

GENERAL

Ammunition for the Q.F. 2-pr. gun is of the Q.F. fixed type.

A complete round comprises a cartridge case, propellant charge, primer, tracer fuze and projectile, all of which are issued assembled and packed in containers.

Each container, of tinned-plate hermetically sealed before issue and provided with two tear-off bands to facilitate opening, contains eight complete rounds ready for immediate use.

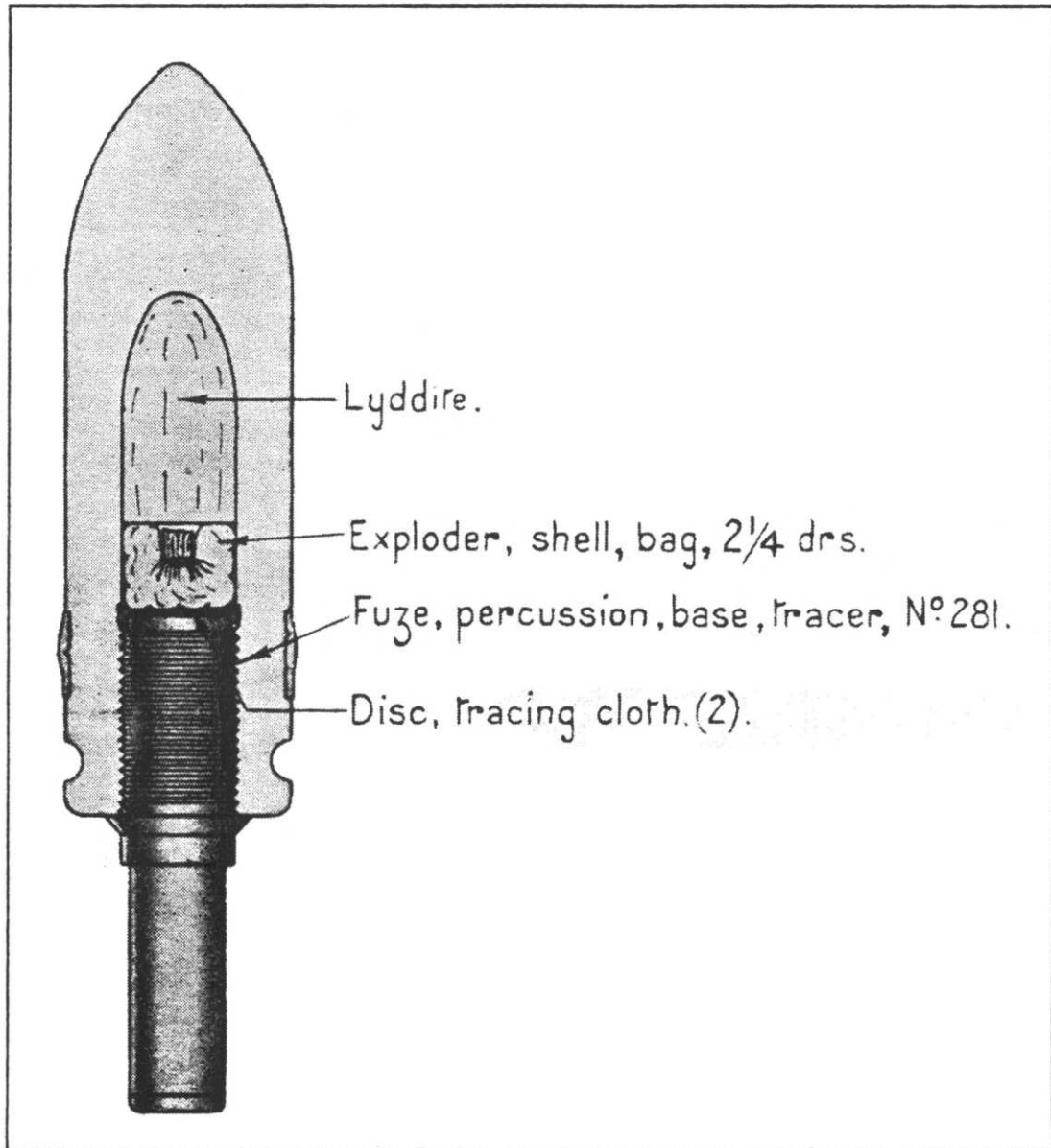


FIG. 57.

PROJECTILES

(Plate 15)

SHELL, Q.F., ARMOUR-PIERCING, 2-PR., MARK I

The shell (Fig. 57) is of steel with a pointed head the radius of

or away from the fuze. Before the fuze is screwed home, two discs of tracing cloth are placed below the exploder. The lower end of the cavity is screw-threaded with a left-hand thread for the No. 281 tracer fuze.

On the outside is fitted a plain copper driving band pressed into position, rotation being prevented by one waved rib, or alternatively the groove may be knurled. An indenting groove is turned on the shell below the driving band for the attachment of the case.

FUZES

(Plate 16)

FUZE, PERCUSSION, BASE, TRACER, NO. 281, MARK I

The tracer fuze (Fig. 58) consists of a flanged metal body with metal cap, detonator, detonator plug, percussion pellet, needle holder, needle and creep spring together with a tracer body and plug.

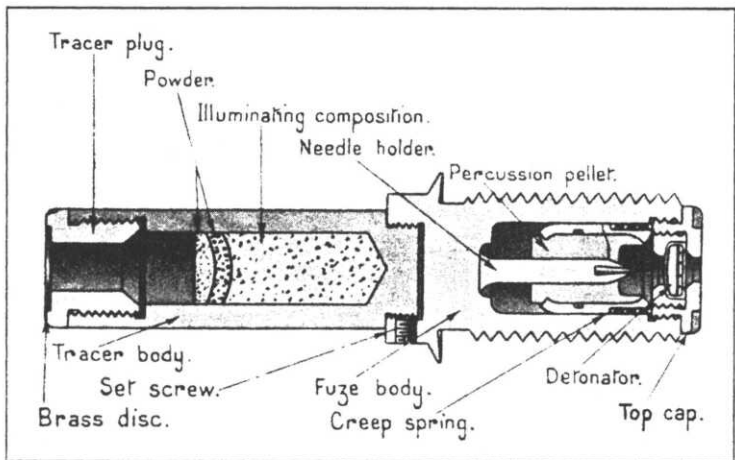


FIG. 58.

The *fuze body* is left-hand screw-threaded externally to fit into the fuze hole in the shell and has two flats formed below the flange to facilitate insertion or removal. Internally it is prepared to receive the percussion arrangement.

The *percussion pellet* comprises a brass tube filled with lead alloy, embedded in which is a hard brass needle holder with steel needle. The holder is crimped to grip the lead alloy. The tube projects beyond the needle to prevent the latter reaching the detonator.

The *creep spring* is positioned between the pellet and cap and prevents "rebound" of the pellet on the shock of discharge and "creeping" when the projectile decelerates.

The detonator contains 2 grains of "A" mixture and is secured in the cap by a plug.

The *tracer* consists of a metal tube or body screw-threaded externally at one end to screw into the fuze and the other end screw-threaded internally for an opening plug. The interior is packed with illuminating composition and primed with powder, the contents being pressed into position to retain them in the tube or body.

The *plug* has a central hole which is sealed by a thin brass disc.

The tracer after being screwed right home into the fuze, is secured by a set screw.

Action of fuze

On gun firing the shock of discharge causes the percussion pellet to set back along the needle holder on to the bottom of the fuze, exposing the point of the needle, the creep spring preventing rebound of the pellet.

During flight the tendency of the pellet to creep forward in consequence of deceleration is checked by the spring.

On graze or impact the pellet overcomes the spring and the needle pierces the detonator, resulting in the flame passing through the fire hole in the cap and then on to the exploder and bursting charge in the shell.

Action of tracer

The propellant gas flame blows in the brass disc and ignites the priming powder, which in turn fires the illuminating composition, with the result that a continuous flame comes from the tracer throughout its flight towards the target.

CARTRIDGES

(Plates 15 and 16)

CARTRIDGE, Q.F. 2-PR. GUN, 8-OZ. 15-DR. WT 144-048 I

The cartridge consists of a case, charge, primer and projectile.

The *case* (Fig. 59) is of brass, slightly tapered towards the top, prepared at the base to receive the primer and formed with a rim to facilitate ejection from the gun after firing. It is secured to the projectile by pressing the top portion or lip all round into a groove provided for it below the driving band.

To protect the primer cap a removable No. 30 cartridge clip is provided. The clip must, however, be removed before firing.

The *charge* (Fig. 59) consists of 8-oz. 15-dr. of cordite WT 144-048 I cut to the required length and secured in several places with silk sewing.

The silk sewing is greased with mineral jelly and usually two turns are given before being knotted. The centre portions of the cordite are of shorter length than the outer, so forming a cavity at the top and bottom for the tracer and primer magazine respectively.

The upper silk sewing thread also holds in position a half dram tin foil strip provided to prevent copping of the bore by the driving band.

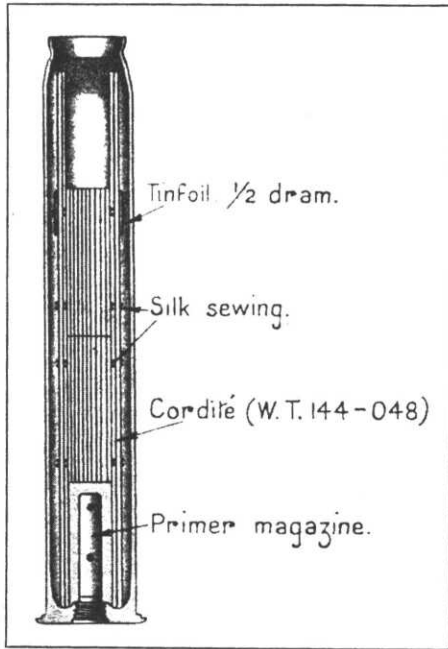


FIG. 59.

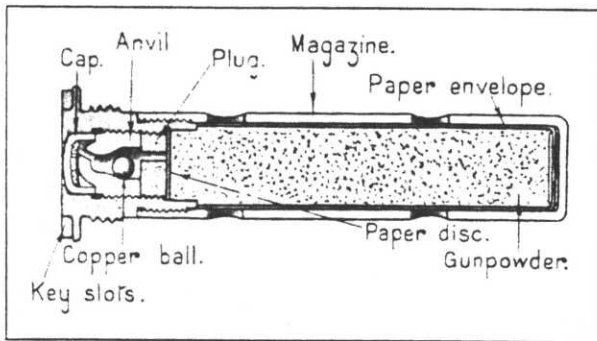


FIG. 60.

CARTRIDGE, Q.F. 2-PR. GUN 6-OZ. 5-DR. WT 144-048 I

CARTRIDGE, Q.F. 2-PR. GUN 6-OZ. 3-DR. WT 144-048 I

The reduced charge is built up in a similar manner to the full charge and the case is marked with an " R " on its base.

PRIMER, PERCUSSION, Q.F. CARTRIDGE, NO. 12,
MARK I

(Plate 16)

The primer (Fig. 60) consists of a body, cap, anvil, copper ball, plug and magazine.

The *body* is of metal, right-hand screw-threaded externally above the flange to screw into the cartridge case. The flange portion has two key slots and suitable marking showing details of filling, etc.

Internally, it is prepared and screw-threaded to receive a cap, anvil and plug.

The *cap* is of copper and contains detonating composition and a tinfoil protecting disc. It is inserted into its chamber and retained by the anvil.

The *anvil* is a metal plug screwed into the body to retain the cap. Its base is dome-shaped and provided with a recess for a copper ball and three fire holes which convey the flash from the cap to the magazine when the cap is struck.

The *copper ball* fits loosely into its chamber and is blown back on magazine firing, so sealing the escape of gas towards the rear.

The *plug* screws into the body ; it has three fire channels and the outer part covered by a paper disc shellacked on to it prevents the magazine contents entering the fire holes or copper ball chamber.

The *magazine* is of brass and screws on to the body. It has eight radial holes for the flash to escape and is lined with a paper envelope filled with about 64 grains of G12 gunpowder.

PRACTICE PROJECTILES

SHOT, PRACTICE, Q.F. 2-PR., MARK IT

The shot (Fig. 61) is a short flat-nosed steel body fitted with a driving band and tracer for practice purposes with *reduced charges*.

The total weight of the shot with tracer is 2 lb. 6 oz.

TRACER, SHELL, No. 6, MARK I

The tracer, which is designed for day or night use with practice shot, consists of a flanged metal body, metal plug and brass sealing disc.

The *body* is screw-threaded externally above the flange to fit the tracer socket of the shell and at the other end screw-threaded

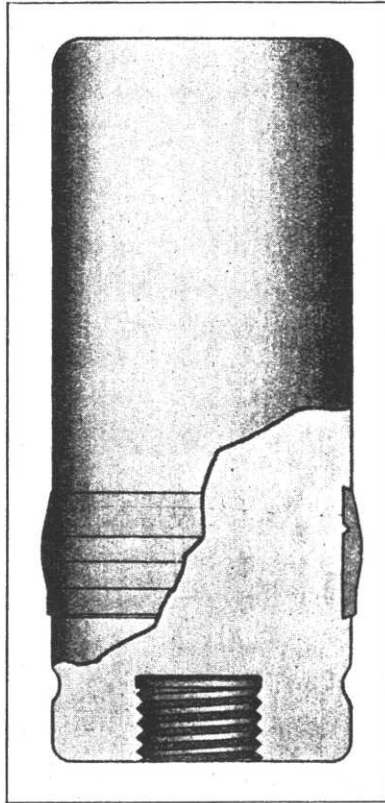


FIG. 61.

internally for the plug. It is recessed to receive a filling consisting of approximately 45 grains of illuminating composition, a 5-grain layer of priming composition and a 5-grain layer of S.F.G. gunpowder, the contents being pressed into position.

The *plug* is flanged and has a central flash hole covered by a brass disc sweated to the base. It also has two small key holes for fixing or removing.