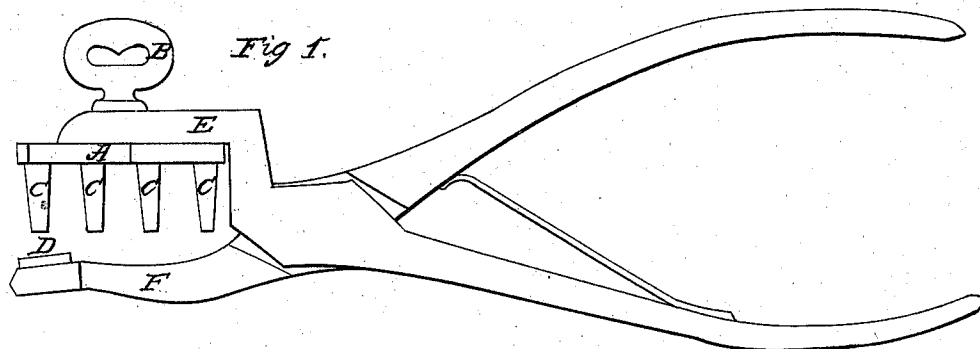
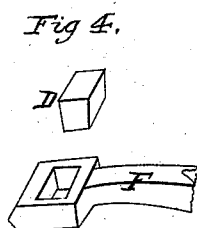
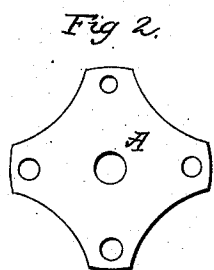


A. Bedford,
Rotary Punch,
N^o 81,465, Patented Aug. 25, 1868.



Witnesses;
Geo. Alev
J. W. Fowler

Inventor;
Alma Bedford

United States Patent Office.

ALMA BEDFORD, OF COLDWATER, MICHIGAN.

Letters Patent No. 81,465, dated August 25, 1868.

IMPROVED ROTARY PUNCH.

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, ALMA BEDFORD, of the city of Coldwater, in the county of Branch, and State of Michigan, have invented a new and improved Rotary or Revolving Punch; and I do hereby declare that the following is a full and exact description thereof, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it.

My invention relates to revolving punches, and consists in a novel construction and arrangement of different-sized tubes or cutters, so that any one of them may be adjusted for use at pleasure, and also in providing a bed of wood for their cutting-edge to strike against, instead of metal, as in most punches in common use.

In the drawings—

Figure 1 is a perspective view of my punch, and

Figures 2, 3, and 4 are views of parts detached.

To most of the revolving punches in use, there are two objections: For want of an easy and free delivery of the leather or other substance passing through the cutting-tube, they become clogged; and when tubes with different-sized cutting-edges are made to strike against the same metal bed, they often become nicked, cracked, or broken. In the construction of my punch, I have sought to obviate these objections.

I construct my punch as clearly shown in fig. 1, making the jaws E and F of the peculiar form shown in the same figure.

To the upper jaw E, I attach a plate, A, shaped as shown in fig. 2, by means of a set-screw, B, shaped as shown in fig. 3. The plate A, I provide with four or more hollow punches C, arranged so that when either of them may be set in position for operation, it will strike against the bed D in the lower jaw F, and its open upper end be outside of the jaw E, so as to leave its delivery entirely unobstructed. The punches C, I make of different sizes, and by loosening the set-screws B, any one of them can be placed in position for use, and then fastened; as shown in fig. 1.

The lower jaw F, I construct, as shown in fig. 4, with an opening, G, in which I insert a bed, D, of wood, or any other material that will not injure the cutting-edges of the punches C when they strike against it; and when, from long or frequent use, the bed becomes worn out or injured, I can easily remove it and insert another.

In this way I produce a punch that will not clog, and one that may be used a long time without becoming dull or injured by having its cutting-edges strike constantly against a hard metal bed.

Having thus described my invention, what I claim, is—

A rotary punch, having attached to its upper jaw E, by means of a set-screw, B, an adjustable plate, A, rotating parallel with it, provided with a series of punches, C, and having its lower jaw F provided with a removable wooden or other bed D, all constructed and arranged substantially as herein described.

ALMA BEDFORD.

Witnesses:

GEO. A. COE,

GEO. W. BOWKER.