

which rests a pellet with two projections or feathers. In the top of the pellet, which is made of lead and tin, there is a cap containing detonating composition. The safety pin passes through the head and through the guard which it supports. It is withdrawn at the moment of loading; a small lead pellet closes up the hole and prevents the flash on discharging passing into the fuze.

*Action.*—On shock of discharge the guard sets back, shearing off the two feathers of the pellet, and locks itself on to the pellet by means of the projection on the latter wedging into the undercut recess in the guard. On graze or impact the pellet and guard fly forward and drive the cap against the steel needle, which pierces the thin brass disc and ignites the detonating composition. The flash passes through the fire-holes in the copper disc, and down through the hollow in the pellet, blows out the brass disc closing the fire-hole in the screw plug, and so into the shell.

*Friction Tubes.*—The short friction tube is about 3 inches long and 2-10 inches in diameter. It consists of a copper tube, lacquered inside. It is driven with mealed powder and pierced with a central hole, the top is closed with shellac putty and the bottom by a disc of varnished paper. A hole is bored through near the top. Over this hole is secured a nib piece, containing a copper friction bar roughened on both sides, and smeared with detonating composition. The nib piece is pinched down on the friction bar, which has an eye into which the hook of the lanyard fits. The tube is varnished black.

*Grummet Wads* are circles of rope with cross pieces, used with S. B. guns when firing at less than 3° elevation.

*Wedge Wads* for 64 pr. consist of two 6½ inch wooden wedges connected by a piece of cane 7½ inches long. Used to prevent projectile shifting when running the gun up.

*Primers, Brass, Shrapnel Shell* consist of a metal cylinder tapped to screw into the pipe of the shell. The top is solid, with a cup shaped recess. The bottom of the cup is perforated with three small holes, communicating with loose powder with which the body of the primer is filled, the bottom is closed by a thin disc of brass covered with shalloon. There are two slots in the head for the screw-driver.

*Primers, Vent Piece*, are cylinders of leather paper driven like friction tubes, have 3 strands of red worsted about an inch long on the exterior. Used to carry the flame to the charge in all Armstrong R. B. L. guns.