

**No. 685,751.**

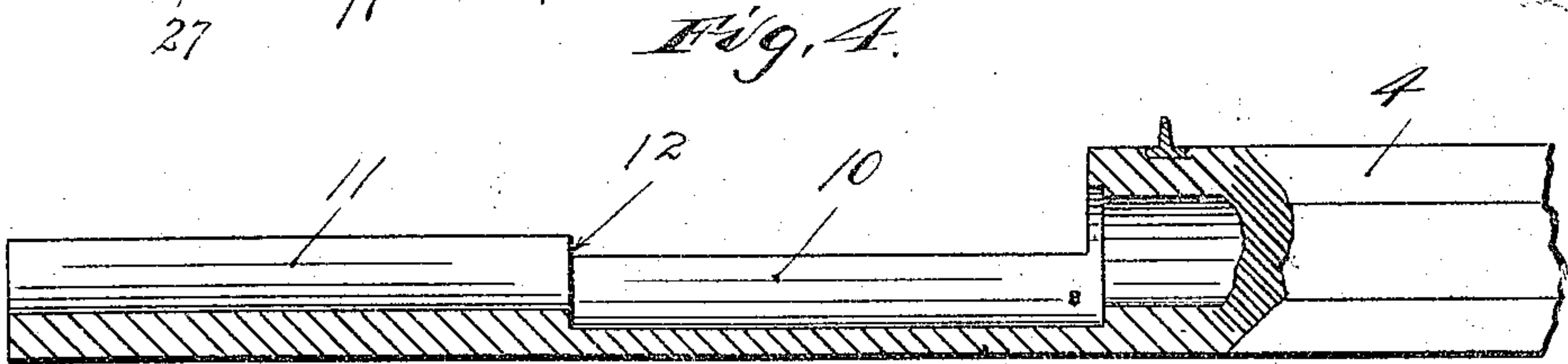
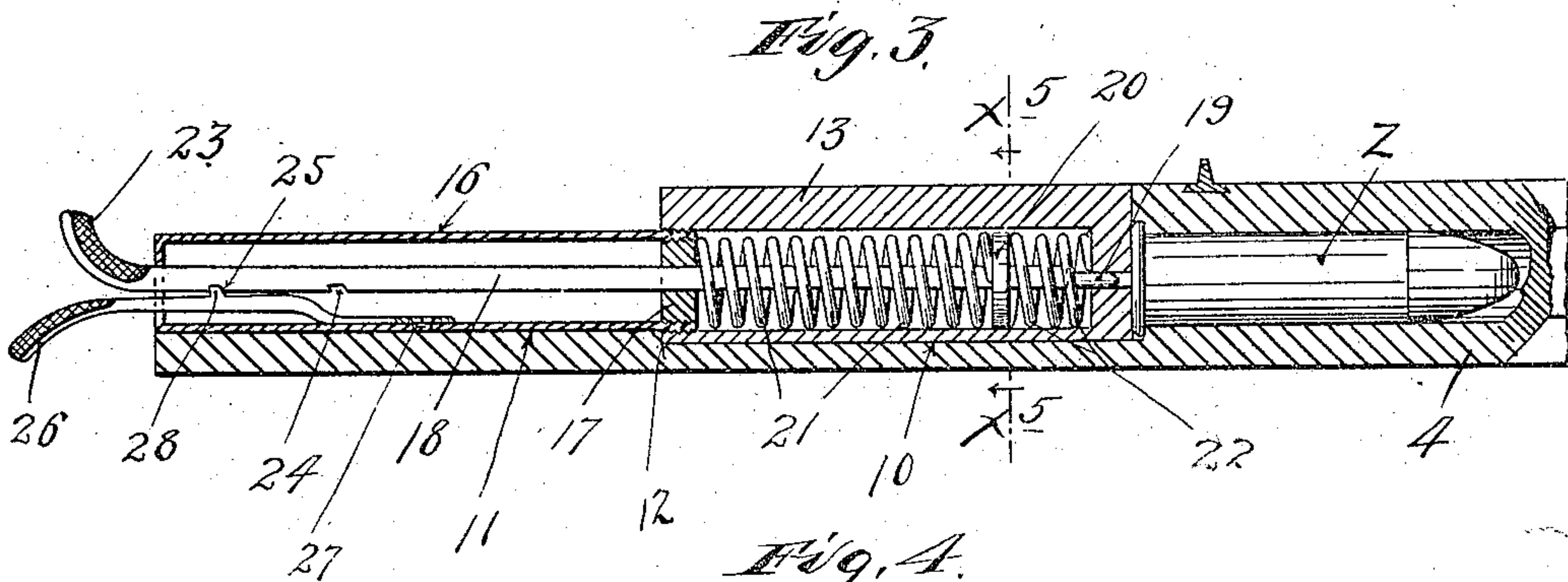
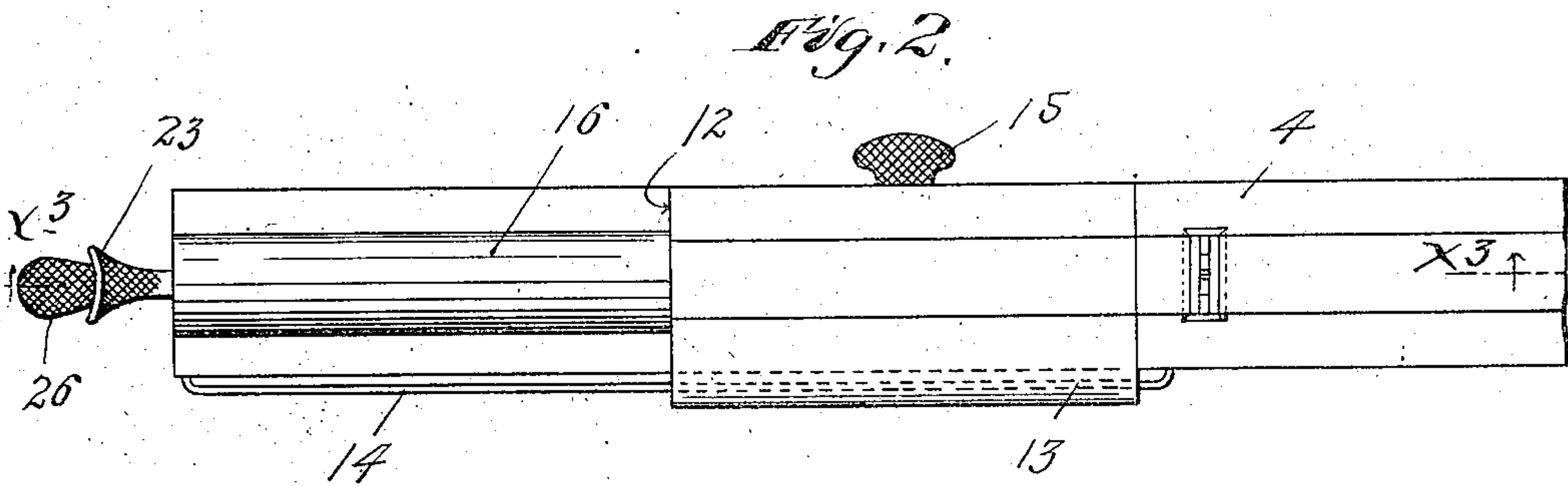
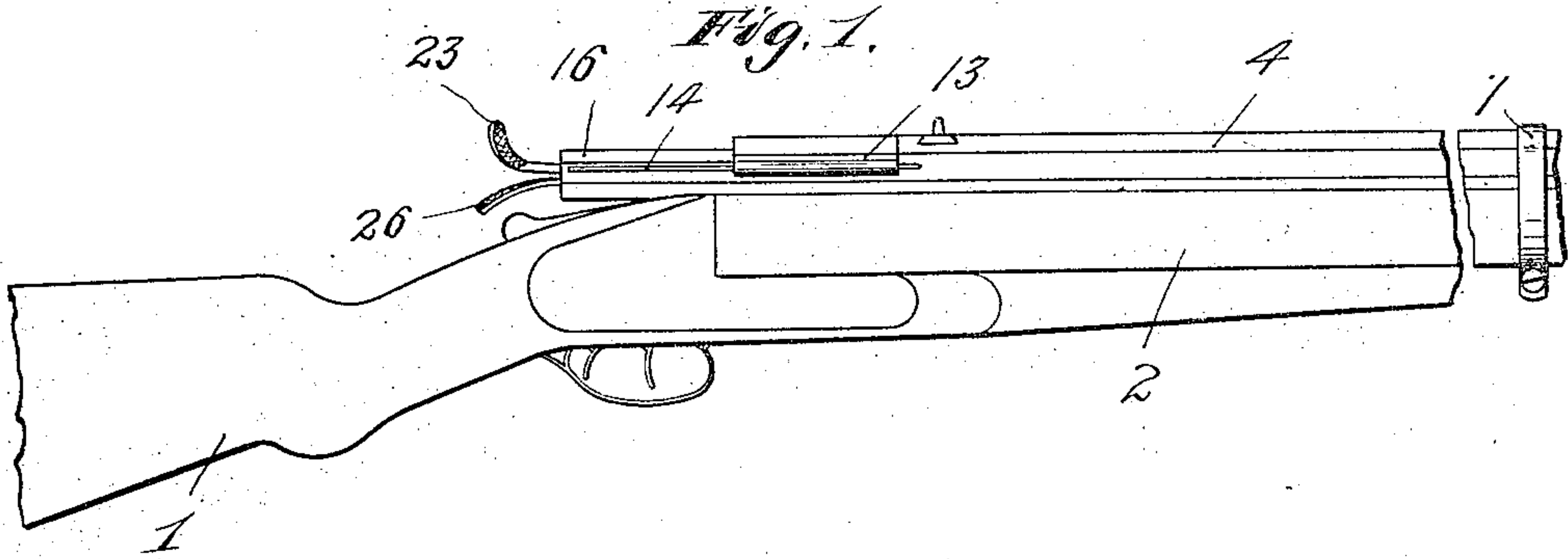
Patented Nov. 5, 1901.

**I. J. EDGE.  
FIREARM.**

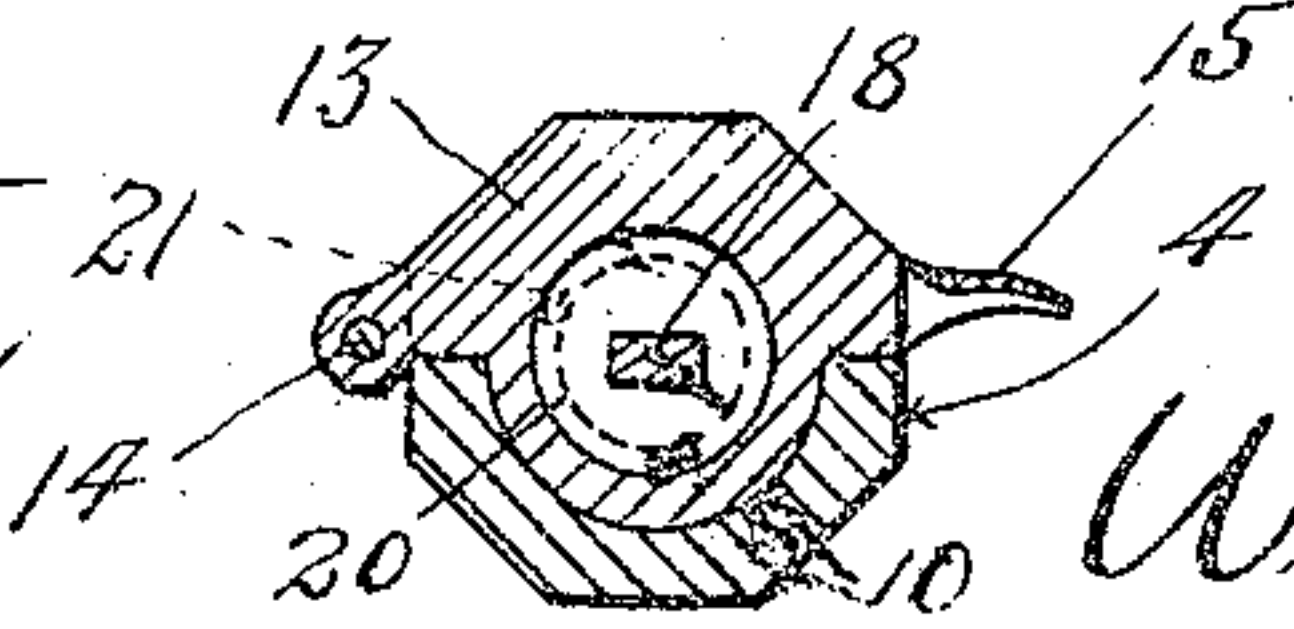
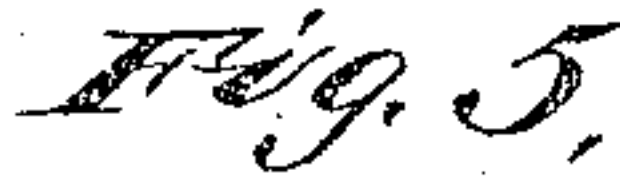
(Application filed July 19, 1900.)

(No Model.)

2 Sheets—Sheet 1.



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FIREARM.

(Application filed July 10, 1900.)

(No Model.)

2 Sheets—Sheet 2.

Fig. 6.

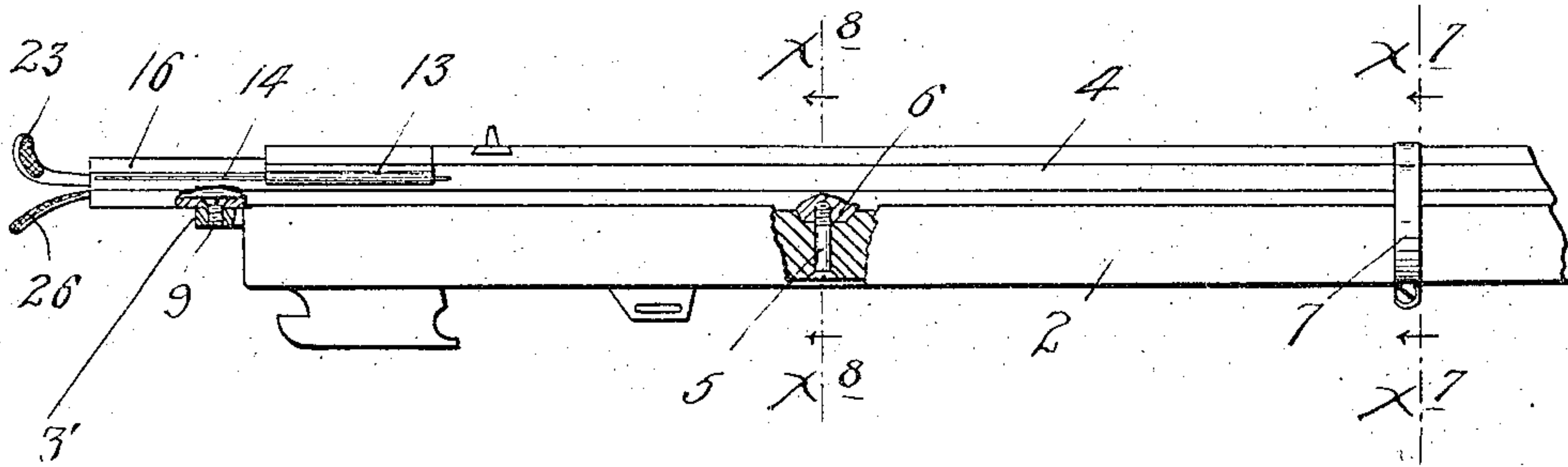


Fig. 7.

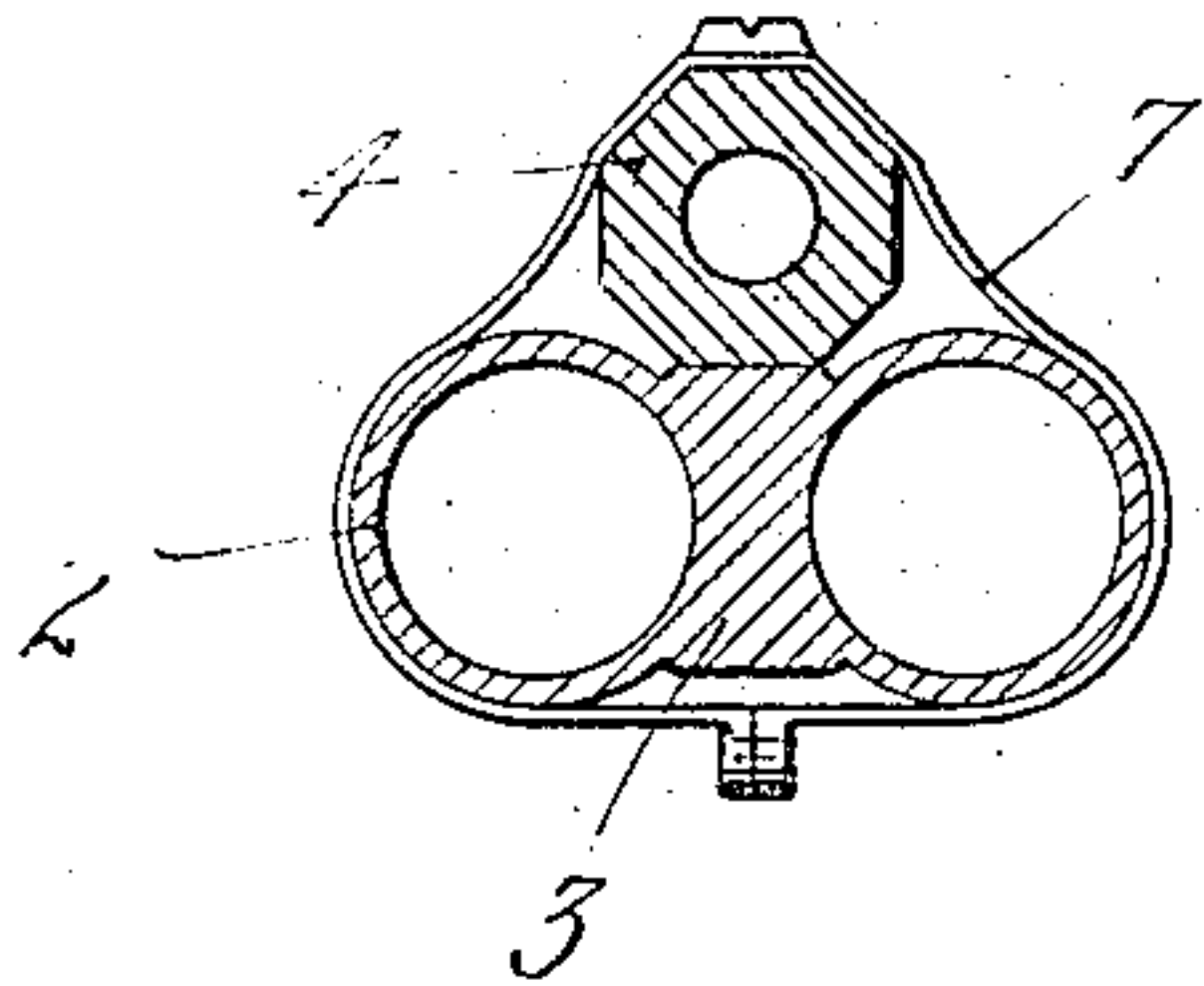
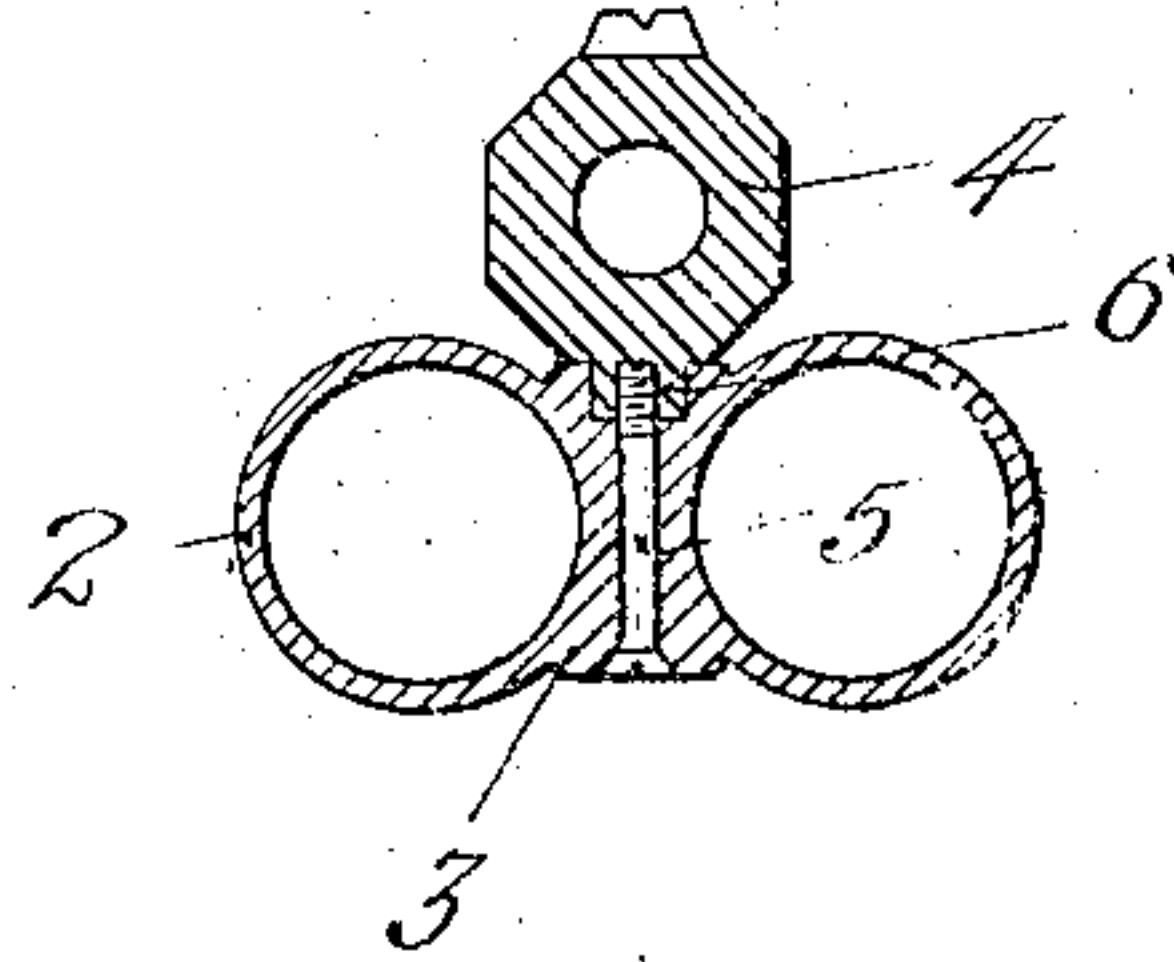


Fig. 8.



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# UNITED STATES PATENT OFFICE.

ISAIAH J. EDGE, OF MINNEAPOLIS, MINNESOTA.

## FIREARM.

SPECIFICATION forming part of Letters Patent No. 685,751, dated November 5, 1901.

Application filed July 19, 1900. Serial No. 24,163. (No model.)

*To all whom it may concern:*

Be it known that I, ISAIAH J. EDGE, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Firearms, of which the following is a specification, which may be more clearly understood by having reference to the accompanying drawings.

My invention relates to detachable rifle-barrels for shotguns, and has for its especial object to provide devices whereby a rifle-barrel may be detachably secured above the barrels of a double-barreled shotgun and to the longitudinally-extended sighting-rib which connects the barrels.

The invention consists of the novel devices and combinations of devices hereinafter described, and defined in the claims.

The invention is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Figure 1 is a view in side elevation showing a double-barreled shotgun of the breech-loading hammerless type having in accordance with my invention a third barrel—to wit, a rifle-barrel—detachably secured thereto, some parts being broken away. Fig. 2 is a plan view, on an enlarged scale, of the breech end of the detachable rifle-barrel. Fig. 3 is a vertical longitudinal section on the line  $x^3 x^3$  of Fig. 2. Fig. 4 is a sectional view of the breech end of the rifle-barrel, other parts being removed. Fig. 5 is a transverse vertical section on the line  $x^5 x^5$  of Fig. 3. Fig. 6 is a view in right side elevation showing the three barrels illustrated in Fig. 1 removed from the stock of the gun, some parts being broken away. Fig. 7 is a transverse section on the line  $x^7 x^7$  of Fig. 6. Fig. 8 is a transverse section on the line  $x^8 x^8$  of Fig. 6.

The numeral 1 indicates the stock and the numeral 2 the barrels of a double-barreled shotgun. The barrels 2 have an ordinary sighting-rib 3, provided with what is known as a "doll's-head" extension-rib 3'. To the upper surface of the rib 2 the detachable rifle-barrel 4 is secured by screws 5 and also by lugs 6 on the bottom of said barrel 4, which lugs engage recesses or seats cut in said rib 3. Clamping-bands 7 encircle the muzzle or outer portion of the three barrels to still further

secure the barrels together. It will be noted that these bands 7 are provided with slightly-curved spring-sections, the purpose of which is to permit of the expansion of the barrels without breaking the said bands. The detachable barrel 4 is shown as further secured to the breech of the shotgun-barrels by means of a screw 9, applied to the rib extension 3'.

It will be noted that when the rifle-barrel is secured on the sighting-rib of the double-barreled gun its bore, or the axis thereof, extends parallel with the said sighting-rib. From this it follows that when the rifle is aimed at an object the shotgun-barrels will be aimed at the same object with as great accuracy as if the sight were made along the said sighting-rib.

The breech end of the rifle-barrel 4 is cut down, as indicated at 10, to form a seat for the breech-block, and outward of the section 10 the said barrel is cut down at 11 in a similar manner, but to a less extent, thereby leaving a shoulder 12, which receives the recoil from the breech-block in the firing action.

The breech-block 13, which fits in the seat 10, is mounted for pivotal and sliding movement on a guide-rod 14, the ends of which are rigidly secured to one side of the rifle-barrel 4. As is usual, the breech-block is provided with a finger-piece 15, by means of which it may be raised. The character  $z$  indicates a cartridge positioned within the barrel 4 and held in place by the breech-block 13.

The detachable rifle-barrel is provided with complete firing mechanism, so that it may, if desired, be fastened to a muzzle-loading shotgun, or a dummy, for that matter, and still be capable of use as an effective rifle. In applying this firing mechanism the breech-block 13 is preferably provided with a rearwardly-extended supplemental section 16, closed at its inner end by a plug 17 and itself of such reduced diameter as to work freely within the concave of the semicylindrical barrel-section 11. The firing-needle 18, the central body portion of which is preferably square or angular in cross-section, works through a similarly-formed perforation in the plug 17 and is thus prevented from rotating. Its extreme forward end is reduced to form a cap-engaging needle, which works through a



suitable seat in the forward end of the breech-block 13. Within the breech-block the firing-pin 18 is provided with a collar 20, against which a pair of opposing springs 21 and 22 press, the outer ends of said springs respectively reacting against the rear and forward ends of said breech-block. The spring 21 is longer than the stronger of the two springs and in the firing action throws the firing-pin under sufficient momentum to overcome the short spring 22 and impart the proper blow to the cap of the cartridge.

The rear end of the firing-pin 18 terminates outward of the tube 16 in a finger-piece 23, and inward of said tube 16 it is provided with notches 24 and 25. The inner end of a thumb-released trigger-spring 26 is secured, as shown, by a screw 27 within and to the under portion of the tube 16. This trigger 26 is provided with a vertically-projected lug or detent 28, which is adapted to engage with either one of the notches 24 25 of the firing-pin 18. Normally the detent 28 of the trigger 26 engages the notch 25 of the firing-pin and prevents the firing-pin from being accidentally forced inward or against the cartridge-cap. The spring 22 serves to slightly retract the firing-pin and carry the same out of engagement with the cartridge and to cause the re-engagement of the pin-notch 25 with the detent 28 of the trigger 26.

To set the firing-pin for action, it is pulled outward until its notch 24 is engaged by the detent 28 of the trigger 26. To fire the gun—that is, the rifle—the outer end of the trigger is pressed downward by the thumb, so as to release the detent 28 from the notch 24, whereupon the firing-bolt is given its firing stroke in a manner already described.

The disposition or location of the rifle-barrel above the barrels of the shotgun places the rifle where it may be given as accurate aim as can an individual rifle. With the above arrangement of the barrels, even if the rifle-barrel be not removed when the shotgun is to be used, the shotgun may be aimed with

sufficient accuracy. Otherwise stated, a shotgun does not require to be as accurately aimed as a rifle, and by the arrangement above described all requirements of a combination rifle and shotgun are best afforded.

With the rifle-barrel located below the shotgun-barrels or with an auxiliary barrel placed within one of the shotgun-barrels the accurate sighting or aiming of the rifle is made impossible. As is further evident, an auxiliary rifle-barrel placed within one of the shotgun-barrels is further objectionable for the reason that it disables one of the shotgun-barrels.

Inasmuch as the rifle-barrel is applied to the sighting-rib of the shotgun-barrels it is evident that when the rifle-barrel is sighted at an object the shotgun-barrels are also sighted with approximate accuracy at the same object. The rifle-barrel, as previously stated, may be sighted with absolute accuracy.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

1. The combination with a double-barreled shotgun having a central longitudinally-extended sighting-rib, of a rifle-barrel detachably secured on said sighting-rib with its bore extending parallel therewith, which rifle-barrel is provided with sighting devices serving for both rifle and shotgun barrels, and affording the greater accuracy in aiming the former, substantially as described.

2. The combination with a double-barreled shotgun having a central longitudinally-extended sighting-rib, of a rifle-barrel detachably securable on said sighting-rib with its bore parallel therewith, which rifle-barrel is provided with depending lugs fitting recesses in said sighting-rib, and with sighting devices which serve for both rifle and shotgun barrels, and give greater accuracy in aiming the former, substantially as described.

I. J. EDGE.

In presence of—

R. B. CHASE,

F. M. JOHNSON.