

No. 713,254.

J. B. THORNEYCROFT.
RIFLE.

Patented Nov. 11, 1902.

(Application filed July 3, 1902.)

(No Model.)

3 Sheets—Sheet 1.

FIG. 1.

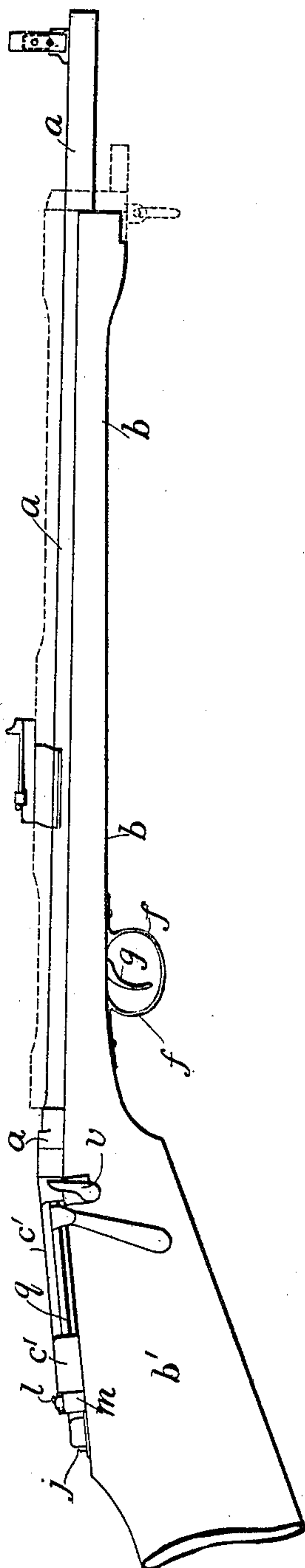
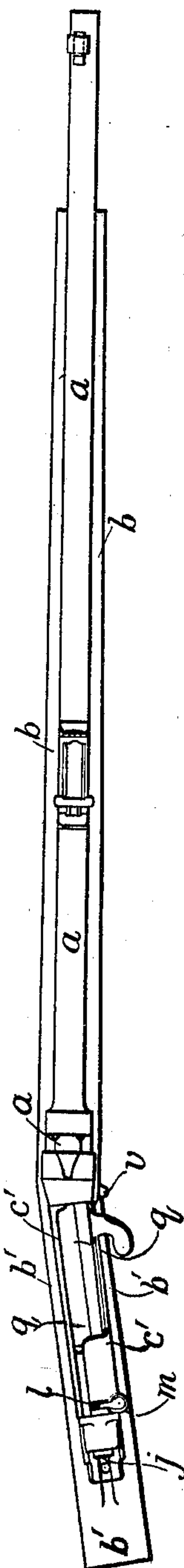


FIG. 2.



Witnesses.

Hiroshi Mori
Ludwig Lum

Inventor.

James Baird Thorneycroft
by T. S. Surger.

Att'y.

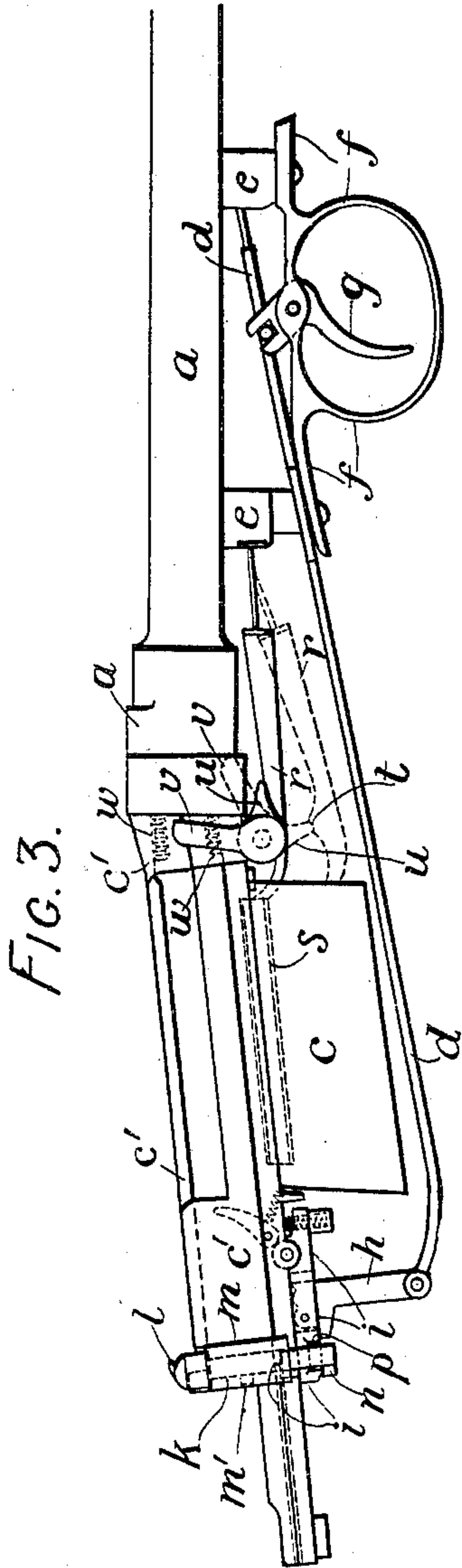


FIG. 8.

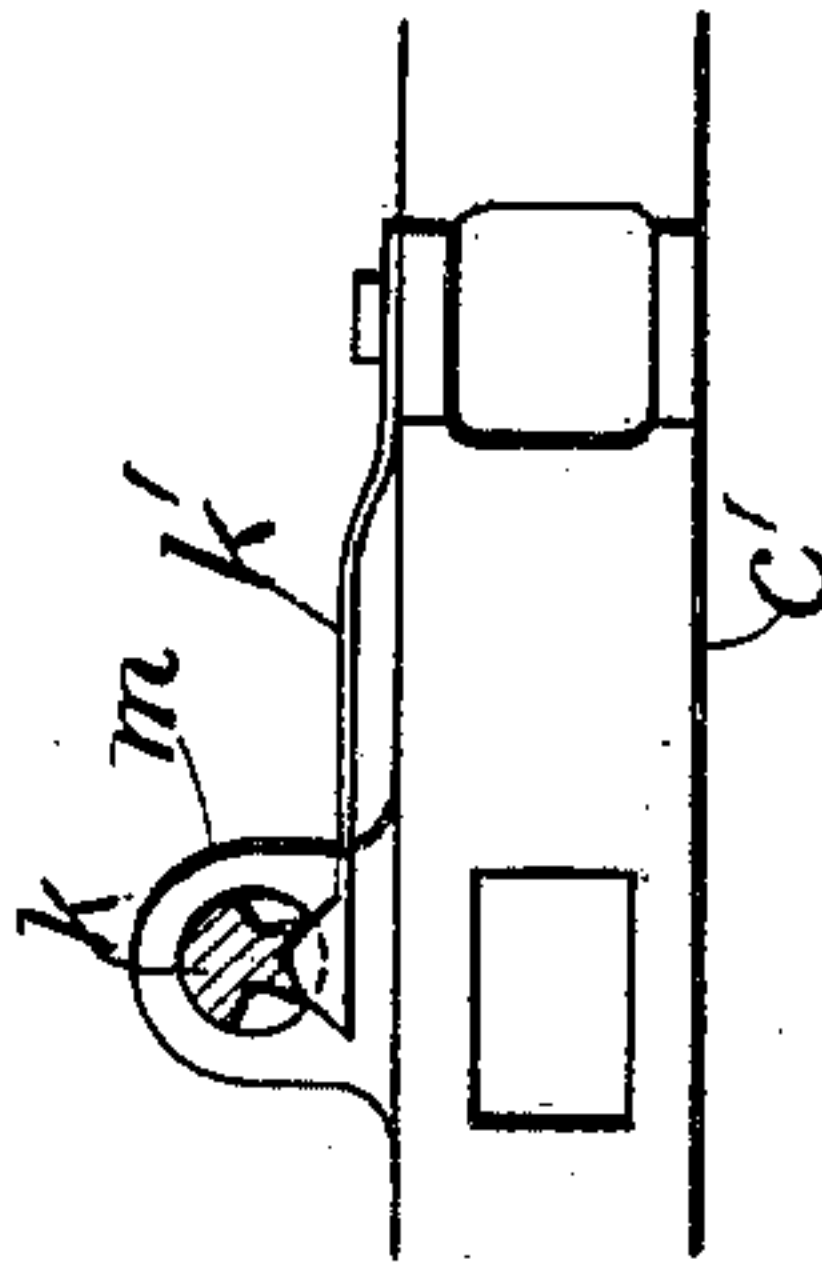


FIG. 7.

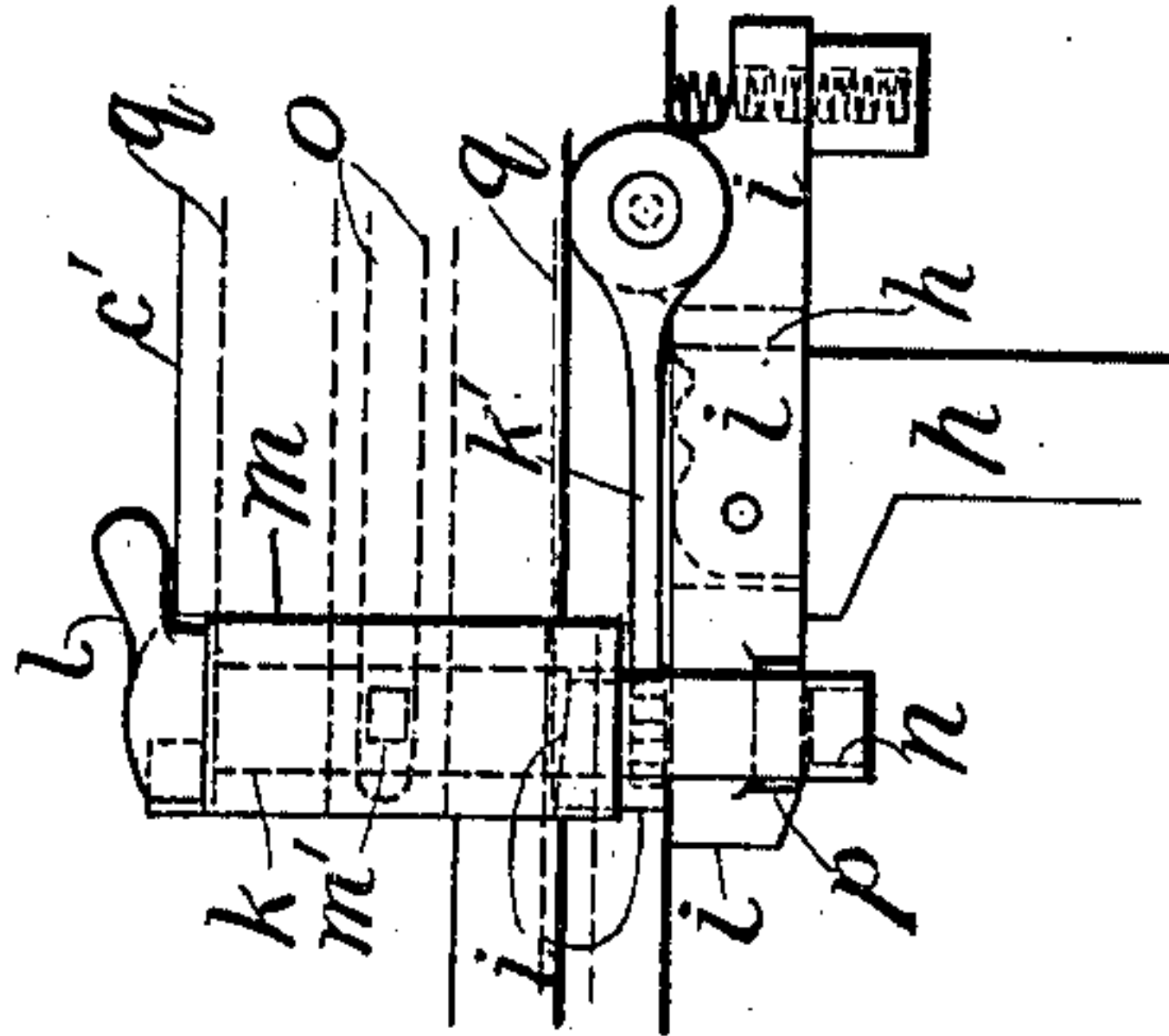
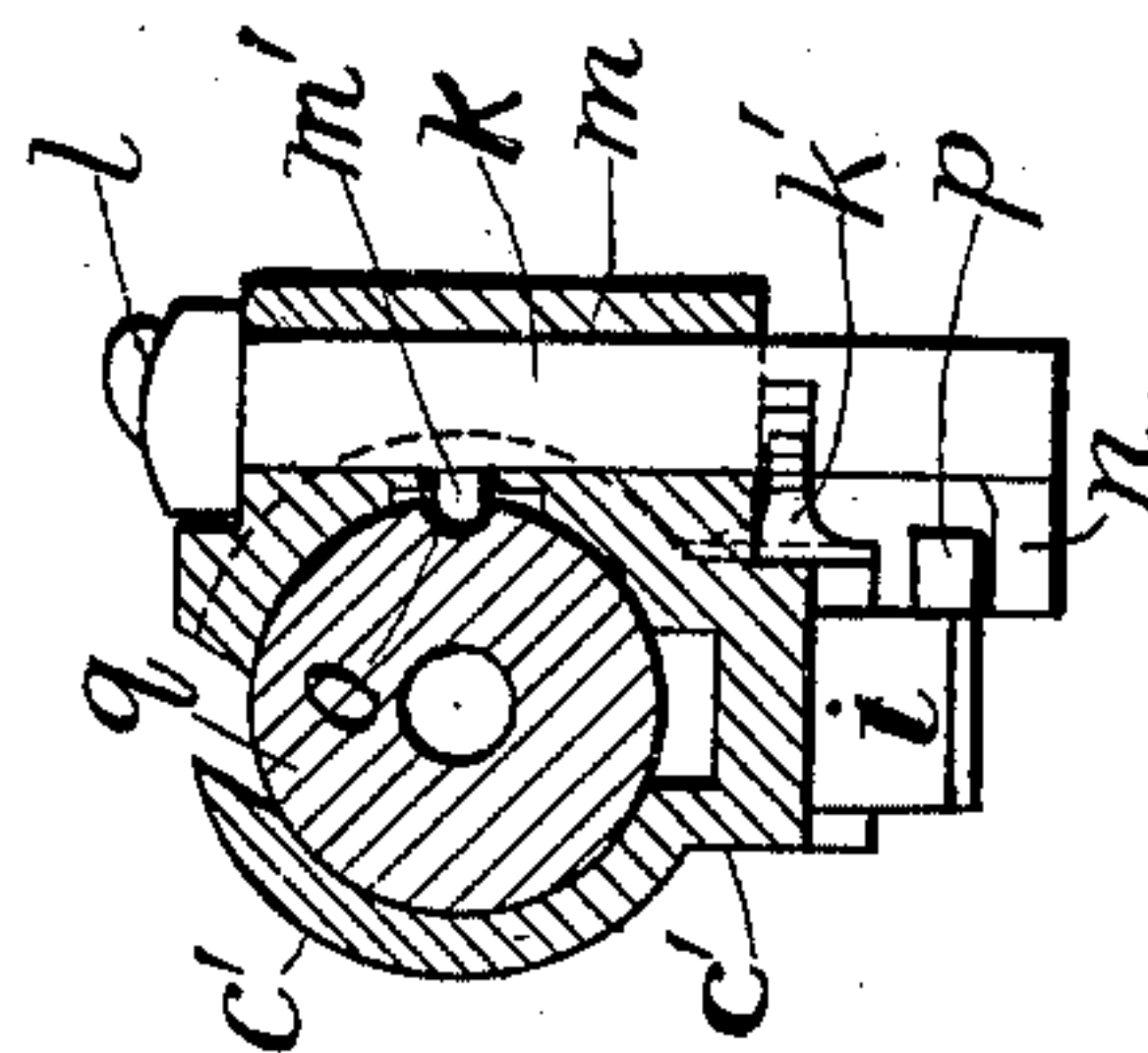


FIG. 6.



Witnesses.

Hiroshi Mori.
Ludwig Flum.

Inventor.

James David Thorneycroft
by P. Singer

Att'y.

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3 Sheets—Sheet 3.

FIG. 4.

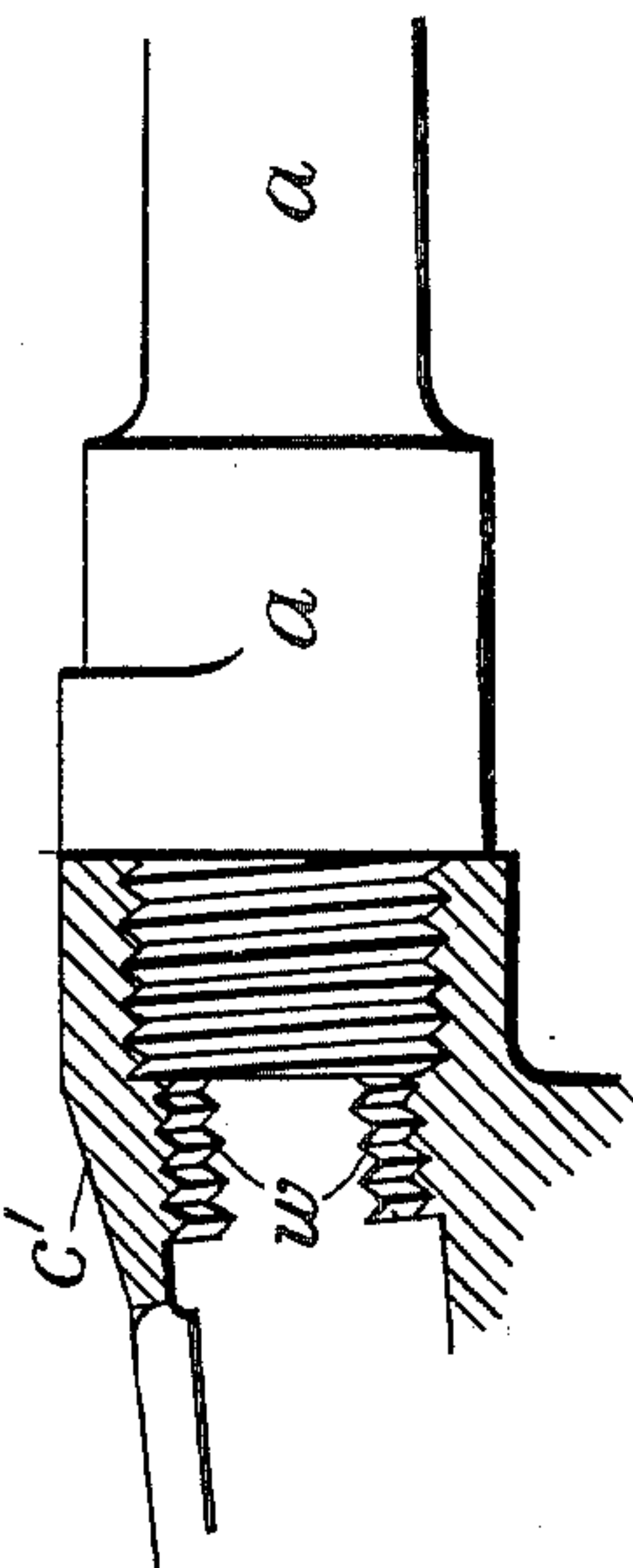


FIG. 5.

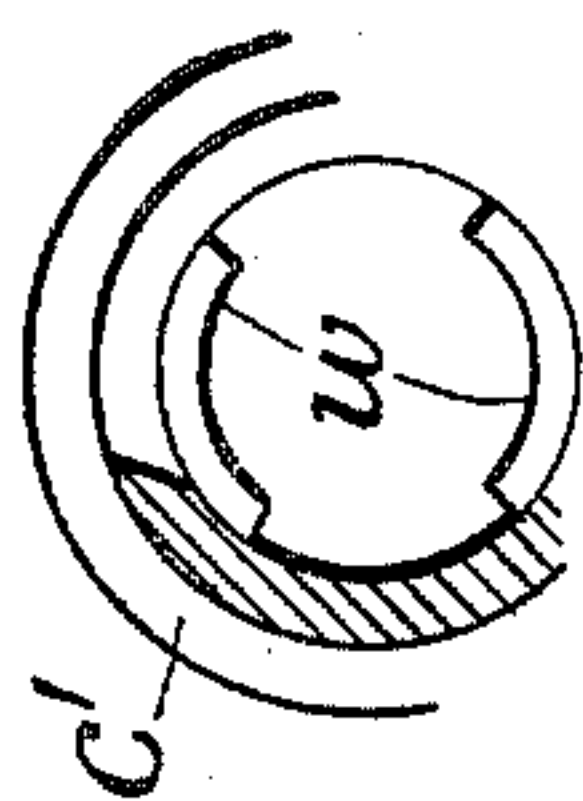
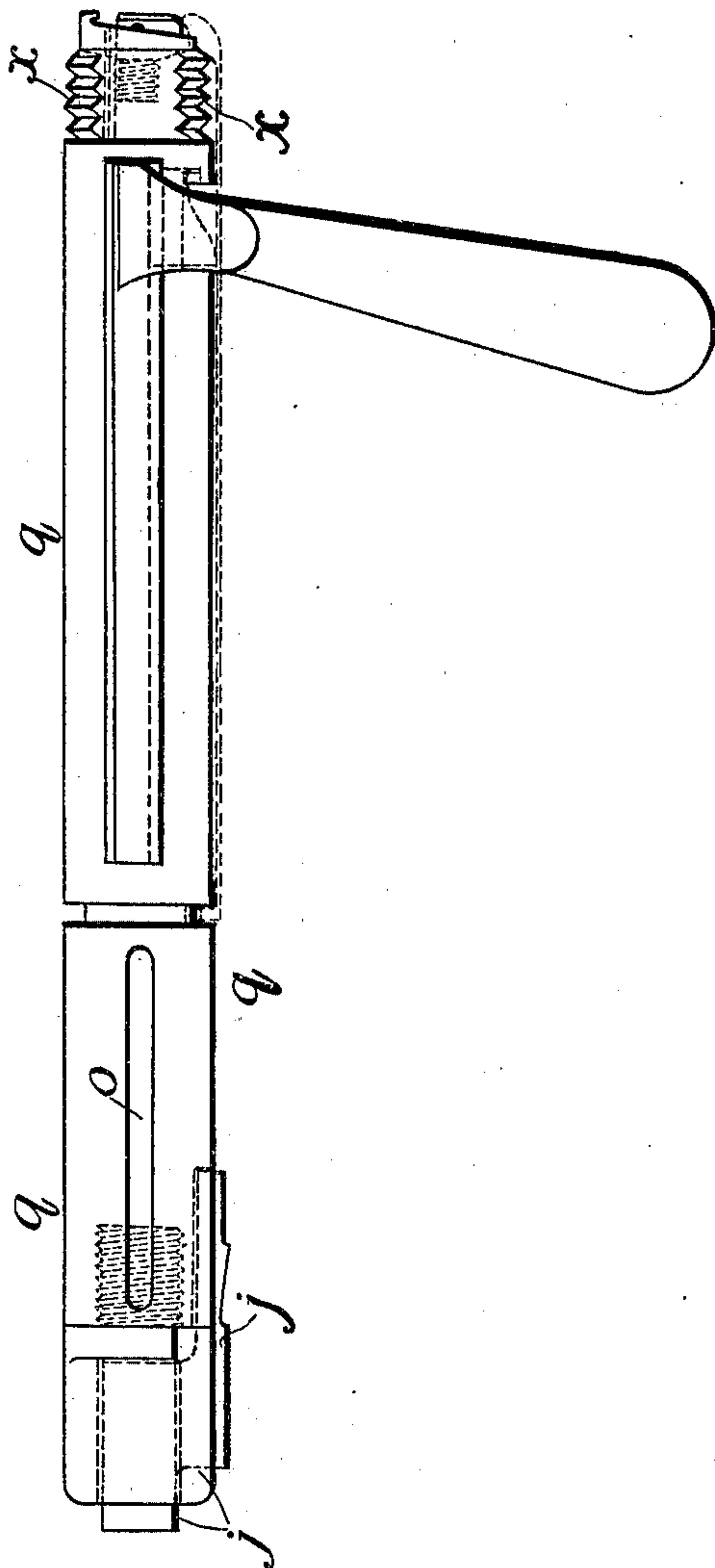


FIG. 9.



Witnesses.

Hiroshi Mori.
Ludwig Flum.

Inventor.

James Baird Thorneycroft
by D. Singer

Att'y.

UNITED STATES PATENT OFFICE.

JAMES BAIRD THORNEYCROFT, OF MAUCHLINE, SCOTLAND.

RIFLE.

SPECIFICATION forming part of Letters Patent No. 713,254, dated November 11, 1902.

Application filed July 3, 1902. Serial No. 114,237. (No model.)

To all whom it may concern:

Be it known that I, JAMES BAIRD THORNEYCROFT, a subject of the King of the United Kingdom of Great Britain and Ireland, residing at Netherplace, Mauchline, county of Ayr, Scotland, have invented certain new and useful Improvements in Rifles and other Small-Arms, (for which application for patent has been made in Great Britain, No. 13,073, dated June 9, 1902,) of which the following is a specification.

This invention, which relates to rifles and other small-arms, has for its object to provide a rifle of improved construction wherein the effective range is maintained by retaining the usual length of barrel while reducing the length of the weapon. The barrel is secured to the stock in such wise that the breech end of the barrel is brought into proximity with the butt of the rifle, and thus while the full length of service-barrel is or may be used the entire length of the weapon is about the same length as a carbine, which is more suitable for use by mounted troops than the longer weapon and has the full range of the latter.

In the accompanying drawings, Figure 1 is a longitudinal elevation of a rifle, to which the invention is applied, and Fig. 2 a plan thereof. Fig. 3 is a part longitudinal elevation of the barrel and lock of the rifle, the butt and wooden stock being removed, showing the connection between the trigger and firing mechanism. Figs. 4 and 5 are sectional views of part of the "grip" by means of which the bolt is engaged in the breech end of the barrel. Figs. 6, 7, and 8 are detail views of the "safe" and breech-lock mechanism, and Fig. 9 is a detail view showing the breech-bolt detached from the body of the rifle.

As shown by the drawings, the barrel *a* of the rifle, which is or may be of the full length used in the ordinary service-rifle, is carried rearward into the butt-end *b'* of the stock *b*, wherein the cartridge-magazine *c* is located, instead of being placed, as is usual, forward of the butt *b'*. The body *c'* of the rifle is in the example shown set at an inclination to the center line of the barrel *a* both in plan and elevation—that is to say, to the right as viewed from the upper side of the rifle and inclining downward from the breech toward

the rear end of the butt *b'*, the object being to facilitate sighting.

As in the use of the improved rifle the distance from the shoulder to the trigger should remain as in ordinary rifles, the trigger is placed forward of the magazine, and connection between the trigger and the firing mechanism is made by providing a connecting rod or lever *d*, extending under the cartridge-magazine *c* and guided in distance-pieces *e* between the rifle-barrel *a* and trigger-guard *f*. This rod *d* is connected at one end to the trigger *g* and at the other end to a lever *h*, attached to the sear *i*, the said lever *h* being arranged to actuate the sear *i* and causes it to disengage with the cocking-head *j*, attached to the firing-needle.

For the purpose of locking the firing mechanism a safe is provided consisting of a spindle *k*, formed at its upper end with a suitable finger-lever *l* and passing through a boss *m*, formed on the side of the rifle-body *c'* and having on it two projections *m' n*, one, *m'*, of which engages with a groove or recess *o* in the breech-bolt *q* and so prevents rotation of same, thus serving as a lock. The other projection *n* is placed at the lower end of the spindle *k*, which is held in position by a spring *k'* and engages with the under side of the sear *i*, or, as shown at Figs. 6 and 7, with a projection *p*, formed on its side. The breech and firing mechanism are thus locked by one action.

The cartridge-feeding mechanism consists of a spring-lever *r*, secured to one of the distance-pieces *e*, fixed on the rifle-barrel *a* and attached to the cartridge platform or feeder *s*, the spring-lever *r* having a notch *t* in it, which is engaged by a radial arm *u*, operated by a thumb-lever *v*, pivoted at the side of the rifle-body *c'*.

The spring-lever notch *t* when engaged with the radial arm *u*, as indicated in dotted lines at Fig. 3, holds down the platform to permit of the magazine being readily charged while it renders the use of a cut-off unnecessary. In the cartridge-feeding mechanism shown the platform or feeder *s* is attached to the barrel *a*, which makes it more compact, the mechanism being all on the barrel when in action.

In proximity to the meeting of the rifle-body c' with the barrel a an internal interrupted screw-thread w is formed on the body c' , as shown particularly at Figs. 4 and 5, and is adapted to be engaged with a similar screw-thread x , formed on the end of the breech-bolt q nearest the barrel a , the formation of the thread x on the breech-bolt q being shown at Fig. 9. The screw-thread formed on the breech q and body c' thereby serves as a grip as in the ordinary rifle.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a rifle the combination with a barrel carried rearward into proximity with the butt-end of the stock of a breech-bolt formed with a grip to engage the body, a cartridge-magazine located in the stock, a trigger placed forward of said magazine and connected by a connecting-rod to a lever attached to the sear, and a "safe" composed of a spindle passing through the rifle-body, having a finger-lever at its upper end and projections engaging the breech-bolt and the sear to lock the breech and firing mechanism.

2. In a rifle the combination with a barrel carried rearward into proximity with the butt-end of the stock of a breech-bolt formed with a grip to engage the body, a cartridge-magazine located in the stock, a trigger placed forward of said magazine and connected by a connecting-rod to a lever attached to the sear, and a platform or feeder in the magazine carried by a spring-blade acted on by a thumb-lever having on it a radial arm adapted to enter a notch in the blade for the purpose of holding down the platform in charging the magazine.

3. In a rifle of the class set forth the combination with a cartridge-magazine having a platform or feeder carried by a spring-blade of a thumb-lever having on its pivot center a radial arm adapted to enter a notch in the blade for the purpose of holding down the platform in charging the magazine.

In witness whereof I have hereunto set my hand in presence of two witnesses.

JAMES BAIRD THORNEYCROFT.

Witnesses:

WALLACE FAIRWEATHER,
JNO. ARMSTRONG, Sr.