C D. Flesche. Imp^d Bunch.

PATENTED
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Fig: 1

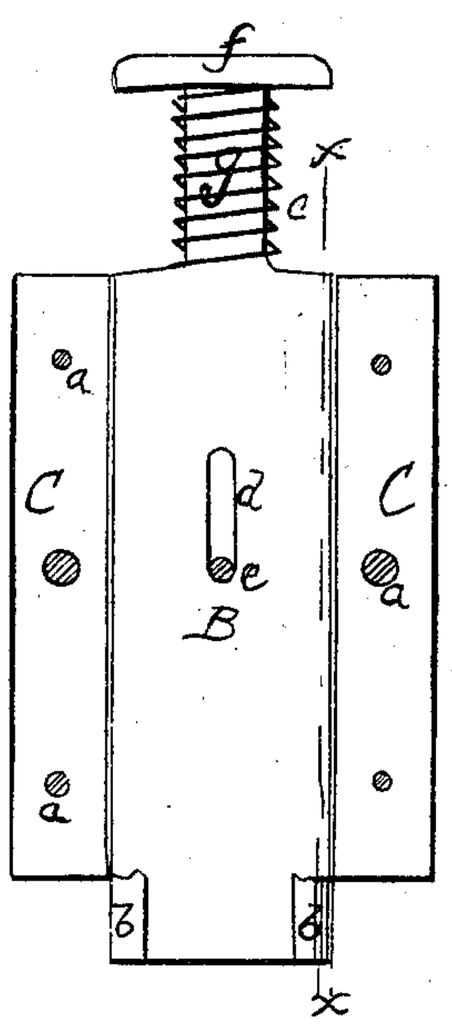

Fig: 2

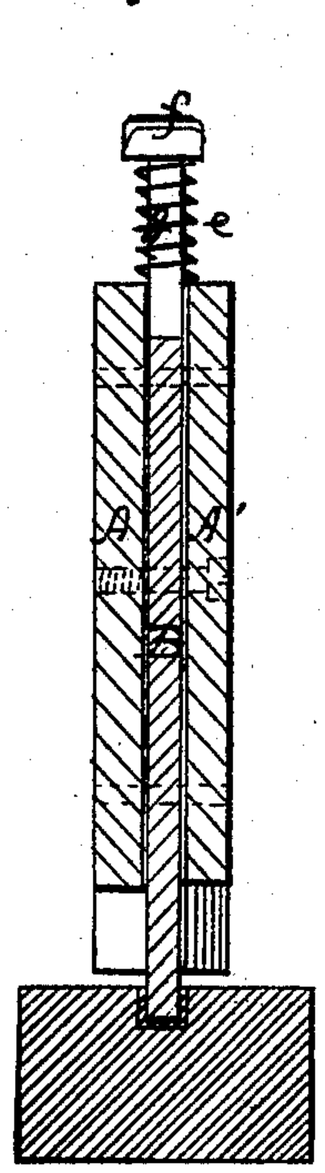

Fig: 3

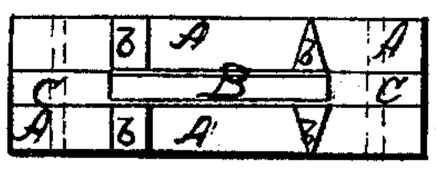

Fig: 4.

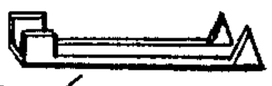

Fig: 5

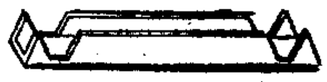

Fig: 6

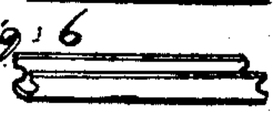

Fig: 7.

Witnesses.
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CHARLES D. FLESCHE, OF NEW YORK, N. Y.

Letters Patent No. 72,007, *dated December* 10, 1867.

IMPROVEMENT IN PUNCHES FOR FORMING CLASPS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, C. D. FLESCHE, of the city, county, and State of New York, have invented a new and improved Punch; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a device whereby sheet-metal clasps, especially those used on hoop-skirts, but also paper-fasteners and other similar articles, may be cut and bent, or formed by the same punch. Heretofore such articles could only be made by using two different punches—one for cutting the same out of the sheet-metal plate, and another for bending them into the necessary shape.

My invention consists in arranging a punch in such a manner that it consists of two pawls, which are firmly connected together, for cutting the metal, while, for bending the same, an inner sliding punch will be moved out of the stationary cutting-punch, thus making both operations by one instrument, and avoiding the removal of the article from the cutting to the bending-punch, which was heretofore necessary. In the accompanying drawing my invention is completely illustrated—

Figure 1 being a front view of my punch, the front plate of which is removed.

Figure 2 is a vertical cross-section of the same, taken on the line *x x*, fig. 1.

Figure 3 is a bottom view of the same.

Figures 4, 5, 6, and 7, are perspective views of articles made by this punch.

Similar letters of reference indicate like parts.

A A′ are two steel plates, which are held together by means of screws or rivets, *a a*, and to the lower surface of which the cutters *b b* are secured. B is the bending-punch, and is a steel plate which slides between the two plates A A′. It is guided by two bars, C C, and by a pin, *c*, which is secured to the plates A and A′, and passes through a slot, *d*, in the plate B. A spiral spring, *e*, which fits around a bar, *g*, on the plate B, and presses against a knob, *f*, on top of said bar *g*, and which is supported by or rests upon the upper edges of the plates A A′, as shown in figs. 1 and 2, keeps the punch B up, so that the lower end of the slot *d* is pressed against the pin *c* (see fig. 1.) The lower edge of the plate B coincides with the cutters *b b* on the plates A A′, and is also provided with cutting-edges, so that the plates A A′ and B form the cutting-punch, and cut the metal, which is laid upon a die under them, into the required shape. It will be seen that when the whole punch is brought down, by some power which is applied to the plates A A′, the inner or sliding punch, B, will be as firm and cut as well as the cutters *b b*, as the pin *c* prevents it from being raised. The die (which is shown in red lines in fig. 2,) is countersunk in such a manner that when (after the metal has been cut,) the punch B is brought down by some pressure applied to the knob *f*, the lower end of the punch B will enter the mortise in the die, and will press the sheet-metal article into the same, thereby bending it into the required shape. The length of stroke of the sliding punch is determined by the length of the slot *d*.

The particular shape and style of punch heretofore shown and described are not claimed by me, as the same have to be adapted to the shape and style of the article to be manufactured; but having thus described my invention,

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

The sliding-punch B, in combination with the plates A A′, cutters *b b*, and spring *e*, substantially as and for the purpose herein shown and described.

CHARLES D. FLESCHE.

Witnesses:

WM. F. MCNAMARA,

ALEX. F. ROBERTS.