

(No Model.)

P. MAUSER.  
CARTRIDGE STOP FOR MAGAZINE GUNS.

No. 476,290.

Patented June 7, 1892.

FIG. 1.

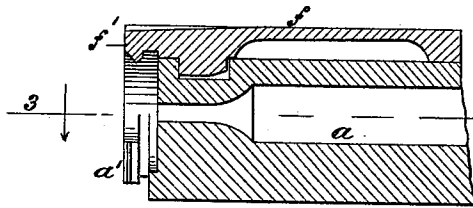


FIG. 2.

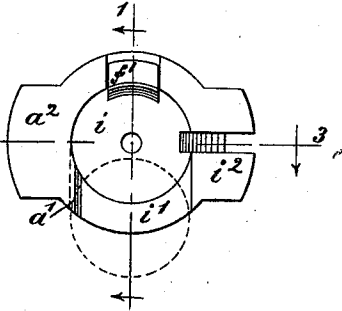


FIG. 3.

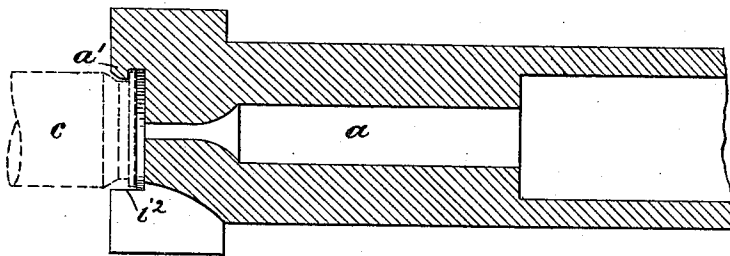


FIG. 4.

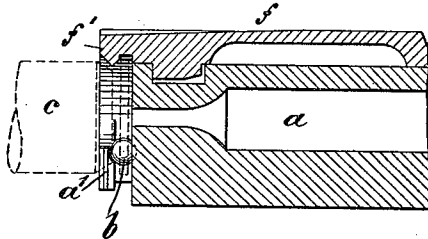
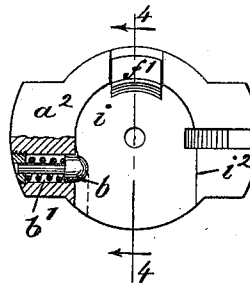


FIG. 5.



WITNESSES:

*John Decker*  
*Fred White*

INVENTOR:

*Paul Mauser,*  
By his Attorneys,  
*Arthur C. Fraser & Co.*

# UNITED STATES PATENT OFFICE.

PAUL MAUSER, OF OBERNDORF-ON-THE-NECKAR, GERMANY, ASSIGNOR TO  
THE WAFFENFABRIK MAUSER, OF SAME PLACE.

## CARTRIDGE-STOP FOR MAGAZINE-GUNS.

SPECIFICATION forming part of Letters Patent No. 476,290, dated June 7, 1892.

Application filed January 28, 1891. Serial No. 379,475. (No model.) Patented in Germany September 15, 1889, No. 51,241; in Belgium September 30, 1889, No. 87,772; in England November 12, 1889, No. 18,014, and October 31, 1890, No. 17,460; in Italy December 10, 1889, No. 26,450/137; in Switzerland December 8, 1890, No. 3,193, and in Austria-Hungary March 18, 1891, No. 54,670 and No. 8,154.

*To all whom it may concern:*

Be it known that I, PAUL MAUSER, a subject of the Emperor of Germany, residing at Obendorf-on-the-Neckar, in the Kingdom of  
5 Würtemberg, Empire of Germany, have invented a new and useful Cartridge-Catcher for Breech-Loading Bolt-Guns with Magazines Beneath the Breech, of which the following is a specification.

10 This invention is the subject-matter of Letters Patent in Germany, No. 51,241, dated September 15, 1889, and patent of addition thereto, No. 56,499, dated November 19, 1890; in Austria-Hungary, No. 54,670 and No. 3,154.  
15 dated March 18, 1891; in England, No. 18,014, dated November 12, 1889, and No. 17,460, dated October 31, 1890; in Italy, No. 26,450/137, dated December 10, 1889, and patent of addition thereto, No. 28,677/242, dated December 18, 1890; in Belgium, No. 87,772, dated September 30, 1889, and in Switzerland, No. 3,193, dated December 8, 1890.

The object of my invention is to avoid by a simple device those obstructions to loading  
25 which arise when two cartridges are at the same time in the loading-space of the breech of breech-loading guns, generally called "bolt-guns."

The "Mauser" repeating-gun, in which the  
30 cartridges rise by a spring from the magazine beneath the breech into the reach of the bolt, is of this class, and I will describe and illustrate my invention as applied to such guns.

35 Although the invention is intended specially for the Mauser repeating-guns, it may be used advantageously in Mauser single-loaders, and also in bolt-guns of other systems, with such slight modifications as any  
40 locksmith is accustomed to make in fitting.

In the accompanying drawings, Figure 1 is a vertical axial section, cut on the line 1 1 in Fig. 2, of the forward end of the bolt of a breech-loading gun, showing my invention  
45 applied thereto; Fig. 2, a front elevation thereof; Fig. 3, a horizontal axial section thereof, cut on the line 3 3 in Figs. 1 and 2. Fig. 4 is a vertical axial section similar to Fig.

1, but showing a modified form of my invention; and Fig. 5, a front view thereof, partly  
50 in section.

Referring to the accompanying drawings, I will now describe the preferred form of my invention.

Let *a* indicate the bolt, which slides longitudinally in the breech-case of a gun, inserting or extracting the cartridge *c* from the gun-barrel; *a*<sup>2</sup>, the recoil-lugs thereof, by which the bolt is locked in the firing position; *i*, the  
55 recess in the forward end of the bolt for the base of the cartridge; *f*, the cartridge-extractor, and *f'* its claw. The cartridge *c* is taken by the bolt *a* (which may be of any usual construction) from the magazine of the  
60 gun (or otherwise, as desired) and carried in the recess *i* to the barrel during the forward movement of the bolt *a*. After firing the bolt  
65 withdraws, by the claw *f'*, the cartridge, and it is expelled, all according to well-known methods.

70 My invention aims to avoid the condition which would arise if the uppermost cartridge of the magazine is pushed by the bolt *a* only partially into the barrel and the bolt *a* drawn  
75 back prior to its being brought to a fully-closed position, in which case the cartridge cannot be drawn back, as it has not been seized by the extractor-claw *f'*, and it remains in its partially-advanced position. The next  
80 cartridge then rises in front of the bolt when it is fully drawn back, and will be wedged forward, whereby discharging and further loading of the gun is prevented until the ob-  
85 struction is removed by hand. To avoid such accidents, the front end of the bolt *a* or of the bolt-head, if such is used, is, according to the present invention, altered in the following manner: That portion of the rim of the  
90 front recess *i* of the bolt *a* at the side where it receives the cartridge is cut away nearly to the ground of the recess *i*, making a groove  
95 *i'* wide enough to permit the passage of the base of a cartridge, and one of the parallel sides *a'* of this groove *i'* is so shaped that it forms a projection which can enter into

the annular groove in front of the cartridge-bottom or of the base of the cartridge. The other side  $i^2$  of the groove  $i'$  may be shaped similarly or remain smooth, as shown. When the bolt  $a$  is fully drawn back, the rising cartridge  $c$  will slip with its back end into the groove  $i'$ , the side or projection  $a'$  taking into the annular groove of the cartridge or in front of its base or projecting rim in case it has no annular groove. Thus the cartridge  $c$  is coupled to the bolt  $a$ . It will thus be understood that the bolt  $a$  will carry back with it, because of its projection  $a'$ , the cartridge  $c$ , out of any position prior to its being fully closed, after the base of the cartridge  $c$  comes entirely into the recess  $i$  and the extractor-claw  $f'$  normally into the annular groove of the cartridge  $c$ . The remaining portion of the rim in the groove  $i'$  constitutes a provision which supports the bottom of the cartridge  $c$  in such way as to prevent its slipping down and escaping from the claw  $f'$  during the receding motion of the bolt  $a$ .

My invention may be variously modified without departing from its essential features, as will be apparent to those skilled in the art. One such modification is illustrated in Figs. 4 and 5, in which the bottom of the groove  $i'$  may be made flush with the bottom of the recess  $i$ , as is shown in the form illustrated in Figs. 4 and 5, in which construction the rising cartridge  $c$  is guided by the projection  $a'$  directly under the claw  $f'$  of the extractor  $f$ . The projection  $a'$  in this case extends out farther, and the cartridge  $c$  is prevented from slipping down by the head  $b$  of a spring-catch arranged beneath the center of the recess  $i$  in a boring of the recoil projection  $a^2$  parallel to the bottom of the recess  $i$  and actuated by a spiral spring  $b'$ . The head  $b$  yields to the rising cartridge  $c$ , but prevents by its pressure the cartridge from automatically leaving its normal position. It will thus be seen that by this invention two cartridges cannot be at the same time in front of the bolt  $a$ , and that therefore an obstruction of this kind cannot happen to prevent loading.

What I claim is, in cartridge-catchers for breech-loading bolt-guns, the following-defined novel features and combinations, substantially as hereinbefore set forth, namely:

1. The combination, with a breech-loading bolt-gun, of a sliding bolt therefor having an extractor and constructed with a recess for

receiving the base of a cartridge in its front end, a groove through the wall of said recess through which the cartridge may be slid into said recess, and a projection on said bolt constructed to engage with the lower portion of the cartridge and thereby to resist the escape of the cartridge when within said recess and engaged by said extractor.

2. The combination, with a breech-loading bolt-gun, of a sliding bolt therefor having an extractor and constructed with a recess for receiving the base of a cartridge in its front end, a groove through the wall of said recess through which the cartridge may be slid into said recess, said groove having a projecting portion engaging the base of the cartridge during its passage therethrough, and a projection on said bolt constructed to engage with the lower portion of the cartridge for preventing the escape of the cartridge through said groove.

3. The combination, with a breech-loading bolt-gun, of a sliding bolt therefor having an extractor and constructed with a recess for receiving the base of a cartridge in its front end, and a groove through the wall of said recess through which the cartridge may be slid into said recess, said groove having a projecting portion engaging the base of the cartridge during its passage therethrough, whereby while in said groove the cartridge is coupled to the bolt.

4. In a cartridge-catcher for breech-loading bolt-guns, a bolt  $a$ , having in its front end a recess  $i$ , and a groove  $i'$ , the bottom of which projects beyond that of the recess  $i$ , and one of the parallel sides of which forms a projecting ridge  $a'$  corresponding to the base of the cartridge, substantially as and for the purpose set forth.

5. In a cartridge-catcher for breech-loading bolt-guns, a bolt  $a$ , having in its front end a recess  $i$ , and a groove  $i'$ , one of the parallel sides of which forms a projecting ridge  $a'$  corresponding to the base of the cartridge, in combination with a spring-catch  $b$ , substantially as and for the purpose set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

PAUL MAUSER.

Witnesses:

CARL F. BURCHARDT,  
OTTO WILHELM.