

(No Model.)

M. M. SUPPES.
ROLL PASS.

No. 436,960.

Patented Sept. 23, 1890.

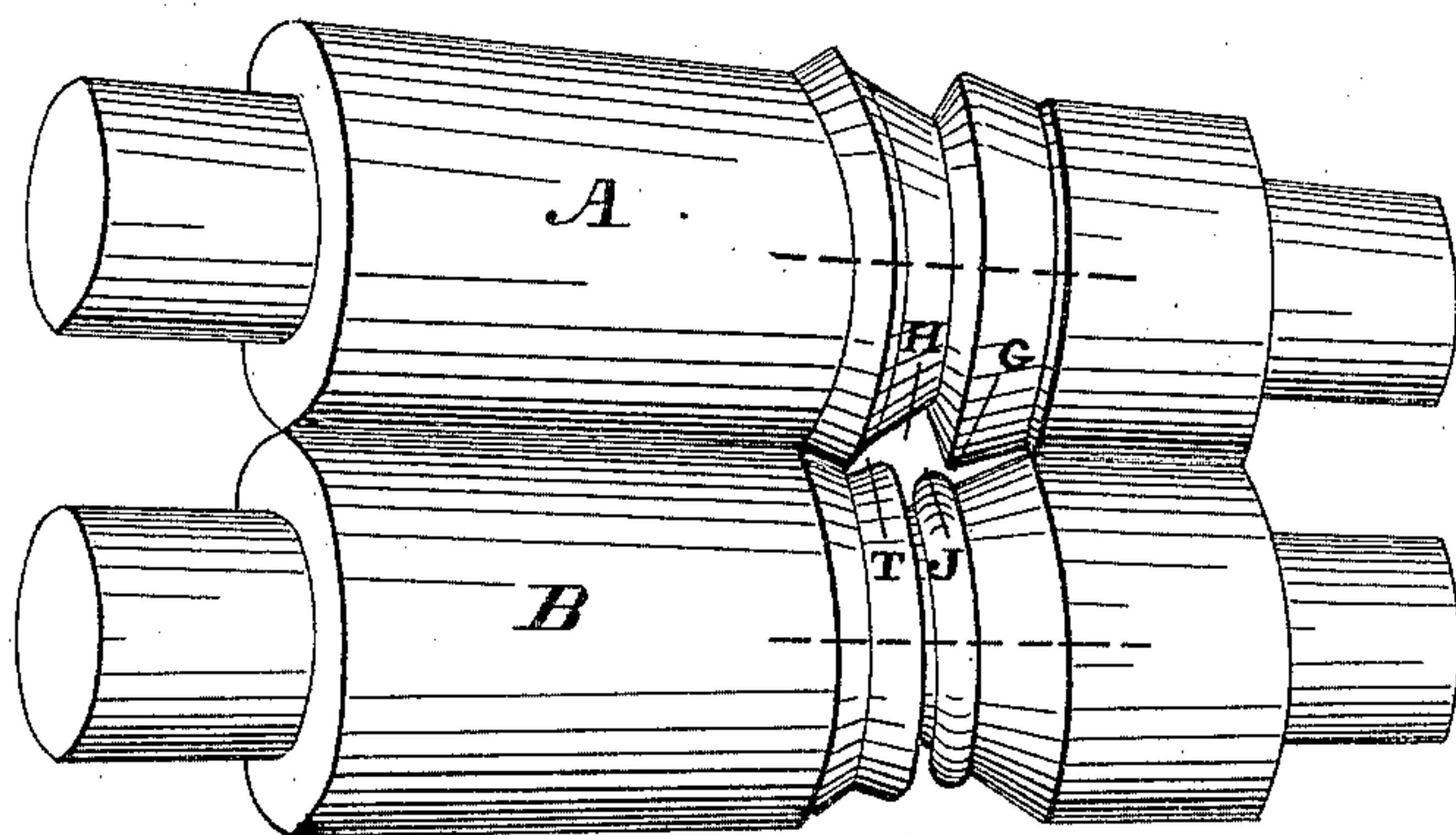


Fig. 1.

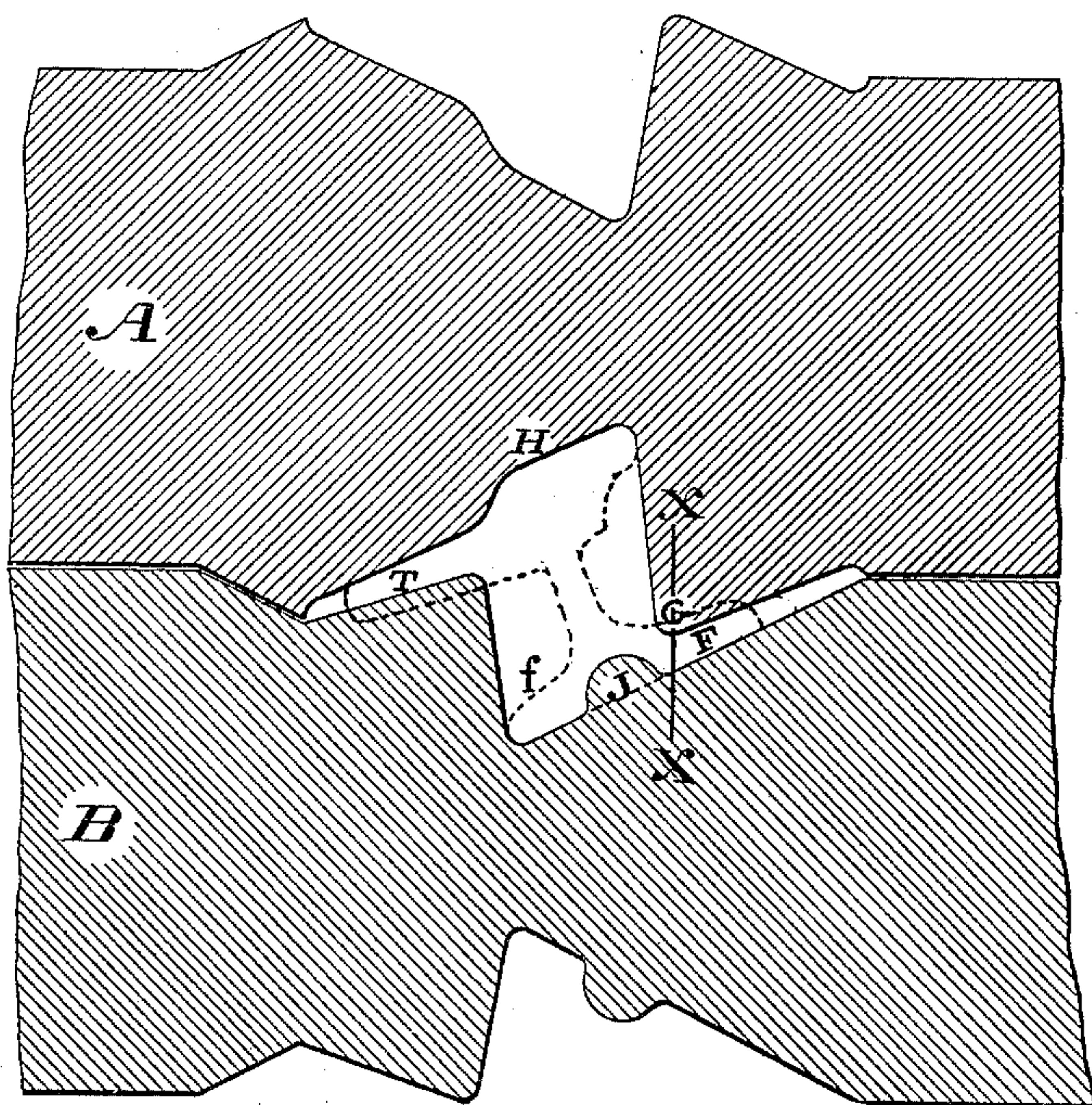


Fig. 2.

WITNESSES:
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UNITED STATES PATENT OFFICE.

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ROLL-PASS.

SPECIFICATION forming part of Letters Patent No. 436,960, dated September 23, 1890.

Application filed February 20, 1890. Serial No. 341,175. (No model.)

To all whom it may concern:

Be it known that I, MAX M. SUPPES, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented a new and useful Roll-Pass in Rolls for Rolling Railroad-Rails, which invention or improvement is fully set forth and illustrated in the following specification and accompanying drawings.

10 The object of this invention is sufficiently indicated by its title.

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

15 In the accompanying drawings, Figure 1 shows in perspective a set of rolls having a pass such as forms the subject of this invention. Fig. 2 shows a longitudinal section through a portion of two rolls, cutting the pass so as to show its exact contour.

In said figures the several parts are indicated by letters of reference, as follows:

25 The letter A indicates the upper roll, and B the lower roll, each provided with grooves which together form the pass illustrated in the drawings, said pass being what is known as an "oblique dummy pass."

30 The letter T indicates that portion of the pass through which the tram of the rail passes, F that portion through which one side of the lower flange of the rail passes, and f that portion of the pass which receives the other side of the web and lower flange of the rail. The head of the rail passes through that portion of the pass indicated by the letter H, and the letter J indicates a "nubbin" in the groove of the lower roll, whose office will be hereinafter particularly pointed out.

The operation of this pass is as follows:

40 The side and lower portion of the rail which passes through the open portion f of the pass merely pass through such open space not acted on or affected materially therein. The specific action of the pass is to reduce the width and thickness of the tram portion of the rail at T and its lower portion on one side at F, and at the same time to spread or widen said parts of the rail, or at least to counteract the wire-drawing tendency which

always occurs if these points be subjected to thinning action in edging passes. The dotted lines, Fig. 2, serve to assist the eye in following the outline of the piece of metal as it enters the pass before being operated upon therein.

55 The action of the nubbin J as the metal enters the pass is specific upon the part which is to form the lower flange of the rail. Without such nubbin in rolling, as heretofore customarily done, the roll action would be such as to tend to thrust this lower portion of the metal outward and away from the thinning part of the dummy pass; but in the pass shown in the drawings it will be observed that the dotted line *xx*, which is directly in the line of the roll's action, passes through the corner of the pass and the nubbin J, the result of which is that these two points or corners pinch the metal between them and hold it from slipping away from the portion of the pass at G. This action, caused by the presence of the nubbin J, has been found so effective in practice that ample width of lower flange of rail is thereby secured where heretofore failure has attended such attempts in the absence of such means. This nubbin J must be distinguished from the tongues or projections shown in Patent No. 292,759, issued January 29, 1884, which said tongues are differently located and serve a different purpose in the passes in which they occur.

80 The dummy pass herein described is illustrated as oblique; but the office of the nubbin J may be equally well performed if the pass should be a straight dummy instead of oblique.

Having thus fully described my said improvement as of my invention, I claim—

A dummy pass in rolls for rolling girder-rails, provided with a nubbin, as J, in the lower groove of the pass, whereby the metal is pinched between said nubbin and a corner of the upper groove, as hereinbefore set forth.

MAX M. SUPPES.

Witnesses:

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JNO. MASTERTON.