

J. REIN & J. STOCK.
Bullets.

No. 143,419.

Patented Oct. 7, 1873.

Fig. 1.



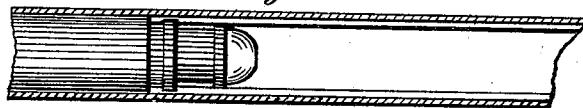
Fig. 4.



Fig. 2.



Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

JOHN REIN AND JOHN STOCK, OF NEW YORK, N. Y.

IMPROVEMENT IN BULLETS.

Specification forming part of Letters Patent No. **143,419**, dated October 7, 1873; application filed May 28, 1873.

To all whom it may concern:

Be it known that we, JOHN REIN and JOHN STOCK, both of the city of New York, in the State of New York, have invented a new and Improved Bullet, of which the following is a specification:

In the use of the very long projectile now generally adopted for breech-loading fire-arms it is found that there is very great friction when the same is constructed in the usual manner, either with annular grooves and straight or tapering sides, or with a hollow base for the explosive gases to expand into the rifled grooves.

Our invention has for its objects to obviate, as far as possible, the above defect, and to provide a bullet having all of the advantages of the best now known, while having the least possible friction. With our invention the bore of the gun and the rifled grooves are constantly scraped out by each successive shot and thereby kept unusually clean; and to this end our invention consists in the construction of the bullet hereinafter more fully described.

Figure 1 represents a side view; Fig. 2, an end view; Fig. 3, a section of a gun-barrel, showing our bullet placed therein; and Fig. 4, a longitudinal section of the bullet.

In the accompanying drawing, which represents a bullet embodying our invention, A represents the bullet, and B a part of the metallic cartridge-case. This bullet is made with three rings or circular projections. The first ring, *a*, is arranged close behind the tapering portion of the bullet, and is of the exact diameter as the bore of the gun or rifle. The

two other rings, *n n*, are situated at the after end of the bullet, with a deep recess or groove, *c*, between the same, and are a little larger in diameter than the bore of the gun. The space *m* between the ring *a* and middle ring *n*, is made a little smaller than the bore of the gun. The space *m* and the recess or groove *c* are filled with a suitable lubricant. The ring *a* will act as a guide for the bullet in its passage through the gun, while the rings *n n* will be forced into the spiral channels, and with their sharp edges clean the inside of the barrel, as well as of the rifled grooves, while the lubricant in the space *m* and in the recess *c* will grease the same, and thus facilitate the passage of the bullet. The metallic cartridge-case B is fastened to the after ring *n* of the bullet in the usual manner.

We disclaim a tapering bullet provided with circumferential grooves near its base.

What we claim as our invention, and desire to secure by Letters Patent, is—

The within-described bullet, provided with an annular outward-projecting ring at its front end, of the size of the bore of the gun, and with two outward-projecting rings near its rear end, one of which is of the size of the one-half of the depth of the rifled groove, and the other of the size of the full depth of the groove of the gun, as set forth.

JOHN REIN.
JOHN STOCK.

Witnesses:

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