Q. C. TEBBS.

Tire-Upsetters.

No. 157,728. Patented Dec. 15, 1874.

Fig. 1.

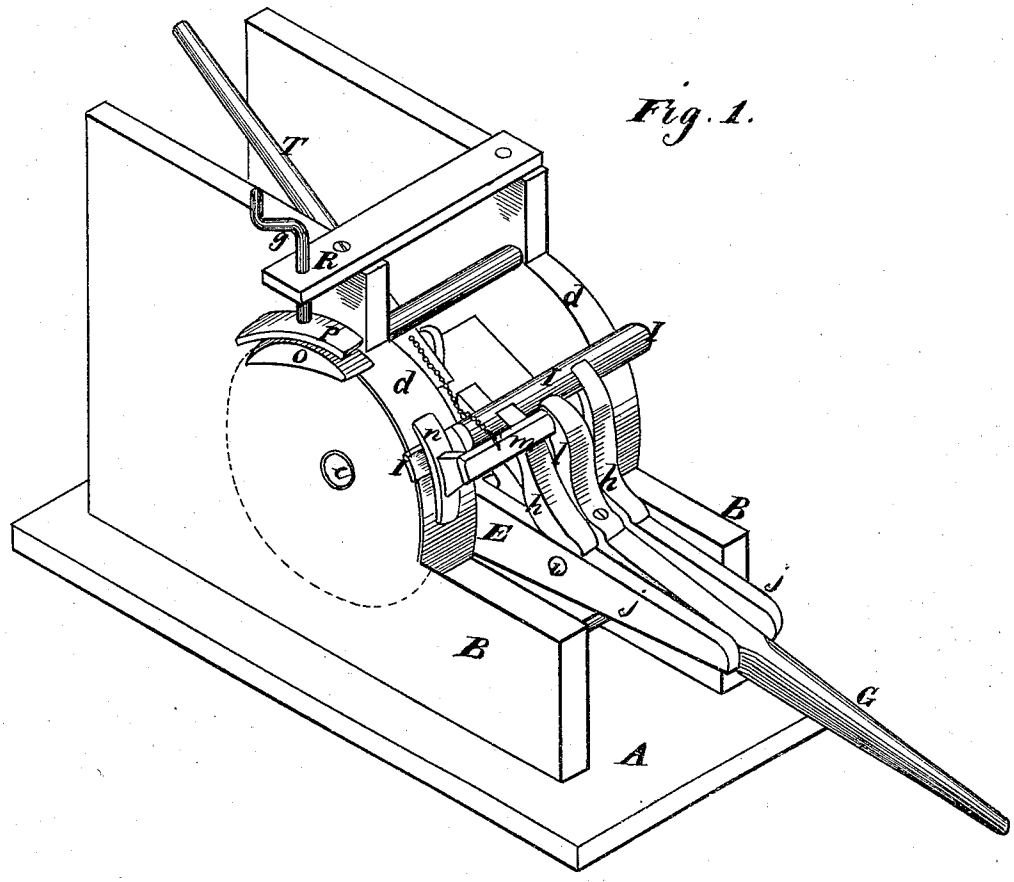
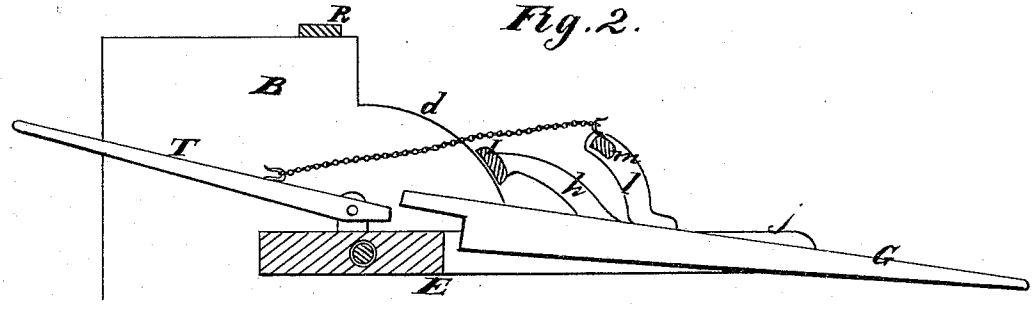


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

QUINTUS C. TEBBS, OF WINDSOR, CALIFORNIA.

IMPROVEMENT IN TIRE-UPSETTERS.

Specification forming part of Letters Patent No. **157,728**, dated December 15, 1874; application filed September 10, 1874.

To all whom it may concern:

Be it known that I, QUINTUS C. TEBBS, of Windsor, Sonoma county, State of California, have invented an Improved Tire-Upsetter; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvement without further invention or experiment.

My invention relates to an improved machine for upsetting metal bands and tires in order to shrink or reduce their diameter.

In order to explain my improved tire-upsetting machine, reference is had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a perspective view of my machine. Fig. 2 is a sectional elevation.

A represents the base of my machine, and B B are two upright parallel metal plates or sides, which can be cast in one piece with the base, or simply secured to it, as desired. These plates or sides are secured at a short distance apart, so as to leave a space between them, and one corner of each is cut away, so as to provide a curved face, *d*, as shown. This curved face is produced by striking a circle on the plates and then cutting away the corner, until about one-fourth of the circumference of the circle is represented. As the plates or sides B stand parallel with each other, their curved faces will be in the same line. Through the center of the circles from which the curved faces *d* are obtained, I place a shaft, *e*, one end of which will rest in each plate B, and upon this shaft, between the plates, I secure one end of a strong beam, E. This beam extends out beyond the curved faces, and has its end bifurcated, as shown, so that a lever, G, can be secured between the prongs *j*, as hereinafter described. An arm or standard, *h*, extends upward from each prong of the bifurcated end of the beam a short distance from the curved faces *d*, and has secured to their upper ends a transverse bar, I, which is long enough to extend across the two faces. The lever G is secured between the prongs *j* by a bolt, *i*, and is long enough to cause its inner end to strike the metal of the beam back of the prongs when its outer end is raised; but the beam might be made plain, and have the lever secured to its side, instead of between two prongs. An upright arm or standard, *l*, is secured to the lever G, between the two arms *h*, and this standard has extending from one side a rectangular bar, *m*, which carries a presser-foot, *n*, in such a position that when the outer end of the lever G is raised, the presser-foot will be pressed against one end of the transverse bar I, directly over one of the curved faces *d*. At the upper end of the curved face *d*, against which the presser-foot moves, I secure a strong bar or block, O, the upper face of which is curved and roughened. A curved shoe, *p*, is arranged to be set down against the curved face of this block by means of a set-screw, *g*, which passes down through the end of a cross-timber, R, above.

If desired, a lever, T, can be attached to the opposite end of the beam E, so that the power of two or more persons can be applied to operate the machine, and in this case I connect the lever T with the bar *m* by means of a cord, so that a pressure downward upon it will aid in holding the presser-foot down.

The band or tire to be upset is first suspended from the curved face of the block O. The shoe *p* is then forced down upon the block O by means of the set-screw *g*, until the tire is firmly held between their two faces. The tire will then pass between the presser-foot *n* and the end of the transverse bar I. Now, by lifting upward on the end of the lever G, the presser-foot *n* will be forced down upon the tire, so as to pinch it tightly between its lower face and the end of the bar. By exerting a sufficient amount of power upon one or both levers G T, the outer end of the beam E will be raised, so as to force the presser-bar *n* and transverse bar I in the direction of the block O and shoe *p*, thus upsetting that portion of the tire which is between them.

This machine is quite simple, and will do the work of upsetting easily, as the length of the levers can be increased to any desired extent in order to obtain a sufficient leverage to do the work.

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

The upright parallel plates or sides B, having the curved faces *d*, block O, and clamping-shoe *p*, in combination with the beam E, with its standards *h* and transverse bar I, and the lever G, with its standard *l*, rectangular bar *m*, and presser-foot *n*, all combined and arranged to operate substantially as and for the purpose above described.

In witness whereof I hereunto set my hand and seal.

QUINTUS C. TEBBS. [L. S.]

Witnesses:
JOHN L. BOONE,
C. M. RICHARDSON.