2 Sheets—Sheet 1.

A. J. FRENCH.

FEEDING PERCUSSION CAPS.

No. 85,224. Patented Dec. 22, 1868.

Fig: 1.

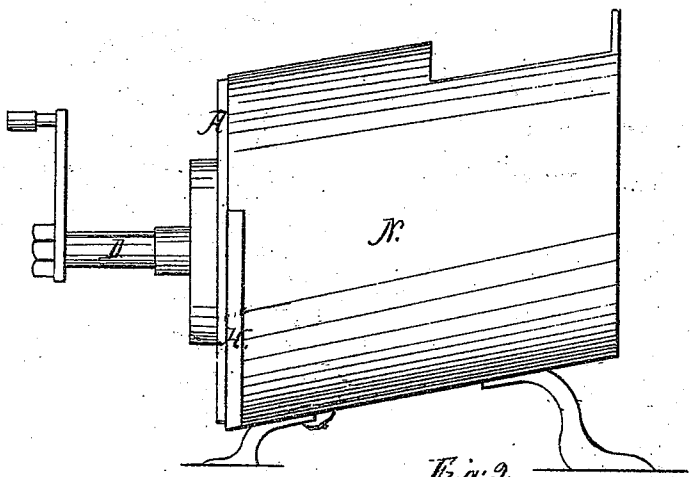


Fig: 2.

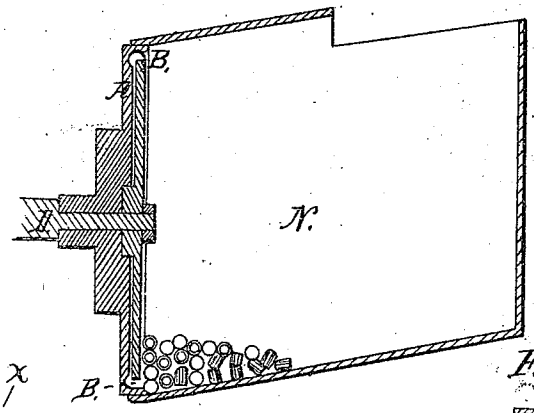


Fig: 3.

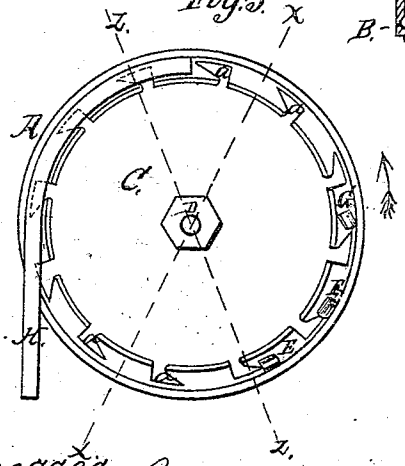
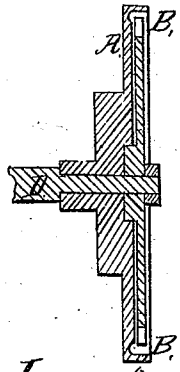


Fig: 4



Witnesses.

J. H. Shumway.

A. J. Tibbits

Inventor.

A. J. French.

By his Attorney

Wm E Earle

THE ECKERT LITHOGRAPHING CO., WASHINGTON, D. C.

2 Sheets—Sheet 2.

A. J. FRENCH.

FEEDING PERCUSSION CAPS.

No. 85,224. Patented Dec. 22, 1868.

Fig: 1.

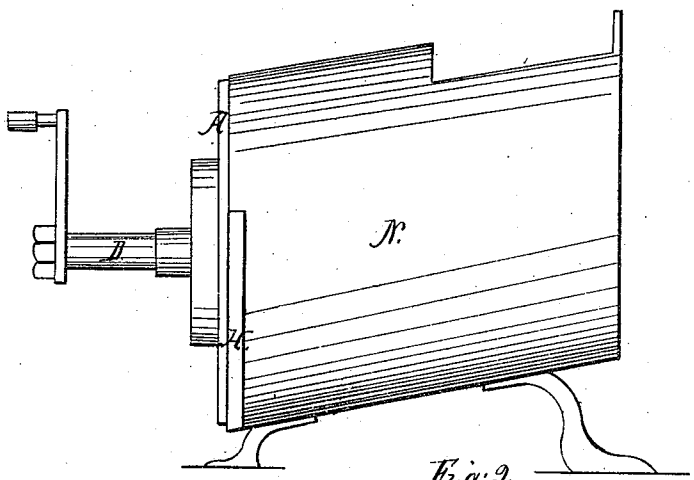


Fig: 2.

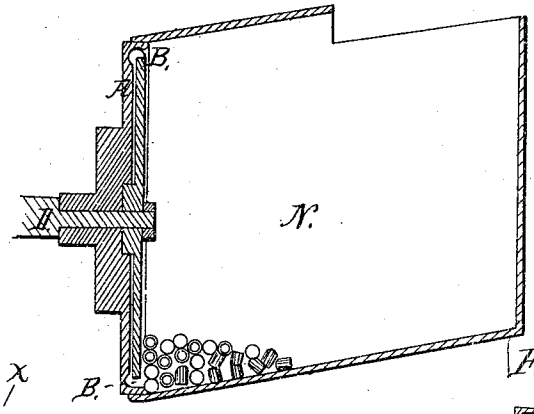


Fig: 3.

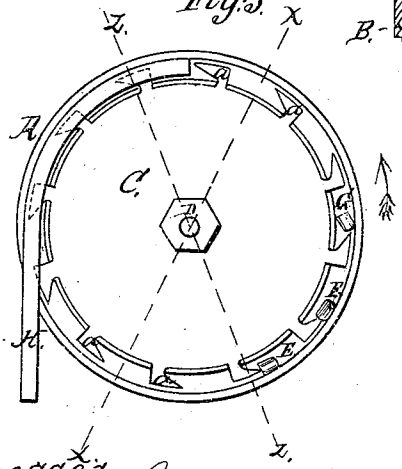
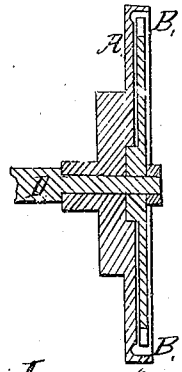


Fig: 4



Witnesses.

J. F. Shumway.

A. J. Tibbits.

Inventor.

A. J. French.

By his Attorney

Wm E Earle

UNITED STATES PATENT OFFICE.

A. J. FRENCH, OF BRIDGEPORT, CONNECTICUT.

IMPROVEMENT IN FEEDING PERCUSSION-CAPS.

Specification forming part of Letters Patent No. 85,224, dated December 22, 1868.

To all whom it may concern:

Be it known that I, A. J. FRENCH, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented a new Improvement in Feed for Percussion-Cap Machine; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view; Fig. 2, a longitudinal section; Fig. 3, an inside view, the hopper removed; Fig. 4, a section on line *x x*.

This invention relates to an improvement in the feed of machines used for the manfacture of percussion-caps, but is alike applicable to other similar purposes.

In the manufacture of percussion-caps, cartridge-shells, and other similar articles struck or drawn up, the edge requires to be trimmed. To do this, the articles must be delivered to the trimming apparatus, the open end always in the same direction. Heretofore this has been done by hand, the articles fed singly into the machine; but by my improvement the articles are delivered from the mass, so as to make the feeding automatic; and my invention consists in the arrangement of a feed-wheel provided with hooked teeth, arranged so that, revolving in a mass of the articles to be delivered, the hooks will enter the open ends of the articles, and, holding them upon the hooks, deliver them into the tube the closed end downward.

To enable others to construct and use my improvement, I will proceed to describe the same as illustrated in the accompanying drawings.

A is a plate, formed with a channel, B, near its edge, and placed in immediate connection with the hopper N, or other receptacle for a quantity of caps, and so that a supply of caps or other articles will lie constantly against the plate, or in the said channel, as seen in Fig. 2. Centrally in the said plate is arranged a wheel, C, on a shaft, D, revolving in suitable bearings, as denoted by the direction of the arrow.

The said wheel is constructed with hooks *a* upon its edge, more or less in number, the said hooks pointing in the direction of the revolution of the wheel, and in such relative position to the channel B that the articles which lie in the hopper and fall into the said channel will be caught by the hooks entering the open end of the article, as denoted at E and F, and to such, as it strikes upon the closed end, as at G, will carry up until it of its own gravity tips from the hook and falls back into the hopper, while those upon the hook at E and F will be carried up and enter a tube, H, arranged in such relative position to the hooks, and slotted so that the hooks pass centrally, or nearly so, through the said tube, thus delivering the articles, their closed end into the tube, and retained in their position by the proper size of the tube, are carried to the desired point in the machine, and so delivered.

The hopper N is arranged so as to present the mass of caps or similar articles to the hooks, and the hooked wheel C may be caused to revolve with the other part of the machinery, so as to make the feeding automatic.

Having fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent, is—

The arrangement of the hooked carrying-wheel C, with a delivering-tube, H, and a hopper to supply the carrying-wheel, the whole operating substantially in the manner herein set forth.

A. J. FRENCH.

Witnesses:

A. C. HOBBS,

SMITH W. ANDERSON.