(No Model.)

H. BOUCHY & J. H. BAMBERGER.

BELT PUNCH.

No. 334,215. Patented Jan. 12, 1886.

Fig. 1.

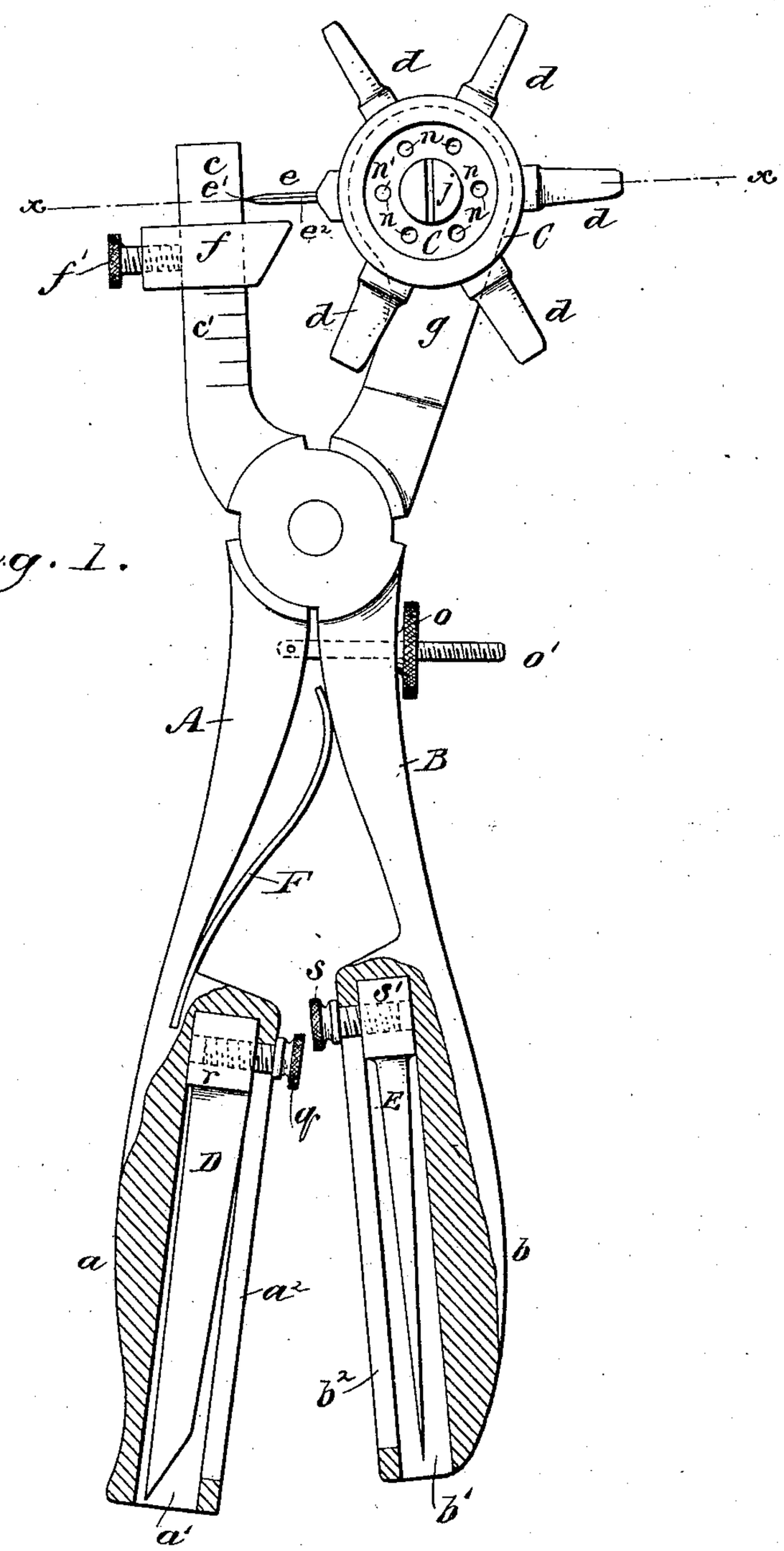
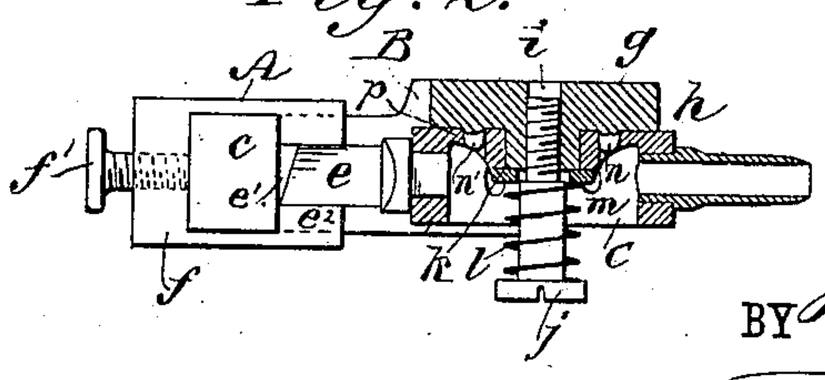


Fig. 2.



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HENRY BOUCHY AND J. HENRY BAMBERGER, OF NEWARK, NEW JERSEY.

BELT-PUNCH.

SPECIFICATION forming part of Letters Patent No. 334,215, dated January 12, 1886.

Application filed October 8, 1885. Serial No. 179,336. (No model.)

To all whom it may concern:

Be it known that we, HENRY BOUCHY and J. HENRY BAMBERGER, of Newark, in the county of Essex and State of New Jersey, have invented a new and Improved Combination Belt-Punch, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a sectional plan view of our new combination belt-punch, and Fig. 2 is a sectional view taken on the line *x x* of Fig. 1.

The invention will first be described in connection with the drawings, and then pointed out in the claims.

A B represent the cross-pivoted members of the punch, the hand-pieces *a b* of which are chambered, as shown at *a' b'*, for the purpose hereinafter described. The point or jaw *c* of the member B is made square for the hollow punches *d d* and blade *e* to abut against in the use of the tool, and on it is placed the sliding gage-block *f*, which may be adjusted on the jaw and held by the set-screws *f'* to gage the cutting and punching of the belt. Graduation-marks *c'* are formed upon one side of the jaw *c*, to indicate the adjustment of the block *f* at regular distances from the punches or blade when the same are brought to position for use.

The jaw *g* of the member A is flattened, and formed with the circular hub *h* and screw-threaded aperture *i*, which passes through the center of the hub *h*. Upon the hub *h* is placed the circular plate or disk C, which carries the several radiating punches *d* and the blade *e* equidistant apart upon its periphery. The plate or disk C is adapted to revolve upon the hub *h*, so that the blade or either of the punches *d* may be brought in line with the abutting jaw *c* for use; and the said plate or disk is held upon the hub by the screw *j*, that screws into the screw-opening *i*, the washer *k*, and coiled spring *l*, placed upon the screw, the spring being arranged to press upon the washer *k*, as shown clearly in Fig. 2.

The plate or disk C is chambered, as shown at *m*, to permit the material punched out by the punches to escape from the punch; and in the thin portion *p* of the plate or disk C are formed a series of small holes, *n*, which coincide with a small stud, *n'*, formed on the jaw *g* near the hub *h*, for locking the plate or disk C in position for holding the blade *e* or one or the other of the punches *d* in position for use.

By drawing outward upon the plate or disk C the spring *l* will yield and permit the said plate or disk to slide outward upon the screw *j*, so as to disengage the plate from the pin or stud *n'*, so the disk may be revolved for bringing the blade *e* or either of the punches *d* (which are of different sizes) into position for use. The blade *e* is sharpened at its end *e'*, so it may be used for cutting narrow slots or openings in a belt or other object, and also at one edge, e^2, which is designed for cutting strings or lacings for belts. When used for the latter purpose, the members A B of the punch will be closed and held in closed position by turning the nut *o* down upon the screw-rod *o'*, or by other means. Then the block *f* will be moved to the proper proximity to the blade *e* to gage with the width of lacing desired, which will be cut evenly by drawing the lacings against edge e^2 and between the blade and the gage-block. The screw-rod *o'* is pivoted to the inner edge of the member A, and passes through an aperture in the member B, as shown in Fig. 1.

In the chamber *a'* of the handle-piece *a* of the member A is placed the knife-blade D, held in place by a set-screw, *q*, which is screwed into the shank *r* and works in the slot a^2, so that by loosening the screw the blade may be shoved out and held for use and returned to place.

In the chamber *b'* of the member B is placed the punch or awl E, which, like the knife-blade D, is held in place by a set-screw, *s*, screwed into the shank *s'* of the awl, and works in a slot, b^2, made in the handle, so that by loosening screw *s* the awl may be shoved out and held for use and returned to place in the chamber.

A flat spring, F, is placed between the members A B of the punch, as shown in Fig. 1, to hold the jaws of the punch open, except when the handles are pressed together by the user, or when the nut *o* is screwed down upon the screw bolt or rod *o'*.

By constructing the punch as described, it

is very convenient for various uses, and is practical, strong, and cheap.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. As an improved article of manufacture, the herein-described belt-punch, consisting of pivoted lever-jaws provided with a sliding tool in each handle end, and a revolving head carrying cutting devices on one of the said jaws, as set forth.

2. The belt-punch herein shown and described, consisting of the cross-pivoted members A B, provided with sliding tools at their handle ends, the jaws *c g*, and the rotary plate or disk C, provided with punches *d* and the blade *e*, substantially as and for the purposes set forth.

3. A combination belt-punch consisting of the pivoted lever-jaws A *g* B *c*, provided with the revolving disk C, carrying punches *d* and blade *e* on the jaw *g*, the gage *f* on the jaw *c*, the sliding knife D in the handle end of lever A, the sliding punch or awl in the handle end of lever B, the screw-rod *o'*, and nut *o* thereon, substantially as herein shown and described.

4. In a belt-punch, the combination, with the jaw *g*, having hub *h*, provided with the screw-threaded aperture *i* and stud *n'*, of the chambered disk C, carrying cutting devices, and provided with the apertures *n*, the screw *j*, and the spring *l*, substantially as herein shown and described.

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