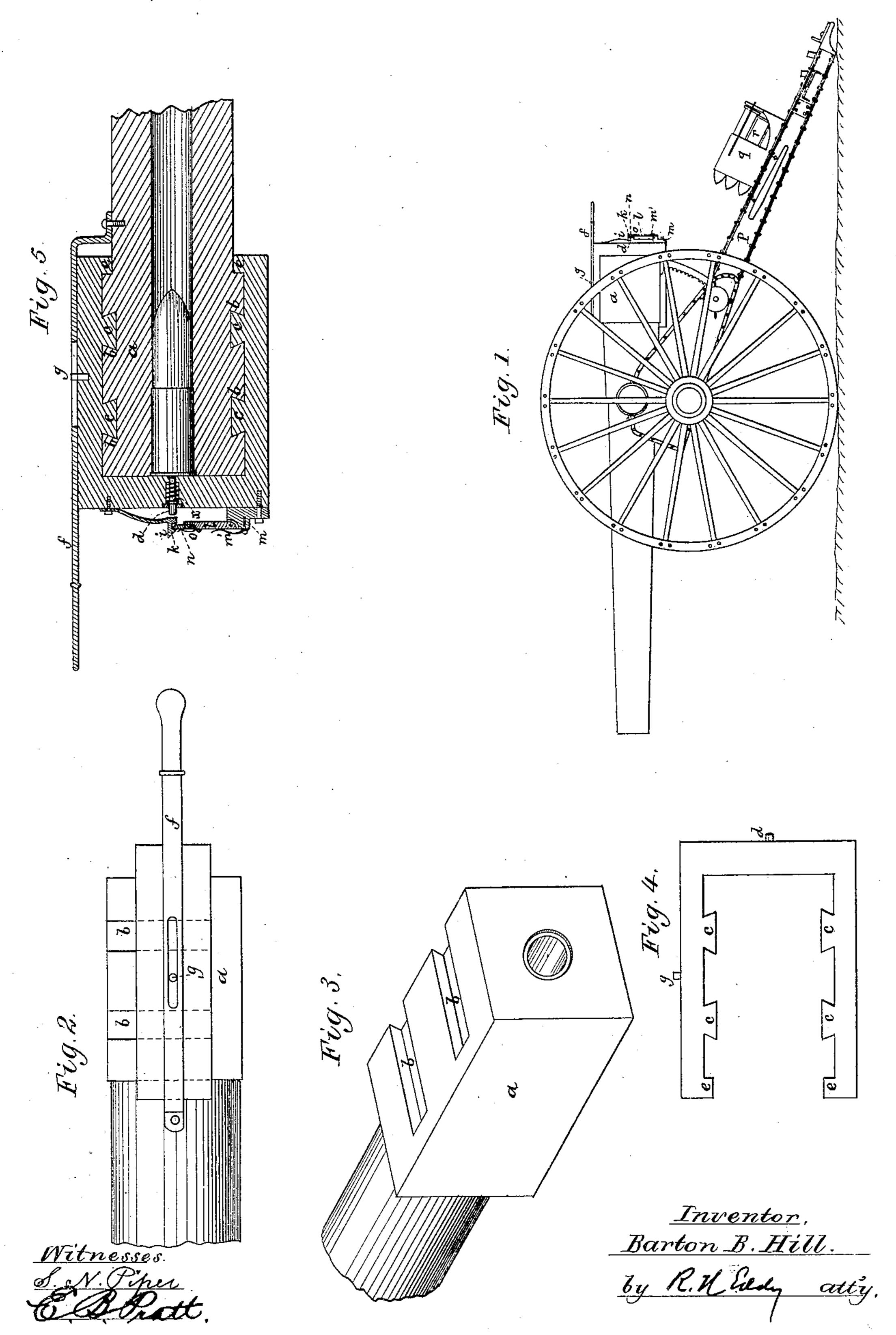
B. B. HILL.

BREECH LOADING ORDNANCE.

No. 309,224.

Patented Dec. 16, 1884.



United States Patent Office.

BARTON BERKLEY HILL, OF LOWELL, MASSACHUSETTS.

BREECH-LOADING ORDNANCE.

SPECIFICATION forming part of Letters Fatent No. 309,224, dated December 16, 1884.

Application filed October 1, 1884. (No model.)

To all whom it may concern:

Beitknown that I, BARTON BERKLEY HILL, of Lowell, in the county of Middlesex, of the Commonwealth of Massachusetts, have in-5 vented a new and useful Improvement in Breech-Loading Field-Guns; and I do hereby declare the same to be described in the following specification, and represented in the

accompanying drawings, of which—

Figure 1 is a side elevation of a field-piece provided with my invention, the nature of which is defined in the claims hereinafter presented. Fig. 2 is a top view, and Fig. 3 is a perspective view, of the rear portion of 15 the gun-barrel, or, in other words, the part to which the laterally-movable breech is applied. Fig. 4 is a side view of the movable breech. Fig. 5 is a vertical and longitudinal section of part of the barrel, with its movable 20 breech.

I am aware that a field gun provided with a breech movable, so as to either cover or uncover the bore at its rear, is not new. My invention is therefore an improvement on such 25 a gun, and is to be found in the combination of such movable breech and the gun for supporting it, the breech being movable laterally and rectilinearly. To this end that part a of the gun, which I term the "breech-carrier," is 30 constructed with opposite parallel faces and with grooves b in each face, such grooves being open at one end of such, and calculated to receive and fit to corresponding tongues, c, projecting from the movable breech, which, 35 formed as represented, embraces the grooved part of the gun and extends down so as to cover the rear end of the bore of the gun, when the firing-pin, shown at d, is in alignment with the axis of the barrel. The sliding 40 breech may have at its ends two projections, e e, to bear against the front end of the breechcarrier. In some cases each groove of the breech-carrier may be dovetailed in transverse section, the tongue to extend into it be-45 ing correspondingly made. A lever, f, fulcrumed to the gun-barrel, and slotted to receive a stud, g, extending from the movable breech, serves to enable a gunner to move the breech laterally, so as to either cover or un-50 cover the bore. In the rear part of the breech is a firing-pin, d, provided with a spring, x, 1

for forcing it backward. Directly in rear of the said pin is a spring-hammer, i, provided with a hook, k, to engage it with an actuator, l, which, pivoted to a bracket, m, attached to 55the breech, and provided with a spring, m', as shown, for forcing it toward the breech, has at the end next the hook a tripper or tooth, n. The said tooth n extends into a recess in the actuator endwise thereof, and projects from it, 60 as represented, and is pivoted to the actuator, and provided with a spring, o, for forcing it into place within the recess. A lanyard is to be attached to the actuator for retracting it and the firing-hammer. On pulling rearward 65 the actuator far enough for the tooth to leave the hook of the firing-hammer, such hammer by its spring will be thrown down upon the firing-pin. On the actuator returning to place the tooth will slip on and engage with the 70 hook. There is placed or attached on the trail P of the field-piece a magazine, q, for holding the ammunition or cartridges for use in the gun. It has in each of its two opposite sides an opening, r, to enable ready access to be 75 had to the cartridges for removing such from the magazine, which magazine is a trough open at its front end and increasing in width from such rearward, in order to prevent the cartridges from being accidentally thrown 80 endwise out of the trough.

I claim in the breech-loading field-piece—

1. The combination of the gun-barrel, having the breech-carrier provided with grooves in two of its opposite parallel faces, with the S5 laterally-movable breech, adapted to embrace the said carrier and extend across its rear end, and having tongues to enter in such grooves. as set forth.

2. The combination of the gun-barrel, hav- 90 ing the breech-carrier provided with grooves b extending in it transversely in each of its two opposite faces, with the laterally-movable breech adapted to embrace the said carrier and extend across its rear or open end, and 95 having tongues to enter the grooves and projections to extend down in front of and against the carrier, as set forth.

BARTON BERKLEY HILL.

Witnesses:

R. H. Eddy, E. B. PRATT.