

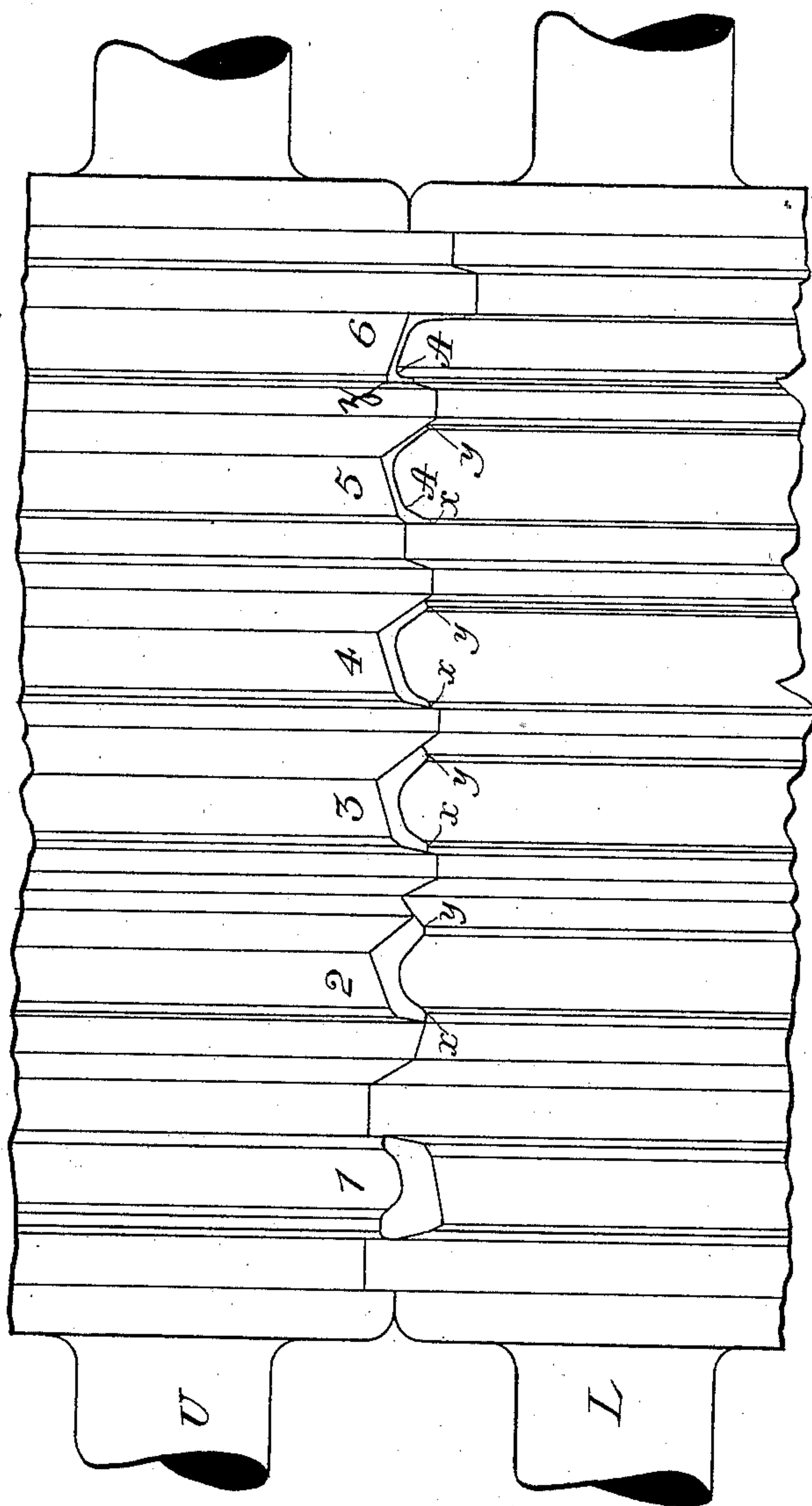
(No Model.)

F. COLLEY.

ROLLS FOR ROLLING ANGLE-SHAPED SLOT RAILS.

No. 387,148.

Patented July 31, 1888.



Witnesses:
Leo von Rosenberg.
Francis P. Reilly.

Inventor:
Fred W. Colley
by A. M. Voorhees.
Atty.

UNITED STATES PATENT OFFICE.

FREDERICK COLLEY, OF JOHNSTOWN, PENNSYLVANIA, ASSIGNOR TO THE
JOHNSON STEEL STREET RAIL COMPANY, OF KENTUCKY.

ROLLS FOR ROLLING ANGLE-SHAPED SLOT-RAILS.

SPECIFICATION forming part of Letters Patent No. 387,148, dated July 31, 1888.

Application filed June 12, 1888. Serial No. 276,925. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK COLLEY, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented new and useful
5 Rolls for Rolling Angle-Shaped Slot-Rails, which invention is fully set forth and illustrated in the following specification and accompanying drawing.

The object of this invention is to provide a
10 set of rolls for rolling slot-rails for cable railways of the form hereinafter described.

The invention will first be described in detail, and then particularly set forth in the claim.

15 The accompanying drawing, consisting of a single figure, illustrates a pair of rolls, the upper one indicated by the letter U and the lower by the letter L.

Said rolls contain six passes, (indicated in
20 the drawing by the letters 1 to 6, inclusive.)

In operating said rolls the hot metal is handled and affected by the rolls in the following manner: The billet, of any suitable form, is first entered and run through pass No. 1. Then
25 it is turned over before entry into pass No. 2, when, after being run therethrough, it is successively rolled without being again turned, until it is finally run through the final pass, No. 6. During the course of this rolling the
30 metal is so inclined in each pass as to throw the maximum of both work and spread toward the points x y in passes 1 to 5, inclusive, and the parting lines of the rolls in passes 1 to 4, inclusive, are located at these points. In the

earlier passes, in which the draft of the rolls 35 is the greatest, the tendency of the metal to lap out through the parting lines is the greatest. As the wearing-line, situated at the point z of the finished shape of rail in pass No. 6, must of necessity be made perfectly smooth 40 and true, the construction just described provides for this by causing any lap which may take place in the passes, wherein it is most likely to occur, to be thrown away from the wearing-point z of the metal to the outside 45 points, x and y , where it can do the least harm.

It will be observed that in the final pass, 6, the angle of the delivery of the pass is changed, and the points x and y finished partly by bending and partly by rolling, and that in pass No. 50 5 an excess of metal is left in the shoulder at A, by which means sufficient draft is brought upon the metal at the wearing-point z to insure a well-filled-out section of metal at this point in the final pass.

Having thus fully described the construction and operation of my said rolls as of my invention, I claim—

A set of rolls for rolling angle shaped slot-rails, having passes of the conformations respectively illustrated and shown in the accompanying drawing by the numbers 1 to 6, inclusive, substantially as set forth. 60

FRED. COLLEY.

Witnesses:

A. MONTGOMERY,
M. KIRKBRIDE.