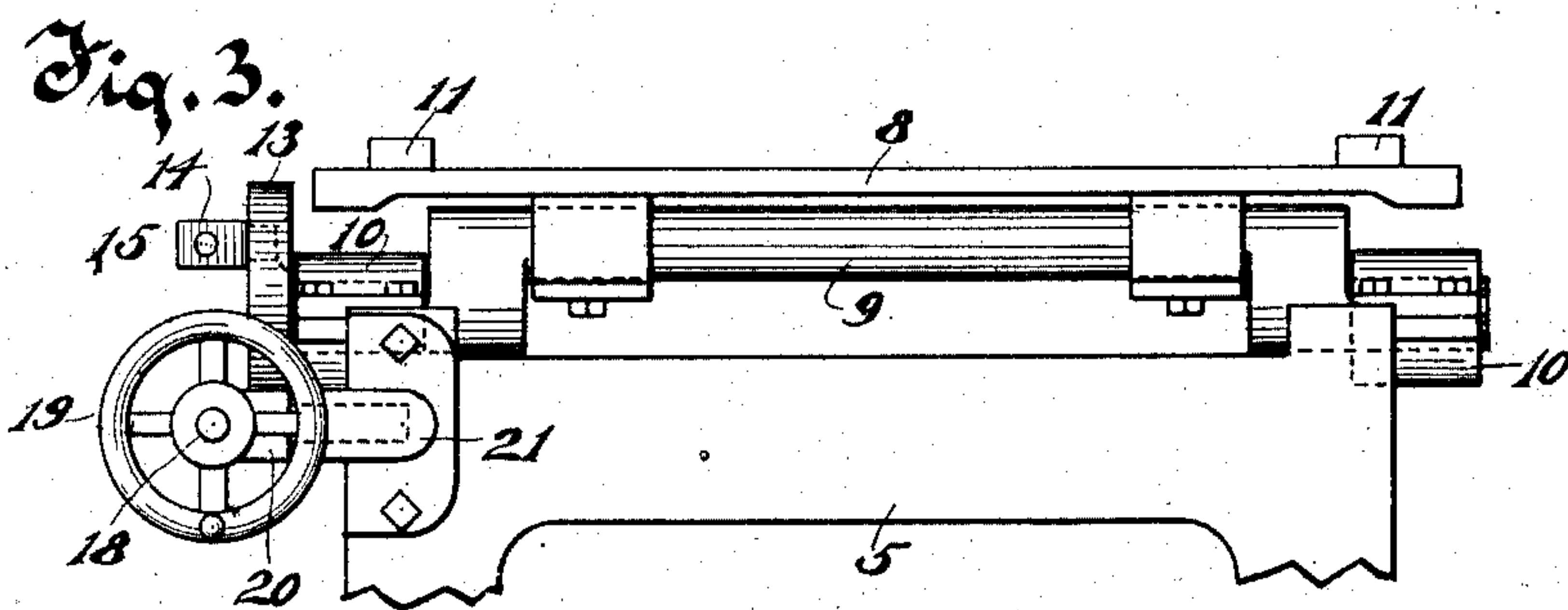
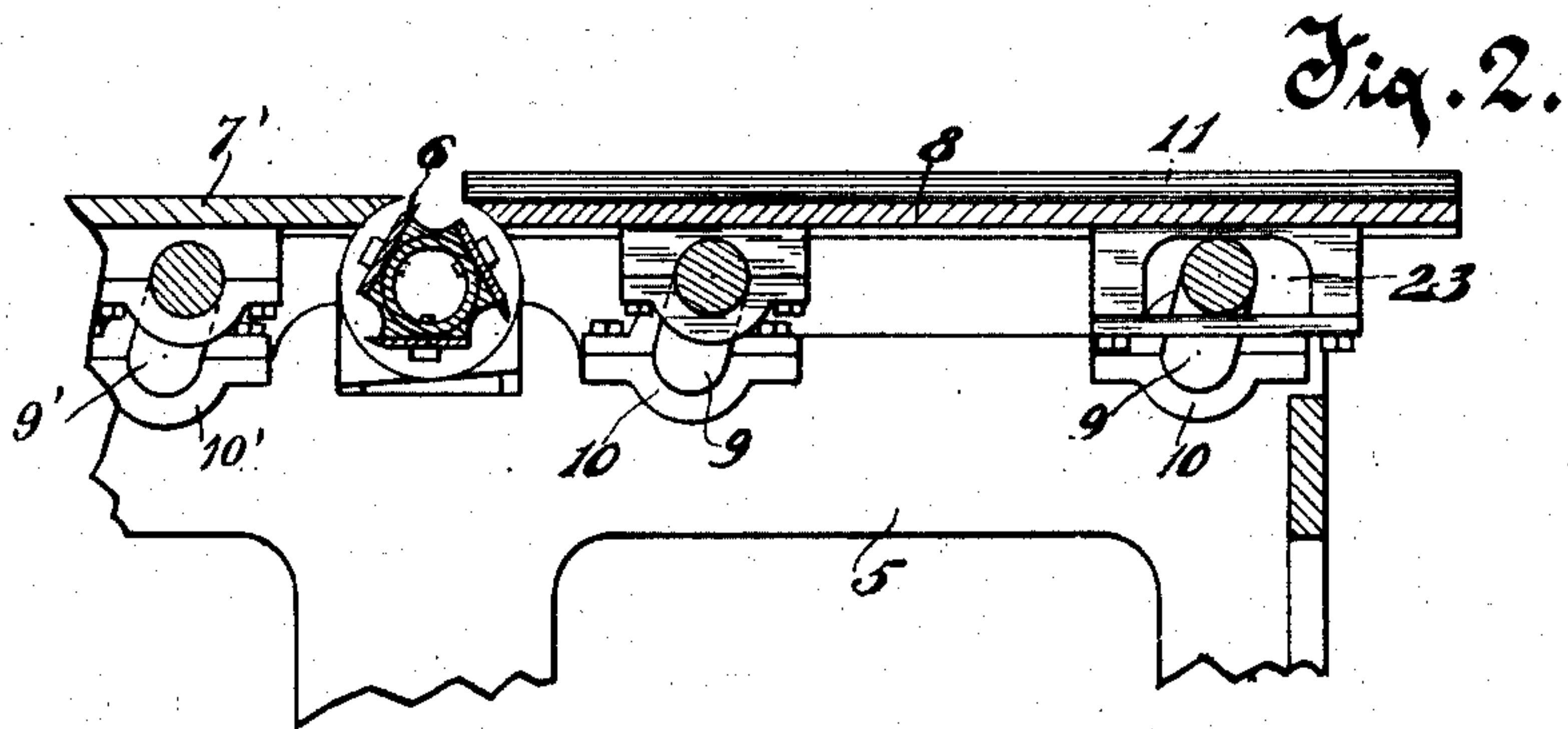
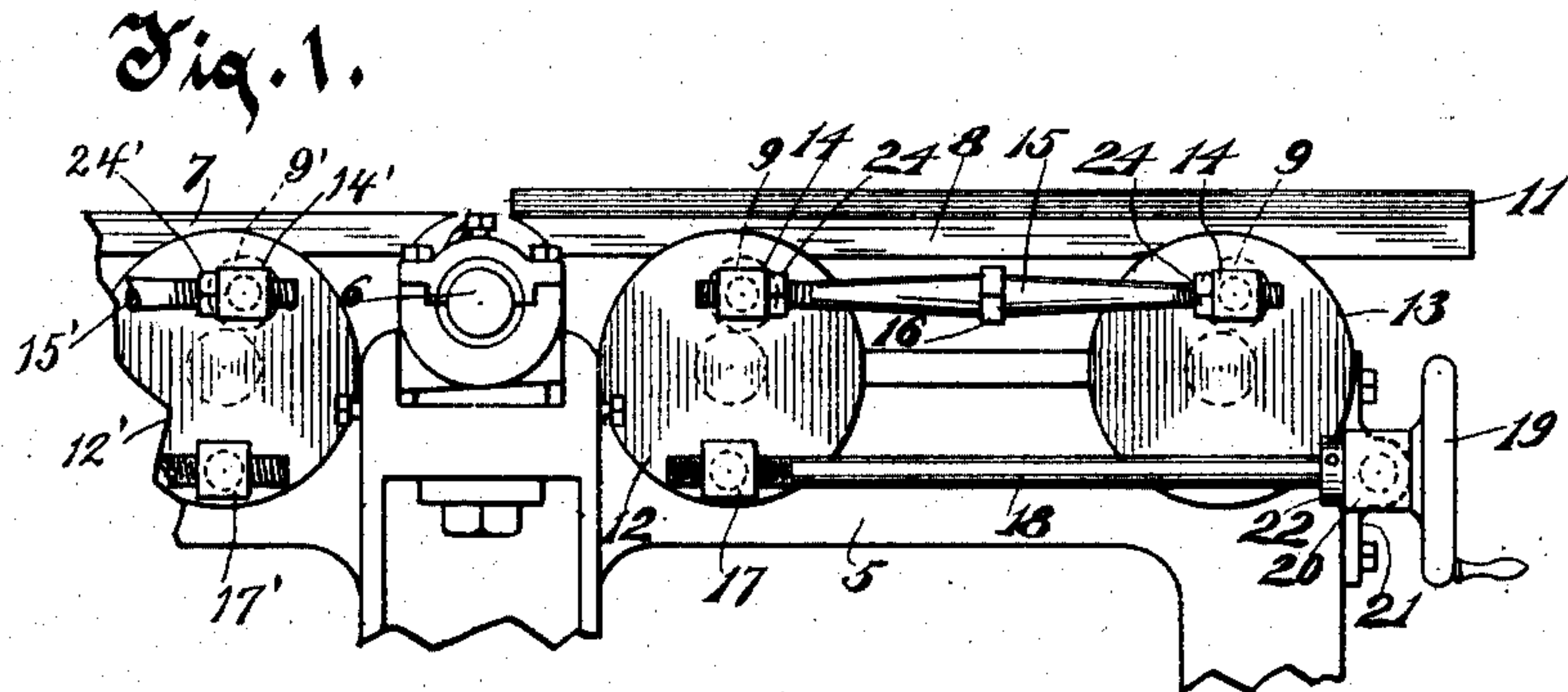


P. J. JOECKEN.  
WOODWORKING MACHINE.  
APPLICATION FILED MAR. 7, 1908.

907,242.

Patented Dec. 22, 1908.



Witnesses.

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# UNITED STATES PATENT OFFICE.

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## WOODWORKING-MACHINE.

No. 907,242.

Specification of Letters Patent.

Patented Dec. 22, 1908.

Original application filed August 30, 1907, Serial No. 390,742. Divided and this application filed March 7, 1908. Serial No. 419,620.

*To all whom it may concern:*

Be it known that I, PETER J. JOECKEN, residing in Sheboygan Falls, in the county of Sheboygan and State of Wisconsin, have invented new and useful Improvements in Woodworking-Machines, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

10 This invention relates to improvements in wood-working machines, and more particularly to that class known as planers.

One of the objects of this invention is to provide a woodworking machine in which the 15 depth of cut of the cutter is adjusted by raising or lowering the feed table, which table always occupies approximately the same relative distance from the radius of the cutter.

A further object of the invention is to provide a wood-working machine in which the 20 feed table may be adjusted to any angle desired.

With the above, and other objects in view, the invention consists of the machine and 25 parts, and all equivalents thereof, as hereinafter described.

In the accompanying drawing in which the same characters of reference refer to the same parts through all of the views; Figure 1 is a 30 side view of a portion of a planer provided with the improved adjustable feed table; Fig. 2 is a vertical longitudinal sectional view thereof; and Fig. 3 is an end view thereof.

Referring to the drawing the numeral 5 indicates the main frame of the planer which 35 may be made of any suitable size or shape, and 6 the rotatable cutter mounted thereon. An adjustable supporting table 7 rests on the frame to the rear of the cutter and is 40 adapted to support the lumber after it has been planed by the cutter. An adjustable feed table 8 mounted on cranked rock-shafts 9 which have their bearings 10 in the main frame is disposed above the main frame and 45 in front of the rotatable cutter. The feed table is provided with guide strips 11 to guide the lumber being planed in the proper direction.

The front ends of the cranked rock-shafts 50 have connected thereto disks 12 and 13 and to the upper portions of these disks are connected, pivotally, threaded blocks 14. A connecting rod 15 reversely threaded at its

ends and provided with a medial squared portion 16, is threaded to these blocks and is 55 adapted to move both disks simultaneously when the table is adjusted vertically. Another threaded block 17 is pivotally connected to the lower portion of the disk 12 and to this block is threaded an adjusting screw-bolt 18 provided with a hand wheel 19 for 60 rotating the same. This adjusting bolt has its bearing in a bearing block 20 which is pivotally connected to a bracket 21 fastened to the main frame. A collar 22 is mounted on 65 the adjusting bolt immediately in front of the bearing block and serves to prevent endwise movement of the adjusting bolt to the right, the hub of the hand wheel providing the means for preventing movement in the 70 opposite direction.

It will be noted that the radii of the cranked rock shafts are equal to the radius of the cutter so that in raising or lowering the table the end of said table adjacent to 75 the cutter will always remain the same relative distance from the arc of movement of the cutter. The inner ends of the tables are beveled off so that the upper surfaces of the tables may be brought as close as possible to 80 the cutter in order to properly support the lumber being planed.

In order to level or aline the feed table with the supporting table the opening 23 of the bearing which surrounds the cranked 85 portion of the crank shaft to which the disk 13 is connected, is elongated so as to permit an independent movement of this shaft, which movement will tilt the feed table to any angle desired. This independent movement of the crank shaft is accomplished by 90 turning the connecting rod 15 by its squared medial portion, which will revolve the disk 13 and its connected crank shaft, the other crank shaft being held stationary in adjusted position by means of the adjusting bolt 18 95 and the disk 12. When the table has been adjusted to the angle desired, the connecting rod is locked in position by means of jamb nuts 24 threaded to the rod and bearing 100 against the blocks 14.

In operation the feed table is raised or lowered to increase or diminish the depth of the cut in planing by turning the hand wheel which will revolve the disk connected there- 105 to, and by means of the adjustable connect-



ing rod will likewise revolve the other disk. This will cause both crank shafts to revolve and the cranked portions thereof upon which the feed table is mounted will be either raised or lowered as the case may be, depending upon the direction of rotation given to the hand wheel.

As the arc of movement of the crank shafts is the same as the radius of the cutter, the inner edge of the feed table will be substantially the same distance from the cutting edges of the knives in all ordinary positions of adjustments.

If it is desired to raise or lower one end of the feed table, the jam nuts are loosened and the connecting rod is turned by means of a wrench engaging the squared medial portion thereof. This movement will revolve the outer disk and the crank shaft connected thereto and the cranked portion of the shaft will slide in the elongated opening of its bearing and raise or lower this end of the table. When the desired adjustment is attained, the jam nuts are tightened and the feed table is in position to be used.

From the foregoing description it will be seen that a feed table and a supporting table are provided which are simple in construction and may be easily adjusted to any angle or position desired.

While only a fragment of the supporting table is shown in the drawings, it is to be understood that it is provided with the same means of adjustment as the feed table and is adapted to be operated in the same manner. These parts are marked with the same reference numerals with the prime character added thereto.

This case constitutes a division of my application for Letters Patent for improvements in wood-working machines, filed August 30, 1907, and bearing Serial Number 390,742.

1. A wood-working machine, comprising a main frame, a cutter mounted on the main frame, cranked shafts mounted on said main frame, a table pivotally mounted on one of the crank shafts and having a sliding connection with the other crank shaft, and means for independently moving one of the crank shafts to tilt the table.

2. A wood-working machine, comprising a main frame, a cutter mounted on the main frame, cranked shafts mounted on said main frame, a table pivotally mounted on one of the crank shafts and having a sliding connection with the other crank shaft, means for independently moving one of the crank shafts to tilt the table, disks connected to the crank shafts, and means for turning the disks to adjust the table.

3. A wood-working machine, comprising a main frame, a cutter mounted on the main frame, cranked shafts mounted on said main frame, a table pivotally mounted on one of

the crank shafts and having a sliding connection with the other crank shaft, means for independently moving one of the crank shafts to tilt the table, disks connected to the crank shafts, blocks connected to said disks, and means connected to one of said blocks for turning the disks to adjust the table.

4. A wood-working machine, comprising a main frame, a cutter mounted on the main frame, cranked shafts having substantially the same arc of movement as the radius of the cutter mounted on said main frame, a feed table pivotally mounted on one of the crank shafts and pivotally and slidably connected to the other crank shaft, an adjustable connecting rod connecting the two crank shafts together and constructed to adjust the relative position of the crank shafts with each other to tilt the feed table, and an adjusting bolt connected to one of the crank shafts to turn the crank shafts to adjust the table vertically.

5. A wood-working machine, comprising a main frame, a cutter mounted on the main frame, cranked shafts having substantially the same arc of movement as the radius of the cutter mounted on said main frame, a feed table pivotally mounted on one of the crank shafts and pivotally and slidably connected to the other crank shaft, disks connected to the crank shafts, a block pivotally connected to each disk, a threaded rod connecting the two blocks together, another block pivotally connected to one of the disks, and an adjusting bolt connected to the last named block to give the crank shafts a partial rotation to adjust the feed table both vertically and horizontally.

6. A wood-working machine, comprising a main frame, a cutter mounted on the main frame, cranked shafts having substantially the same arc of movement as the radius of the cutter mounted on said main frame, a feed table pivotally mounted on one of the crank shafts and pivotally and slidably connected to the other crank shaft, disks connected to the crank shafts, a threaded block pivotally connected to each disk, a threaded rod connecting the two blocks together, a jam nut for locking the rod to one of the blocks, another threaded block pivotally connected to one of the disks, a block pivotally connected to a stationary part of the machine, and an adjusting screw-bolt connected to the last named block and threaded to the disk block to give the crank shafts a partial rotation to adjust the feed table both vertically and horizontally.

7. A wood-working machine, comprising a main frame, a cutter mounted on the main frame, cranked shafts mounted on said main frame, a table pivotally mounted on one of the crank shafts and having a sliding connection with the other crank shaft, disks connected to the crank shafts, blocks connected



to said disks, an adjustable connecting rod  
connecting the two blocks together and con-  
structed and adapted to adjust the relative  
position of the crank shafts with each other  
5 to tilt the table, and an adjusting bolt con-  
nected to one of the crank shafts to turn the  
crank shafts to adjust the table vertically.

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

PETER J. JOECKEN.

Witnesses:

W. J. JOEHN,  
A. LEICHT.