

F. W. PERRY.

Apparatus for Oiling Sheet-Metal.

No. 156,436.

Patented Nov. 3, 1874.

Fig. 1.

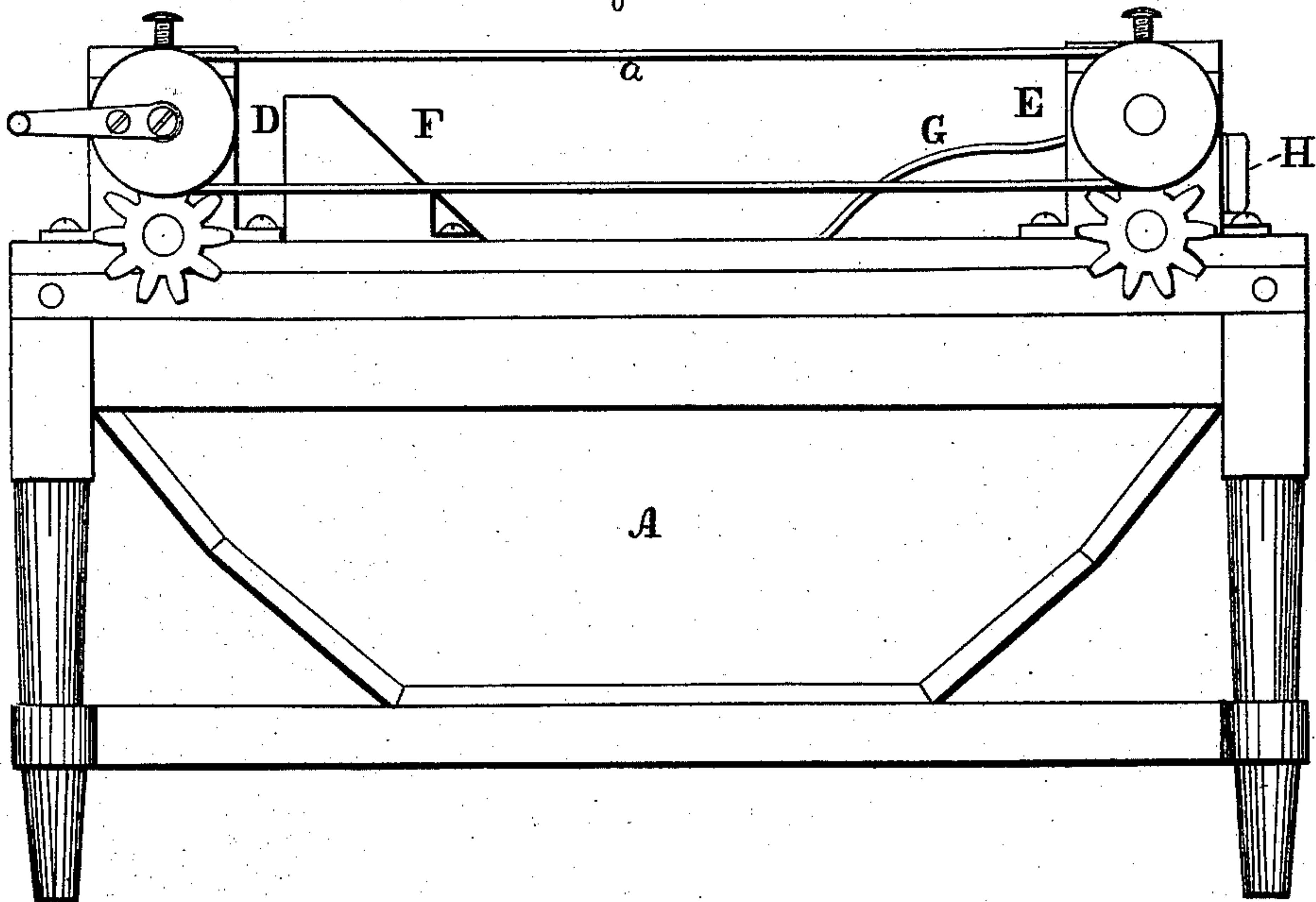
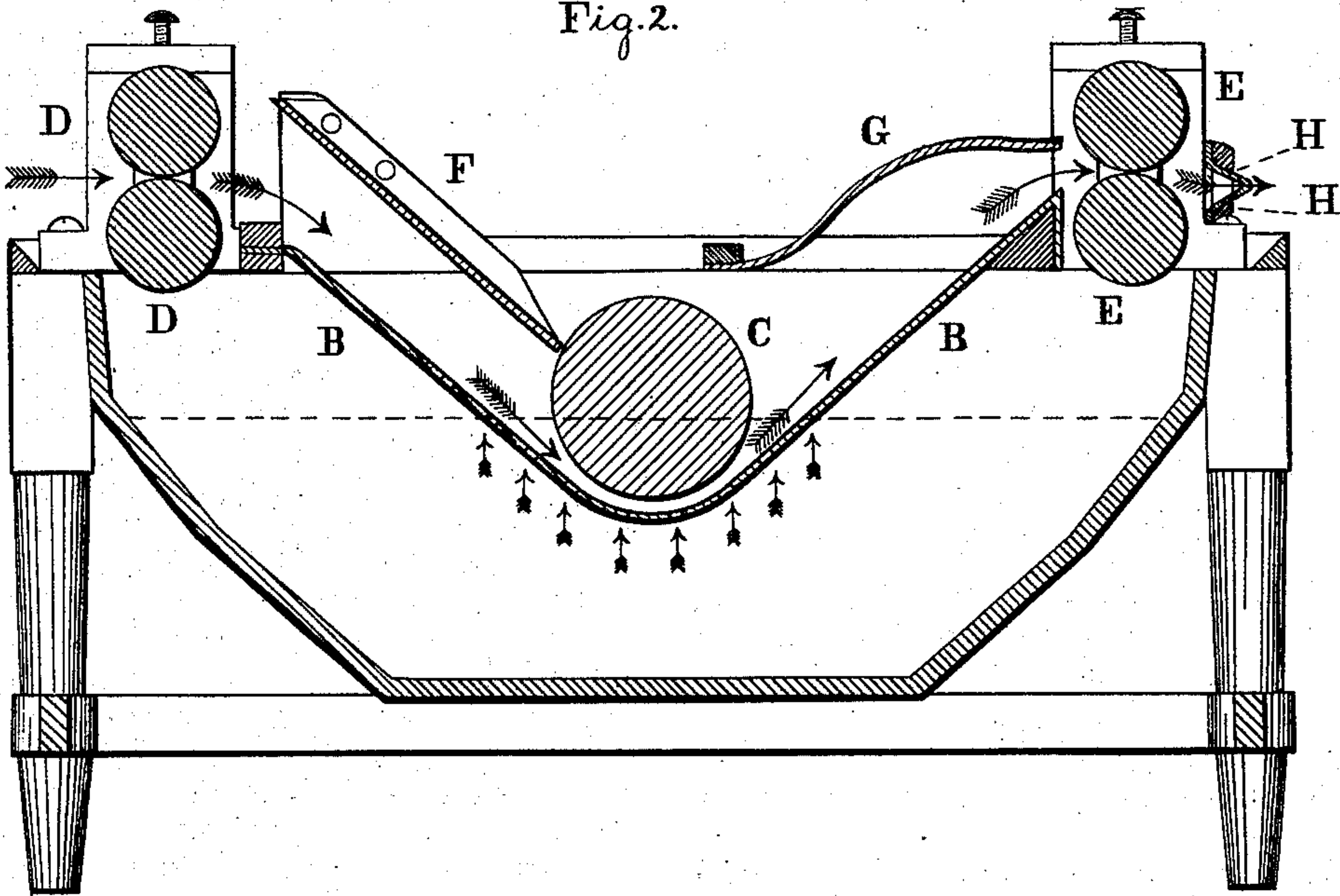


Fig. 2.



Witnesses

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IMPROVEMENT IN APPARATUS FOR OILING SHEET METAL.

Specification forming part of Letters Patent No. **156,436**, dated November 3, 1874; application filed July 27, 1874.

To all whom it may concern:

Be it known that I, FRANK W. PERRY, of the city and county of Camden and State of New Jersey, have invented a new and useful Improvement in Apparatus for Oiling Metal; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a side elevation of the device embodying my invention. Fig. 2 is a central longitudinal vertical section thereof.

Similar letters of reference indicate corresponding parts in the two figures.

It is well known that for certain purposes sheet metal requires to be oiled in order that the same may be properly worked.

My invention consists in an apparatus for thoroughly and uniformly applying the oil to the sheets or strips of metal.

Referring to the drawings, A represents a box or oil-holder, which is properly mounted or supported, and within the same is arranged a guide, B, which extends from about the top of one end of the box, curves down toward the center, and then up again to about the top of the other end of the box. C represents a roller, which is mounted within the box A, and arranged above the central bend of the guide B.

At one end of the box there are mounted two feed-rollers, D, arranged one above the other, which are geared to each other, and extend transversely.

Similar rollers E are mounted at the other end of the box, the two sets of rollers being rotated in the same direction by means of a band-wheel, *a*, or other suitable mechanism, and one or both of the rollers of each set having adjustable journal-boxes so as to adapt the device to metal of various thickness.

F represents a guide, which extends from the rollers D, at one end of the box A, down-

wardly to the center roller, C; and G represents a guide, which extends upwardly from the roller C, on the side opposite to that of the guide F, and terminates near the rollers E.

To the box A, or suitable uprights rising therefrom at the end occupied by the rollers E, there are secured wipers or buffers H, which consist of pieces of suitable material arranged vertically and transversely with a space between them for the passage of the metal, so that both sides of the metal will be acted upon by the wipers.

The operation is as follows: The box A will receive a certain quantity of oil, preferably to the line of level shown in Fig. 2, so that a portion will occupy the space just above the central bend of the guide B, the passage of the oil above the guide being permitted by openings in the latter, as indicated by the small arrows or openings between the sides of the guide and adjacent sides of the box.

The rollers D and E being properly rotated, a strip or piece of metal will be passed between the rollers D, and, owing to the downwardly-extending guide F, is directed down along the guide toward the central bend, thereof. The strip now passes under the roller C, and receives a full supply of oil, the roller rotating due to the passage of the strip. The strip then moves up beyond the roller C, along the guide B, and, directed by the guide G, enters between the discharge-rollers E, from whence it is passed to the wipers H, and having the surplus oil removed thereby, is discharged in a finished state.

The various movements of the strip are indicated by the line of arrows, Fig. 2.

It will be seen that the strip is readily and easily manipulated, and emerges from the apparatus entirely oiled, and the oil having a uniform surface throughout.

It will also be seen that the central bend of the guide B contains sufficient oil for the purpose intended, and, owing to the separation thereof from the rollers D E, the latter are not submerged or in contact with the oil, excepting such as will be imparted to the roll-

ers E by the passage of the strip of metal as it comes from the center roller C.

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

The oil-box A, with guide B and roller C, in combination with the feed-rollers D and

guide F, and with the guide G, discharge-rollers E, and wipers H, substantially as and for the purpose set forth.

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