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MINES AND BOOBY TRAPS
MILITARY TRAINING PAMPHLET
No. 40

Part I (All Arms)—How to deal with individual mechanisms

1943

(This Pamphlet in conjunction with Part II supersedes Military Training Pamphlet No. 40, 1942)

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*Prepared under the direction of
The Chief of the Imperial General Staff*

THE WAR OFFICE,
May, 1943

PREFATORY NOTE

1. Military Training Pamphlet No. 40, Mines and Booby Traps, will consist of the following parts:—

Part I (All Arms)—How to deal with individual mechanisms.

Part II (All Arms)—Laying and recording of British mines.

Part III (All Arms)—The breaching of minefields.

Part IV.—(In preparation).

2. The above-mentioned pamphlets should be studied by all commanders, i.e. battalion and upwards.

3. Blank pages are included in Part I for pasting in amendments which will be issued when new devices are taken into use.

DISTRIBUTION (Part I)

All arms	D
OCTUs	IV

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MINES AND BOOBY TRAPS

MILITARY TRAINING PAMPHLET No. 40

GENERAL RULES

THESE SAVE LIVES. LEARN THEM LIKE YOUR ABC

1. If you **keep your eyes open** and suspect everything unusual, mines rapidly become merely a nuisance. It's only when you become **careless** that you are asking for **trouble**.
2. Look carefully all round a mine or booby trap **before** starting to work on it.
3. Handle all mines, fuzes, igniters and switches with **care at all times**.
4. **Never use force**. If a thing will not come undone gently by hand, leave it.
5. It generally takes **only one man** to work on a mine—**others keep off** and lie down.
6. **Look out for booby traps** (see next page).
7. Never pull a slack wire and never cut a taut one. Look at both ends of any wire before you touch it.
8. Safety-pin anti-personnel mines before you lift them.
9. If you have to leave a mine or trap **unlifted mark it obviously**.
10. If you find any mine or mechanism not described in this booklet, or anything you are not confident you understand, **leave it alone, mark it obviously** and inform the sappers.
11. **Don't** be fooled by the name "anti-tank" mine. It blows up anything on wheels just as well as it does a tank.

BOOBY TRAPS ON MINES

Mines laid by the enemy will normally be found buried, or with tops flush with the ground surface. They will frequently be **booby-trapped** to catch the **clumsy** and **incautious** lifter.

Traps will normally be in the form of another charge underneath the mine, set off by a pull igniter attached to the mine by a wire.

The **Tellermine** is designed for booby-trapping, but all mines can be booby-trapped.

Therefore **always suspect a booby trap**.

1. **Feel carefully** all round and underneath the mine for wires and igniters.
2. **Neutralize** each igniter as you come to it.
3. Examine both ends of any wire for igniters.
4. **Don't** lift mine until you are sure it is clear.

Note.—In special circumstances, when speed is vital, **pulling clear without-searching for booby traps** may be ordered.

This order will **not** be given by anyone below Divisional Commander.



BRITISH MINE MK V.



CHAPTER I

SECTION I.—ANTI-TANK MINE

BRITISH MK V

Size.—Circular, 8 ins diameter, 4 ins high.

Weight.—About 12 lb (containing about 8 lb explosive).

Safety device.—Safety pin in the top of the fuze.

Description.—The fuze sits in a pocket in the centre of the top of the mine; over it sits a tin cap on a rubber-washer to keep moisture out of the fuze pocket. The fuze is operated by a spider frame which fits over the top of the mine and is held in place by studs which fit into slotted straps on the side of the mine.

To arm

- i. Check that the shear wire of fuze is not damaged (if it is—discard the fuze).
- ii. Put the fuze in the mine and remove the safety pin with a horizontal pull using pliers.
- iii. Place the rubber washer and tin cap over it and replace spider cover.

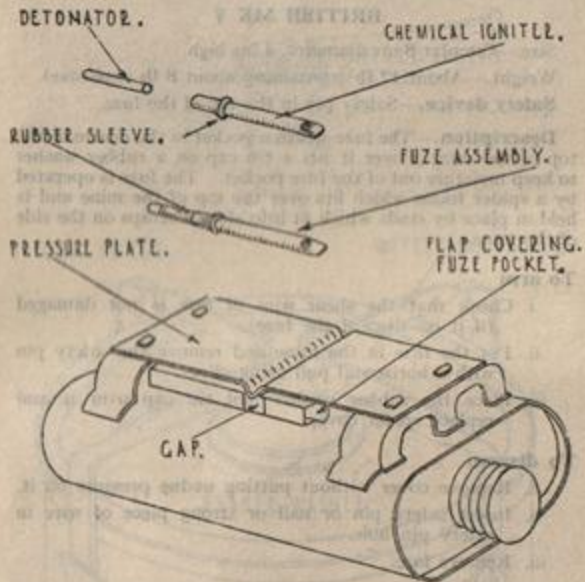
To disarm

- i. Remove cover without putting undue pressure on it.
- ii. Insert safety pin or nail or strong piece of wire in safety pin hole.
- iii. Remove fuze.

Note.—You may meet British Mk IV mines. They are similar to the Mk V but have an overall solid cover in place of the spider frame, and no waterproof cap.



BRITISH No 75 GRENADE MINE. MK. I.



(MK II) IGNITER



ANTI-TANK MINE

BRITISH No. 75 GRENADE MINE, MK I

Size.—7 ins by 4 ins.

Weight.—About 3 lb (containing about 1½ lb explosive).

Safety device.—Nil.

Description.—The mine is operated by the V-shaped indent on the pressure plate crushing the chemical igniters of the fuze.

To arm

- i. Assemble the fuze by inserting detonator into igniter (putting the open ends together) and fasten with the rubber sleeve on the igniter.
- ii. Insert a fuze into each of the two pockets under the pressure plate, pushing the detonator end in first, and ensure that the RED paint is visible in the gap.
- iii. Close the flaps at the ends of the pockets to prevent the fuzes falling out.

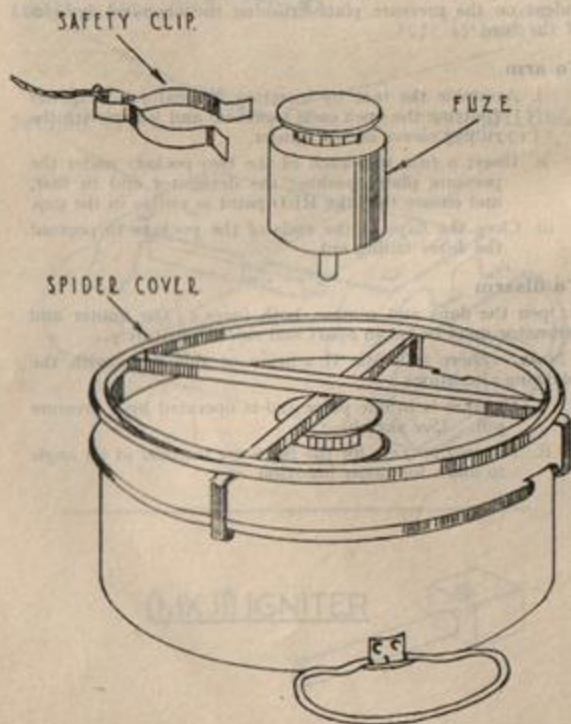
To disarm

Open the flaps and remove both fuzes. The igniter and detonator must be taken apart and stored separately.

Note.—There is a Mk II edition of this mine with the following alterations:—

- i. The fuze is in one piece and is operated by a pressure pin. (See sketch).
- ii. The two pockets for the fuzes are inclined at an angle to allow for easier insertion.

AMERICAN MINE M.I.



ANTI-VEHICLE MINE

AMERICAN MK 1

Size.—Circular, 8 ins diameter and 4 ins high.

Weight.—About 10 lb (containing about 6 lb explosive).

Safety device.—Safety "bicycle" clip, which fits on fuze.

Description.—This mine is very similar to the British Mk V.

To arm

- i. Place fuze in fuze pocket.
- ii. Replace spider cover.
- iii. Remove safety "bicycle" clip.

To disarm

- i. Replace safety "bicycle" clip, or similar improvisation.
- ii. Remove spider cover.
- iii. Remove fuze.

AMERICAN MINE M.L.
MILITARY MINE

AMERICAN MINE 1

Description.—This mine is constructed for the purpose of
 Safety device—Safety device—This mine is constructed for the purpose of
 Weight—This mine is constructed for the purpose of
 Size—This mine is constructed for the purpose of

To arm

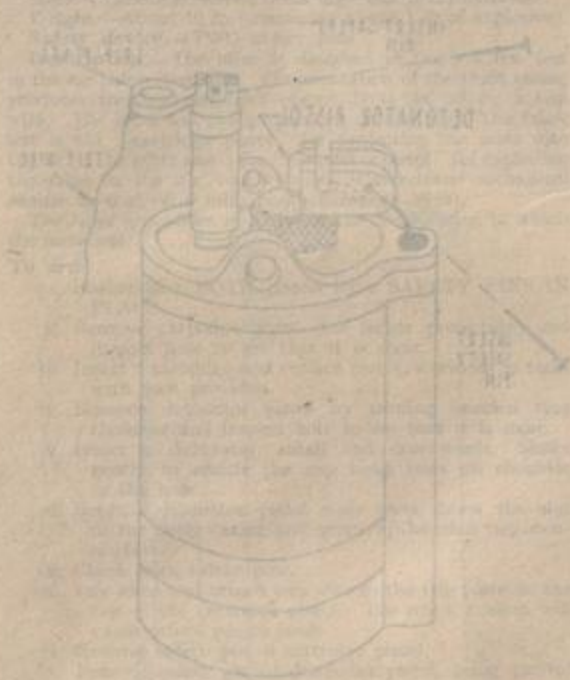
- i. Turn down the lever
- ii. Release the spring
- iii. Release the spring

To disarm

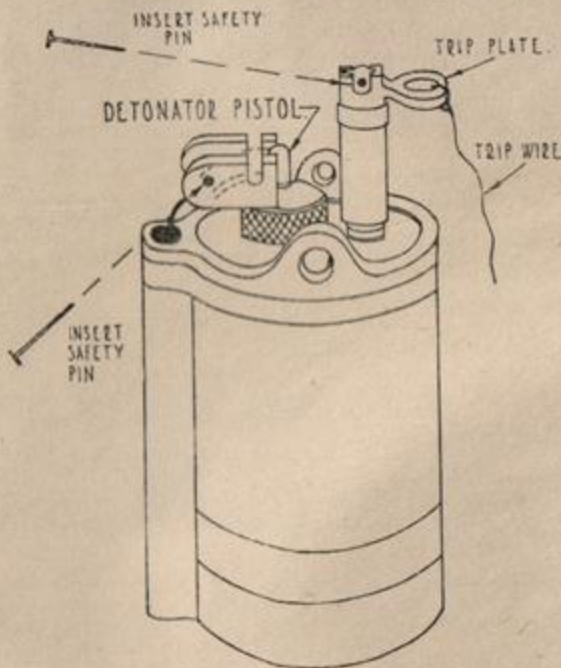
- i. Release the spring
- ii. Release the spring
- iii. Release the spring



BRITISH SHRAPNEL MINE MK I



BRITISH SHRAPNEL MINE MKII



SECTION 2.—ANTI-PERSONNEL MINE

BRITISH SHRAPNEL MINE, MK I

Size.—Cylindrical, about 6 ins high and 3 ins diameter.
Weight.—About 10 lb (containing about 1 lb of explosive).
Safety device.—TWO safety pins.

Description.—The mine is designed to jump a few feet in the air before bursting. Fragmentation of the thick casing produces the anti-personnel effect. It is set off by a trip wire. The mine has two projections on the top. The taller one is the "cartridge pistol" for projecting the mine into the air. The other one is the "detonator pistol" for exploding the mine in the air, and consists of a release mechanism similar to that on a Mills bomb (Grenade 36 m).

The lever arm slides in a slot in the outer casing in which the mine sits.

To arm

- i. Ensure that BOTH pistols have SAFETY PINS IN PLACE.
- ii. Remove cartridge pistol (the larger projection) and inspect hole to see that it is clear.
- iii. Insert a cartridge and replace pistol, screwing up tight with tool provided.
- iv. Remove detonator pistol by turning knurled ring *clockwise* and inspect hole to see that it is clear.
- v. Insert a detonator, small end downwards. Shake gently to ensure the cap head rests on shoulder in the hole.
- vi. Replace detonator pistol with lever down the slot in the outer casing and screw up knurled ring *anti-clockwise*.
- vii. Check both safety pins.
- viii. Lay mine and attach trip wire to the trip plate on the top of the cartridge pistol. Too much tension will cause safety pin to jamb.
- ix. Remove safety pin of cartridge pistol.
- x. Remove safety pin of detonator pistol, being careful not to disturb the mine.

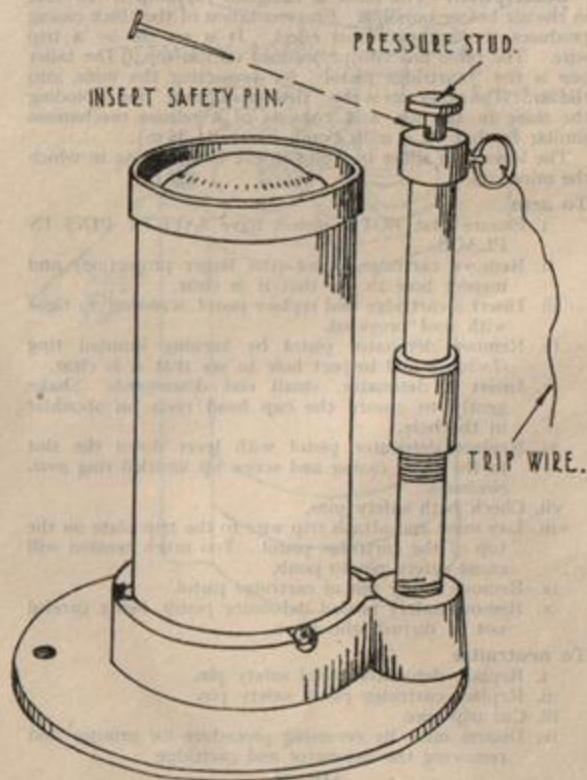
To neutralize

- i. Replace detonator pistol safety pin.
- ii. Replace cartridge pistol safety pin.
- iii. Cut trip wire.
- iv. Disarm mine by reversing procedure for arming and removing the detonator and cartridge.

MK II

Almost exactly the same, but the lever arm of the detonator pistol is longer.

AMERICAN MINE M2



ANTI-PERSONNEL MINE

AMERICAN MK 2

Size.—About 7 ins by 4 ins.

Weight.—About 8 lb (containing about 1 lb of explosive).

Safety device.—Safety pin in the igniter.

Description.—This mine is similar in action to the British Shrapnel mine.

The firing device can be operated either by pulling on a trip wire or by pressure on the knob.

To neutralize

- i. Place a nail or piece of strong wire in the safety pin hole in the igniter.
- ii. Cut the trip wire or remove pressure knob (whichever applies).
- iii. Unscrew the igniter.

APPARATUS FOR THE
DETERMINATION OF THE
ATOMIC WEIGHT OF
SODIUM

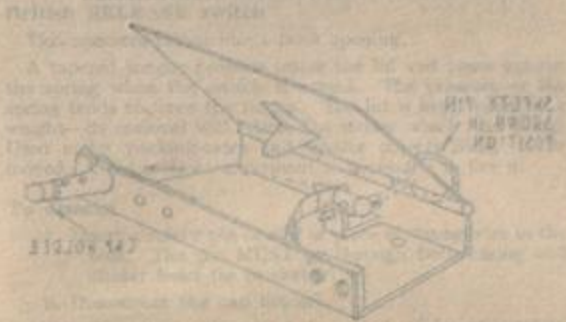
Fig. 1. — About 7 cm. by 4 cm.
Weight. — About 8 gm. containing about 1 gm. of sodium.
Sodium chloride. — Weighs 7 gm. in the bottle.
Description. — This apparatus is similar to the apparatus
shown in Fig. 1. The main part is a glass cylinder 7 cm. in
height and 4 cm. in diameter. The top is closed by a stopper
and the bottom is open. The cylinder is supported on a stand.

To be used.

- I. Place a small piece of sodium in the side
hole in the stopper.
- II. Cut the strip with a razor and place the sodium
in the hole.
- III. Invert the apparatus.

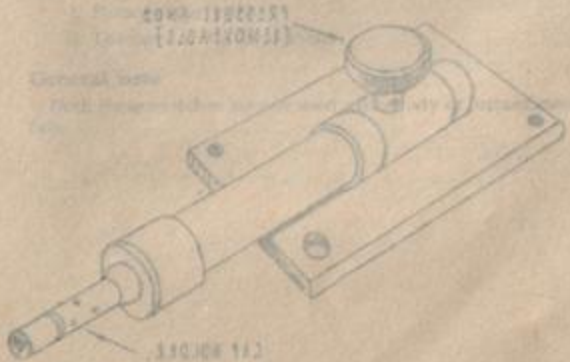


BRITISH RELEASE SWITCH



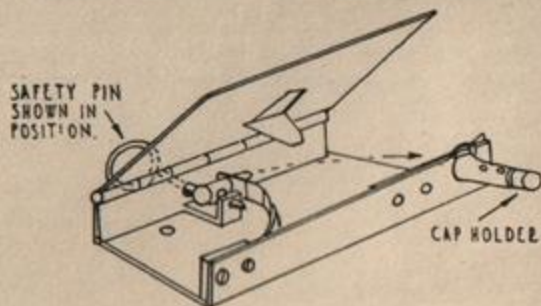
1/16" BORE

BRITISH PRESS SWITCH

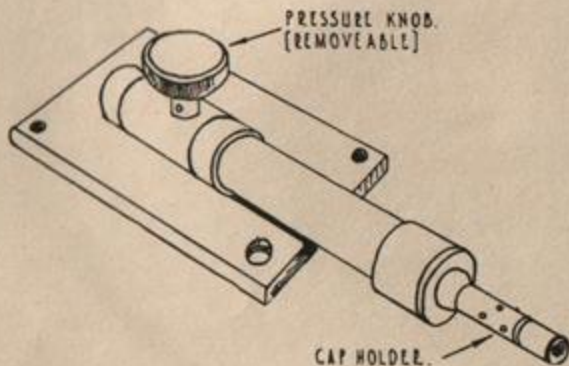


1/16" BORE

BRITISH RELEASE SWITCH.



BRITISH PRESS SWITCH.



SECTION 3.—BOOBY TRAP SWITCHES

British RELEASE switch

This operates rather like a book opening.

A tapered tongue projects inside the lid and bears against the spring when the switch is armed. The pressure of the spring tends to force the lid up. The lid is kept down by a weight—its removal will release the striker which fires a cap. Used under packing-cases and similar objects likely to be moved. Only a slight movement is necessary to fire it.

To disarm

- i. Insert a safety pin or nail or piece of strong wire in the hole. The pin **MUST** go through both casing and striker head (as in sketch).
- ii. Disconnect the cap holder.

Note.—If you cannot get at the switch to insert a safety pin you may be able to cut the fuze coming from it.

British PRESS switch

This switch is operated by pressure on the knob which releases a spring-loaded striker. It may be used under boards, mats, etc., and is fired by a weight of about 30 lb.

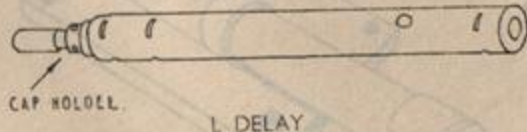
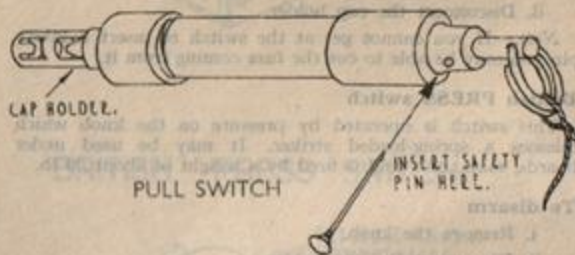
To disarm

- i. Remove the knob.
- ii. Disconnect the cap holder.

General note

Both these switches may be used with safety or instantaneous fuze.

BRITISH IGNITERS.



BOOBY TRAP SWITCHES

British PULL switch

This switch is used with a trip wire, which releases the striker when pulled.

To disarm

- i. Insert safety pin or nail or piece of strong wire in the hole.
- ii. Cut trip wire.
- iii. Disconnect the cap holder.

British L delay (lead break)

This igniter contains a spring-loaded striker, held back by a lead strip which stretches and eventually breaks under the action of the spring. Initially the striker is held in place by a safety pin.

There are various delays from 1 hour to 28 days. The igniter can be fitted direct to a detonator or safety fuze (using an adaptor).

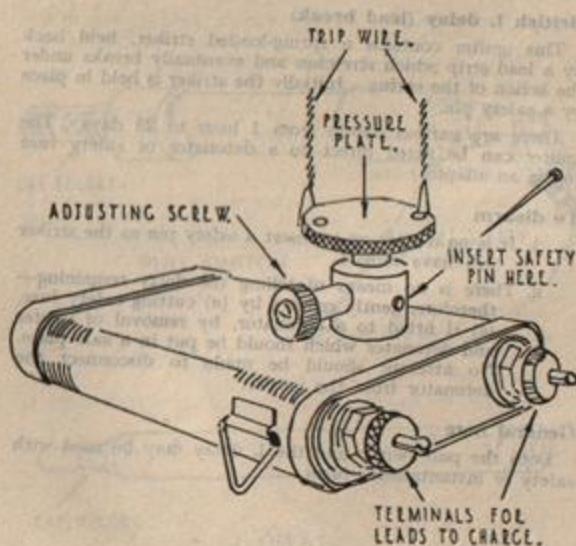
To disarm

- i. It is no use trying to insert a safety pin as the striker will have moved.
- ii. There is no means of telling the delay remaining—therefore, gently remove by (a) cutting safety fuze, (b) if fitted to a detonator, by removal of igniter and detonator which should be put in a safe place. No attempt should be made to disconnect the detonator from the igniter.

General note

Both the pull switch and the L delay may be used with safety or instantaneous fuzes.

BRITISH PRESSURE/PULL SWITCH.
ELECTRIC.



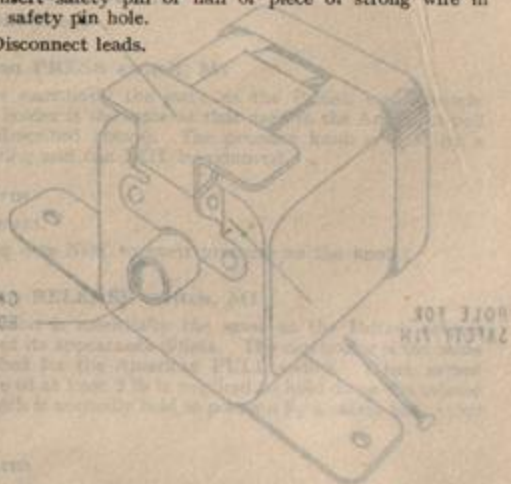
AMERICAN BOOBY TRAP SWITCHES

British PRESSURE/PULL Switch (Electric)

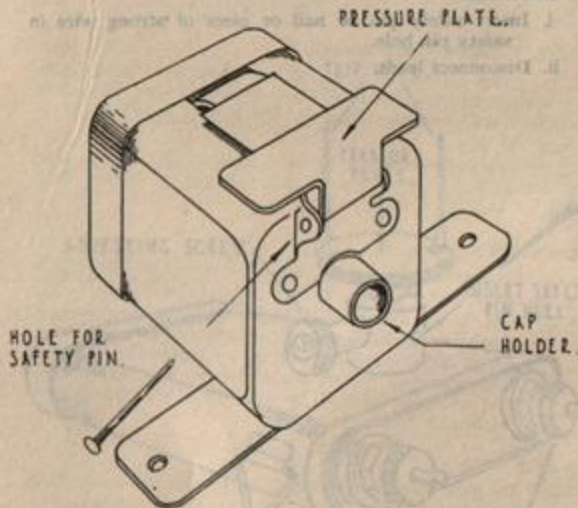
This switch contains a small battery and is designed to fire an electric detonator when either a trip wire is pulled or pressure is put on the plate. The pressure required to actuate the switch can be varied. The lightest pressure required is about 5 lb.

To neutralize

- i. Insert safety pin or nail or piece of strong wire in safety pin hole.
- ii. Disconnect leads.



AMERICAN RELEASE SWITCH M1.



BOOBY TRAP SWITCHES

American PULL switch, M1

This is essentially the same as the British pull switch, with one main modification: the cap holder is threaded to fit the American hand grenade and it can also be fitted to a detonator in addition to safety or instantaneous fuze.

To disarm

- i. Insert safety pin or nail or piece of strong wire in safety pin hole.
- ii. Disconnect.

American PRESS switch, M1

This is essentially the same as the British press switch. The cap holder is the same as that used in the American pull switch (described above). The pressure knob is held by a small spring and can NOT be removed.

To disarm

Disconnect.

(Taking care NOT to exert pressure on the knob.)

American RELEASE switch, M1

The action is essentially the same as the British release switch, but its appearance differs. The cap holder is the same as described for the American PULL switch. When armed a pressure of at least 2 lb is required to hold down the release plate, which is normally held in position by a safety pin. (See sketch.)

To disarm

Replace safety pin or nail and disconnect.

AMERICAN BELL CO. SWITCH, M1.

American BELL CO. SWITCH, M1.

This is essentially the same as the British Bell switch with one main modification. The cap holder is attached to the main American Bell switch and it can also be used in a similar manner in addition to safety in construction.

To disassemble

Remove safety pin or nail or piece of string wire as shown in drawing.

ii. Disassemble

American BELL CO. SWITCH, M1.

This is essentially the same as the British Bell switch with one main modification. The cap holder is attached to the main American Bell switch and it can also be used in a similar manner in addition to safety in construction.

To disassemble

Remove safety pin or nail or piece of string wire as shown in drawing.

Taking care NOT to touch wires on the knob.

American BELL CO. SWITCH, M1.

This is essentially the same as the British Bell switch with one main modification. The cap holder is attached to the main American Bell switch and it can also be used in a similar manner in addition to safety in construction.

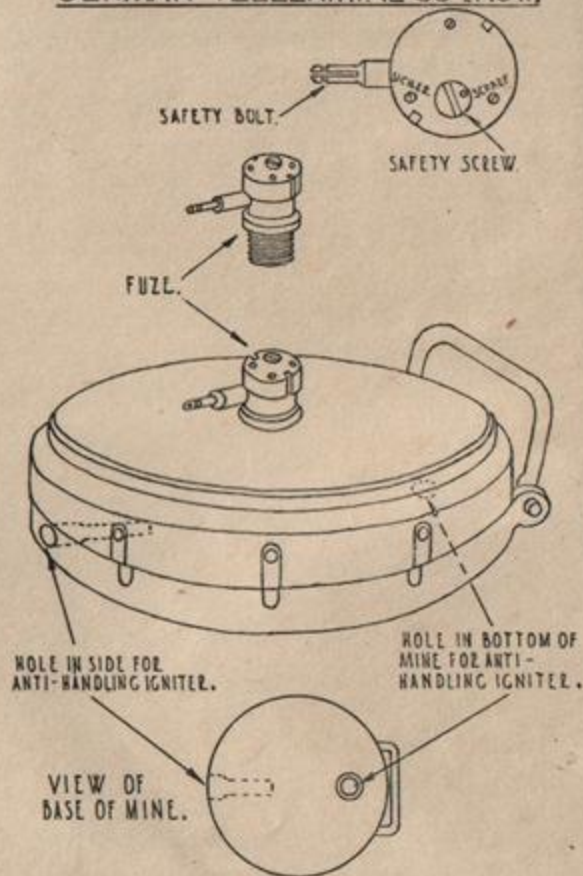
To disassemble

Remove safety pin or nail and disassemble.

GERMAN TELEPHONE 25 (No. 1)



GERMAN TELLERMINE 35 (No. 1)



CHAPTER II SECTION 4.—ANTI-TANK MINE

GERMAN TELLERMINE 35 (No. 1)

Size.—Circular, about 13 ins diameter.

Weight.—About 20 lb (containing about 12 lb of explosive).

Safety device.—Safety bolt and safety screw in the fuze.

Description.—The mine has a dome-shaped cover plate in the centre of which is screwed a brass fuze.

Pressure on any part of the cover plate will fire the mine. It is fitted with a carrying handle.

Anti handling devices.—There are TWO holes in the body of the mine threaded to take the standard German igniters (described on pages 63, 65). These holes are situated:—

- i. One opposite the handle in the side of the mine.
- ii. One in the bottom about half way between the handle and the centre of the mine.

Anti handling igniters when fitted are almost invariably pull igniters.

To neutralize

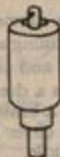
(a) IF HAND LIFTING IS ORDERED

- i. SEARCH FOR AND NEUTRALIZE BOOBY TRAPS which will almost certainly be present with this mine (see page 3).
- ii. Unscrew the main fuze.
- iii. Point the fuze away from you, and turn the screw so that the RED DOT is opposite the slot marked SICHER which may be coloured GREEN or WHITE.
- iv. Push home the safety bolt.
- v. Replace the fuze (which is now safe) in the mine.
- vi. Lift the mine and unscrew any anti-handling igniters.
- vii. Remove the detonators from the anti-handling holes.

(b) IF PULLING CLEAR WITHOUT SEARCHING FOR BOOBY TRAPS IS ORDERED

- i. Drop a loop on the end of about 50 yards of signal cable or strong cord over the fuze, or if you cannot do this, tie it to the handle. Do NOT move the mine or handle while doing this as it may be booby trapped.
- ii. Take cover at full length of the cable and pull the mine clear.
- iii. If the mine has not detonated, unscrew the main fuze and make it safe by carrying out iii and iv as for hand lifting.
- iv. Replace the fuze.

GERMAN TELLERMINE 42 (No 2)



FUZE

HEXAGONAL CAP



HOLE FOR ANTI HANDLING IGNITER.

HOLE IN BASE FOR ANTI HANDLING IGNITER.

VIEW OF BASE OF MINE



ANTI-TANK MINE

GERMAN TELLERMINE 42 (No. 2)

In general appearance this mine is similar to the Tellermine 35 (No. 1) with the following important differences:—

- i. *The fuze is quite different. It is much smaller, has a detonator screwed on to the bottom of it, SLIDES into the fuze box and works on the same principle as our own Mk V mine fuze, but has no safety device.*
- When in position a hexagonal cap screws over it into the cover.
- ii. *The holes for anti-handling igniters are in a different position in relation to the handle. (See sketch.)*
- iii. *The pressure plate is fluted and extends over only about half of the top of the mine.*

To neutralize

(a) IF HAND LIFTING IS ORDERED

- i. **SEARCH FOR AND NEUTRALIZE BOOBY TRAPS** which will almost certainly be present with this mine. (See page 3.)
- ii. Unscrew hexagonal cap.
- iii. Remove fuze and replace hexagonal cap.
- iv. Unscrew anti-handling igniters and remove detonators.

(b) IF PULLING CLEAR IS ORDERED

- i. Drop a loop on the end of about 50 yards of signal cable or strong cord over the fuze, or if you cannot do this, tie it to the handle. Do NOT move the mine or handle while doing this, as it may be booby trapped.
- ii. Take cover at full length of the cable and pull the mine clear.
- iii. If the mine has not detonated, unscrew hexagonal cap.
- iv. Remove fuze and replace hexagonal cap.

ANTI-TANK MINE

GERMAN TELLERMINE No. 3

This mine is really the Tellermine No. 1 with a fluted cover plate. It may also be found with a Tellermine No. 2 (type) fuze, in which case a screwed plug with a milled head screws into the hole in the cover plate over the fuze in the same way as the hexagonal cap in the Tellermine No. 2.

To neutralize

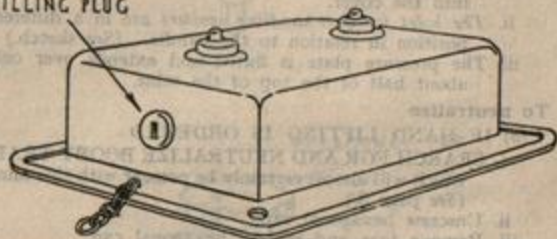
Follow the instructions for Tellermine No. 1 or 2 according to the type of fuze.

FRENCH LIGHT ANTI-TANK MINE



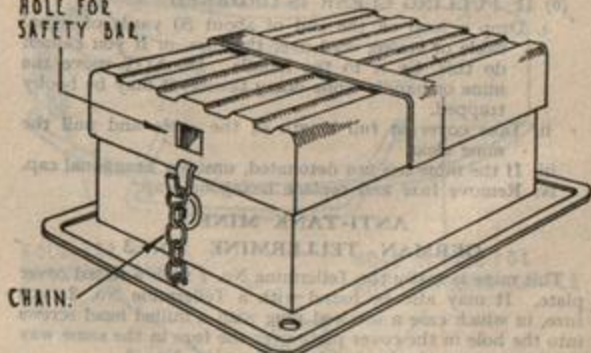
FUZE

FILLING PLUG



MINE WITHOUT LID

HOLE FOR SAFETY BAR



CHAIN.

MINE COMPLETE.

ANTI-TANK MINE

FRENCH LIGHT ANTI-TANK MINE

Size.—12 ins long by 9 ins wide by 5 ins high.

Weight.—About 12 lb (containing about 6 lb of explosive).

Safety device.—None in the fuze.

A safety bar can be slipped in between the fuzes and the lid.

Description.—The mine consists of a rectangular box with a corrugated cover, which is held down on to the mine by a chain at each end.

Two fuzes of similar type to our Mk 5 fuze screw into the mine under the lid.

To neutralize

(a) IF HAND LIFTING IS ORDERED

i. SEARCH FOR AND NEUTRALIZE BOOBY TRAPS.
(See page 3.)

ii. Carefully remove chain from one end and without exerting pressure lift the lid.

iii. Unscrew and remove fuzes, taking care not to press on the centre of the striker heads.

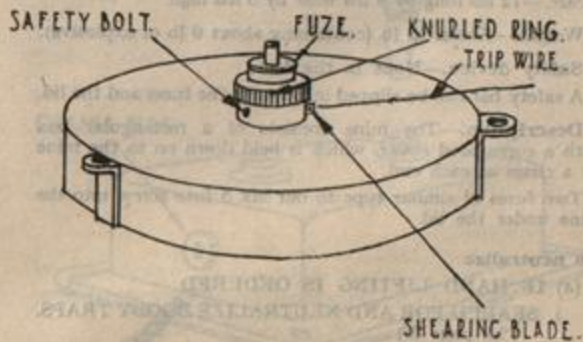
iv. Handle the fuze with care after removal as the detonator is still fixed to it. Accidents have occurred through careless handling after removal.

(b) IF PULLING CLEAR WITHOUT SEARCHING FOR BOOBY TRAPS IS ORDERED

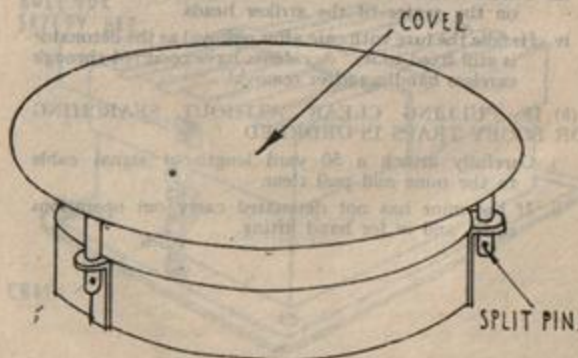
i. Carefully attach a 50 yard length of signal cable to the mine and pull clear.

ii. If the mine has not detonated carry out operations ii, iii, and iv for hand lifting.

HUNGARIAN MINE C.V.P.I.



MINE WITHOUT COVER.



MINE COMPLETE.

ANTI-TANK MINE HUNGARIAN C.V.P.I

This mine may also be set as an anti-PERSONNEL mine

Size.—Circular about 8 ins diameter and 3 ins high.

Weight.—About 8 lb (containing about 4 lb. of explosive).

Safety device.—A hole in the side of the fuze to take a safety bolt.

Description.—The mine has a cover, which acts as a pressure plate, sitting on top of the fuze which screws into the body of the mine. Attached to the pressure plate are three vertical legs which slide in brackets attached to the body, and may be held down by split pins through the legs under the brackets. The fuze can be adjusted to fire at varying pressures, giving an anti-TANK mine or an anti-PERSONNEL mine fired by pressure or a trip wire.

To disarm

As this mine may be set to go off at light pressure, BE CAREFUL.

(a) IF LIFTING BY HAND IS ORDERED

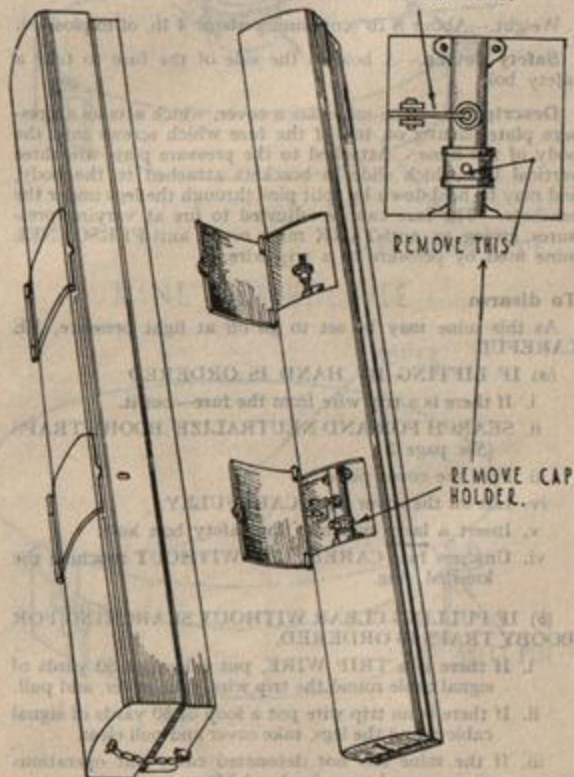
- i. If there is a trip wire from the fuze—cut it.
- ii. SEARCH FOR AND NEUTRALIZE BOOBY TRAPS (See page 3).
- iii. Free the cover plate.
- iv. Lift off the cover plate CAREFULLY.
- v. Insert a large nail into the safety bolt hole.
- vi. Unscrew fuze CAREFULLY WITHOUT touching the knurled ring.

(b) IF PULLING CLEAR WITHOUT SEARCHING FOR BOOBY TRAPS IS ORDERED.

- i. If there is a TRIP WIRE, put a loop of 50 yards of signal cable round the trip wire, take cover, and pull.
- ii. If there is no trip wire put a loop of 50 yards of signal cable round the legs, take cover and pull clear.
- iii. If the mine has not detonated carry-out operations iii, iv, v and vi as for hand lifting.

ITALIAN MINE

B.2



ANTI-TANK MINE

ITALIAN B2

Size.—3 ft 6 ins by 5 ins by 5 ins.

Weight.—About 33 lb (containing about 7 lb of explosive).

Safety device.—A removable cap holder.

Description.—The mine is a rectangular metal box, with an overall cover attached by chains at each end. There are two inspection lids in the cover. The charge is placed in both ends of the box. The firing mechanism is in the middle. The striker is held clear of the cap by a wire, which is sheared by a knife edge on the underside of the lid when it is pressed down.

To disarm

(a) IF LIFTING BY HAND IS ORDERED

- i. SEARCH FOR AND NEUTRALIZE BOOBY TRAPS (See page 3.)
- ii. Open both inspection lids carefully.
- iii. Remove CAP HOLDER CAREFULLY (see inset sketch) and DO NOT TOUCH THE LEVER.

(b) IF PULLING CLEAR WITHOUT SEARCHING FOR BOOBY TRAPS IS ORDERED

- i. Pull clear with 50 yards of cable.
- ii. Carry out ii and iii as for hand lifting, if mine is still there.

ITALIAN MINE
 WITH TAKE MINE
 ITALIAN MINE

Size - 6 1/2 in. by 3 in. by 2 in.

Weight - About 12 lb. containing about 7 lb. of explosive.

Water weight - 2 1/2 lbs. - this cap holds

Description - The mine is a rectangular metal box with an opening over the top of the box as each end. There are two important things to be noted. The cap is held in place by two bolts in the box. The mine is mounted in the mine. The mine is held fast to the cap by a wire which is attached to a hole in the mine. The mine is held fast to the cap by a hole in the mine.

To clear

(a) IF FITTING BY HAND IS ORDERED

(b) STATIONER AND WHEN IN THE MINE LEAVE

(See page 2)

(c) Open both ends of the mine

(d) Remove CAP HOLDER CAREFULLY (see

sketch)

and DO NOT TOUCH THE LEVER

(e) IF FILLING CLEAR WITHOUT SEARCHING FOR

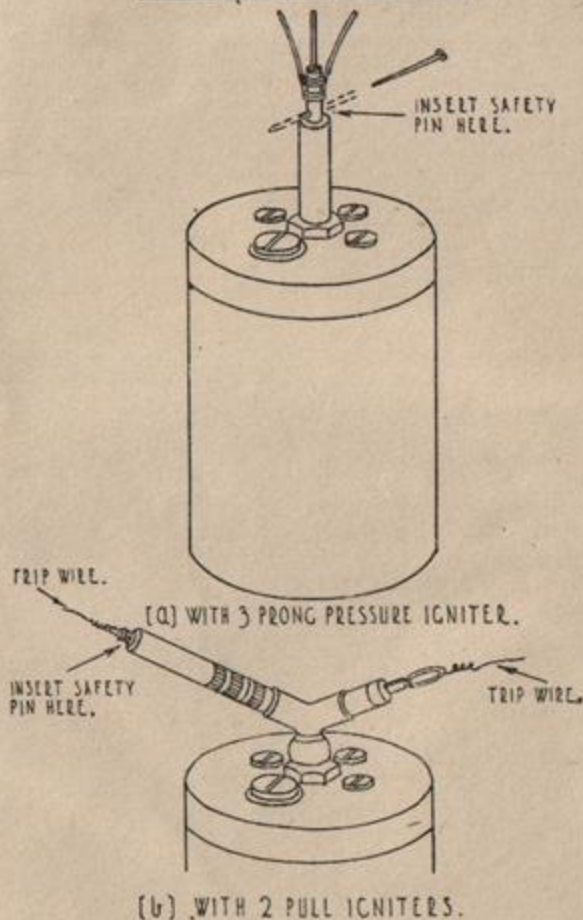
SMOKE BY LEVER IS ORDERED

(f) Pull lever with 50 yards of cable

(g) If lever not pulled in an hour mine is still

safe

GERMAN 'S' MINE



SECTION 5.—ANTI-PERSONNEL MINE

GERMAN 'S' MINE

This is a small cylindrical mine about 4 ins diameter and 5 ins high. On firing, the mine is projected about 3 ft into the air where it explodes, scattering steel balls in all directions. It is purely an anti-PERSONNEL mine. Up to date there are three normal methods of operation.

1. THE MOST COMMON method is using the *standard 3-prong pressure igniter* (see page 63).

To neutralize

Insert nail into safety pin hole and unscrew igniter.

2. ANOTHER METHOD is using *one or two standard pull igniters*. An adaptor is used when pull igniters are fitted (see page 65).

To neutralize

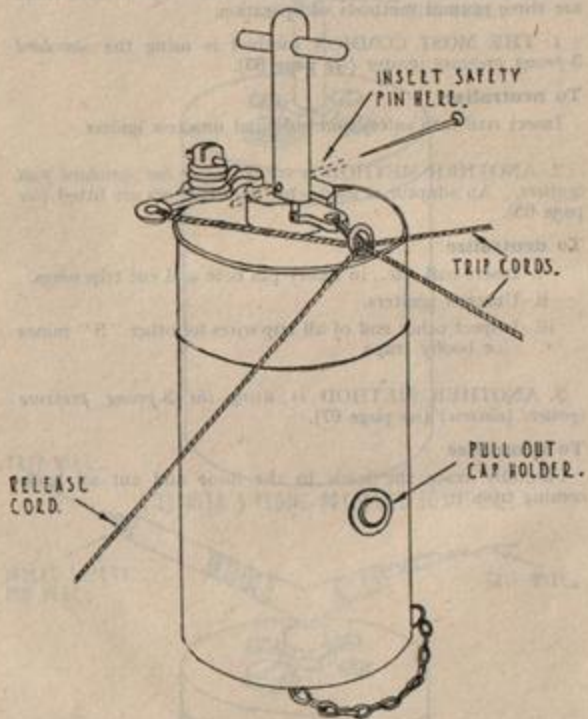
- i. Insert nail, etc., in safety pin hole and cut trip wires.
- ii. Unscrew igniters.
- iii. Inspect other end of all trip wires for other "S" mines or booby traps.

3. ANOTHER METHOD is using the *3-prong pressure igniters (electric)* (see page 67).

To neutralize

Carefully trace the leads to the mine and cut all leads coming from it.

ITALIAN MINE B.4.



ANTI-PERSONNEL MINE

ITALIAN B4

This is a shrapnel mine and on discharge scatters scrap metal. It is usually fixed above the ground to a tree or post as it has no "jack-in-the-box" effect like the British and German types, but has been used buried. It is fired by pulling a trip wire or by cutting a tension wire.

To neutralize

- i. Withdraw cap holder.
- ii. Insert stout wire or nail in safety pin hole in striker.
- iii. Release cords, checking other ends for booby traps.

ANTI-PERSONNEL MINE

ITALIAN MINE B-4

This is a delayed mine and on discharge neither rings
 metal. It is usually fixed close to the ground to a tree or post
 as it has no "kick-in-the-loin" effect like the British and
 German types but has been used in Italy. It is hard to believe
 a trip wire is by cutting a tension wire.

To neutralize

A wooden stake (shown)

A loose steel wire or nail is used for hole in center.
 In above mine, checking other ends for loose traps.



GERMAN IGNITERS

The igniter is a small, cylindrical device used for starting engines. It consists of a main body with a threaded base and a top section containing the firing mechanism. The top section is protected by a cap that can be removed to access the internal components.

The main body of the igniter is made of metal and has a threaded base for mounting. The top section is made of a different material, possibly plastic or a different metal, and is designed to be easily removed. The internal components, including the firing pin and the spark plug, are housed within the top section.

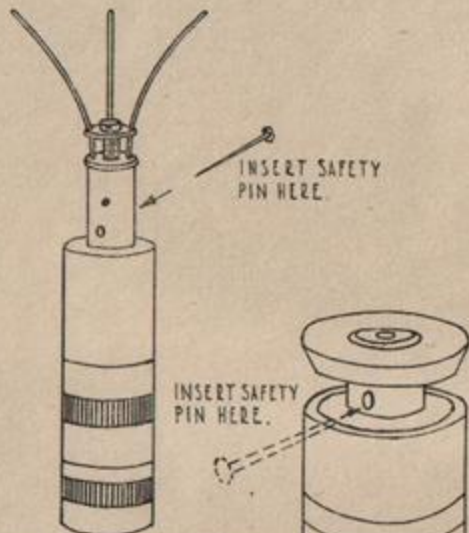
The igniter is used to start engines by providing a spark to the spark plug. The firing pin strikes the spark plug, creating a spark that ignites the fuel mixture. The igniter is a critical component of the engine's starting system.

The igniter is a simple and reliable device that has been used for many years. It is a key component of the engine's starting system and is essential for getting the engine started.

GERMAN PRESSURE IGNITER
D 5 32



GERMAN IGNITERS



GERMAN 3 PRONG PRESSURE
IGNITER. S. M. I. Z. 35



GERMAN PRESSURE IGNITER
D. Z. 35.

SECTION 6.—GERMAN IGNITERS

(FOR MINES OR BOOBY TRAPS)

General note

All German igniters are capable of being screwed into German made-up charges and mines (in some cases by means of an adaptor). They can also be attached to safety fuze by means of an adaptor. In all cases the igniter fires a percussion cap.

German 3-prong pressure igniter SMIZ35

This is the 3-pronged pressure igniter most often used with the "S" mine (see page 55). Pressure required, about 15 lb.

To neutralize

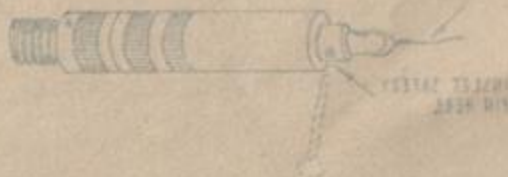
- i. Place a nail or piece of strong wire in safety-pin hole.
- ii. Unscrew.

German pressure igniter DZ35

This igniter is made in two sizes, the larger being made of aluminium and painted brown, the smaller being unpainted brass. The larger needs a greater pressure to fire. They are chiefly used in improvised mines and booby traps and in similar places to our own pressure switch.

To neutralize

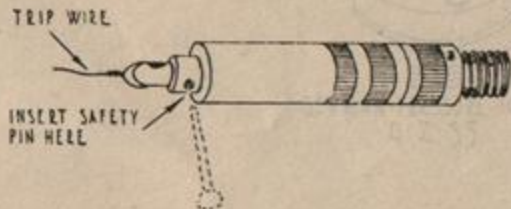
- i. Place a nail or piece of strong wire in the safety-pin hole.
- ii. Unscrew.



GERMAN PULL IGNITER
ZDSCHN ANZ 29 (FRICTION).



GERMAN PULL IGNITER ZZ.35.



GERMAN IGNITERS
(FOR MINES OR BOOBY TRAPS)

German pull igniter (friction) ZDSCHN ANZ29

This igniter can be recognized by the large ring attached to the end, and may be found with "S" mines and in booby traps.

To neutralize

- Cut wire carefully and unscrew igniter.
- N.B.—This igniter has no safety pin.

German pull igniter ZZ35

Action is very similar to our pull switch and it is used with trip wire in the same way. Used with "S" mines either singly or in pairs, and in booby traps.

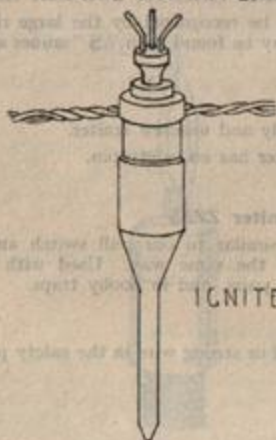
To neutralize

- i. Place a nail or strong wire in the safety pin hole.
- ii. Unscrew.



GERMAN 3 PRONG PRESSURE IGNITER

ELECTRIC TYPE.



S. MINE
FITTED FOR USE WITH THIS IGNITER.

GERMAN IGNITERS

(FOR MINES OR BOOBY TRAPS)

German 3-prong pressure igniter (electric), EM MI 240

Used with the "S" mine this is a variation of the standard 3-prong pressure igniter, which fires an electric detonator in the mine. This set up is usually found with one mine operated by any of 18 igniters used in two chains of 9, thus increasing the radius of action of the mine.

To neutralize

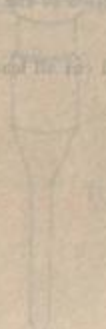
Trace leads to mine and cut all leads coming from mine.

GERMAN STEELING PRESS AND KNITER
 TONNAGE OF BOOTH PLANT

GERMAN STEELING PRESS AND KNITER
 TONNAGE OF BOOTH PLANT
 (Caption text, partially illegible)

Illustration of

the machine and its parts



PLANT



TONNAGE OF BOOTH PLANT

