

H. R. LAVEY.

Improvement in Saw Sets.

No. 125,465.

Fig. 1.

Patented April 9, 1872.

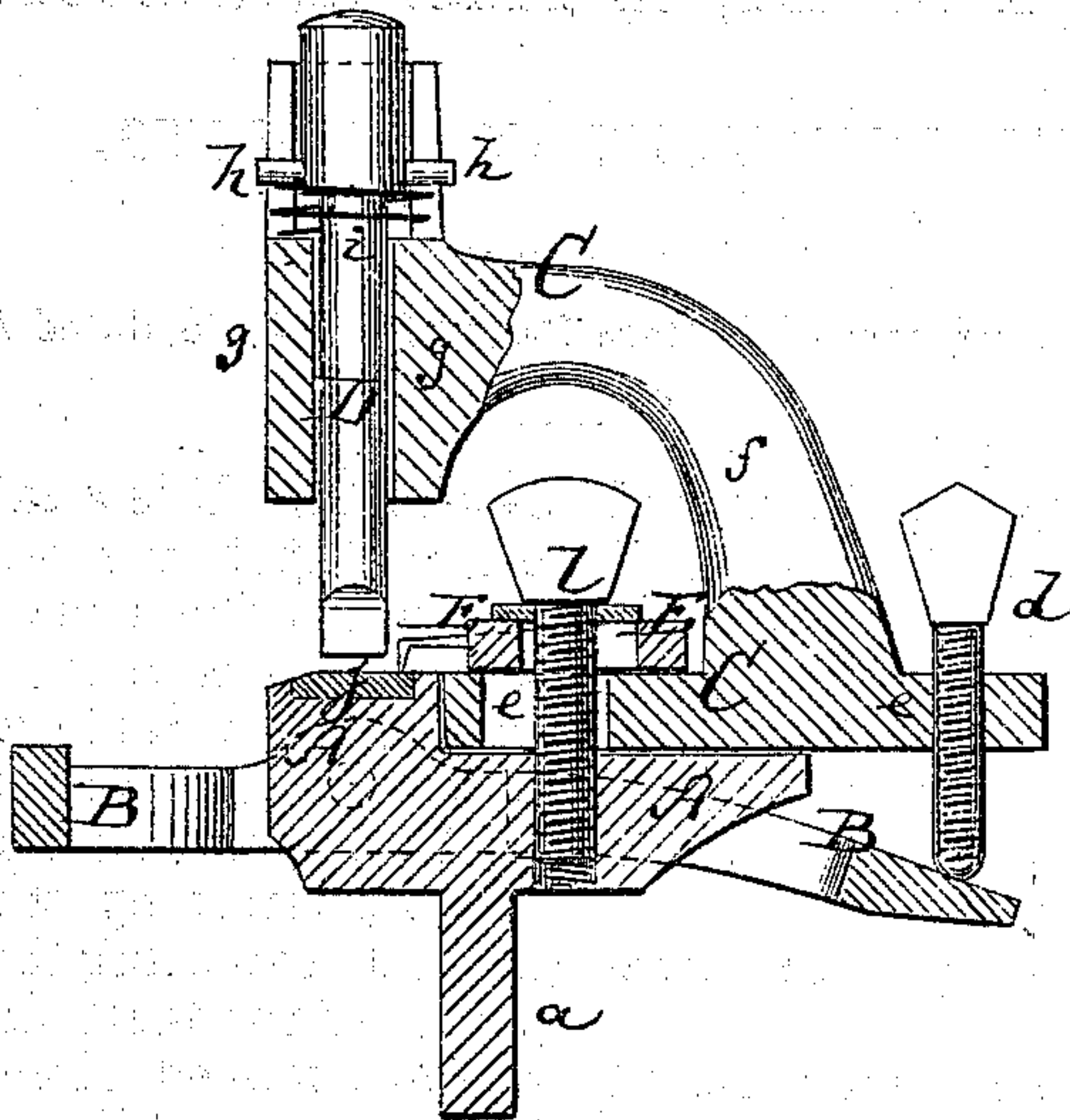
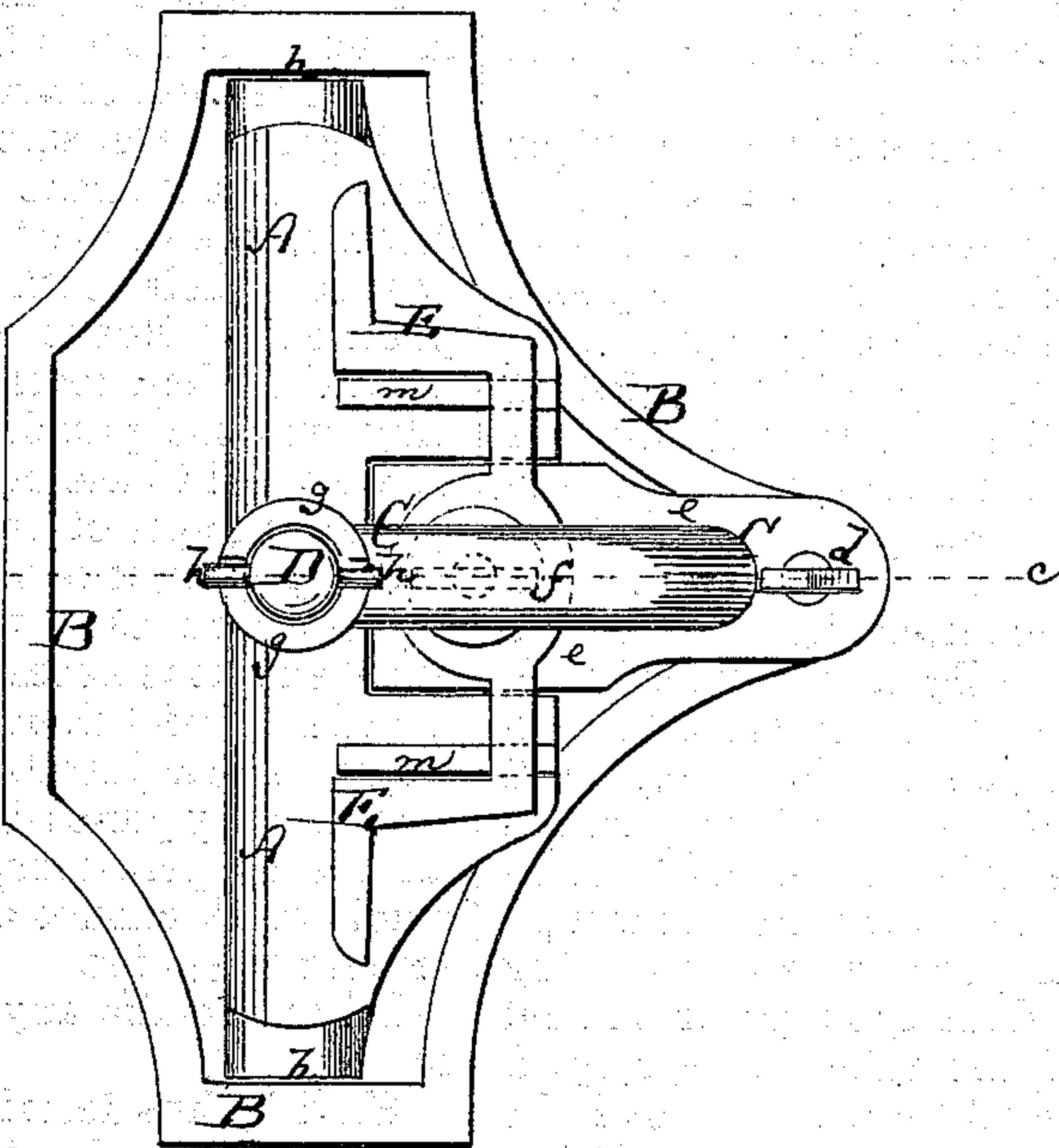


Fig. 2.



Witnesses:

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IMPROVEMENT IN SAW-SETS.

Specification forming part of Letters Patent No. 125,465, dated April 9, 1872.

Specification describing a new and Improved Saw-Set, invented by HIRAM R. LAVEY, of Bristol, in the county of Kenosha and State of Wisconsin.

Figure 1 represents a vertical transverse section of my improved saw-set, the line *c c*, Fig. 2, indicating the plane of section. Fig. 2 is a plan or top view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new arrangement of rest, gauge, guide, and punch in a saw-set; and has for its object to so construct and combine these devices as to reduce the size and cost of the complete instrument to a minimum, and enable the punch-holder and guide to be secured and adjusted by the same screw in order to facilitate the practical operation of the instrument.

A in the drawing represents the bed-piece of the saw-set, made with a downwardly-projecting tenon, *a*, or otherwise, so that it may be conveniently attached to a suitable support. At its ends are formed projecting pins or trunnions *b b*, which serve as pivots for a frame, B, that constitutes the rest for the saw. A thumb-screw, *d*, fitted through the back portion of the bed-piece, bears on the back of the rest and serves to give it a suitable desired inclination to or distance from the plane on the face of the bed-piece. By this manner of adjusting the rest the saw can be set with suitable angle. C is the punch-holder, composed of a horizontal slotted base, *e*, and of an arched arm, *f*, in which the tubular vertical punch-guide *g* is held. The punch D is fitted through the tube *g*, its upper part having projecting pins *h h* working in slots, grooves, or against projecting guides of the tube. A spring, *i*, tends to hold the punch elevated above the bed, which, below the punch, has a steel face-plate, *j*, set into it. The lower end of the punch D forms, by being flattened, two wedge-like faces of different angles, so, by being turned in the tube, one or the other of these faces can be brought into action, according to the size or face of the teeth to be set. A screw, *l*, passing through the slotted base of the punch-holder C, holds the same in place and permits its adjustment in order to bring the punch over a greater or less portion of the

saw-teeth. E is a laterally-adjustable guide, secured upon the bed A by the same screw *l* that holds the base *e*, as shown. Projecting ribs or lugs *m m* on the bed serve to steady and hold the guide E, to keep its front edge always parallel with the saw.

The saw to be set is supported partly by the rest B, partly by the bed A, the position of the rest regulating the "set" of the teeth. The points of the teeth abut against the guides E, and are moved along the same to bring the teeth successively under the punch.

The screw *d*, instead of passing through the back part of the bed-piece A, as stated, may as well be fitted through the back part of the base *e*, as shown.

By making the punch-holder adjustable by means of its slotted base I am enabled to bend or set the teeth of heavy circular or other saws with great ease, since the punch can be adjusted to just strike the end of the tooth instead of the whole tooth, and more especially if the whole tooth is to be bent than if the point only. But it is frequently desirable to bend the whole tooth of fine saws at their base only, and the punch-holder may be set so as to allow said base of the tooth to rest at the corner or angle of the base-plate, as is necessary. Again, it is not safe to bend the teeth of very hard saws wholly at any one point, and hence it is necessary to have adjustability in order to bend them gradually and in a gentle curve. The adjustable guide E, combined with a stationary punch-holder, will not suffice for all these operations, since in that case the whole tooth cannot be bent by striking it on or near the point.

I do not claim any of the above devices *per se*; but

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

The slotted gauge or guide E and the punch-holder C, provided with the horizontal slotted base *e*, arranged as shown, and secured to the base A *a*, having ribs *m*, by means of the screw *l*, as hereinbefore set forth.

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Witnesses:

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