

H. G. THOMPSON & C. LUKE.

Tack-Driving Machine for Boots and Shoes.

Patented Feb. 2, 1875.

No. 159,473.

Fig. 1.

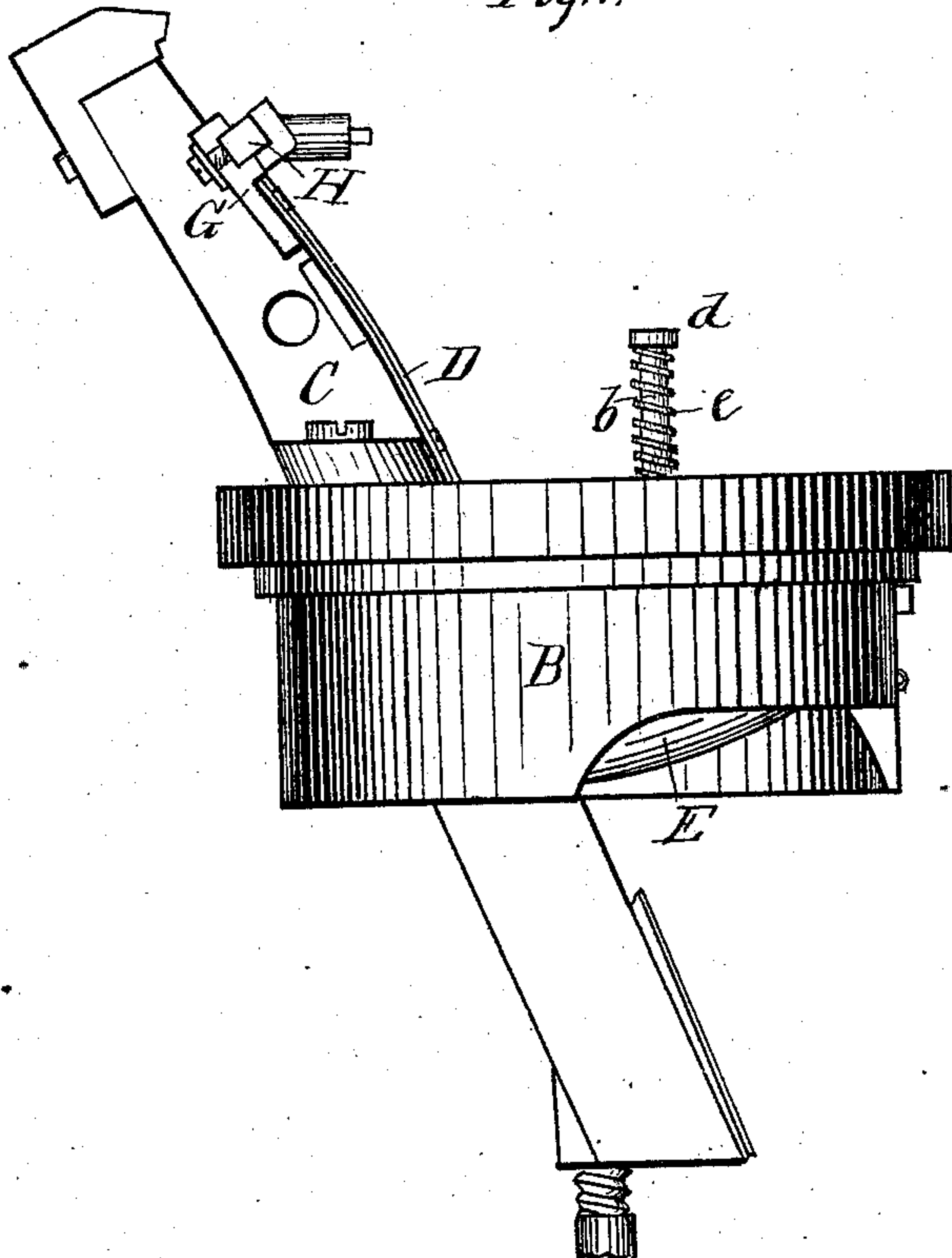
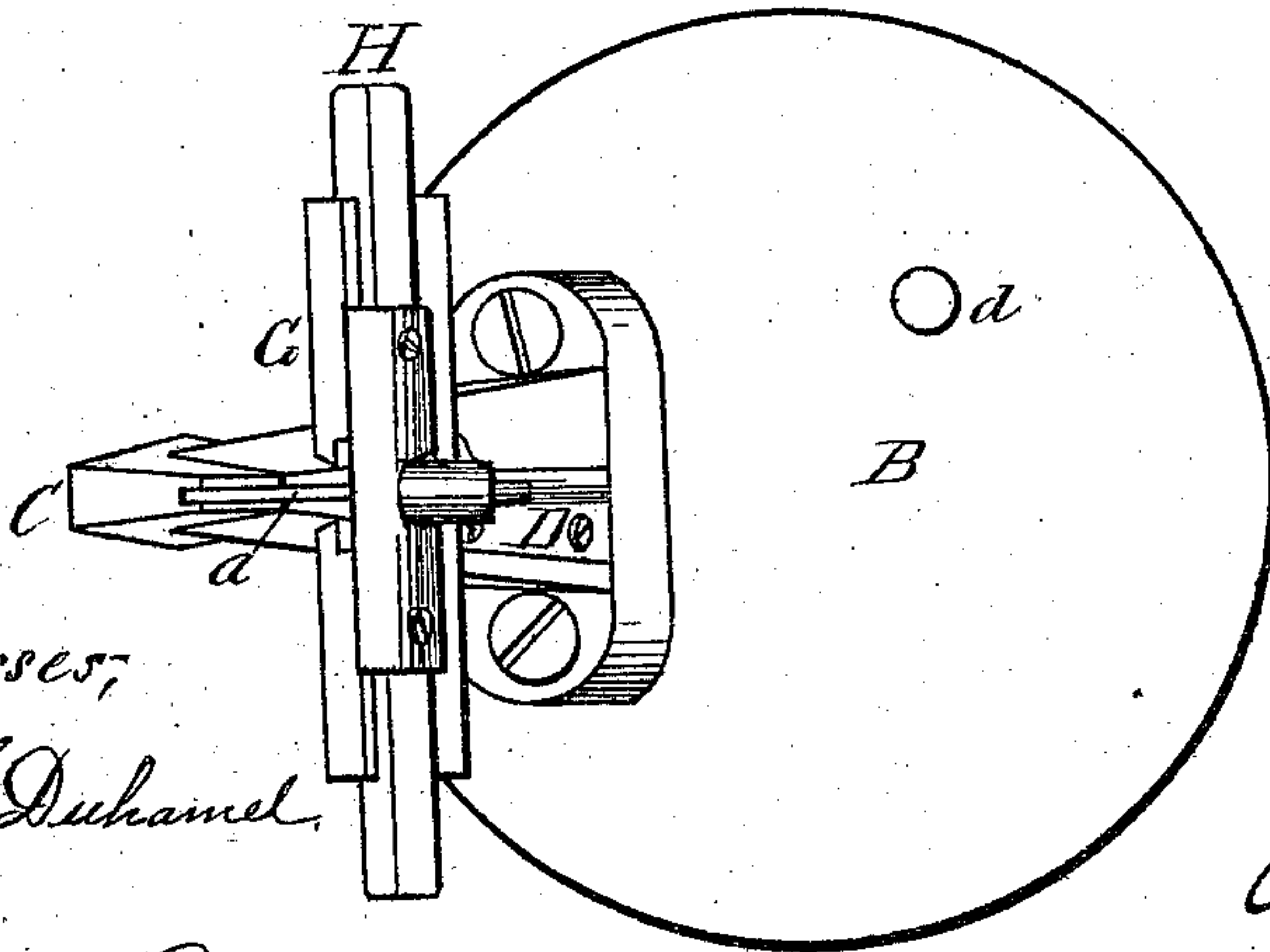


Fig. 2.



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Fig. 3.

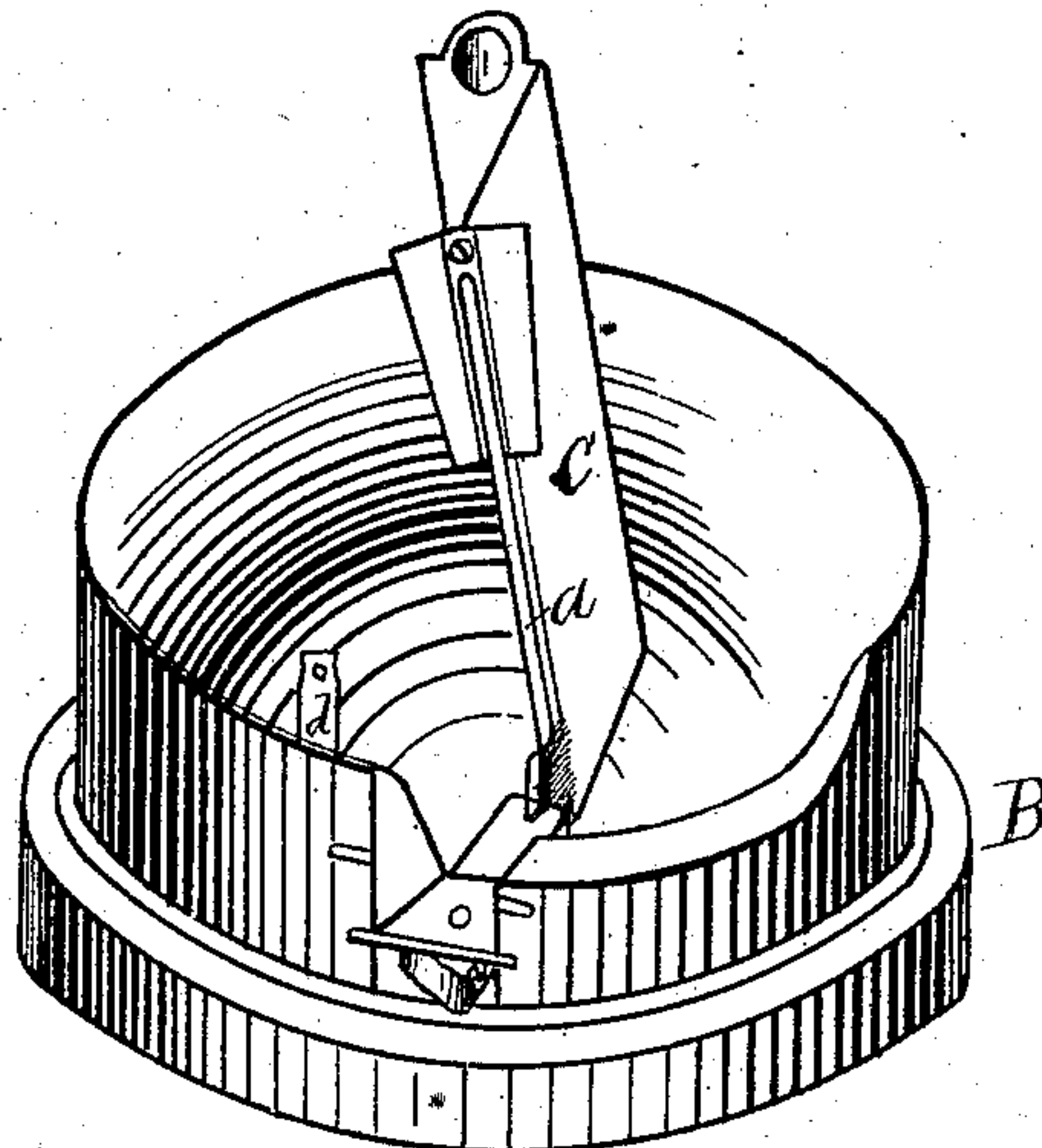


Fig. 4.

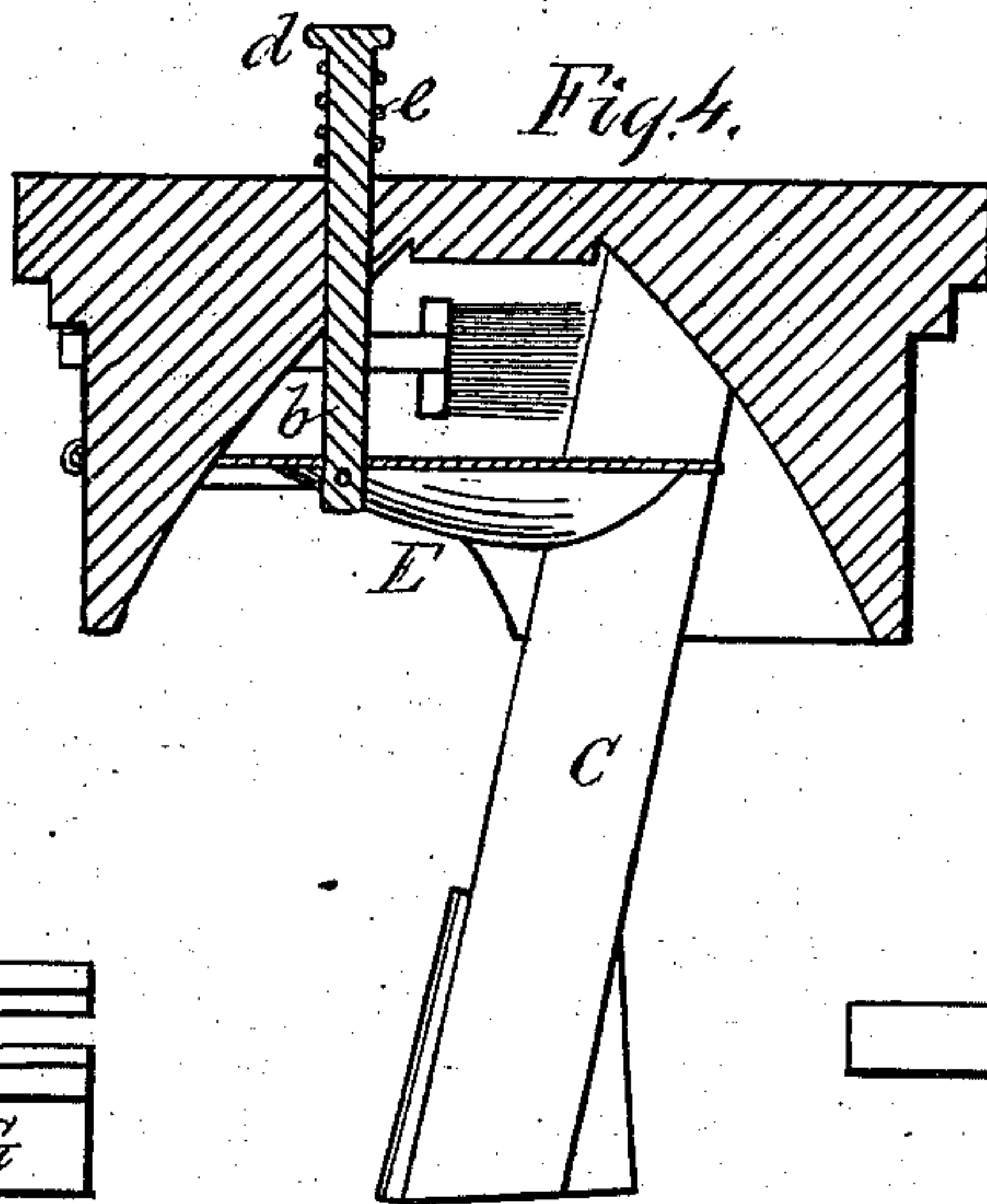


Fig. 5.

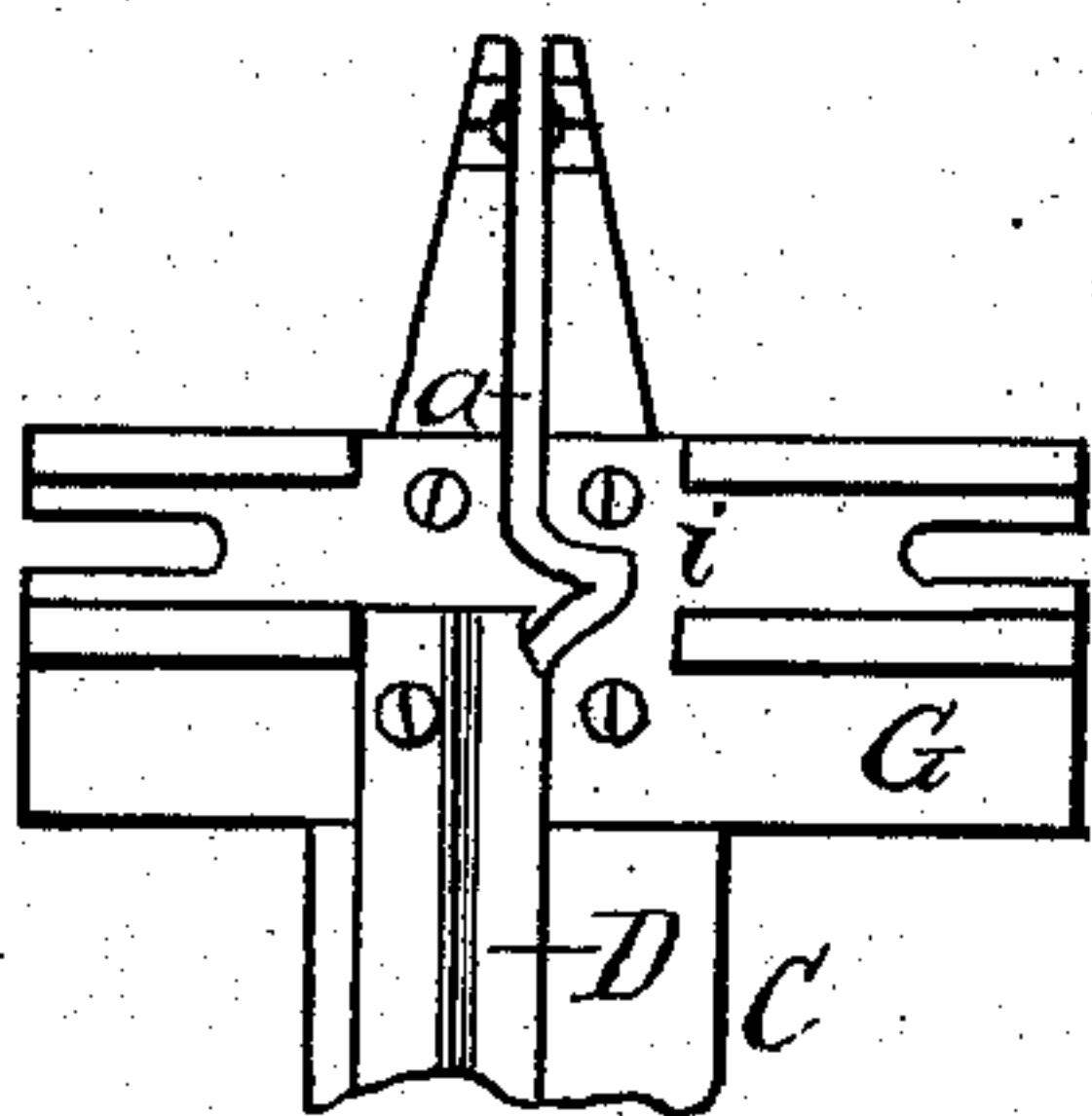
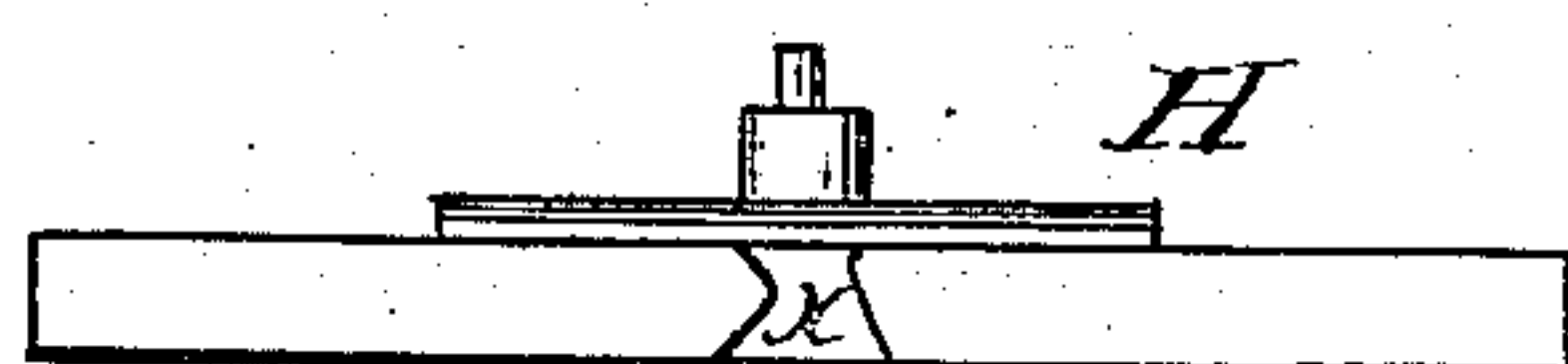


Fig. 6.



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UNITED STATES PATENT OFFICE.

HENRY G. THOMPSON AND CHARLES LUKE, OF MILFORD, CONNECTICUT;
SAID LUKE ASSIGNOR TO SAID THOMPSON.

IMPROVEMENT IN TACK-DRIVING MACHINES FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. **159,473**, dated February 2, 1875; application filed
January 16, 1875.

CASE A.

To all whom it may concern:

Be it known that we, HENRY G. THOMPSON and CHAS. LUKE, of Milford, county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Tack-Driving Machine for Boots and Shoes, of which the following is a specification:

Our invention relates to that class of tack-driving machines in which is employed a reciprocating revolving feed-cylinder having a stationary head and an inclined roadway for the passage of the tacks; and the nature of our invention consists in a guard over the heads of tacks in the roadway of a vibrating incline outside of the feeding-cylinder, for the purpose of preventing their displacement by the jar consequent upon the movement of the parts; also, in a diaphragm fastened to the inside of a stationary head of a revolving feeding-cylinder, for the purpose of keeping the roadway clear of obstructions; also, in giving a reciprocating movement to the diaphragm by means of a bumper and spring attached to the same outside of the stationary cylinder-head. Our invention further consists in a receiver or trap in the roadway of a tack-driving machine, for the purpose of stopping the downward movement of the tacks preparatory to their separation, in combination with a slide-bar with an opening or trap beneath for receiving, separating, and carrying each tack singly by the head to the discharge-passage; and also in a trap in the roadway of a tack-driving machine with the delivery from the same, when formed into a curve or segment of a circle, in combination with the slide-bar for separating each tack singly.

In the accompanying drawings forming part of this specification, Figure 1 is a side view, and Fig. 2 a plan view, of my invention. Fig. 3 is an inside view of the stationary head. Fig. 4 is a section of the same through the bumper and spring. Figs. 5 and 6 are detailed views of the trap and slide-bar.

A represents the reciprocating revolving cylinder with the stationary front head B having the incline C passing through it, and said incline having the roadway *a* for the passage

of the tacks, the same as described in former patents for this class of machines. On top of the incline C in front of the feeding-cylinder is secured a guard, D, which extends over the roadway *a* and over the heads of the tacks therein, for the purpose of preventing any displacement of the tacks by the jar consequent upon the movement of the parts. On the inner side of the stationary cylinder-head B is a diaphragm, E, hinged at the top and straddling the incline C, for the purpose of keeping the roadway *a* clear of obstructions. This diaphragm is given a reciprocating movement by means of a rod, *b*, attached to it, and passing through the head B with a bumper upon its outer end, and a coiled spring, *e*, surrounding the rod between the head and bumper. At the forward movement of the cylinder the bumper *d* strikes some part of the machine arranged for the purpose, and moves the diaphragm inward. At the backward movement of the cylinder the spring *e* throws it back again. In the roadway *a* a short distance above the lower end is inserted a receiver or trap, G, in which the roadway forms a curve or segment, *i*, of a circle, and over this is a laterally-sliding bar, H, having an opening or trap, *x*, in its under side. The curve *i* actually forms the receiver or trap, and stops the downward movement of the tacks preparatory to their separation, and, in combination with the sliding bar H and its trap *x*, receives, separates, and carries each tack singly by the head to the discharge-passage.

The tack may be removed from the trap by a circular wheel, or the segment of a circular wheel, and carried to be discharged again into the roadway for delivery to the hammer in place of a straight push-bar.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a tack-driving machine, a vibrating inclined roadway or passage provided with a guard or cover outside of the cylinder, substantially as shown, and for the purpose described.

2. A diaphragm, in combination with the

stationary head of a revolving feeding-cylinder, for the purposes herein set forth.

3. A diaphragm, fastened to the inside of a stationary head of a revolving feed-cylinder, and provided with a bumper and a spring, by means of which the diaphragm may be given a reciprocating movement, substantially as shown and described.

4. In a tack-driving machine, a roadway provided with a trap or receiver forming a curve or segment of a circle, for the purpose described.

5. The receiver or trap G in the roadway of a tack-driving machine, in combination with the slide-bar H having an opening or trap beneath, for the purposes set forth.

In testimony that we claim the foregoing as our invention we hereunto affix our signatures this 11th day of January, 1875.

HENRY G. THOMPSON.

CHARLES LUKE.

Witnesses:

FRANK L. ALLIS,

HARRY GRANT THOMPSON.