

(No Model.)

J. W. EVANS.

MACHINE FOR SCARF ROLLING.

No. 389,504.

Patented Sept. 11, 1888.

Fig. 1.

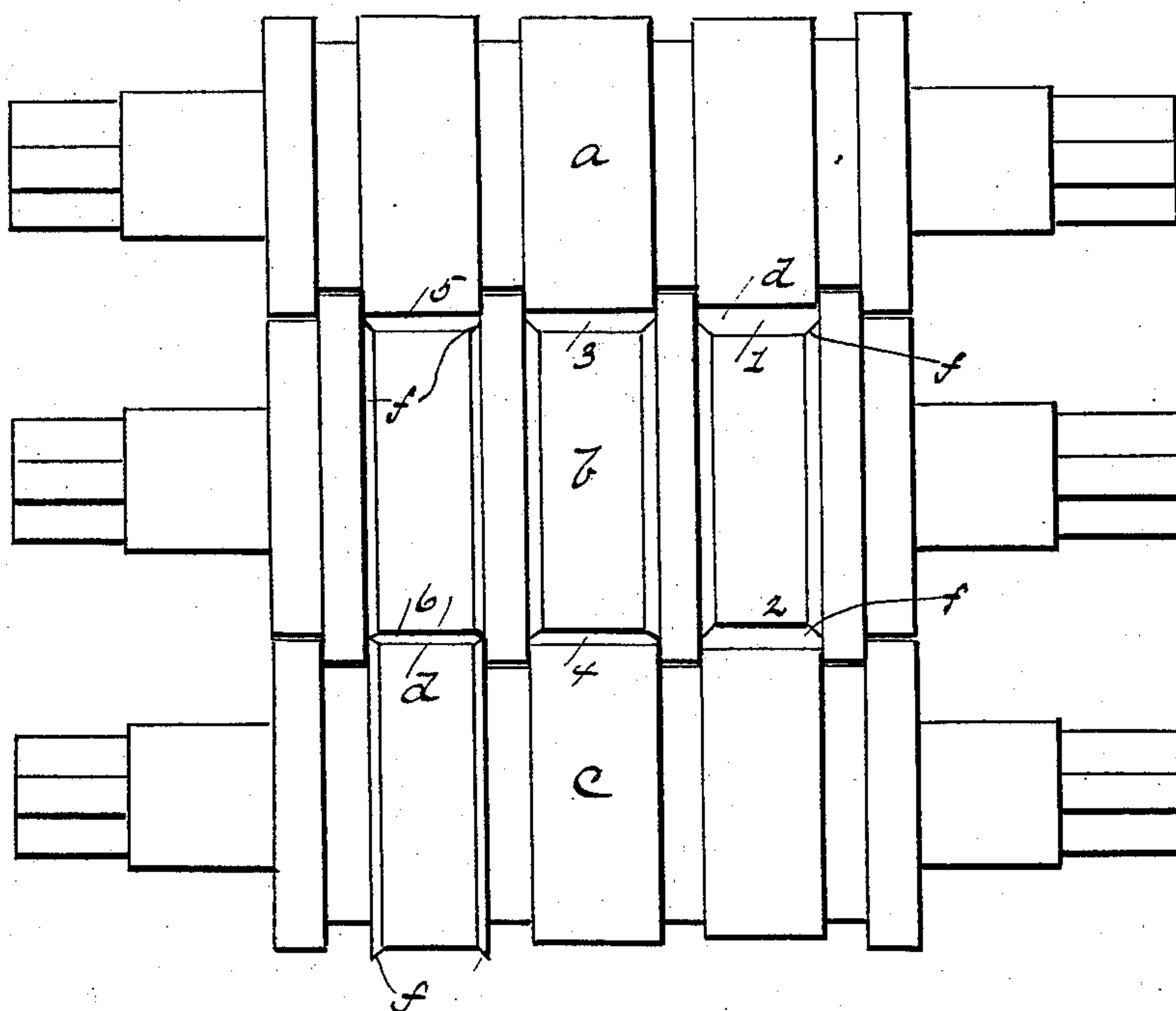


Fig. 2.

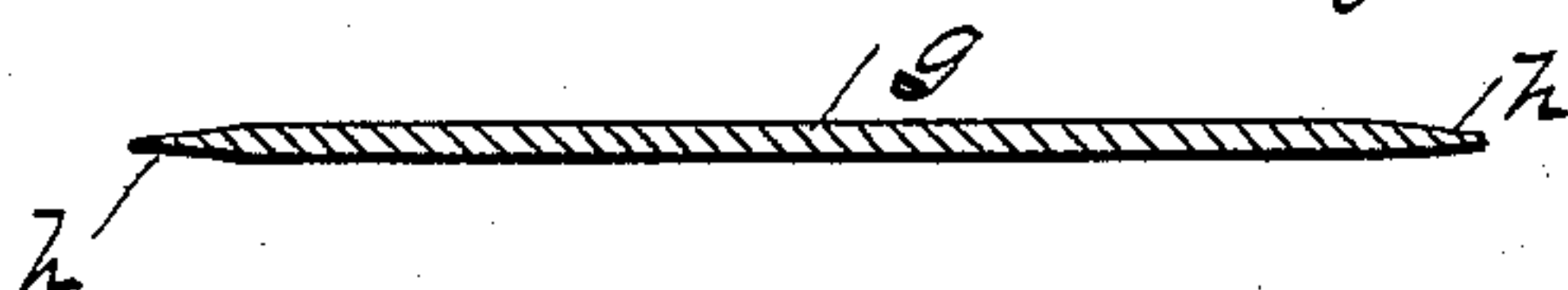
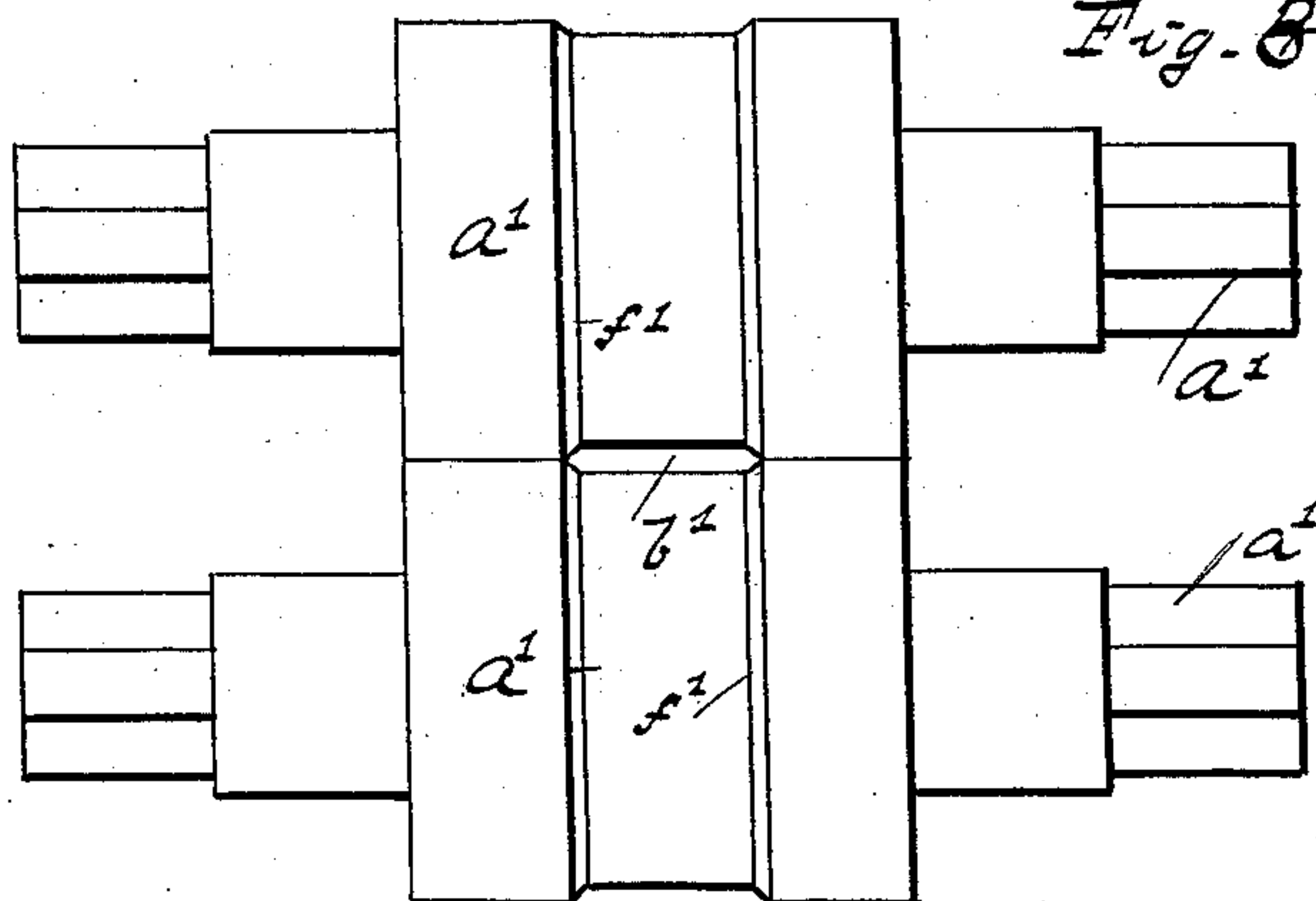


Fig. 3.



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MACHINE FOR SCARF-ROLLING.

SPECIFICATION forming part of Letters Patent No. 389,504, dated September 11, 1888.

Application filed December 19, 1887. Serial No. 258,413. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. EVANS, a citizen of the United States, residing at Etna, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Scarf-Rolling; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improvement in scarf-rolling, the object being to provide a means whereby the scarf or bevel may be rolled on plates used in the manufacture of wrought-iron tubing; and with this end in view my invention consists in a set of rolls having a number of peculiarly-constructed grooves or passes, as will be fully set forth hereinafter.

In the accompanying drawings, Figure 1 is a front elevation of my improved rolls for forming the scarf on metallic plates constructed in accordance with my invention. Fig. 2 is an enlarged cross-section of a plate scarfed and ready for forming the same into a tube. Fig. 3 is a front elevation of a set of rolls having but one pass, the same being used for scarfing plates that have been previously rolled.

To put my invention into practice, I provide a set of rolls, *a b c*, such as are well known to the art as "three-high," and form thereon a number of grooves or passes, *d*, gradually diminishing in size from the first pass, 1, to the last or finishing pass, 6. The central roll, *b*,

of this set is provided in each of the passes *d* with beveled or inclined corners *f*, which produces the scarf *h* on the finished plate *g*. The finishing-groove 6, formed on the lower roll, *c*, is also provided with inclined corners *f*.

At Fig. 3 on the drawings I have shown two rolls, *a'*, having formed thereon a single pass, *b'*, provided with beveled or inclined corners *f'*. These rolls *a'*, I prefer to use when the plates have been previously rolled.

In operation the billet is first allowed to pass through the groove 1, thence in a reverse direction through the groove 2, formed between the central roll, *b*, and lower roll, *c*, and is again successively passed through the grooves 3 4 5 6, the last pass, 6, finishing the scarf *h* on the plate *g*.

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

In a rolling-mill, a set of rolls, *a b c*, having a series of passes, from 1 to 6, inclusive, of varying thicknesses, the upper and lower rolls, *a c*, having plain annular grooves formed in their peripheries for the narrow ribs on the intermediate roll, *b*, to work in, and the intermediate roll, *b*, having both sides of the annular grooves thereof beveled or inclined at *f*, and receiving the wide plain ribs of the upper and lower rolls, substantially as and for the purpose described.

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