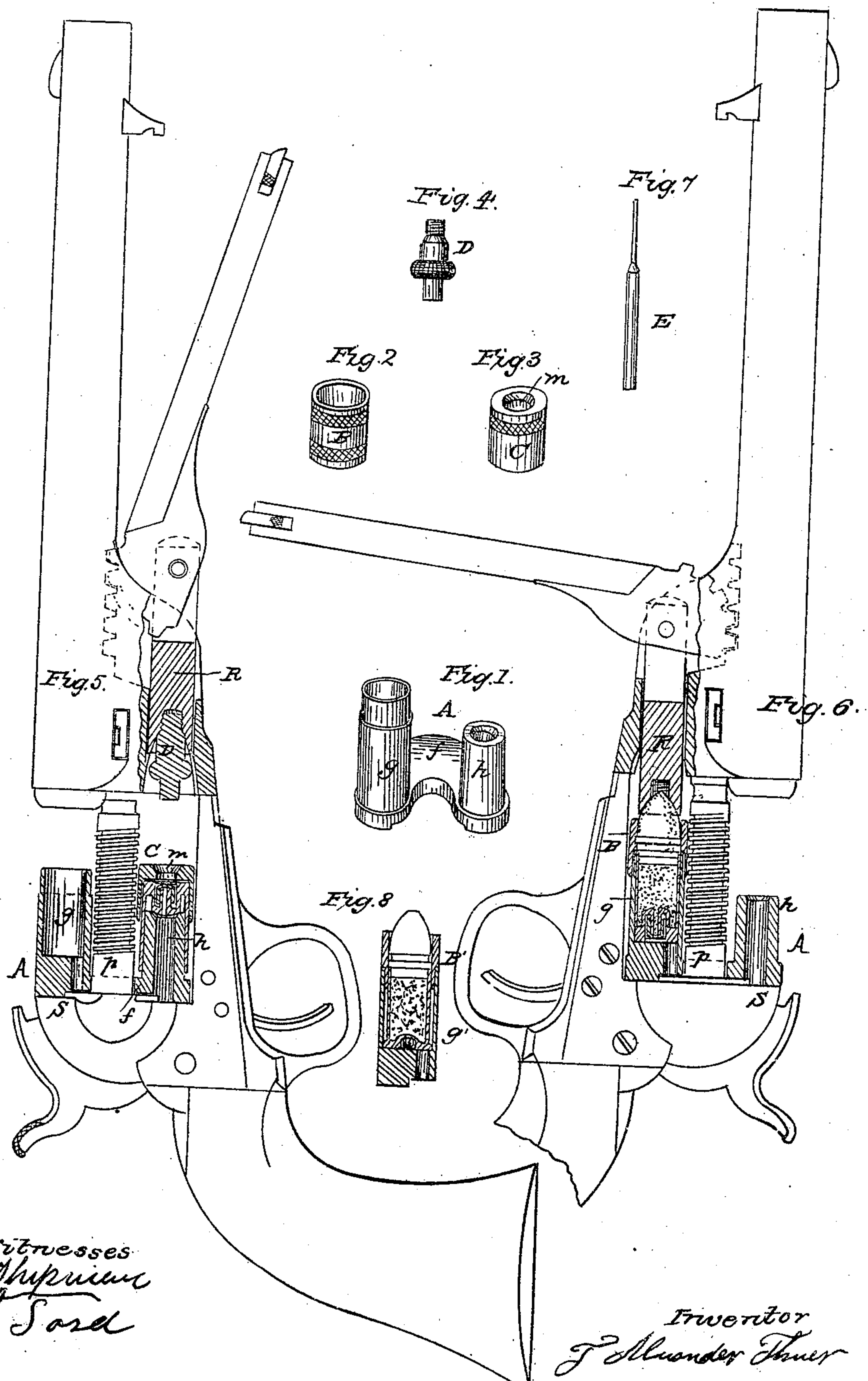


F. A. THUER.  
Cartridge Loader.

No. 98,529.

Patented Jan'y 4, 1870.



Witnesses  
Chas. H. Sord

Inventor  
F. Alexander Thuer



# UNITED STATES PATENT OFFICE.

F. ALEXANDER THUER, OF EAST HARTFORD, CONN., ASSIGNOR TO THE COLT'S PATENT FIRE-ARMS MANUFACTURING COMPANY, OF SAME PLACE.

## IMPROVEMENT IN CARTRIDGE-LOADING APPARATUS.

Specification forming part of Letters Patent No. 98,529, dated January 4, 1870; patented in England, April 9, 1869.

*To all whom it may concern:*

Be it known that I, F. ALEXANDER THUER, of East Hartford, in the county of Hartford and State of Connecticut, have invented a new and useful Cartridge-Loading Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon.

My invention relates to apparatus for facilitating the loading and capping of metallic cartridge-shells, being intended for use in connection with a revolving-breech pistol for recharging the shells of spent cartridges; and it supplies the place of other machinery for that purpose. It forms part of the subject-matter of an English patent to F. A. K. W. Von Oppen, dated December 31, 1868, No. 3,981, the invention having been communicated to the said Von Oppen by the Colt's Patent Fire-Arms Manufacturing Company, my assignees of this invention.

My invention consists in a cartridge-shell holder so constructed that it may be held in a frame of a Colt's or other similar revolver in such a manner that the rammer of the revolver can be used to properly fix the caps or the ball, or both of these, in a cartridge-shell supported by or contained in the said holder.

My invention also consists in the combination of a socket for containing a cartridge-shell, of a tubular ball-guide for holding the ball and insuring its being properly entered into the shell, and also in a centering capping-guide adapted to fit the rear end of a cartridge, whereby a percussion cap or primer may be guided into the cap or onto the cap-nipple of the cartridge-shell.

My said invention also consists in a capping-plug fitted for application to the end of the rammer of a revolver, and adapted for fixing the caps or primer in the cartridge-shell.

To enable others skilled in the art to make and use my invention, I will proceed to a description thereof.

In the several figures of the drawings, similar characters of reference denote the same part.

Figures 1, 2, and 3 are perspective views,

showing, respectively, the cartridge-shell holder A, the ball-guide B, and the capping-guide C. Fig. 4 is a side elevation of the capping-plug D. Fig. 5 is a side elevation, partly in section, of a Colt's revolver with the cylinder or breech removed, and with my invention applied thereto in a suitable way for the capping of a cartridge-shell by the use of the rammer R. Fig. 6 is a similar view of the same parts of the pistol with my invention so arranged therein that the ball may be fixed by the pressure of the rammer R. Fig. 7 is a side view of the punch E.

The apparatus, in the form shown by the above-named figures, is designed to be used for center-fire cartridges without flanges.

*f* is a saddle-piece, fitting upon the recoil-shield of the lock-frame of the pistol and around the base-pin *P*, on which the breech rotates. Attached to and forming part of this saddle-piece are the mandrel *h* and the socket *g*, in such a position that, when placed upon the pistol, they correspond with the position of the chambers of the rotating breech, and either of them can be brought under the center of the rammer R by a movement around the base-pin *p*. The mandrel *h* is designed for holding the shell while the percussion-cap is placed upon it and forced home by the rammer R, and the socket *g* is designed for holding it while the ball is being forced down by the rammer.

B is a short tube, to be placed on the end of the socket *g* to guide the ball into the cartridge. C is a short cap, with a central perforation, *m*, to be placed over the cartridge-shell after the shell has been inverted and set on the mandrel *h*, to guide the percussion-cap in the operation of capping the shell. D is a capping-plug, the lower end of which is of proper shape to press on the percussion-cap or primer, while its upper end is suitably shaped to receive the pressure of the rammer R. I prefer to form the upper end of the plug D with a threaded portion, which may be screwed into a hole tapped in the end of the rammer R.

The manner of using my invention in the form above described is as follows: The capping-plug D is screwed into the lower end of the rammer R of the revolver, the rotating



breech of which has been previously removed, an empty cartridge-shell, from which the exploded primer has been removed, is placed on the mandrel *h* of the holder, A the capping-guide C is inverted over the end of the shell, and a percussion cap or primer is dropped into the hole *m*. The holder A, supporting the shell, is now set on the recoil-shield of the pistol, and the mandrel brought into line with the rammer R, (see Fig. 5,) which, when lowered, drives the capping-plug D down through the cap-guide and forces the percussion-cap down into the cavity made in the end of the cartridge to receive it. After removing the primed shell from the mandrel *h*, others may be substituted. If the shells should stick on the mandrel, they may be removed by pushing them from the bottom with the large end of the punch E, the mandrel being perforated to admit of this. After having capped as many shells as it is intended to load, the capping-plug is removed from the rammer R, and one of the cartridge-shells, supplied with powder and a lubricating-wad, is placed on the socket *g*. The ball-guide B is applied to the socket over the shell, and a ball is placed in the ball-guide B. The socket *g* is now brought into line with the rammer R, which is used to force the ball home and fix it by pressure in the shell. The punch E may be used to thrust out the cartridge from the socket, the bottom

of which is perforated at one side to permit this to be done without danger.

It is obvious that the socket *g* and mandrel *h* may be made entirely separate from each other, each being fitted to stand on the recoil-shield of a pistol and to be used in connection with the rammer; but I do not consider this modification of my invention to be so desirable as the one I have described.

Fig. 8 shows the socket *g* and ball-guide B, suitable for flange-cartridges.

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

1. A cartridge-holder adapted for use in combination with the recoil-shield and rammer of a revolving fire-arm, substantially in the manner described, for the purpose specified.

2. The ball-guide B, in combination with the holder A, when these are adapted to be used together in connection with the parts of a revolver, as described.

3. The cap-guide C, constructed and applied substantially as and for the purpose set forth.

4. The capping-plug D, adapted for application to the rammer of a revolver, for the purpose hereinbefore specified.

F. ALEXANDER THUER.

Witnesses:

C. V. SHIPMAN,  
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