in recovering articles lost, and slinging them in such a manner that they can be easily hauled up; cleaning and coppering ships' bottoms, cleaning propellers, and communicating by slate and voice. We are assured by Mr. Deighton, the instructor at Sheerness (whose portrait we give), that a diver generally looks the healthiest of the seamen. When sufficiently trained to be able to work at a depth of 120ft., seamen divers are considered fully qualified, and are drafted to various ships. It would appear that diving is quite an important branch of work in the Navy. Lieutenants who qualify for gunnery and torpedo work go through a course of from ten to twenty days' training in diving, descending to a depth of 60ft. All gunners become more or less skilful divers on attaining warrant rank, and qualify either at Devonport or at Portsmouth, where they are trained by Mr. H. Stevens, R.N., to whom we are indebted for these details, and whose portrait also appears on this page.



MR. C. H. DEIGHTON.
From a Photo. by R. Hider, Sheerness.

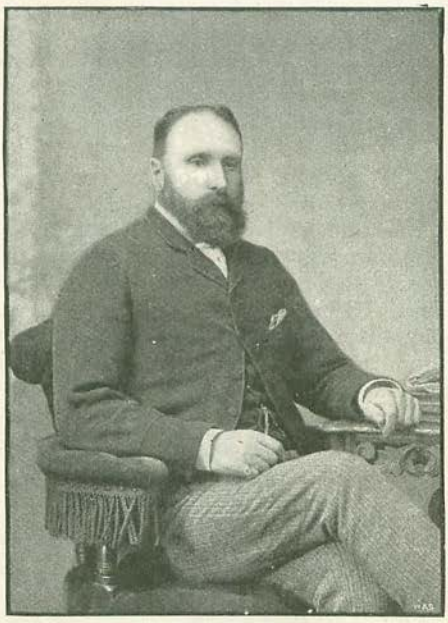
MR. H. STEVENS, R.N.
From a Photo. by Robinson, Landport.

About fifteen years ago Mr. Gorman was approached by a French engineer, named Carmagole, who exultingly declared he had invented a diving dress in which an expert man could work at a depth of 300ft., or even more. Mr. Gorman, who is nothing if not enterprising, resolved to test the value of the invention, which turned out to be a diving

suit of planished steel, with lobster-like joints. This suit was made in twelve months by a celebrated Paris armourer at a cost of £600. On its completion, Mr. Gorman hired a special steamer at Marseilles and journeyed out some forty or fifty miles into the Mediterranean, accompanied by one diver. The latter upset all calculations, however, for at the last moment he refused to go down in the new dress, urging, tardily enough, that he had a wife and family dependent upon him.

In order that the costly experiment might not be wholly fruitless, Mr. Gorman resolved to send the dress down empty. It was accordingly put together with great care, and lowered 300ft. into the sea. After a quarter of an hour's immersion, the strange-looking dummy diver was hauled up, whereupon it was found that no water had entered, notwithstanding the prodigious pressure at so great a depth.

Few people, we venture to say, have heard of the wreck-destroying department of Trinity House, as conducted by the chief diver, Mr. Alexander Sutherland, whose photograph we reproduce, and who receives instructions from the head stores at Blackwall. When a wreck takes place on our coast, the Trinity House authorities at once dispatch a vessel to the scene of the disaster. This vessel is moored close to the wreck, and displays a green flag in the day-time, and burns a brilliant light at night, as a warning to passing vessels to keep clear. Wooden ships that were wrecked used to go to pieces very quickly; there are now so many iron vessels, however, that when one is sunk, it is necessary to use some expeditious mode of destroying it. The Trinity House staff of "wreckers" numbers about thirty men, and includes two divers and their attendants, or signalmen.

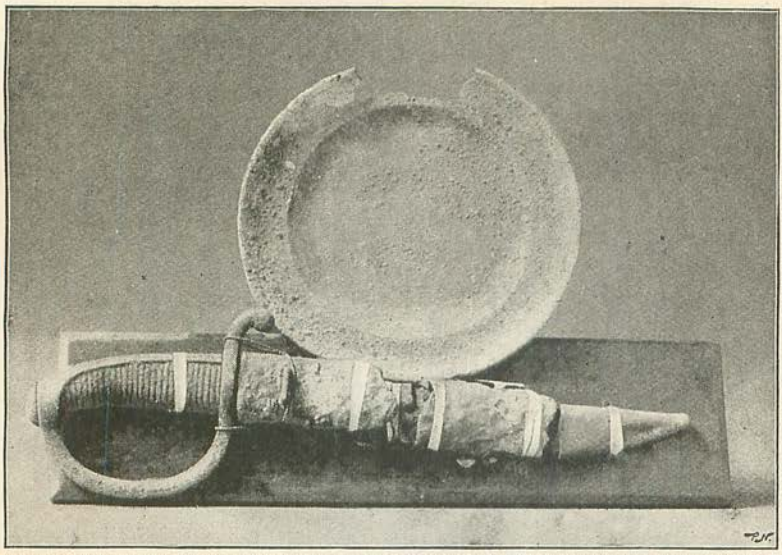


MR. ALEX. SUTHERLAND.
From a Photo. by W. Bartier, Poplar.

All the Trinity House depôts on the coast are in communication with the head-quarters at Tower Hill. The official tender, dispatched on wreck-destroying missions, is equipped with diving apparatus, cables, batteries, fuses, and a large quantity of gun-cotton. Mr. Sutherland estimates that he destroys from fifteen to twenty vessels every year. One of his recent jobs was a cargo steamer sunk off Dover in about five fathoms. This vessel lay in a particularly awkward position; its destruction took three or four weeks, and necessitated the use of nearly 4,000lb. of gun-cotton. Our informant (Sutherland himself) points out that not only does he run the risk of an ill-timed explosion, but his work as a professional diver is rendered peculiarly dangerous by reason of the loose spars and cordage of the wreck, which may entangle his air-pipe or life-line, and render him a prisoner at the bottom of the sea. We may mention that even the heavily weighted diver finds it rather difficult at times to maintain an upright position. Men diving at a depth of ten fathoms and more are cautioned not to keep their heads down for more than fifteen seconds at a time, lest the air should accumulate in the dress and cause them to glide upwards against their will. Should this occur, the diver opens the regulating cock in front of his helmet, signalling at the same time for "less air."

During the summer of 1842, a corporal and twenty-three of the rank and file of the Royal Sappers and Miners, in addition to nine men of the East India Company's sappers, were employed at Spithead, under Major-General Sir C. Pasley and the late Mr. A. Siebe, in the removal of the wreck of the *Royal George*. The operations were carried on incessantly from the 7th of May till the end of October. It is impossible to adequately describe in this article the difficulty of this prodigious task, which was sporadically carried on for several years. The divers not only worked at a great depth and with a flowing tide, but the actual scene of their labours was covered with thick mud, in which were embedded large timbers and guns, iron and shingle ballast, and a thousand other obstacles.

In Mr. Gorman's cosy office at West-



ADMIRAL KEMPENFELDT'S SILVER PLATE AND SWORD, FROM THE WRECK OF THE "ROYAL GEORGE."
From a Photograph.

minster may be seen a veritable museum of interesting objects, mostly recovered from the deep sea. We have spoken of the removal of the *Royal George*. Here is shown Admiral Kempenfeldt's sword together with a silver plate taken from his cabin. The ornamental vase seen in the next illustration is fashioned from the timbers and metal of the *Royal George;* while the relics grouped upon it were all found by the divers. They speak for themselves. Look at the old clay pipe, once the comfort of some doomed sailor; the cup and spoon from Kempenfeldt's cabin; the old boot and pistol, and the silk handkerchief on top of all, none the worse for its eighty-four years' immersion.

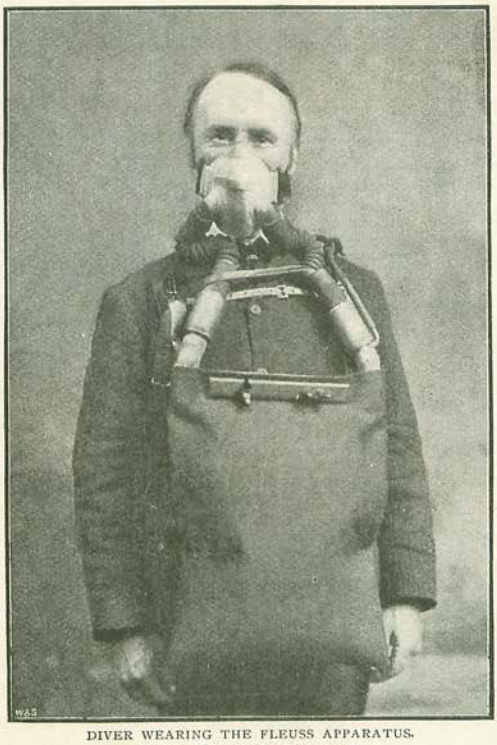
The magnitude of this subject is such that we can give but the briefest description of harbour works. During the construction of the breakwater at Libau, in Russia, no fewer than thirty divers were employed; Messrs. Siebe and Gorman having sent two of their own expert men to teach twenty-eight Russian masons how to manipulate blocks of fifty tons at the bottom of the sea. This important work took four years, half of the divers working by day, and the other half by night. This latter gang used submarine electric lamps, and were also assisted by a powerful electric lamp of enormous size, which depended from a Titan crane and penetrated the 40ft. of water. One of the most successful operations in the way of ship-raising was the floating of H.M.S. *Howe*, which struck on a rock off Ferrol. The work was undertaken by the Neptune Salvage Company, of Stockholm, presumably because English enterprise fought shy of it. The Admiralty placed all the plant they could at the disposal of the company, and Mr. Gorman contributed the submarine searchlights and diving dresses.

The method adopted was at once simple and efficacious. The rock that had penetrated the battleship's bottom was blown

From a] RELICS FROM THE "ROYAL GEORGE." *[Photograph.*

away; a platform was built over the damaged portion, and the *Howe* was then pumped and floated. Eight divers were employed, and so thoroughly did they do their work that the great vessel lay at anchor some time before being docked for thorough repairs. The salvors of the *Sultan* built up the inside of the ship with bricks and concrete, and then used the platform. The whole of this work took but six weeks.

The pay of divers varies according to the nature of the work. On big salvage jobs the men receive a standing wage and maintenance, together with a percentage on the value recovered. While engaged on the Libau breakwater, Mr. Gorman's chief diver, Murphy, signed a five years' agreement on the following terms: he was to receive £350 a year, with a house and maintenance; and he eventually got a bonus of £600. Which explains that while the cabmen complain of unfair treatment, and the boot operatives petulantly neglect their soles, "Brer Diver, he lay low." Talking of Murphy, though, it must be said that he kept his big gang of Russians hard at it, and from time to time descended upon them, in a literal as well as in a metaphorical sense. Experienced English divers employed on foreign harbours and pier, dock, and bridge contracts get from £20 to £30 a month. For similar work in this country the pay is from 2s. 6d. to 3s. 6d. per hour; but from 5s. to 10s. per hour is paid for well and colliery work.

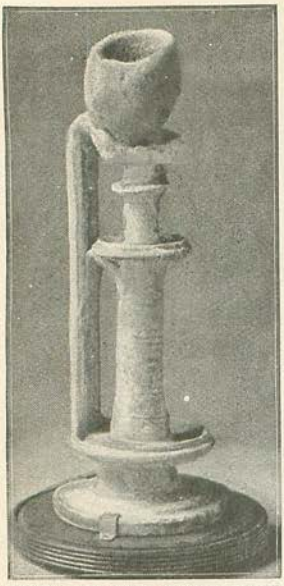


DIVER WEARING THE FLEUSS APPARATUS.
From a Photo. by E. Sharp & Co.

This brings us to an extraordinary phase of the diver's occupation, namely, working for hours in irrespirable gases. The "diver" shown in our photograph is provided with the Fleuss apparatus, which is self-contained and entirely independent of any communication with the outer atmosphere, thus enabling the wearer to breathe with safety in the most deadly gases, and to explore the most intricate turnings of a mine with perfect freedom of action. The principle of the apparatus is that the wearer breathes the same air over and over again, the carbonic acid being absorbed from it after each expiration, and at the same time the requisite amount of oxygen restored to it.

The apparatus consists of a strong copper cylinder, 12in. long and 6½in. in diameter, with domed ends, and capable of containing four cubic feet of oxygen, at sixteen atmospheres pressure; the man carries this cylinder on his back, and its contents are sufficient for four hours' respiration. Above it is the carbonic acid filter—a square metal box fitted with cubes of india-rubber sponge saturated with a thick pasty solution of caustic soda. In front of the diver (as may be seen in our illustration) is a flat bag of vulcanized india-rubber, measuring 15in. by 12in.; into this passes the exhaled air from the filter, and the bag is also connected with the oxygen-chamber at the back by a second pipe. The mask is made to fit air-tight to the face of the wearer, and is held in position by straps buckled at the back of the head. When venturing into certain gases and blinding smoke, the diver is further provided with a band of rubber, which covers his ears, and glass lenses for the eyes. The whole apparatus weighs but 26lb., costs £18, and can be adjusted in a few seconds.

The inventor, Mr. Fleuss, is at all times ready to test the apparatus. He has remained for hours in the densest smoke, and also in a glass chamber charged with carbonic acid. His invention was for a long time used regularly at the Westminster Aquarium; but to come to matters more practical, the apparatus was recently the means of saving ten lives at the Killingworth Colliery, and it

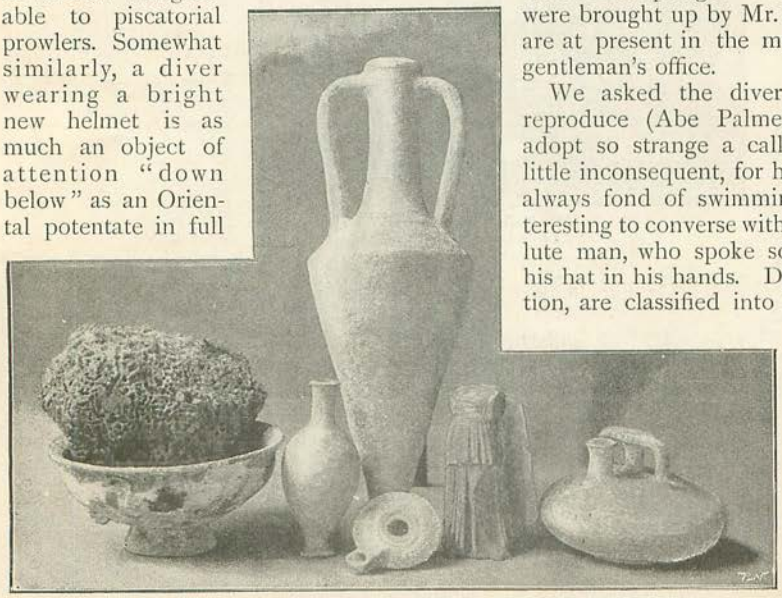


GREEK LAMP, WITH SPONGE, FOUND OFF THE COAST OF SYRA.
From a Photograph.

was also used at the re-opening of the Maudlin seam of the Seaham Colliery, after the fatal explosion of September, 1880. We believe this breathing machine is constantly kept at Seaham; the men were nervous at first, though, and, in order to coach them in the use of the apparatus, the authorities rigged up, as a training school, a temporary wooden building, which they periodically filled with sulphurous fumes of a sufficiently choking kind.

The submarine electric lamps made for the Admiralty for torpedo work are of 1,500 candle-power. These powerful lamps attract myriads of curious fish—curious in the double sense of the term. In certain waters these fish become a nuisance, and the diver has sometimes to eject paraffin oil into the water round the lamp, in order that the vicinity may be rendered disagreeable to piscatorial prowlers. Somewhat similarly, a diver wearing a bright new helmet is as much an object of attention "down below" as an Oriental potentate in full panoply would be if he walked down the Strand.

We reproduce on this page a picture of a Greek lamp which was found off the coast of Syra, and which is supposed to date from the year 300 B.C. It will be seen that a sponge was growing from the lip. We also show a group of articles—Greek vessels, etc.—recovered from a submerged island in the Greek Archipelago. These interesting relics were brought up by Mr. Gorman's divers, and are at present in the museum of that jovial gentleman's office.



GROUP OF ARTICLES FROM SUBMERGED ISLAND IN THE GREEK ARCHIPELAGO.
From a Photograph.

MR. ABE PALMER.
From a Photo. by G. F. Hewitt, Weymouth.

We asked the diver whose portrait we reproduce (Abe Palmer) how he came to adopt so strange a calling; his reply was a little inconsequent, for he merely said he was always fond of swimming. It was most interesting to converse with this daring and resolute man, who spoke so quietly and twirled his hat in his hands. Divers, we should mention, are classified into various heads, which are further subdivided into trades. Palmer may be described as a "fresh-water man," with a pronounced antipathy to wells. Palmer loathes working in a well. Four years ago he was working in a well 180ft. deep, at the

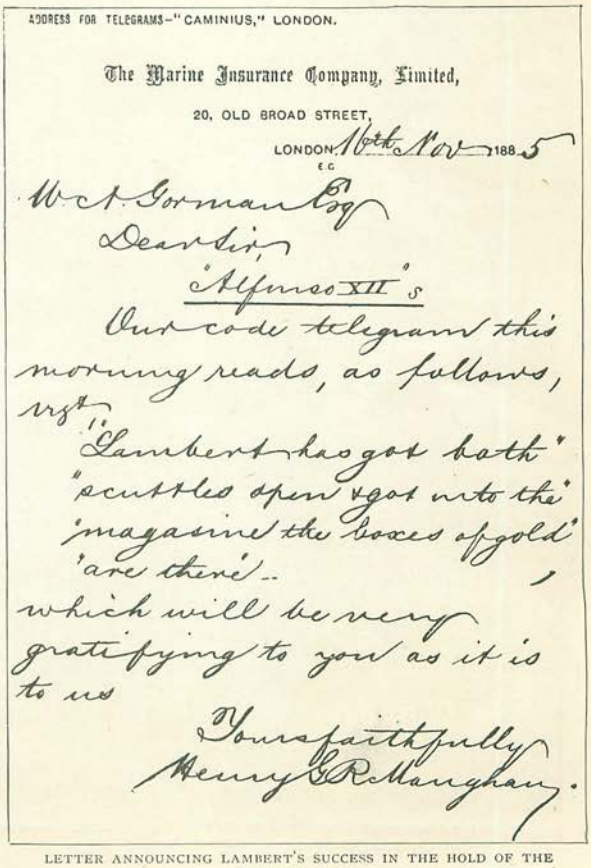
Savoy Hotel, when his earth-bucket unhooked an immense iron rod, which fell with a frightful crash and quivered in the ground at the bottom, within a few inches of the diver, whose attendant it had disemboweled on its way down. Speaking of his professional *bête noir*, Palmer remarked, naïvely, "You see, when you're in a well you can never tell what's coming down; it may be a brick, or a bucket, or even part of the wall." We may add that deep-sea divers also strongly object to well work; for this objection they give the curious reason that they feel stifled and oppressed within so strait an area.

MR. LAMBERT.
From a Photo. by Perez, San Francisco.

After all, this is but natural. Think of the deep-sea diver working at a great depth in the translucent sea of the tropics, and surrounded by a veritable forest of graceful, drooping submarine growths and countless multitudes of beautiful fishes, which glide hither and thither among the rocks. Obviously, his lot is cast in pleasant places compared with his colleague who descends the shaft of a flooded coal mine in order to recover scores of corpses. During the operations at the Severn Tunnel, Portskewett, the shaft was flooded with water owing to a door in the drainage tunnel having been inadvertently left open. Mr. Gorman's diver, Lambert, volunteered to shut this door, and equipped with a Fleuss apparatus he walked a distance of 1,050ft. up the tunnel, in water 50ft. deep, so as to accomplish his perilous mission.

Many of the wrecking divers told gruesome stories of their adventures under water. Palmer, who was evidently impressed by the experience, described how he had seen dead women floating before his eyes and standing at the top of the companion-ladder of a sunken steamer, their hair streaming behind them, and some carrying infants clasped in their rigid arms.

As we have said before, the fish in certain waters are a hindrance; they are greatly disliked by the diver, especially if they happen to be sharks. Mr. Lambert, Messrs. Siebe and Gorman's late chief diver, once had a thrilling fight with a shark at the bottom of the Indian Ocean; this man, by the way, was, without doubt, the greatest adept in his extraordinary profession that has yet appeared. On the occasion referred to, Lambert had been sent to the Island of Diego Garcia to fix copper sheets on a coal hulk that had been fouled by a steamer. Strange as it may seem, the diver was annoyed by the same shark every day for nearly a week; the monster was temporarily scared away, however, every time Lambert opened the escape valve in his helmet and allowed some air to rush out.



ADDRESS FOR TELEGRAMS—"CAMINIUS," LONDON.

The Marine Insurance Company, Limited,

20, OLD BROAD STREET,
LONDON, E.C. 16th Nov 1885

W. T. Gorman Esq
Dear Sir,
"Alfonso XII"s
Our code telegram this morning reads, as follows, viz.
"Lambert has got both"
"scuttles open & got into the"
"magazine the boxes of gold"
"are there"
which will be very gratifying to you as it is to us
Yours faithfully
Henry R. Callaghan.

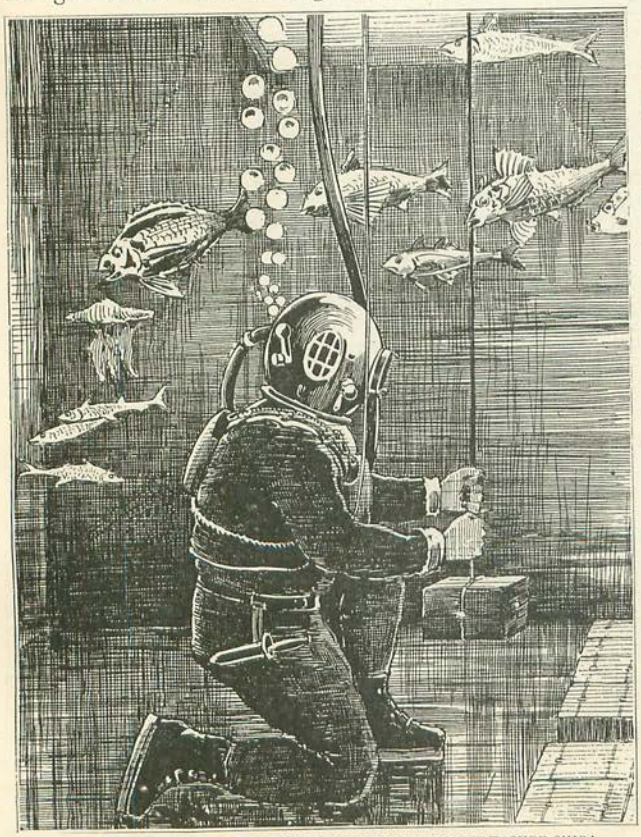
LETTER ANNOUNCING LAMBERT'S SUCCESS IN THE HOLD OF THE TREASURE-SHIP.

We take it that at these times the shark thought there was a whale somewhere about.

One day Lambert signalled to his attendants for a big sheath knife and a looped rope. Having got these, he used his bare hand as a bait, and waited until the shark commenced to turn on its back, when he stabbed it repeatedly, passed the noose round its body, and signalled for it to be drawn up. The diver brought home the shark's backbone as a trophy. Many divers—especially among the pearl-fishers of Western Australia—will not venture into the depths of the southern seas unless they are provided with a huge iron cage in which they may work. We imagine that even then it is uncomfortable enough to see a multitude of strange and diabolical-looking creatures peering in through the bars. Shark cages for divers cost about £10 each, and weigh a quarter of a ton.

TREASURE-CHEST FROM THE "ALFONSO XII.," WITH GOLD COIN SET IN THE PANEL.
From a Photograph.

Mr. Lambert's greatest achievement was the recovery of treasure from the *Alfonso XII.*, a Spanish mail steamer belonging to the Lopez Line, which sank off Point Gando, Grand Canary, in 26½ fathoms of water. The salvage party was dispatched by the underwriters in May, 1885, the vessel having £100,000 in specie on board. The letter we reproduce on the preceding page gives the ultimate result. For nearly six months the operations were persevered in, and golden bait was dangled before the divers who could reach the treasure-room beneath the three decks. Two divers lost their lives in the vain attempt, the pressure of water being fatal. Our illustration, showing Lambert in the hold of the treasure-ship, is a drawing from a painting which Mr. Gorman had executed to commemorate the recovery of £90,000 from the *Alfonso XII.*; Lambert's share of this was £4,500. Our artist took a photograph of one of the original treasure-chests removed from the vessel; it will be seen that one of the gold coins is set in a glass panel in the side of the box. This interesting relic is in the museum in Mr. Gorman's private office.



LAMBERT AT WORK IN THE HOLD OF THE SUNKEN TREASURE-SHIP: SENDING UP THE CHESTS OF GOLD.