

J. F. Thomas.

Swaging Roll.

N^o 87,011.

Patented Feb. 16, 1869.

Fig. 2.

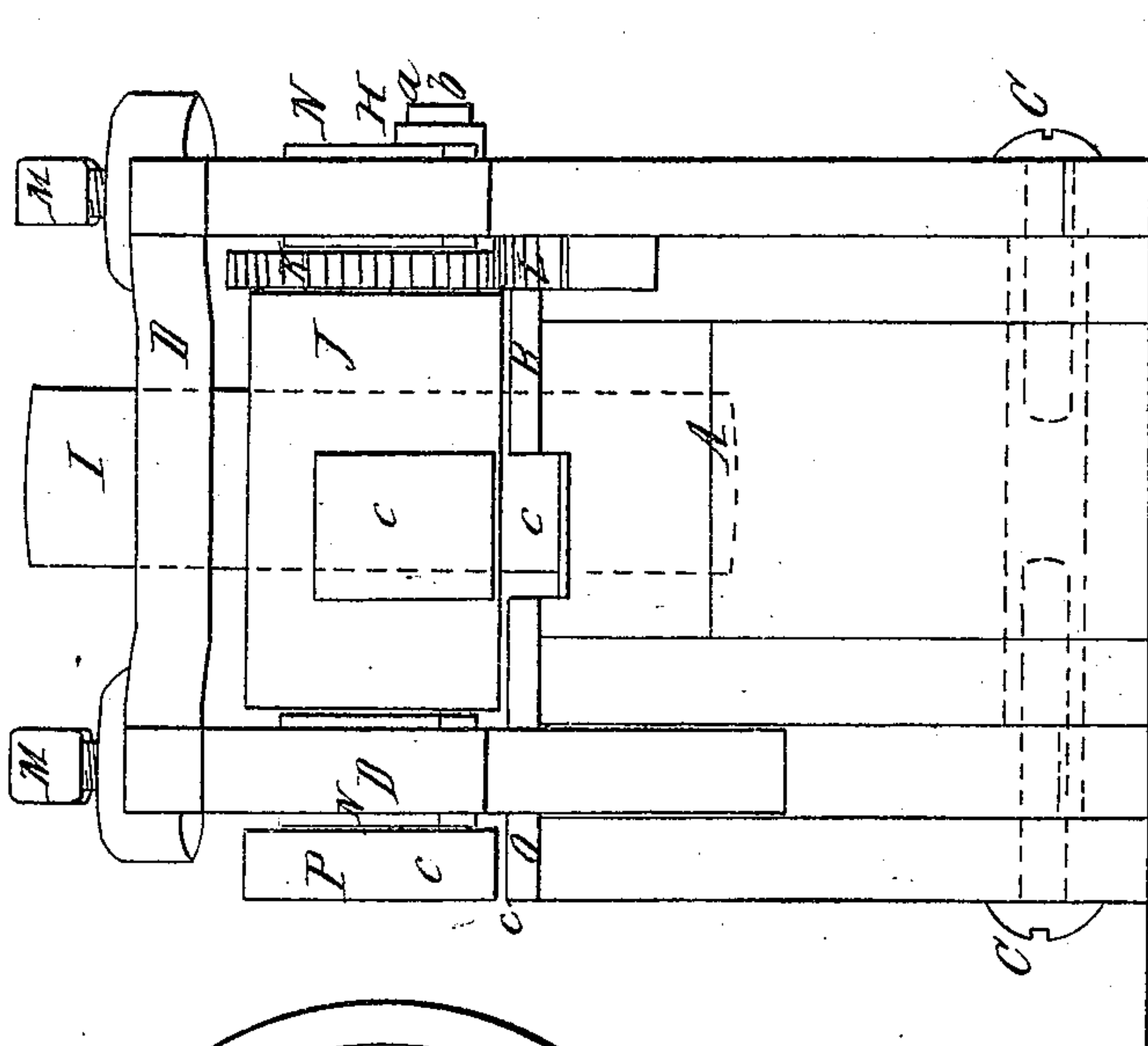
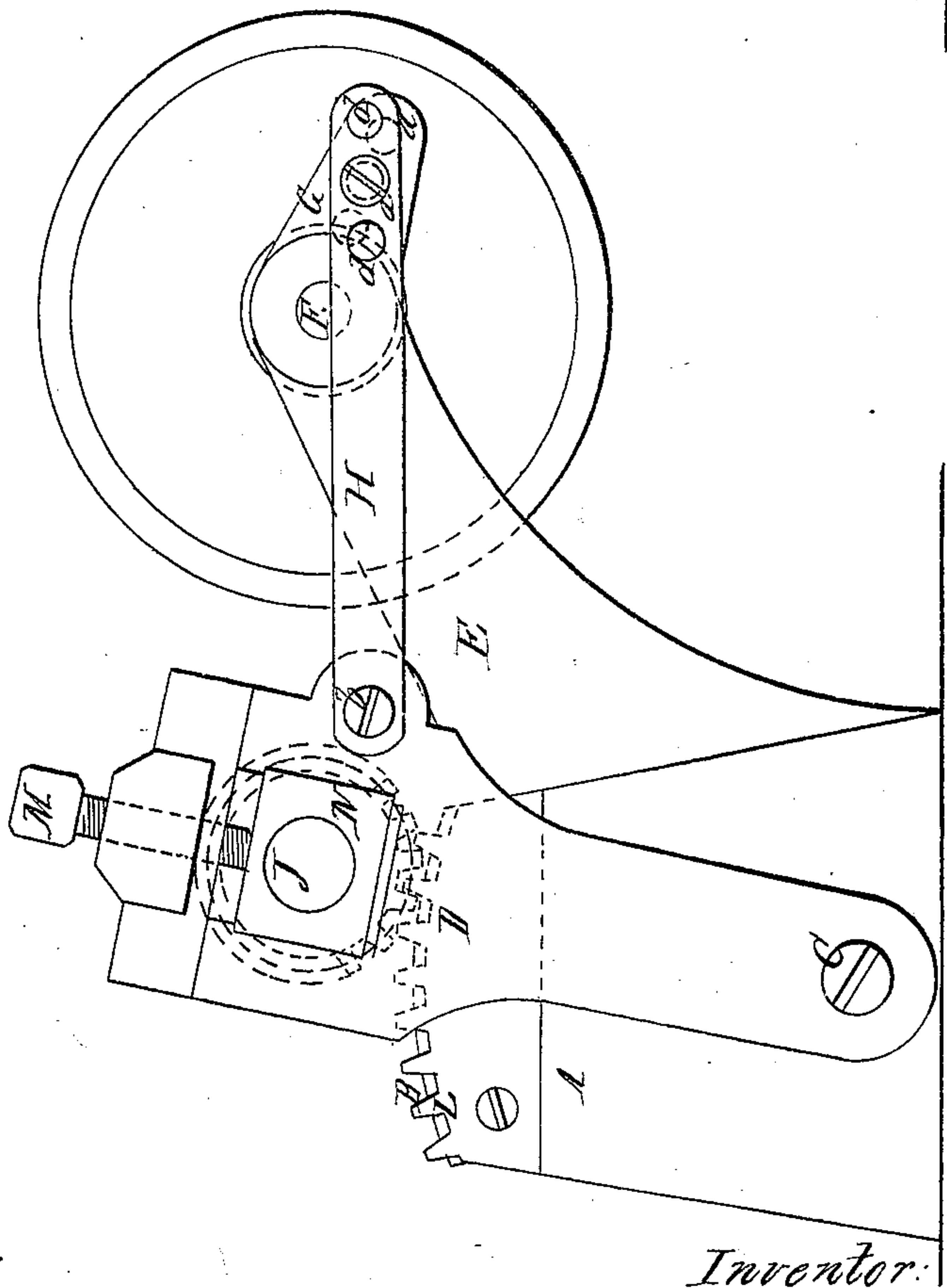


Fig. 1.



Witnesses:

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United States Patent Office.

JOHN F. THOMAS, OF ILION, NEW YORK.

Letters Patent No. 87,011, dated February 16, 1869.

IMPROVEMENT IN SWAGING-ROLLS.

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, JOHN F. THOMAS, of Ilion, Herkimer county, in the State of New York, have invented an Improved Machine for Rolling, Plating, and Swaging Metal; and I hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, forming part of this specification.

The nature or essence of my invention consists in combining, with a stationary anvil, having a curved face, a roller, arranged in a frame, pivoted upon the anvil, so as to be traversed over or across said face.

In the following description of my invention, I shall refer to the drawings hereinbefore mentioned, of which—

Figure 1 is a side elevation, and

Figure 2, an end or front elevation of my improved machine.

The anvil B has its face B curved cylindrically, the axis of its curvature passing through the centres of the pivots C, upon which the roller-frame D vibrates.

The stand E supports, in suitable bearings, the shaft F, which has on each end a crank, G, connected, by rods or bars H, pins *a*, and pivots *b*, to the roller-frame D.

The shaft F may be turned by a belt on the pulley I, or by gears, or otherwise, as may be preferred, and the roller J, having journals in the boxes N, will thus be traversed across the face of the anvil B, so as to act upon such material as may be placed upon said face.

The turning of the roller, as it moves over the face, is secured by the gear K and toothed segment L, and its height above the face may be adapted to the thickness of the material or article to be operated upon by the set-screws M, in the top of the frame, the boxes N

being arranged to traverse in the frame, and the teeth of the gear K and segment L being made long enough to allow the roller to be raised and lowered to a limited extent, without their being separated.

A second face, O, may be arranged outside the roller-frame, with a corresponding roller, P, on the end of the journal of the roller J, to traverse across it, and both the rollers and the faces may be provided with scores *c*, for the reception of such dies and patterns as the work to be performed may require.

In the case of articles having a shank or tang at one side, as hoes, for example, they may be rolled in one direction on the face O, and in the direction across or at right angles to that on the face B, the box N, at the opposite end of the roller J, being supported by a wedge, or otherwise, when the roller P is used to prevent that end of the roller from being depressed by the upward strain upon the roller P.

The cranks G and the connecting-rods H have several holes *d* in each, for the crank-pin *a*, in order that the roller may be arranged to traverse over such a part of the face B, and to such an extent upon it as the work in hand may require.

The foregoing, being a description of my improved machine for rolling, plating, and swaging metal—

1. I claim, the combination of the roller J, pinion K, and vibrating frame D, with the segment-rack L, anvil B, and forming-dies *c c*, all constructed, arranged, and operated substantially as described.

2. The arrangement of all the parts of the improved machine, herein described, as and for the purpose specified.

Witnesses:

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