F. M. SWALLOW.

BREECH-LOADING ORDNANCE.

No. 189,329. Patented April 10, 1877.

Fig. 1

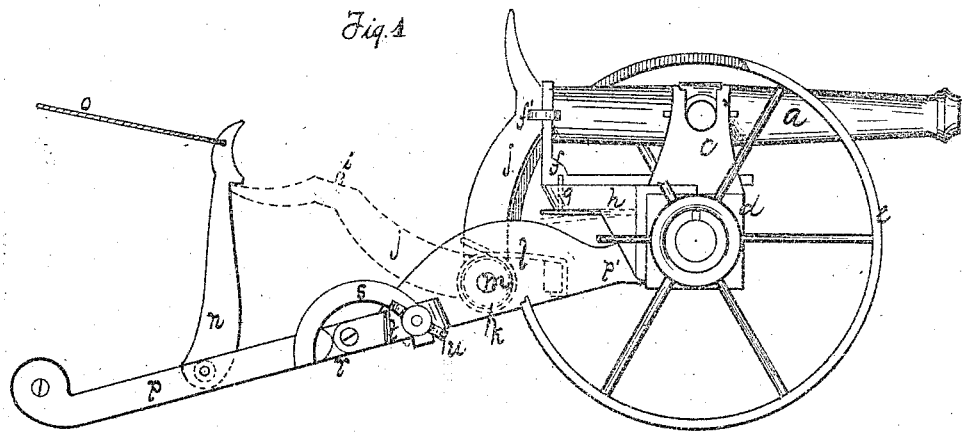
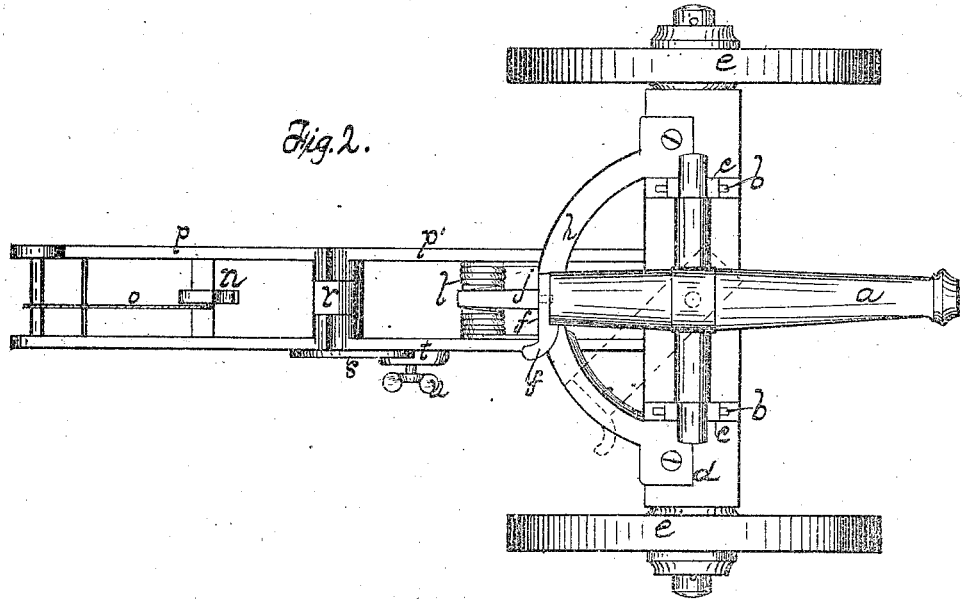


Fig. 2.



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UNITED STATES PATENT OFFICE.

FREEMAN M. SWALLOW, OF SPRINGFIELD, MASSACHUSETTS.

IMPROVEMENT IN BREECH-LOADING ORDNANCE.

Specification forming part of Letters Patent No. **189,329**, dated April 10, 1877; application filed March 9, 1877.

To all whom it may concern:

Be it known that I, FREEMAN M. SWALLOW, of Springfield, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements Pertaining to a Cannon, of which the following is a specification, reference being had to the accompanying drawings, where—

Figure 1 is a side elevation. Fig. 2 is a top view.

The letter *a* denotes the cannon designed for firing metallic cartridges, hung by its trunnions, fixedly, by means of pins *b*, in the bearings *c*, rising from the axle *d*, supported by wheels *e*. The rear open end of the cannon is closed by the laterally-swinging pivoted breech-block *f*, held to place by spring-catch *g*, and prevented from swinging past its proper position by the shoulder on the handle *f'* striking against the side of the cannon. The breech-block is supported on and by the arc *h*. The vertical part of the breech-block is perforated for allowing the firing-pin *i* access to the base of the cartridge, which, of course, contains fulminate in the base. This firing-pin is borne on the hammer *j* pivoted within the trail on shaft *k*, its impact given by the helical spring *l* coiled around the shaft-pin. The shaft-pin and hammer are fixedly attached together, and the pivot-points or bearings are given by the screws *m* running through the sides of the trail.

The hammer is held in position of "cocked" by the detent-arm *n* pivoted to the trail, and its release for firing purposes is given by pulling backward on cord *o*. The trail is made in two parts, *p p'*, pivoted together at *r*, and by depressing or raising this joint the mouth of the cannon is correspondingly raised or lowered to vary the range.

One part of the trail *p* is provided with an arc, *s*, running through a mortise, *t*, built upon the other part of the trail *p'*, said arc being fastened in any desired adjustment by the set-screw *u*.

I claim as my invention—

1. A cannon-trail made in two parts jointed together, one part provided with arc *s*, and the other part with mortise *t* and set-screw *u*, substantially as described.

2. The breech-loading cannon *a*, the hammer *j*, pivoted within the trail, and provided with the spring *l*, and the detent-arm *n*, pivoted within the trail, all combined and arranged to operate substantially as shown and described.

3. The cannon *a* with rear open end, the laterally-swinging breech-block *f*, perforated for the passage of the firing-pin, and the pivoted hammer *j*, provided with the firing-pin *i*, all combined substantially as described.

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