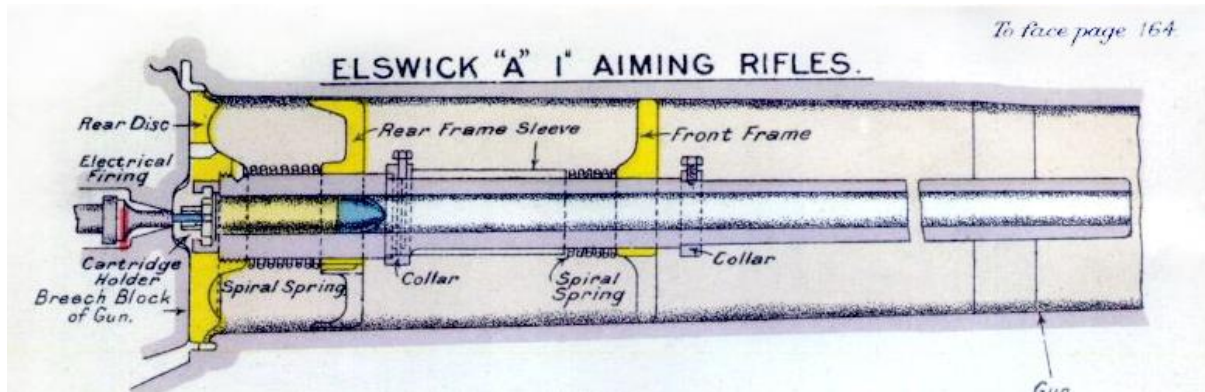


AIMING RIFLES.

ELSWICK "A" (see plate).



For use in Q.F. guns; assembled as follows:-

(a) 6-INCH TO 4 INCH Q.F.

Rear disc, rear spring, rear frame, collar, sleeve, front spring, front frame and collar.
The collars are secured by set screws.

(b) 12-Pr. Q.F.

Rear disc, rear spring, rear frame, collar, front spring, front frame, sleeve and collar.

NOTE.-The front and rear frames differ for the different natures of guns.

Breech Block. - This consists of a block with an auxiliary striker, which completes the circuit between the striker of the gun and base or the cartridge.

A recess is cut in the front face to take the rim of the 1-inch cartridge. When extracting the fired cartridge case, the breech block is also withdrawn and replaced by a fresh one.

Instructions for Shipping Elswick "A" Rifle. - Insert the rifle in the gun; the rear disc should now protrude slightly to the rear on account of the action of the springs.

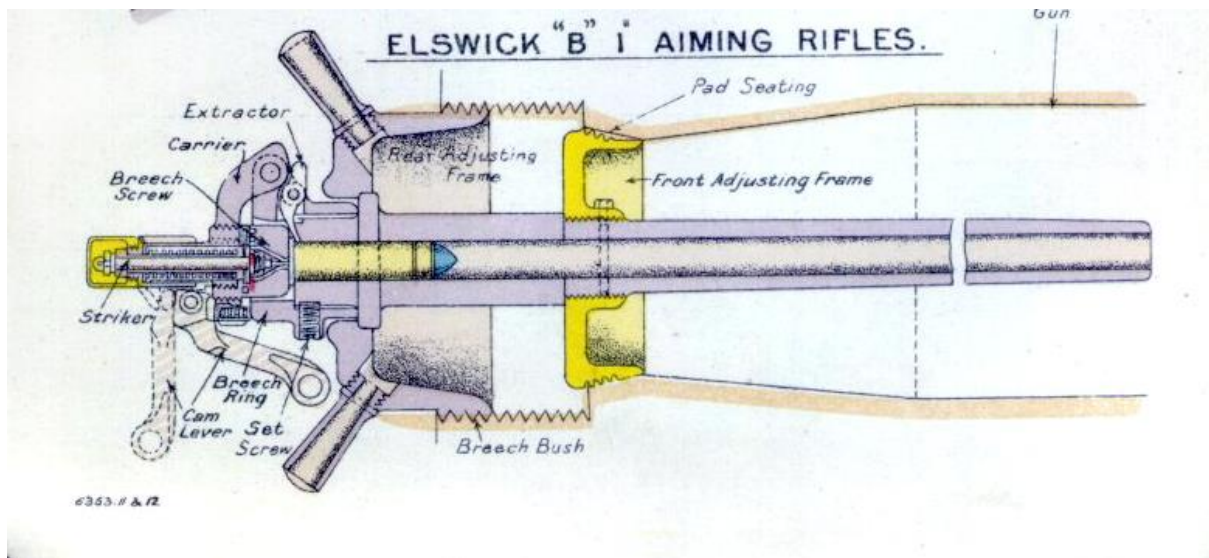
Insert the cartridge in the cartridge holder and attach to breech block (older types only); then insert the whole into the rifle.

Close the breech. As the breech is closed the rifle is driven into the gun, compressing the springs which, by acting on the adjusting frames, centre and steady the rifle.

The rifle is fired by means of the firing mechanism of the gun.

A special extractor which screws into the rear disc of the rifle is supplied for withdrawing it from the gun.

ELSWICK, "B." (see plate).



The Elswick rifle is supplied for use in B.L. and Q.F. guns.

Instructions for Shipping Elswick "B" Rifle. - Screw the front adjusting frame over the barrel until the arrow or line on the frame coincides with the arrow or line on the barrel and secure by means of set screw.

The barrel with frame is then placed in the breech opening of the gun, the part of the frame marked "TOP" being uppermost, the coned portion of the frame fitting the obturator seating in the case of B.L. guns, or the rear end of the chamber in Q.F. guns.

The Mark I rear adjusting frame is then placed over the rear end of the barrel, pushed into the breech opening as far as it will go and turned so as to engage with the screw threads of the breech opening.

The frame is then jamed tightly into position in the breech of the gun by means of a tommy, which will lie inserted into the hole in the frame for its reception, or into one of the hollow handles on the frame and used as a lever.

When correctly assembled the hole in the frame or the handles should be in the horizontal plane in 6-inch guns, and with the upper handle in the vertical plane in 12-pr. guns.

NOTE. - With the Mark II. or III. rear frame, the frame is placed over the rear end of the barrel, with the word : "UP" in the vertical position and turned so as to engage with the screw threads of the breech opening, and screwed up by means of the tommy until the indicating ring is flush with the face of the breech of the gun.

In the event of the rear adjusting frame screwing beyond the position mentioned above, thin steel discs are provided which will be inserted over the rear end of the barrel as may be necessary, the frame being temporarily removed for this purpose.

The breech ring with carrier and breech screw in the open position is then placed over the rear end of the barrel, and secured by means of the screw bolt, which engages in a recess in the barrel.

CAUTIONS.

- (1) Great care must be taken when assembling the rifle that the screw bolt engages in the recess in the barrel.
- (2) Care must be taken when removing the breech ring from the barrel to see that the breech screw and carrier of the rifle are always in the "open" position, and the extractor clear of the recess for its reception in the barrel.
- (3) Care must be taken when inserting the rifle not to injure the chamber of the gun in any way.
- (4) In the first adjustment of an aiming rifle it may be found that the carrier arm cannot be placed horizontal, owing to the horns of the front frame taking against the end of the threads in the gun. To remedy this, slack back the set screw on the front frame, then place the rifle in the gun, force the rifle round until the carrier is in the desired position, remove the rifle carefully so as not to move the front frame on the rifle, and then set up the set screw.
- (5) Care must be taken to see that the set screw for the front adjusting frame is properly screwed up before the aiming rifle is inserted.
- (6) On some occasions, when using these rifles, the rear frame has been found, after a certain number of rounds, to have become slightly unscrewed. When this is found to occur, a wooden wedge or chock is to be inserted in one of the interruptions in the threaded portion of the breech opening to prevent any turning movement on the part of the aiming rifle.
- (7) An aiming rifle is never to be put or left in a gun which has a tampeon in it.
- (8) Guns are to be sponged out immediately after firing with aiming rifles, as it is found that a ring of solid residue forms in the bore of a gun during firing, abreast the muzzle of the aiming rifle, and if not removed at once, it hardens and becomes a serious obstruction, quite sufficient, in fact, to cause the premature explosion of a shell in the gun.

SAFETY ARRANGEMENTS.

Great care must be taken when assembling the breech mechanism before firing that the screw securing the spring case to the breech block is not left out, otherwise all the safety arrangements of the mechanism are rendered useless, owing to the liability of the spring case to become unscrewed and to move the lug on the sleeve clear of the cam lever.

The following are the safety arrangements of the rifle:-

- (a) The safety stop prevents the breech being closed unless breech ring is properly locked to the barrel.
- (b) If the breech is not properly closed, the firing pin cannot go to the front.
- (c) The firing pin is withdrawn from the cartridge with the first movement of the cam lever in opening, the cam of which forces back the lug on the sleeve.
- (d) The cam lever taking in a cut-away part of the carrier prevents the breech block from turning when the gun is fired.

·303-INCH AIMING RIFLES.

(a) For Guns using Elswick "A" Aiming Rifle.

A special frame screws into the breech screw of the gun. Into this frame the Elswick "B" ·303-inch Aiming Rifle is inserted and secured by means of a nut.

The Elswick "B" ·303-inch Aiming Rifle consists of a ·303-inch barrel and electric firing gear.

Before shipping Elswick "B" 303-inch Aiming Rifle the extractor of the gun must be removed.

The special frame is marked "UP," "start screwing," "screw home."

(b) For Guns using Elswick "B" 1-inch Aiming Rifle).

The Elswick "A" ·303-inch Aiming Rifle is inserted into the Elswick "B" 1-inch and secured by a nut. The carrier, safety stop and extractor must first be removed from the 1-inch Aiming Rifle.

The Elswick "A" ·303-inch is the same as the Elswick "B" ·303-inch except that it has a small bush to keep it central in the 1-inch rifle.

(c) For 3. and 6-pr. Hotchkiss and 6-pr. Vickers.

The ·303-inch Aiming Rifle for these guns is similar to the Elswick "B" ·303-inch, but is supported by being fitted through a dummy cartridge filled with wool. The Aiming Rifle is held in the gun by screwing back on a nut which takes hard against the rear recess of the gun.

The rifle is fired electrically.

·45-INCH AIMING RIFLE.

6-pr and 3-pr. Hotchkiss.

This rifle will be superseded by the ·303-inch Aiming Rifle. It consists of a ·45-inch barrel held in a cartridge case, the intervening space being filled with wood.

Before shipping, the extractor of the gun must be removed. The ordinary firing mechanism of the gun is used, and a special extractor supplied.