

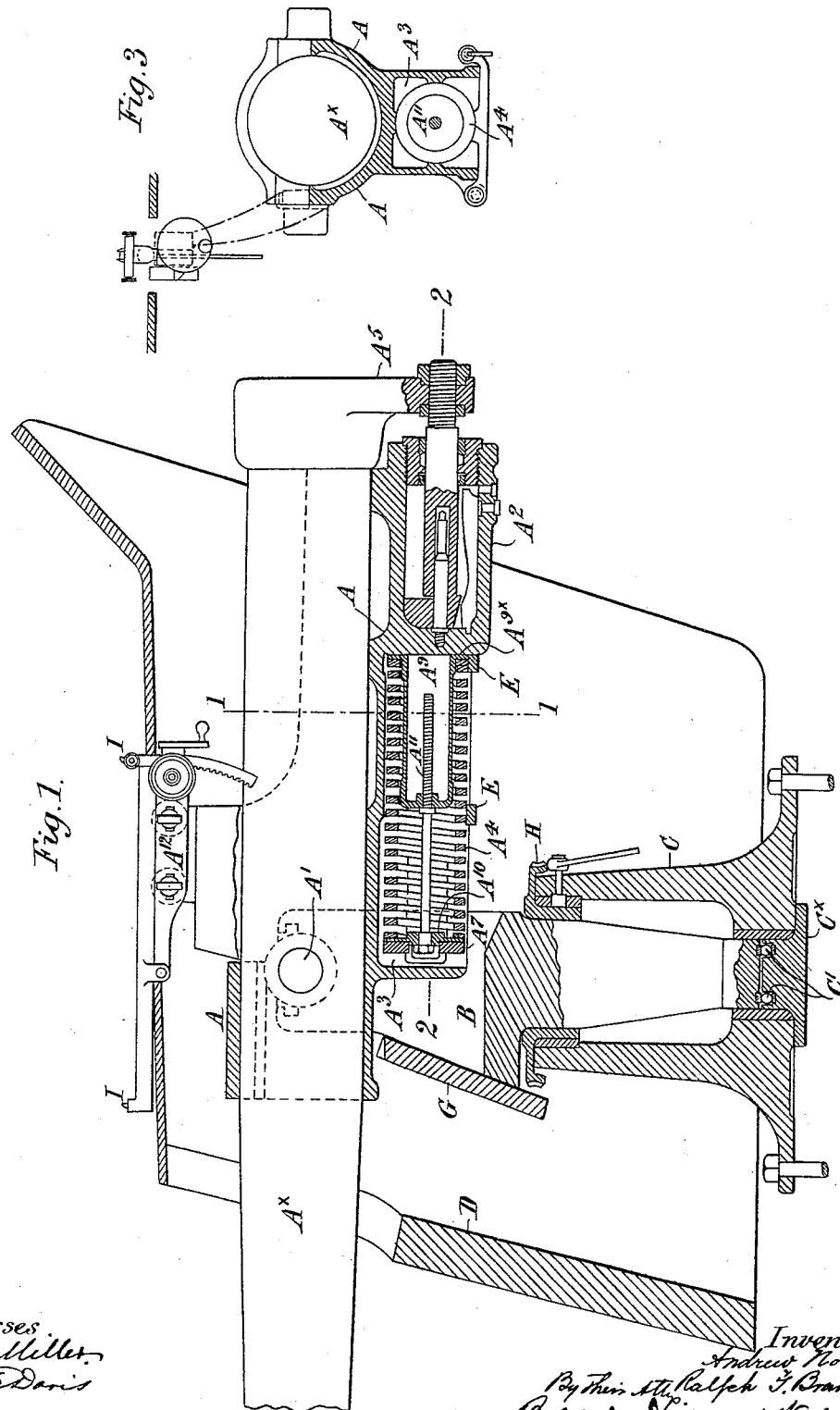
(No Model.)

2 Sheets—Sheet 1.

A. NOBLE & R. T. BRANKSTON.
QUICK FIRING GUN MOUNT.

No. 526,407.

Patented Sept. 25, 1894.



Witnesses
B. W. Miller,
Ray E. Davis

Inventors
Andrew Noble,
By Thos. H. Ralph, J. Brankston
Ralph Davidson & Thos. H. Ralph

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Fig. 2.

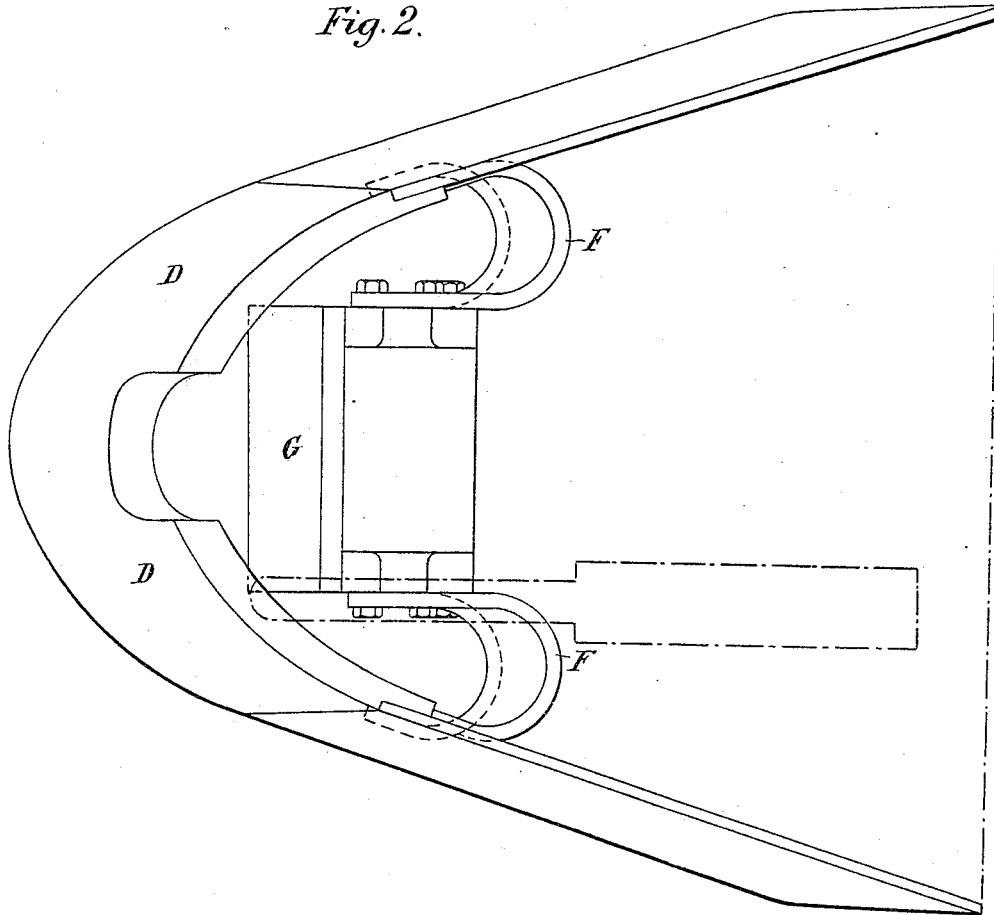
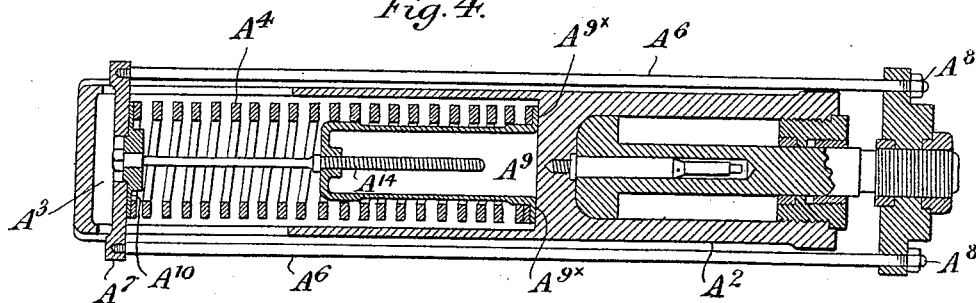


Fig. 4.



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UNITED STATES PATENT OFFICE.

ANDREW NOBLE AND RALPH THEW BRANKSTON, OF NEWCASTLE-UPON-TYNE, ENGLAND, ASSIGNORS TO THE SIR W. G. ARMSTRONG, MITCHELL & COMPANY, LIMITED, OF SAME PLACE.

QUICK-FIRING-GUN MOUNT.

SPECIFICATION forming part of Letters Patent No. 526,407, dated September 25, 1894.

Application filed May 14, 1894. Serial No. 511,199. (No model.)

To all whom it may concern:

Be it known that we, ANDREW NOBLE, residing at Jesmond Dene House, and RALPH THEW BRANKSTON, engineer, residing at Elswick Works, Newcastle-upon-Tyne, England, subjects of the Queen of Great Britain, have invented new and useful Improvements in Quick-Firing-Gun Mountings, of which the following is a specification.

10 This invention has for its object improvements in quick firing gun mountings.

Our improvements are shown in the drawings annexed.

Figure 1 is a vertical section. Fig. 2 is a plan with the gun and cradle removed, and also the roof of the shield. The sighting slot formed through the roof is shown in dotted lines. Fig. 3 is a section on the line 1. 1. of Fig. 1, and Fig. 4 is a horizontal section on the line 2. 2. Fig. 1.

The mounting consists generally of—

First. A cradle A in which the gun A^x fits and is free to move backward and forward in the direction of the axis. The cradle is provided with trunnions A' and fitted with a recoil press A², a spring box A³ for the springs A⁴ for running out the gun into firing position after recoil—a horn A⁵ projecting from breech end of gun having the piston rod of recoil press secured to it and rods A⁶ see Fig. 4 extending forward from it to a disk A⁷ which bears against the forward end of the springs in the spring box.

Second. A carriage or Y piece B fitted with trunnion bearings to receive the trunnions A' of the cradle and having a shank which fits into a pedestal C and forms a pivot upon which the mounting revolves.

Third. A pedestal C forming a socket for the carriage, and having a movable piece C^x at the base for access to the balls C' upon which the carriage revolves.

Fourth. A shield D carried from the carriage B and supported from it by means of yielding stays F. See Fig. 2.

Fifth. An inner shield G for the protection of the springs and the training worm wheel H attached by friction to the pedestal.

In mountings of this description the gun is usually fitted with keys which fit into corre-

sponding keyways in the cradle and serve to prevent the gun from being rotated by the action of the projectile on the rifling. The gun as shown in the drawings we make to rest in a semi-circular trough or channel formed along the top of the cradle. The gun is without trunnions and without keys and the tendency of the gun to rotate we prevent by means of the horn upon its breech end which engages the piston rod. There are therefore, no keyways in the cradle, and the gun can be shipped or unshipped from the cradle much easier than heretofore.

The spring A⁴ used for running out the gun we also arrange to be shipped or unshipped from beneath the cradle rearward, and to be held up in place by straps E hinged at either end. To remove the springs it is only necessary to slack the bolts A⁸, see Fig. 4, attaching them to the horn of the gun and then remove one of the bolts in the hinged straps E and allow the springs to drop. The spring box A³ is made of a square shape open at the bottom to provide for the removal of the springs. The spring or springs are as usual held between a flange A^{9x} at the rear end of a tube A⁹ and a disk A¹⁰ which is prevented from moving more than a certain distance away from the flange A^{9x} by a screw bolt A¹¹ screwing into the forward end of the tube A⁹ so that the springs are kept with the required amount of compression upon them.

The sights I, preferably of the pattern patented in our British Patent No. 18,892, of November 21, 1890, are carried by a plate A¹² secured to the side of the cradle A as shown in Fig. 3. As shown in the drawings they are carried up to such a height that a full view can be obtained over the top of the front portion of the shield, through a slot in the roof.

What we claim is—

1. The combination of a gun, its cradle, with trunnions supported in bearings carried by a fork at the upper end of a vertical pivot, a pedestal for the vertical pivot to rest in, a shield carried from this pivot by yielding stays and shielding a space around the front and sides of the pivot, a spring box for running out the gun carried on the under side of the cradle and open on the under side so that

the springs may be taken out and removed rearward and sights carried by an upward extension of one side of the cradle at a level above the front portion of the shield substantially as described.

2. The combination of a gun A^x cradle A with its trunnions supported in bearings on a vertical spindle B the pedestal C for vertical spindle to rest in the removable ball bearing C^x at the bottom of the pedestal—recoil cylinder A² and spring box A³ on under side of cradle containing a spring A⁴ for running out the gun and open at bottom to admit of the springs being readily removed—a worm wheel H attached by friction to the pedestal—a flat shield G fixed across the front of the vertical pivot to protect the spring-box and the worm wheel and a shield D carried from the pivot by yielding stays F to protect the space around the front and sides of the pedestal.

3. The combination of a gun without trunnions or keys projecting from its sides, a trough-like cradle from which the gun is removable vertically, a removable cap secured to the cradle and extending over the gun, a recoil cylinder secured to the gun, a piston working in the cylinder, and a piston-rod secured to the piston and also secured to a horn projecting from the breech of the gun.

4. The combination of a gun without trunnions or keys projecting from its sides, a trough-like cradle from which the gun is removable vertically, a removable cap secured to the front end of the cradle and extending over the gun, a recoil cylinder secured to the

gun, a piston working in the cylinder, and a piston-rod secured to the piston and also secured to a horn projecting from the breech of the gun.

5. The combination of a gun without trunnions or keys projecting from its side, a semi-circular cradle without keys or key-ways, open at the top, in which the gun is mounted, a removable cap secured to the cradle and extending over the gun, a recoil cylinder secured to the cradle and having its piston-rod secured to a horn projecting from the breech of the gun, substantially as described.

6. The combination of a gun, a cradle in which the gun is mounted, a spring box secured to the cradle and containing springs for running out the gun, and made open at the bottom so that the springs can quickly be taken out and drawn rearward without removing any other part of the mounting.

7. The combination of the gun, the cradle in which the gun is mounted, a spring box secured to the under side of the cradle and containing springs for running out the gun to which they are operatively connected and made open at the bottom, as described, so that the springs can quickly be taken out and drawn rearward without removing any other part of the mounting, and readily detachable straps E, which support the springs when in operative position.

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