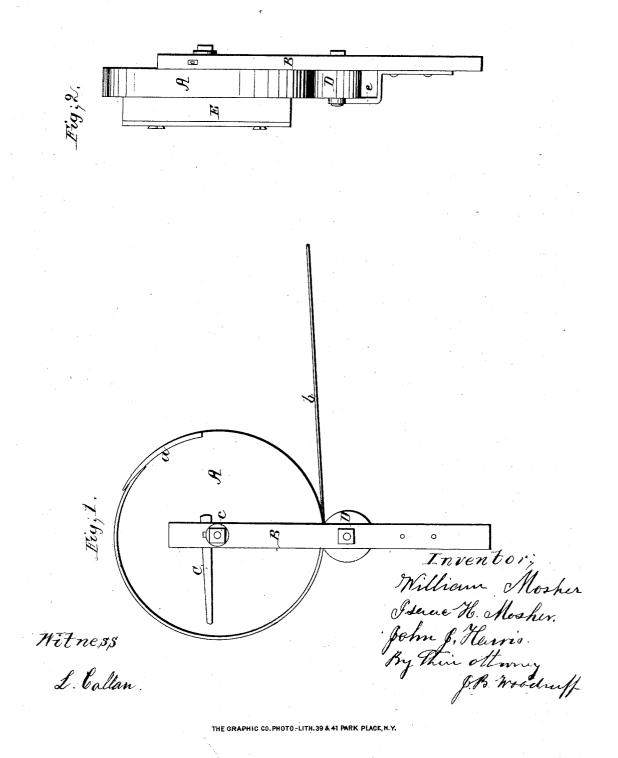
W. & T.H. Mosher & J. J. Harris.

Bending Tires.

JV ª R7, 143.

Patented Feb. 14, 1860.



UNITED STATES PATENT OFFICE.

WM. MOSHER, ISAAC H. MOSHER, AND JNO. J. HARRIS, OF GREEN, NEW YORK.

MACHINE FOR BENDING TIRES.

Specification of Letters Patent No. 27,143, dated February 14, 1860.

To all whom it may concern:

Be it known that we, WILLIAM MOSHER, ISAAC H. MOSHER, and JOHN J. HARRIS, all of the town of Green, in the county of Che-5 nango, State of New York, have invented new and useful Improvements in Forms and Fixtures for Bending Tires for Wheels to Vehicles and Hoops and Bands for Tubs and Casks; and the following is a clear and 10 exact description of the same, reference be-

ing had to the accompanying drawings, making a part of this specification.

The nature of our invention consists in the simplified arrangement by which we use

15 a wedge, or tapering key, to control the length of the lever that holds a roller to press upon the bar to adjust it to the thickness, and the scroll shaped former to hold the bar, so that the roller will pass over the 20 bars, and complete the bending at one opera-

tion. To enable others skilled in the art, to make

and use our invention we will describe it referring to the drawings, and the letters 25 thereon.

Figure 1, represents a top view of the former (A,) made of wood or metal, which is nearly a circle, except on the side in which the end of the bar (b,) to be bent is inserted,
which is brought in from a true circle toward the center like a scroll. There is an opening (a,) to receive the end of the bar (b,) which is to be bent. On starting the bend comes within the circle the thickness of 35 the tire, so as to allow the circle to be com-

- pleted by passing once around the lever (B,) on which is placed a friction roller (D,) in a line of the face, or upper surface of the former (A,) which is to be firmly se-
- 40 cured from turning around in a fixed position by a timber (E,) bolted to the under side, as seen in (Fig. 2,) which shows the edge view of the former (A,) roller (D,)

and lever (B,) supporting bracket (e) all combined.

In the center of the former (A_{i}) is a strong bolt (c,) and nut, on which the lever (B,) hangs, it having a mortise or elongated hole for the bolt (c_i) and transversely is a mortise into which is fitted a tapering key, $_{50}$ or wedge (c_{i}) to bear against the side of the bolt and thereby lengthen or shorten the distance of the friction roller (D,) from the center, by the position the wedge is placed in, the roller is accommodated to the thick- 55 ness of the bar, so as always to press it firmly against the periphery of the former and when the roller has set the tires the entire circle, the wedge, or key, can be started back at one blow with a hammer so $_{60}$ as to pass over and liberate the hoop, or allow the bending to be continued over the lap

We have found by practical experience that the above described former and fixtures, 65 is a more perfect and expeditious mode of shaping tire for wheels, or bands, or hoops of any kind, size or dimensions, than has ever before come to our knowledge.

And having thus fully described our in- 70 vention, what we claim as new, and desire to secure by Letters Patent, is-

The scroll shaped stationary former the mode of holding the end of the bar to be bent, the manner of adjusting the friction 75 roller, by the wedged shaped key through the lever, bearing against the center belt, all in combination as specified, and for the purposes set forth.

WILLIAM	MOSHER.
ISAAC H.	MOSHER.
JOHN J. HARRIS.	

Witnesses:

JOHN W. OSGOOD, JOSHU H. MOSHER. 45