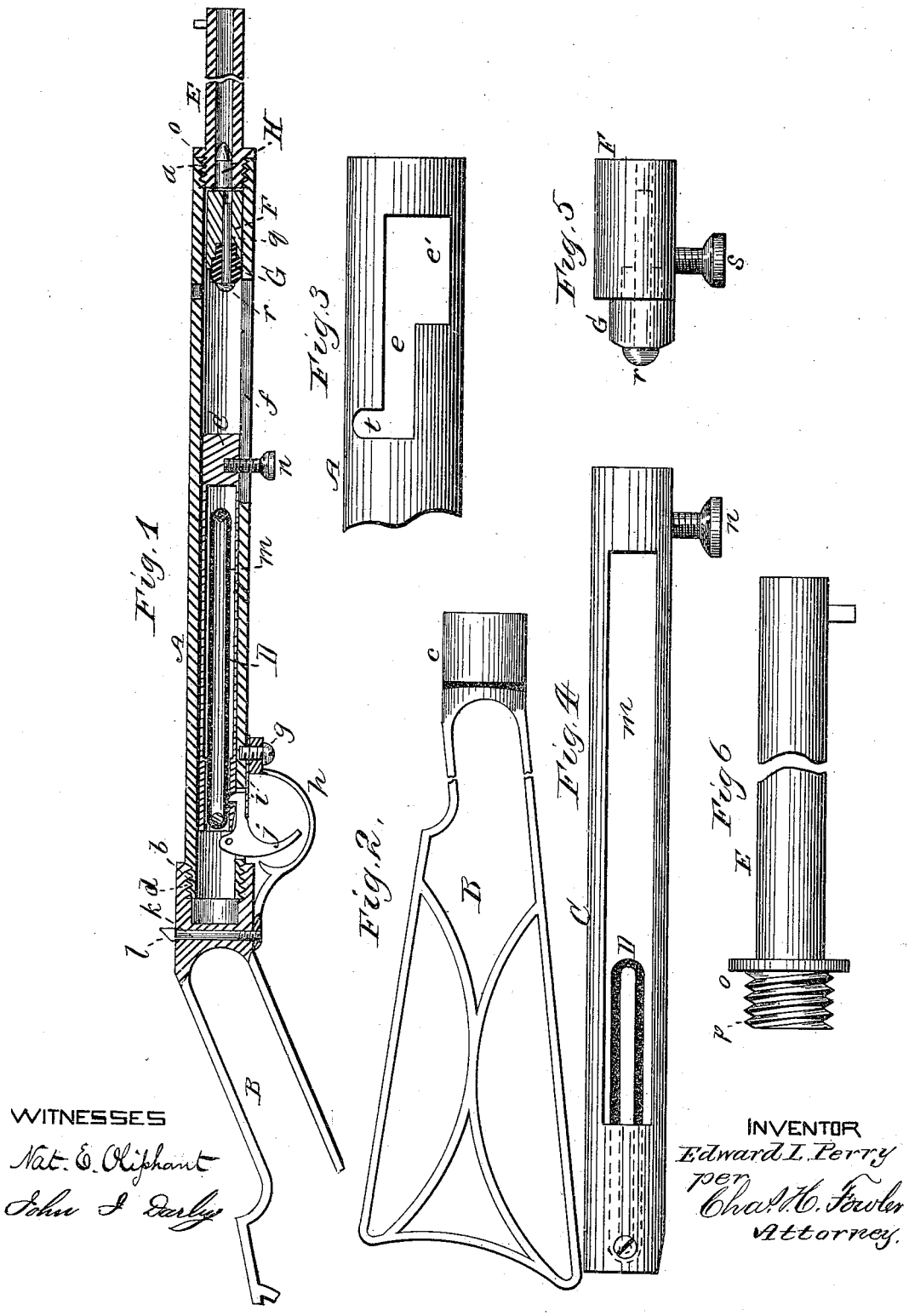
E. L. PERRY.

Breech-Loading Fire-Arm.

No. 210,626. Patented Dec. 10, 1878.



WITNESSES

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IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. **210,626**, dated December 10, 1878; application filed July 31, 1878.

To all whom it may concern:

Be it known that I, EDWARD L. PERRY, of Paterson, State of New Jersey, have invented a new and valuable Improvement in Toy Rifles; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a longitudinal section of my invention. Fig. 2 is a detached view of the skeleton handle. Fig. 3 is a detail view of a portion of the tube on an enlarged scale. Fig. 4 is a side elevation of the plunger, showing the elongated opening. Fig. 5 is a detail view of the breech and firing-pin; Fig. 6, a side elevation of the detachable barrel.

This invention has relation to toy guns or rifles, and to that class which are breech-loading, and capable of firing either ball or blank cartridges.

The invention has for its object to simplify the construction of this class of toys, and thereby lessen the cost in their manufacture, while at the same time the perfect operation of the gun in firing the cartridge is preserved, as will be hereinafter described.

In the accompanying drawings, A represents a tube composed of any suitable metal, and provided at its outer end with interior screw-threads *a*, and upon its opposite end with screw-threads *b* upon its exterior, for attaching a skeleton stock or handle, B, said handle terminating in a short tube or cylinder, *c*, formed with interior screw-threads *d*, for engaging with the screw-threads *b* upon the end of the barrel or tube A. The tube A is formed, at or near its outer end, with a right-angled slot, *e*, which may be located at any point around the periphery of the tube A, but preferably near the end thereof. An elongated slot or opening, *f*, is formed upon the under side of the tube A, the purpose of which will be hereinafter described.

Upon the under side of the tube A is secured, by a suitable screw, *g*, the trigger-guard *h*, said screw also holding between the end of the trigger-guard and barrel a flat metal spring, *i*, the free end of which bears against the under side of the trigger *j*, the same being pivoted to the tube A. The other end of the guard *h* is connected to the short tube or cylinder *c* of the stock B by a rod, *k*, the lower end having screw-threads thereon, which engage with a screw-hole in the end of the guard *h*. This rod has upon its upper end a back sight, *l*, and when it is desired to remove the stock from the tube A the screw part of the rod is disengaged with the screw-threads in the end of the trigger-guard *h*, thereby allowing the tube A or stock B to be unscrewed and separated.

By the means above described of connecting the trigger-guard to both the tube and stock they are retained in their relative position to each other.

Fitting within the tube A is a plunger, C, the outer end thereof formed solid, while the other portion is tubular to receive a rubber, wire, or any other suitable spring, D. In this instance, however, I have shown a continuous rubber band, the inner end being suitably connected to the end of the plunger, while the opposite end is secured to the tube A, or to a pin passing through the same and through elongated slots or openings *m* in the tube. A thumb-screw, *n*, is connected to the solid end of the plunger, by which it is operated or forced back until the trigger *j* engages with a notch or opening in the plunger, and holds it in position ready for firing or discharging the gun.

A tube, E, of any suitable metal, and of sufficient strength and thickness, and having a proper-sized bore to form the barrel of the gun, is secured to the end of the tube A. This barrel is formed with or has rigidly secured to one of its ends a bushing, *o*, with screw-threads *p*, by which said barrel is connected to the end of the tube A.

The bushing, however, may be dispensed with, and screw-threads formed upon the end of the barrel, by which the barrel may be screwed into the end of the tube; or any other convenient means may be employed for connecting the two together.

A breech, F, fits within the tube A, and may be made of any suitable metal, said breech having a central hole through it for the firing-

pin *q*. This firing-pin is formed with a head, *r*, which bears against a rubber or elastic buffer, G, which fits within a suitably-formed seat at the rear end of the breech.

A thumb-screw, *s*, is secured to the breech F for adjusting or operating the same, or to change its position in the tube A.

The cartridge, as represented at H, is inserted in the end of the barrel E through the larger portion *e'* of the slot *e*, first pulling back the breech and locking it in the right-angled part *t* of the slot *e*, the plunger C being held back ready for action by engaging with the trigger *j*. As the plunger is released by pressing on the trigger *j*, the solid portion or forward end thereof is forced against the head *r* of the firing-pin *q*. The breech F, previous to the release of the plunger, is changed to the position as illustrated in Fig. 1 of the drawings, the end thereof resting against the cartridge, or nearly in contact therewith, so that the pin *q* will be brought against the cartridge with sufficient force to explode the same, after which the elasticity of the buffer will cause the pin to be thrown back.

It will be noticed that every provision is made for the ready taking apart or separating the several parts composing the gun, and at the same time making the parts so very simple in construction that they may be produced by the manufacturer at a trifling cost.

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

1. The detachable stock B, in combination with the tube A and trigger-guard *h*, one end of which is detachably connected to the tube, and the other end detachably connected to the stock B, substantially as and for the purpose set forth.

2. The hollow slotted plunger C, in combination with spring D and tube A, said spring being attached at its rear end to a cross-bar within the plunger, and at its forward end to the tube A, the parts being arranged and combined as shown and described.

3. The tube A, formed with elongated slot *f*, and the hollow slotted detachable plunger C, and spring D attached at its rear end within the plunger and at its forward end to the tube, in combination with the removable and adjustable breech F, firing-pin *q*, and elastic buffer G, said breech being independent of the plunger, and operating substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

EDWARD L. PERRY.

Witnesses:

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WALTER NUTT.