

H. D. Barnes.

Straightening Metal Hoops.

N^o. 45,015.

Patented Nov. 15, 1864.

Fig. 2.

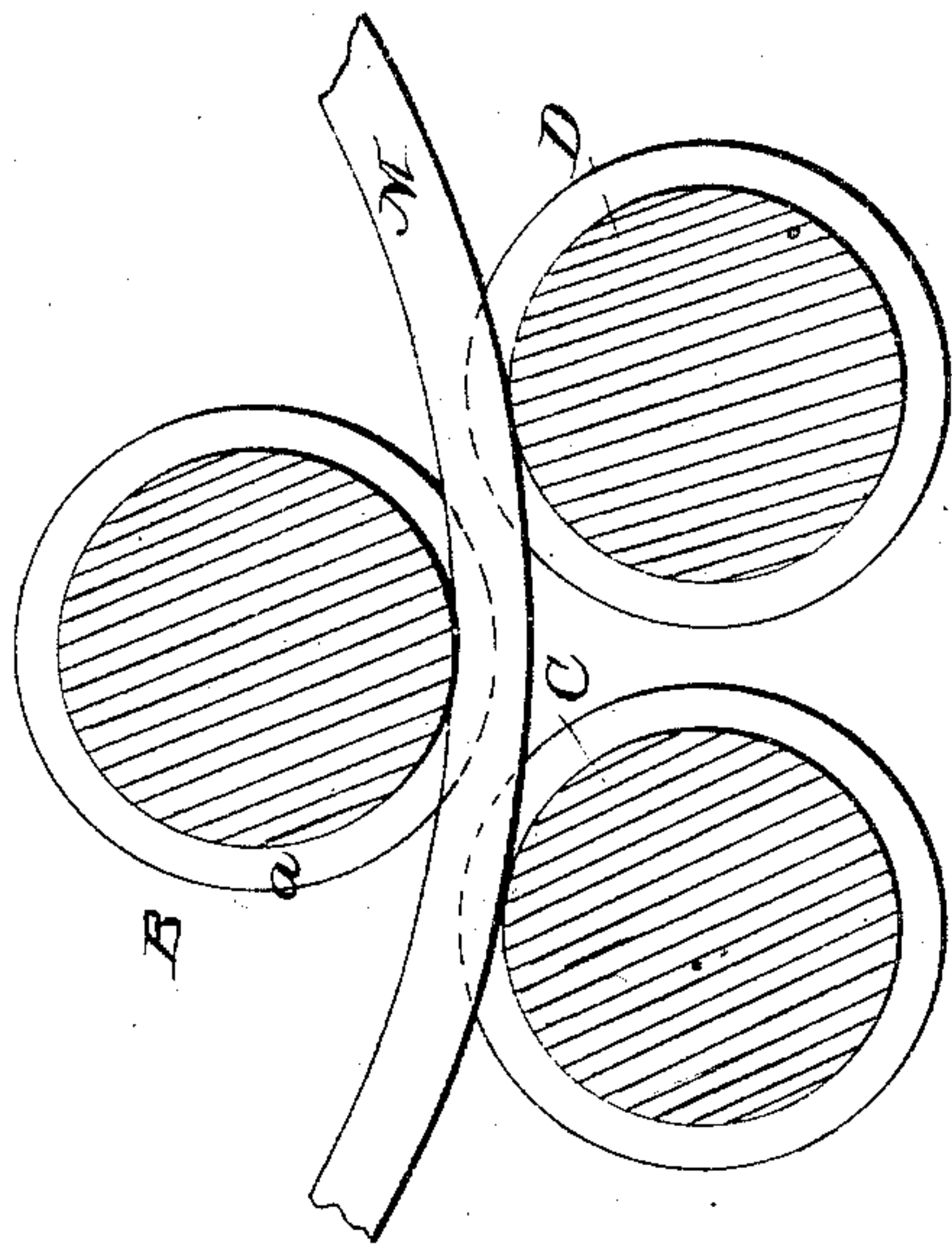
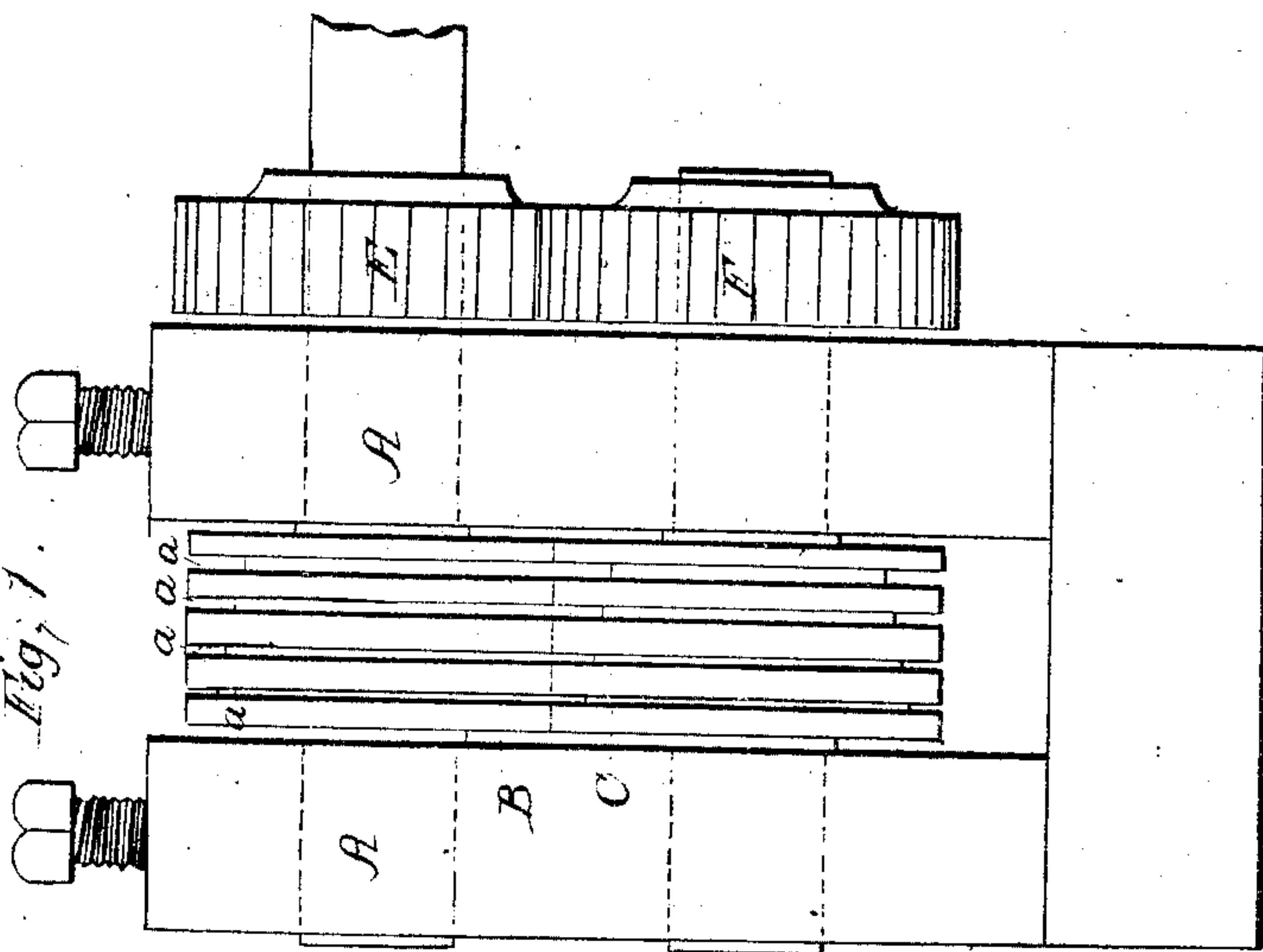


Fig. 1.



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UNITED STATES PATENT OFFICE.

HENRY D. BARNES, OF NEW HAVEN, CONNECTICUT.

IMPROVEMENT IN FLARING METAL HOOPS.

Specification forming part of Letters Patent No. 45,015, dated November 15, 1864.

To all whom it may concern :

Be it known that I, HENRY D. BARNES, of New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Flaring Metal Hoops; and I do hereby declare the following to be a full, clear, and exact description of the same when taken in connection with the accompanying drawings and the letters of reference marked thereon, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view of a machine for flaring hoops upon my improved plan, and in Fig. 2 a sectional view of the same.

My invention is designed to give the necessary flare to metal hoops—as for barrels, pails, &c.—when it is required that the hoop be of a larger diameter upon one edge than the other. Heretofore the flare has been given by rolling or hammering the hoop upon the flat sides to stretch one edge. This operation makes one edge thinner than the other, very much weakens the hoop, leaves a rough edge, often cracks or entirely destroys the metal. The object of my invention is to overcome these objections and give to the hoop the requisite curvature, preserving and finishing the edges of the metal; and it consists in passing the strip of metal between rollers, or their equivalent in such manner that the rolls bear only upon the two edges of the metal, whereby the edges are left smooth and of their original thickness, curved with the utmost accuracy.

To more fully illustrate my invention, I will proceed to describe my manner of curving

strips of metal in order to give them the necessary flare.

In the accompanying drawings, A is a frame supporting in proper bearings three rolls, B C D. In the face of each of the said rolls I form grooves (one or more) *a a* in width the thickness of the metal from which the hoop is to be formed, and of a proper depth, nearly one-half the width of the metal. (See Fig. 2.)

The said rolls are made to revolve together by means of gears E upon their shafts, power being applied to either one of the three. When revolving, insert the metal M to be curved into its proper groove, adjusting the upper roll to give it its proper curve. The rolls revolving will draw the metal through, rolling the edges smooth, and curving it as desired, (see Fig. 2,) so that when bent into a hoop it will be properly flared for the purpose for which it is designed.

I do not claim as of my invention rolling metal for the purpose of curving it, as such is common and well-known.

I do not claim rolling hoops to reduce one edge in thickness for the purpose of giving the requisite flare; but,

Having fully set forth my invention, what I do claim as new and useful, and desire to secure by Letters Patent, is—

Giving to a metal hoop the requisite flare by rolling upon its edges, substantially as and for the purpose herein set forth.

HENRY D. BARNES.

Witnesses :

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