

(No Model.)

L. W. STOCKWELL.
MACHINE FOR THREADING BOLTS.

No. 250,459.

Patented Dec. 6, 1881.

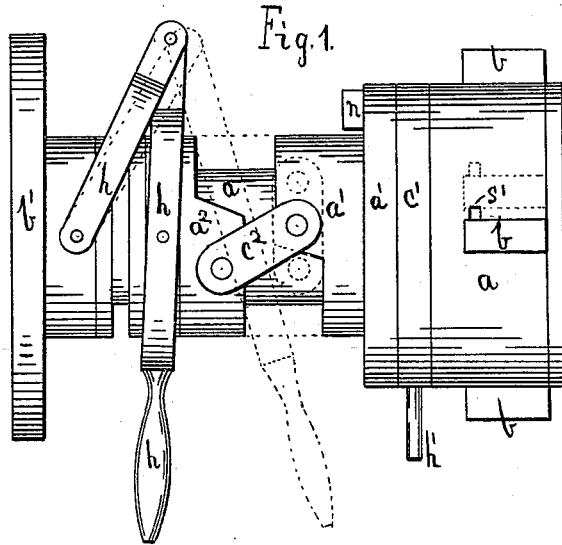


Fig. 2.

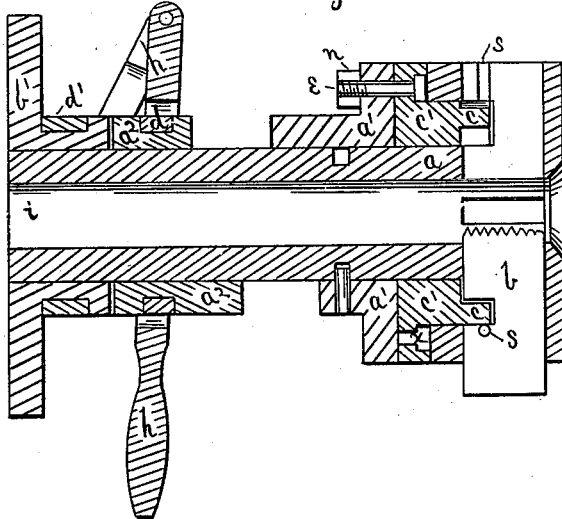
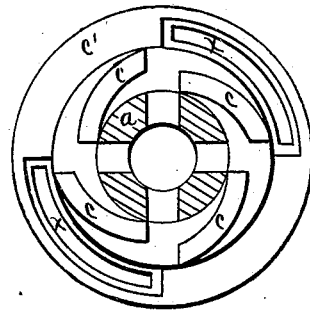


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

LEVI W. STOCKWELL, OF CLEVELAND, OHIO, ASSIGNOR TO WILLIAM H. PRICE, OF SAME PLACE.

MACHINE FOR THREADING BOLTS.

SPECIFICATION forming part of Letters Patent No. 250,459, dated December 6, 1881.

Application filed July 13, 1881. (No model.)

To all whom it may concern:

Be it known that I, LEVI W. STOCKWELL, of Cleveland, Ohio, have invented a new and useful Improvement in Bolt-Threading Machines, of which the following is a specification.

This invention relates to that class of screw-threading machines in which the dies are adjusted by means of a scroll or cam ring.

The object of my invention is to turn the scroll-ring for the purpose of moving the cutting-dies toward and from the center of the cutter-head by means of a link connecting a sliding collar on the spindle with the scroll-ring.

In the drawings, Figure 1 is a plan. Fig. 2 is a horizontal section. Fig. 3 represents the face of the scroll-ring.

The cutter-head or stock *a* carries the threading-dies *b*, which are held and moved toward and from the axis of the cutter-head by eccentric cams *c* on scroll-ring *c'* entering slots in the dies. The cutter-head *a* has a flange, *b'*, at the end of its spindle *i*, through which it may be bolted to the face-plate of a lathe or rotating wheel to operate the machine. The ring *a'* turns on spindle *i*. It is firmly attached by bolts *e* to scroll-ring *c'* through slots *x* in the scroll-ring. Link *c²* connects ring *a'* with sliding collar *a²*, which is feathered to spindle *i*.

By sliding forward collar *a²* from the position shown in Fig. 1 to the position indicated by dotted lines the link *c²* turns ring *a'* and scroll-ring *c'* on cutter-head *a*, thereby causing cams *c* to close the cutting-dies *b* against the bolt to be threaded. By sliding back collar *a²* the link *c²* turns ring *a'* and scroll-ring *c'* to open the dies or withdraw them from the threaded bolt. When the dies are closed and cutting threads the link *c²*, being parallel with the face of the cutter-head, prevents scroll-ring *c'* and ring *a'* from turning, and thereby retains the dies in position for cutting.

Link *c²* is pivoted to collar *a²* and ring *a'*. Sliding collar *a²* is operated by the jointed lever *h* pivoted to loose rings *d d'*. It rotates in ring *d*, which is in an annular groove in the circumference of the collar. Ring *d'* rests in an annular groove in the circumference of spindle *i*.

Scroll-ring *c'* has two circular slots, *x x*, to receive bolts *e* and their heads. Bolts *e* extend through slots *x* and ring *a'*, and are for the purpose of firmly attaching scroll-ring *c'* and ring *a'* together, which is done by turning the threaded nuts *n* on the bolts. When nuts *n* have been loosened on bolts *e* scroll-ring *c'* may be turned on the cutter-head to adjust dies *b* without turning ring *a'*. There is sufficient space between the ends of consecutive cams *c* to permit the removal of the dies from the cutter-head when the scroll-ring has been turned on cutter-head *a* to the position shown in Fig. 3, and the dies become dislodged from cams *c*.

In replacing the dies in the cutter-head a pin, *s*, in the side of each die comes in contact with the outside of cam *c*, at the outer end of the cam, and arrests the die in position for the cam to enter the slot in the die on turning scroll-ring *c'* on the cutter-head. Scroll-ring *c'* is thus turned by means of handle *h'* inserted in a hole for the purpose in the circumference of the scroll-ring. There is a small slot, *s'*, at the side of the die-slot in cutter-head *a* for pin *s* to enter.

I claim as my invention—

In a screw-threading machine, the link *c²*, in combination with sliding collar *a²*, ring *a'*, and scroll-ring *c'*, substantially as described.

LEVI W. STOCKWELL.

Witnesses:

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