2 Sheets--Sheet 1.

A. H. TOWNSEND.

Improvement in Repeating Ordnance.

No. 115,659. Patented June 6, 1871.

Fig. 1

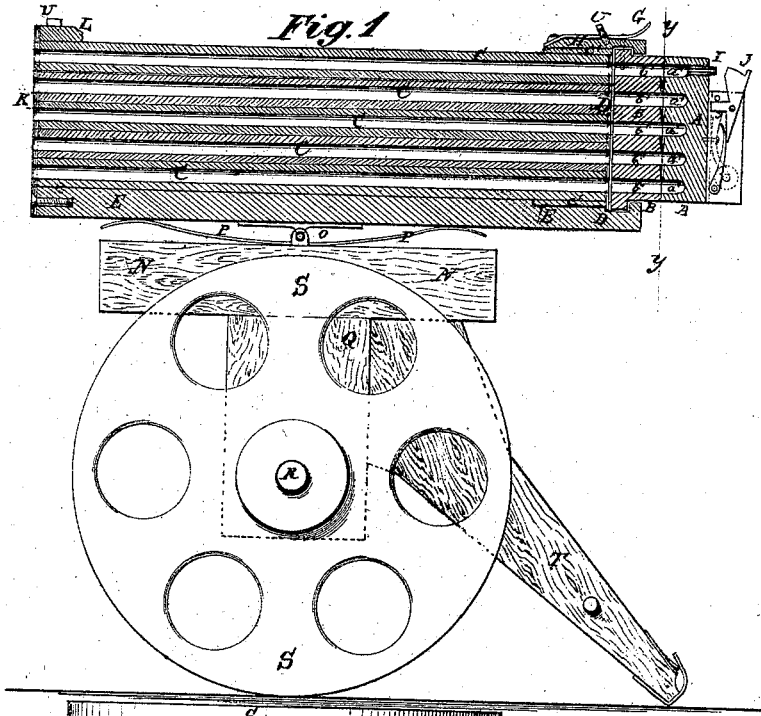
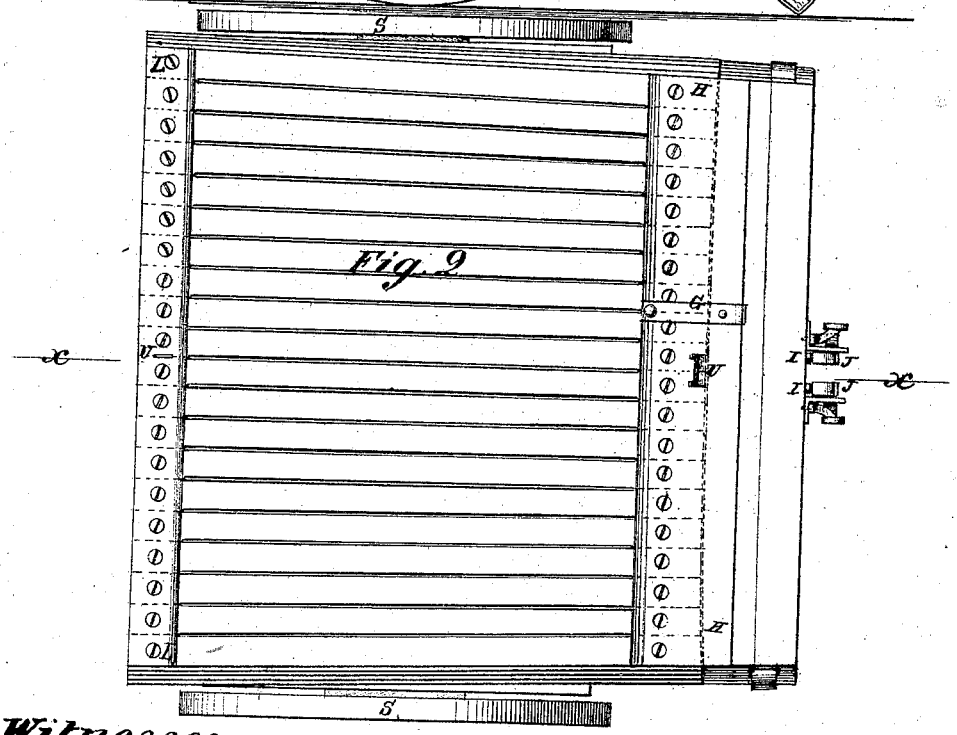


Fig. 2



Witnesses.
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2 Sheets--Sheet 2.

A. H. TOWNSEND.

Improvement in Repeating Ordnance.

No. 115,659. *Fig. 3* Patented June 6, 1871.

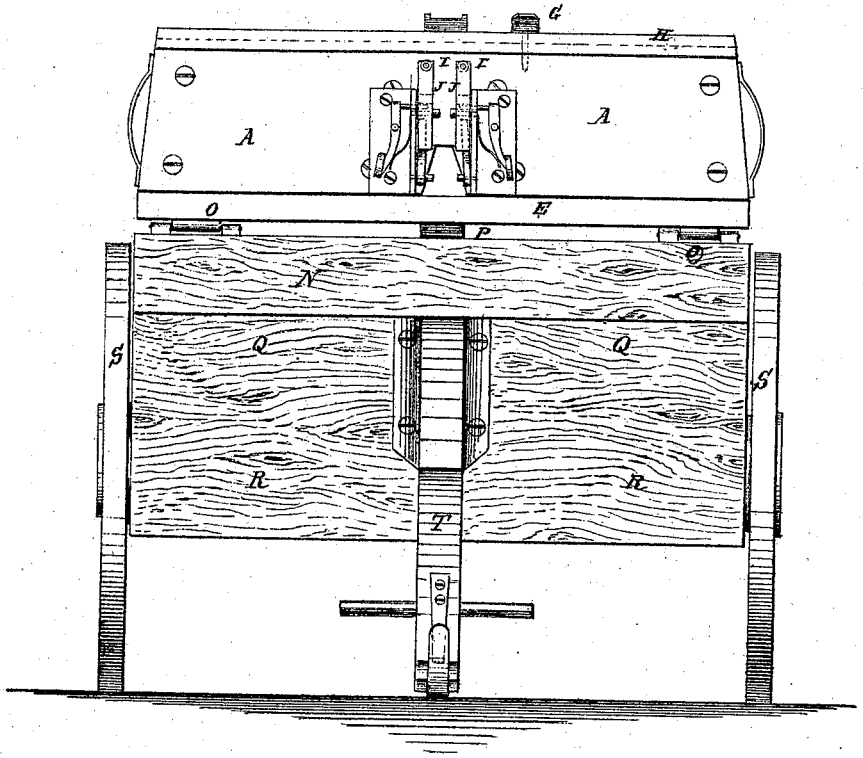


Fig. 4

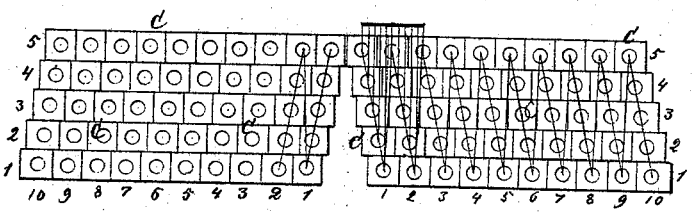
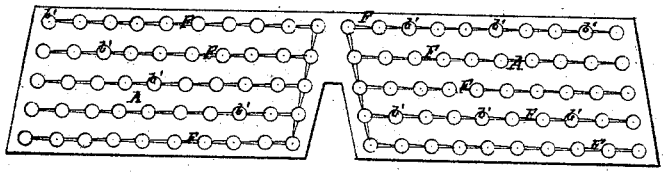


Fig. 5



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UNITED STATES PATENT OFFICE.

ALFRED H. TOWNSEND, OF GEORGETOWN, COLORADO TERRITORY.

IMPROVEMENT IN REPEATING-ORDNANCE.

Specification forming part of Letters Patent No. 115,659, dated June 6, 1871.

To all whom it may concern:

Be it known that I, ALFRED H. TOWNSEND, of Georgetown, in the county of Clear Creek and Territory of Colorado, have invented a new and Improved Gun; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1, Sheet I, is a side view of my improved gun, partly in section, through the line *x x*, Fig. 2. Fig. 2, Sheet I, is a top view of the same. Fig. 3, Sheet II, is a rear view of the same. Fig. 4, Sheet II, is a detail view of the rear ends of the barrels, showing their diagonal arrangement. Fig. 5, Sheet II, is a detail sectional view of the breech-piece taken through the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention relates to that class of guns which is constructed to throw numerous balls from different barrels, and either simultaneously or in quick succession.

I will first describe my improvements in connection with all that is necessary to a full understanding thereof, and then clearly point them out in the claim.

A and B are two parts, which form the breech-piece of the gun. *a' b'* are corresponding perforations, made to register with each other, and to receive the cartridge. At the point of junction or joint formed by these plates are apertures F, connecting the several chambers, in order to communicate the fire from one to the other. These apertures may be uniform in size or graduated diminishingly from first to last. C are the barrels, formed independently and arranged one upon another in diagonal planes. D is a plate between the breech-piece and the barrels, and having perforations correspondent thereto. The barrels are placed in two divisions, one on each side of a central line, and each obliqued reversely thereto. E is the plate which supports the barrels; K, a muzzle-plate, to assist in holding them firmly in position; and H L plates to receive the sights U U. The plates H E are grooved to receive tongues on the breech-piece A B, by which the latter may be made readily removable. G is a spring, having a pin which enters a perforation in plate H and piece B, in order to hold the breech-piece detachably. I is a cap-tube, connecting with one of the cartridge-chambers, and J the hammer which strikes upon it. The gun thus constructed is supported upon the carriage N Q R S T. N is a platform, on the center of which the gun is hinged; Q, a shoulder projecting from the axle; and T, a trail thrown out obliquely from the shoulder Q to support the gun in a horizontal position. The platform N likewise serves to regulate the amount of deviation allowable on each side of the hinge O. Upon this hinge the gun is turned in sighting it, and a spring, P P, is fixed centrally thereunder, but unfastened at either end.

The mode of operation is as follows: The breech-piece A B being loaded with cartridges, fixed in position, and aimed at the object, the hammer is brought down upon the nipple. The cartridge in the first chamber is thus ignited, and in quick succession thereafter, but not simultaneously, all the rest. A momentary interval is required to impart ignition through the channels F to the succeeding chambers, and this prevents the shock and recoil so objectionable in guns of this character. The cartridges exploding, the balls follow each other from the gun in quick but imperceptible succession, and in lines slightly divergent from and directed centrally to the object. The breech-piece is immediately withdrawn and a duplicate thereof substituted.

This slight lapse of time in changing the breech-pieces is sufficient for a circulation of air through the barrels, an expulsion of fouling gases, and an absorption of much heat.

Having thus described all that is necessary to a full understanding of my invention, what I esteem to be new and desire to protect by Letters Patent, is—

1. A breech-piece, formed of two pieces, A B, with perforations *a' b'* and converging apertures F at their joint or junction, as and for the purpose specified.

2. A tongued breech-piece, A B, grooved plates H E, and detachable pin and spring G, combined as and for the purpose specified.

3. The independent sectional barrels C, the perforated plates D K, and the bottom plate E, combined, constructed, and put together as described.

4. The arrangement of spring B B and hinge O beneath the barrel, as and for the purpose specified.

ALFRED H. TOWNSEND.

Witnesses:

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WM. SPRUANCE.