(No Model.)

H. J. WILLIAMS.

Bench Hook.

No. 232,094. Patented Sept. 7, 1880.

Fig: 1.

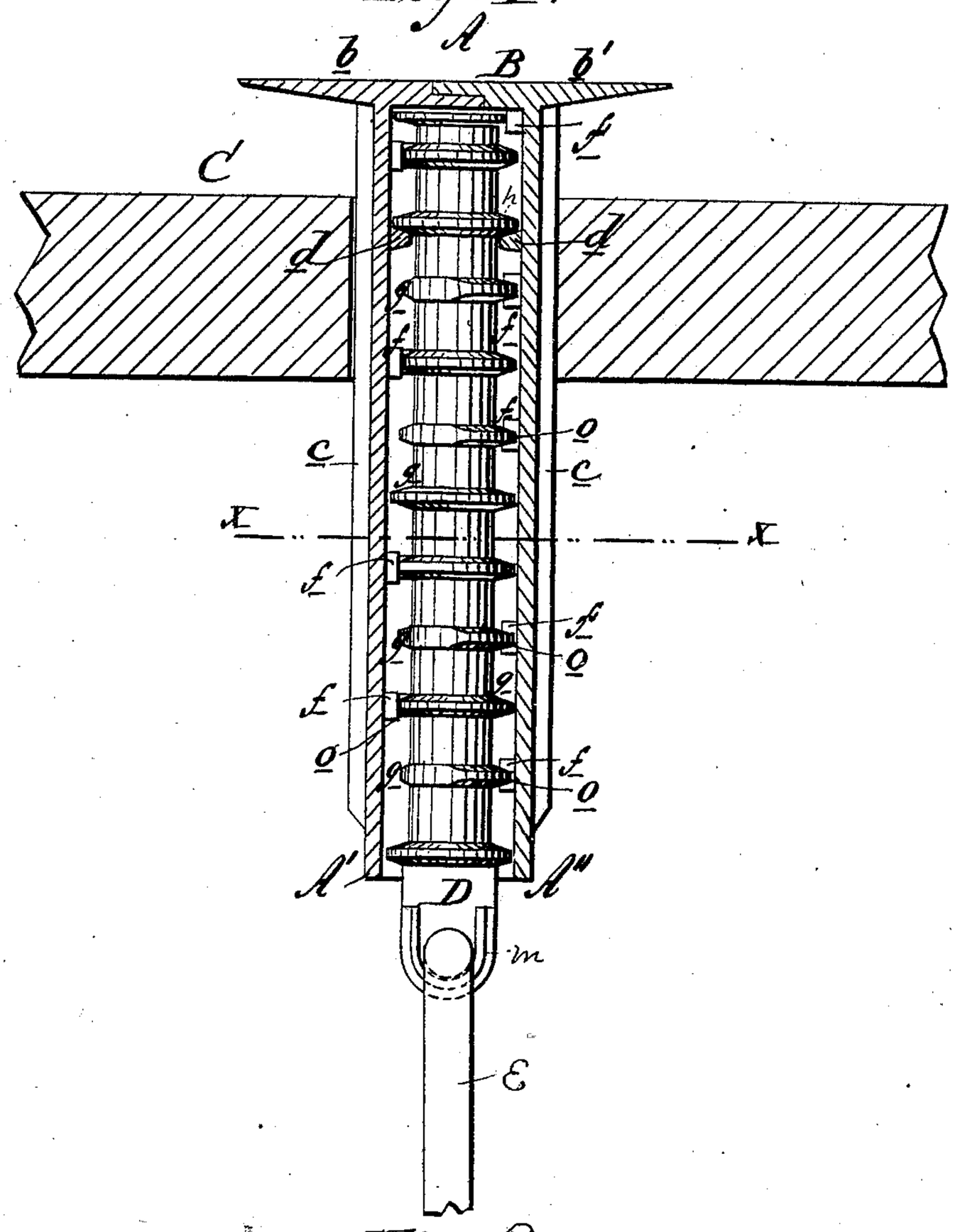
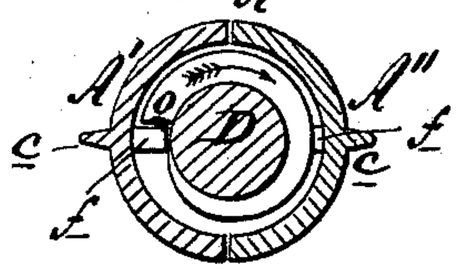


Fig: 2.



WITNESSES:

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HUMPHREY J. WILLIAMS, OF NEW YORK MILLS, NEW YORK.

BENCH-HOOK.

SPECIFICATION forming part of Letters Patent No. 232,094, dated September 7, 1880.

Application filed June 18, 1880. (No model.)

To all whom it may concern:

Be it known that I, HUMPHREY J. WILLIAMS, of New York Mills, in the county of Oneida and State of New York, have invented a new and Improved Bench-Hook, of which the following is a specification.

The object of this invention is to provide a carpenter's bench-hook that can be more easily set in position, adjusted, and removed, and is more durable than those now in use, and be firmer in the bench when in use.

The invention consists, essentially, of a tubular shell carrying a toothed plate on its top, set at right angles thereto, said shell being longitudinally divided into two sections, that inclose an eccentrically or cam threaded rod or screw, by means of which the said sections are spread apart.

Figure 1 is a vertical sectional elevation of the device in position. Fig. 2 is a cross-section of the same on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

In the drawings, A′ A″ represent, respectively, the semi-tubular longitudinal sections of the bench-hook A, each section A′ A″ having on its top a toothed section, *b b′*, respectively, of the horizontal plate B, and each section A A′ is provided exteriorly with a longitudinal flange or web, *c*, extending nearly its whole length, and designed to hold the said bench-hook from turning in the bench C, into which it is inserted. Interiorly each section A′ A″ is provided with a semicircular shoulder, *d*, to hold the rod or screw D up in position, and with a series of short studs, *f f*, arranged one above the other, those in the one section being opposite the intervals between those in the other section, and designed to serve as stops to prevent the turning of the screw D in the wrong direction, and to serve also as bearing-points for the cams or eccentric threads *g g* of the said rod or screw D, which cams or eccentric threads *g g* are arranged with their shoulders *o* alternating on opposite sides of the rod or screw D. When set in position the collar *h* of the screw D rests on and above the shoulders *d* of the semi-tubular sections A′ A″, while the cams or eccentric threads *g g* bear against the studs *f f*, so that when the rod or screw D is turned in one direction the sections A′ A″ will be separated by the pressure of the swells of the cams *g g* upon the studs *f f* with the effect of tightening the said bench-hook A in position, and if the said screw or rod D be turned in the opposite direction the sections A′ A″ of the said bench-hook A may be brought together again, so that said bench-hook A can be moved and adjusted at will.

A wrench or lever, E, attached at *m* to the lower end of the rod or screw D, serves as a handle whereby to turn said rod or screw D.

This device can be raised or lowered, taken from the bench and reset, without the use of hammer, screw-driver, or other tool, and is adapted to a bench of any thickness.

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

1. As an improved article of manufacture, a bench-hook constructed substantially as herein shown and described, consisting of the semi-tubular sections A′ A″, provided with exterior webs or flanges, *c c*, and interior studs, *f f*, sectional toothed plate B, and rod or screw D, provided with cams or eccentric threads *g g*, as set forth.

2. In bench-hooks, the combination, with screw D, having eccentric threads *g*, of the interior shoulders, *d*, and studs *f*, the latter arranged one above another, and those in one section opposite the intervals between those in the other section, as and for the purpose specified.

HUMPHREY J. WILLIAMS.

Witnesses:

Rev. EDWARD R. HUGHES,

JOHN M. WHITNEY.