

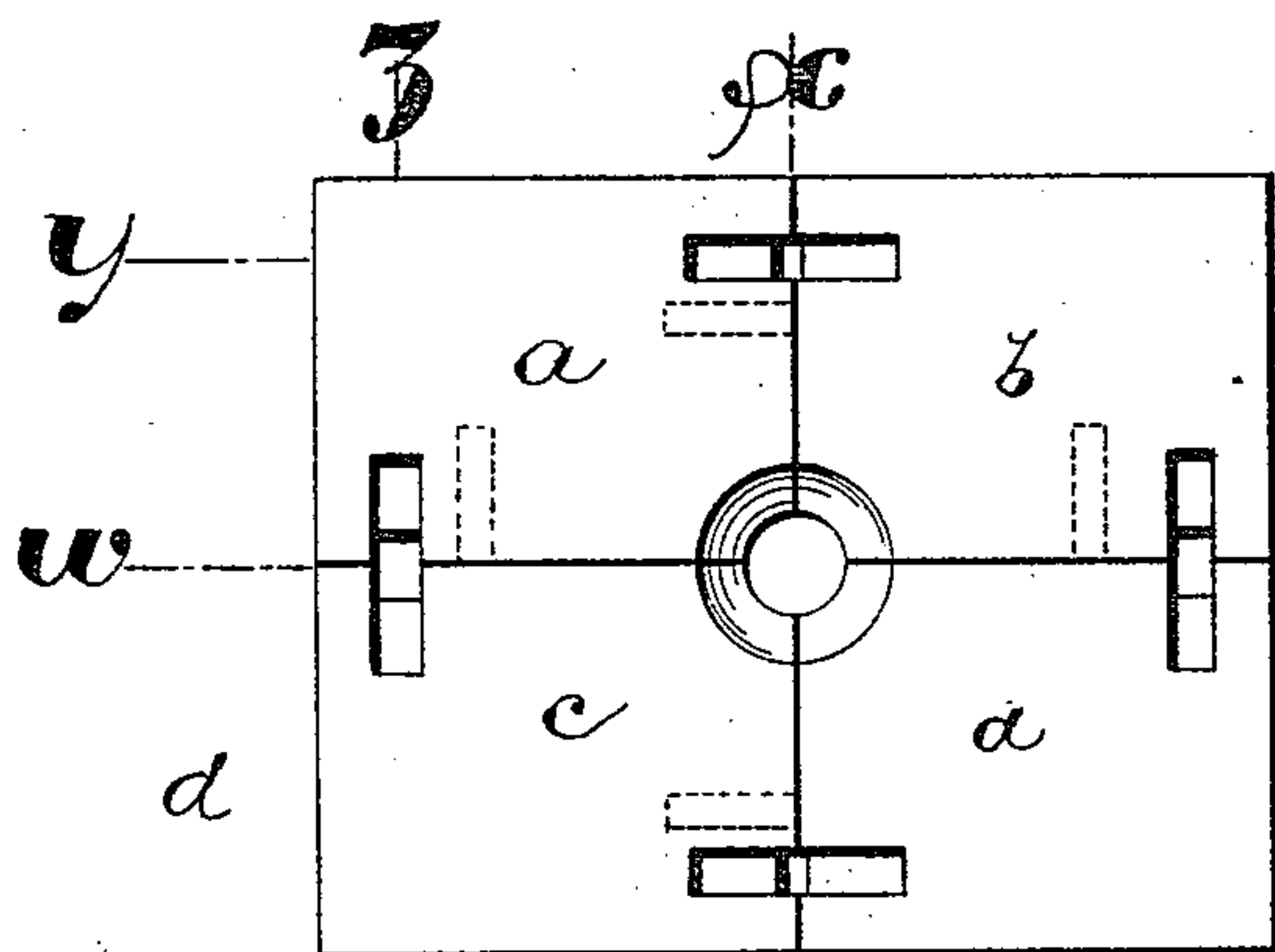
(No Model.)

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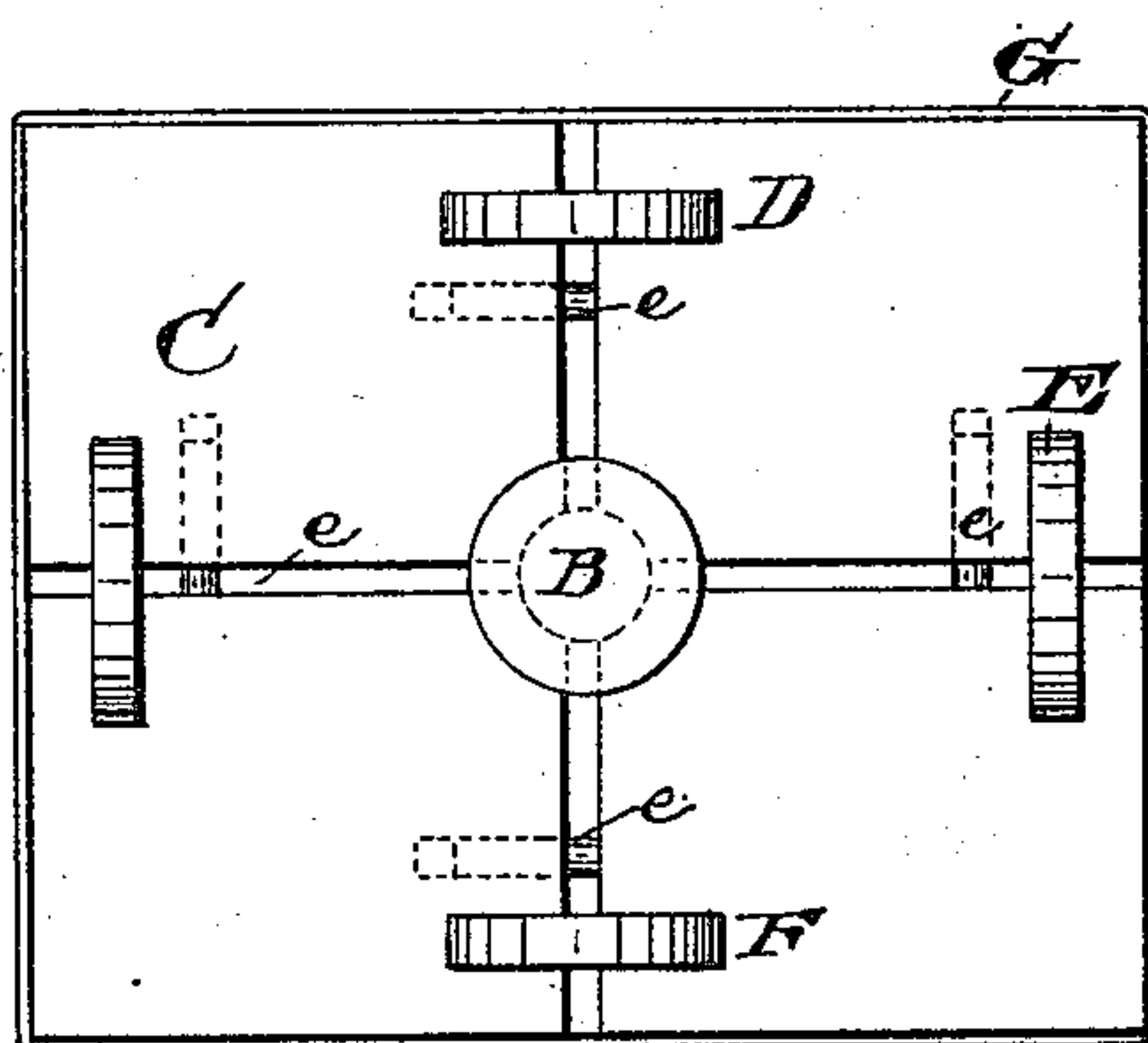
J. M. RILEY.  
SHAPING MACHINE.

No. 428,416.

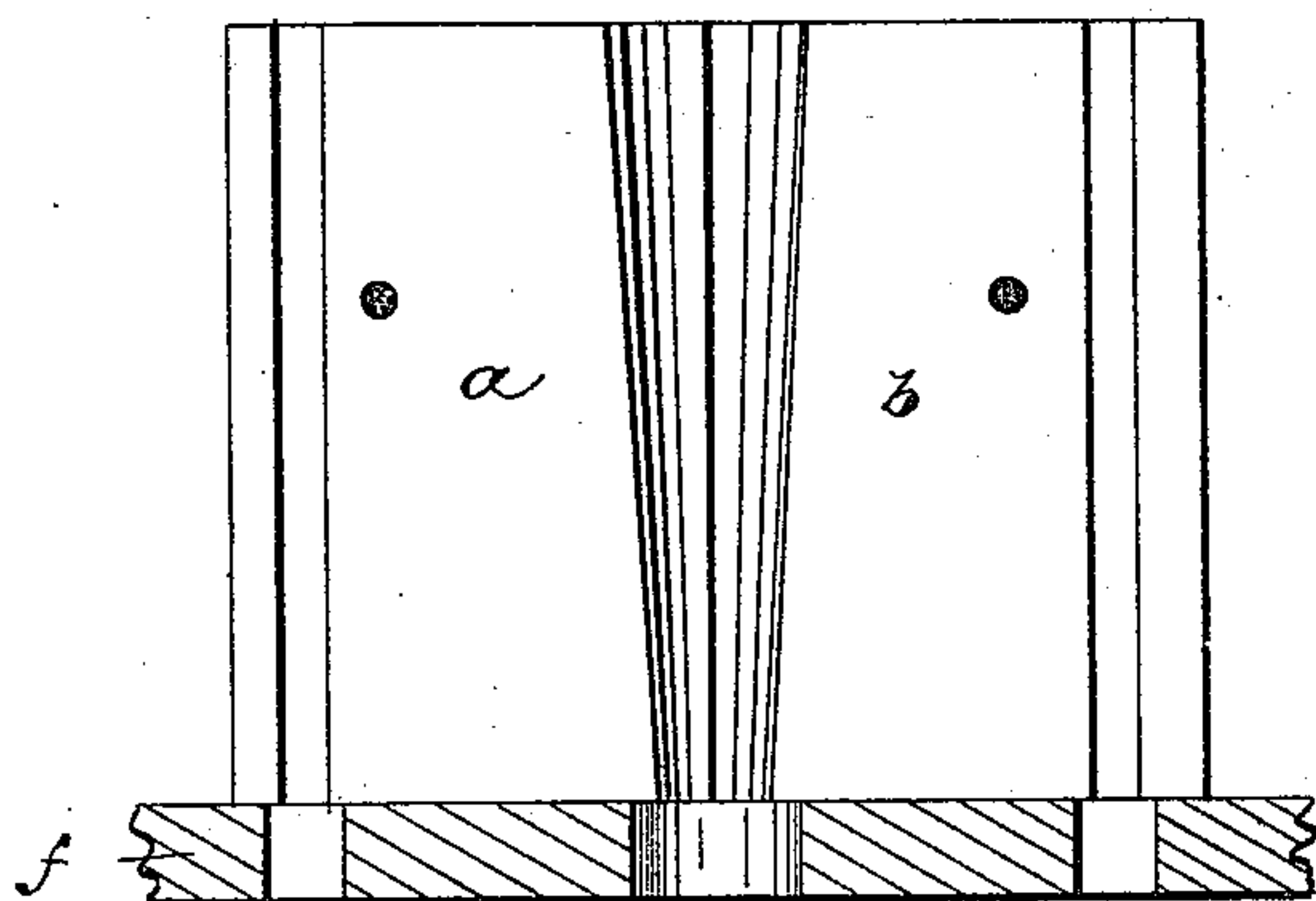
Patented May 20, 1890.



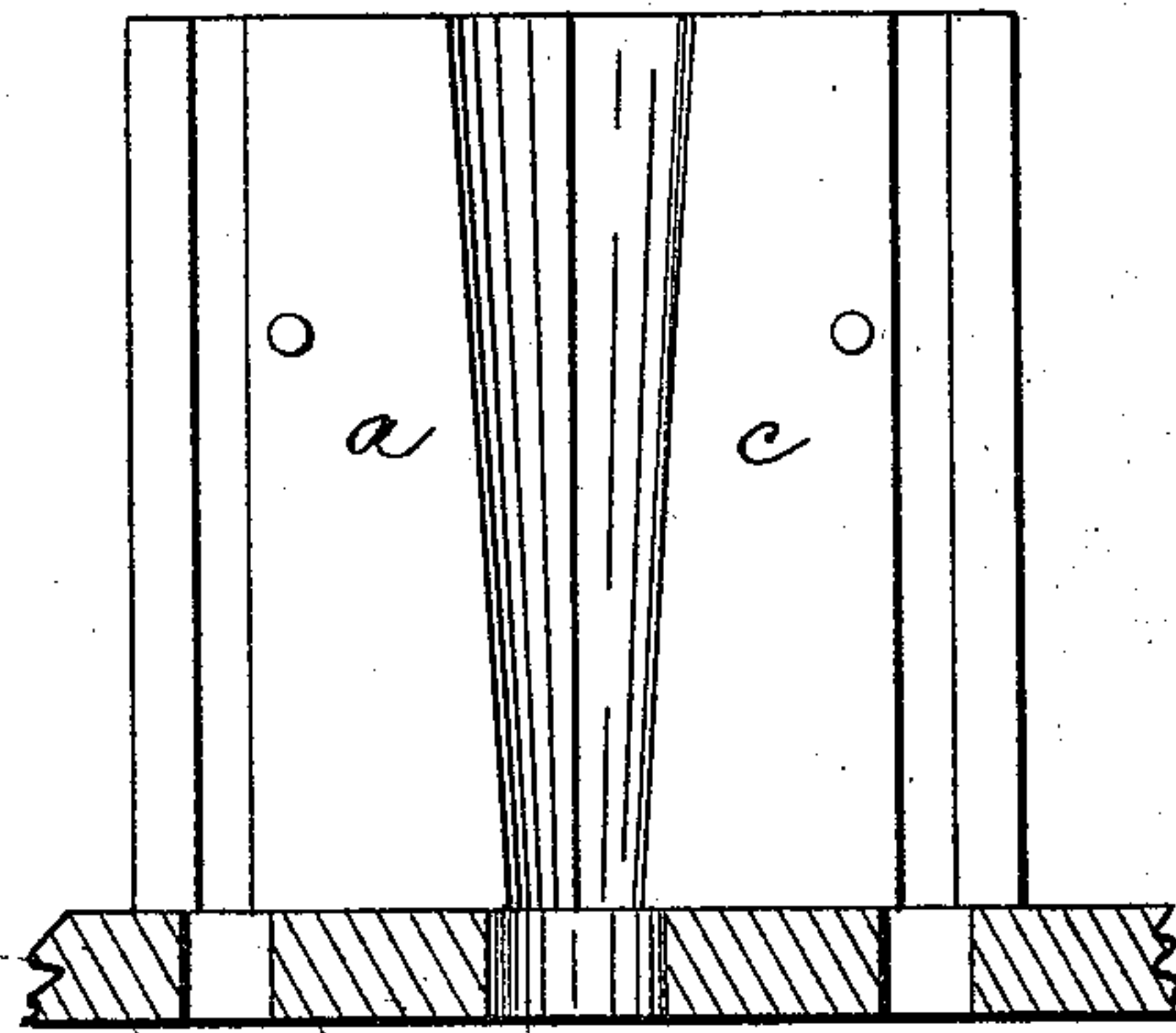
*Fig. 1.*



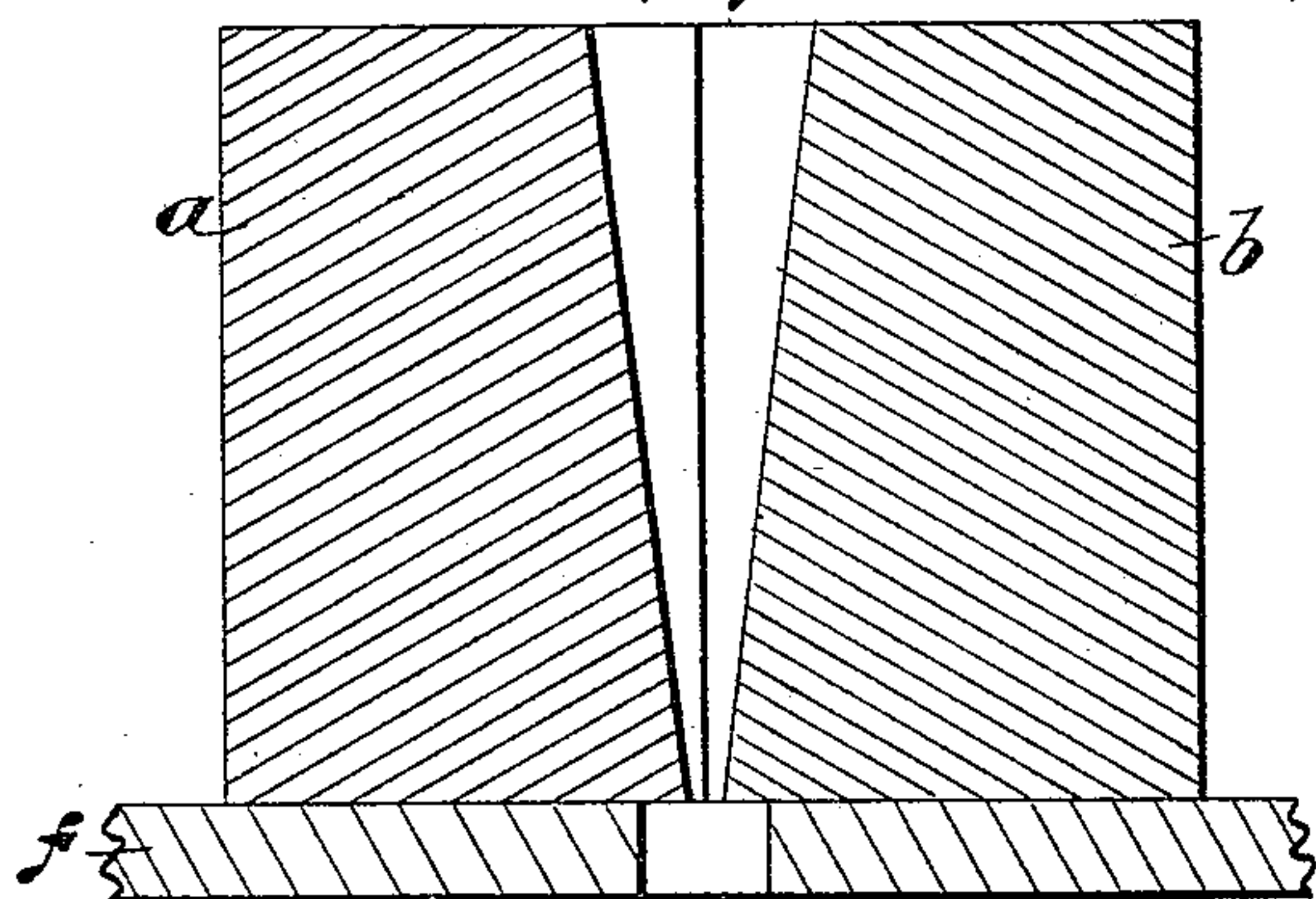
*Fig. 2.*



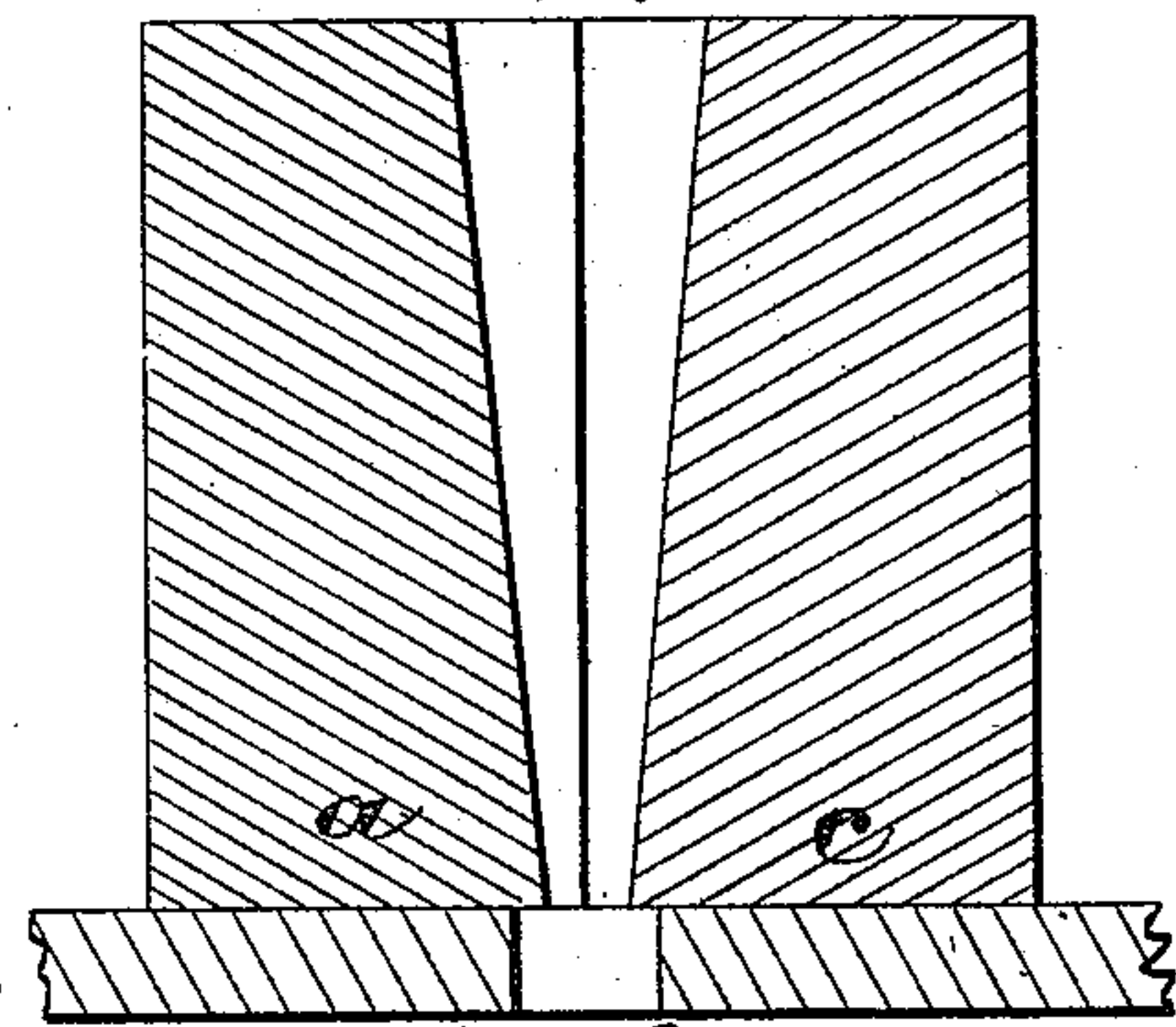
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



*Fig. 6.*

WITNESSES:

INVENTOR

Oscar A. Michel.  
E. L. Sherman

*John M. Riley,*

BY *Drake & Co.* ATTY'S.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 7.

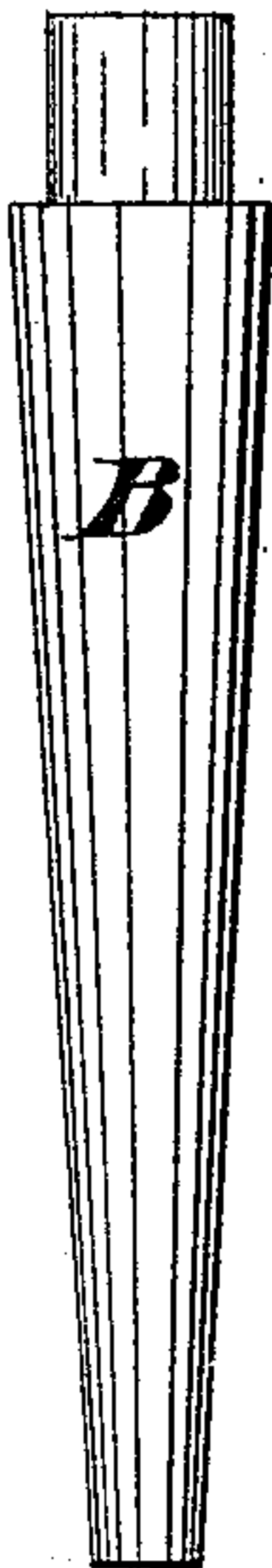


Fig. 8.

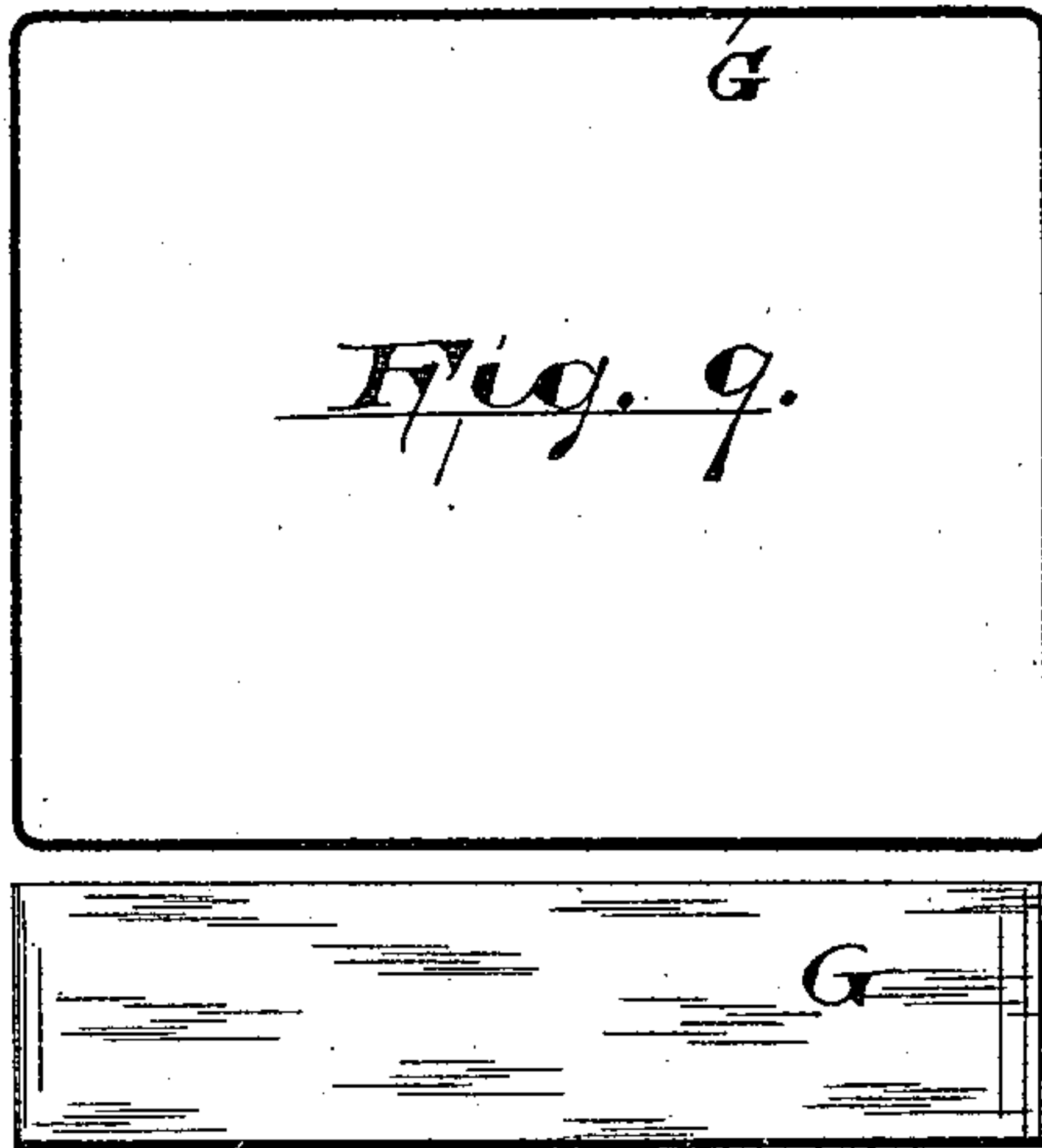
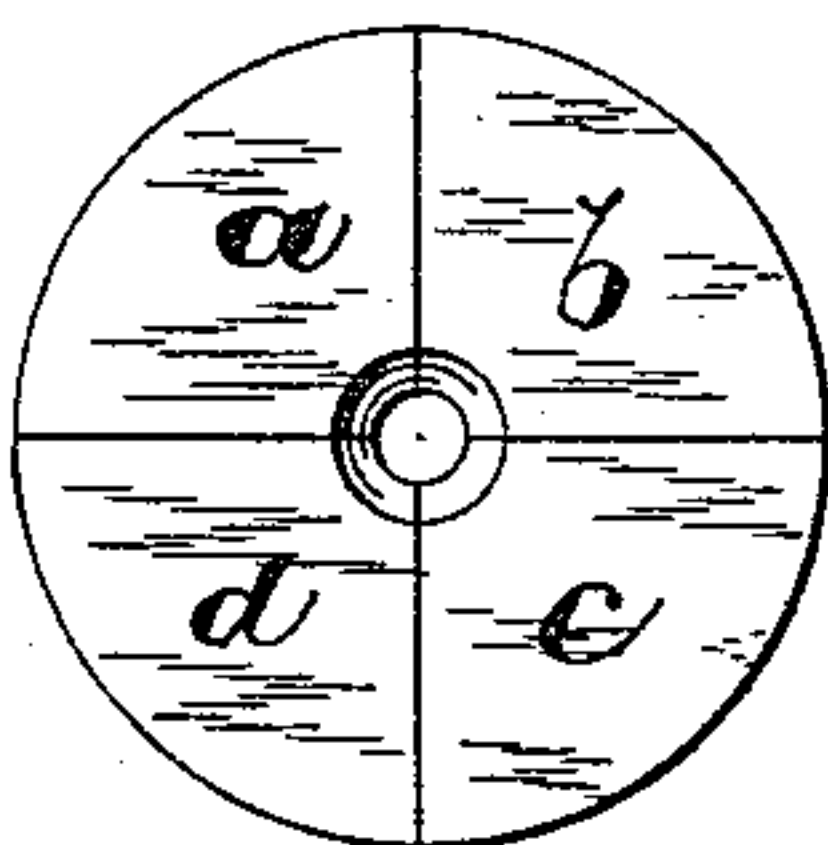
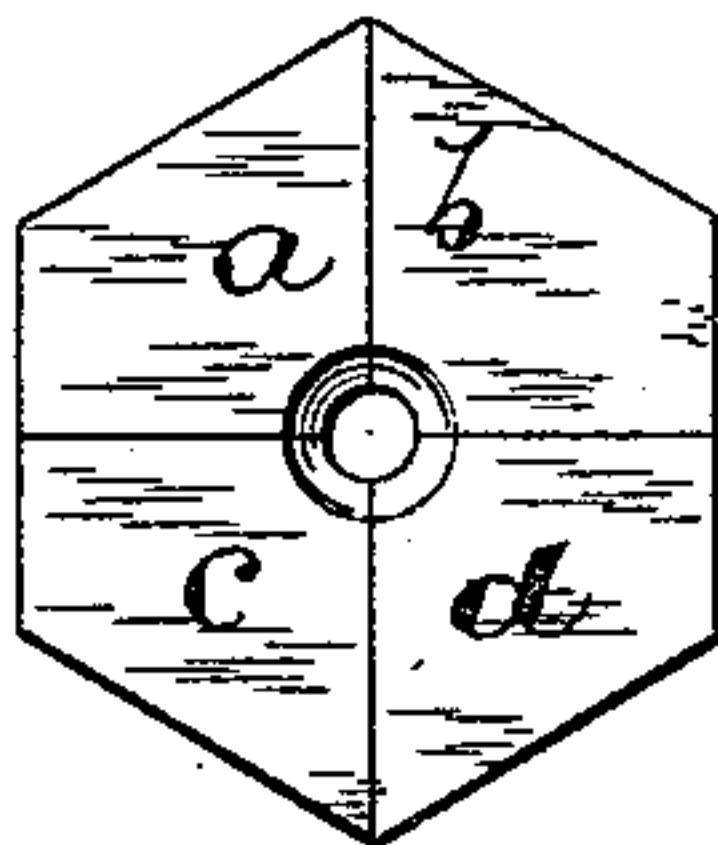


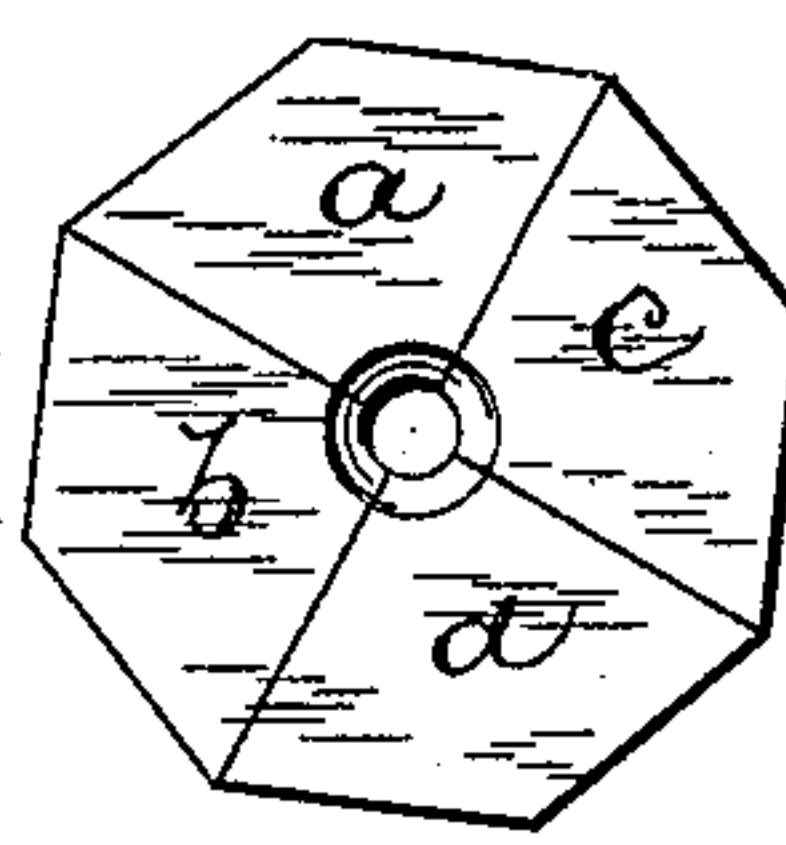
Fig. 10.



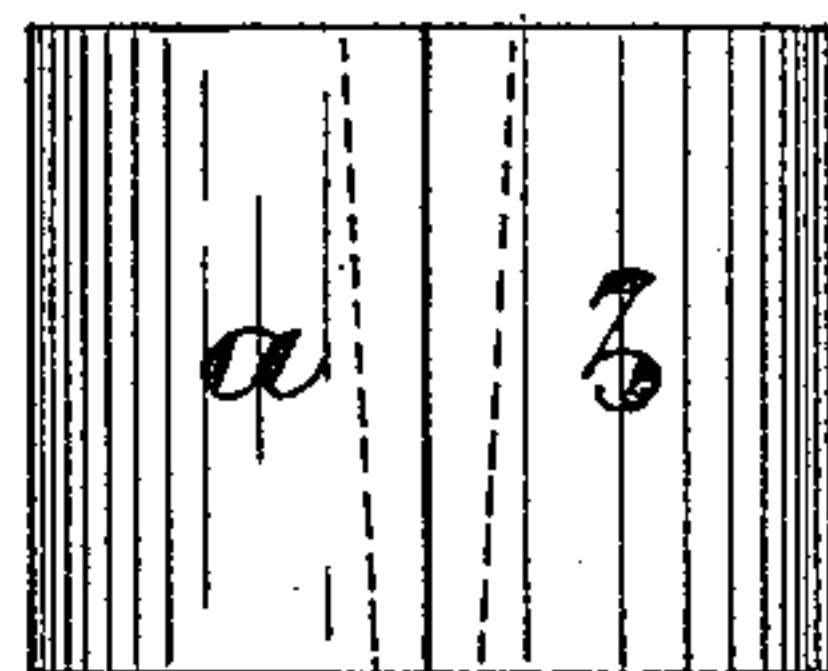
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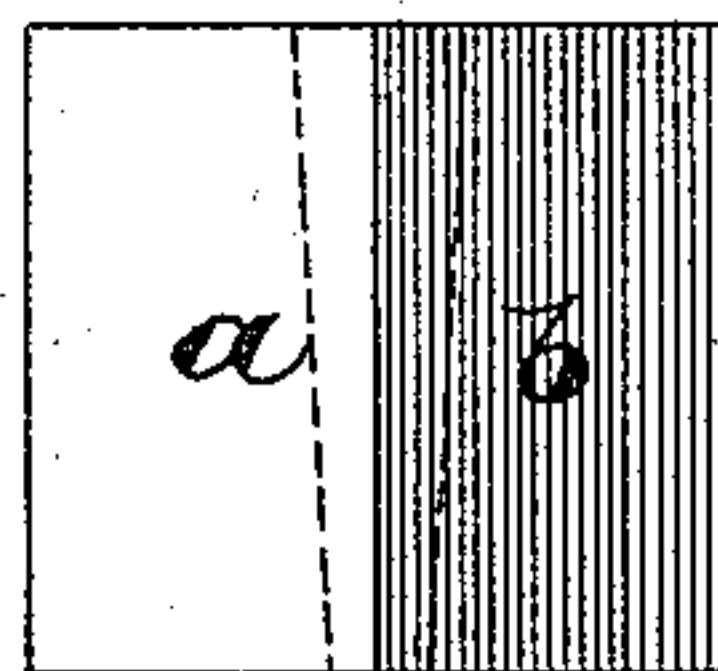
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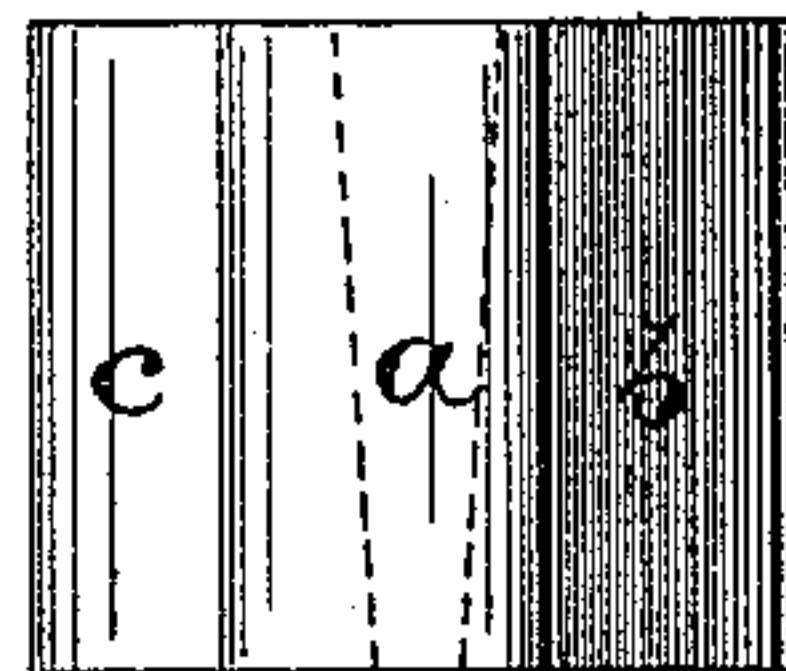
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12.



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16.

WITNESSES:

INVENTOR:

Oscar A. Michel.  
E. L. Sherman

John M. Riley,  
BY Drake & Co. ATTY'S.



# UNITED STATES PATENT OFFICE.

JOHN M. RILEY, OF KEARNEY, NEW JERSEY.

## SHAPING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 428,416, dated May 20, 1890.

Application filed December 10, 1889. Serial No. 333,262. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN M. RILEY, a citizen of the United States, residing at Kearney, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Shaping-Machines; 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a convenient and effective machine for forming and shaping metallic bands; and the invention consists in the improved machine and in the combination and arrangement of the several parts thereof, as hereinafter more fully described, and finally embodied in the clauses of the claim.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the several figures, Figure 1 is a top plan view of my improved machine. Fig. 2 is a similar view of the device, showing certain side wedges and a tapering pin in connection therewith and a metallic band pressed or shaped into position by the die. Figs. 3, 4, 5, and 6 are respectively sectional views through lines *w*, *x*, *y*, and *z* of Fig. 1. Fig. 7 is a plan view of one of the side wedges of the die. Fig. 8 is a plan view of the central tapering pin or spreader. Figs. 9 and 10 are respectively plan and side views of a metallic band after it has been formed and pressed into shape on my improved device. Figs. 11, 12, 13, 14, 15, and 16 are detail views showing modified forms of the die.

In said drawings, *a*, *b*, *c*, and *d* indicate sections of a die, Figs. 1, 2, 11, 13, and 15, which are held in position by pintles *e*, Fig. 2.

B indicates the central tapering pin or spreader.

C, D, E, and F are side wedges.

G is a metallic band formed round, square, or polygonal by a die, as desired, and *f* is a bench or table upon which the die rests.

The operation of my improved die is as follows: The ends of the metallic band or strip to be formed are first soldered or fastened together in any desired manner. The band is then passed over the outside of the dies. The central tapering pin or spreader is then driven down, so as to bind the band firmly to the outside of the die. The side wedges are then driven firmly into position in the sockets, thus securely locking the sections of the die and firmly binding the metallic band to the outer surface of the die, thus stretching the band and giving to it the contour or shape of the die when released therefrom, as will be manifest.

I do not limit myself to any form of die or the number of wedges to be used, as round or polygonal shaped dies may be used, the central tapering pin being sufficient to spread the parts of the machine and shape the band.

What I claim as new, and desire to secure by Letters Patent, is—

1. The improved forming and shaping machine herein described, composed of two or more sections, a central tapering pin or spreader, and side wedges, all said parts being arranged and adapted to stretch and form a metallic band, substantially as set forth.

2. In a stretching and forming machine, the combination of two or more sections and a central tapering pin or spreader, all said parts being arranged and adapted to stretch and form a metallic band, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, this 7th day of November, 1889.

JOHN M. RILEY.

Witnesses:

OLIVER DRAKE,  
E. L. SHERMAN.