

(No Model.)

J. Z. GIFFORD.
HOOP FLARING MACHINE.

No. 287,659.

Patented Oct. 30, 1883.

Fig: 1.

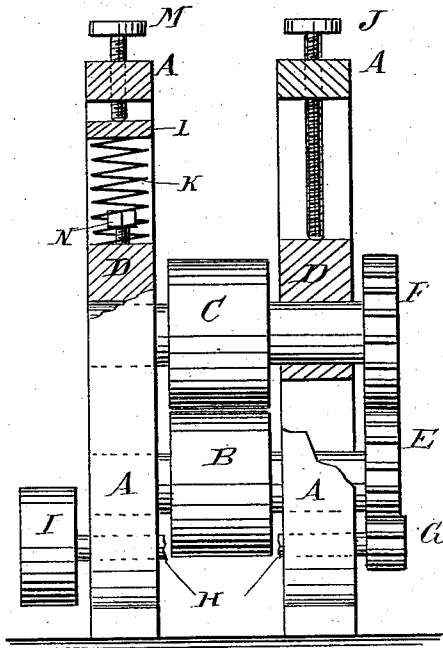


Fig: 2.

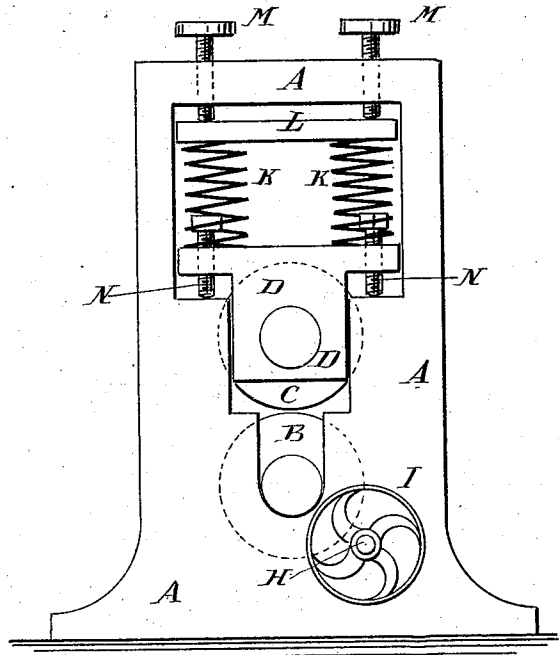
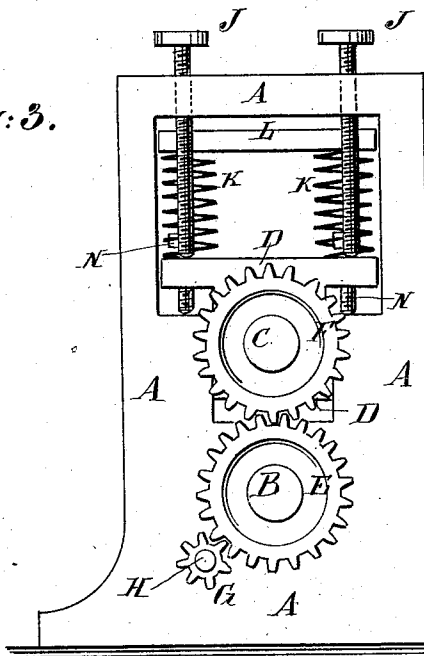


Fig: 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN Z. GIFFORD, OF NEW YORK, N. Y.

HOOP-FLARING MACHINE.

SPECIFICATION forming part of Letters Patent No. 287,659, dated October 30, 1883.

Application filed April 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN Z. GIFFORD, of the city, county, and State of New York, have invented a new and useful Improvement in Hoop-Flaring Machines, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of my improvement, partly in section. Fig. 2 is an elevation of one end of the machine. Fig. 3 is an elevation of the other end of the machine.

The object of this invention is to facilitate the operation of flaring metal hoops.

A are the end frames of the machine, in slots in the lower parts of which revolve the journals of the lower roll, B. The journals of the upper roll, C, revolve in bearings D in the widened upper parts of the slots in the frames A.

To the journals of the rolls B C, at one end of the machine, are attached gear-wheels E F, the teeth of which mesh into each other, and which serve as stops to keep the ends of the rollers at the proper distance apart. Into the teeth of the lower gear-wheel, E, mesh the teeth of the small gear-wheel G, attached to the end of the shaft H, which revolves in bearings in the lower parts of the frames A, and has a pulley, I, attached to its other end to receive the driving-belt.

The ends of the rolls B C, that carry the gear-wheels E F, are kept from separating by a screw or screws, J, passing in through the top bar of the frame A, and resting against the bearing D, or by other suitable means.

The bearing D at the other end of the machine is held down by a spring of springs, K, the lower ends of which rest upon the said bearing, and their upper ends rest against a bar, L, placed beneath the top bar of the frame A. The bar L is held down by screws M, resting against its upperside, and which pass down through screw-holes in the top bar of the frame A, so that by adjusting the screws M the roll C will be held down with any desired force.

With this construction the rolls will adjust themselves to the varying thickness of the hoop-iron, and will exert a pressure increasing automatically as the thickness of the hoop-iron increases, so that it will not be necessary to adjust the machine for each thickness of the hoop-iron.

The movable ends of the rolls B C are kept from coming in contact by set-screws N, which pass through the end parts of the bearing D and rest against the shoulders of the frame A, as shown in Fig. 2.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

A hoop-flaring machine in which the rolls are provided with a screw adjustment at one end, and at the other with an adjusting device consisting of a bearing, D, springs K K, bar L, and screws M M, substantially as shown, and for the purpose specified.

JOHN Z. GIFFORD.

Witnesses:

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