

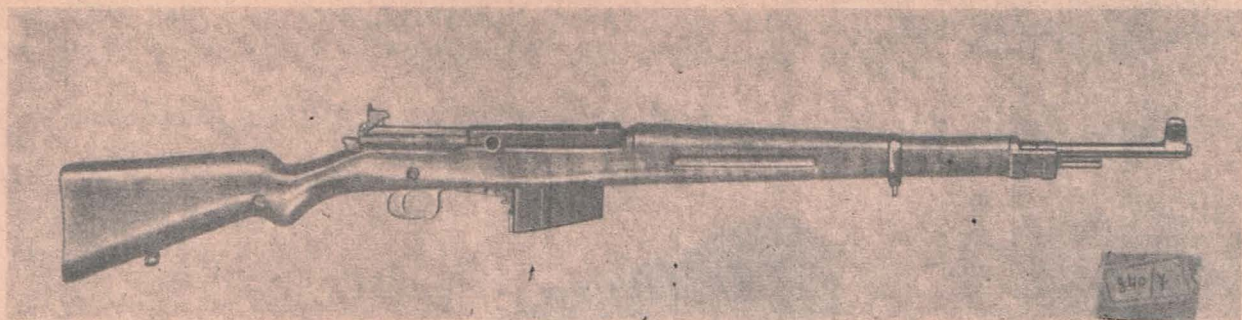
P E L O SEMI-AUTOMATIC RIFLE

(ag m/Pelo)

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PELO SEMI-AUTOMATIC RIFLE

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I. General Information

The Peló rifle, semi-automatic model, has a calibre 6,5 - 7,62 mm and 7,92 mm. For the 6,5 mm cartridge the V25 is 785 m/sec.

II. General Characteristics

The weight of the rifle, as it is now designed, is 4, kilograms. Its weight, however, can be reduced to about 4 kilograms when manufactured in series.

Total length of rifle: 1,100 mm
Length of barrel: 550 "
Sight line: 800 "

III. The Rifle's Components

The Peló semi-automatic rifle functions according to the short barrel recoil principle.

Locking: During the time gas pressure is exerted in the barrel the breech block (1) is locked to the cover and the barrel by two parallel pawls (4-5) placed on each side of the axis of the barrel and the rifle, thus ensuring symmetrical locking.

Springs: When the rifle is fired and the mobile parts of the mechanism are thrown backward, the shock is absorbed by two buffer springs (6-7) (not visible) placed parallel with the axis in the buffer block (9), a recoil spring (10) placed in the hollow of the breech block with its front end resting against the bottom of the hollow and the back end against the buffer block (9) is intended to soften the recoil movement of the breech block and to return it to the forward position.

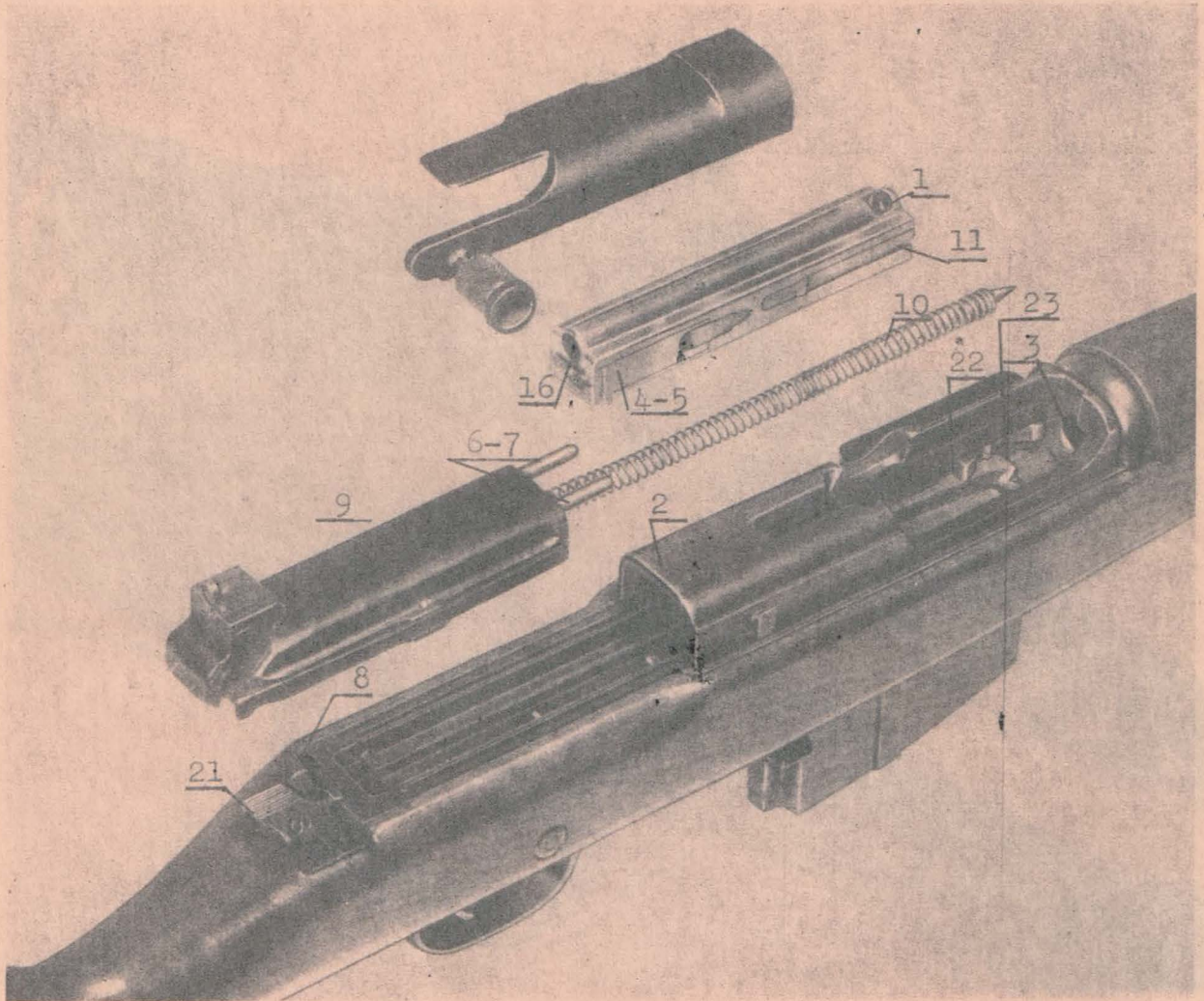
Magazine: The magazine is fixed to the receiver and holds ten cartridges. It is loaded with the aid of ordinary five-cartridge frames, the cartridges in the two frames being pressed down into the magazine. The bottom of the magazine is removable. It is equipped with an ordinary spring, one end of which is attached to the magazine's bottom and the other to an ordinary cartridge guide which, by the pressure of the spring, conveys the cartridges to the grooves in the receiver.

Feeding: The feeding of cartridges from the magazine to the firing chamber in the barrel is effected in the usual manner by the breech-block and the recoil spring.

Extraction: The extraction of the empty cartridge is done by an ordinary extractor (11).

Ejection: The empty cartridge, which is held by the extractor besides the breech-block during recoil, is ejected by an ejector fastened to the bottom of the receiver (12).

Ignition Device: The ignition device is of the usual hammer type

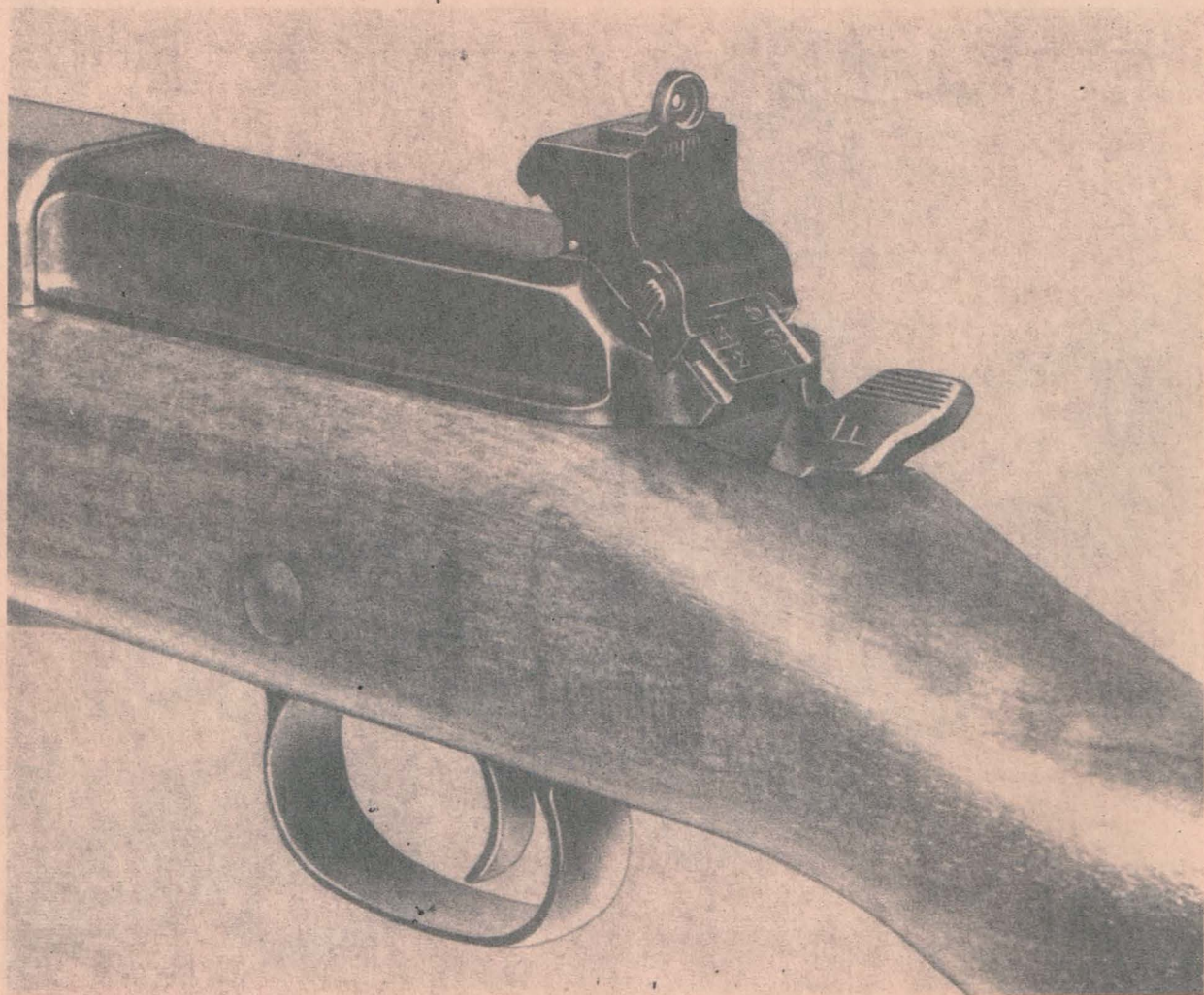


(cock) (21) pinioned to the lower part of the receiver and acted upon by a main spring (14) inserted in the metal fitting under the stock. When the breech-block recoils, the upper end of the hammer falls back causing the main spring to become compressed. When the hammer moves forward, a firing pin strikes (16) the percussion cap through the breech-block causing the cartridge to fire.

Firing Device: The firing device is of the two-point type: a lighter and longer "first pressure point" and a noticeably heavier "second pressure point". Between the sear (17) and the trigger catch (18), placed beside the trigger catch, is a disengaging lever (19) which, through a hook, pushes the spring catch away from the recess of the hammer, causing the cartridge to fire. After the cartridge is fired, the breech-block hits the upper part of the disengaging lever and, in pushing it backward releases the spring catch. This prevents double or premature firing.

Safety Devise: The semi-automatic Pelo rifle is equipped with safety devices.

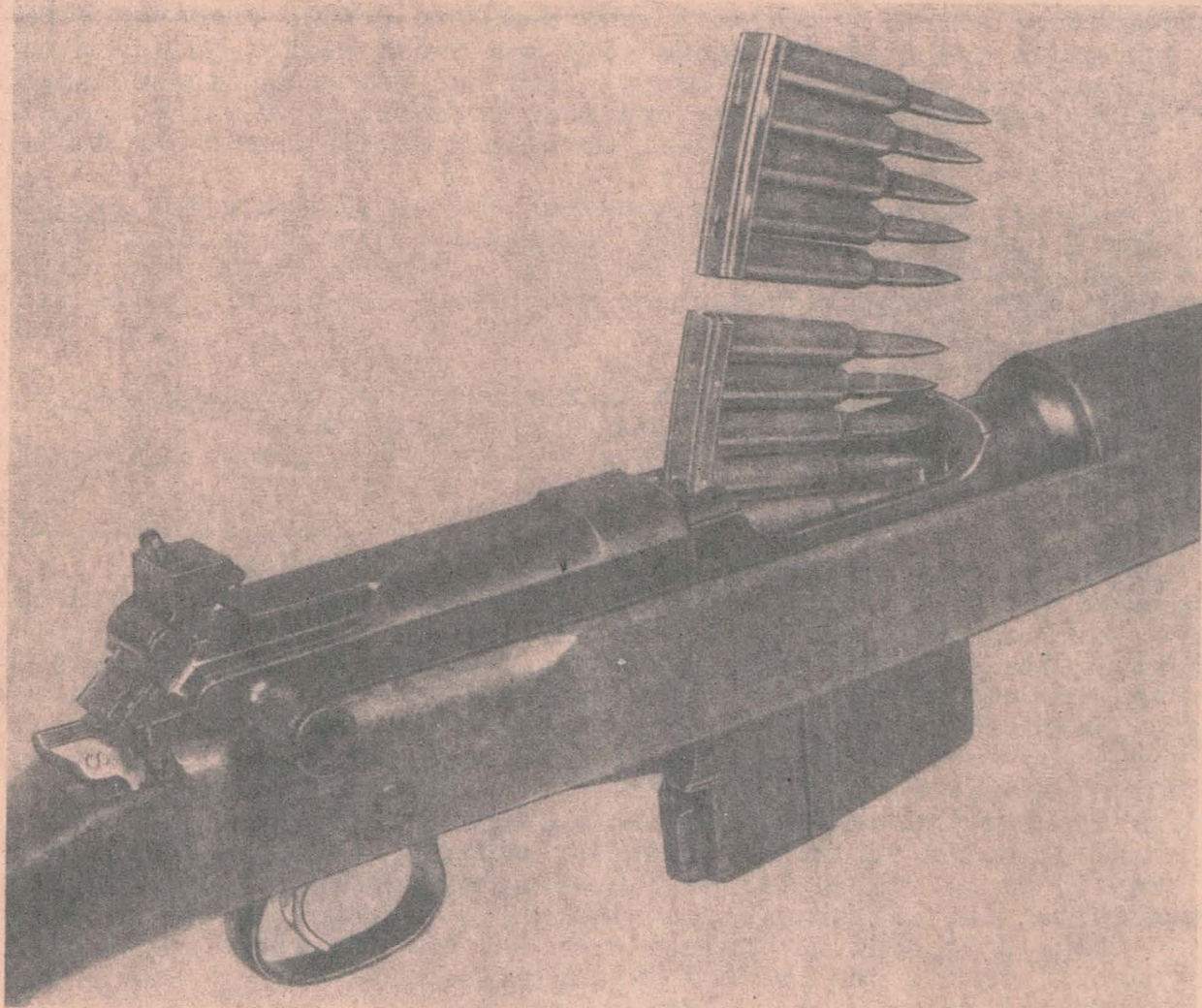
1. When the rifle is fired, the breech-block is symmetrically locked to the cover and the barrel from both sides (fig.1.)
2. The hammer (cock), when cocked, is locked in both directions until the mechanism is returned to its forward position (fig.4.)



3. After each round the trigger device is automatically disconnected from the hammer's spring catch, thus eliminating the possibility of doublefiring (fig. 3.).
4. When the breech-block is un-locked, the firing pin is locked in the breech-block. This completely precludes premature firing.
5. The safety catch (21) effectively locks the hammer's spring catch, the hammer itself, and the entire mobile mechanism.
6. When the rifle is locked
 - a) the firing device is locked
 - b) the mechanism cannot be pulled backward (opened)
 - c) the mechanism cannot be dismantled.

7. When the mechanism is open, the rifle can be locked and the magazine loaded; if the mechanism is then moved forward, a cartridge is conveyed to the firing chamber in the barrel and, after loading, the rifle is again completely locked.

Breech lock: When the last round is fired and the magazine is empty, the mechanism is hooked up in an open position with the aid of the disengaging lever and the breech lock by the action of the magazine spring and the cartridge guide.



Sight device: The foresight of the rifle consists of a pillar aim which is fixed between two protective ears. The sight consists of a vertically and horizontally adjustable diopter.

Sight: The sight is of the slide type and is mounted at the back of the buffer block on a sight base, fixed at an appropriate angle, and having a 100-meter sliding scale ranging from 100 to 1,000 meters.

Diopter: The diopter is fixed with the aid of an adjusting screw to the side of the sight frame. The diameter of the diopter hole is 2 mm.

Telescopic sight: There are two appropriate alternatives for fitting a telescope to the rifle:

- a) to make a suitable socket for the holder of the telescope on the left side of the receiver.
- b) to make the sight frame readily removable and to use the sight base as a socket for the holder of the telescope.

The breech-block's accelerator: An accelerating device (22) is fitted at the front end of the cover of pulling out the empty cartridges from the firing chamber and for accelerating the backward movement of the breech-block. Combined with the accelerator is a spring-action block arm (23) whose function is, after the accelerator has moved the full length backward, to hook up the mobile mechanism in a backward position, and to release the mechanism after the breech-block has moved forward.

Stock: The stock is of the ordinary rifle type with its fore extending to an appropriate distance from the muzzle. A hand guard facilitates handling when the rifle becomes heated. Surrounding the barrel, in the stock, is an air chamber providing outlet for the hot air.

Bayonet joint: At the fore end of the stock there is a bayonet joint of the usual type. The mounted bayonet does not at any point touch the barrel or in any way affect the accuracy of firing.

IV. FUNCTIONING.

When the trigger is pulled backward, the shot is fired. Both the barrel and the mobile mechanism recoil with the breech-block locked to the barrel. The recoil movement is dampened by the buffer springs. The guide lugs of the pawls run in their respective grooves in the floor of the receiver. The grooves are designed in such a manner that the pawls, when in a certain position, slide into the sides of the breech-block and unlock it from the cover and the barrel. This sets into function the accelerator device which, combined with the action of the breech-block and the extractor, pulls from its position the empty cartridge which is then struck by the ejector and removed from the rifle. Both buffer springs and the recoil spring are now compressed, the hammer has been moved backward, and the main spring has been tightened. The firing device has been disconnected and the hammer through the automatic safety catch and the hammer's spring catch has been doubly locked. When the pawls are unlocked, the firing pin is hooked and pressed backward in the breech-block.

Through the force of the recoil spring, the breech-block is again moved forward and takes with it a cartridge from the magazine, inserting it into the barrel; the accelerator is disconnected from the breech-block; with the aid of the buffer spring, the mechanism is moved into firing position, the breech-block is again locked; the firing pin is free, and the automatic safety catch has released the hammer which is now held only by its spring catch.

To fire the next round, the rifleman lets the trigger move forward, the disengaging lever acts on the hammer's spring catch and the next round can be fired.

The rifle is locked by pushing the safety catch to the left ("S" is visible).

The safety catch firmly locks the spring catch and the hammer.

Fig. 1.

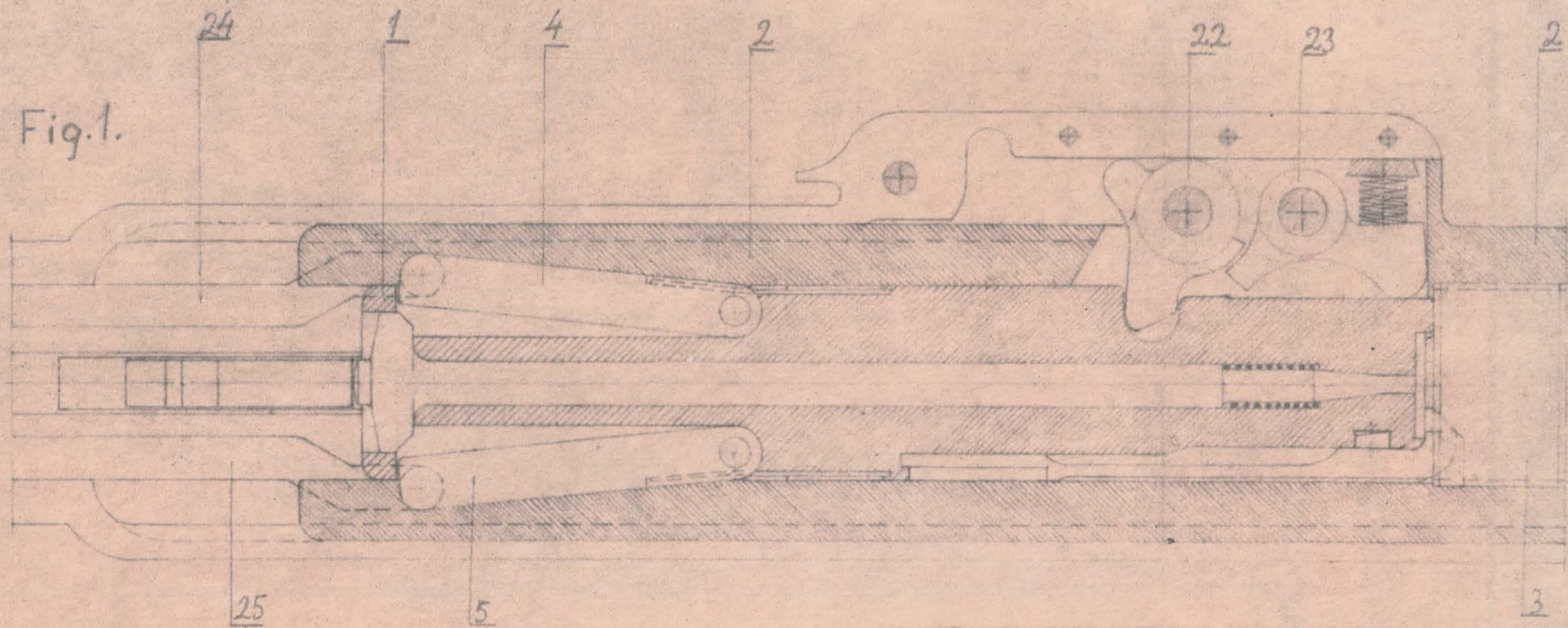


Fig. 2.

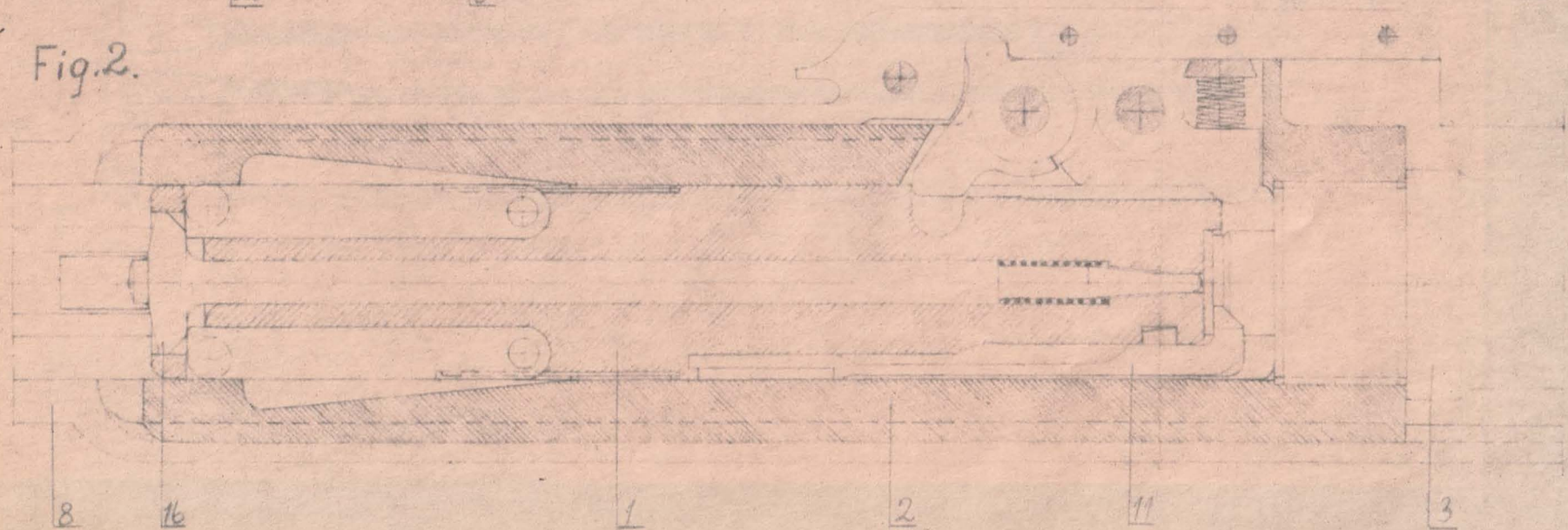


Fig. 3.

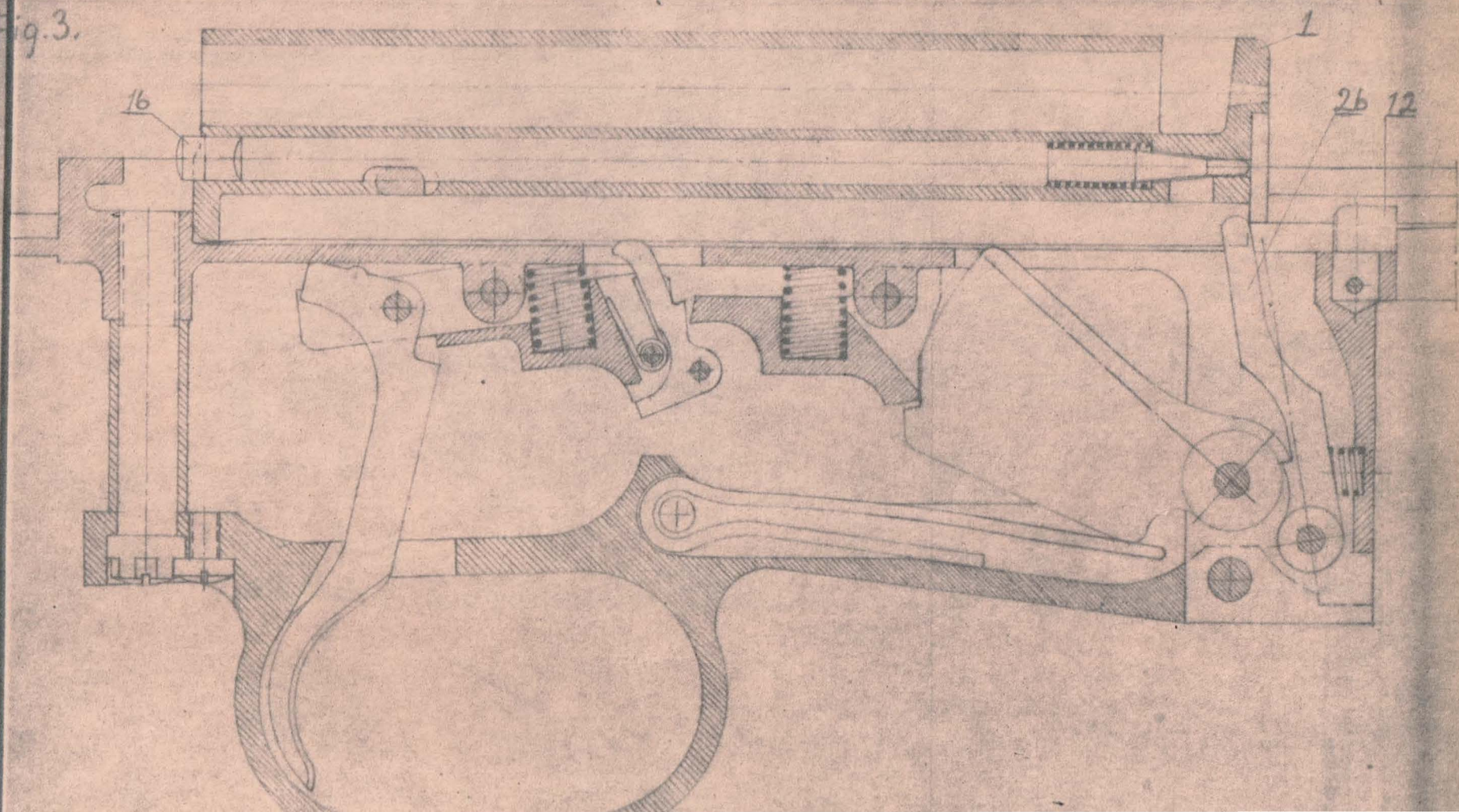
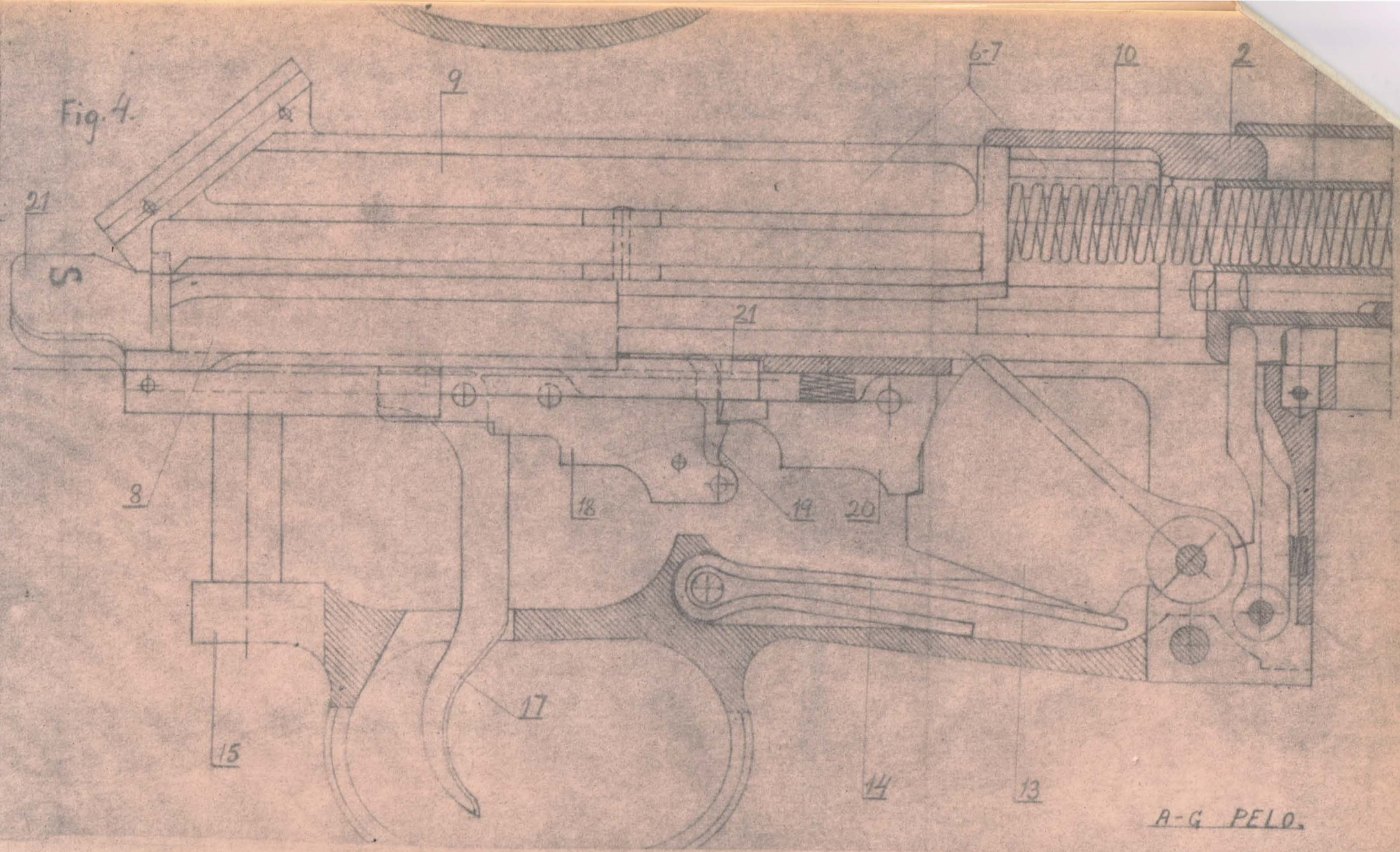


Fig. 4.



A-G PELO.