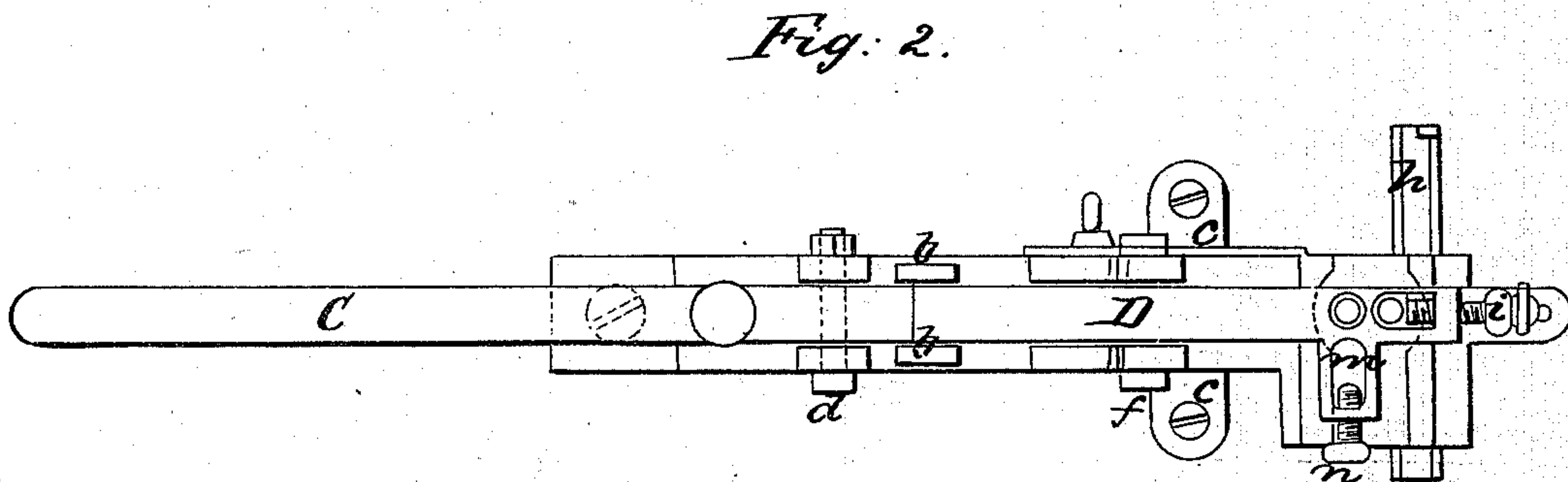
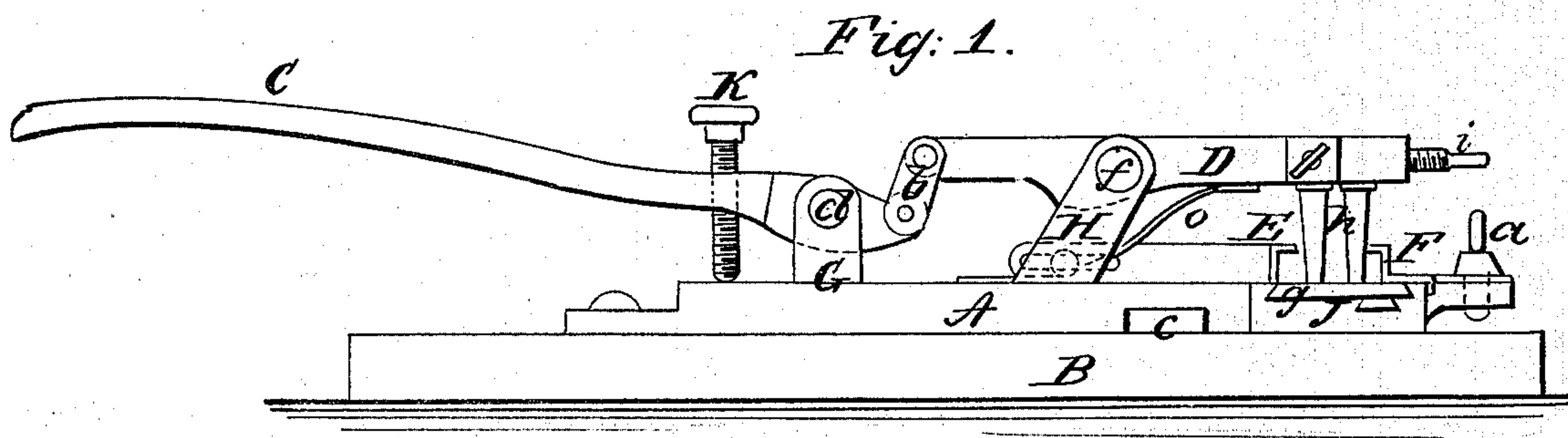


Schindler & Metzger,
Punch,
No 69,031, Patented Sept. 17, 1867.



Witnesses
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EDWARD SCHINDLER AND CHARLES H. METZGER, OF EASTON, PENNSYLVANIA.

Letters Patent No. 69,031, dated September 17, 1867.

IMPROVEMENT IN PUNCHES.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that we, EDWARD SCHINDLER and CHARLES H. METZGER, of Easton, in the county of Northampton, and State of Pennsylvania, have invented a new and useful Improvement in Punches; and we 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.

The object of this invention is to construct a tool for punching leather or any other material of a similar nature in an accurate and expeditious manner; and the invention consists in connecting a hand lever to another rocking lever, and in adjusting punches to the rocking lever in such a manner that a down pressure on the lever forces the punches through the leather or other material, as will be hereinafter more fully described.

Figure 1 represents a side view of the article complete, showing the different parts properly arranged.

Figure 2 is a top view of the same.

Similar letters of reference indicate like parts.

A represents the bed-piece or bar of the punch; B is the plate or foundation to which the punch is attached, and which may be of either wood or metal; C is the lever; D is another lever, to which the punches are attached, and to which the lever C is connected by strap joints; E is a gauge which is fastened in any desired position by a set-screw; F is another gauge, which is fastened by the set-screw *a*. These gauges are moved towards or from the punches so as to correspond with the width of the piece to be punched. The upper edges of these gauges are turned in, as seen in fig. 1, forming flanges, the design of which is to take the leather from the punches when the punches are thrown up by the spring. G represents stands on each side of the bar A, between which the lever C is supported; H represents two more stands attached to the bar A, between which the lever D is supported. The lever C and the lever D are connected together by short straps marked *b*, so as to form joints on each. The fulcrum of the lever C is at *d*, and the fulcrum of D is at *f*. *e e* are ears by which the bed-piece A is screwed down to the plate B. *g* is a plate of brass or lead or leather, or of some other suitable material, upon which the article to be punched is laid. *h* is a gauge by which the distance apart of the holes to be punched is governed. This gauge, and also the plate *g*, are dove-tailed into the bed-piece A, as seen at J. *k* shows the punches. These punches are fastened to the lever D. One of them is made fast without a set-screw, while the other is held by a set-screw, *i*, as seen in fig. 2. This punch may be changed to the recess *m* when desired, in which position it is held by the set-screw *n*. Punches of different sizes may be fitted and adjusted and fastened in the same manner. K is a guide-screw for the lever C, to prevent its throwing the punches too far down. *o* is a spring which throws up the end of D.

The operation of the punch is readily understood from the drawing.

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

1. The levers C D, connected by the straps *b*, the former provided with the set-screw K, the latter provided with the removable punches *k*, arranged in relation with the longitudinal adjusting-plates E F, substantially as described for the purpose specified.
2. The adjusting-plates E F, when provided with flanges upon their upper ends, whereby the leather is taken from the punches when the latter are raised, as herein shown and described.
3. The gauge *h*, when arranged in relation with the bed-plate *g*, whereby the distance apart of the holes to be punched is governed, substantially as described for the purpose specified.
4. The arrangement of the flanged adjustable guides E F, gauge *h*, plate *g*, and punches *k*, substantially as described for the purpose specified.

Witnesses:

D. B. MILLER,
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