

(No Model.)

P. GENDRON.
ROLLING TIRES.

No. 383,521.

Patented May 29, 1888.

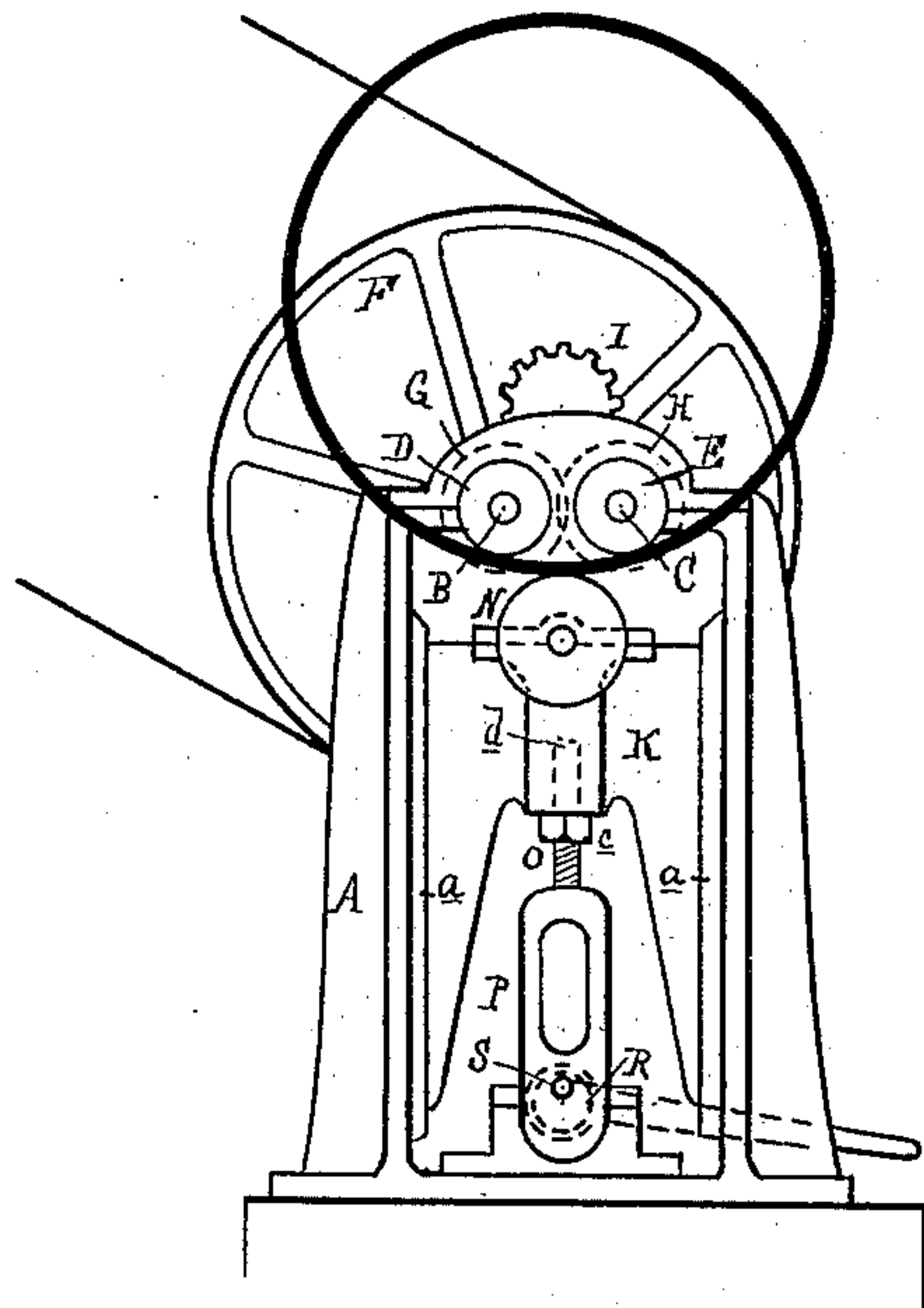


Fig. 1.

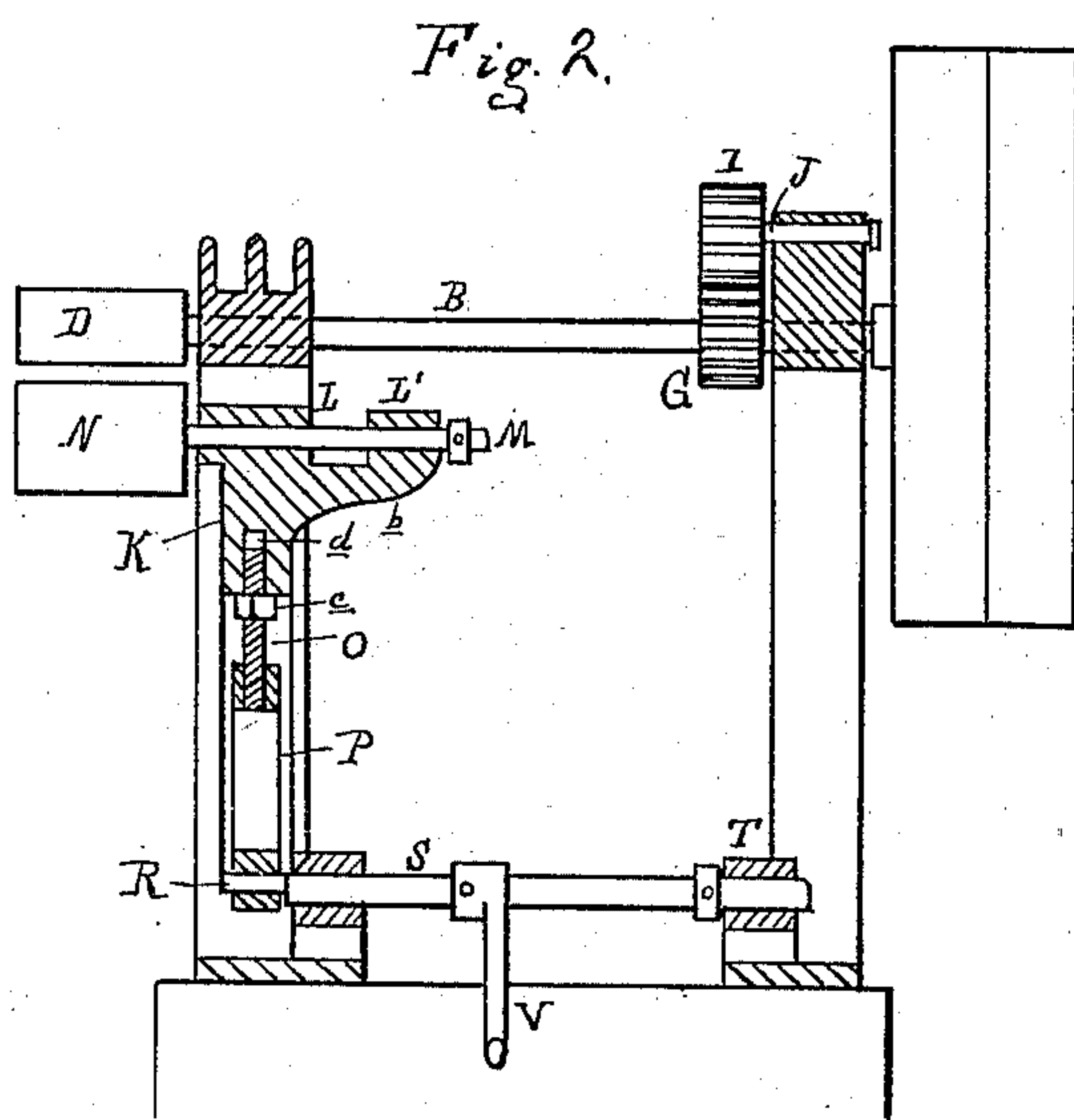


Fig. 2.

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PETER GENDRON, OF TOLEDO, OHIO.

ROLLING TIRES.

SPECIFICATION forming part of Letters Patent No. 383,521, dated May 29, 1888.

Application filed October 18, 1887. Serial No. 252,656. (No model.)

To all whom it may concern:

Be it known that I, PETER GENDRON, of Toledo, in the county of Lucas and State of Ohio, have invented new and useful Improvements in Machines for Rolling Tires; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in machines for rolling tires.

In what are known as "baby-carriages" and other light vehicles the wheels are generally made of wire spokes, the ends of which project through light iron rims or tires, and then are secured by forming a rivet-head on the end of the spoke outside the rim, which preferably is countersunk to allow the rivet-head to be flush with the surface of the tire. In welding the ends of the strip of metal to form the hoop, and in punching the holes therein to engage with the spokes, irregularities occur which must be corrected in the surface.

It is the object of this invention to provide a machine that will do this, and at the same time make a perfect and true circle of the rim.

The invention consists in the peculiar construction of the parts and their combination, as more fully hereinafter described and claimed.

Figure 1 is a front elevation of my improved machine. Fig. 2 is a vertical longitudinal section through the main driving-shaft and operating parts of the lower roll.

In the accompanying drawings, which form a part of this specification, A represents a suitable frame to support the operating parts. Running in suitable boxes in the front and rear parts of the frame are two parallel shafts, B and C, the former carrying on its overhanging end the roll D, while the latter carries in a similar manner the roll E. Upon the rear end of the shaft B there is secured the main driving-pulley F. Upon this shaft B there is also secured a toothed wheel, G, and upon the other shaft, C, there is secured a similar toothed wheel, H, and each of these toothed wheels engages with a similar wheel, I, which is secured upon the overhanging end of the shaft J, which runs in a suitable box upon the rear side of

the frame. These toothed wheels are so arranged with relation to each other that the wheels G and H run in the same direction, the motion of G being communicated to H through the engagement with I.

K is a gate having a vertical movement in guides *a* on the frame. This gate has an overhanging arm, *b*, which supports a box, L', coincident with the box L, which is supported by the body of the gate. In these two boxes runs the shaft M, upon the overhanging end of which is secured the roll N.

O is a set-screw provided with a nut, *c*, and one end of this screw enters a socket, *d*, in the gate, so that such gate rests upon the nut. The lower end of the screw engages with the standard P, the lower end of which engages with the eccentric or crank pin R upon the shaft S, which is journaled in the boxes T.

V is a lever secured to this shaft S, and by its means the partial rotation of the shaft is obtained whenever it is necessary to raise or lower the roll N. By means of the nut *c* the gate is vertically adjusted.

In practice the lever V is raised so as to lower the roll N, in order to increase the space between it and the two upper rolls. The rim or tire of the wheel to be operated upon, having first been welded and punched, is inserted in the space between the upper rolls and the lower one, and motion being given to the rolls through the mechanism described the upper rolls give motion to the tire, and this, by friction, is communicated to the lower roll. The adjustability of the gate by the change in position of the nut on the set-screw is necessary to adapt the device to operating upon different sizes and thicknesses of tires. If after the wheel-tire has been finished upon one side, as shown in Fig. 1, it becomes necessary to reverse it to finish the other side, it is hung upon the lower roll, in which case this roll must be adjusted to a position nearer the upper rolls.

What I claim as my invention is—

1. In a machine for the purposes described, and in combination with the frame thereof, a vertically-adjustable gate which may be elevated or lowered at will by an eccentric, substantially as and for the purposes specified.

2. In a machine for the purposes described,

and in combination with the frame thereof, a gate which is vertically adjustable and provided with two boxes in line with each other, for the purpose of carrying an overhanging
5 shaft and roll, as set forth.

3. In a machine for the purposes described, and in combination, the overhanging rolls D and E, having mechanism intervening, by means of which they are compelled to rotate in the
10 same direction, and the overhanging roll N, having a vertical adjustability, substantially as and for the purposes set forth.

4. The combination, in a machine for the purposes described, with the frame thereof and a vertically-sliding gate, of the set-screw, nut, 15 and standard, substantially as and for the purposes specified.

PETER GENDRON.

Witnesses:

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