

S.S. 616.]

BIBLIOTECA DO EXERCITO
(Antiga Biblioteca do E. M. E.)
N.º 928
Aumentado em 19-9-19
Livro N.º _____ Pag. _____



2/6 (Q.B.2).

INSTRUCTIONS FOR FIXING RUBBER FUZE-COVERS TO TIME-FUZES AND TIME AND PERCUSSION FUZES, AND FOR THE USE OF FUZE-WATERPROOFING COMPOSITION.

(See General Routine Order No. 2753.)

Cover, flexible, 2-inch T. & P. fuze.—Rubber or rubber composition (some covers are provided with patches of prepared canvas beneath the rubber to prevent the cover being cut by the projections on the fuze).

METHOD OF FIXING.

Remove any grease from the nose of the shell where it will come in contact with the cover and apply a band of Pettman cement, $\frac{3}{4}$ -inch wide, just above the shoulder of the shell.

(Any trace of oil or grease on the shoulders of the shell, or on the inside of the rubber cover, will prevent the adhesion of the Pettman cement.)

The cement should reach down to the lower edge of the cover.

In cases where fuzes have been issued without covers, and are coated with luting, the luting should be removed and the fuze wiped with a clean cloth before fixing the cover.

Fit on the rubber cover, and in the cases where it is made with strengthening patches, make sure that the patches come over the projections on the fuze, as otherwise the rubber is likely to get cut; then smooth the cover down by hand so that a watertight joint is made at the lower edge, care being taken in the operation not to put undue pressure on any projections.

To get the best results with these covers, the following points are of importance:—

- (i.) The cover should be put on immediately the fuze has been removed from its cylinder and has been fitted into the shell, in order to prevent damp air affecting the fuze.
- (ii.) The removal of the cover before firing should be postponed to the last minute practicable.
- (iii.) If a fuze has had the cover removed unnecessarily the cover should be put on again as soon as possible, taking care that the fuze is dry before the cover is replaced. Rotation of the time ring of a fuze renders it more liable to be affected by damp.

INSTRUCTIONS FOR ANTI-AIRCRAFT SECTIONS.

After a fuze has been set, and before it is placed in the ready rack, a rubber fuze cover should be fixed in accordance with the instructions given above. But whenever possible, fuzes of the No. 80 type should be treated in addition with "Fuze-waterproofing Composition." (This composition must not be used with No. 85 fuzes.)

Fuzes of the No. 80 type are issued with the recesses over the gas-escape hole discs, and the small grooves above and below the time rings filled with this composition. This, while unbroken, protects the fuze considerably, but the seal is broken as soon as the time ring is moved.

Therefore, after the fuze is set, the composition, slightly warmed to make it soft, should be worked in by hand, any surplus being rubbed off by means of a smooth wedge-shaped piece of wood.

(Mark III. Luting can be used if "Fuze-waterproofing Composition" is not available, but thinned luting must on no account be used.)

If the fuze is damp, the round should be marked "Damp Fuze" and returned to the A.O.D. for re-fuizing.

• **Formalin as a Poison for House-Flies.**

Formaldehyde solution (formalin) has often been recommended as an efficient fly-poison. In certain instances, however, it has been reported on as almost useless for this purpose.

This difference in potency has recently been found to be dependant on the formation, on exposure of the solution to light and air, of varying amounts of formic acid and other substances which render the liquid unattractive to flies. This formation of acid can be prevented, or, if it has already occurred, it can be neutralized, by the addition of a weak alkaline solution, of which lime-water is the most convenient for general use.

A formalin solution made up as follows, may be relied on as being specially attractive to flies, while at the same time acting efficiently as a poison. It is not dangerous to human beings or domestic animals.

Formula for fly-killing solution.

Formalin (formaldehyde 40 per cent.), 50-60 c.cms., say 2 tablespoonfuls.

Sugar, 25 grammes, say 1 dessertspoonful.

Filtered lime-water 500 c.cms., say $\frac{1}{2}$ pint.

Water, add to make up to 1,000 cc., say to make up 1 pint.

It is to be noted that the effect of this solution will not be so apparent if the atmosphere is very humid. It is also desirable that, so far as possible, the flies should not be afforded opportunity of obtaining access to water in the vicinity of the formalin solution.

Method of use.

Pieces of absorbent paper (thick blotting paper) in an ordinary soup plate may be wetted with the formalin solution. As evaporation takes place more must be added from time to time.

An efficient trap can be made by filling a small glass pot about half full of the solution, and inverting it on to a flat-bottomed glass dish or a soup-plate holding three superimposed layers of filter paper.

The pot can be kept in position by passing a thick elastic band around both pot and plate. The fluid gradually escapes by capillary action, thus keeping the filter-paper sufficiently moist.

WAR OFFICE,

June, 1917.