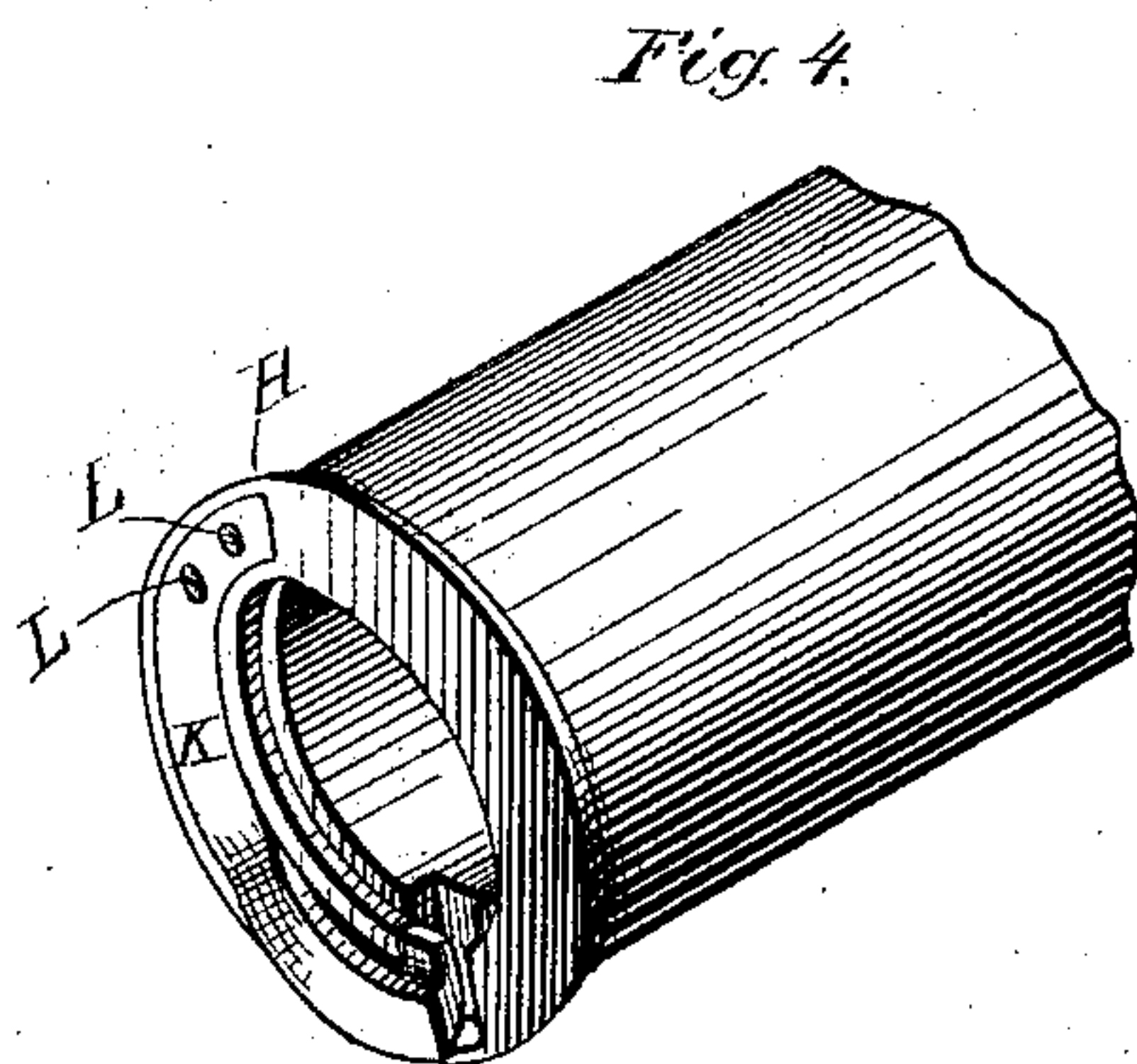
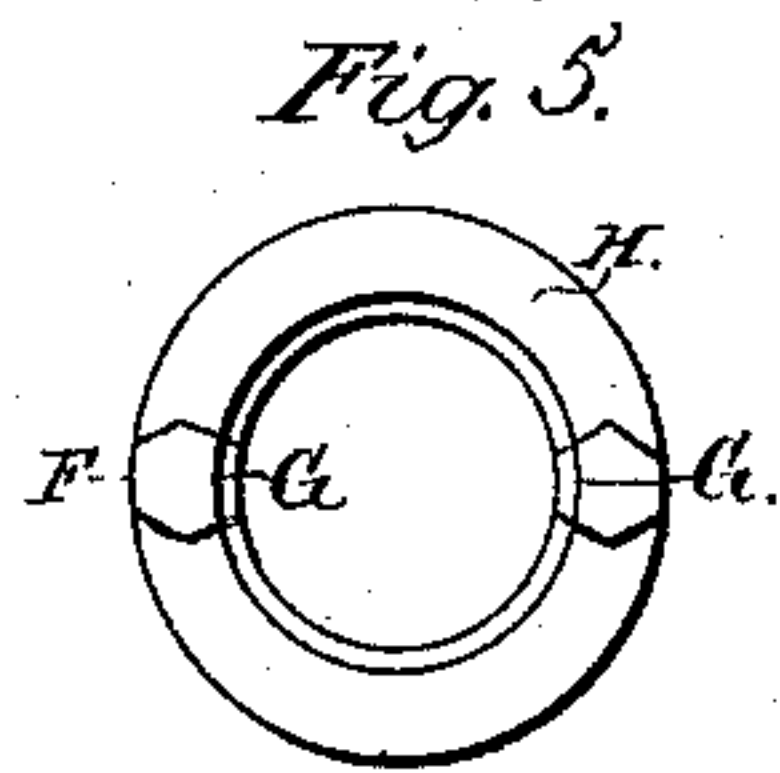
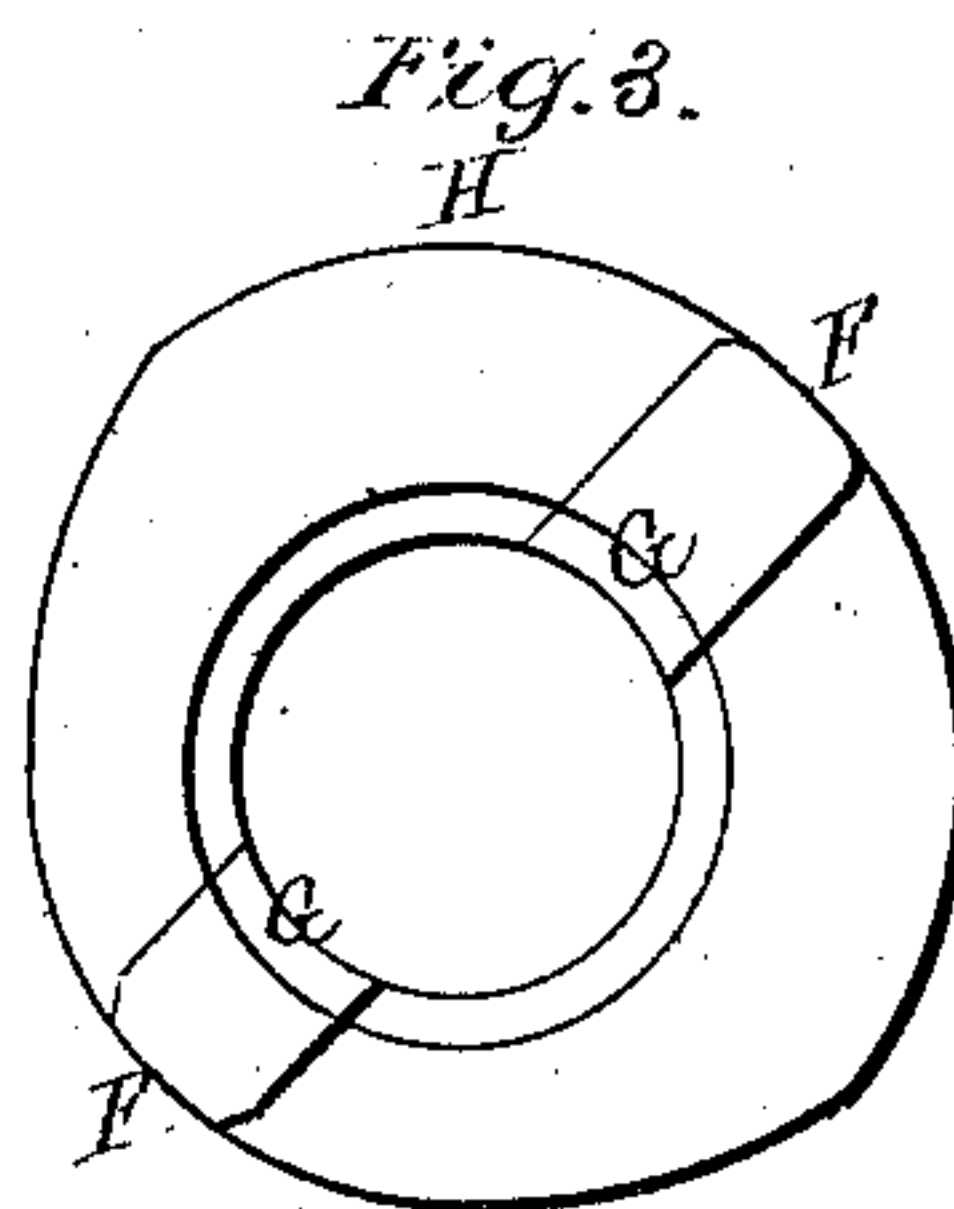
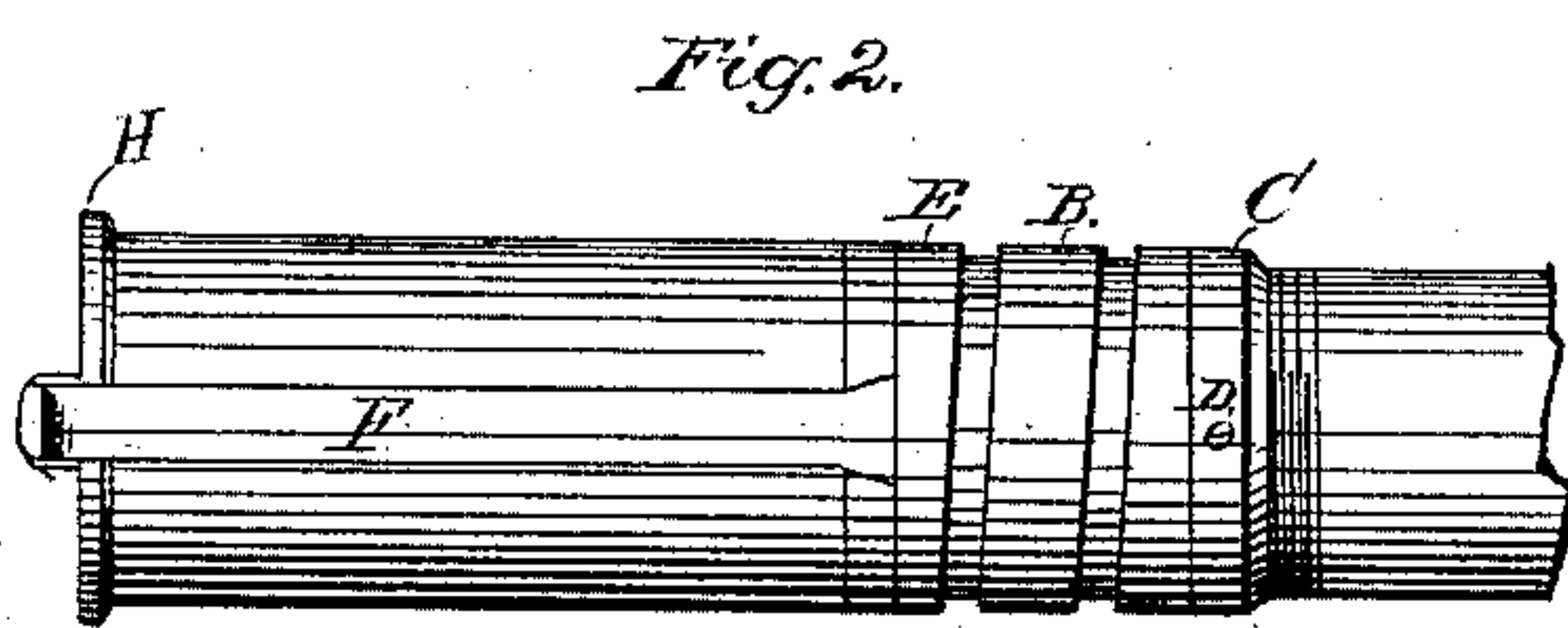
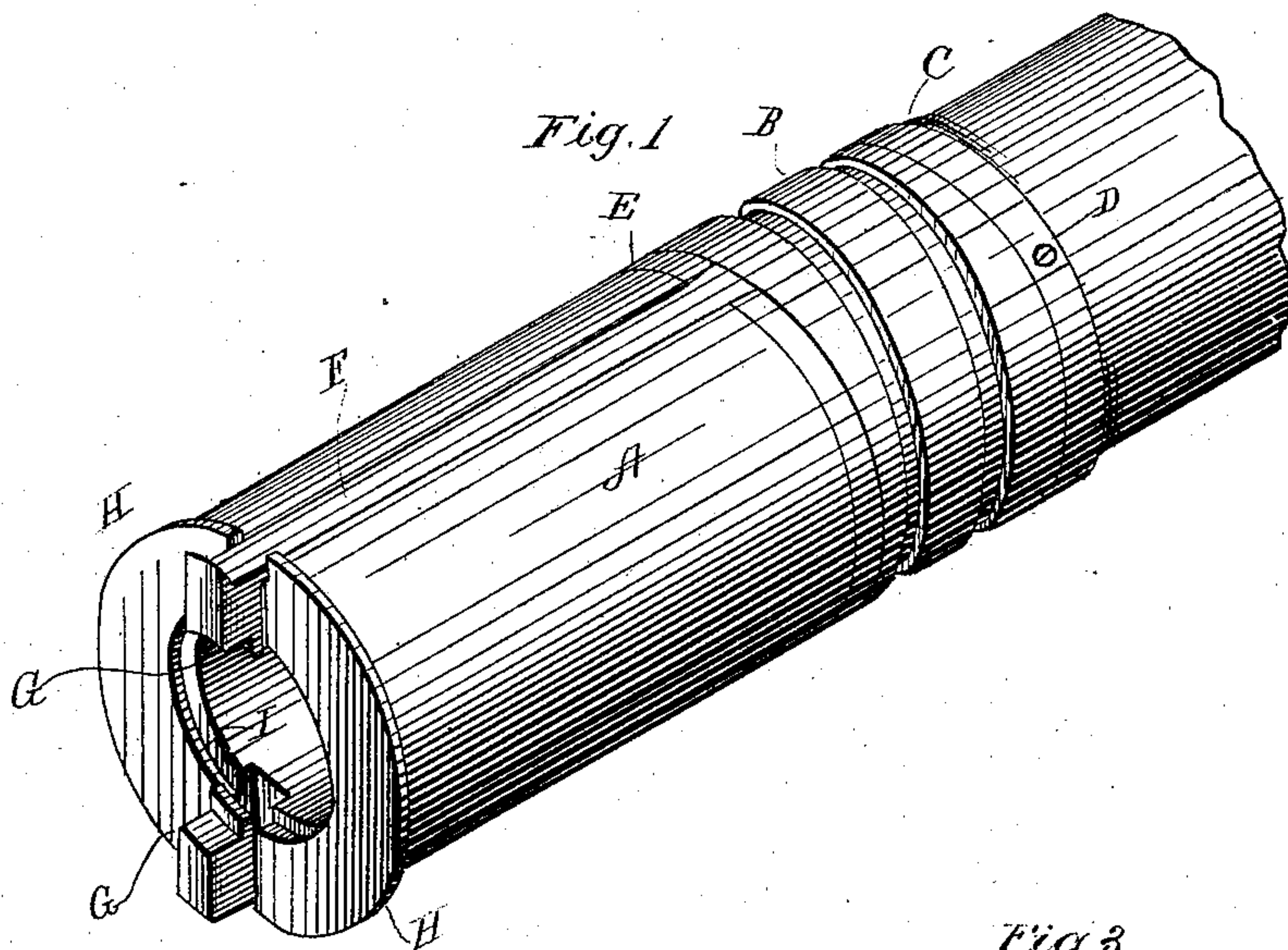


F. N. BEEBE.  
Spring Extractor for Fire Arms.

No. 230,224.

Patented July 20, 1880.



WITNESSES

*John F. C. Prentiss*  
*F. W. Smith Jr.*

INVENTOR

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*By J. M. W. Intire*

ATTORNEY.



# UNITED STATES PATENT OFFICE.

FRANK N. BEEBE, OF COLUMBUS, OHIO.

## SPRING-EXTRACTOR FOR FIRE-ARMS.

SPECIFICATION forming part of Letters Patent No. 230,224, dated July 20, 1880.

Application filed December 6, 1879.

*To all whom it may concern:*

Be it known that I, FRANK N. BEEBE, of Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Auxiliary Rifle-Barrels; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification.

My invention relates to certain improvements in auxiliary rifle-barrels for use in shot-guns. Previous to my invention auxiliary rifle-barrels have been devised for use in shot-guns; but so far as I am aware none of such barrels have ever been provided with any means independent of the gun in which they are designed for use for extracting the exploded shell.

The object of my invention is to provide an automatic extracting device directly connected with the barrel, whereby the shells are ejected sufficiently to enable the sportsman to readily remove the same when the gun is "broken" in the usual way; and with this object in view, my invention consists, broadly, of an auxiliary rifle-barrel adapted for use in a shot-gun provided at the breech end with means for automatically ejecting the exploded shells without the intervention of any mechanism connected with the shot-gun.

In order that those skilled may readily understand the construction and operation of my invention, I will proceed to describe the same, referring by letters to the accompanying drawings, in which—

Figure 1 is a perspective view of the breech end of an auxiliary barrel embracing my invention. Fig. 2 is a side elevation of the same; Fig. 3, an end view; Figs. 4 and 5 detail views, showing modifications of my invention.

Similar letters of reference indicate like parts in the several figures.

A represents an ordinary auxiliary rifle-barrel, near the rear or breech end of which an annular seat is formed for the reception of a spiral spring, B, one end of which has its bearing against an annular collar, C, secured rigidly to the barrel by an independent screw, D, and the other against one edge of a similar collar, E, to which are secured ejector-bars F F, the free ends of which are provided with seats G G, to receive the rim or flange of the

shell. It will be readily observed that the free ends of these bars F F are, by the action of the spring B, projected, and that by such movement, and the fact that the rim of the shell rests on the seats G, the shell is moved rearward. The bars F F lie in longitudinal channels cut in the sides of the barrel for that purpose. The thickness of these bars may be quite limited, and in order to secure strength the free ends may be made V-shaped on each side and fit in correspondingly-shaped channels in the flanged breech end of the barrel, as shown at Fig. 5.

At Fig. 2 I have shown the collar D as adjustably secured in place by a thread on the inside matching with a short thread on the barrel. The outside edges of the heads or free ends of the bars F are cut so as to form a continuation of the flange H of the barrel, which flange and one of the heads of one of the bars may be cut away eccentrically, as seen at Fig. 3, so that when the space between the end of the barrel of the shot-gun and the breech is limited there will be no danger of the bar F striking or catching against the breech-block.

The seats G in the bars F are slightly deeper than the rim-seat I in the end of the barrel, in order that the shell or cartridge shall be certain to rest against the seat I, and not on the seats G, when the gun is closed, and hence avoid any likelihood of the accidental discharge of the shell.

While I consider the construction described as the most desirable for neatness, the most economic, and at the same time as successfully operative, a construction is shown at Fig. 4 in which the breech end of the barrel has an annular or semicircular groove cut therein, and a C-spring, K, secured therein by screws or rivets L L, the free end of this spring being formed with a seat to receive the rim of the shell, and the spring so formed that in its normal condition, this end will be projected rearward for the obvious purpose of drawing the shell from the barrel.

Instead of making a single C-spring, I may duplicate the same, or I may provide a series of short springs. In fact, there are very many ways which I might describe, or which will readily suggest themselves to an ordinary mechanic skilled in the art to which my invention

pertains for successfully carrying out the same; and I do not wish to limit myself to the special features of construction and arrangement, the gist of my invention resting in the idea of  
5 providing the breech end of an auxiliary rifle-barrel with a cartridge-extracting device, which shall be closed up by the closing and locking of the barrels of the shot-gun, and which shall automatically operate to withdraw, or partially  
10 withdraw, the exploded shell when the barrels are tilted to reload, or to entirely withdraw the auxiliary barrel.

I am aware that auxiliary rifle-barrels designed for use in shot-guns have been pro-  
15 vided with means for ejecting the shells, which means depend upon the intervention and co-operation of the extracting devices connected

with the gun proper, and therefore I do not wish to be understood as laying claim, broadly, to any and all means of ejecting shells from 20 auxiliary rifle-barrels; but

What I claim as new, and desire to secure by Letters Patent, is—

The barrel A, having its rear end formed with a circular groove and provided with a 25 spring arranged therein, substantially as and for the purpose set forth.

Witness my hand this 5th day of December, A. D. 1879.

FRANK N. BEEBE.

Witnesses:

F. W. SMITH, Jr.,  
WM. C. MCINTIRE.