

A. L. HOLLEY.
Feeding Device for Rolling-Mills.
No. 215,361. Patented May 13, 1879.

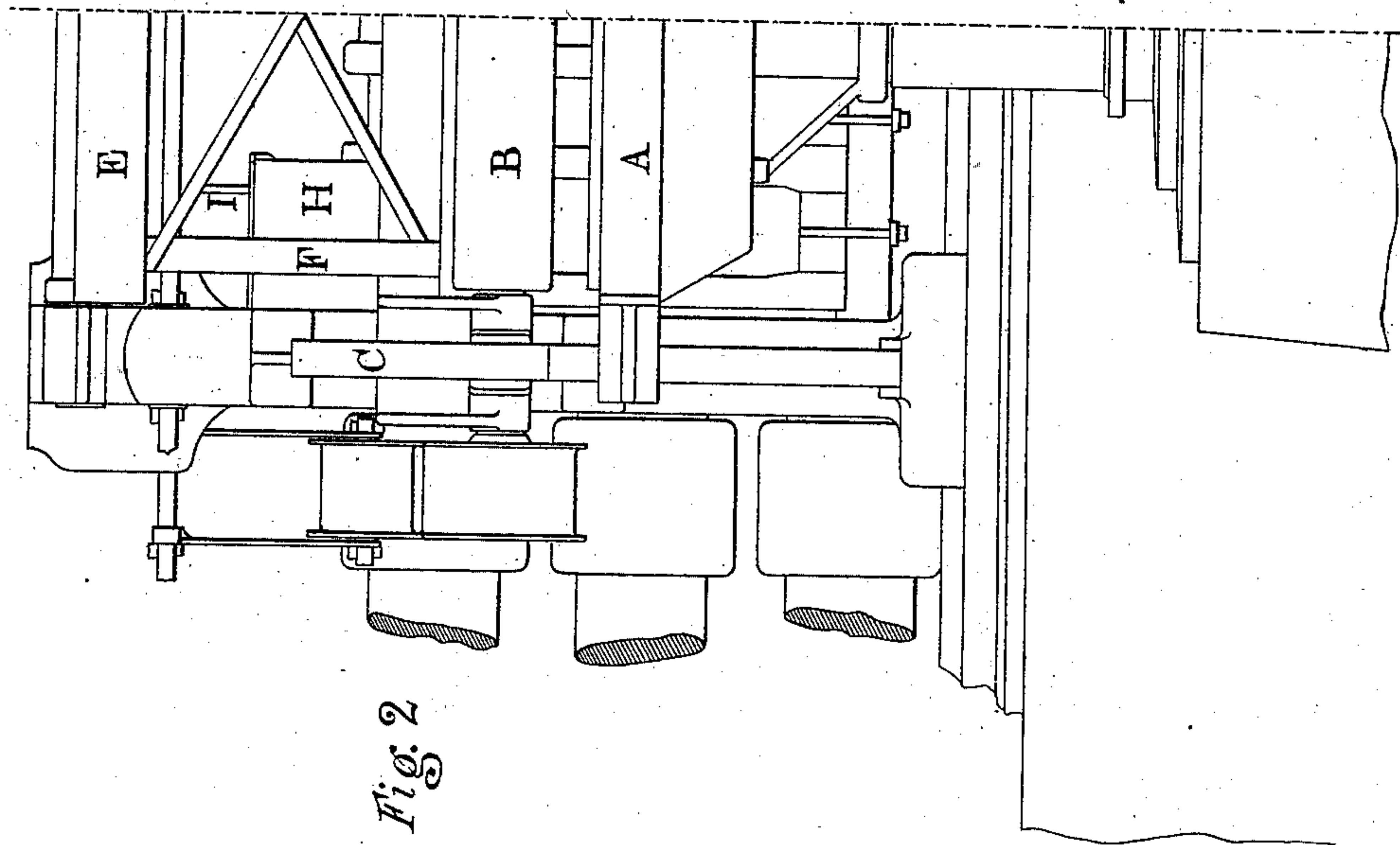


Fig. 2

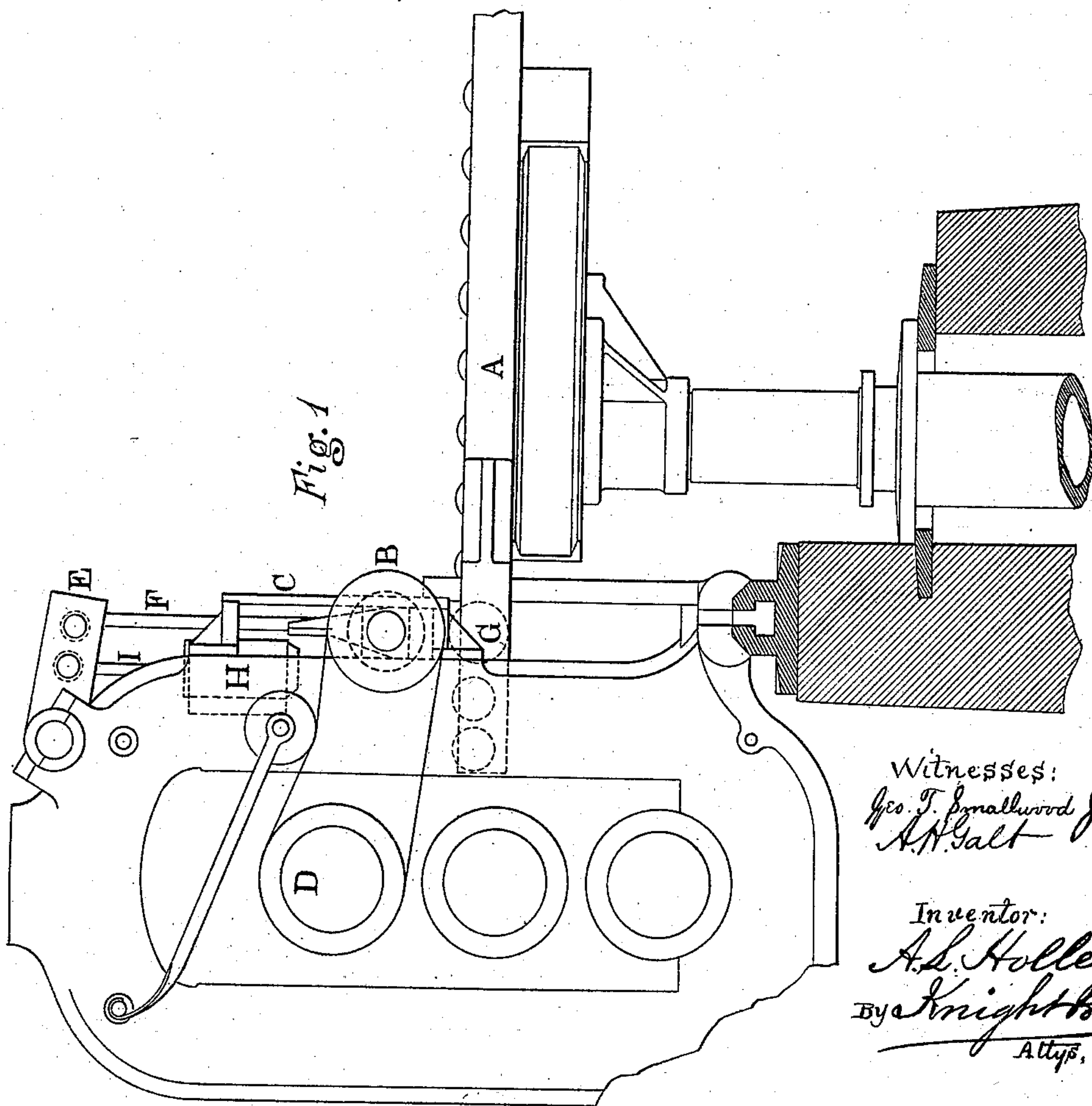


Fig. 1

Witnesses:
Geo. T. Smallwood Jr.
A. N. Galt

Inventor:
A. L. Holley
By Knight Bros
Atty's.

UNITED STATES PATENT OFFICE.

ALEXANDER L. HOLLEY, OF NEW YORK, N. Y.

IMPROVEMENT IN FEEDING DEVICES FOR ROLLING-MILLS.

Specification forming part of Letters Patent No. **215,361**, dated May 13, 1879; application filed March 21, 1878.

To all whom it may concern:

Be it known that I, ALEXANDER L. HOLLEY, of New York, in the county of New York and State of New York, have invented certain Improvements in Feeding Apparatus for Roll-Trains, of which the following is a specification.

My device consists, essentially, of a driven feed-roller confined by vertical guides and mounted in a frame depending from a rocking frame, as hereinafter described.

My invention further consists in the combination of a driven feed-roller with a carrying-table provided with rollers, one of which projects above the other rollers of the table and is located directly beneath the driven feed-roller, as hereinafter described.

My invention further consists in the combination, with a rocking-frame, pendent roller-frame, and driven feed-roller, of one or more dash-pots, to prevent the roller falling hard on the table, as hereinafter described.

In the accompanying drawings, Figure 1 shows a side elevation, and Fig. 2 a partial front view, of one form of my apparatus as applied to an ordinary three-high roll-train.

Over the lifting-table A the feed-roller B is placed so as to slide up and down in suitable boxes in the slides C, and to be revolved by belts from the roll-necks D; or the feed-roller may be revolved by any other suitable means. By means of a rock-shaft, E, and connecting-rods F both ends of the feed-roller are made to rise uniformly.

In order to facilitate the feeding of the piece into the roll-train, I place one of the table-rollers, G, immediately below the driven feed-roller B, and I make this roller G slightly larger in diameter than the other rollers of the table, so that it shall project above them, or, whatever the diameter of the roller G is, I make it project above the other table-rollers. The piece is then pinched between the roller G and the feed-roller B, and the resistance which the table offers to the feeding of the

piece is chiefly the friction of the roller G. The other table-rollers, except G, may thus be made light, because they only have to carry the weight of a portion of the piece, and do not have to bear the pinching action of the feed-roller. When the piece, by being pinched between the table-roller G and the feed-roller B, has been fed into the train, and past the feed-roller B, the latter will drop; but it is prevented from dropping hard upon the table by means of a dash-pot, H, connected with the rock-shaft by the rod I. The dash-pot may be of any of the well-known types, or a spring or other equivalent may be used in place of it.

It is obvious that the starting and stopping of the feeding may be done by operating the feed-roller by means of a clutch or equivalent.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. The combination, with the housings of a rolling-mill, of the rocking frame E, the feed-roller frame depending therefrom, the feed-roller B mounted in said feed-roller frame, the guides for guiding the feed-roller vertically in its movements up and down, and mechanism to impart rotary motion to said feed-roller, substantially as herein set forth.

2. The combination, with the driven feed-roller, of a vertically-adjustable table having two or more carrying-rollers, one of which projects to a greater elevation than the others and is located directly underneath the driven feed-roller, substantially as and for the purposes described.

3. The combination of the table A, driven feed-roller B and its frame, the rocking frame E, and dash-pots G, substantially as and for the purposes set forth.

A. L. HOLLEY.

Witnesses:

JOHN C. THOMPSON,
J. W. EDMUNDS.