

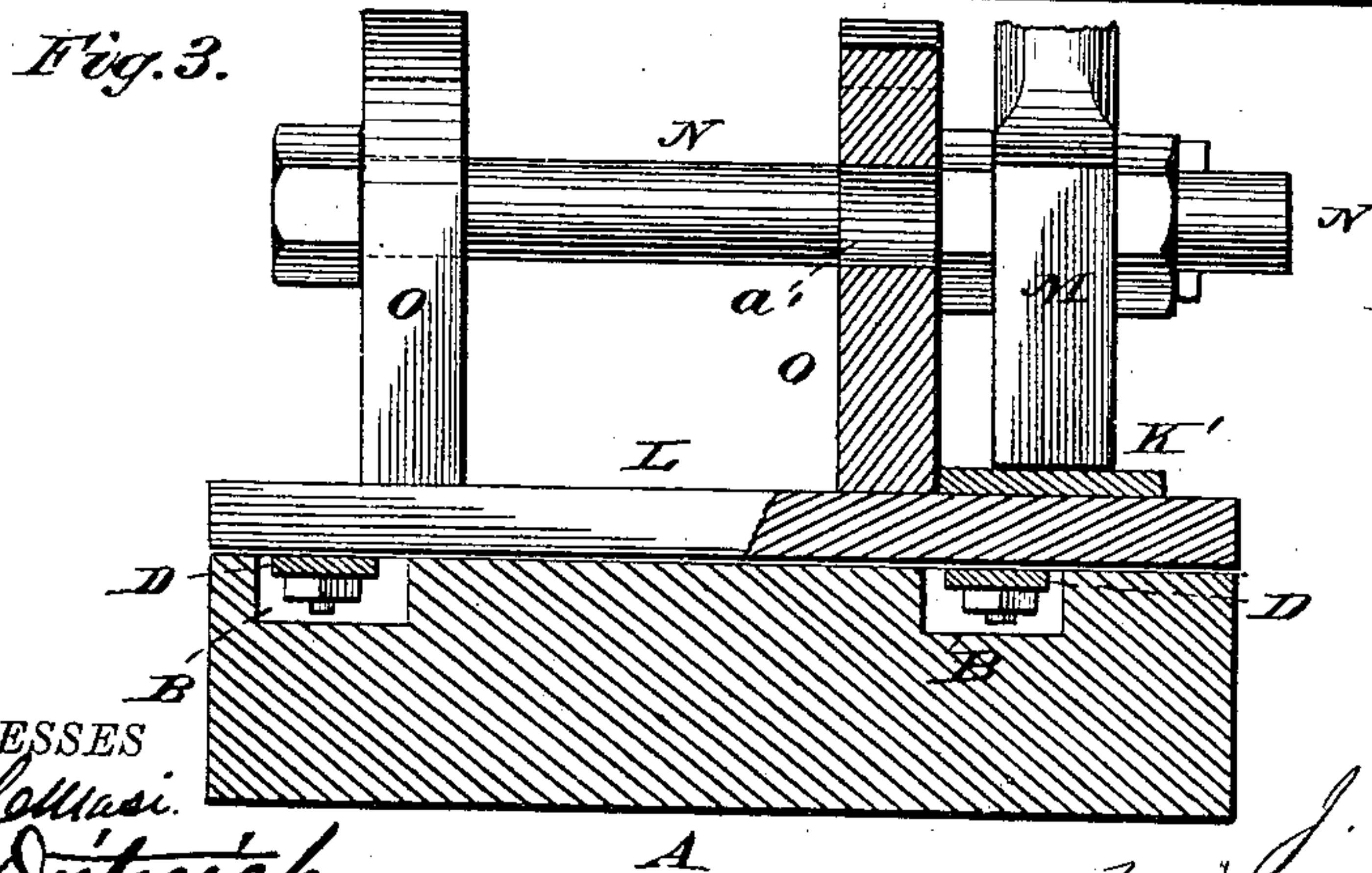
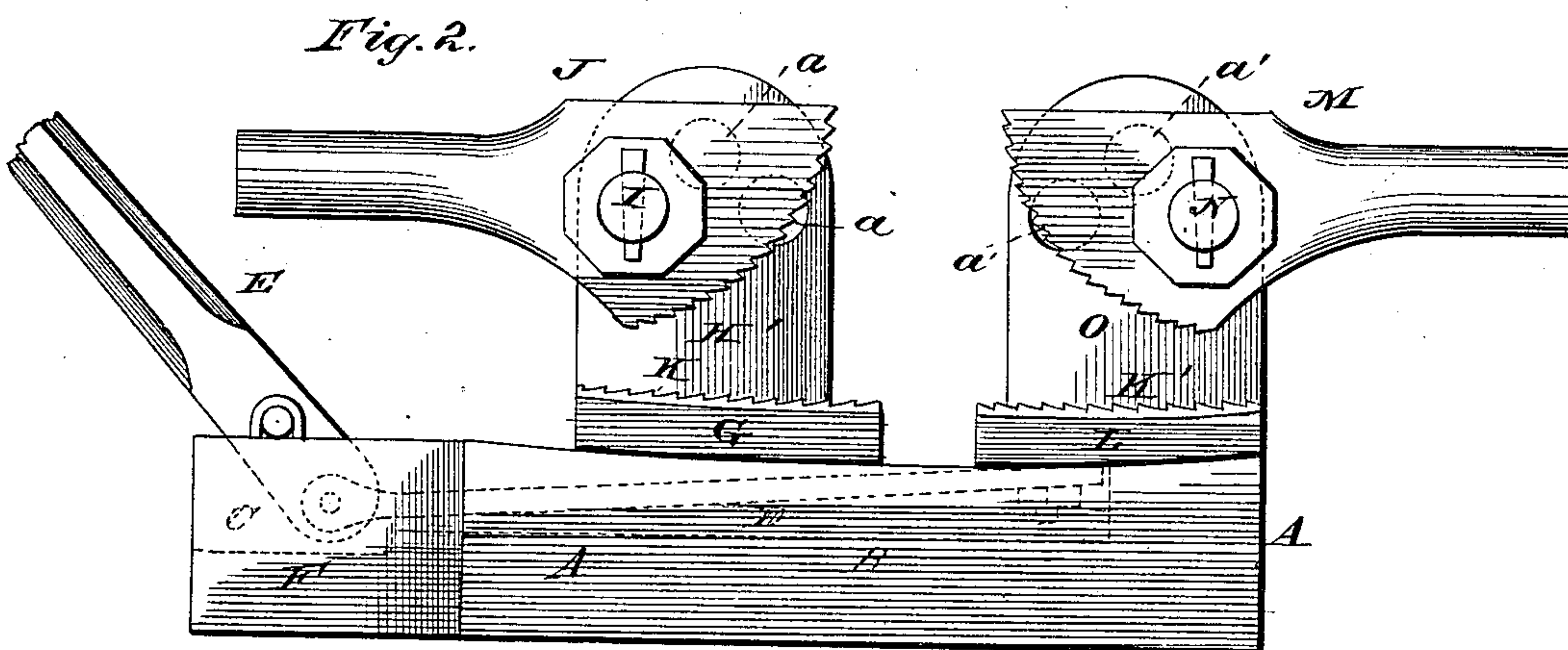
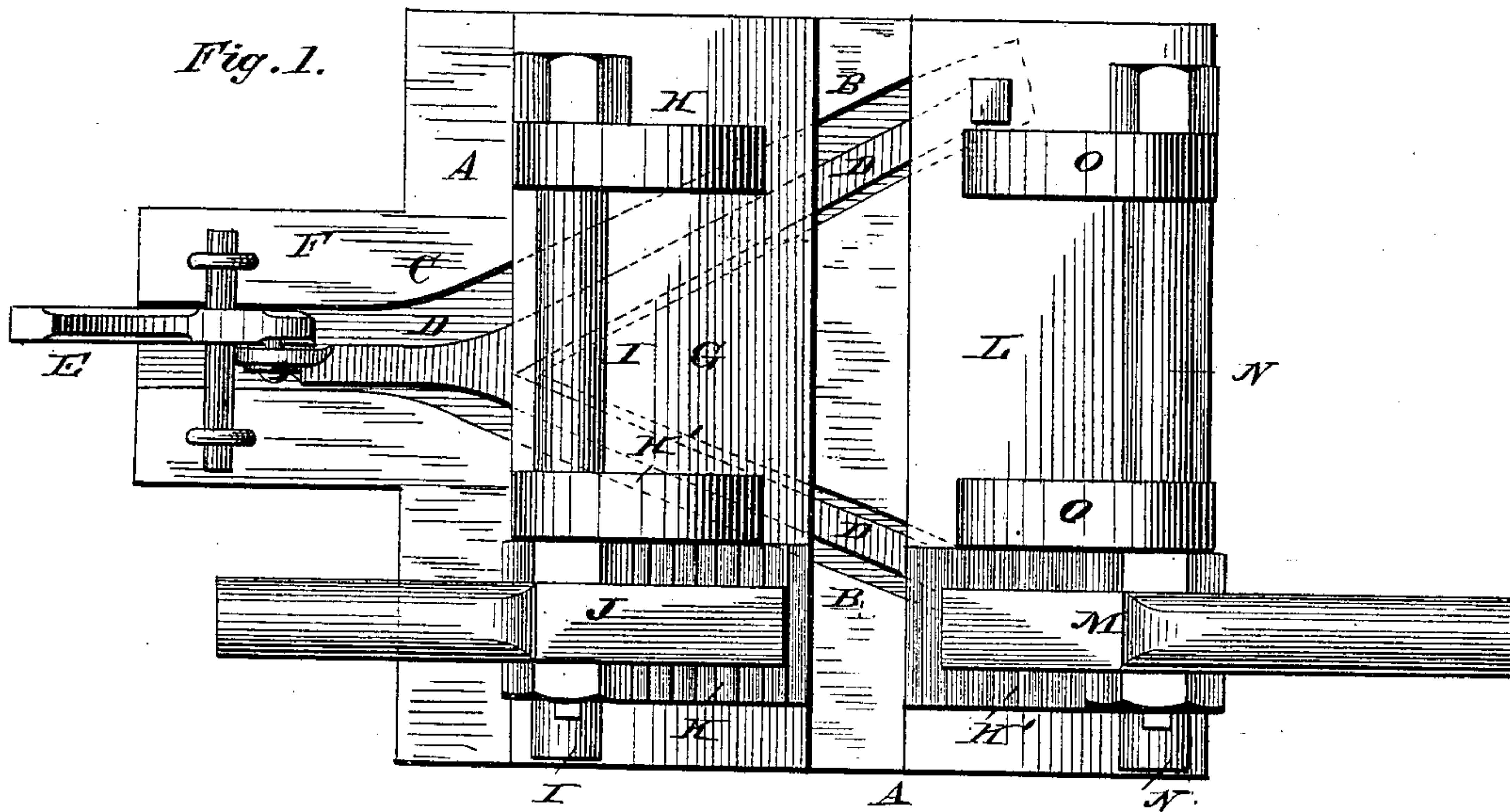
(No Model.)

J. M. TERRY.

TIRE UPSETTER.

No. 266,659.

Patented Oct. 31, 1882.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

JOSEPH M. TERRY, OF PALMETTO, GEORGIA.

## TIRE-UPSETTER.

SPECIFICATION forming part of Letters Patent No. 266,659, dated October 31, 1882.

Application filed September 29, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH M. TERRY, a citizen of the United States, and a resident of Palmetto, in the county of Campbell and State of Georgia, have invented a new and valuable Improvement in Tire-Shrinkers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a plan view of my device. Fig. 2 is a side view, and Fig. 3 is a cross section.

This invention has relation to tire-shrinkers; and it consists in the novel construction and arrangement hereinafter fully described, and pointed out in the claim.

Referring by letter to the accompanying drawings, A designates the bed-plate, slightly concave in its upper face, as shown, grooved at B B and C to receive the bifurcated arm D of the operating-lever E, which is fulcrumed in the neck F of the bed-plate A and secured at or near each end of a movable table, L. By this connection the table is reciprocated in a manner hereinafter described in a perfectly true line and with the least possible friction, much less in fact than would be the case were the lever D connected to the table in the center only, as heretofore, as shown. A table, G, is fixed upon the bed-plate A a short distance from the neck F, and is provided with two up-rights, H H', having a series of three holes, *a*, for the reception of the bolt I, carrying the corrugated cam-lever J near one end thereof. By this construction the bearing of the levers J and M is rendered more firm and is held in a true line, causing their corrugated gripping ends to take and retain a square hold upon the tire, thus insuring a shrinkage of equal extent at each edge thereof, which is not the case when the pivots of the levers are less strongly constructed. Beneath the cam-lever J a corrugated plate, K, is secured to the fixed table G, and a similar plate, K', is secured to a movable table, L, beneath a corrugated cam-lever, M, fulcrumed on an adjustable bolt, N, having bearings in holes *a'* in up-rights O rising from

the movable table L. The movable table L is connected to the ends of the arms of the bifurcated portion D of the operating-lever E, and may be slid toward the stationary table by operating the lever E, and when so operated it moves toward the fixed table G in the arc of a circle, thus insuring a compression or shrinkage of the tire in a curved line passing substantially through its longitudinal center and obviating the tendency thereof to bulge up or down in transverse curves or ridges, as would be the case if the foundation A were horizontal at its upper surface at this portion. The bolts that carry the corrugated cams may be placed in either of the holes *a a'*, to cause the cams to be nearer to each other or farther apart to adapt the cams to tires of different diameters.

The tires are first heated and then placed upon the plates and the corrugated levers brought down upon them to bind them between the corrugated cam-levers and the corrugated plates at a time when the movable table is farthest from the stationary table. The lever E is then forced in toward the stationary table and the movable table is drawn toward the former, whereby the tire will be shrunk. The device is cheap and simple and may be adapted to tires of greater or lesser diameter.

A tire-shrinker has been constructed which consists in combining with a movable plate and jaws a forked connecting-rod pivoted to the jaws and a lever-operated disk, as may be seen by reference to Patent No. 222,545, of December 9, 1879, and this construction I do not claim, protection being asked only for the construction hereinafter specifically claimed.

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

In a tire-shrinker, the foundation, grooved at B B C and curved at that portion upon which the movable gripping mechanism rides, in combination with a fixed and a movable table, each provided with two up-rights, one at or near each end thereof, and each having a series of holes in line with each other and disposed in pairs, a bolt extending from one upright to the other on each table and adapted

to removably support a corrugated-faced gripping-cam, each of said tables being provided with an opposing curved corrugated gripping-surface, with the lever E and connecting-rod  
5 D bifurcated and secured to each end of the movable table, substantially as shown and described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOSEPH MELLMOUTH TERRY.

Witnesses:

SIMEON ZELLARS,  
ZACHARY T. CRANFORD.