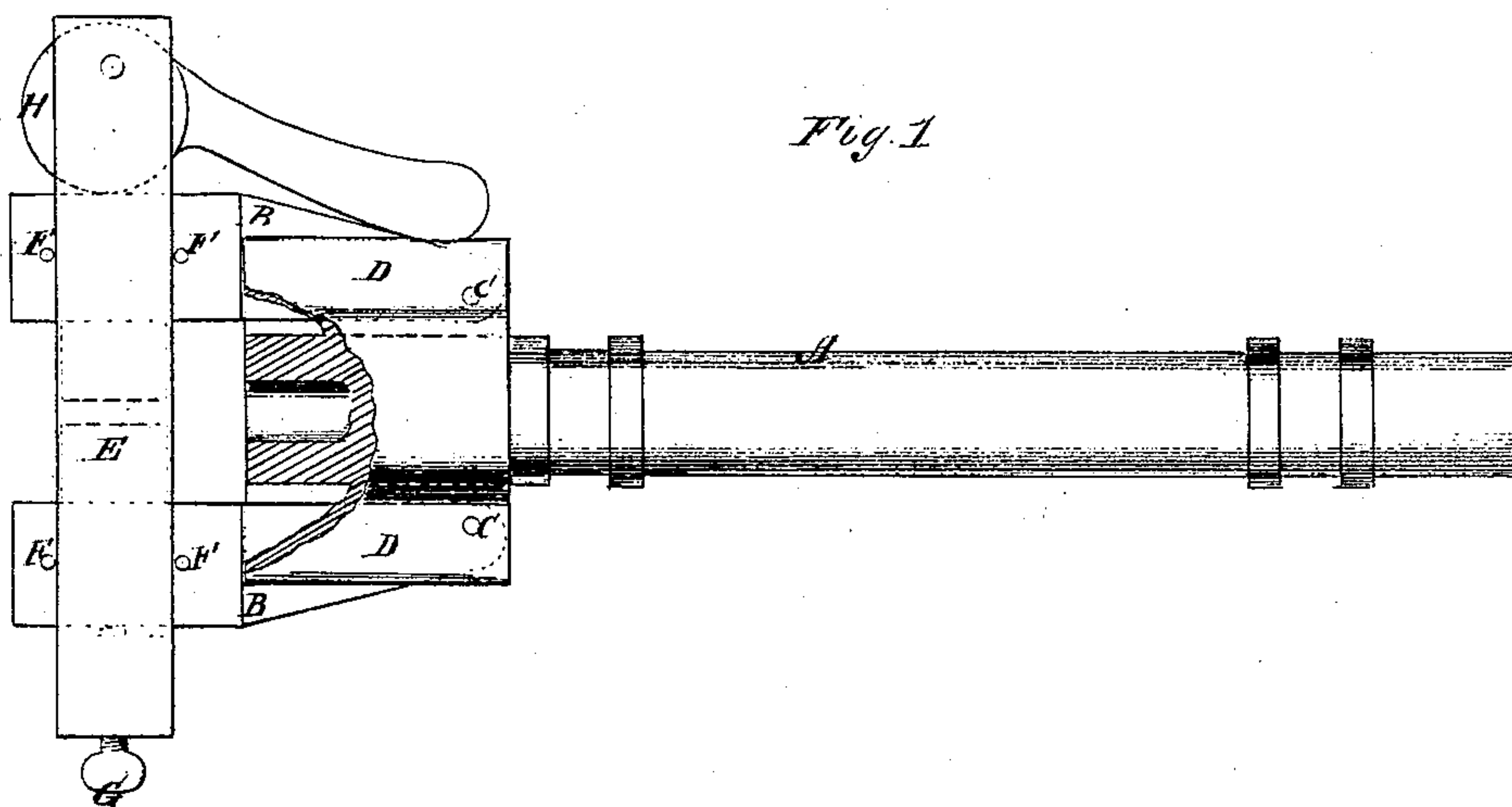


*G. W. Mingus,*

*Bolt Threader.*

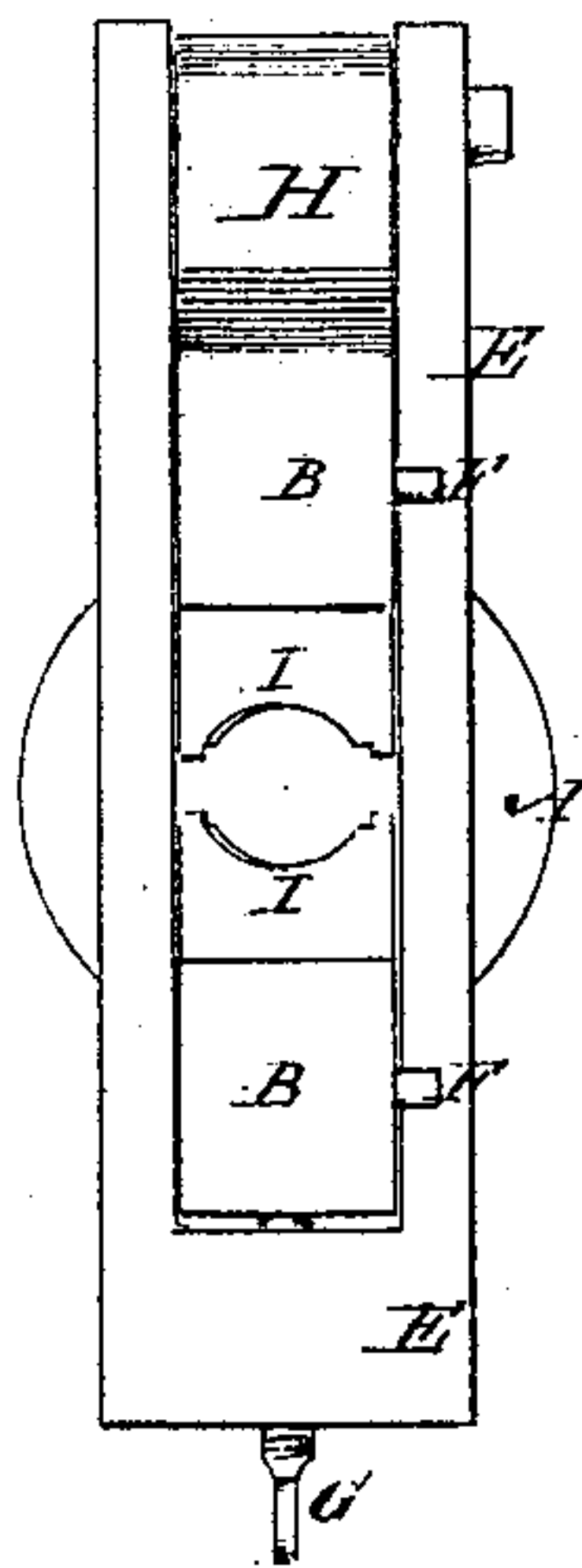
*No. 103642.*

*Patented May 31, 1870.*

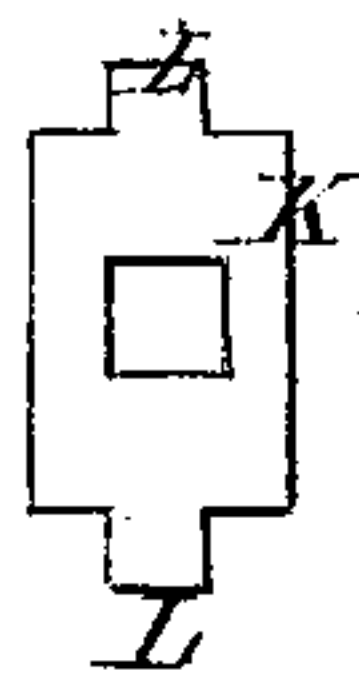


*Fig. 1*

*Fig. 2.*



*Fig. 3.*



Witnesses:  
*L. S. Mabie*  
*Alex. F. Roberts*

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*G. W. Mingus*  
PER *Mmm*  
Attorneys.

# United States Patent Office.

GIDEON W. MINGUS, OF POMEROY, OHIO.

Letters Patent No. 103,642, dated May 31, 1870.

## IMPROVED BOLT-THREADER.

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

*To all whom it may concern:*

Be it known that I, GIDEON W. MINGUS, of Pomeroy, in the county of Meigs and State of Ohio, have invented a new and useful Improvement in Bolt-Threader; and 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 drawing forming part of this specification.

This invention relates to an improved screw-thread cutter for threading bolts, and consists in a pair of die-carrying jaws hinged to a hollow mandrel near its end, and arranged for their free ends which project beyond the end of the mandrel to work in a slotted transverse bar, or it may be a disk having a set-screw at one end of the slot, and an eccentric bar at the other, working against the outer faces of the die-carrying jaws to hold them up to the work. The set-screw makes the adjustment for the size of the bolt, and the eccentric releases the jaws to discharge the finished bolt. A solid die or wrench may be applied in place of the screw-cutting dies, to turn a tap for tapping nuts.

Figure 1 is a side elevation of my improved bolt-threader, a part being broken out;

Figure 2 is an end view; and

Figure 3 is a plan of a solid die or wrench to be attached in place of the screw-cutting dies for operating taps.

Similar letters of reference indicate corresponding parts.

A is the hollow mandrel. It may be arranged to work in bearings in any suitable support, and have gear-wheels, or other means applied for turning it.

B represents the die-carrying jaws, pivoted between ears D at C to the mandrel, near one end, and so that the swinging ends project beyond the end thereof.

E is a slotted bar placed on the jaws near the ends

transversely, and held in the required position by the pins F.

One end has a set-screw, G, tapped through it to bear against the rear side of one of the jaws, and the other end has an eccentric lever, H, pivoted in the slot, to bear against the outer side of the other jaw.

I represents the dies attached to the insides of the jaws, and within the slot of the bar E, so that the walls thereof keep them in position laterally, when turning around the rod or bolt.

The ears D being firmly attached to the mandrel, of necessity turn with it, and thus the bar E and the dies also receive rotary motion.

The set-screw G is first adjusted so that, when the eccentric is turned to the position represented in the drawing, the jaws will be right for the rod or bolt to be threaded, which is then applied and threaded in the ordinary way to the extent required. The eccentric lever H is then turned back to release the bolt, and the apparatus is ready for the next operation.

For tapping nuts, I propose to remove the dies I, and apply the solid die or wrench K, which is provided with studs L for taking into notches or sockets in the faces of the jaws, to receive and hold them, the jaws being clamped against them by the eccentrics. The square end of the tap may be placed in this wrench and turned thereby.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

The combination of the mandrel A, ears D, die-carrying jaws B, slotted bar E, set-screw G, and eccentric lever H, all constructed and arranged substantially as specified.

GIDEON W. MINGUS.

Witnesses:

B. B. DICKERSON,

E. J. WILLIAMS.