T. M. WALLIS.

Breech-Loading Gallery-Rifle.

No. 197,432. Patented Nov. 20, 1877.

Fig. 1.

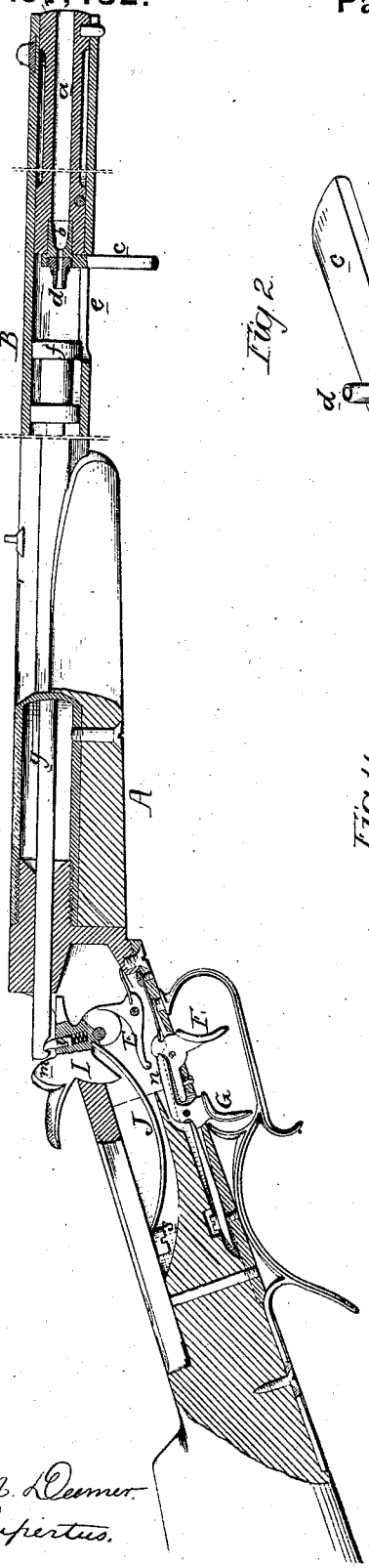

Fig 2.

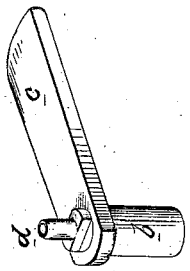

Fig 3

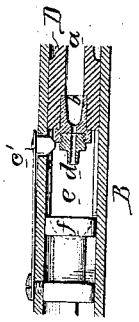

Fig 4

Witnesses.

John M. Deemer

John K. Rupertus.

Inventor

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UNITED STATES PATENT OFFICE.

THOMAS M. WALLIS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO WILLIAM WURFFLEIN, OF SAME PLACE.

IMPROVEMENT IN BREECH-LOADING GALLERY-RIFLES.

Specification forming part of Letters Patent No. **197,432**, dated November 20, 1877; application filed February 8, 1877.

To all whom it may concern:

Be it known that I, THOMAS M. WALLIS, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Gallery or Parlor Rifles, of which the following is a specification:

My invention relates to certain improvements in that class of fire-arms which are generally used for gallery practice, and in connection with which are used percussion-caps containing the explosive material.

The main object of my invention is to afford facilities for reloading fire-arms of this class.

In the accompanying drawings, Figure 1 is a side view of the rifle, partly in section; Fig. 2, a perspective view of the charging device; Fig. 3, a sectional plan of part of the rifle; and Fig. 4 is a sectional view, showing the connection between the firing-rod and the hammer.

A is the stock, and B an outer tube or barrel, to the interior of which is fitted the real barrel D of the rifle, having a bore, *a*, adapted to the projectile to be fired, and chambered at the rear end for the reception of a cup, *b*, which, with the nipple *d* and arm *c*, forms the removable charging device, the cup, with its projectile and capped nipple, being introduced into the barrel through a slot, *e*, in the under side of the same, and being retained, when in position, by a spring-pin, *c'*, or other retainer, which should be such as to permit the easy removal of the charging device preparatory to reloading the same.

To the bore of the barrel B is adapted the enlarged head of the firing-rod *g*, the rear end of which projects from the stock, and is notched in the under side for the reception of the upper end of a spring-pin, *i*, carried by the hammer I, the latter having, immediately adjacent to the spring-pin, a striking-face, *m*, for acting on the end of the firing-rod.

I combine the hammer with a double trigger of the character known as the "Swiss hair-trigger," and consisting of a spring-lever, E, for retaining the hammer when drawn back, and two triggers, F and G, the former acted on by a light spring, and the latter by a heavy spring.

The trigger G has an arm, *n*, adapted to a notch in the body of the trigger F, so that when the parts are in the position shown in Fig. 1, the firing of the rifle is effected by pressing upon the trigger F, which, owing to its light spring, is easily operated, and thus releases the arm *n* of the trigger G, the heavy spring of which causes said arm to strike the long arm of the locking-lever E with sufficient force to cause the end of its short arm to be withdrawn from the notch in, and to release, the hammer.

It will be evident that, by the use of the charging device which I have described, the rifle can be rapidly loaded and fired, as the attendant can always have at hand additional charging devices ready for introduction into the barrel.

Another advantage resulting from the use of this device is that the rear end of the bore *a* is not contracted, as in a muzzle-loading rifle, so that in case a shot becomes lodged in the bore, it can be readily driven from the same by a suitable instrument introduced into the outer end.

Another important feature of my invention is the spring-pin *i*, which serves to withdraw the firing-rod *g* when the hammer is drawn back, for it will be observed in Fig. 4, that when the face *m* of the hammer is acting on the end of the rod *g*, the pin *i* is not in a condition to be injuriously affected by the resultant shock, thereby overcoming a serious objection to rifles in which the end of the firing-rod is connected to the hammer by a fixed pin or link.

I claim as my invention—

1. The combination of the firing-rod and the barrel with its chambered bore with the removable charging device, consisting of the cup *b* for the projectile, the nipple *d* for the percussion-cap, and arm *c*, all substantially as set forth.

2. The combination of the firing-rod, having a notched rear end, with the hammer I and its spring-pin *i*.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS M. WALLIS.

Witnesses:

HERMANN MOESSNER,

HARRY SMITH.