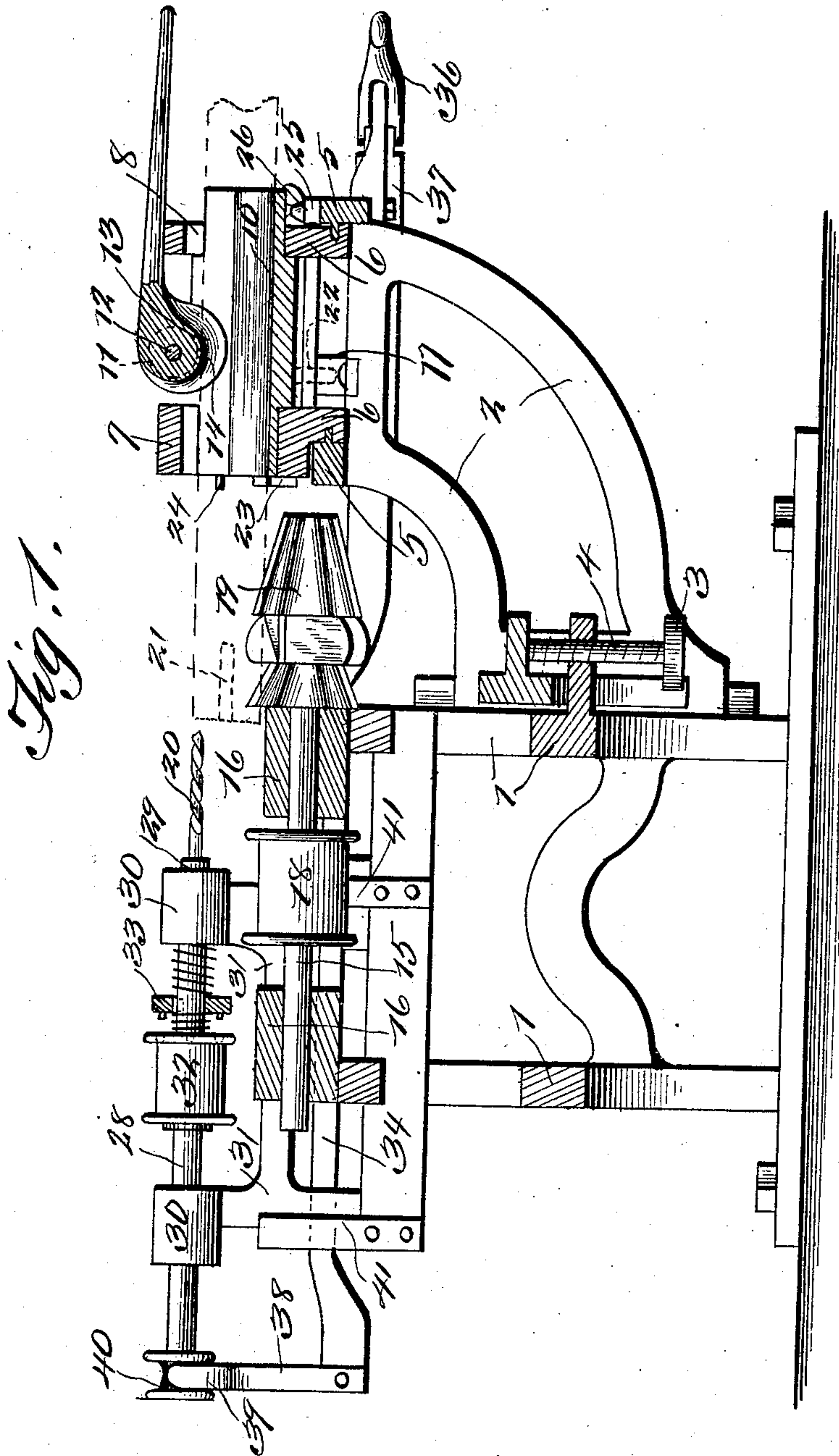


No. 889,428.

J. S. BARNES.
WOODWORKING MACHINE.
APPLICATION FILED APR. 26, 1907.

PATENTED JUNE 2, 1908.

3 SHEETS—SHEET 1.



Witnesses

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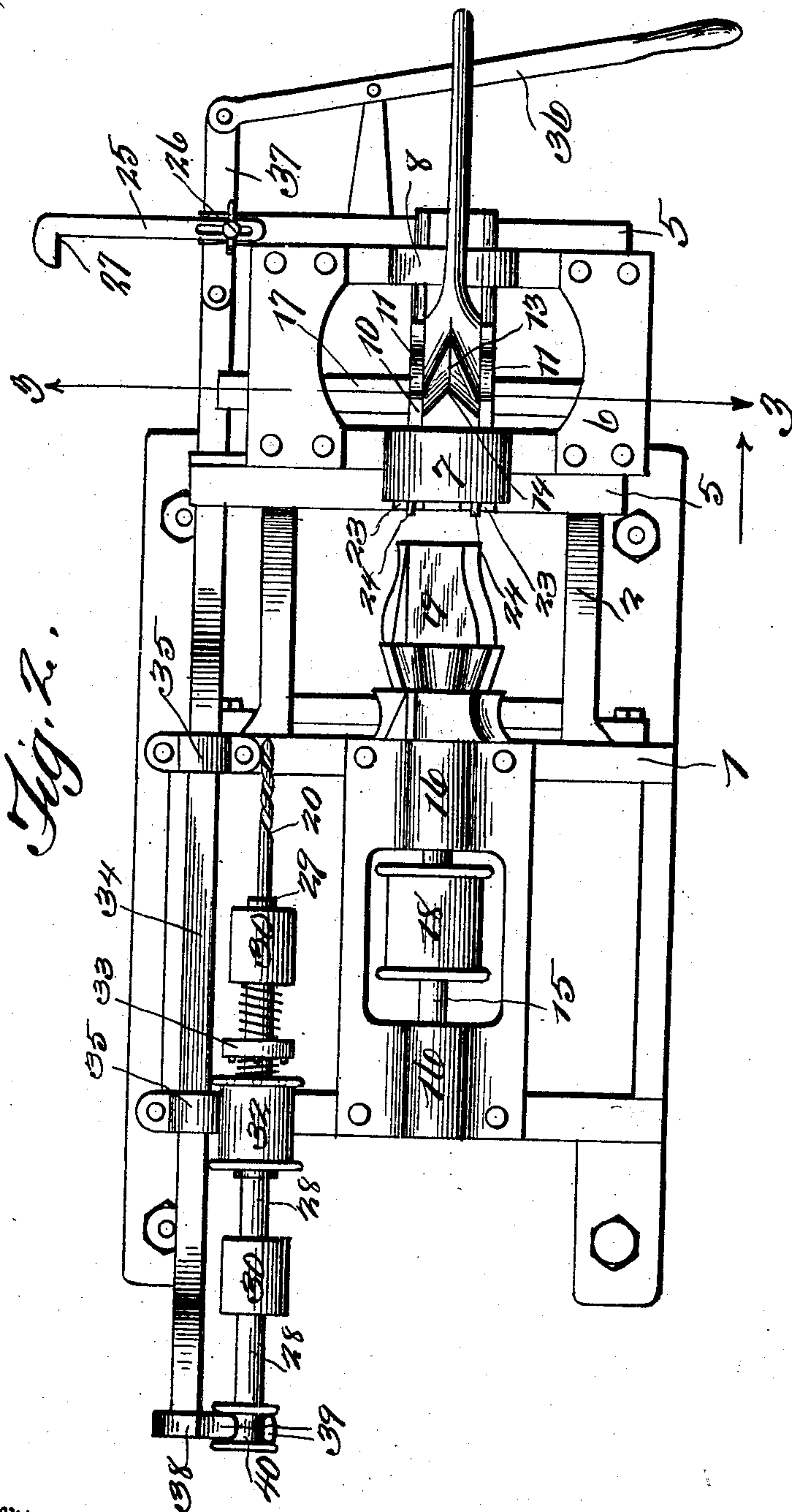
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3 SHEETS—SHEET 3.

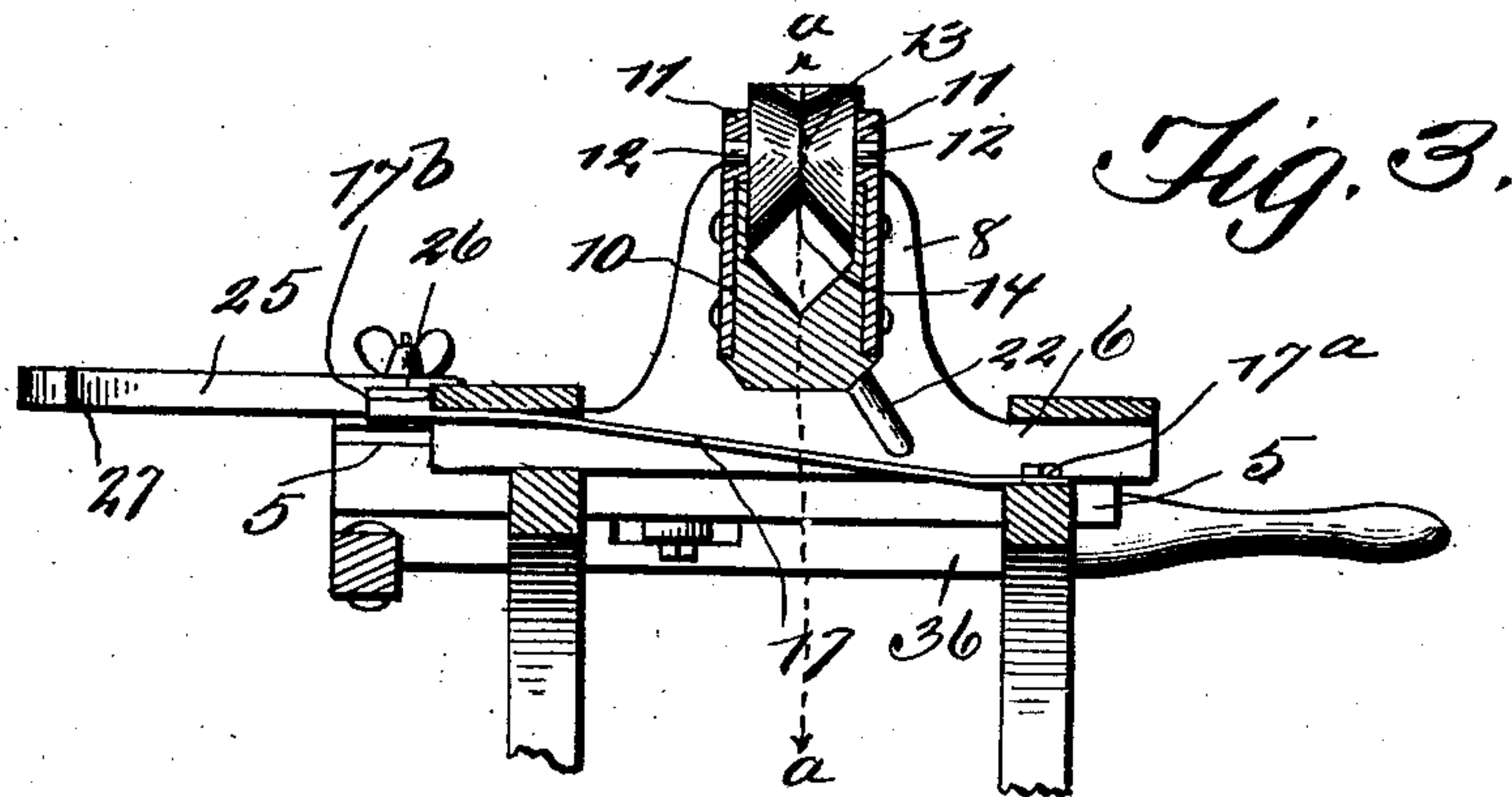


Fig. 4.

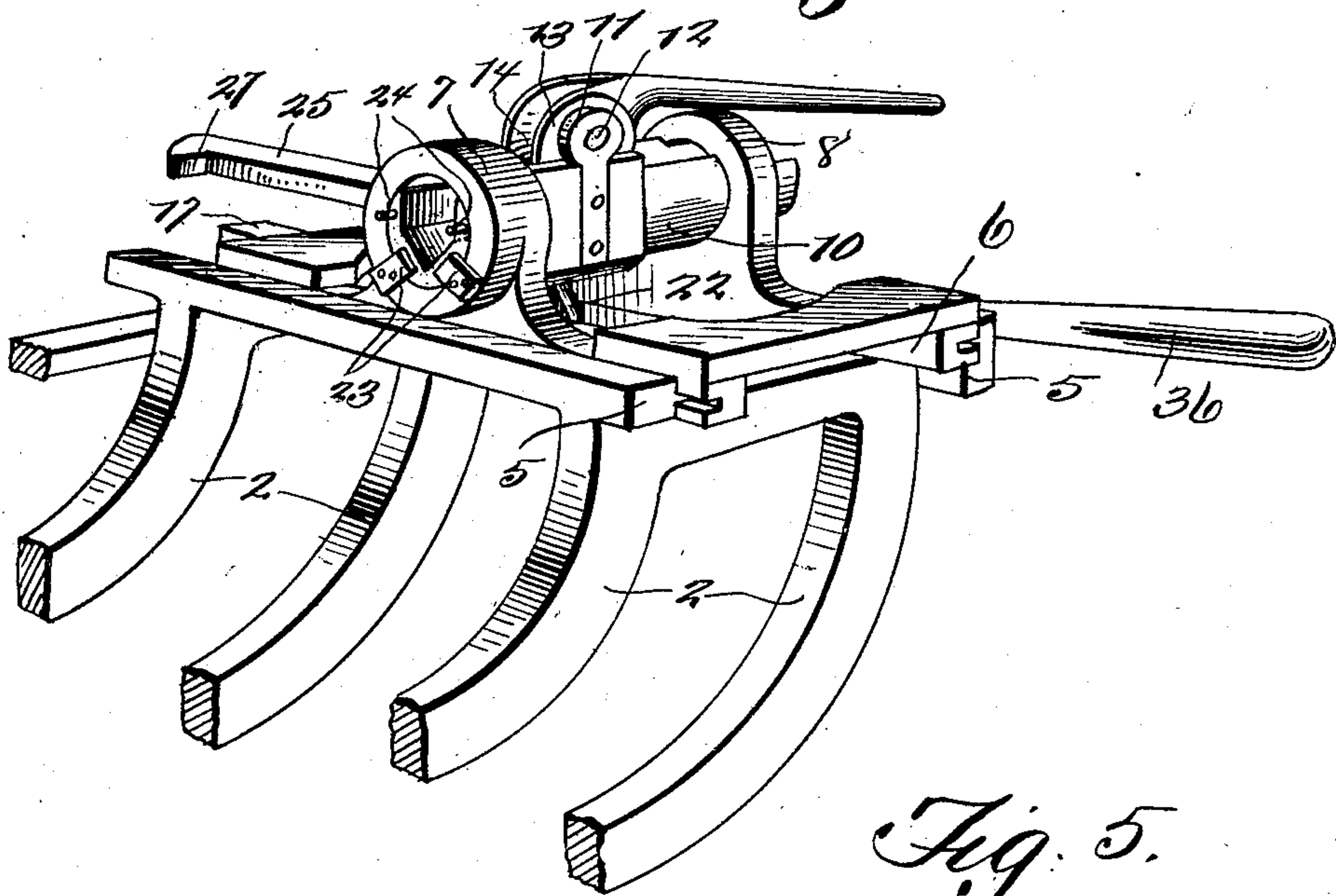
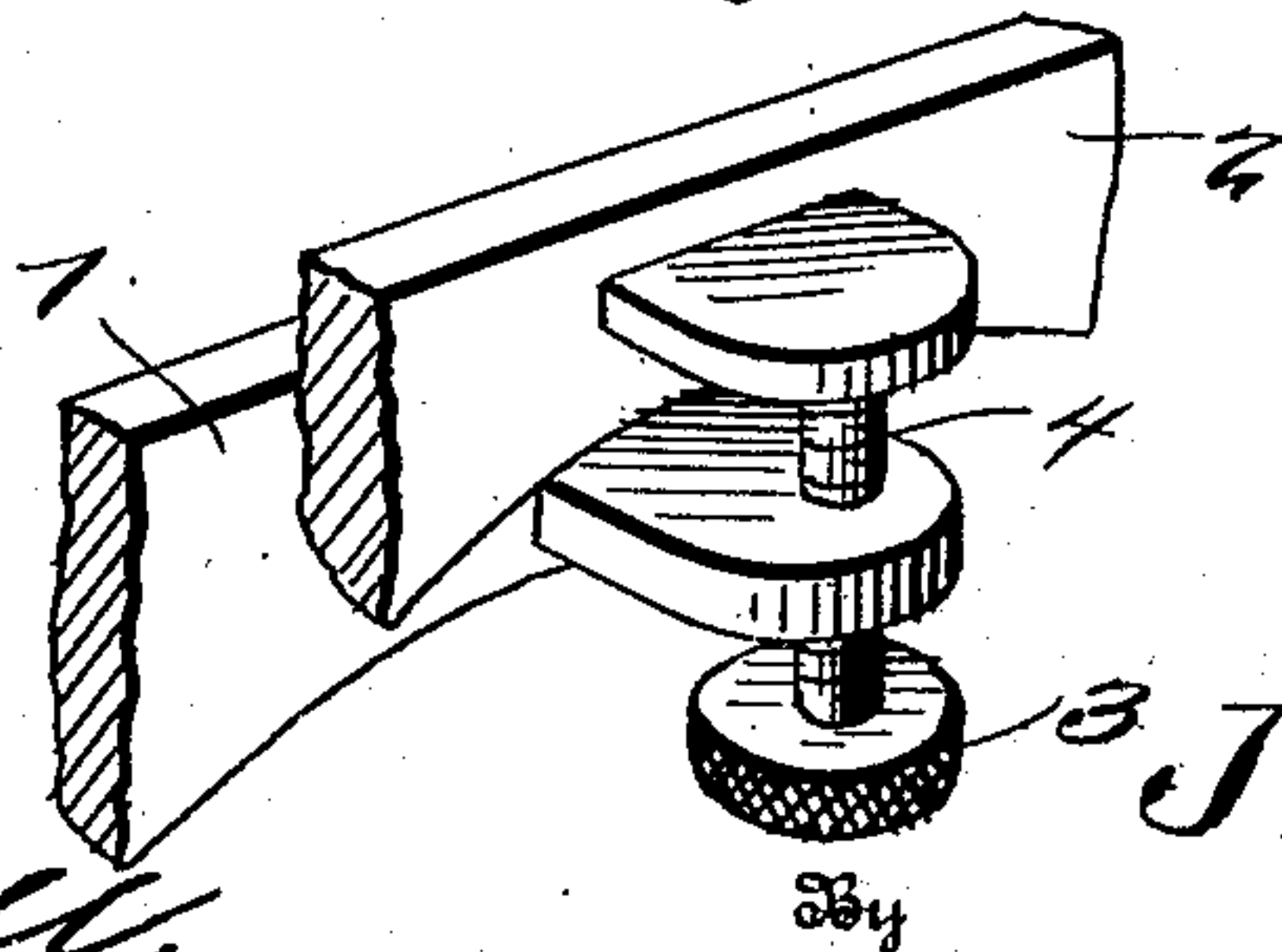


Fig. 5.



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UNITED STATES PATENT OFFICE.

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WOODWORKING-MACHINE.

No. 889,428.

Specification of Letters Patent.

Patented June 2, 1908.

Application filed April 26, 1907. Serial No. 370,380.

To all whom it may concern:

Be it known that I, JOHN S. BARNES, citizen of the United States, residing at North Wilkesboro, in the county of Wilkes and State of North Carolina, have invented certain new and useful Improvements in Woodworking-Machines, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention pertains to a new and useful wood-working machine, especially adapted for shaping first on one side and then on the other of corner posts for washstands, bureaus and similar articles of furniture, or table legs or the like.

Furthermore, the invention aims as an object to provide means whereby the carriage carrying the post to be shaped, may be shifted to one side, so as to bore a recess for the reception of a caster wheel, such as used in connection with articles of furniture.

20 The invention is still further provided with lever operating means for shifting the tool carrying element, for boring the said recess, as will be manifest from the drawings.

The invention consists further in the provision of the device of this nature, which is simple and efficient in construction and effective in the utility thereof.

30 This invention comprises further objects and combinations of elements which will be hereinafter more fully described, shown in the accompanying drawings, and the novel features thereof will be pointed out by the appended claims.

To obtain a full and correct understanding of the details of construction combinations of features, elements and advantages, reference is to be had to the hereinafter set forth description and the accompanying drawings in connection therewith, wherein,

Figure 1 is a longitudinal vertical section through the device showing the reciprocating carriage having the post carrying member. Fig. 2 is a top plan view of the device. Fig. 3 is a sectional view on line 3—3 of Fig. 2, so as to illustrate the V-shaped annular groove, formed in the cam locking member. Fig. 4 is a perspective view illustrating the frame, upon which the carriage supporting the post carrying member reciprocates. Fig. 5 is a detail view illustrating the means for adjusting the said frame.

Making renewed reference to the accom-

panying drawings, wherein similar reference characters indicate corresponding parts, in the several illustrations, 1 designates the main frame of the device, from which, laterally projects a frame 2, which is adjustable with relation thereto, by means of a hand wheel 3 and a threaded shaft 4, as clearly shown in Fig. 5.

Supported and carried by the frame 2, is a pair of laterally disposed guides 5, upon which a carriage 6 reciprocates; this carriage is provided with bearings 7 and 8, for the reception of the journals of the post carrying member 10. This post carrying member may be of any desired configuration upon the inner circumference thereof, and is provided with a pair of bearings 11 in which is journaled a shaft 12, upon which the cam locking number 13 is mounted. This cam locking member, is provided with a V-shaped annular recess 14, designed to engage the post when carried within the member 10.

The post carrying member is held in alignment with the shaft 15, that is, when looking down upon the machine as will be observed from Fig. 2, but as shown in Fig. 1, the post-carrying member appears slightly above the member 19 carried by the shaft 15, so as to shape the post as desired. This shaft is journaled in suitable bearings 16, upon the main frame. A spring device 17 is provided so as to form a stop for the post-carrying member, so as to hold the same in position to allow the post carried thereby to cooperate with the member 19. This spring device is fastened to a portion of the frame as at 17^a and is slightly bent upwards, so as to allow the shoulder 17^b to engage the carriage 6, as will be observed. The shaft 15, is provided with a suitable pulley 18, to which power may be transmitted by suitable belt connections; carried by the end of the shaft 15, is a suitable wood-working tool 19, of any desired form, suitable for shaping corner posts of furniture, and similar articles.

To allow the carriage to be shifted to one side, so as to bring the corner posts carried by the member 10 in alinement with the tool 20, for drilling the recess 21 in the end of said post, a lug 22, carried by the member 10, is provided, which engages the spring device 17, thereby pushing it downward, so as to release its engagement with the carriage 6. To limit the rotation of the member 10, the front

face of the bearing 7 is provided with a pair of stops 23, which are engaged by lugs 24, carried by the member 10. A quarter rotation of the member 10, is all that is necessary to allow the lug 22 to engage the spring device 17, so as to disengage the spring from the carriage; the spring 17 is not entirely disengaged from the carriage until the lug 22 is in alinement with the line as shown in Fig. 3. While the member 10 is in this position the carriage may be moved laterally so as to allow the post carried by the member 10, to be brought into alinement with the drill 20. After the carriage 6, has been released from the spring device a member 25 is provided, which is pivoted as at 26, and comprises a bar or rod having a crook or stop at its end, as at 27; this second stop may be swung to one side when it is desired to remove the carriage 6.

A shaft 28 having a drill carrying member 29 at its end is provided, which is allowed to have a reciprocating movement through bearings 30, formed integral with the carriage 31, that is at right angles to the reciprocatory movement of the said shaft; this shaft is driven by any suitable source of power, which is not shown but which may be belted to the pulley 32, carried by the shaft. The carriage 31 is removable for obvious purposes, for instance, repairing and cleaning. A suitable clutch device 33, is positioned so as to cause the shaft to be thrown in or out of operation, at will. The shaft 28 is reciprocated by means of a pitman 34, mounted within bearings 35, which is connected to an operating lever 36 by means of a second pitman 37; the pitman 34 has an arm extending at right angles thereto at its end thereof as at 38, the upper end of which arm is forked as at 39, to engage the grooved collar 40, carried with the shaft 28. The carriage 31 is guided in its vertical movement that is when it is detached or connected to the machine by means of the guides 41, as clearly shown in Fig. 1 of the accompanying drawings.

Various changes and modifications may be employed within the scope of the appended claims.

The operation of the device is as follows: A post to be shaped, is held firmly within the member 10 by the locking cams 13. As will be observed in Fig. 4, member 10 is capable of having a rocking movement, which movement is imparted thereto by hand; that is to say, the member 10 rocks within the portions 7 of the carriage 6. The carriage 6 is movable laterally of the frame 2, while the frame 2 is movable vertically by means of the threaded shaft 4, with relation to the frame 1. By providing a vertically movable frame, such as the frame 2, and the carriage movable laterally of the frame 2, a post may be suitably presented for the boring and the shaping action of the tools or

members 19, 20, respectively, as will be plainly manifest. The spring device 17, is secured to the frame 2, and is provided with a stop which limits the lateral movement of the carriage, as shown clearly in Fig. 3. The post being suitably placed in the holder or member 10 and disposed or presented for the action of the cutter or tool 19, said holder is suitably rocked, effecting the partial shaping of the post, the latter then being removed from said holder and reversed and replaced therein, and the holder again rocked, resulting in completing the shaping of the post. The member 10, is moved so that the lug 22 will disengage the shoulder 17^b of the spring device from the carriage, which will allow the carriage to be moved laterally, so that the said post may be brought into vertical alinement with the member or drill 20, and if after the post is brought into such alinement with the drill 20 the center of said post is below the center of the drill, that is, horizontally, the frame 2 is moved vertically by the shaft 4, so as to center the vertical and horizontal alinements of the post and the drill, the post being held in alinement with the drill just long enough to be bored. The crooked portion 27 of the member 25, limits the lateral movement of the carriage after being released from engagement with the spring device 17, as will be clearly understood from the drawings. In operating the member 10, that is, rocking the same, the stops 23 and lugs 24 are brought into coöperation so as to limit its movement.

From the foregoing, the essential features, elements and the operation of the device together with the simplicity thereof, will be clearly apparent, and when manufactured in accordance with the invention, an inexpensive market will be easily obtained therefor.

Having thus described the invention, what is claimed by the protection of Letters-Patent, is:

1. In a wood-working machine, the combination of the main frame, and an adjustable secondary frame projecting laterally therefrom, of a carriage mounted upon said secondary frame, guides for said carriage, said carriage having a post carrying member, a pair of rotating shafts having tools for shaping posts, means to stop said carriage and post carrying member, in relative position with first one and then the other of said rotating shafts, and means carried by the post carrying member, adapted to release one of said stops, and means adapted to bring the carriage in relative position with the drill-carrying shaft.

2. In a wood working machine, the combination of the main frame, and an adjustable secondary frame projecting laterally therefrom, of a laterally moving carriage mounted upon said secondary frame, guides for said

carriage, said carriage having a post carrying member rotatably mounted in bearings thereon, said post carrying member being designed to only partly rotate, a pair of rotating shafts one having a tool for shaping posts, and one for boring posts and means to stop the said carriage and post carrying member in relative position with first one and then the other of said rotating shafts.

10 3. In a wood working machine, the combination of the main frame, and an adjustable secondary frame projecting laterally therefrom, of a movable carriage mounted upon said secondary frame, guides for said carriage, said carriage having a post carrying member rotatably mounted in bearings thereon, said post carrying member being designed to only partly rotate, a pair of rotating shafts having tools for shaping posts, 20 means to stop the said carriage and post carrying member in relative position with first one and then the other of said rotating shafts, and means to limit the rotation of said post carrying member.

25 4. In a wood working machine, the combination of the main frame, and an adjustable secondary frame projecting laterally therefrom, of a carriage mounted upon said secondary frame, guides for said carriage, said carriage having a post carrying member rotatably mounted in bearings thereon, said

post carrying member being designed to only partly rotate, a pair of rotating shafts one having a tool for shaping posts, and one for boring a spring stopping device to stop the carriage and post carrying member in relative position with the shaft carrying the shaping tool, a pivoted stop to limit the carriage and post carrying member with relation to the drill carrying shaft, stops carried by one of the bearings of the said carriage and lugs projecting from the outer edge of the post carrying member to engage said stops to limit the rotation of said post carrying member. 40 45

5. A wood working machine comprising a main frame, an adjustable secondary frame projecting laterally therefrom, a carriage thereon, said carriage having a post carrying member, a pair of rotating shafts one having a tool for shaping and one for boring a post, a spring stopping device, and a pivoted stopping device to limit the post carrying member in relative position with first one and then the other of said rotating shafts. 50 55

In testimony whereof I hereunto affix my signature in presence of two witnesses.

JOHN S. BARNES.

Witnesses:

W. V. WILLIAMS,
W. D. WOODRUFF.