

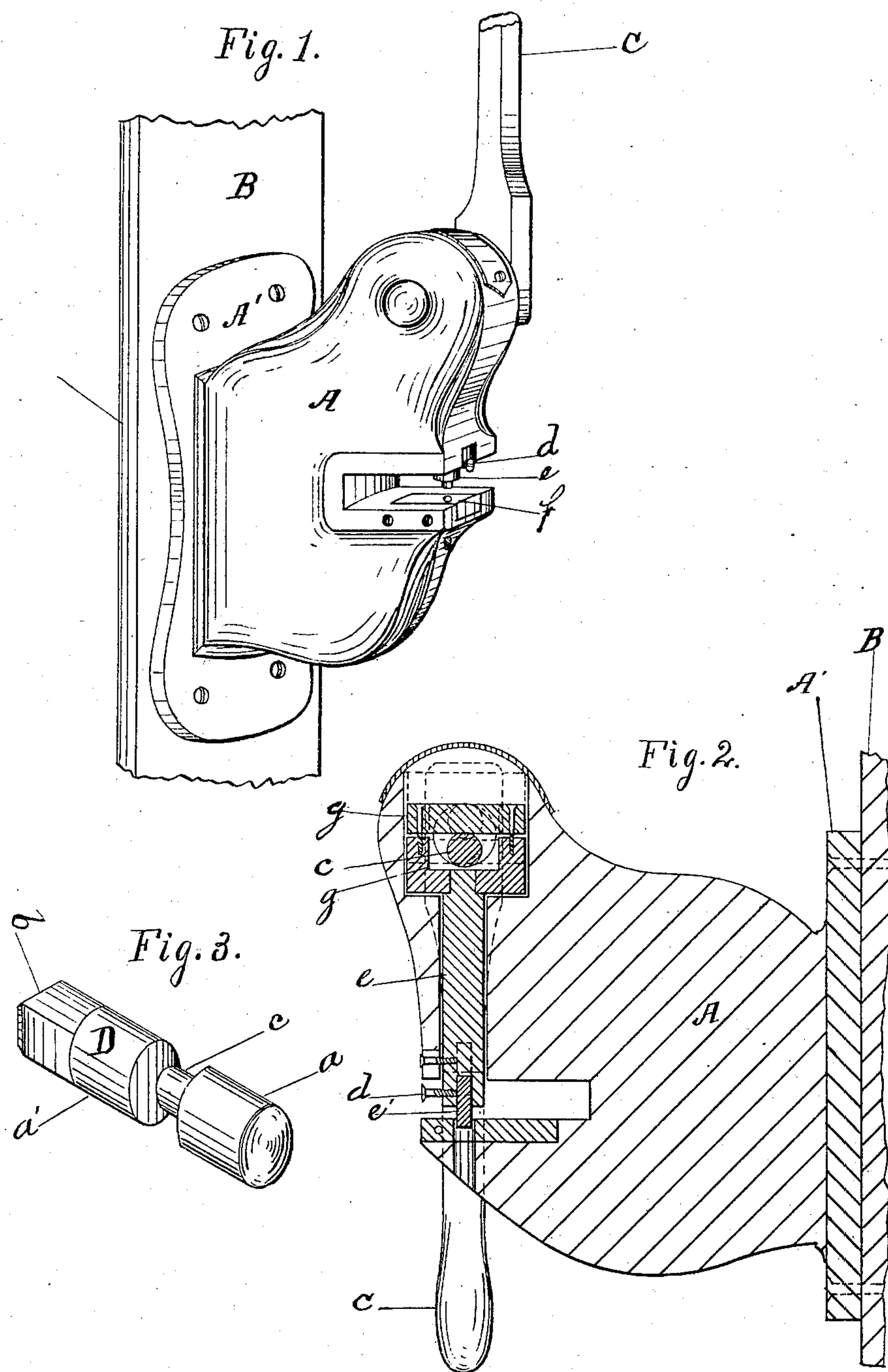
(No Model.)

M. C. BRANDENBERG.

BLACKSMITH'S PUNCH.

No. 314,647.

Patented Mar. 31, 1885.



Witnesses.
J. Rowlett
Fred F. Ross

Inventor.
Martin C. Brandenburg
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UNITED STATES PATENT OFFICE.

MARTIN C. BRANDENBERG, OF CAMBRIDGE CITY, INDIANA.

BLACKSMITH'S PUNCH.

SPECIFICATION forming part of Letters Patent No. 314,647, dated March 31, 1885.

Application filed July 28, 1884. (No model.)

To all whom it may concern:

Be it known that I, MARTIN C. BRANDENBERG, a citizen of the United States, residing at Cambridge City, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in Blacksmiths' Punches, of which the following is a specification, reference being had therein to the accompanying drawings.

10 My invention relates to that class of punches operated by hand and used in making holes in the common varieties of plate-iron while cold.

15 My invention consists in a combination of mechanical devices by which a punch is constructed, which may be operated by hand-power, having sufficient power to produce holes in ordinary plate-iron, and so arranged as to admit of the use of punching-tools of different sizes, which may be used interchangeably.

25 In the drawings, Figure 1 is a perspective view of my improved punch in working form. Fig. 2 is a central vertical section of the same showing the working part. Fig. 3 is a perspective view of the lever-shaft which operates the punch by means of the handle.

30 In Fig. 1, A represents the stock of the punch provided with a vertical flange or facing, A', having holes for screw-bolts by which it is secured to any vertical surface for support. The front portion of the stock is provided with a rectangular recess across the horizontal plane of the same. The upper and lower surfaces form jaws in which the iron is placed to be acted upon by the punch-point. The lower jaw has a sliding-plate, f, let into the same, the upper surface of which is flush with the surface of the jaw. The sliding plate f is provided with a hole immediately below and in line with the punch-point and sheath e, said hole corresponding in size with the punch-

point e', which is inserted in the sheath e and is removable.

e is a sheath of cylindrical form and is fitted at the upper end with a cross-head, g, and at the lower end is provided with a longitudinal opening to receive the punch-point e', which is held in position by a set-screw, d.

50 D, Fig. 3, is a lever-shaft journaled horizontally in the upper portion of the stock, one end being made square, to which a lever or handle may be fitted, as seen at b. The bearings of the shaft a a' are of equal size, and the central portion of the same is cut away, leaving a portion of the body eccentric to the center line, as seen at c, forming a crank, which, when the lever is turned to produce a partial revolution, raises and lowers the sheath e by its connection with the cross-head g, and, as the lever is raised and lowered, the punch e' carried by the sheath e is given a vertical reciprocating motion, as shown by dotted lines in Fig. 2. The lever or handle c has a square mortise, which fits upon the shoulder b of the lever-shaft D, by which it is actuated in operating the punch and sheath.

The stock A is bolted in any suitable manner to a vertical wall or framing at a proper height for operating.

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

In a blacksmith's punch, the stock A, lever-shaft D, constructed as described, sheath e, punch-point e', combined with the lever c, and cross-head g, all substantially as set forth and described.

In testimony whereof I affix my signature in presence of two witnesses.

MARTIN C. BRANDENBERG.

Witnesses:

W. T. DENNIS,

MARY E. PRESCOTT.