

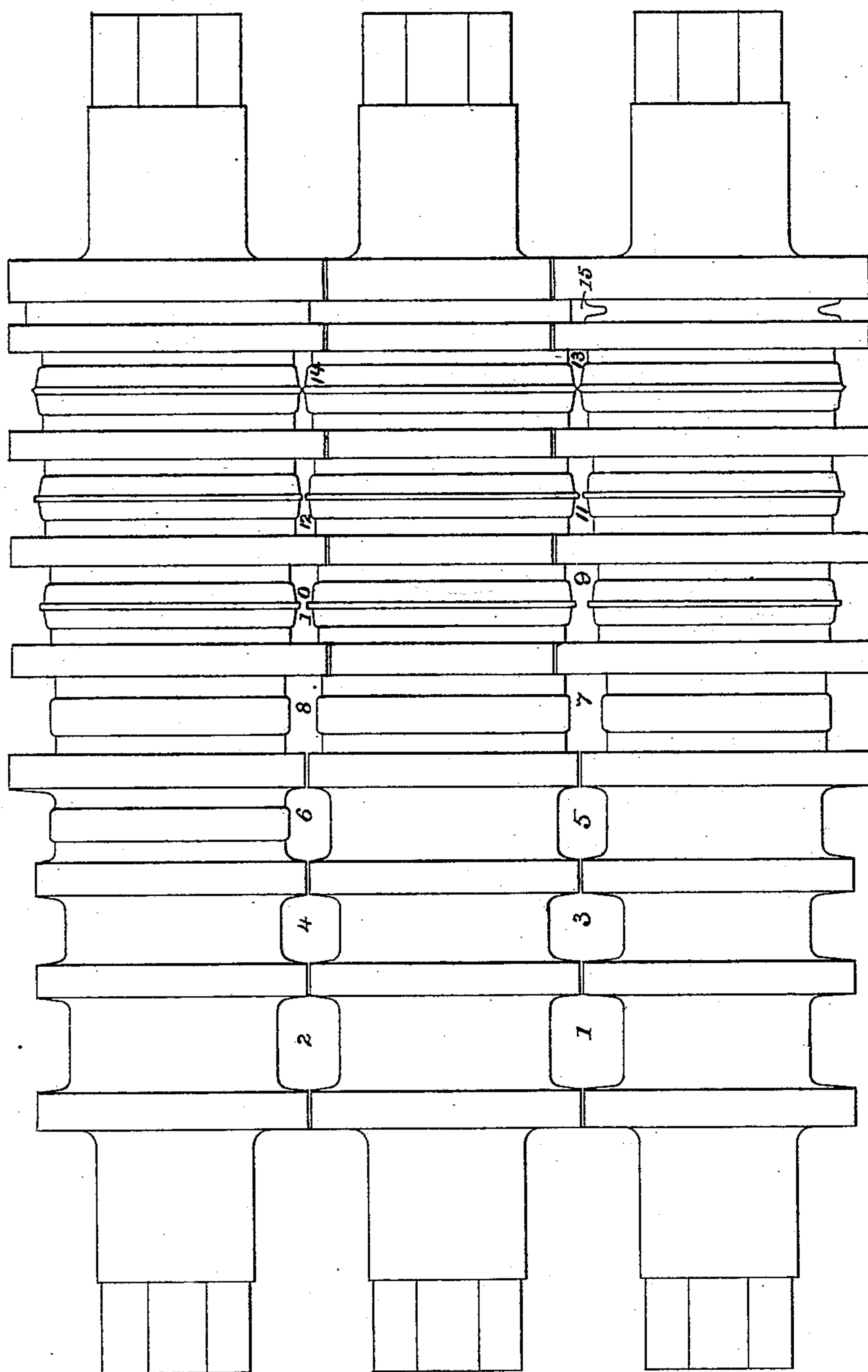
(No Model.)

F. HOLUB.

ROLLS FOR ROLLING METAL.

No. 252,464.

Patented Jan. 17, 1882.



WITNESSES

Wm. A. Skinkle,
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INVENTOR

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UNITED STATES PATENT OFFICE.

FRANK HOLUB, OF JOLIET, ILLINOIS, ASSIGNOR OF ONE-HALF TO
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ROLLS FOR ROLLING METAL.

SPECIFICATION forming part of Letters Patent No. 252,464, dated January 17, 1882.

Application filed August 29, 1881. (No model.)

To all whom it may concern:

Be it known that I, FRANK HOLUB, of Joliet, in the county of Will and State of Illinois, have invented certain new and useful Improvements in Rolls, of which the following is a specification, reference being had to the accompanying drawing.

My invention is for the special purpose of utilizing the crop-ends of blooms or billets for the purpose of manufacturing metallic plow-beams.

My object is to produce two bars at a time from a single billet at one heating, thus saving about half the number of passes through the rolls that are necessary to reduce billets to the proper bar form in making two bars one at a time.

The accompanying drawing represents so much of a set of three-high rolls in elevation as is necessary to illustrate my invention.

These rolls are provided with dies from No. 1 to No. 15, inclusive. The bloom is first heated and passed through between the rolls at No. 1, back at No. 2, through again at No. 3, and so on to the final return at No. 14, when the bars become separated and ready to be passed through the dies at No. 15 to be finished into the proper form for metallic plow-beams. The passes from No. 1 to No. 5, inclusive, successively reduce and elongate the billet. The passes from No. 6 to No. 8, inclusive, reduce it successively by flattening and in the center by forming longitudinal grooves in the upper and lower sides of the bar. The passes from No. 9 to No. 14, inclusive, continue the elongation

and flattening of the bar, the deepening of the longitudinal grooves, and gradually crease it longitudinally in the center until the pass at No. 14 finally severs it into two parts, which are respectively finished by being passed through the dies No. 15. Thus a single heating and a single set of passes through the rolls produce simultaneously two bars of approximate form for plow-beams, which may be finished by continuing the operation through dies 15 without reheating.

It is obvious that the metal after each pass through each set of dies will have the form in cross-section indicated in the drawing representing the dies themselves, as at No. 1, No. 6, No. 9, No. 14, and No. 15, &c.

I sometimes prefer to place the cutters No. 14 outside the journal and bearing near one end of the rolls, in which case that end of the rolls should of course be made to project beyond the frame or bearing.

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

The combination, in a set of three-high rolls, of the reducing, grooving, creasing, and finishing dies from 1 to 15, inclusive, substantially as and for the purpose specified.

In testimony whereof I have hereunto subscribed my name.

FRANK HOLUB.

Witnesses:

M. R. MUDIE,
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