

and all they left was still there, with the addition of two crows and a pickaxe, a large amount of dust and *débris*, and a gaping chasm in the floor, where their altar had stood, disclosing a trap-door broken off its rusty hinges, and a stair leading down to a deep and narrow cellar, exactly like that of Morice Durone's dream: it was furnished with two chests, not of ebony, but cast iron: the locks were wrenched off, and they were empty.

Father Pedro was unable to preach for some months after that discovery. All the machinery the Society could command was put in motion to track out Morice, and extort part of his findings. In the former quest they succeeded easily; Morice was by that time at the *Hôtel de l'Europe* in Paris, consulting registers and notaries about the redemption of his family estate; he had a considerable stake in the Bank of France, and was getting reconciled to his relations and the Huguenot Church, with the facility always experienced by fortunate men. But the latter endeavour was not so easy to the brotherhood; their credit with court and cabinet had fallen so low, particularly in France, that nobody could move a step in their service, till the Spanish ambassador, being informed that his parchment had been a principal instrument, thought he might have a private interest in the affair, and accordingly paid Morice a private visit. His former salesman received him with great politeness in a splendid *salon*, and would have discussed the news of the day; but the Marquis assured him that his own exploit at Malaga was the most interesting subject on the *tapis*, and begged to inquire which of the parchments, said to have been sold to Monsieur Durone's passing countryman, had been furnished to Father Pedro.

"Monsieur le Marquis," said Morice, "since you have honoured me with a visit on this account, I will be frank with you. Your parchments were sold. Your agent sold them to Morice Durone—for I myself was the Frenchman who happened to be passing, and I did not intend to finish my days in Spain. However, the Moorish manuscripts have been presented to the Royal Library of Paris, and I had the honour of paying your Excellency every rial of the price set upon them. The document furnished to Father Pedro was not the one found in your tin case, but a *fac-simile* which I made for his amusement, having some scraps of talent in the artistic line—with this difference, that the original represented his own college, and gave the interior of the chapel; there was also a peculiar mark at the eastern corner, which suggested to me the advisableness of excavating there; and you will observe I took the necessary steps. Your excellent ancestor, who doubtless found the parchment among the papers of some of the Jews he burned, must have known its value; but, being a Dominican, he did not wish to enrich the Jesuits, then in possession, and did not know that a follower of Calvin would come to benefit by it, in the same street with the Holy Office. So things take their turn, Monsieur le Marquis; it is not yet a hundred years since my family lost land and station through the endeavours of the amiable Society which owned that little college in Malaga; and now I am about

to buy back our property with the gold over which they said mass for almost two centuries."

"Very remarkable," said the Marquis, trying another tack; "but your sense of honesty will, of course, indicate the propriety of making some acknowledgment to the lawful owner of that valuable parchment."

"Certainly, Monsieur le Marquis;" and Morice took from a cabinet hard by a large goblet of solid gold, ornamented with figures in *bas relief*. "Permit me to present you with this cup, which may have been used at many a passover and marriage feast, before your excellent ancestor and the pious sovereign he served interfered with its lawful owner. The goldsmith has wrought upon it the scene of Joseph sold by his brethren, and thus made it a suitable present for a gentleman so skilful in bargains."

The Marquis kept down his Castilian blood: the cup was worth two hundred pistoles at least; but he cordially hated Morice till the end of his days. The latter is said to have made a liberal use of the wealth won in such a questionable fashion; but it was not considered safe for a Frenchman to settle in Malaga, till after the suppression of the Jesuits by Clement XIV, in 1773; and the good people of that town, among the many tales more creditable to the cleverness than the honesty of their Gallic neighbours, still repeat the story of Father Pedro's Convert.

THE ROYAL UNITED SERVICE INSTITUTION.

FEW sights in London are more interesting than the Museum of the Royal United Service Institution in Whitehall Yard. The external building indeed is small, and the apartments within possess not the slightest approach to ornament; but a visit cannot fail to leave a deep impression on the contemplative mind, not without a shade of sadness, as most of its contents relate to men who are now no more.

A ticket of admission, signed by some member of the naval and military Institution to which it belongs, is requisite for the inspection of the Museum. Provided with this *permit*, a visitor is allowed to roam through the rooms at pleasure. We had the good fortune, however, to be accompanied by the highly intelligent and courteous secretary, Captain Burgess, to whom we are indebted for much of the information in the present article.

On passing out of the Secretary's office, we are immediately conducted into a room where there is a small but exceedingly useful collection of the military uniforms at present *in vogue* throughout Europe—English, French, Belgian, Austrian, Prussian, Sardinian, etc.—which did not fail to engage the attention of our Rifle Corps authorities, when the question of the most desirable material, shape, and colour for the soldier's clothing was so much debated. A second department exhibits the not less important subject of providing for the quarters of troops in the field; and Mr. Turner's, as well as Major Godfrey Rhodes' improved or patent tents, may be inspected with much advan-

tage. Both of them are admirable in their way, and, could a combination be effected, they would, as nearly as possible, approach perfection. The second room also contains models of the steam-engine, of every variety, from the earliest application of steam to the present day.

On entering the third apartment, or rather long gallery—named the European Armoury—we find a large and varied collection of the different weapons used in war, from the time of Henry VIII and his bows, up to the latest improvement of the revolver. It is curious here to remark the ingenious and often exceedingly complicated forms of some of these, especially the most ancient implements devised for the destruction of the human species. Had a tithe of the invention and labour thus expended by man for his own extermination been devoted to his bodily or mental improvement, we cannot help thinking the world would at present have been much better worth living in; but such, possibly, have been the reflections in all ages; and, how desirable soever such a consummation may be in the eyes of the sanguine, we fear it must long remain a phantom in the dreams of the benevolent and the wise.

One little weapon—though a very formidable-looking affair, too—in this apartment struck us as proving how really little of novelty there exists under the sun. In a small implement (of death) named the *Snaphaunce*, belonging to the era of Charles I, we find the model of the American revolving pistol of the present day. The Transatlantic Colonel Colt's lethal instrument is in almost all respects a fac-simile; and doubtless many specimens of ancient armour here exhibited would, if closely inspected, be found to be equally the originals of modern weapons.

The fourth apartment is devoted to an almost equally varied collection of Asiatic arms; proving by its extent and ingenuity that the natives of the East have been not less industrious than ourselves in devising means for accelerating the arrival or progress of that otherwise sufficiently rapid-marching potentate—the king of all earthly terrors. India, China, Borneo, Ceylon, the Malays, and the inhabitants of Afghanistan, seem to have vied with each other in their eagerness to increase the dread monarch's ceaseless pace.

The Enfield Rifle-room, into which we next pass, at once strikes the spectator by its exhibition of the almost innumerable operations to which that weapon is subjected, from the time the materials first emerge from the forest and the bowels of the earth, till appearing as a perfect instrument in the soldier's hands. No less than twenty-three processes are necessary for the formation of the stock alone; and sixty-six are required to complete the barrel, from the moment of its primitive aspect as a piece of flat iron. The different stages through which the manufacture of the lock proceeds are almost incredible; twenty-three being indispensable in one department, twenty-six in another, the trigger alone demanding eleven distinct manipulations, while forty-nine are requisite to complete the bayonet.

In the same apartment will be found a small but

interesting collection of breech-loading rifles. The celebrated Prussian needle-gun is amongst the most conspicuous of these; and it appears a beautiful weapon, though destitute of that simplicity which is so necessary in war, and which, indeed, characterizes every inanimate as well as animate production that is truly great.

We next proceed to the Naval department, the progress of which, since we first visited the place ten years ago, has really been most commendable. It must long remain a matter of astonishment and humiliation to an Englishman that, with all the vaunted and undoubted supremacy of Britain as a naval power, we have no such brilliant assemblage of objects of interest to naval men, as are to be found in the Marine Museum of Paris. The splendid collection of models, and all implements of maritime warfare there to be seen, is wholly unequalled on this side the Channel. But the progress of this British Institution in this respect has recently been great, considering that it is merely a private Institution.* It contains, however, objects of curiosity which are nowhere else to be seen.

Amongst the first of the models which arrest the visitor's attention on entering this apartment, is a beautiful one of the "Cornwallis," an old Bombay seventy-four, one of those noble ships which performed such immortal service in the days of Nelson, Howe, and Jervis, though they were but cock-boats in comparison with our existing line-of-battle ships, and are now for ever numbered with the past. A gaudy specimen of a Hanseatic League ship, of the year 1650, is also here to be found, as well as a small model of the deathless "Victory," and an old Dutch vessel, seemingly of the time of the bloody Duke of Alva, which looks like a Chinese junk, or washing-tub. Several beautiful models of modern English frigates are also here to be seen, recalling the days when they unfolded their plumage to the gale, and "walked the waters like a thing of life," ere they experienced the doom of being supplanted by more prosaic but useful steam.

What will attract the non-professional visitor's attention, however, perhaps more than any other subject in this apartment, is an astonishing model of a ship in a bottle, by one of the French prisoners of the first Napoleonic war, who was in the Norman Cross Prison. It is, of course, constructed on the tiniest scale, and the patience with which the poor artificer succeeded in introducing it, bit by bit, through the narrow aperture of the vessel, must have been painful indeed; though, doubtless, the occupation afforded a solace to his weary sojournment there. A similar model was presented by him to the Prince Regent.

Life-boats, on the model of the Northumberland as well as Royal National Life Boat Institution, are also here to be found; together with illustrations of the means of communicating from land with shipwrecked vessels; Clifford's plan (strangely enough, we were told, a lawyer's invention) for lowering boats in heavy seas; and a British (Cun-

* We are happy to state that this Institution has lately been incorporated by Royal Charter, and receives a small grant from Government.—EDITOR.

ningham's) mode of reefing topsails from deck, instead of proceeding aloft in stormy nights—a practice, by the by, which has been an immemorial custom of the Chinese.

Quitting this, we enter now what is termed the Second Naval Model department; and here the true romance of the exhibition begins. Amidst models of anchors and guns of every variety, the visitor's attention is at once riveted by the identical main-truck of the celebrated French vessel "L'Orient," blown up at the battle of the Nile. The story is well known, and will long live in the hearts of men. Casabianca, the captain who commanded her, and was vice-admiral of the French on that fatal day, had been mortally wounded, and though the ship was on fire, his son, a beautiful boy of ten or eleven years of age, refused to forsake him. In a few minutes the ship blew up, and they were together in eternity.

A gun, terribly weather-beaten, secured from the wreck of the "Mary Rose," sunk at Spithead in the reign of Henry VIII, is also to be found in this apartment, as well as one associated with the still more painful history of the "Bounty," and a curious old piece of artillery, seemingly for shooting wild fowl, fished up off Dover Castle. Portions of the "Royal George" are also to be seen, recalling the memorable catastrophe of the tranquil Kempenfelt; and Sir Francis Drake's walking stick, a stout bamboo-cane with ivory head, much like one of the present day. Here, too, is Captain Cook's chronometer, made by one Larcum Kendal, London, still going, and keeping time with a fidelity not to be surpassed by any now fabricated by the present worthy Lord Mayor of that city—a *horloger* of renown.

In the same room we find a collection of old naval uniforms, all of them vastly more gorgeous than the present, but awfully baggy, and cumbersome enough, we should think, in action. These, however, were in the days of periwigs and ruffles, which seemingly have for ever passed away, though hoops have again come into fashion.

In another part of the Museum will be found a trophy of a different order—the sword of Cromwell; that sword which he often wielded ruthlessly at home, but with which he upheld the honour of England abroad; that sword which has impressed his character with hues of dazzling lustre, but has at the same time steeped it in dyes of immortal gloom. Scarcely inferior in interest are some relics of Nelson, the greatest captain who ever led men to victory on the ocean.

In the Asiatic Armoury we find another relic, being the dress in which Tippoo Saib, a hero of another order, but still a hero, was killed. It is so carefully wadded as to be almost sabre proof; though it did not save him from meeting his doom. Close by are the pistols taken from his belt on the fall of Seringapatam. A curious collection of foreign swords is also here, Malay and Burmese, Chinese, etc. Some of them, of semilunar shape, have teeth serried like saws, and all assuredly have an aspect villanous enough.

In the Foreign Naval Model-room there are several very interesting models; among them the

celebrated Maltese war-galley and Malay prow. A Chinese pleasure-junk, a huge and clumsy though highly ornate affair, is also here; together with an effigy of one of those memorable lorchas, or celestial trading boats, which threaten to let loose upon the world another Iliad of woes. A curious representation of the Burmese emperor's state-barge will repay notice here, as well as its rowers, before it and these funny-looking little men were superseded by that smart steam yacht, built for him by Napier of Glasgow, the model of which is elsewhere to be seen.

In the same department there is a magnificent table made from the stout oak timbers of the "Victory." It is intended to surmount this with a model of the battle of Trafalgar; but at present it is mainly occupied by the Franklin relics. These have already been described in this journal; but they still excite an enduring interest, as all that now remains of men who, in the discharge of duty and pursuit of science, have for ever perished in the realms of snow.

Ascending the stair-case to the floor above, we encounter Dampier's chart to New Guinea, still in as good preservation as ever, though presented to the Lords of the Admiralty in the year 1699 or 1700. Models of fortification are to be found in the first apartment we enter, especially a beautiful model of the fortified town of Linz, on the Danube, protected by that modern system of detached forts which have since been adopted in Paris. Here, too, is a very singular specimen of the New Zealanders' war-pahs, defended with such skill as to lead to the supposition that they must have been taught the art of constructing them by the French. In the Waterloo room are Captain Siborne's well-known model of the field of Waterloo, on that memorable day; and Colonel Hamilton's (of the Grenadier Guards) very meritorious representation of the war in the Crimea, in which the proportion is so well observed that even the smallest ships are made on a scale relative to the size of Sebastopol.

But it would be idle for us to attempt sketching in a brief paper a tithe of the interesting objects to be found in this Museum. We cordially recommend our readers to visit it; and every member of the services ought specially to support the Institution, for the honour of the profession, as well as for personal advantage when within reach of London.

There is also a library of between eleven and twelve thousand volumes. The walls of the Topographical Department are adorned with maps and charts, in which the members, by means of pins, etc., keep themselves *au courant* whether with warlike operations or peaceful movements over the world. The events of the late campaigns in India, and even in Italy, are here thus illustrated. The members meet once a-week, or oftener, we believe, for the purposes of lectures or discussions, in a well-arranged theatre.*

Outside the edifice there are a few curiosities which are to be seen by the whole world, without the necessity for an introductory ticket: an anchor

* The lectures are afterwards printed in the Journal of the Institution.

belonging to one of the vessels in the Spanish Armada; a Chinese gun, and a large piece of artillery, or 56-pounder, captured from the Russians in the late Crimean war, but not, apparently, till after it had sustained some effective service, if one may draw such an inference from its battered condition.

SECOND SHAPE.

FUSELI, the eccentric painter of nightmares and other horrors, was, as few of my readers need be informed, a very inventive man. He began by inventing a new name for himself. The real patronymic of the celebrated Swiss painter was Füssli—a name which, being interpreted, means “little foot,” or rather “pettitoes.” The man of genius objected to the name, and, by a trifling change of letters, created the euphonious Italian equivalent by which he is so much better known. Fuseli was a good Greek scholar, and every inch of him a wit. On one occasion, it is related, he played off the following trick upon old Porson. It was the boast of the latter that, a few words of a classic Greek author being quoted, he could not only mention the author, but point out chapter, line, and verse; thus referring every Greek quotation to its proper authorship and place. It is reported of Fuseli that, sitting one day at a Royal Academy dinner with Porson, he quoted a bit of Greek, and asked the latter to refer it to its proper authority.

The professor ransacked his memory and looked thoughtful, but ended by confessing he could not tell.

“I should think not, indeed,” retorted Fuseli with a laugh; “why, I just invented it.”

Well, in like manner the expression *second shape* is almost an invention of mine, though not quite. I, perhaps, should call it a free translation of the scientific term of Greek significance—*allotropism*.

There is a fashion in philosophy, no less than in the cut of a gentleman's coat or the architecture of a lady's bonnet. Every now and then one finds scientific treatises pervaded with a few pet words, representing facts or theories in vogue at the time. Far be it from me to speak disparagingly of *all* hard scientific terms; most of them have a real significance, though a few, it must be confessed, are employed on occasions when they need not, and are made to solace the pride of philosophy by standing for things really unknown, though philosophers do not like to say so. It is my intention, presently, to state so much about that hard word *allotropism*, by way of explanation, as shall reconcile the reader to it when next it comes in his path; and I shall begin by taking the liberty of denominating it *second shape*.

In order to be quite intelligible, the reader must be informed that this world of ours, its atmosphere, its animals, and its vegetables, are made up of some fifty-eight or sixty different materials or elements. Chemists do not exactly know the number, because the claim of certain materials to be different from all other materials is not quite admitted. Many of them have to submit to the torture and the scrutiny

of chemists for years, before their patent of nobility, their right and title to be considered as simple bodies, is fully conceded; but, until comparatively late years, the assumption was taken for granted, that one and the same body must necessarily display, in its simple and uncombined state, the same characteristics. I really do not know on what grounds this assumption was so complacently accepted, for the fact has been long known that charcoal and the diamond are one and the same body—carbon. So it was, however; the dissimilarity in appearance of the diamond and charcoal was long known, before chemists suspected that what held good for carbon might also hold good for other bodies. At length, however, the curious fact was placed beyond doubt, and the term *allotropism* was invented—a term which I have ventured to render by the homely phrase, *second shape*. Let the reader not misunderstand me: the shape or appearance of materials is marvellously changed by composition. The very substance carbon, out of which, in its pure state, charcoal and diamonds are formed, bathes our bodies as an invisible gas; yet, the gas is not carbon alone, but carbon in combination with oxygen. All the pit-coal in existence, all the charcoal, all the carbon of animals and vegetables which, after burning in close vessels, will become charcoal, once existed in this gaseous invisible form. In the form of this gas we evolve from our lungs no less than about thirteen ounces of charcoal every twenty-four hours. The charcoal is thoroughly altered from its ordinary form, seeing that it exists as a gas; but it is not uncombined, it is united with oxygen; therefore, the wonder is less great than it would have been had no combination taken place. The great wonder of the allotropic or second shape condition of bodies is, that the second shape is unattended with any combination; wherefore it occurs we cannot tell: the whole thing is a mystery to us.

The most familiar example of second shape is, as I before mentioned, furnished by carbon. In the diamond it exists under one form; in charcoal under another. We have all been so accustomed, from our earliest school-days, to accept for granted the identity of the diamond and charcoal, chemically speaking, that perhaps my readers will not require that I should furnish proof of that identity. It may be interesting for them, however, to know that the diamond can readily be converted into coke, which is only a particular form of charcoal, and that although the converse of this—the conversion of coke into diamonds—has never been accomplished, nevertheless, I believe that the diamond has actually been made by one of those tortuous chemical operations described some time since in an article on “aluminium.”* By what strange agency the diamond has been made by the operations of nature, it is impossible to say. There is very little reason, however, to doubt that the origin of the gem is vegetable. Diamonds are sometimes found with little bubbles of air in their substance, and occasionally small insects; circumstances which go to prove that the gems in question must once have existed in a soft or pasty state; and,

* See Nos. 226, 273, and 274.