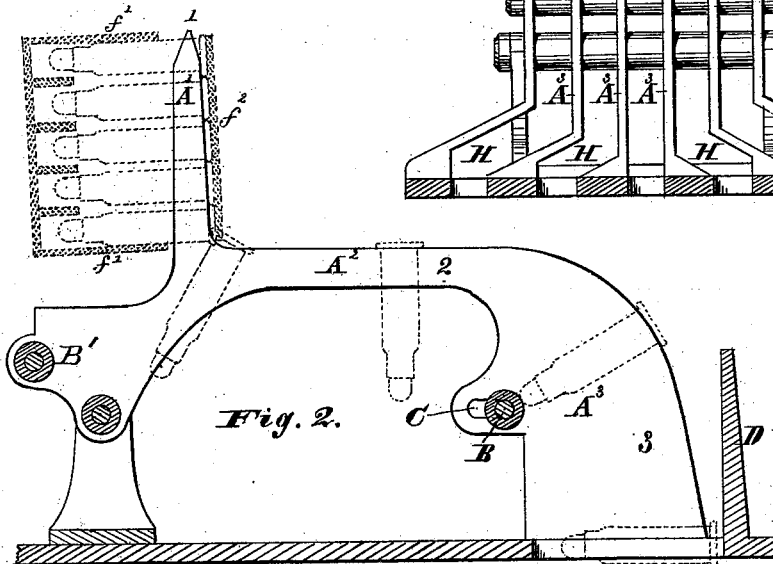
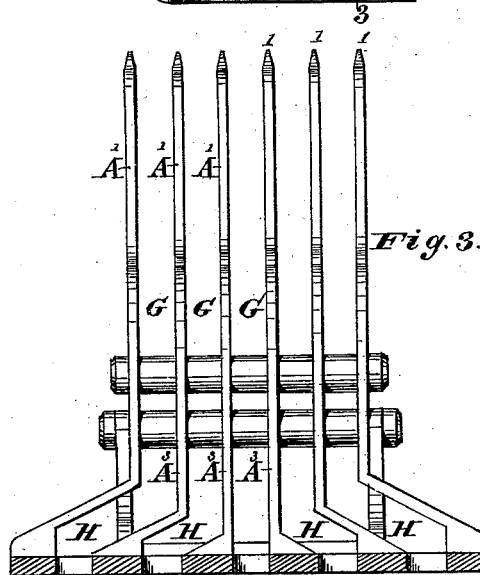
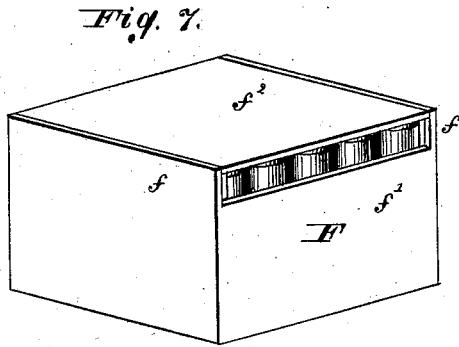
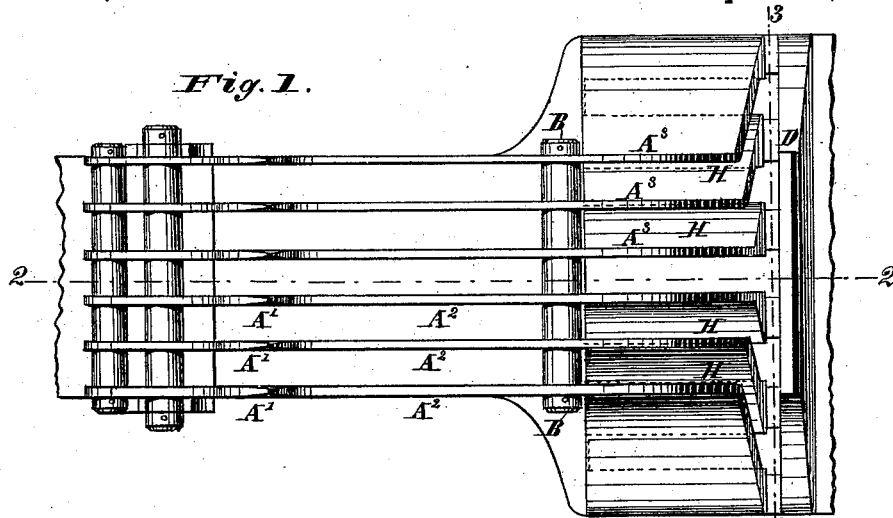


J. P. TAYLOR.  
FEEDERS FOR MACHINE GUNS.

No. 189,811.

Patented April 17, 1877.



WITNESSES

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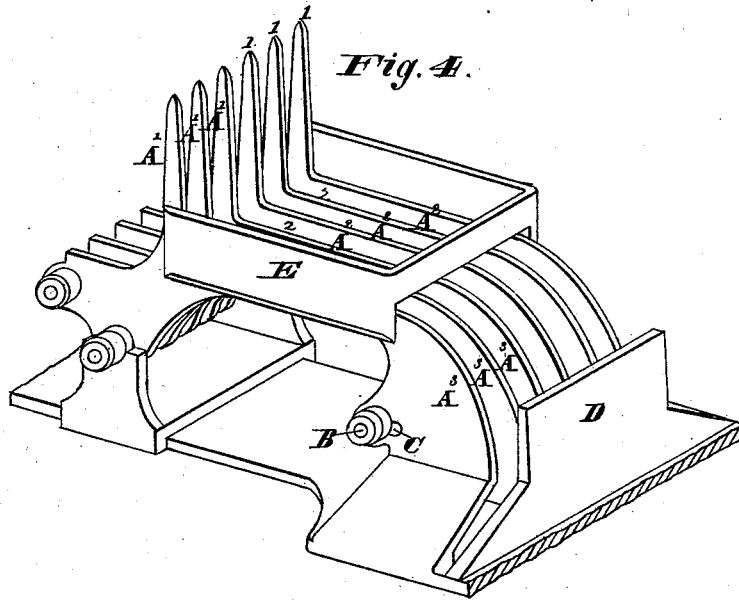


Fig. 4.

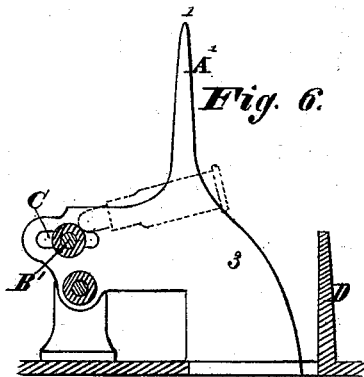


Fig. 6.

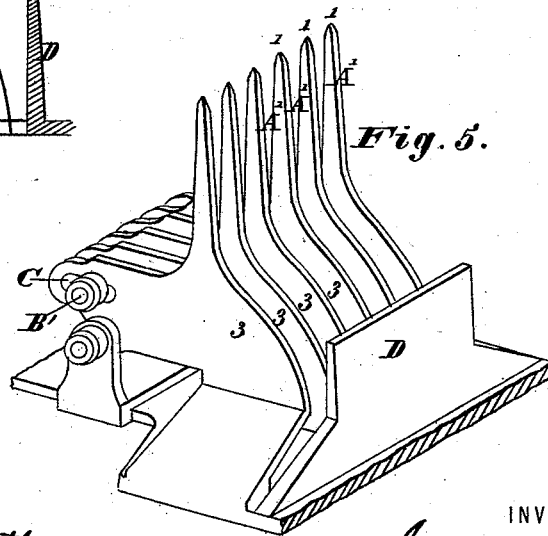


Fig. 5.

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# UNITED STATES PATENT OFFICE.

JAMES P. TAYLOR, OF CARTER DEPOT, TENNESSEE.

## IMPROVEMENT IN FEEDERS FOR MACHINE-GUNS.

Specification forming part of Letters Patent No. 189,811, dated April 17, 1877; application filed April 4, 1877.

*To all whom it may concern :*

Be it known that I, JAMES PATTON TAYLOR, of Carter Depot, in the county of Carter and State of Tennessee, have invented certain new and useful Improvements in Feed Devices for Machine-Guns, of which the following is a specification :

The object of this invention is to provide a simple and effective device for receiving flanged cartridges and conveying them in proper position to the firing mechanism. To this end I provide a grate or grid in horizontal, vertical, or inclined position, as may be required, the bars being at the requisite distance apart to permit the entrance of the body of the cartridge between them, and hold them by their flanges, as hereinafter described, the cartridges being fed either from packing-cases or promiscuously in bulk.

The invention further relates to a device for taking metallic cartridges from the case in which they are to be packed, and conveying them in proper position to the firing-mechanism. This device consists in a series of vertical or inclined bars, between which the bases of the flanged cartridges may be introduced, as hereinafter described.

The invention further relates to a combination, with the grid or guide-bars above referred to, of tripping-bars, by which the cartridges may be changed from a vertical to an inclined position.

The invention further relates to so constructing and applying the said tripping-bars that they may be adjusted in position to suit cartridges of different lengths, or either ball or blank cartridges, as required.

In the accompanying drawings, Figure 1 is a plan of a feed device illustrating the invention. Fig. 2 is a vertical longitudinal section on the line 2 2, Fig. 1. Fig. 3 is a transverse section on the line 3 3, Fig. 1. Fig. 4 is a perspective view. Fig. 5 is a perspective view, illustrating a modification. Fig. 6 is a longitudinal section of the device shown in Fig. 5. Fig. 7 is a perspective view of a packing-case of novel construction, filled with cartridges.

The feed mechanism consists essentially of a series of parallel bars,  $A^1$  or  $A^2$ , the spaces between which are equal in number to the barrels of the machine-gun with which the

apparatus is to be used. These bars may have the vertical position shown at 1 in Figs. 2, 4, 5, and 6, or the horizontal position shown at 2, or vertical and horizontal bars may be combined, as shown at 1 and 2 in Figs. 2 and 4. They preferably terminate rearward in a segmentally-formed base, 3, by which cartridges are conveyed from the hopper or feeder to the firing-chamber, or to a suitable position to enter the firing-chamber, as hereinafter described.  $B$   $B'$  represent trip-bars, adjustable horizontally by means of slots  $C$  in the frame to which they are attached, so as to cause them to act with the proper effect upon the points of the cartridges.  $D$  is a vertical guide-plate placed in the rear of the segmental back portion  $A^3$  of the bars, in order to confine the cartridges to the spaces between said bars as they descend vertically to the firing-chamber or to suitable devices which convey them one by one to the firing-chamber.  $E$  represents a hopper, which may be placed on top of the horizontal portion 2 of the bars  $A$ , when it is desired to supply the cartridges promiscuously to the feed mechanism, as hereinafter described.  $F$  represents a cartridge-case of peculiar construction, having two sides,  $f$   $f$ , extending to a greater height than the front and back  $f^1$ , and with a cover,  $f^2$ , adapted to fit within the sides  $f$   $f$  in the manner illustrated in Fig. 7, so as to leave spaces through which the vertical bars 1 may pass, as illustrated in Fig. 2, for the purpose of drawing the cartridges from their cases. The cartridges and cartridge-case are shown in Fig. 2 in dotted lines.

Operation : If the cartridges are to be supplied to the gun in a promiscuous manner, which may be done by the use of a scoop, a suitable hopper,  $E$ , is placed over the horizontal portion  $A^2$  of the bars, the cartridges being then poured upon the grate  $A^2$  heads to points, or crossed and piled in any position. They are simply stirred or shaken, the effect of which is to cause the points to drop between the bars  $A^2$ , while the flanges are retained by said bars, so that the cartridges will be in vertical position. The hand is then placed beneath the bars  $A^2$ , and the cartridges pressed backward, their points coming in contact with the tripping-bar  $B$ , as their flanged bases are carried around

the segmental portions  $A^2$  of the grate-bars, and the cartridges fall one upon another in horizontal position, the trip-bar B being adjusted horizontally, so as to adapt it to produce the required effect upon the cartridges as they pass over it in succession. Where the cartridges are packed in cases, as illustrated in Fig. 7, a whole casefull is supplied to the feeding mechanism at one operation, as illustrated in Fig. 2, the operator applying a light pressure to the cover  $f^2$ , with one hand to keep the flanges in contact with the bars  $A^1$ , while with the other hand he withdraws the body  $f^1$  of the box. The cartridges will then descend by their gravity, and, with the device constructed as illustrated in Figs. 1, 2, and 4, they are pressed forward or backward by hand, as before described. If it is not desired to adapt the apparatus for the promiscuous supply of cartridges in bulk, it receives the more simple construction illustrated in Figs. 5 and 6, the trip-bar  $B'$  being then employed to retain the points of the cartridges while their flanged bases pass around the convex or segmental portion 3 of the bars, or to retard the points of the cartridges to prevent their falling point first, and thereby endangering choking of the apparatus. The throats G be-

tween the bars  $A^3$  terminate in divergent channels or throats H, by which the cartridges are conveyed to the requisite distance asunder to bring them directly in line with the respective barrels in which they are to be fired.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. A feeder for machine-guns, consisting of a series of parallel bars, with spaces, as shown and described, for the automatic arranging or assembling of the cartridges, with their points in corresponding position, preliminary to their introduction into the breech or charge-chamber.

2. The blades  $A^1$ , constructed and arranged substantially as described, for drawing cartridges by their flanges from cases in which they are packed.

3. The trips B, placed at such a point as to operate in combination with the blades or bars, substantially as and for the purposes set forth.

JAMES P. TAYLOR.

Witnesses:

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