

No. 782,511.

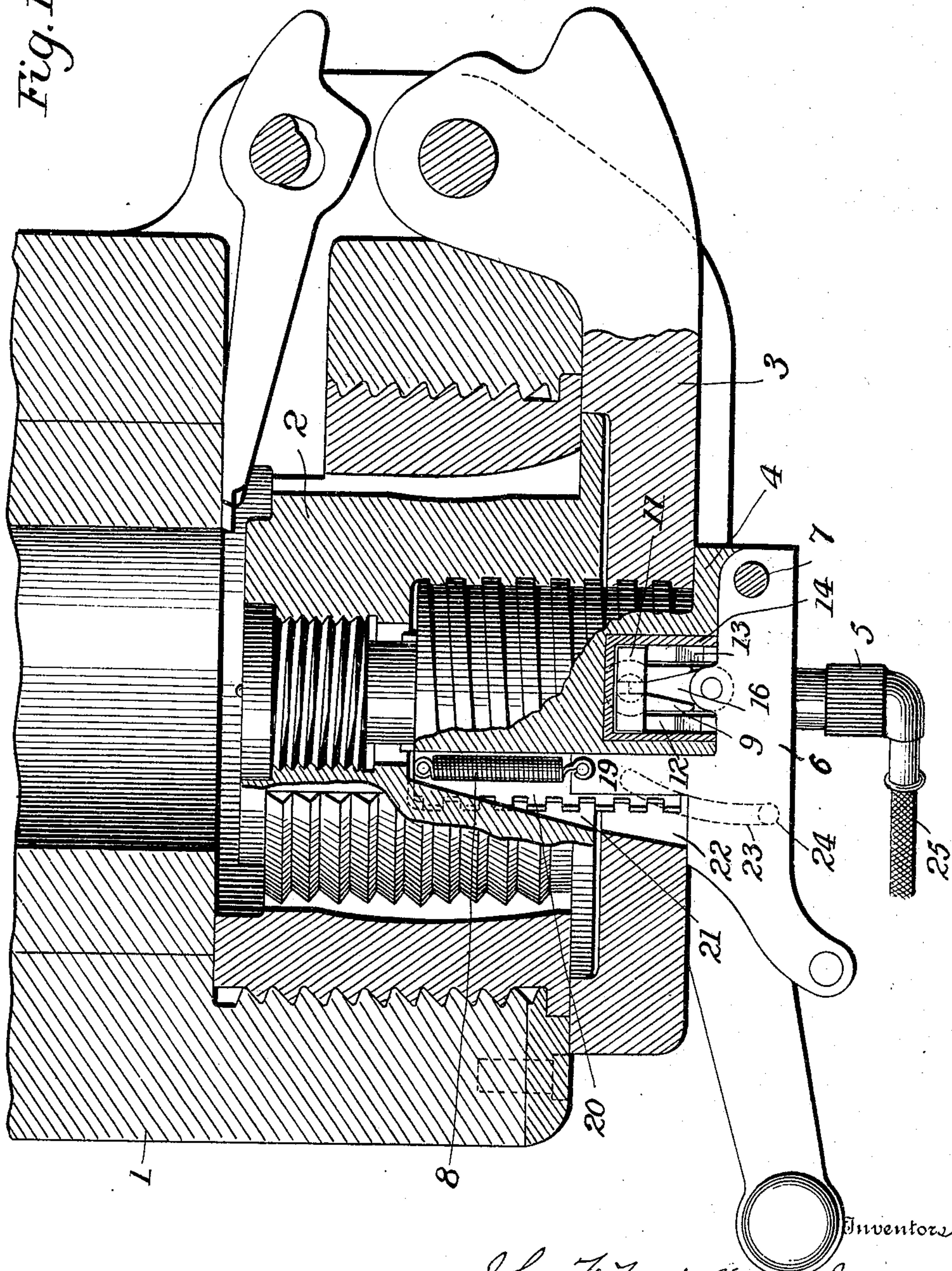
PATENTED FEB. 14, 1905.

J. F. MEIGS & H. G. JAKOBSSON.  
FIRING MECHANISM FOR GUNS.

APPLICATION FILED SEPT. 16, 1903.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses  
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2 SHEETS—SHEET 2.

Fig. 2.

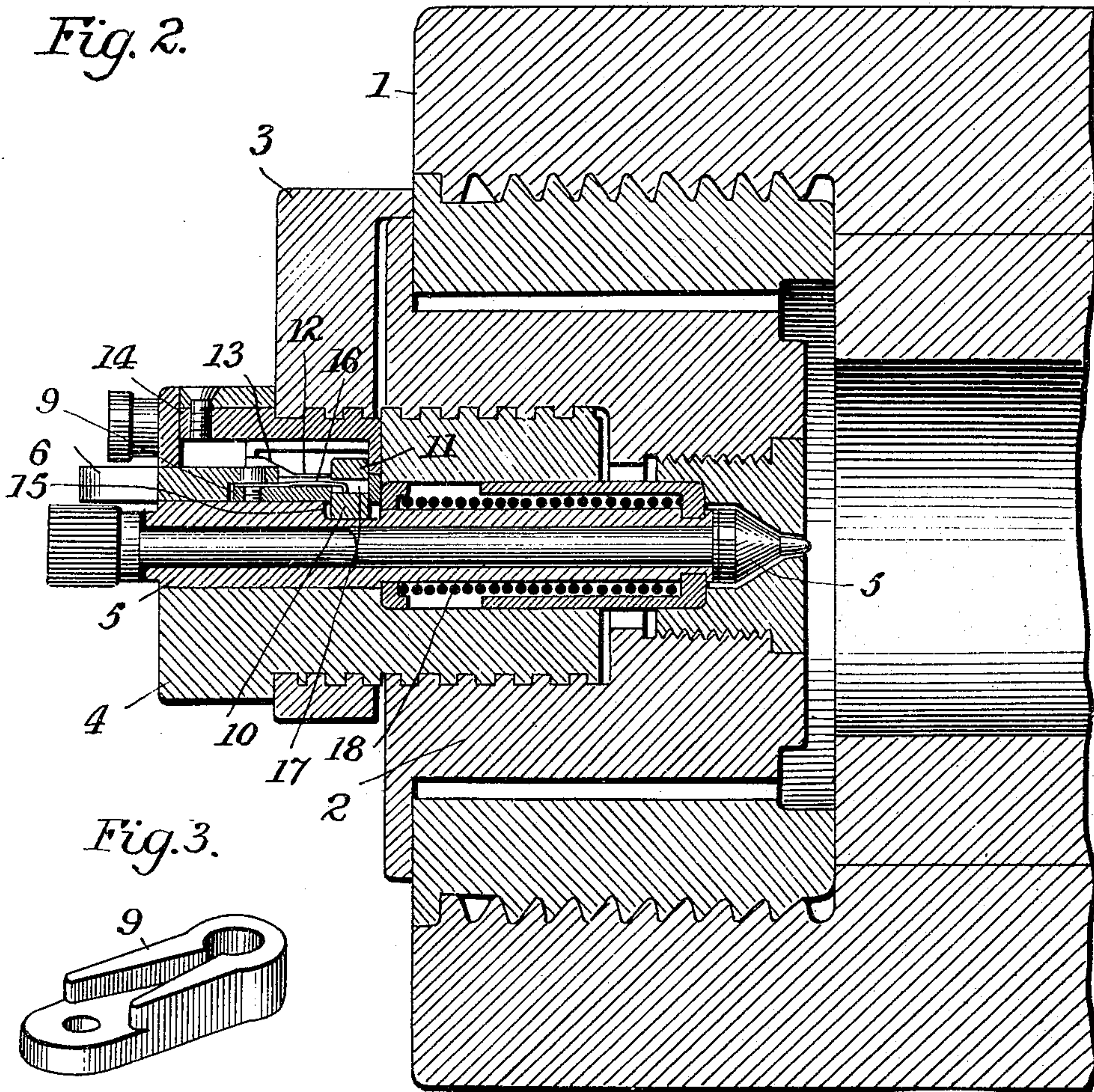


Fig. 3.

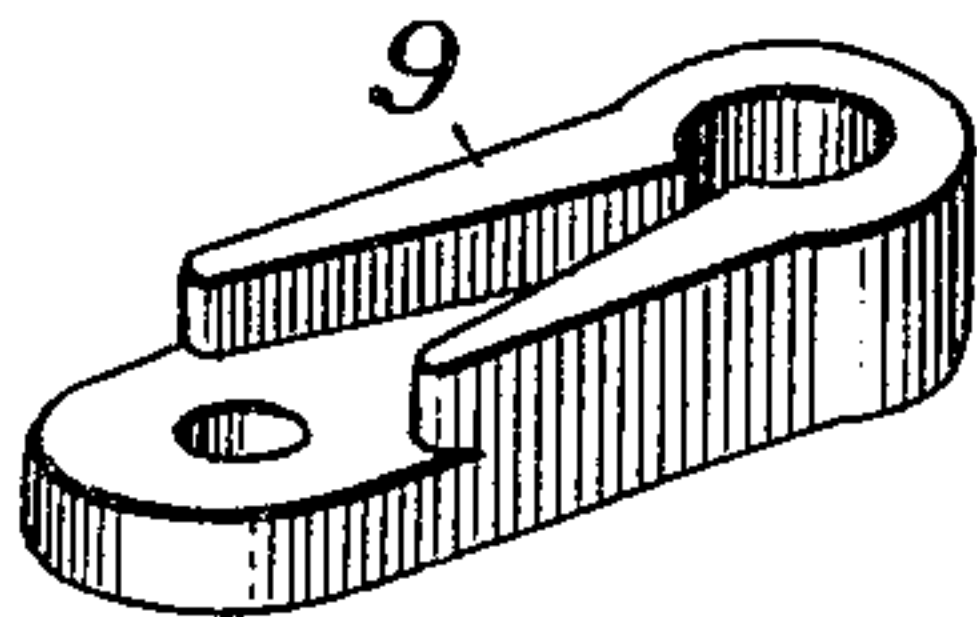


Fig. 4.

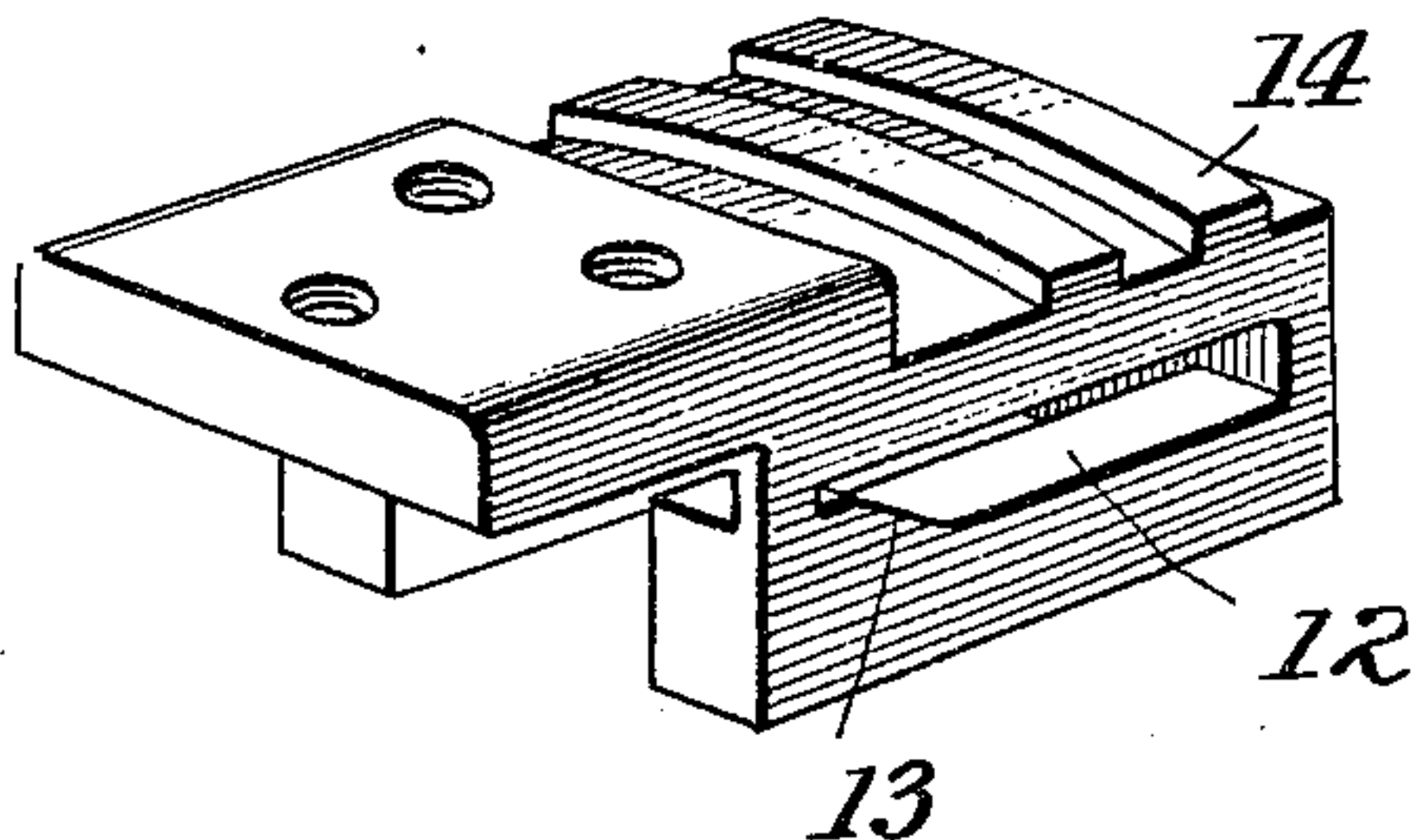
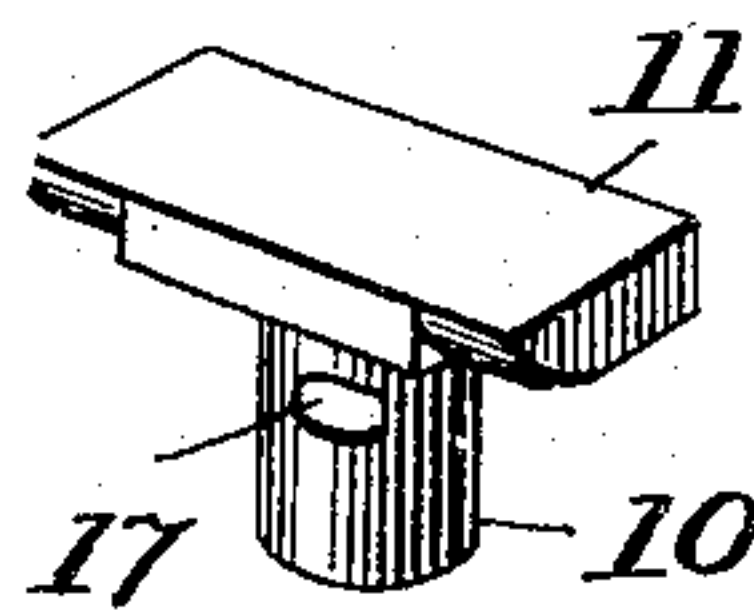


Fig. 5.



Witnesses

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# UNITED STATES PATENT OFFICE.

JOHN F. MEIGS AND HERMAN G. JAKOBSSON, OF SOUTH BETHLEHEM, PENNSYLVANIA, ASSIGNORS TO BETHLEHEM STEEL COMPANY, OF SOUTH BETHLEHEM, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

## FIRING MECHANISM FOR GUNS.

SPECIFICATION forming part of Letters Patent No. 782,511, dated February 14, 1905.

Application filed September 16, 1903. Serial No. 173,466.

*To all whom it may concern:*

Be it known that we, JOHN F. MEIGS, a citizen of the United States, and HERMAN G. JAKOBSSON, a subject of the King of Sweden and Norway, residing at South Bethlehem, in the county of Northampton and State of Pennsylvania, have invented certain new and useful Improvements in Firing Mechanism for Guns, of which the following is a specification.

This invention comprises various improvements in the firing mechanism of guns whereby a single movement of the trigger effects both the retraction and the release of the firing-pin and whereby, also, the operation of the firing-pin is prevented except when the breech-block is in firing position.

The invention will be described in detail in connection with the accompanying drawings, in which—

Figure 1 is a horizontal section through the breech mechanism of a gun constructed according to the present invention. Fig. 2 is a vertical section through the same. Figs. 3, 4, and 5 are details.

Referring to the drawings, 1 indicates the gun proper, 2 the breech-block, and 3 the pivoted carrier for the breech-block. These parts may be of any ordinary construction, and no detailed description of them is necessary. Mounted on the carrier 3 is the carrier-hub 4, upon which the breech-block turns. The firing-pin 5 is arranged centrally in the hub, and above the firing-pin is a trigger-lever 6, which lever is shown in plan view in Fig. 1. The lever 6 is pivoted to the carrier-hub at 7, and it is normally held in the position shown in Fig. 1 by a spring 8. To the trigger-lever is pivotally connected a link 9, and in an opening in the inner end of the link is mounted a stud 10, having a projecting head 11, adapted to ride upon guide-rails 12, having inclines 13 at the outer ends. The rails 12 and inclines 13 are formed in a removable section 14 of the carrier-hub, which is shown in perspective in Fig. 4.

When the trigger-lever is in its normal position, the stud 10 is located in front of the shoulder 15 in the firing-pin, being forced into

this position by a spring 16, which is mounted on the link 9 and engages an opening 17 in the stud 10. When the trigger-lever is pulled rearward, the firing-pin is drawn back by means of the link 9 and the stud 10 until said stud is raised by the inclines 13, when the firing-pin is released and driven forward by its spring 18. On releasing the trigger-lever the spring 8 throws it forward and stud 10 re-engages the firing-pin.

The arm 19 of the trigger-lever, which works in a slot 20 of the carrier-hub, can only be operated to fire the gun when said slot registers with a slot 21 in the breech-block and a third slot 22 in the carrier. The invention, therefore, supplies a safety device to prevent the premature firing of the gun and also a rapid and positive firing mechanism. The trigger-lever is provided with a slot 23 on its under side, which is engaged by a pin 24 upon the carrier to limit the movement of the lever, the pin forming a stop to prevent undue strain upon the spring 8.

By suitably connecting the trigger-lever with an electric switch or circuit-breaker the gun may be fired electrically instead of mechanically, or the mechanical devices described may be used in connection with any ordinary electrical firing devices. As shown, an electric circuit 25 leads to the firing-pin for this purpose.

It will be evident that many changes may be made in the details of construction of the above-described apparatus without departing from the spirit and scope of the invention, and it will therefore be understood that we do not limit ourselves to the precise construction and arrangements illustrated and described.

What we claim, and desire to secure by Letters Patent, is—

1. In a firing mechanism for guns, the combination with the breech-block and its carrier, of the trigger-lever, the link connected to said lever, the stud movably mounted in said link, the firing-pin adapted to be engaged by said stud and means for engaging and disengaging said stud and firing-pin.

2. In a firing mechanism for guns, the combination of the firing-pin having a shoulder, the trigger-lever, the link connected with said lever, the stud movably mounted in said link,  
5 the spring for holding said stud in engagement with the firing-pin and the inclines for raising said stud to release the firing-pin.

In testimony whereof we have signed our

names to this specification in the presence of two subscribing witnesses.

JOHN F. MEIGS.

HERMAN G. JAKOBSSON.

Witnesses:

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