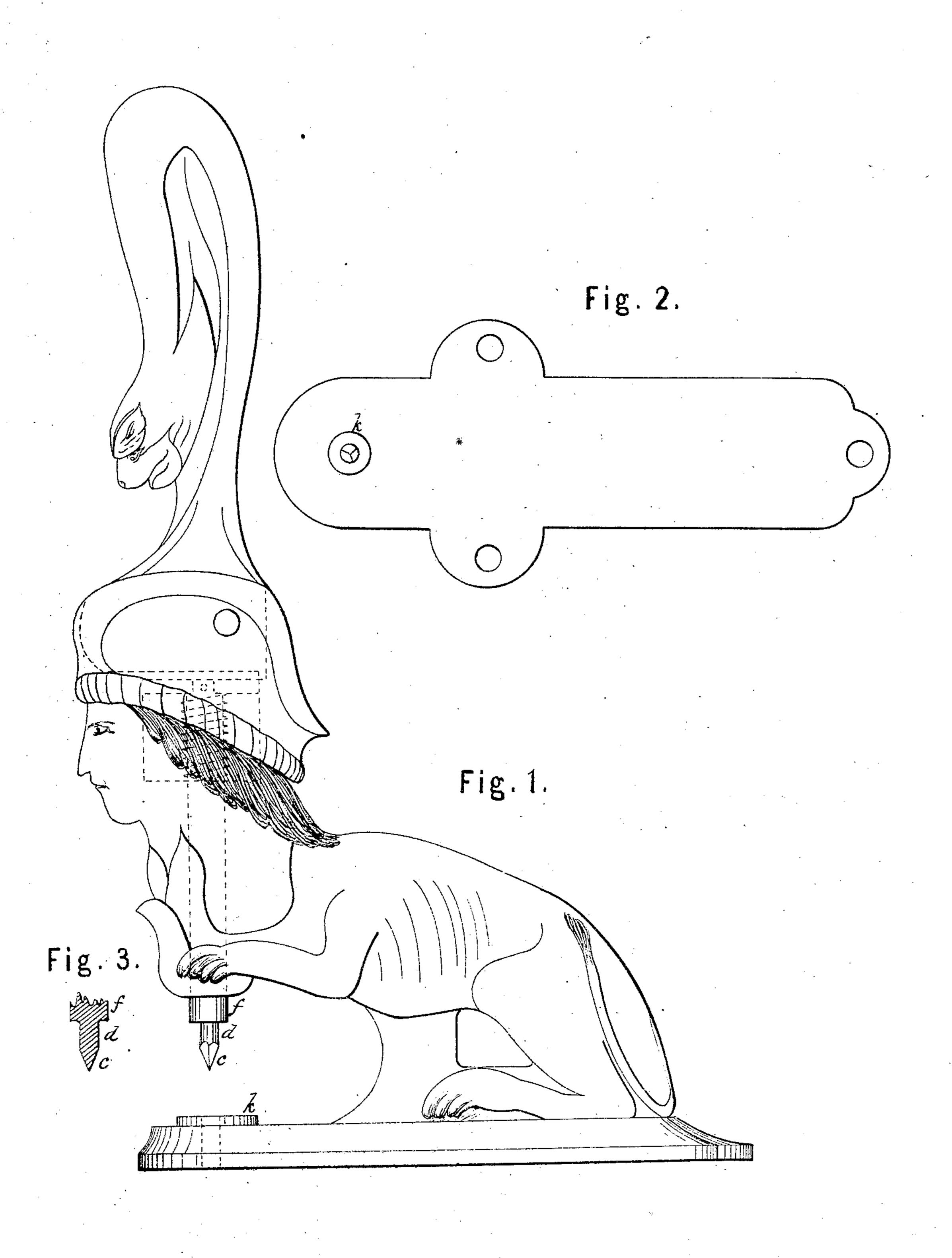
## M. Steinmitz. Eyeleting Machine. Nº 27934 Patented Apr. 17,1860.



## UNITED STATES PATENT OFFICE.

WILLIAM STEINMETZ, OF PHILADELPHIA, PENNSYLVANIA.

## EYELET-MACHINE.

Specification of Letters Patent No. 27,934, dated April 17, 1860.

To all whom it may concern:

Be it known that I, William Steinmetz, of the city of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Eyelet-Machines; and I do hereby declare that the following is a full and exact description of the construction and operation of the same, reference being had to the accompanying drawings, which form a portion of this specification.

Figure 1, is a side view of my improved eyelet machine; Fig. 2, a view of the under side of the bottom of the same, and Fig. 3, a section of a portion of the pointed cutter-

15 punch of said machine.

The peculiar shape of the punch c, d, f, employed in my improved eyelet-machine, which enables it, when used in combination with a perforated die-plate k, to cleanly cut holes in several thicknesses of paper and then insert eyelets into said holes and clench the same all at one operation, constitutes the improvement in said machine which I have invented and desire to secure by Letters Patent.

The point c, which descends from the shank d, of the punch of my improved eyelet machine, is divided into several faces whose separating angles as also the angles 30 between the upper portions of said faces and the periphery of the shank d, are kept sharp by any suitable means. The aforesaid shank d, of the punch f, fits closely into the aperture in the die plate k; and the angle 35 at the upper end of the aperture in said dieplate, is kept sharp by grinding off the upper surface of the plate, or by any other suitable means. Therefore, it will be perceived that while the sharp point of the 40 aforesaid punch can be easily forced through many thicknesses of paper, the sharp angles between the faces of the said point and the

periphery of the shank d, of said punch acting in conjunction with the perforated dieplate k, will form a clean hole through the 45 said mass of papers. Or, should it be desired to form the hole in a mass of papers and to secure them together by a clenched eyelet, all at one operation, it may be accomplished in the following manner, viz, first, place the 50 outwardly curving end of an eyelet over the aperture in the die-plate k, then place the papers to be united upon the upper end of said eyelet, and then force down the punch through the said papers and through the 55 eyelet, to such a distance that the curved shoulder of the punch f, at the upper end of the shank d, will first force the said papers over the eyelet and then turn outward and clench the upper end thereof down upon the 60 face of said papers. In this operation the eyelet itself serves as the counter cutting die in the process of forming the hole in the papers thus united together by the machine.

The punch of my improved eyelet ma- 65 chine is forced downward by a cam-lever and is thrown upward by a spring in the usual manner of operating the punches of

eyelet machines.

What I claim as my invention, and desire 70

to secure by Letters Patent, is—

Giving a sharp-angled pointed shape to the extremity of the shank d, of the punch of my improved eyelet-machine, when the said punch is otherwise of the shape represented in the accompanying drawings, and when it is used in connection with a perforated die-plate substantially in the manner and for the purpose herein set forth.

WM. STEINMETZ.

Witnesses:

CHARLES D. FREEMAN, A. B. STOUGHTON.