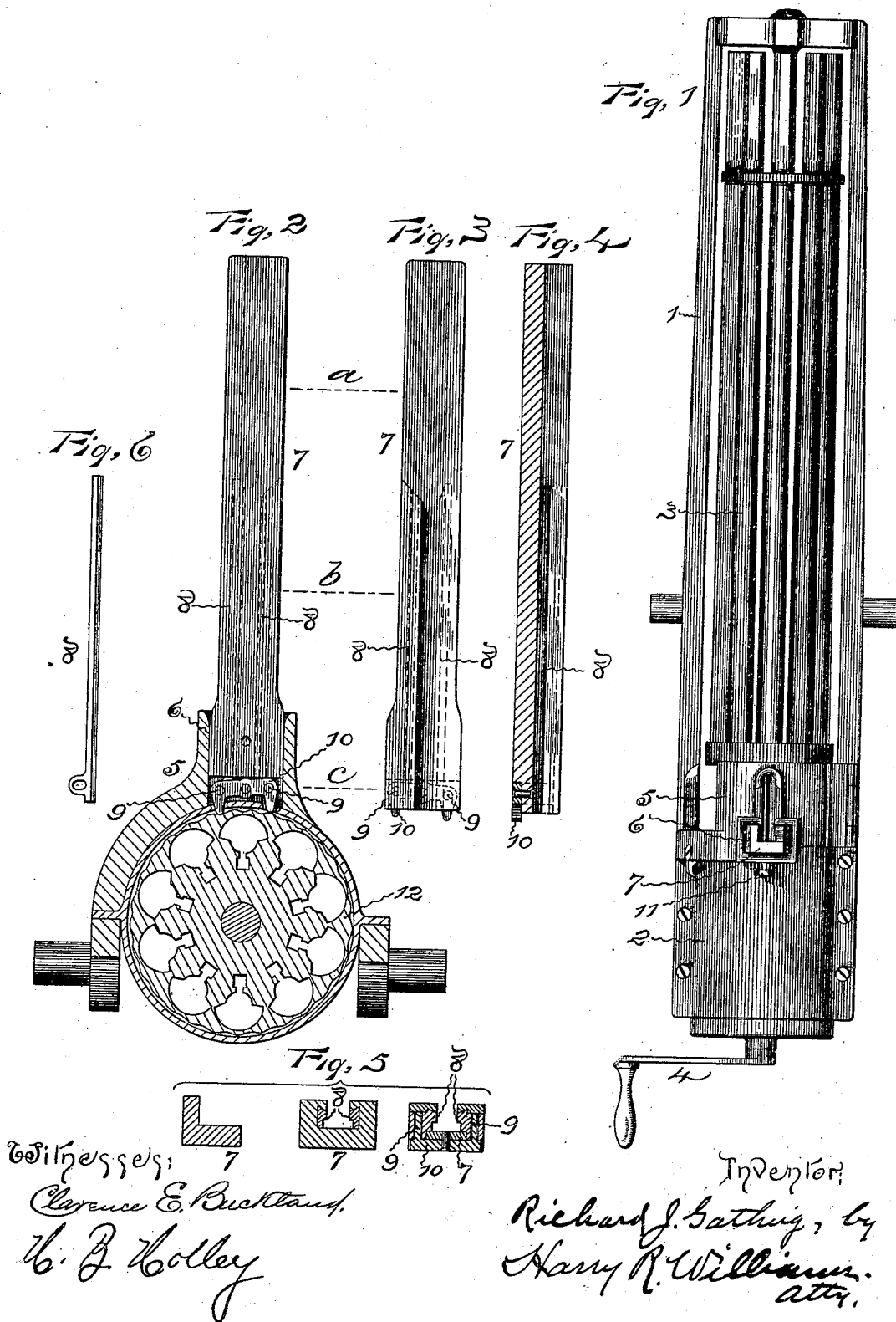


(No Model.)

R. J. GATLING.
FEED FOR MAGAZINE GUNS.

No. 502,882.

Patented Aug. 8, 1893.



UNITED STATES PATENT OFFICE.

RICHARD J. GATLING, OF HARTFORD, CONNECTICUT.

FEED FOR MAGAZINE-GUNS.

SPECIFICATION forming part of Letters Patent No. 502,882, dated August 8, 1893.

Application filed October 15, 1892. Serial No. 448,967. (No model.)

To all whom it may concern:

Be it known that I, RICHARD J. GATLING, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Feeds for Machine-Guns, of which the following is a full, clear, and exact specification.

The invention relates to that class of devices known as gravity feeds provided for feeding cartridges to Gatling guns, and the object of the invention is to provide a simple, convenient and cheap arrangement which will insure the certain passage of the cartridges, without catching, sticking or clogging, from a gravity feed into the gun.

To this end the invention resides in a feed plate, that can be quickly inserted into or removed from the hopper of the gun, having a groove for receiving the heads of the cartridges, and vibrating slides to prevent the cartridges from catching and holding in the groove so that they will rapidly slide into the gun, with a device for reciprocating the slides, as more particularly hereinafter described and pointed out in the claims.

Referring to the accompanying drawings:—Figure 1 is a plan view of a Gatling gun provided with the improved feed. Fig. 2 is an enlarged vertical transverse section through the hopper and gun just back of the feed plate. Fig. 3 is a front view of the feed plate. Fig. 4 is a vertical section of the same. Fig. 5 is a detail cross-section on planes *a*, *b*, and *c*; and Fig. 6 is a detail view of one of the slides.

In the views 1 indicates the frame of a Gatling gun of ordinary form and construction, having the usual breech casing 2, group of rotary barrels 3, and crank 4 for revolving the barrels. At the rear of the barrels just forward of the breech casing, is the customary hopper 5 which being hinged to one side of the frame and provided with a catch at the other side, may be lifted up to uncover the breech of the barrels as in the ordinary Gatling gun. This hopper has an opening through the top for the passage of cartridges, and at the rear of this opening is a rectangular pocket 6 adapted to receive and hold the lower end of the feed. This feed consists of a plate 7 having a flange along one edge for about its entire length, and a flange at the opposite edge for only a por-

tion of its length. These flanges form a groove to receive the heads of the cartridges which while in the original package are put up to the upper end of the long flange against the plate and drawn downward until the heads pass into the groove between the flanges and are there held so that the package can be removed and thrown away. Both of these flanges in the form shown are mortised, preferably with an under cut on the inside, and in these mortises are placed slides 8 that are free to be reciprocated vertically. Connected with these slides by pins 9 is a lever 10 having downward projecting arms, pivoted to the lower end of the plate in such manner that when the feed is thrust into the pocket in the hopper and there held by means of a set-screw 11, the ends of this lever will come in contact with the periphery of a portion of the lock-carrying cylinder 12 that is keyed to the central shaft of the gun. The periphery of this cylinder, common to all the prior Gatling guns, is indented, serrated or fluted, so that when it is rotated in firing the gun, the lever will be oscillated. This oscillation of the lever causes the slides to which it is connected, to be alternately reciprocated, and as the slides form the side walls of the groove which holds the heads of the cartridges, any tendency of those heads to clog, catch or stick in the grooves is obviated, and any dust or dirt which collects in the groove is shaken out by this alternate reciprocation or vibration of the slides forming the side walls of the groove and at the same time the heads of the cartridges are shaken down, so that by this simple, cheap and convenient means cartridges may be held merely by the heads, and fed by gravity into the gun with great rapidity without any danger of catching, sticking, or clogging so as to interfere with the rapid firing of the gun.

Of course but one side of the groove may be made with a vibrating slide, if desired, while the construction is equally applicable to the ordinary gravity feed having the double groove for reciprocating two rows of cartridges instead of one.

I claim as my invention—

1. A feed for machine guns, consisting of a grooved plate for receiving cartridges set into an opening in a gun, and a slide held by the plate adjacent to the cartridge groove and re-

reciprocated longitudinally by the revolution of the gun when in action, substantially as specified.

2. A feed for machine guns, consisting of a
5 grooved plate for receiving cartridges set into an opening in a gun, and slides supported by the plate on each side of the cartridge groove reciprocated longitudinally by the revolution of the gun when in action, substantially as
10 specified.

3. A feed for machine guns, consisting of a grooved plate for receiving cartridges, a slide supported by the plate adjacent to the cartridge groove, and a lever connected with the

slide and reciprocated longitudinally by the
15 revolution of the gun when in action, substantially as specified.

4. A feed for machine guns, consisting of a grooved plate for receiving cartridges, slides
20 held in mortises in the side walls of the cartridge groove, a lever pivoted to the plate and connected with the slides and reciprocated by the revolution of the gun when in action, substantially as specified.

RICHARD J. GATLING.

Witnesses:

HARRY R. WILLIAMS,
CLARENCE E. BUCKLAND.