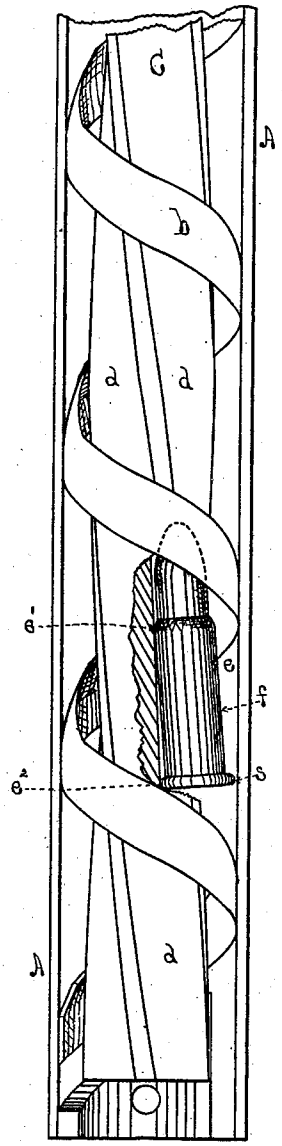
2 Sheets—Sheet 1.

G. F. EVANS.

Magazine Fire-Arm.

No. 213,555. Patented Mar. 25, 1879.

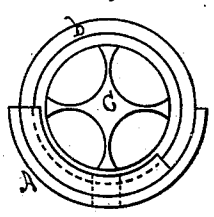
Fig. 1



Witnesses
Wm. S. Brown
George L. Reed.

Inventor
George F. Evans

Fig. 2



2 Sheets—Sheet 2.

G. F. EVANS.

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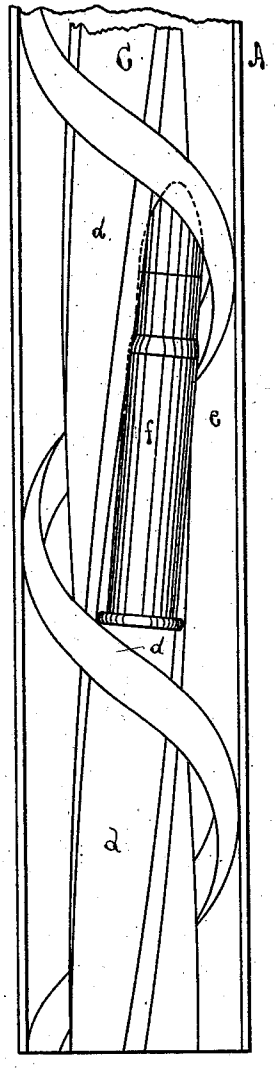
Fig. 3

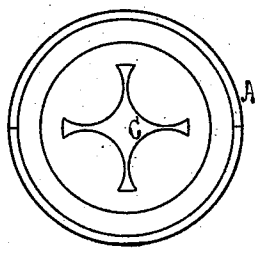


Witnesses

Wm. S. Brown

A. F. Welch

Fig. 4



Inventor

George F. Evans.

per Benjamin C. Rice

Attorney

UNITED STATES PATENT OFFICE.

GEORGE F. EVANS, OF MECHANICS FALLS, MAINE.

IMPROVEMENT IN MAGAZINE FIRE-ARMS.

Specification forming part of Letters Patent No. **213,555**, dated March 25, 1879; application filed February 3, 1879.

To all whom it may concern:

Be it known that I, GEORGE F. EVANS, of Mechanics Falls, in the county of Androscoggin and State of Maine, have invented certain new and useful Improvements in Magazine-Guns, of which the following is a specification, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a revolving magazine for fire-arms, and is an improvement on the revolving magazine for fire-arms described and claimed in Letters Patent No. 84,685, granted to Warren R. Evans, and bearing date of the 8th day of December, 1868; and the object of my invention is to prevent bottle-necked cartridges, or those having different diameter at the powder and ball sections, from becoming clogged or choked in the magazine, and to facilitate the movement of the cartridges in the magazine toward the barrel.

Heretofore the fluted shaft used in guns constructed under the said patent has been made with the flutings cut in a right line with the axis of the shaft, thus forming, in combination with the spiral partition, a cell of equal depth or diameter in all its parts for the cartridges, excepting where the point of the ball extends under the edge of the spiral thread described in that invention.

My improved device constituting my invention consists in cutting the fluting of the shaft in a spiral form upon the shaft, or in giving it such form by twisting the shaft, after having been cut in the usual shape, thus forming, in combination with the spiral partition, cartridge-cells, each of which is of such form that the bottle-necked cartridge will be supported upon its convex bottom at its longitudinal center, and therefore the ball cannot drop down to the bottom of the groove and crowd or jam under the spiral partition, because the shell or tube which forms the outside of each cell, bearing against the base of the cartridge, holds it up.

By constructing the fluting in the shaft in the spiral form, as above stated, the capacity of the fluting to propel large or small cartridges by means of the spiral thread toward the barrel is not impaired, while the average depth of the cell that can be occupied by the cartridge is less, therefore rendering it possible to use with such cartridge-shells balls of a diameter smaller than the shell.

In the drawings, Figure 1 is a view of the improvement, with a portion of the surrounding tube removed to exhibit it more clearly. Fig. 2 is an end view, showing the form of the fluted shaft and the shell or tube. Fig. 3 represents another form of my improvement, drawn to a larger scale. Fig. 4 is an end view of the same.

A represents the shell or tube, with a portion removed to show the interior, having the spiral thread or partition *b* fixed within it. C is the spirally-fluted shaft, which, when placed within the spiral partition in the tube, forms the cartridge-cells *d d d*, each of which has a convex bottom longitudinally.

At *e* will be seen the cartridge *f* in one of the cells *d*, with the wall of the fluting broken away in Fig. 1 to show the convex form of the bottom of the cell, on which the cartridge rests at e^1 and e^2, and also showing the head of the cartridge touching the shell A at the point *s*, which holds the head down into the bottom of the fluting, and, in conjunction with the convex form of the bottom, holds the ball away from the latter, as shown, so that it cannot enter too far underneath the spiral partition in advance of it and jam or choke the fluted shaft C so as to interfere with its revolving.

What I claim as new and of my invention is—

A fluted shaft for magazine-guns, with the fluting formed upon it in a spiral to its axis, combined with a spiral partition, *b*, and shell A, forming the magazine, substantially as set forth.

GEORGE F. EVANS. [L. S.]

Witnesses:
WM. M. GREENLEAF,
FRANK N. BOOTHBY.