C. PERLEY.

Breech-Loading Fire-Arm.

No. 37,764. Patented Feb. 24, 1863.

Fig: 1.

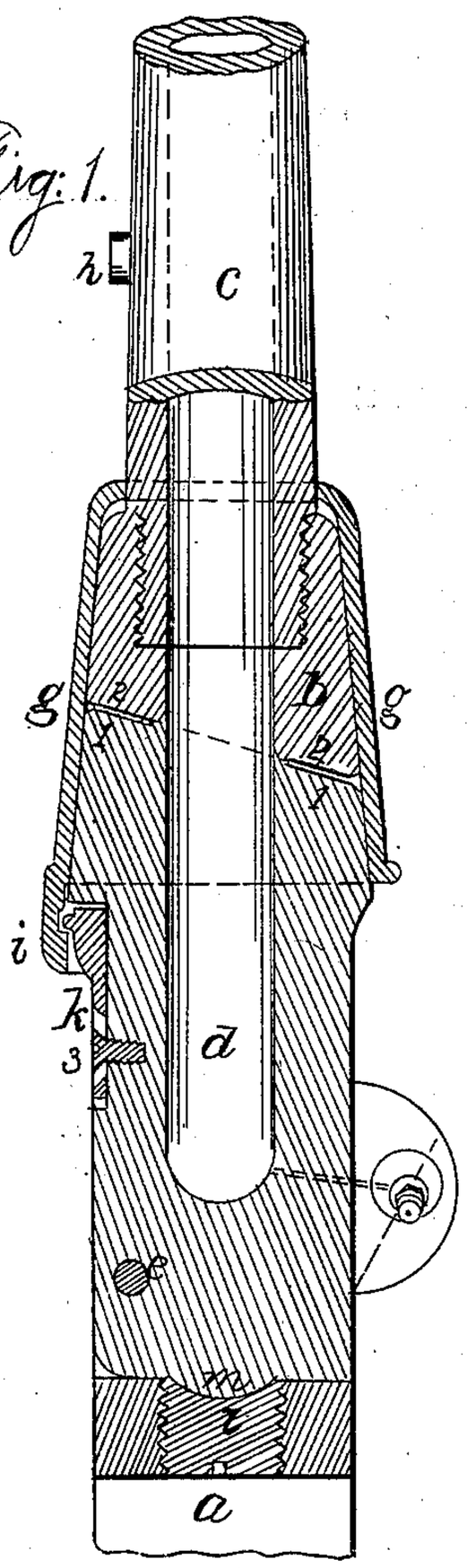
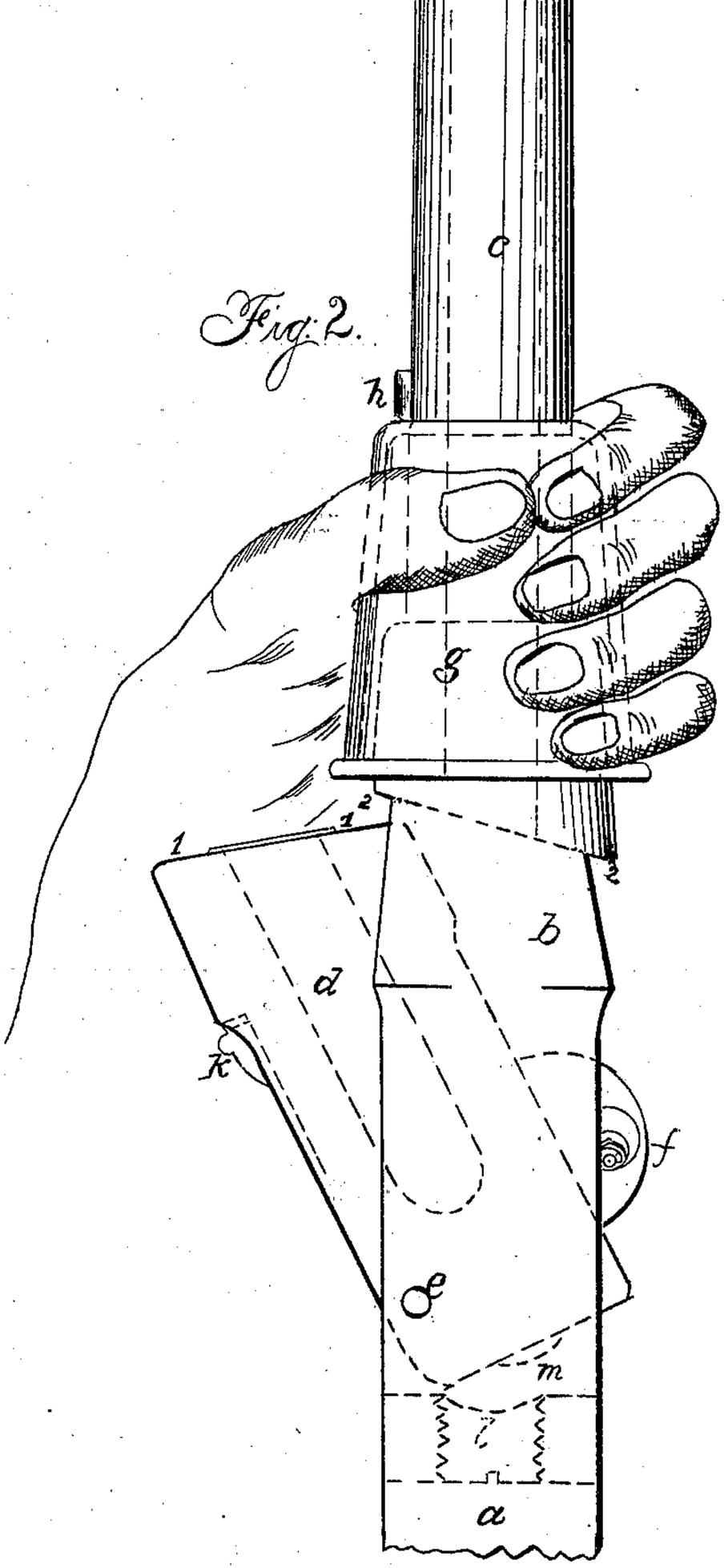


Fig: 2.



Witnesses

Samuel N. Powell

Thos. Geo Harold

Charles Perley

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C

UNITED STATES PATENT OFFICE.

CHARLES PERLEY, OF NEW YORK, N. Y.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. **37,764**, dated February 24, 1863.

To all whom it may concern:

Be it known that I, CHARLES PERLEY, of the city and State of New York, have invented, made, and applied to use a certain new and useful Improvement in Breech-Loading Fire-Arms; and I do hereby declare the following to be a full, clear, and exact description of my said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a section of said arm closed for firing, and Fig. 2 is an elevation of the same as held in position for loading.

Similar marks of reference denote the same parts.

My said invention consists in a swinging breech, in combination with a sliding tapering sleeve that retains the forward end of the breech in contact with the rear end of the barrel, the said sleeve being of a tapering form and so fitted that it is easily turned in opening or closing the breech, and is always tight, because the wear always tends to make the parts fit more accurately together.

In the drawings, *a* represents the straps or projecting bars that connect the stock to the gun. *b* is the breech-supporter extending from the stock to the barrel *c*, which barrel is screwed into the forward end of this supporter or otherwise firmly connected in any usual manner. This breech-supporter is formed with a mortise through it containing the breech or chamber *d*, and *e* is a pin or screw through said chamber and supporter, as shown, and on which pin the said breech *d* will swing to the position shown in Fig. 2. The forward face of this chamber *d* is diagonal or at an angle of about sixty degrees with the sides, and the angle of the parts at the rear end of the barrel corresponds therewith. The chamber *d* should fit the slot in the breech-supporter *b* freely, so that it cannot become stuck by the expansion or by dirt. The forward end around the bore of the chamber fits closely to the rear of the barrel.

f is a nipple or cone on the breech *d*, for the reception of a cap or ordinary detonating device, to be exploded by a hammer for firing the charge, as usual.

g is my tapering sleeve, that is applied at the base of the barrel around the parts *b* and *d*, which are made tapering at the forward end to correspond with the taper of the inside of the sleeve.

To open the breech for loading, the sleeve *g* is seized with one hand (see Fig. 2) and the piece slightly turned with the other. The sleeve is instantly loosened and slid along until arrested by the lug *h*. The breech is easily swung open, as in Fig. 2, by pressing on the side of said breech at or near the cone *f*. The charge of powder, with balls, shot, or any other missile, is then introduced into the chamber (in *d*) in any usual manner. The breech is then shut down to place, and the tapering sleeve slid back to its place, and the arm is ready for use. In the act of sliding back the sleeve *g* the forward face of the breech *d* is firmly pressed to the rear end of the barrel *c* by the action of the sleeve against the side of the breech, forcing it into the mortise, (in *b*.) Should it become necessary to carry the breech *d* slightly forward to compensate any wear or to make the surfaces at 1 1 and 2 2 set closer together, I effect the same by means of the screw *l*, passing through on the line of the barrel at the back part of the slot in *b;* and in order to relieve the pin *e* of as much strain as possible and properly guide and sustain the back end of the chamber *d* if the pin *e* were lost or not used, I employ the hemispherical or conical plug *m*, entering a corresponding cavity in the screw *l*. A projection at the lower side of the lug carrying the cone prevents the chamber *d* swinging too far. Under ordinary circumstances the taper of the sleeve *g* will cause it to hold tightly upon the tapering portions of *b* and *d*, so as not to slip forward in use. However, to secure this more firmly, especially for long marches, I provide a projecting lug, *i*, with an overhanging lip, taking behind an inclined lug, *k*, on the breech *d;* or it might be attached on the breech-holder *b*, so that the action of turning the sleeve in forcing the parts together shall carry this lip behind the said lug, the incline of which will tend to draw the sleeve still more firmly upon the taper of *b* and *d*. This inclined lug should be upon a plate with a slot and retained by a screw, 3, as seen in Fig. 1, so that the same can be adjusted in case of wear.

My invention is adapted to muskets, rifles, pistols, and other fire-arms, and is very strong, durable, and easily made, fitted, and used, and

the escape of gases at the breech from the explosion can be effectually prevented.

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

1. The swinging breech or chamber *d*, in combination with the tapering sleeve *g* and breech-supporter *b*, substantially as and for the purposes specified.

2. In combination with the foregoing, the adjusting-screw *l*, hemispherical or conical projection *m*, and the inclined lug *k*, for the purposes and as set forth.

In witness whereof I have hereunto set my signature this 17th day of July, 1862.

CHARLES PERLEY.

Witnesses:

LEMUEL W. SERRELL,

THOS. GEO. HAROLD.