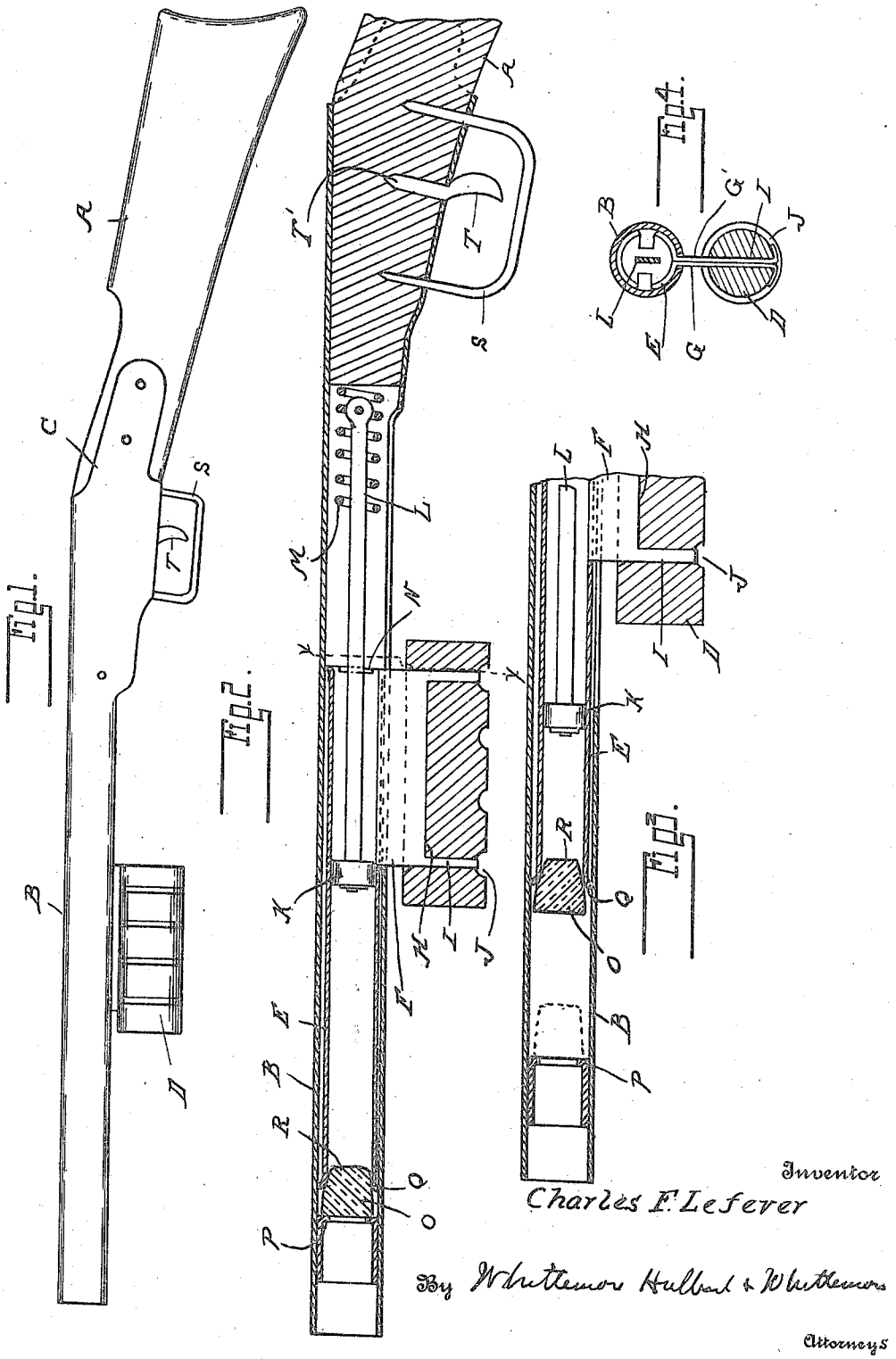
C. F. LEFEVER.

POP GUN.

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1,248,507.

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POP-GUN.

1,248,507. Specification of Letters Patent. Patented Dec. 4, 1917.

Application filed October 25, 1916. Serial No. 127,553.

To all whom it may concern:

Be it known that I, CHARLES F. LEFEVER, 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 Pop-Guns, of which the following is a specification, reference being had therein to the accompanying drawings.

It is one of the objects of the invention to obtain a construction of gun in which a loud report may be produced without the discharge of any projectile; further to provide mechanism for repeated operation; and still further to obtain a construction which closely simulates a fire-arm of the pump gun type. With these and other objects in view the invention comprises various features of construction as hereinafter set forth.

In the drawings:

Figure 1 is a side elevation of the gun;

Fig. 2 is a longitudinal section thereof;

Fig. 3 is a similar section showing the members in a different position of adjustment;

Fig. 4 is a section on line *x*—*x* Fig. 2.

A is the stock and B the barrel of the gun, the latter being preferably formed from a sheet-metal blank, with a frame portion C integral therewith and forming the attachment to the stock. D is a handle arranged below the barrel and slidable in relation thereto, having the appearance of the handle used in a pump gun.

To produce the report a cork or other tight-fitting plug is inserted in an air cylinder and upon compression of the air therein is ejected. Both cork and cylinder are concealed within the barrel B, and by reciprocating the handle D the cork is first engaged with the cylinder and the air is then compressed. Preferably the cylinder E is slidable within the barrel B and is attached to the handle by a strap F preferably integral with the cylinder and projecting downward through a slot in the barrel. The strap is provided with the parallel flanges G and G′, which engage a longitudinal slit H in the handle and have prongs I passing through bores in the handle and then clenched at the bottom thereof. The clenches may be arranged in grooves J so as to be concealed and to avoid any roughness on the handle.

Within the barrel E is a piston K having a shank L anchored at its rear end to the barrel B. M is a buffer spring sleeved upon the shank within the barrel, its rear end abutting against the stock and its forward end against the cylinder when retracted, which latter is provided with inwardly-extending integral ears N forming a bearing for the spring. O is the cork or stopper, which is of a size to loosely fit the barrel B and to tightly engage the end of the cylinder E. P is an abutment in the forward portion of the barrel, which arrests forward movement of the cork but which is centrally apertured for the escape of air. In order that the cork may have a clearance within the barrel B for the escape of air therearound and at the same time tightly fit the cylinder, the latter is formed with a flaring mouth Q, while the cork is formed with a rounded inner end R for engaging said flaring mouth. There is also sufficient taper in the sides of the cork to compress the same when inserted and to produce the desired frictional resistance to its expulsion from the cylinder.

With the construction as thus far described in operation, the handle D is moved outward and the cylinder E is forced against the cork O while the latter is bearing against the abutment P. This will cause the cork to tightly engage the cylinder, so that when the latter is drawn rearward by a movement of the handle I the cork will be carried therewith. When the handle D is drawn quickly rearward the piston K will compress the air in the cylinder E until sufficient pressure is attained to expel the cork, whereupon a sharp report is produced. The cork is driven forward but the abutment P limits its movement, while the return movement of the handle and cylinder will cause a reëngagement of the cork with the cylinder. Thus the gun may be operated successively as frequently as desired.

In order to increase the semblance to a real gun a false trigger is provided, which, however, performs no mechanical function. A simple and inexpensive construction of trigger and guard may be formed by providing the same with shanks which are inserted in bores in the stock A. Thus, as shown, the guard S is a U-shaped strip of metal, the prongs of which are inserted in

bores in the stock while the trigger T is provided with a shank T′ inserted in a bore between the prongs of the guard.

What I claim as my invention is:

1. In a gun, the combination with a barrel, of a cylinder, piston and stopper completely concealed and permanently retained within said barrel, and means operable from outside the barrel for alternately engaging said stopper with said cylinder and compressing the air to eject the stopper.

2. In a gun, the combination with a barrel, of an air-compression cylinder and a stopper therefor completely concealed and permanently retained within said barrel, and a handle slidable longitudinally of the barrel for actuating said air-compression cylinder, to engage the same with said stopper and to eject the stopper by compressed air.

3. In a gun, the combination with a barrel, of a cylinder within said barrel slidable longitudinally thereof, a piston engaging said cylinder, a stopper for said cylinder, an abutment for limiting movement of said stopper, and a handle outside of said barrel movable longitudinally thereof and connected with said cylinder, for the purpose described.

4. In a gun, the combination with a barrel, of a cylinder within said barrel of lesser diameter and provided with a flaring mouth, said cylinder being movable in opposite directions, a tapering stopper for engaging the flaring mouth of said cylinder, an abutment for said stopper, a piston within said barrel, and a handle slidable longitudinally outside of said barrel and connected with said cylinder to actuate the same in either direction.

5. In a gun, the combination with a barrel, of a cylinder slidable within said barrel, a piston for said cylinder, a shank for said piston extending rearward from said cylinder and anchored to said barrel, a buffer spring sleeved upon said shank and adapted to abut against said cylinder, a stopper for engaging said cylinder, an abutment for said stopper, holding the same in position for engagement with said cylinder when pressed forward, and a handle for retracting said cylinder to compress the air and eject said stopper.

6. In a gun, the combination with a barrel, of a member within said barrel movable longitudinally thereof, a shank on said member projecting through a slot in said barrel and comprising a flat plate and a projecting prong, and a handle for engaging said shank having a grooved periphery and a longitudinal slot, the flat plate portion of said shank engaging said slot and a prong projecting through the body of said handle and clenched in said groove.

7. In a gun, the combination with a barrel, of an air compression cylinder formed from a sheet-metal blank, having a shank portion extending through a slot in the barrel and provided with a projecting prong, and a handle for engaging said shank slotted to receive the same and bored to receive said prong, the latter being clenched to secure the handle to said shank.

8. In a gun, the combination with a barrel, of a cylinder slidable within said barrel formed of a sheet-metal blank having a portion seamed to form an air tight tube and a portion having parallel shanks projecting through a slot in the barrel and terminating in prongs, and a handle slotted to receive said parallel projections and bored for the passage of said prongs, said prongs being clenched to hold said handle in position.

In testimony whereof I affix my signature.

CHARLES F. LEFEVER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."