Saluting battery of 7-inch R.B.L. Guns in Malta

During the construction of the forts the exact nature of the flank armament had not yet been decided. Before the introduction of rifled guns smooth bore guns, such as the 8-inch were to be placed in the caponiers and on the flanks of the forts such as those of Gosport Advanced Line. By the time the forts of Portsdown were under construction the rifled 7-inch Armstrong gun had been adopted. It was recommended for use in caponiers as well as for flank defence and in some cases main armament. The forts of the Gosport Advanced Line, Gomer, Grange, Rowner, Brockhurst and Elson, all received the 7-inch R.B.L. as a flank defence gun together with the 64pr. R.M.L. for the Haxo casemates. At first it was intended to mount 7-inch R.B.L. guns in the caponiers for flanking the ditches and the upper floors of the barracks at the gorges of the Portsdown Hill forts.

In May 1872 the Inspector General of Fortifications agreed to the use of smooth bore guns for caponiers, in response to a request for carriages to mount 32pr. S.B. guns converted to 64pr. B.L.s on Krupps system mounted on non-recoil carriages. The I.G.F. disapproved of this ideas as it would require a special carriage. He preferred small smooth bore carronades on ordinary carriages for short flanks. He suggested the 24pr. and 32pr. carronade would be suitable. In 1879 the I.G.F. was informed by the Secretary, Woolwich, that there were only 96 carronades available for about 400 emplacements. He was advised that the 32pr. Smooth Bore gun converted to breech loading could be used for the remainder at a cost of £26,848 for the 304 positions.

Regarding the gorge flank defences of the Portsdown Hill forts, in 1881 the Defence Committee recommended that, as the guns had not yet been mounted, and, as for structural reasons a lighter gun was desirable, 20 pr. R.B.L. guns should be substituted for the 7-inch R.B.L. The number of guns to remain unaltered. In 1882 the platform for the 32pr. S.B.B.L. was approved and fifteen were ready for issue that year. The Surveyor General of Ordnance thought that 'the flank defence of ditches was the least important part connected with the armament of a fortress.' In January 1893 still no provision had been made to fit these guns.

Later in 1893 an Armament return (gorge and caponiers) shows the following Mounted or on charge

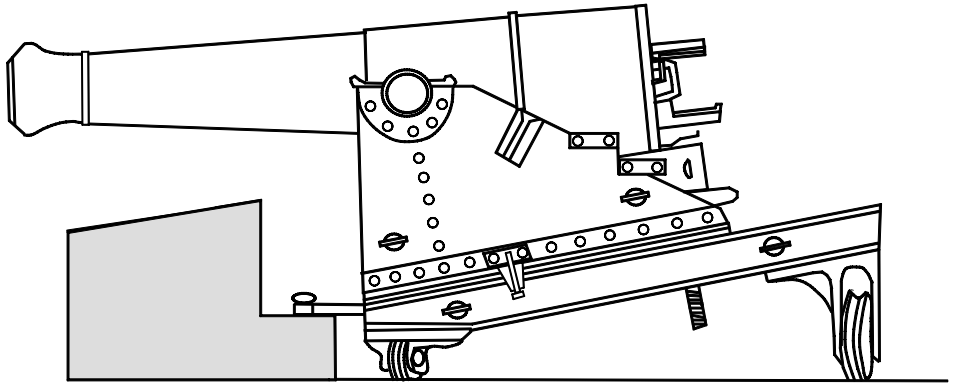
Nelson
4 x 40pr. RBL on Haxo Mountings
nil 32pr.
Widley
4 x 20pr. RBL on Haxo mountings
8 x 32pr. S.B.B.L.
Purbrook
4 x 40pr. RBL on Haxo mountings
5 x 32pr. S.B.B.L.
Wallington
2 x 40pr. RBL on Haxo Mountings - 6 required to complete.
nil 32pr. 10 required to complete
Southwick
Nil 40pr. 6 provided for in Imperial Defence Loan
Nil 32pr. 8 provided for in Imperial Defence Loan

By 1900 it was proposed to withdraw all of these guns. In 1901 Fort Widley was disarmed and the others were disarmed by 1907.

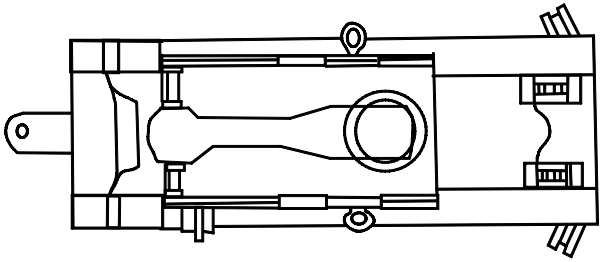
This extract is taken from
'**Arming the Forts'**
by David Moore.

Arming the Forts : David Moore

The 32pr. Smooth Bore Breech Loader



PLATFORM, TRAVERSING MEDIUM, No. 6. IRON
Smooth Bore Breech
Loading 32 pr.
for Carriage No.6



The 32 pr. S.B.B.L. is a conversion from the Smooth Bore cast-iron gun of 42 cwt., to adapt it for firing case shot in the flanks and approaches of permanent works. It was later used for saluting purposes.

The cascable is completely cut off behind the base ring and the bore continued through to the breech. A slightly enlarged chamber is formed by boring out the metal in front of the obturating cup to a distance of 4.1 inches; the shoulder so made, becomes a stop for the case shot in loading. The gun is prepared for an interrupted screw, having three smooth surfaces each one sixth of the circumference in breadth, of the ordinary cylindrical type and provided with an open or projecting carrier of the R.G.F. pattern, being similar to that for the 8-inch B.L., hinged to a hinge plate, attached to the face of the breech by fixing screws.

The gun is radially vented with a copper bush. These guns were generally fired point-blank, the effect being sufficiently great up to 500 yards. They were therefore provided with a foresight only used in conjunction with a groove cut on the breech.

The barrel is 97.6 inches in total length.

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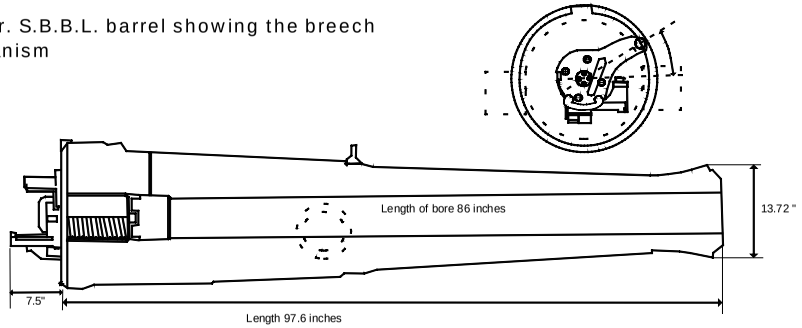
A 32-pr. S.B.B.L. gun in the North Caponier at Fort Nelson

A 32-pr. S.B.B.L. barrel showing the breech mechanism



Platform, Traversing, Medium, No. 6. Iron for Smooth Bore Breech Loading 32 pr. for carriage No.6

This was intended for use in caponiers or for flanks. It fires over a 2-foot 3-inch parapet, with 10 degrees elevation and 15 degrees depression. The maximum recoil allowed is 1 foot 8 inches. This is controlled by a tension buffer.

The slide is constructed by bolting two sides of girder iron to a front transom, and a front and rear bottom plate. Wrought-iron flanges are bolted to the bottom plates for the wrought-iron trucks, which revolve on steel axles. The front transom is furnished with a wrought iron pivot lug, which is secured to the breast of the works by a steel pivot plug and key. The slide is fitted with two rear buffer stops, the front consisting of rectangular india-rubber pads and wooden blocks. The front buffers are fixed to the transom by spindles; the rear buffers are each fixed by a spindle to a stop, hinged on a bracket on the rear bottom plate, and so arranged that it can be folded down to clear the carriage when housed. When in use the rear stops are held in position by small catches fitted to the bottom plate.

Carriage No.6 is a Single Plate (S.P.) wrought-iron sliding carriage.

The carriage consists of two brackets of ¾-inch iron plate, joined by a transom and a bottom plate. Two angle iron guides and four clip plates are fixed to the underside of the bottom plate to maintain the position of the slide and prevent it jumping during recoil. The brackets are formed with steps for the use of handspikes in laying. There are wrought-iron trunnion bearings in which the gun is secured by capsquares and keys.

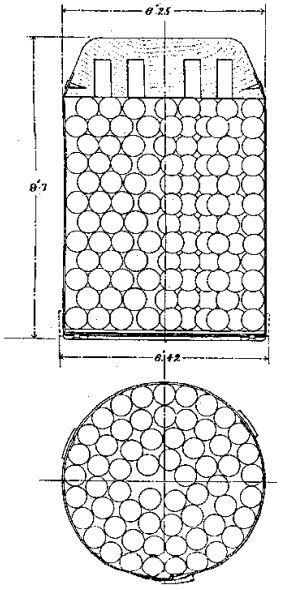
The carriage is not fitted with rollers, but the slide has a slope of 10 degrees to ensure the carriage running out after recoil. The carriage is intended to slide along the upper surface of the slide both in recoil and in running up. A lubricating groove is cut in the bottom plate on each side, to which channels, cut through the plate and angle irons, and closed by screw plugs, lead.

The fittings consist of two eye-bolts on each bracket, a socket for the priming irons, and a metal clamp with a steel screw, which retains the carriage when run back for housing. The elevating gear consists of an iron stool bed, pivoted to a stay between the brackets; a wood quoin; and an elevating screw, fitted with a metal hand wheel, by which it is turned in a nut fixed to the bottom plate.

The hydraulic buffer consists of an iron cylinder, 4 inches in diameter, closed at each end by a wrought-iron cap, and provided with a rod, and a solid piston. It has a metal gland with ring, a leather as well as cotton packing. There are three holes in each piston, two of ⅜-inch and one of 5/16-inch diameter. The buffer is fixed to the bottom plate of the carriage by two wrought-iron securing bands, and its piston is attached to a bracket on the slide by two hexagon nuts.

The projectile consists of case shot, each filled with 730 mixed metal balls, 16 per lb the interstices being filled with powdered clay and sand. The top is a disc of elm 2-inches thick, drilled on the underside to ensure its breaking up. It was fired by a charge of 3lbs RLG[2]. The crew is made up of a Gun Commander and three other numbers. (This was a reduction from an earlier detachment of six).

Length of slide	6 feet 7 inches	
Radii of racers		
	front	**rear**
	1 foot 6 inches	6 feet 10 inches
Weight		
Carriage	14 cwt. 1 qr.	
Slide	13 cwt.	



Shot, case, 32pr. Mark IV

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