

VENETIAN BRONZE GUNS RECOVERED BY DIVERS IN THE
MEDITERRANEAN.

By JOHN HEWITT.

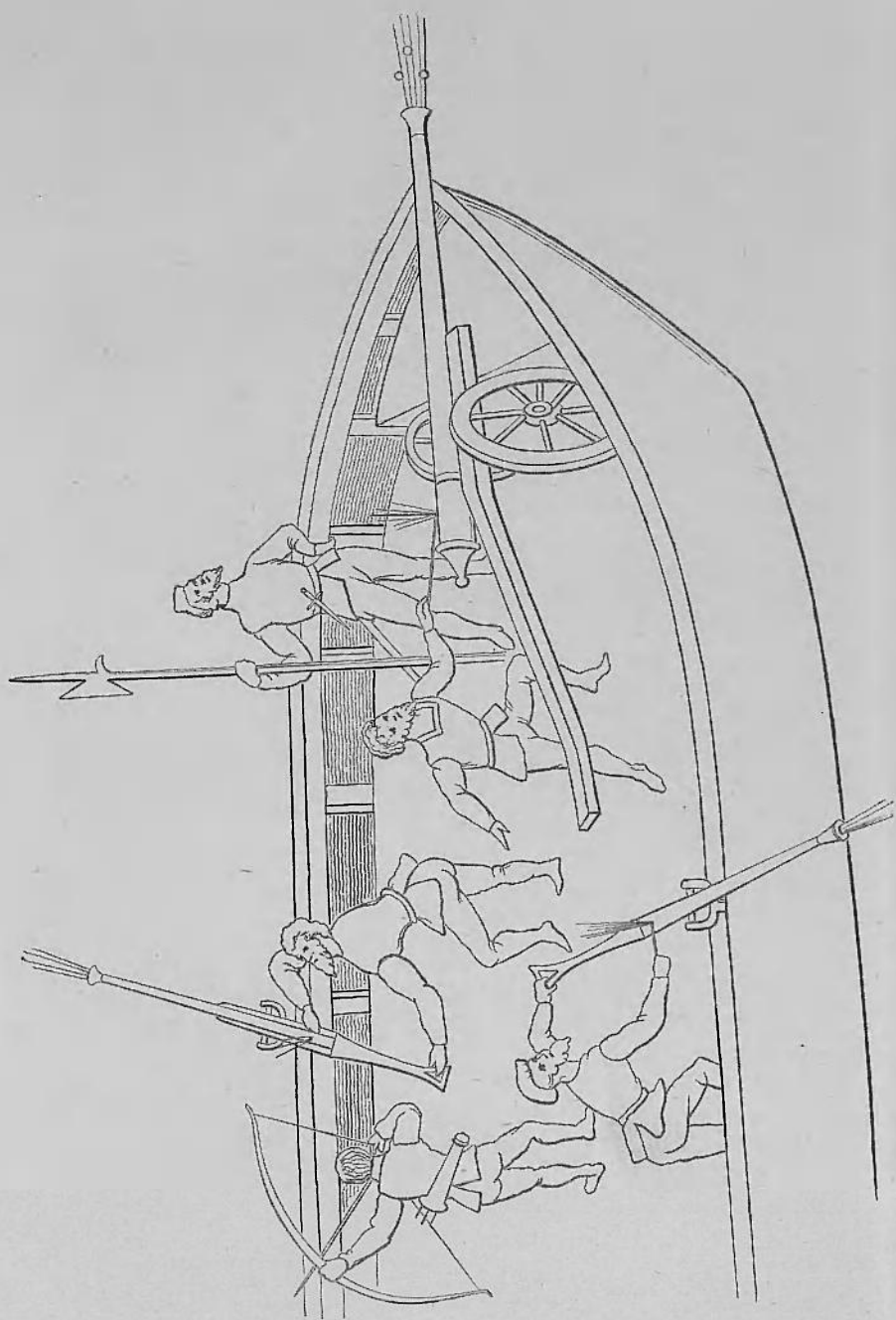
A FEW years ago a party of sponge-divers at the Isle of Symi in the Mediterranean, discovered on the sea-floor a number of bronze guns of various forms and sizes. Subsequently a portion of them was raised, and they proved to be of Venetian manufacture. Advised of this curious find, General Lefroy immediately placed himself in communication with our Vice-Consul at Rhodes, M. Biliotti, and through his agency obtained for the Royal Artillery Museum at Woolwich three of the guns in question. They were received at the Rotunda in October, 1871, where they remain, open to the inspection of the public.

From the letter of the Vice-Consul in 1869 it appears that about forty bronze guns were seen by the divers, of which nine had then been recovered. The heaviest had not been fished up, and of these some are said to be 12 ft. long. It may reasonably be supposed that they formed the armament of some Venetian vessel or vessels that were sunk in these seas ; whether by storm or battle can only be conjectured. And even this conjecture may be far from the truth.

The three guns at Woolwich are, a 6-pounder bronze muzzle-loader, 6 ft. 8 in. in length, $3\frac{3}{4}$ in. calibre, weighing 12 cwt. ; and two bronze breech-loaders with movable chambers, 3 ft. 4 in. long, weighing each 1 cwt. 2 qrs., calibre 3 in. Each piece bears the Lion of St. Mark, and the chambers, which are also of bronze, have the same badge. The square hole seen at the breech of the smaller gun was no doubt for a tiller. The movable chamber is curious from the channel formed across it for reception of the bolt ; which bolt, passing through the holes at the side of the breech, occupied also the channel, and this wedged-up the chamber close to the chase. All three guns have cylindrical

trunnions, those of the larger piece prolonged from the lower line of the bore, as shown by the dotted lines of our sketch. A scientific friend calls our attention to the fact that while the breech-loaders are only half the weight of our modern guns of corresponding calibre, the muzzle-loader is double. It must be remembered, however, that of the old pieces, the larger only is a cannon, the other being a perrier; the first to carry iron shot with large charges of powder, the other to propel stone shot with a low charge. And how low a charge was often used, may be gathered from the fact that these perriers were commonly fired from a fixed pivot on the gunwale of a boat, where of course no recoil could be had.

It is an old weakness of virtuosi to exaggerate the antiquity of the memorials they encounter. Old guns in especial are subject to this fallacy. Crecy crops up immediately; and if that is not conceded, our virtuoso, with a truly Bismarckian obstinacy, takes his stand on the *ne plus ultra* of Agincourt. Breech-loaders with movable chambers are at once set down as of the remotest age, though a little inquiry would show that this nature of gun was still in vogue in Europe as late as the seventeenth century. Ufano, in 1613, engraves one precisely like the example before us, but with the tiller in its place, and tells us that such pieces, made of iron or of bronze, are still "fort usitées, principalement es navires" (chap. 5). Gasperoni figures the gun on its carriage, calling it a "petriera a braga." This example is copied in the fine work of General Marion and M. De Brette, "Recueil des Bouches-à-feu les plus remarquables," plate 54. See also the perriers engraved in the "Milice française" of Père Daniel, vol. i. plate 31. And the plate of Grose, vol. i. page 402. They are shown as employed for boat service, for ships, and for shore batteries; the last mounted on a kind of bench, and moving on pivots. We have already cited Ufano in 1613. Three years distant only, comes Florio (in 1611), who tells us that the Petriero a braga was "called of our Gunners a Foulter, being but about foure inches diameter at the mouth; there is another sort of six inches diameter, called Port-piece." The Petriero maschio, he adds, was "a kind of Perrier well fortified in the breeches and well mettalled, called a Male perrier;" and the Petriero femina was "a Female perrier, not so well fortified in the breeches as the former" (p. 374).



In Cotton MS., Augustus 3, a book supposed to have belonged to Henry VIII., may be seen a very curious drawing of a boat armed with swivel guns; there are eight guns in all, six on swivels on the gunwale, two on carriages. We give a drawing of half of this boat with its armament, the other half resembling it in all particulars. It will be observed that the gun on the stem is treble shotted; that on the stern is similarly loaded. Archers and halberdiers are mingled with the gunners.¹ In the work named above, "Recueil des bouches à feu," are figures of the pivoting breech-loading gun from real examples, showing the form of the wedge which secured the chamber in its place, and how it was attached by a chain to the tiller (plates 53 and 54). In the Tower may be seen a piece of similar fashion, made of iron, and moving on a pivot: probably a boat gun. Woolwich has another, of the same construction. The Chinese, it will be remembered, use the movable-chamber gun to the present day. The Chinese junk exhibited in London in 1852 was armed with such "gingals," which were fixed on pivots along the gunwale. Specimens of the arm are in the Tower and Woolwich collections.

On the subject of the retention of old forms in gunnery, we may allude to the hoop-and-stave breech-loaders recovered from the ship *Mary Rose*, sunk in 1545, and of which examples will be found at the Tower and Woolwich. These, if not well authenticated as to their *provenance*, would certainly have been put down to Crecy, and we should have had the old jumble of Froissart, and Villani, and Berthold Schwarz all over again. Iron-hooped guns are seen also in the picture at Hampton Court of the Embarkation of Henry VIII. from Dover: they are mounted on the forts. Some of the guns from the *Mary Rose* still retain the stone shot with which they were loaded when the vessel went down (No. 2 of Class 19 of the Tower Catalogue, and No. 10 of Class 1 of the Woolwich Catalogue).

In order to arrive at an opinion as to the age of the guns before us, or of any ancient specimens, it is necessary

¹ Some of the drawings in this *codex* may have formed a book belonging, as Strutt suggests, to Henry VIII., for they are clearly of his time. But others are decidedly later. However, the volume

altogether is a perfect cyclopædia of military matters of the sixteenth century, and deserves to be carefully consulted by all who desire to know exactly the soldier's trade at this period.

to consider, not alone the general principle of their construction, but (as the architects do in their investigations) the particular fashion of the mouldings. Everybody knows what a wonderful difference there is between the deep channels of the "Early English" period of building and the shallow outline of the "Perpendicular" time. Not less striking is the contrast of the early and late contour of cannon mouldings; and it is from these only that a critical opinion of the age of old guns can be formed. We have, unfortunately, no hand-chart of such mouldings, so that every particular case has to be worked out by a special comparison of contemporary examples. From a careful examination of this kind we are inclined to place the age of the larger gun here represented as not earlier than the middle of the sixteenth century. As authorities, we may refer to Plates 13, 14, 27, 41, and 46 of the "Recueil des Bouches-à-Feu," and Plates 37 and 38 of Colonel Favé's third volume of "Le Passé et l'Avenir de l'Artillerie." The little brass gun (faucon) of Charles I., cast in 1638, in the Woolwich series, may be compared with the Venetian example now under consideration; both muzzle mouldings and breech mouldings are almost identical. See also, of the Woolwich Collection, Nos. 120, 137, 140, 145, and 127 of Class 2. The breech-loader of our drawing may be of any time,—1500 or 1600; but, as in the case of the "Geese and the Cranes," being found in company with the six-pounder, must be content to share the fate of that *ultima ratio regum*.