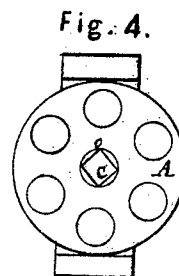
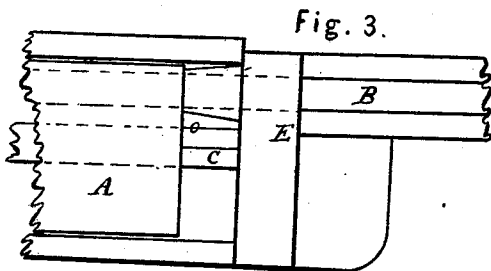
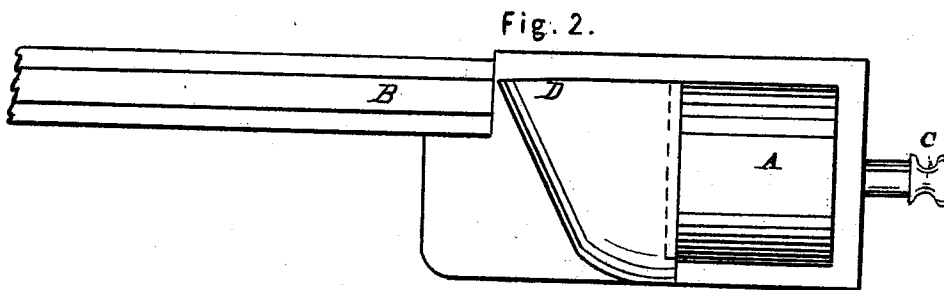
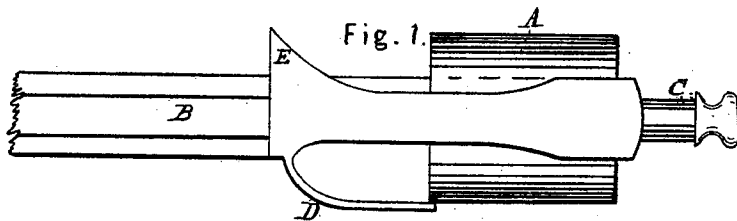


E. ALLEN.  
Revolver.

No. 21,400.

Patented Sept. 7, 1858.



# UNITED STATES PATENT OFFICE.

ETHAN ALLEN, OF WORCESTER, MASSACHUSETTS.

## IMPROVEMENT IN REVOLVING FIRE-ARMS.

Specification forming part of Letters Patent No. 21,400, dated September 7, 1858.

*To all whom it may concern:*

Be it known that I, ETHAN ALLEN, of Worcester, in the county of Worcester and State of Massachusetts, have invented certain Improvements in Repeating Fire-Arms; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which drawings—

Figure 1 represents the chambered cylinder, its case, and part of the barrel. Fig. 2 is a left-hand side view of the same. Fig. 3 is a right-hand side view of the improvements. Fig. 4 shows a vertical cross-section taken through at the front end of the cylinder.

Similar letters denote the same parts in all the figures.

My improvements relate particularly to the repeating fire arm or revolver. It always has been a great source of trouble in using arms of this description (having a revolving cylinder with one or more chambers for receiving the charges) that at the junction of the barrel B of the piece and the chambered cylinder A the gas or smoke of the charge, when fired, would escape, and part of it, being directed downward, would strike upon that portion of the center-pin C that projects beyond the front end of the cylinder, and a portion of it would be deflected toward the cylinder and forced in between the center-pin C and the sides of the hole around it, and after a little use the deposit from this gas or smoke would clog up the pin and hole, so as to prevent the cylinder from turning properly. To remedy this I form that part of the pin C that projects in front of the cylinder A of such a shape as to present a projecting angle, *o*, toward the aforesaid junction of the barrel B and cylinder, so that the gas or smoke that is directed down against this pin will be divided by this angle *o* and deflected off laterally instead of back and front, and thus prevent it from being forced into the hole around the pin C.

To prevent that portion of fire and gas that

finds its way out at the junction of barrel and cylinder, when the piece is discharged, from injuring the hand or wrist when the piece is supported by the left hand in front of the cylinder, and also to prevent any injury being done to that hand from an accidental discharge of the chambers not in range with the barrel, I form the projection D, starting from the left-hand side of the piece in front of the cylinder, curving round and extending back more or less beyond the front end of the cylinder, forming on its inside a cavity sloping upward and forward, so as to deflect in that direction the contents of any chamber that may be accidentally discharged on that side, as a like projection upon the right-hand side of the piece would interfere with the removal of the cylinder A when required, and there being no necessity for directing the contents of the chambers that may be accidentally discharged on this side upward, as the wrist is not exposed there, I have only to guard the fingers in front, which I do by making the projection E on the right-hand side of piece in front of the cylinder A. This guard or projection is sloped outward and forward, so as to direct the contents of any chamber discharged on that side in that direction. I do not mean to be understood as confining myself to any particular angle on that part of the pin, or to the precise form of the guards given; but

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

1. Constructing that part of the pin C that projects in front of the cylinder so as to present a projecting angle toward the junction of the barrel and chamber that is being discharged, for the purpose herein set forth.

2. The guards D and E, when constructed and operating as above described.

In testimony whereof I have hereunto set my hand in the presence of two witnesses.

ETHAN ALLEN.

Witnesses:

Z. E. BERRY,  
JAS. G. ARNOLD.