

## THE MURRAY SWITCH CARTRIDGE

“Someone has cut the end of this case with a fine hacksaw “is the usual comment when this cartridge is encountered.

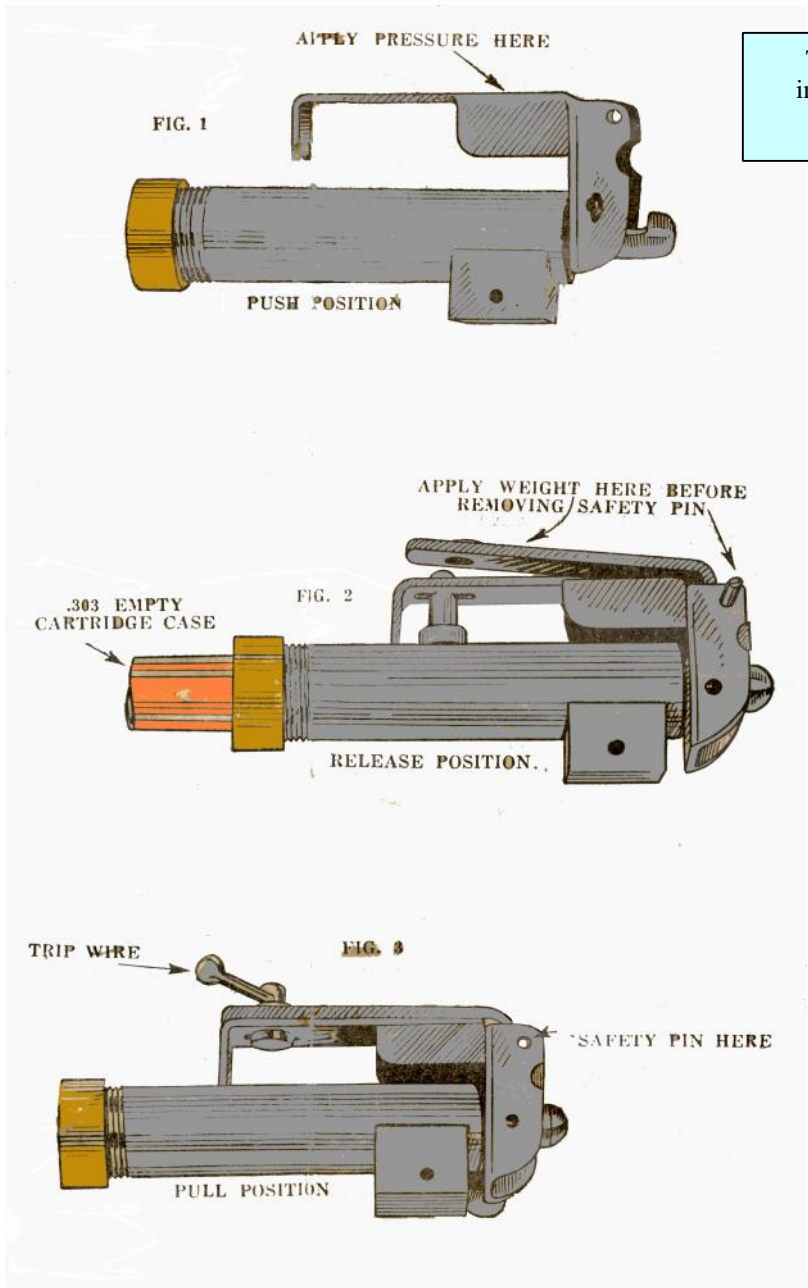
Well, it isn't someone. It is a factory job and they are not very common today. A glance at the photograph will show you why the instinct to call it an afterthought. You have an empty case with two fine cuts in the neck and it is primed. What it is of course is the cartridge supplied with a booby trap switch. This switch is known as the “Murray switch” but is more correctly know as the “switch booby trap (Murray) Mk I” and it was supplied in a greaseboard box along with two cartridges and a set of instructions. The first cartridge was a standard .303 blank which was provided so that testing of your booby trap set up and the switch could be carried out before doing it for real. The second was the cartridge shown in the photograph.

This item was supplied empty and the cuts in the neck enabled a piece of fuze instantaneous (FI) to be inserted and crimped in place up against the primer holes in the bottom of the case. FI burns at approximately 27metres per second thus giving the victim very little time in which to react to his mistake. Alternatively a detonator could be inserted in the case, this detonator being connected directly to a demolition charge. Functioning of the booby trap switch causes the switch to fire the primer in the case which in turn ignites the FI or functions the detonator either of which are normally connected to a high explosive device or charge sufficient to cause casualties near the booby trap when it functions.

The instructions supplied with the switch were very specific about testing the set up prior to attaching high explosives to the system. The instructions reflect the attitudes of the time in that they recommend that a normal .303 ball case could be pulled apart and used in place of the pre-prepared case. I believe this is what eventually happened in that the specially prepared cartridge was discontinued and troops simply followed the recommendations.

The cases supplied were normally ball versions although cases without headstamps have been seen which would seem to indicate that some cases were purpose made for the switch. Either that or they used reject cases.





The diagrammatic portion of the instruction sheet supplied with the switch.



A rare packet of the capped cases as supplied for the switch.



The greaseboard box containing the switch, the instruction sheet, a blank cartridge and a capped case.



The written instructions  
as supplied with the  
switch.

## SWITCH BOOBY TRAP (MURRAY) Mk. I. DIRECTIONS.

The Switch is designed to operate in three positions, viz.:-

- (1) Push Position — by the application of a weight or blow. (Fig. 1.)
- (2) Release Position — by the displacement of a weight or object. (Fig. 2.)
- (3) Pull Position — by pull of trip wire or cord. (Fig. 3.)

(For diagram see back of this sheet.)

In each of these positions the operation of the trap causes the release of a spring-loaded plunger, the pointed lower end of which explodes the cap of a .303 empty cartridge case held in position by a collar engaging the rim of the case and screwing on to the trap body. Exploding of the cap fires a detonator (or safety fuze whichever is to be used) held in position by being clamped between the two small lugs cut into the end of the cartridge issued with the trap. Alternatively an ordinary .303 cartridge with bullet and cordite removed may be used and the fuze or detonator held in position by a small wedge or with tape.

## TO SET THE TRAP.

Caution.—To ensure against premature operation first set the trap without the cartridge and test method of release. Then re-set the trap with cartridge and fuze or detonator for operation.

## PUSH POSITION.

Assemble collar on to body having first inserted the plunger and spring. Then holding release plate roughly in position over top of body, press down on to an upturned cartridge case (or rod fitting through opening in collar) until circular groove in top of plunger projects through the top of the body. The release plate is then moved across so that the narrow slot in it engages the groove in the plunger and holds the plunger against the spring pressure. The safety pin is then inserted through the small holes nearest the plunger head. The trap body is then tied to a convenient post, etc., by a cord passing through the small hole provided in the base in such a way that a weight or blow being applied to the release plate, after removal of safety pin, causes it to move across the top of the body and thus release the groove in the plunger body. The plunger is then driven down under the influence of the spring and fires the cartridge.

## RELEASE POSITION.

Set up as in push position. Place release lever in position above release plate at the same time transferring safety pin to the other set of holes provided above the release lever. Push release lever and plate together across the top of the body until the edge of the release lever enters the upper slot in the plunger. Further movement will release the groove in the plunger from the release plate and cause the plunger to be held on the release lever.

Trap is then placed in such a position that the application of a weight or object near it will prevent the lower end of the release lever from flying up under spring action and at the same time conceal the trap.

Safety pin is then removed (BUT NOT BEFORE) leaving the trap set for operation.

## PULL POSITION.

Set up release lever in position above release plate and engage upper slot in plunger as in release position, lower end of release lever is then prevented from flying up under spring action by passing small release pin through hole provided in base of release plate, through release lever, and then inserting brass trigger pin in hole in release pin.

Trap body is then tied to a convenient post, etc. (as in Pressure Position) in such a way that a trip wire or cord attached to the loop in the trigger pin and stretched across a doorway, etc., will cause the trigger pin to be withdrawn from the release pin, thus allowing end of release lever to fly up under spring action and actuate the trap. On no account must safety pin be removed until trap is finally set for operation.