HAND

&
MORTAR

GRENADES

INTRODUCTION

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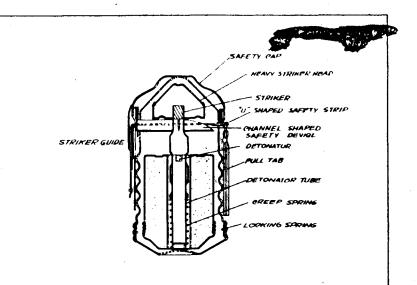
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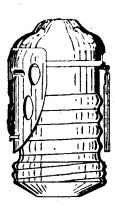
Italian high explosive anti-personnel hand grenades are almost totally of the "offensive" type. Although the loading factor is usually low, the grenade bodies are not adapted for maximum fregmentation. The anti-tank grenades are adaptations of the anti-personnel granades with an additional charge. There is no evidence of the use of shaped charges in Italian anti-tank grenades. Likewise, the chemical granades that are not frangible are made of adapted anti-personnel granade bodies and machanisms with a chemical filler. The Italians did not make use of the rifle granade but did use a small mortar, not unlike a granade projector, to fire a mortar granade.

Italian granades are of the impact type. They incorporate an "all-ways" acting fuse which arms in flight. For that reason, granades found in the armsel position are very sensitive and are a delicate disposal problem.



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ITALIAN BREDA MOD. 35 -HAND GRENADE



. . . 3.8 inches.
. . 2.1 inches.
. . Body red;
Safety cap black.
. . 7 ounces.
. . T.N.T.
. 2.1 ounces. Overall length . . Maximum diameter . Color Total weight . .

ITALIAN

BREDA HAND GRENADE MOD. 35 BOMBA A MANO BREDA MOD. 35

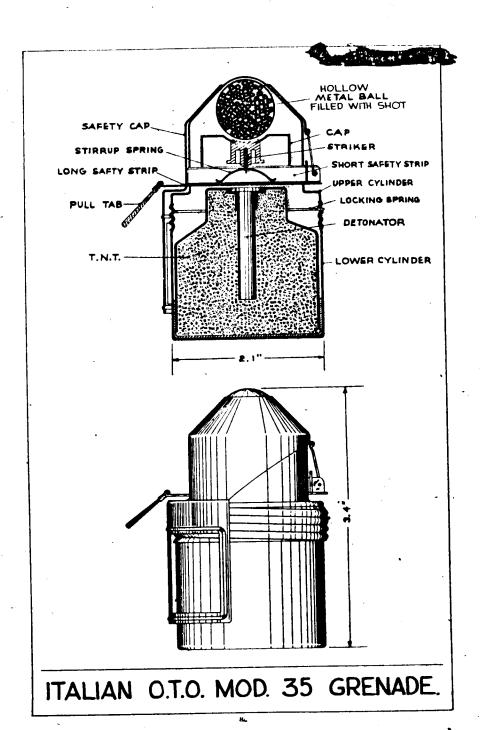
Description

This grenade is longer and thinner than the S.R.C.Me.35 grenade and has bemispherical ends. It consists of a thin aluminum case in two parts. The safety strip is in the form of an elongated U and passes through the grenade on either side of the channel shaped safety device. The ends of the strip pass into slots in the top of a locase metal piece which is retained by a pin in the large safety cap (of light aluminum). The striker pin is attached to the heavy head.

Anound the detonator tube is a periorated metal tube attached to the striker head; the spring maintains the striker away from the detonator until impact.

Operation

On withdrawd my the safety strip, the safety cap is freed. At one end it is attached to a brees strip which is wound twice around the head of the grenade, and attached at the other end to the safety device. During flight the safety cap pulls this out around the granade so that it fires on impact.





Data

ITALIAN

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HAND GRENADE QT.Q. MOD. 35 BOMBA A MANO Q.T.Q. MOD. 35

Description

This grenade is composed of a very light casing of metal, made in two parts: a flat lower cylinder, and, acrewed to this, a cylinder of smaller diameter which has a truncated cone shaped top.

Transport Company

The safety pin consists of two long and one short brass strips. The two longer strips pass one on either side of the base of the channel shaped safety device and the short strip engages and locks in a slot in the body of the grenade. The striker is riveted to the cep, the top of which is shaped to take the heavy metal ball. The explosive is contained in a metal box which has a well in it for the detonator. A spring holds the striker away from the detonator.

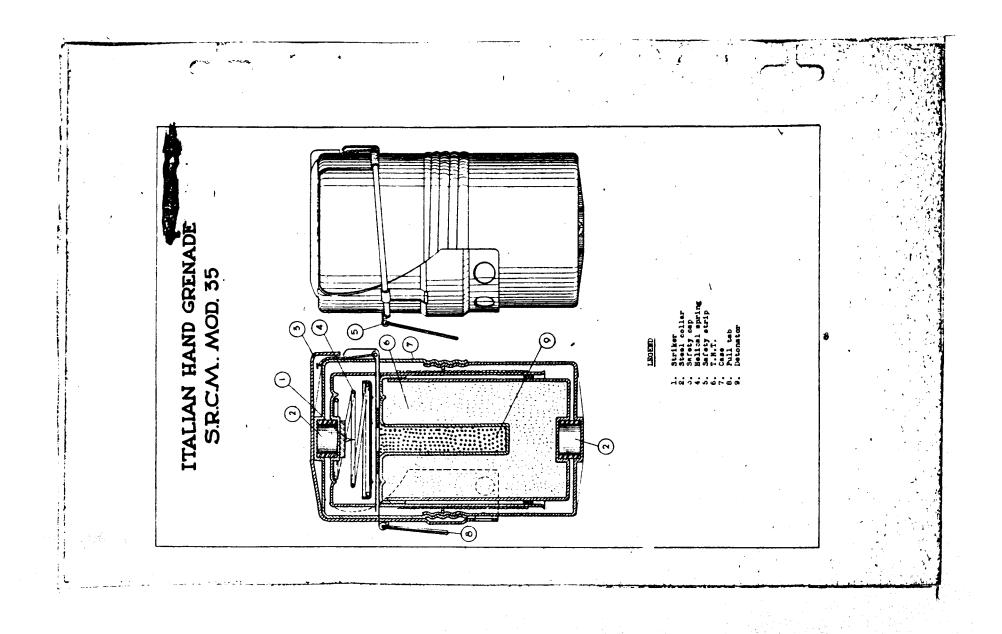
Operation

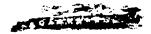
On withdrawel of the pin, the safety cap (of light aluminum) is freed so that it becomes disengaged during flight. The cap is hinged and by its weight and withdraws the channel shaped safety device. The granade is then armsed to fire upon impact. In trial with this granade, no ill effects were fait by men standing 25 yards from the burst. There is practically no fragmentation, and clast is fair.

Homarks

Anti-Tank Incendiary Grenade 0.T.0.42.

This grenede consists of an 0.7.0. grenade, without the explosive charge, to the base of which is attached a glass bottle containing an incendiary liquid. The two components are secured by means of an aluminum collar. The weight is given as approximately \$\frac{2}{3}\$ lbs. The base of the 0.7.0. grenade is open so that when the grenade is thrown in the normal way, the detenator will ignite the liquid in the glass container. The time of burning is 4 - 6 seconds. As with the E.E. A. Th. grenade, this should only be used at targets 15 yards eway. The grenade must be thrown with some force in order to break the glass container.





Date

S. R.C. M. MOD. 35 BOMB A MANO S. R.C. M. MOD. 35

lescription

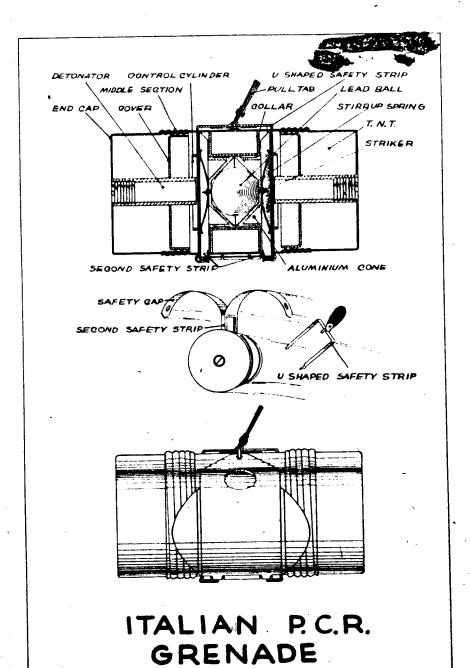
The outer case is in two parts which screw tagether. Both parts are stamped to form a setting for the collar and the upper part is cut to take the safety bars. Internally the grenade consists of two metal collars and two light metal cylinders. The striker is riveted to the head of the open cylinder around the outside of which is wound some coarse wire to form the metal loading. The lower cylinder is a loose fit inside the upper one, and carries the explosive charge, a pressed block of impure T.N.T. which is recessed to take the detonator. The cap contains the helical spring which holds the striker and detonator spart.

The safety strip passes over the ring and is bent up under it, so securing the safety car (of light aluminum) to which the ring is attached. Between the two safety strips is an elliptical metal strip, with an sccentric hole, whose ends are joined by a spring passing around the side of the cylinder. This acts as a safety shutter, and on impact one end is jerked forward to a position in which the striker is centrally behind the hole in the shutter and can fire the detonator.

The two steel collars rest in recesses in the splinders. If the grenade falls on its side these are jerked from their seetings and force the cylinder together.

Operation

When the safety pin is withdrawn the safety cap is free to disengage during flight and withdraw the second safety strip. The delay in arming is effected by means of a snort obtain which is attached at one end to the safety cap and at the other to the safety strip, the bight of the chain being wound once around the stop. On impact, the safety shutter moves into sligmment, the sylinders come together and the striker impinges upon the detonator. There is a slight amount of fragmentation from this granade.





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P. C. R GRENADE

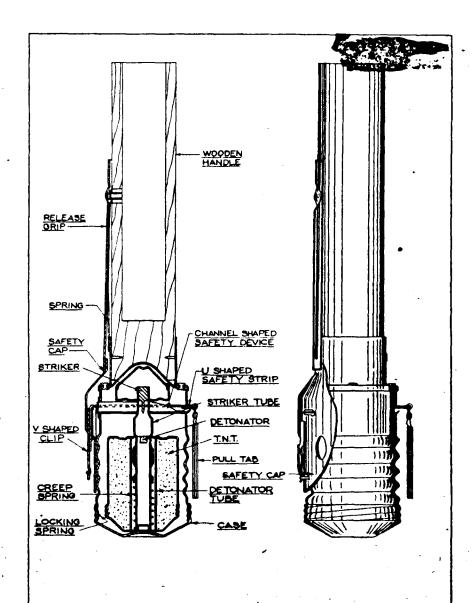
Description

The grenede body is of three parts, the two end caps threeding into the middle section. Two shallow cones of aluminum, each with a striker and the center of a four prong stirrup spring at its apez, are contained in a 1-1/2 inch diameter cylinder held in the middle section by two collars. One of the cones is at each end of this cylinder and in the space formed is a heavy lead ball 1 inch in diameter.

The action of this ball in this cavity makes the fuse always soting. The detonators are held in two cylindrical tubes, one attached to the center of each end cap. The end cap is closed by a metal cover and the explosive filling is contained therein. The first safety strip consists of a rubber pull tab and a one pleas U-shaped bar of light soft metal. Each end of this passes through an opening in the middle section, between a stritur and a detonator to protrude elightly through the opposite side of the body. The second safety strip is attached to the hinged wing shaped safety cap which passes around the body over the middle section. There are two bars, each to pass through the body and cover a striker. Thus each striker is held from each detonator by a stirrup apring and two safety bars.

Operation

The first safety strip is removed before throwing, and when the grands is thrown, the wing shaped eafety cap will open and pull off, extracting the second safety strip. Then each striker is held from its detonator by the light opring only, and the grands will fire on impact.



ITALIAN BREDA MOD. 40 HAND GRENADE



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ITALIAN BREDA HAND GRENADE MOD. 40 BOMBA A MANO BREDA

MOD 40

Description

The Breds Model 35 body is used with an adapted head so as to take a six inch wooden handle. The striker end detonstor are held spart by a creep spring and two safety strips. One is an elongated U-shaped plate which passes through holes in the body on each side and is attached to a rubber pull tab. The other is a single bar and is attached to the safety cap.

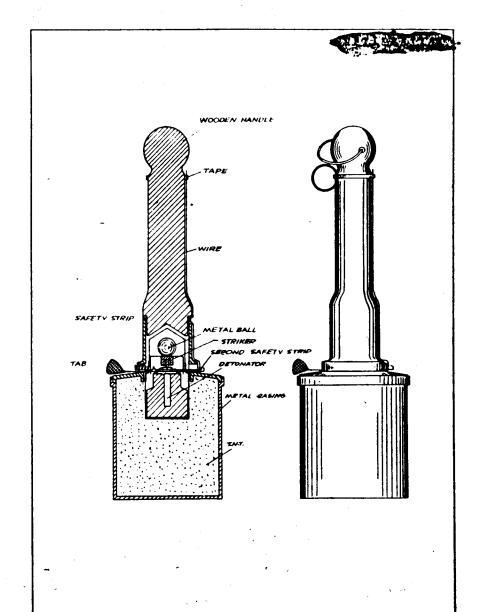
The striker head is semi-hemispherical in shape and weighted. It fits into a similarly shaped cavity. The detonator is movable so the fuse is always acting.

The safety cap is extended so that a metal strip runs up the handle. Beneath this there is a light spring to sid in throwing the cap away from the grenade. A small V-shaped clip passes over the protruding ends of the U-safety strip and clips to the base of the cap. This holds the cap in place.

Operation

The grenade must be grasped firmly by the handle so that the safety cap will not come off when one safety strip is removed.

After removing the U-shaped strip the greneds is thrown. In flight the safety cap will come off extracting with it the second safety strip. The greneds will fire on impact,



ITALIAN "L" TYPE ANTI-TANK HAND GRENADE



Date

ITALIAN "L"TYPE ANTI TANK HAND GRENADE

Description

This grenade consists of a metal casing with a wooden throwing handle. A tab protrudes from the top of the casing. Pulling this tab removes a safety strip which, while in, blocks the striker from the detonator. There is also a small metal strip protruding from the base of the handle. This strip is held in position by a wire in the side of the handle. The wire is held in position by a piece of tape secured by a pin.

The firing mechanism is always, acting much like the 0.T.O. Mod 35 Hand Grenade.

Operation

Before throwing this grenade, remove the safety strip attached to the tab. Then, holding the handle firmly, remove the pin. Be sure that the wire is held securely. When the grenade is thrown, the wire is released and this releases the smell metal strip which them moves over into a position so that the hole in it is in alignment with the striper and detonator. On impact the striper and detonator are brought together, firing the grenade.

This grenade was designed for use against vehicles and tanks. The grenade should be thrown at a distance of 15 to 20 meters from the target and cover should be taken as protection against fragmentation. In the armed position, the grenade is very sensitive.



Date

ITALIAN

BREDA ANTI-TANK GRENADE MOR 42 BOMB A MANO BREDA MOD. 42

Description

This is the Breds Model 40 grenade with a light metal globe 3-5/8 inches in diameter screwed on to the bottom. This gives an additional charge for entitank use. The striker and detonator are held spart by a creep spring and two safety strips. One is an elongated U-shaped plate which passes through holes in the body on each side and is attached to the mafety cap.

The striker head is semi-hemispherical in shape and weighted. It fits into a similarly shaped cavity. The detonator is movable so the fure is always acting.

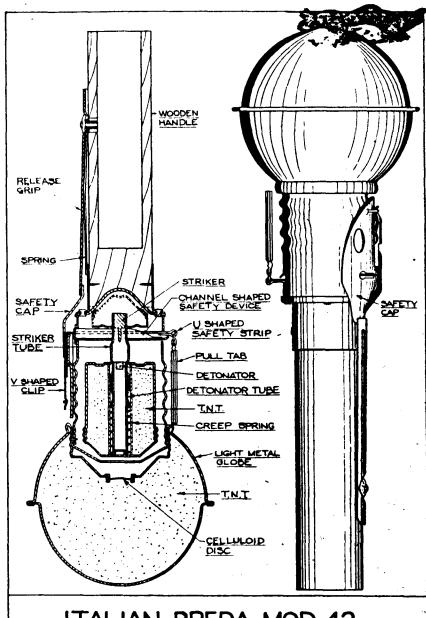
The safety cap is extended so that a metal strip runs up the handle. Beneath this there is a light apring to sid in throwing the cap away from the grenade. A small V-shaped clip passes over the protruding ends of the U-safety strip and clips to the base of the cap. This holds the cap in place.

A hole is cut in the bottom of the Model 40 grenade to insure the detonation of the attached charge.

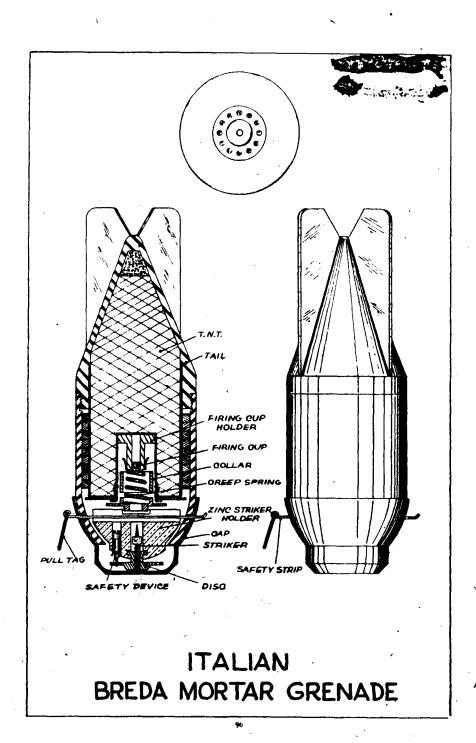
Operation

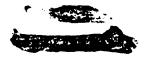
The handle should be held firstly before the pull tab is pulled to release the first safety strip. In flight the safety cap will come off axtracting the second safety strip. The grenade is then armed and will fire on impact.

According to the instructions, the grenade must not be used against objects closer than 15 yards for the safety of the thrower.



ITALIAN BREDA MOD.42 HAND GRENADE





<u>Da ta</u>

Overall	length .						5-1/4 inches
Maximum	diameter	•		•	•	٠	1-3/4 inches
Color .		•	٠	٠	٠	•	body black;
Pilling							tail red. T.N.T.

ITALIAN BREDA MOTAR GRENADE

Description

The body of this grenade is steel, while the tail is of aluminum siloy. The two are acrewed together. The steel cap is attached to a steel strip, and a double bress safety strip holds the cap in place. The safety strip peases through two slots near the head of the grenade, and lies in the recess of the sino striker holder. The tail of the H.E. grenade is painted red to distinguish it from practice and instructional grenades, which have yellow and umpainted aluminum tails respectively. It is fired from the 45 mm light mortar, Model 35 - Brixia.

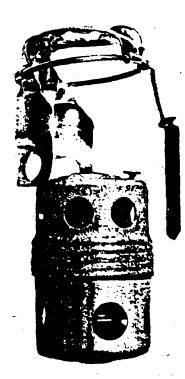
Operation

On withdrawing the sefety strip, the cap is freed, and on firing, the setback causes the safety device to move down into its slot. This eafety device consists of a short brass rod which projects into one of the holes in the disc and holds the disc from rotating. Four light brass spring strips hold the rod in the "astback"position.

At the same time the collar also sets back onto the firing cap holder-being held in position by the detent spring. The collar and holder them act as one, and can move under the influence of the spring.

During flight the disc rotates as air passes through the oblique holes near the edge of the disc. The striker, being prevented from rotating by the squareshape of the portion moving in a square-shaped channel, is thus moved towards the detonator. The greened is then armed. On impact, the detonator rides forward on the spring and hits the striker. BREDA DRILL GRENADE





S.R.C.M.
PRACTICE
GRENADE
with
SMOKE
FILLER



Types S.R.C.M. Model 35 F Model 35 P Model 35 F

Markinga
Top part red; lower part black; with the letter F (Fungeno) printed in white on a black background.

Description

These grenades are very similar in construction to the N.E. equivalents, but contain in place of the N.E. charge a liquid smoke filling consisting of a mixture of chloraulfonic acid and sulphur trioxide. They produce a fairly dense white smoke cloud of 2 to 5 yards front. They cannot be used if wind strength is above 7 m.p.h. They cannot

ITALIAN

MISCELLANEOUS

HAND GRENADES

Operation
Same as H.E. equivalents.

II. Smoke incendiary Hand Grenades.

Types
1. S.H.C.M.
2. G.T.G.
3. Breds Model 35 F1 Model 35 F1 Model 35 F1

Markings
Top part red; lower part black. The letters FI printed in red on a black background.

Description

Correspond to H.E. equivalents with explosive filling replaced by a charge of white phosphorus. The burst creates a dense white smoke covering an area of about 11×4 yards. The phosphorus is scattered with the burst.

Operation
Same as H.L. equivalents.

III. Practice and Drill Grensdes.

- Types of Markings

 1. The grenade containing a small charge is white with a 1/2" red band around the place where the two parts of the body join.

 2. The instruction or drill grenade is umpainted or black.

 3. The practice grenade with a smoke filler is yellow.

 The S.R.C.M. Mod 35 practice grenade is also recognizable by the fact that six large holes are cut in the body above and below the screw threads. The lower cylinder containing the H.E. charge is replaced by a brame willinder having a truncated conical bottom with four holes in it. This cylinder holds the smoke producing charge in a celluloid container. The shutter is also simplified so that there is no "eafe" position after impact.

IV. Improvised Rand Orenades.

This consists of a cylindrical tin can of the type used 2x preserved foods, filled with T.N.T. Attached to the can is a coller into which is fitted the 0.T.O. grenade. Below the grenade is a cavity in the main explosive filling where a detonator containing a short length of F.I.D. is fitted. It is issued with a red paper cover over the head.



INCENDIARY PETROL GRENADE INCENDIARY BOTTLE B.A.C.



Deta

Bottle													l litro eize
20111	•	•	•	•	٠	٠	•	•	•	٠	•	٠	T TITLE BIES
Color .	•	•	•	٠	٠	•		٠	٠		•		Transparent.
F1111ng	:	•	٠	٠	٠	•	٠	٠		٠		٠	Inflammable
													liquid.

Desc-iption

The incendiary grensde is made from an ordinary one litre glass bottle, fitted with a metal pressure cap, and containing an inflammable liquid. A fuxe match, protected by a canvas cover, is fixed to the side of the bottle by two rings of cord. To the top of the fuze is attached a fine cord, which, on being pulled, fires the fuxe.

To avoid accidental ignition by a chance drawing of the cord, the cord has a small wooden handle and is fixed to the neck of the bottle by a ring of thread.

Operation

Just before use, the wooden handle is freed by a light pull on the ring of thread which is securing it to the neck of the bottle. The handle is then given a sharp pull and a small flame will appear at the lower end of the fure. The bottle should then be thrown with force against the target.

If the bottle is not thrown immediately it may burst before reaching the target. A minimum of two seconds is given between the lighting of the fuse and the bursting of the bottle. The Italians consider the grenade to be a good weapon for defense against A.F.V.'s at close quarters.

