

(No Model.)

J. E. ATWOOD.

HAND PUNCH.

No. 300,831.

Patented June 24, 1884.

Fig. 1.

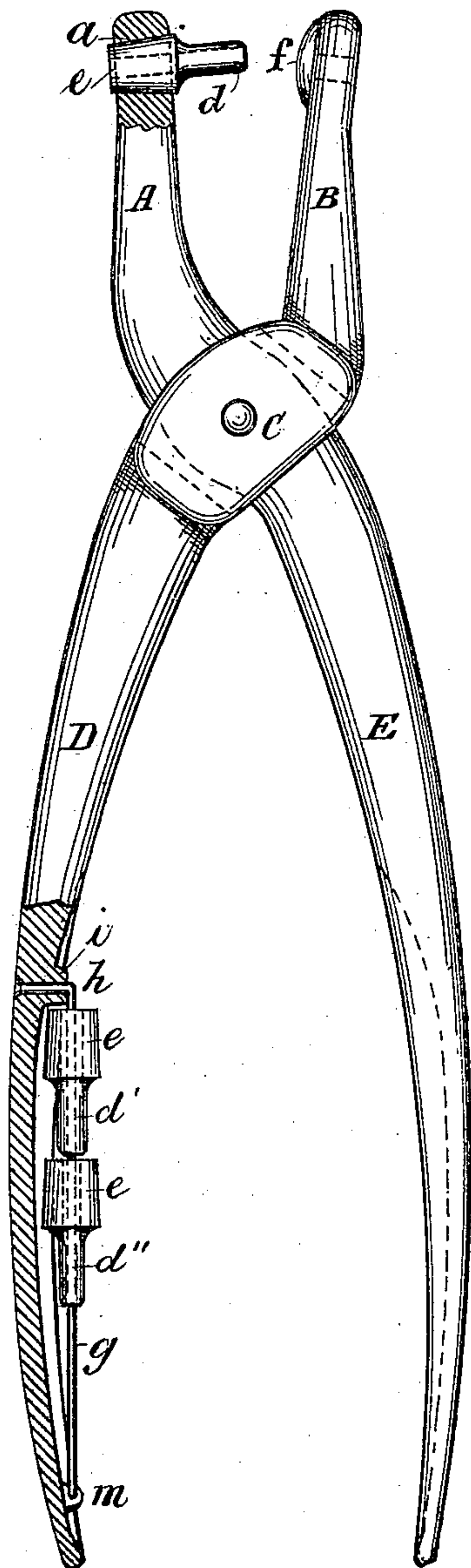
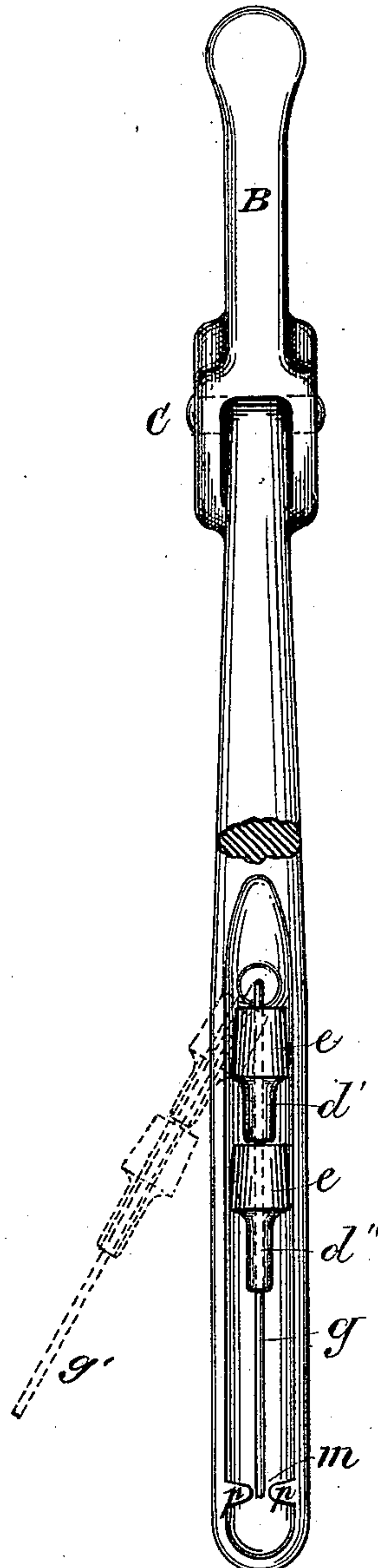


Fig. 2.



Witnesses
Fred Hagner
Geo Wadman

Inventor
John E. Atwood
By his Attorney
Brown & Brown

UNITED STATES PATENT OFFICE.

JOHN E. ATWOOD, OF STONINGTON, CONNECTICUT.

HAND-PUNCH.

SPECIFICATION forming part of Letters Patent No. 300,831, dated June 24, 1884.

Application filed July 17, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. ATWOOD, of Stonington, in the county of New London and State of Connecticut, have invented a certain
5 new and useful Improvement in Hand-Punches; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification.

10 This invention relates to hand-punches, which are composed of an ordinary pair of levers and jaws working on a pivot, the jaws provided with a punch and die for punching leather and other materials, the punch being removably secured in one of the jaws to enable one
15 punch to be readily substituted for another; but the improvement is more especially valuable for what are known as "belt-punches" for punching holes in machine-belts to receive the
20 fastenings which unite their ends.

In order to provide for keeping attached to the stock those punches which are not in use when the same stock is furnished with several changeable punches, the invention consists in
25 a hand-punch stock provided with a wire or small rod, one end of which is pivoted to one of the handles on the inner side thereof, the other end being secured in a notch formed in the same side of the same handle, but free to
30 be sprung out of the notch and turned laterally in order to place on said wire or remove therefrom the several punches of different sizes used with the hand-punch. This contrivance is very convenient in places where
35 several kinds of belt-fastenings are in use, requiring holes of different size, as one punch is easily substituted for another to meet the various cases, and the manner of holding and carrying the punches not in use effectually guards
40 against their being lost, at the same time offering no impediment to the free use of the hand-punch, and keeping the necessary punches always at hand ready for use.

In the drawings, Figure 1 is a front view of
45 a hand-punch containing my improvement, certain parts being shown in section; and Fig. 2 is a side view of the same, the outer end of one of the levers being broken away, in order to show the method of attaching and securing
50 to the other lever the wire upon which the punches are strung, and is represented in the position it occupies when the hand-punch is

ready for use. The dotted lines indicate the position of a wire when a punch is to be removed from or placed on the wire.

Similar letters of reference designate corresponding parts in both figures.

A B designate the two jaws, which, with their levers or handles D E, working on a pivot, C, constitute an ordinary hand-punch stock.
60 The head of the jaw A is provided with a hole, *a*, tapering from the inner side of the jaw outward; and *d d' d''* designate hollow punches of different sizes, having heads *e*, which are taper and of uniform size. Either of the punches
65 may be used, and when it is desired to change the punch which is in the jaw A said punch may be readily knocked out and a different one inserted. *f* designates a die on the jaw B.

g is a wire, having one end, *h*, bent at right
70 angles to form a pivot, and inserted in a hole through the lever D, to which it is loosely riveted to allow the wire to swing laterally across the inner face of the said lever, which is made with a small projecting hub, *i*, to give sta-
75 bility to the pivot *h*. The other end of the wire is capable of entering and being held by the elasticity of the wire itself in a notch in or between two projections, *p p*, provided for that purpose in the inner face of the lever D,
80 near the extremity thereof, and is so prevented from turning on the pivot, except when it is desired to substitute one punch for another in the jaw, when the wire is easily sprung out of the notch *m* by taking hold of it near
85 the lower end, and can then be turned to the position *g'*, (indicated by dotted lines,) enabling punches to be changed. As here shown, the punch *d* is in use and the punches *d' d''* are retained on the wire *g*.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with a hand-punch stock, of a wire or rod, *g*, pivoted at one end to one
95 of its handles, and at the other end springing into a notch or between projections in or on said handle for the purpose of stringing punches not in use, substantially as herein described.

JOHN E. ATWOOD.

Witnesses:

C. H. COWAN,
WM. A. GILBERT.