2 Sheets—Sheet 1.

M. W. GRIFFITHS.

Tire-Upsetter.

No. 204,317. **Patented May 28, 1878.**

Fig. 1.

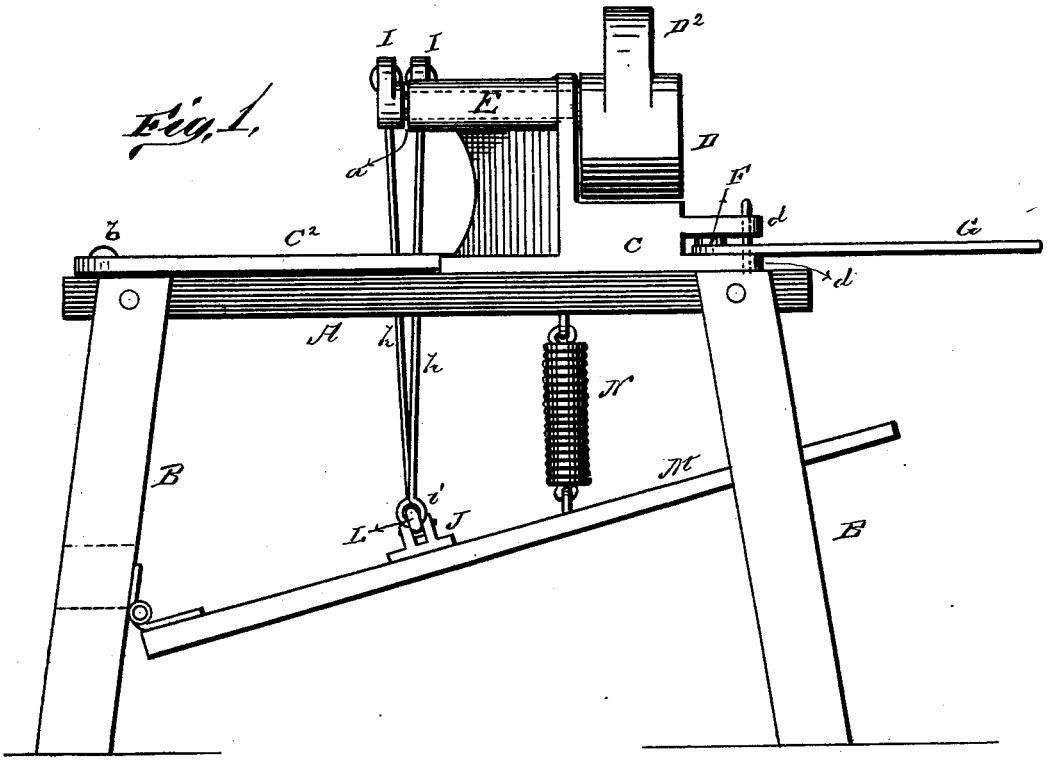
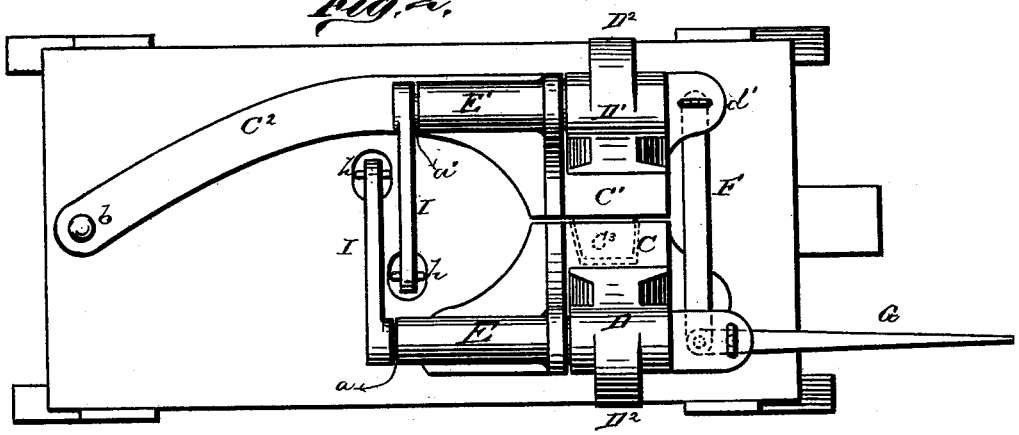


Fig. 2.



WITNESSES

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ATTORNEYS.

2 Sheets—Sheet 2.

M. W. GRIFFITHS.

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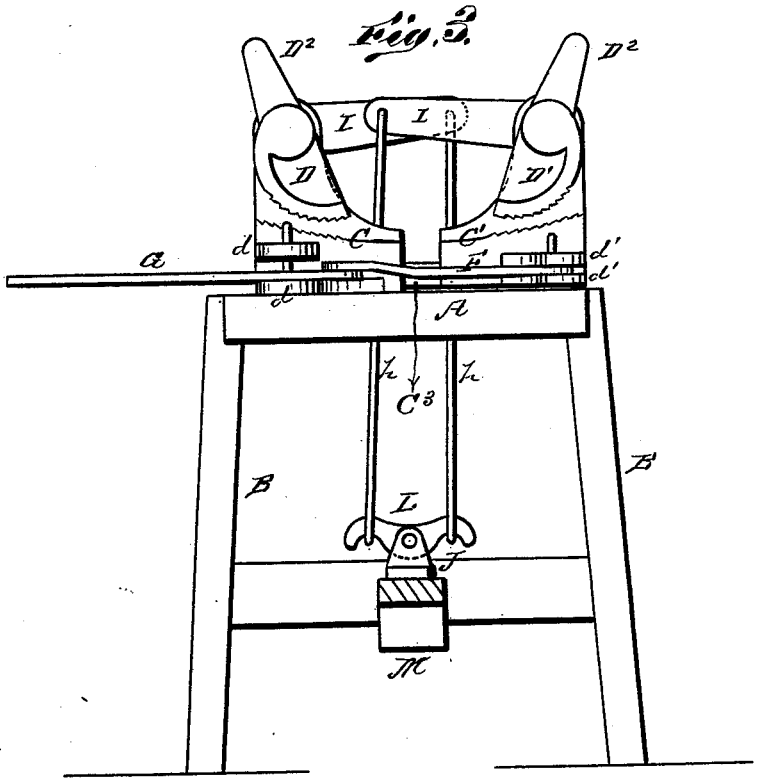
Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

MORRIS W. GRIFFITHS, OF MIDDLE GRANVILLE, NEW YORK.

IMPROVEMENT IN TIRE-UPSETTERS.

Specification forming part of Letters Patent No. **204,317**, dated May 28, 1878; application filed May 4, 1878.

To all whom it may concern:

Be it known that I, MORRIS W. GRIFFITHS, of Middle Granville, in the county of Washington and State of New York, have invented a new and valuable Improvement in Tire-Upsetters; 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 side view of my tire-upsetter. Fig. 2 is a plan view of one half of my tire-upsetter, and Fig. 3 is a part-sectional end view of the same.

The nature of my invention consists in certain improvements upon the tire-upsetter for which Letters Patent No. 184,074 were granted to me November 7, 1876, as will be hereinafter more fully set forth, and pointed out in the claims.

The annexed drawing, to which reference is made, fully illustrates my invention.

A represents the table of the machine, supported upon a suitable frame or legs, B. On top of this table, near the front end, is the plate or anvil upon which the tire is laid.

In my former patent, above referred to, this plate was made in one piece; but in my present case the same is divided transversely in the center in two equal parts, C and C^1, they being formed, respectively, with the elongated hubs E E′, to receive the shafts *a a′*, upon the front ends of which are secured the eccentrics D D^1, as shown,

The anvil C is secured permanently to the table A, while the anvil C^1 is movable thereon, it being provided with a rearwardly-extending arm, C^2, which is pivoted by a bolt, *b*, to the table. The anvil C^1 is further provided with a curved projection, C^3, which fits in a corresponding groove in the bottom of the stationary anvil C, and acts as a guide for the inward and outward movement of the anvil C^1.

On the front of the anvil C^1 are two projecting ears, *d′ d′*, between which is pivoted one end of an arm or connecting-rod, F. This rod extends across in front of the two anvils, and its other end is pivoted to the inner end of a lever, G, said lever being pivoted between two projecting ears, *d d*, on the front of the anvil C.

The lever G extends inward from its own pivot-point one inch, more or less, and to its extreme inner end the rod F is pivoted, as shown. By carrying the lever G to the front of the machine the anvil C^1 is brought close to the anvil C, and by reversing the lever an opening is made between the two anvils.

Each eccentric D is formed with an outwardly-projecting lug, D^2, which is used to strike upon with the hammer to open the eccentrics and relieve the tire.

On the inner ends of the shafts *a a′* are secured levers or arms I I, which overlap each other, and have rods *h h* attached to them. These rods pass downward through a slot or opening in the table A, and their lower ends form eyes *i i*, which are placed over the hooked ends of an equalizing-bar, L, pivoted centrally in a casting, J, on the treadle M, said treadle being hinged to the frame supporting the table, and held in a raised position by a spring, N.

The equalizer L causes the eccentrics D D^1 to grasp with equal force the tire, should said tire be thicker where grasped by one eccentric than the portion grasped by the other.

To operate the machine, the tire is heated and placed upon the anvils C C^1, the said anvils being separated, more or less, by means of the lever G, according to the distance or amount the tire is to be shortened. The eccentrics D D^1 are then clamped down upon the tire by operating the treadle M, when the lever G is seized by the operator and brought to the front of the machine, carrying the movable anvil C^1 toward the stationary one, C, thus upsetting the tire.

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

1. The eccentrics D D^1, shafts *a a′*, arms I I, connecting-rods *h h*, equalizer L, secured to treadle M, and spring N, in combination with stationary anvil C, movable anvil C^1, provided with arm C^2, guide C^3, and lever G, hav-

ing connecting-rod F, pivoted together, substantially as shown, and for the purpose set forth.

2. In combination with the eccentrics D D^1, shafts a a', and arms I I, the connecting-rods h h, equalizer L, casting J, and treadle M, substantially as and for the purposes set forth.

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

MORRIS W. GRIFFITHS.

Witnesses:
WM. H. ALLEN,
GEO. E. PAUL, M. D.