J. W. BODGE.
Tire Upsetter.

No. 202,220. Patented April 9, 1878.

Fig. 1.

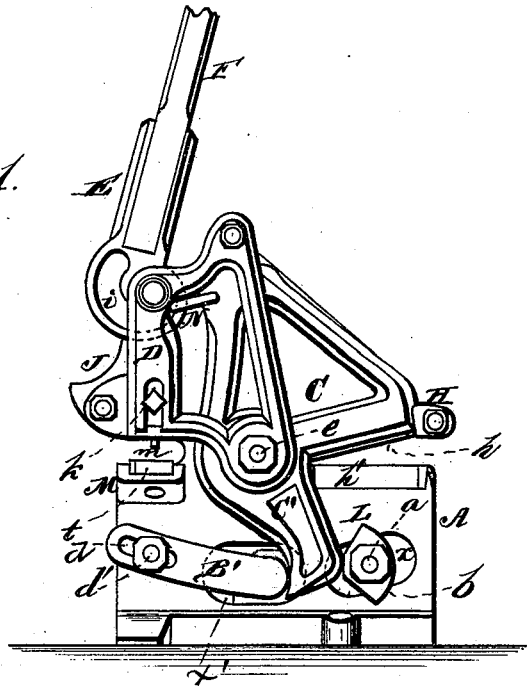


Fig. 2.

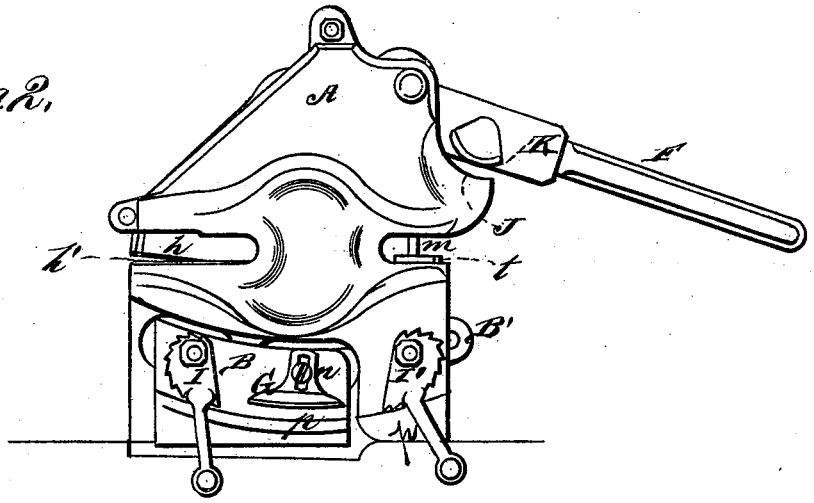
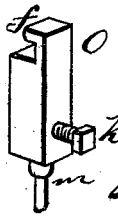


Fig. 3.



WITNESSES

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JOHN W. BODGE, OF CANISTEO, NEW YORK.

IMPROVEMENT IN TIRE-UPSETTERS.

Specification forming part of Letters Patent No. **202,220**, dated April 9, 1878; application filed January 5, 1878.

To all whom it may concern:

Be known that I, JOHN W. BODGE, of Canisteo, in the county of Steuben 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 side view of my machine. Fig. 2 is a side view, and Fig. 3 is a perspective detail, thereof.

This invention relates to tire-upsetters; and the novelty consists in the construction of the parts, as will be hereinafter more fully set forth, and pointed out in the claim.

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

A represents the standard or frame of the machine. B is the movable part of the upsetting device, which moves on the arc of a circle. This movable part or slide B has a stud, *a*, projecting through a curved slot, *x*, in the standard A, and upon this stud is placed a thick washer, L, and a nut, *b*, screwed upon the end of the stud to hold said washer in place. The slide B is also provided with an angular arm, B′, projecting through slot *x′*, and said arm has a slot, *d*, as shown, working over a pin or screw, *d′*. By these means the slide is guided in its movement.

C represents a lever, triangular in form, with a pendent arm, C′, extending downward between the angular arm B′ and washer L, as shown in Fig. 1, and working upon a pivot or journal pin, *e*. This lever C is provided at either end with a shear-blade, *h*, and a punch, *o*.

The pin *e* is in the center of the frame A, and the lever C thereon is actuated by means of a lever, E, so as to actuate the slide B; and said lever C has the shear-blade *h* attached to it, as shown.

D is a part of the frame, made separate from and is bolted to the main frame A. At one end the frame D is recessed to receive the punch slide O.

E is the operating-lever, pivoted in the upper part of the frame, and formed with a cam-groove, *i*, on the side near the edge, to to draw the lever C back by means of a hook, N, and also to draw the punch-slide O up by means of a hook, *f*.

The punch *m* is held in the slide O by a set-screw, *k*, passing through a slot in the frame D.

On the slide B is an adjustable guard, G, to keep the tire from "buckling" while being upset. This guard is held at any height necessary by a set-screw, *n*.

On the frame A is a guard, H, fitting over that end of the lever C to which the shear-blade *h* is attached, so as to prevent the same from spreading away from the lower knife or blade *h′*.

I and I′ are toothed scroll-levers, arranged, respectively, over the ledge *p* on the frame A and on the slide B to hold the tire down thereon. The cranks of these two levers are set so as not to interfere with each other in operation.

On the front edge of the frame A is formed a concavity, J, and upon the side of the lever E is a convex projection, K, fitting in said concavity when the lever is down, thus forming a band-bender.

M is the seat for the punch-block *t*.

The lever E is provided with a wrought-iron bar, F, bolted thereto to form a handle.

The advantages of this machine are as follows: The tire is held straight, without any possibility of slipping, and the guard G holds the tire from buckling or humping up.

By the construction of the lever C the shears open clear out, so that any shaped piece of iron can be laid in.

The punch passes down through a round hole, so that in punching the end of an iron the iron cannot tip up and break the punch when it draws up. The bottom part of the frame D is used as a guard with the hole through it, and the punch is put in up through the punch-block seat.

The band-bender is in a convenient place, and has a straight side on the lever E to hold the iron against to keep it from winding or twisting in bending.

The entire machine is comparatively small

and put up in compact form, takes up but little room, and is practical and efficient in operation.

I claim—

The slide B, provided with angular arm B′ and stud *a*, with washer L, in combination with the arm C′ of the lever C, all constructed 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.

JOHN WORTHINGTON BODGE.

Witnesses:
H. C. LIDLIARD,
S. P. MARSH.