

(No Model.)

W. MASON.  
MAGAZINE FOR FIRE ARMS.

No. 285,284.

Patented Sept. 18, 1883.

Fig. 1

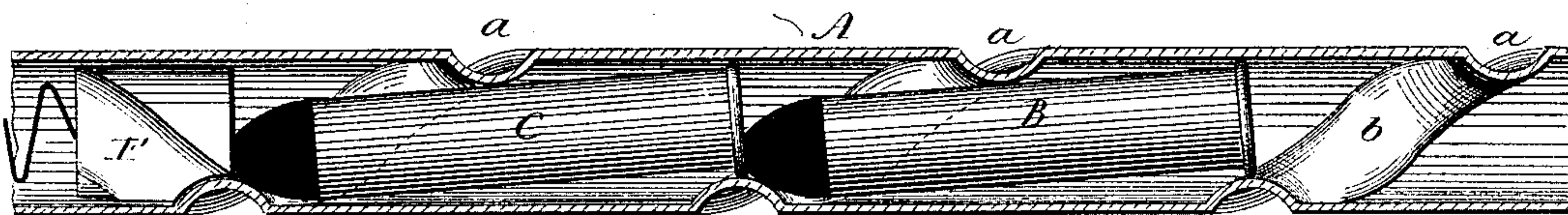


Fig. 2

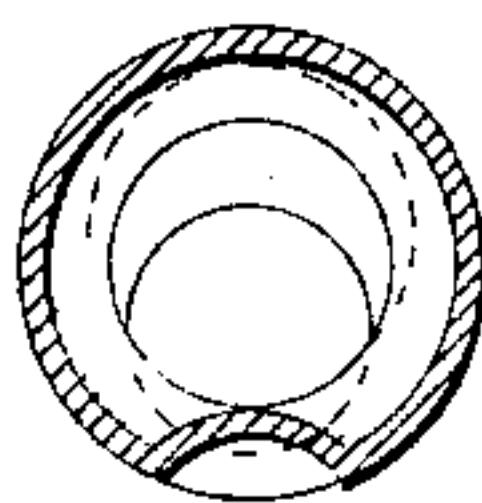


Fig. 3

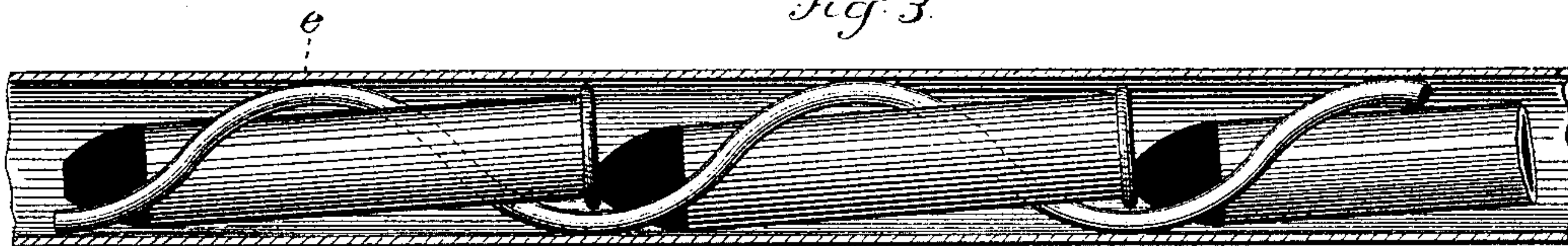


Fig. 4

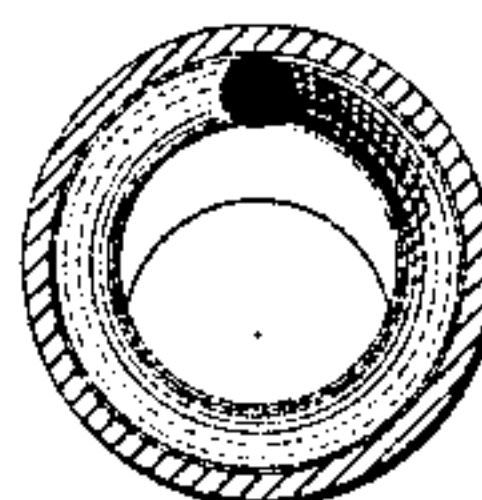


Fig. 5

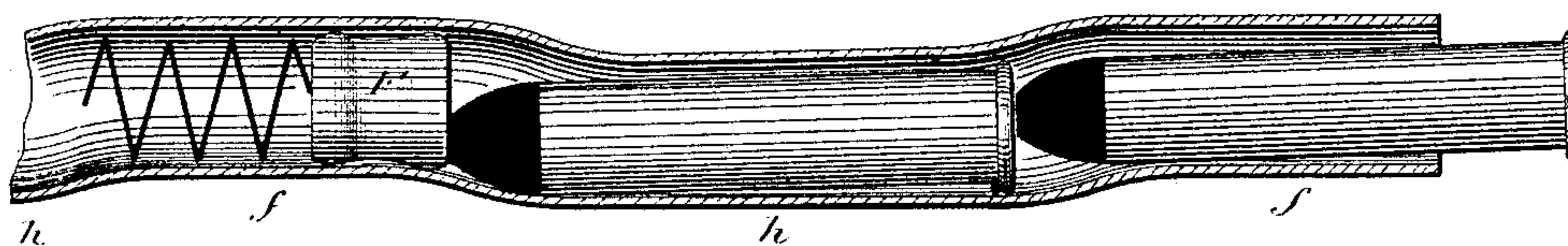
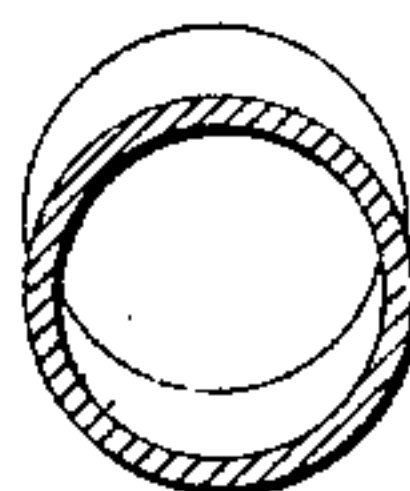


Fig. 6



Witnesses.  
*J. H. Shumway*  
*Joe D. Earle*

*Wm. Mason*  
Inventor.  
By *Atty.*  
*Wm. D. Earle*



# UNITED STATES PATENT OFFICE.

WILLIAM MASON, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE  
WINCHESTER REPEATING ARMS COMPANY, OF SAME PLACE.

## MAGAZINE FOR FIRE-ARMS.

SPECIFICATION forming part of Letters Patent No. 285,284, dated September 18, 1883.

Application filed March 7, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM MASON, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Magazine Fire-Arms; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a longitudinal section of the magazine tube, showing cartridges therein; Fig. 2, a transverse section of the same; Fig. 3, a longitudinal section, and Fig. 4 a transverse section, of a modification of the same; Fig. 5 a longitudinal section, and Fig. 6 a transverse section, of a modification of the same.

This invention relates to an improvement in magazine fire-arms, with special reference to the magazine itself.

In the usual straight tubular construction of the magazine, when several center-fire cartridges are arranged therein, the point of one in contact with the head of the next, unless there be some provision to prevent forcible contact between adjacent cartridges, they are liable to explosion within the magazine by any sudden shock which will bring the primer of one of the cartridges of the column forcibly upon the point of the next in rear. Various devices have been resorted to to prevent this contact, and usually some mechanism of a latch-like character has been arranged, whereby each cartridge would be held and supported independent of the others, and so that there can be no forcible contact between adjacent cartridges, but such mechanism is liable to derangement, so much so as to be impracticable.

The object of my invention is to construct the magazine with an internal shape, which, while it will permit the cartridge to move freely within the magazine under the pressure of the magazine-spring, will prevent the contact of the primer of one with the head of the next when the cartridges are standing in the magazine; and the invention consists in a magazine constructed with internal irregulari-

ties longitudinally, which irregularities turn, hold, and support the cartridges therein each out of line with the next, and as more fully hereinafter described.

The best construction of magazine, whereby the object of my invention is accomplished, is illustrated in Fig. 1. The magazine-tube A is of a little larger internal diameter than the head end of the cartridge. Upon the outer surface of the tube I impress or form a spiral groove, *a*, which forces the metal inward to form a corresponding internal spiral rib, *b*. The pitch of this spiral rib—that is, from the center of one convolution to the center of the next—is substantially equal to the extreme length of the cartridges to be arranged therein. The internal projection of the rib is such as to make the distance between the rib and the diametrically-opposite points slightly larger than the flange of the cartridge, so that the flange may freely pass over the rib. The starting-point of this rib at the breech end, as shown, is preferably such that the heads of the several cartridges B C will lie upon the rib, while the points will rest nearly upon the internal surface of the tube, as seen in Fig. 1. This position raises the heads and drops the points, so that the cartridges stand so far out of axial line that the primer of one cannot come in contact with the point of the next. The pitch of the spiral rib being substantially that of the length of the cartridges, the cartridges are readily forced by the action of the magazine-spring rearward, they following the spiral rib in their rear movement until they pass from the magazine onto the carrier. This rib may be rolled in the tube after the tube has been formed or rolled in the strip preparatory to forming the tube.

Instead of rolling the spiral rib into the magazine, it may be formed by a wire bent into helical shape and of a diameter corresponding to the interior of the tube, as seen in Fig. 3, *c* representing the wire rib. The pitch of this rib is substantially the same as that in the first instance—that is to say, so that the heads and points are held and supported out of axial line, and prevented from possible contact while standing in the magazine.

Instead of forming the spiral or helical rib in the magazine, the tube may be bent at points corresponding to the length of the cartridge, as seen in Fig. 5—that is to say, so that alternate sections *f* will stand in axial line with each other, while the intermediate sections, *h*, will be out of line with the sections *f*, but in axial line with each other, the sections being in length substantially that of the cartridges, and so that the cartridges lying in alternate sections will stand out of axial line with those in the intermediate sections. The follower *F* in the magazine readily follows the irregularities in the magazine, whether it be a spiral rib or bent tube.

From the foregoing it will be understood that I do not wish to confine myself to any precise method of making the internal irregularities in the magazine, it only being essential to my invention that the said irregular surface of the interior of the magazine shall be

such that the cartridges therein will be held and supported out of axial line with each other.

What I do claim as my invention is—

1. A magazine for fire-arms, constructed with irregularities or internal projections upon its inside distant from each other longitudinally substantially the extreme length of the cartridges to be arranged therein, substantially as described, and whereby successive cartridges standing therein will be held and supported out of axial line with each other, substantially as described.

2. A magazine for fire-arms, having a spiral rib upon its inner surface, the pitch of said rib corresponding substantially to the length of the cartridges to be contained therein, substantially as described.

WILLIAM MASON.

Witnesses:

DANIEL H. VEADER,  
L. H. DANIELS.