

E. Mets,
Bending Wood,
No 79,489, *Patented June 30, 1868.*

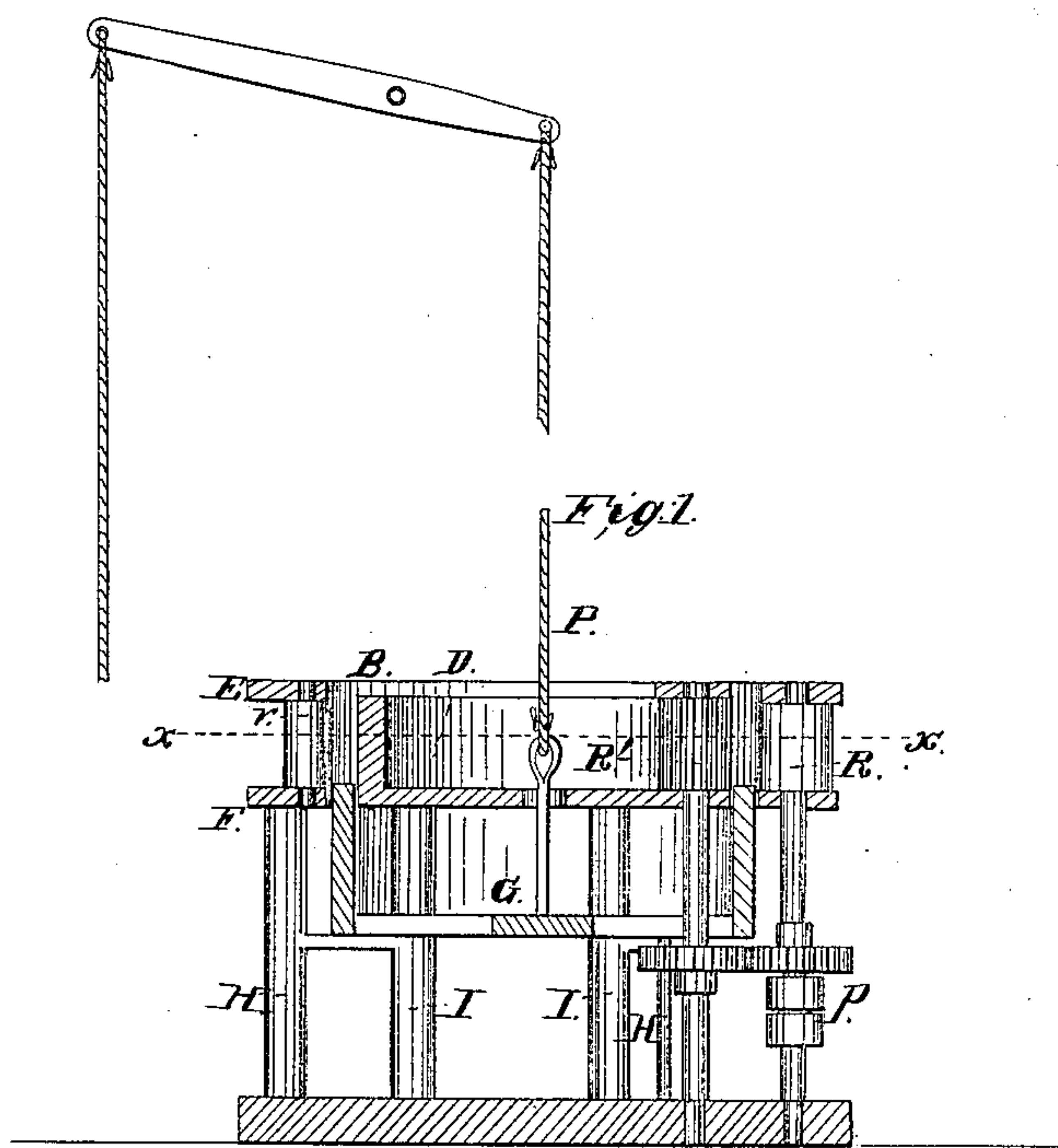
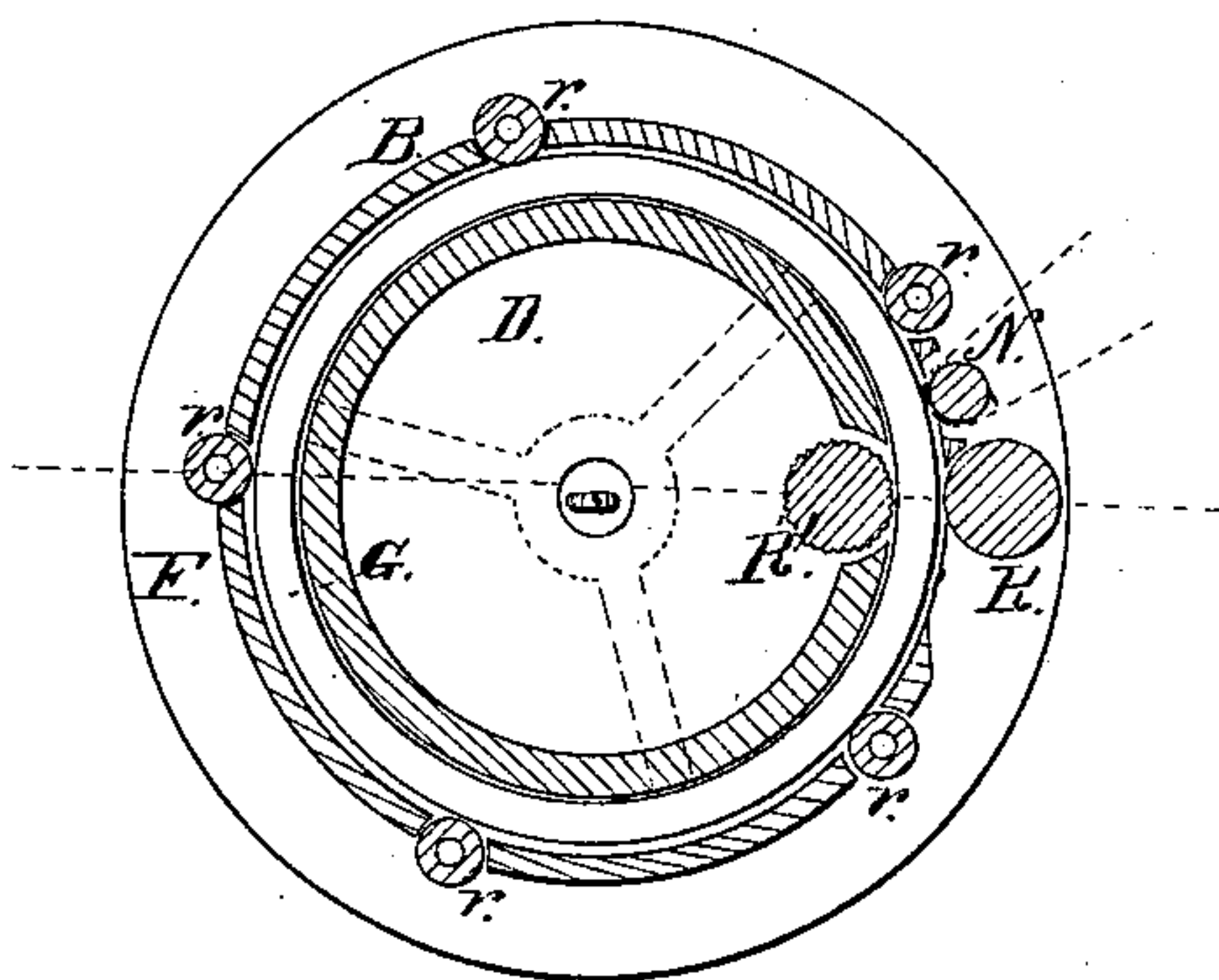


Fig. 2.



Witnesses:
Wm. S. Loughborough,
And A. Hatch.

Inventor
E. Mets.

United States Patent Office.

ELISHA METS, OF ROCHESTER, NEW YORK, ASSIGNOR TO HIMSELF AND
A. CRAM:

Letters Patent No. 79,489, dated June 30, 1868.

IMPROVEMENT IN WOOD-BENDING MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ELISHA METS, of Rochester, in the county of Monroe, and State of New York, have invented a new and useful "Apparatus for Bending Table-Rims;" and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a vertical central section of my invention.

Figure 2 is a top view of the same, taken in the plane of the red line x in fig. 1.

Similar letters of reference indicate corresponding parts in both figures.

This invention consists in providing an apparatus for bending table-rims, having a circular concave, composed of alternate segments and friction-rollers, and an inner circle, around which the rims are bent, by being driven in by the feed-rollers, which are geared together.

To enable others to make and use my invention, I will describe its construction and operation.

I provide a suitable support for the circles B and D, and for the follower G. The surface of the outer circle, B, is broken by a series of friction-rollers, r . It is provided with a projecting flange, E and F, above and below, in which the feed-rollers R and R', and the friction-rollers r , have their axis or journal-bearings. This circle may be supported upon the columns H, and the inner circle upon the columns I; or they may be connected together directly, by several arms, and by having corresponding vertical openings in the rim of the follower, to permit it to rise sufficiently to discharge the bent rim.

The follower may be raised by the rope P, connecting with a lever above, as shown, or by passing it over a pulley. In either case, the rope must be unhooked in order to remove the bent rims, their ends being firmly clasped together before they are thrown entirely out of the machine.

The feed-rollers R and R' are geared together, and may be driven by a band upon the tight pulley p . The inside feed-roller, R', is serrated, but I prefer to make the other one smooth.

As the stick to form the rim is fed in, the serrations in the roller R' tend to crimp the wood, and by means of the friction-rollers r , placed at suitable distances, the friction is sufficiently reduced to permit the rim to be driven through, and form the complete circle in one piece.

If desired, there might be a cutter-head, N, arranged just in rear of the feed-rollers R and R', for the purpose of dressing and moulding the outer face of the rim at the same time it is being bent.

The rims may be placed in suitable receivers, large enough to receive quite a number, in which they are allowed to remain until sufficiently dried. The timber is suitably steamed before being inserted in the machine.

The bender may be arranged to work the follower horizontal instead of vertical, if desired, and the receiver so arranged as to take the bent rims into it as soon as they are completely formed, in which case it would be necessary, probably, to work the follower with a screw. The rims may be bent into ovals, instead of circles, by making the benders in that shape.

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

1. The combination of the annular-rollered concave B with the inner circle D, and the feed-rollers R and R', for the purposes herein shown and described.

2. The arrangement of the follower G with the inner and outer circles B and D, constructed and operating substantially in the manner and for the purposes set forth.

E. METS.

Witnesses:

WM. S. LOUGHBOROUGH,

FRED. A. HATCH.