UNITED STATES PATENT OFFICE.

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MAGAZINE-BARREL FOR AIR-GUNS.

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To all whom it may concern:

Be it known that I, CHARLES F. LEEVER, a citizen of the United States of America, residing at Plymouth, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Magazine-Barrels for Air-Guns, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to air guns and has particular reference to the construction of the magazine from which the shot are automatically fed into the shot barrel.

In the drawings:—

Figure 1 is a perspective view of the shooting barrel and magazine detached;

Figs. 2, 3 and 4 are sections on line x—x, y—y and z—z Fig. 1;

Fig. 5 is a longitudinal section through the magazine and barrel in place in the gun; and

Fig. 6 is a view of a portion of Fig. 5 showing the manner of engaging the spring for the follower.

A is the outer or false barrel of the gun. B is the shooting barrel which detachably engages the barrel A and is provided with the screwthreaded nipple C for engaging the threaded abutment D, and the end cap E for engaging the outer end of the barrel A. F is the magazine which is formed of a channel strip having bent lugs G for embracing the barrel B and forming the securing means thereto. H is a follower which slidably engages the channel strip F, and has a laterally-extending lug H' projecting out through the slot between said channel and the barrel to form an actuating handle for retracting the follower. I is a spring for pressing the follower forward and which bears thereagainst at one end, while its opposite end abuts against the cap E.

In the construction of magazine barrels of the type above described, certain difficulties have been encountered, such for instance as the tendency for the spring of the follower to escape through the opening for the introduction of shot into the magazine. This is due to the fact that as heretofore constructed the shot orifice is formed as a notch in one side of the channel, and frequently the follower spring has escaped through this opening. This defect I have avoided by forming the entrance orifice for the shot in a lug J formed integral with one side of the channel and bent downward to contact with the barrel B. In this lug is a small aperture K which is but slightly larger than the diameter of the shot and which is too small for the escape of the spring. Another feature of my invention is the means employed for introducing the follower spring into the magazine channel. It has been found difficult to introduce the spring into the magazine and valuable time is often wasted in assembling the parts. To facilitate the operation of assembly, I engage with the forward end of the spring a nose piece L having a head L' forming a 70° shoulder for the end convolution of the spring. This permits of inserting the end of the spring readily through aperture, preferably formed by striking out a tongue M in the channel strip F, and after the spring is fully inserted this tongue M is bent back to close the aperture and to force the end of the spring to abut against the cap E.

In use, the follower H may be drawn backward to compress the spring I until the aperture K is uncovered, permitting filling the channel with shot. The follower is then released, after which the spring will place a slight tension thereon which will cause the forward feeding of the shot column after each shot is fired. The end shot of the column is forced through a lateral opening O in the barrel B by an oblique portion P at the end of the channel.

What I claim as my invention is:

1. The combination with a shooting barrel, of a channel member arranged parallel thereto and forming a shot-holding magazine having a lateral inlet at one end into the barrel, a spring-pressed follower in said channel, and a lug at one side of the channel apertured to form a fill opening for the magazine.

2. The combination with a shooting barrel, of a channel strip arranged parallel and secured thereto, forming a shot-holding magazine laterally communicating at one end with the barrel, a spring-pressed follower in said channel, and a tongue in one portion of said channel strip bendable to open and to subsequently close an entrance orifice for introducing said spring into said channel.

3. The combination with a shooting bar-
rel, of a channel strip arranged parallel and secured thereto, and forming a shot-holding magazine laterally communicating at one end with the barrel, a bendable tongue adjacent to the opposite end of the channel strip, and a follower spring insertible into said channel when said tongue is bent outward and retained by the bending inward of said tongue.

4. The combination with a shooting barrel, of a channel strip arranged parallel and secured thereto, forming a shot-holding magazine laterally communicating at one end with the barrel, a follower, a spring for yieldably pressing said follower, and a shouldered nose piece engaging the end of said spring for facilitating the introduction of the same into said channel.

5. The combination with a shooting barrel, of a channel strip arranged parallel and secured thereto, forming a shot-holding magazine laterally communicating at one end with the barrel, a bendable tongue adjacent to the opposite end of said channel strip, a follower spring insertible through an opening disclosed by the barrel opening of said tongue and retained from displacement when said tongue is bent inward, and a shouldered nose piece at the end of said follower spring for facilitating the introduction of the same.

6. The combination with a shooting barrel, of a channel member arranged substantially parallel thereto and forming a shot-holding magazine having an inlet into said barrel, and a lug formed integral with one side of said channel member, provided with an aperture but slightly larger than the diameter of the shot.

In testimony whereof I affix my signature.

CHARLES F. LEFEVER.

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