

No. 848,548.

PATENTED MAR. 26, 1907.

A. HARROLD.
GUIDE FOR SAWS.
APPLICATION FILED AUG. 23, 1906.

FIG. 1.

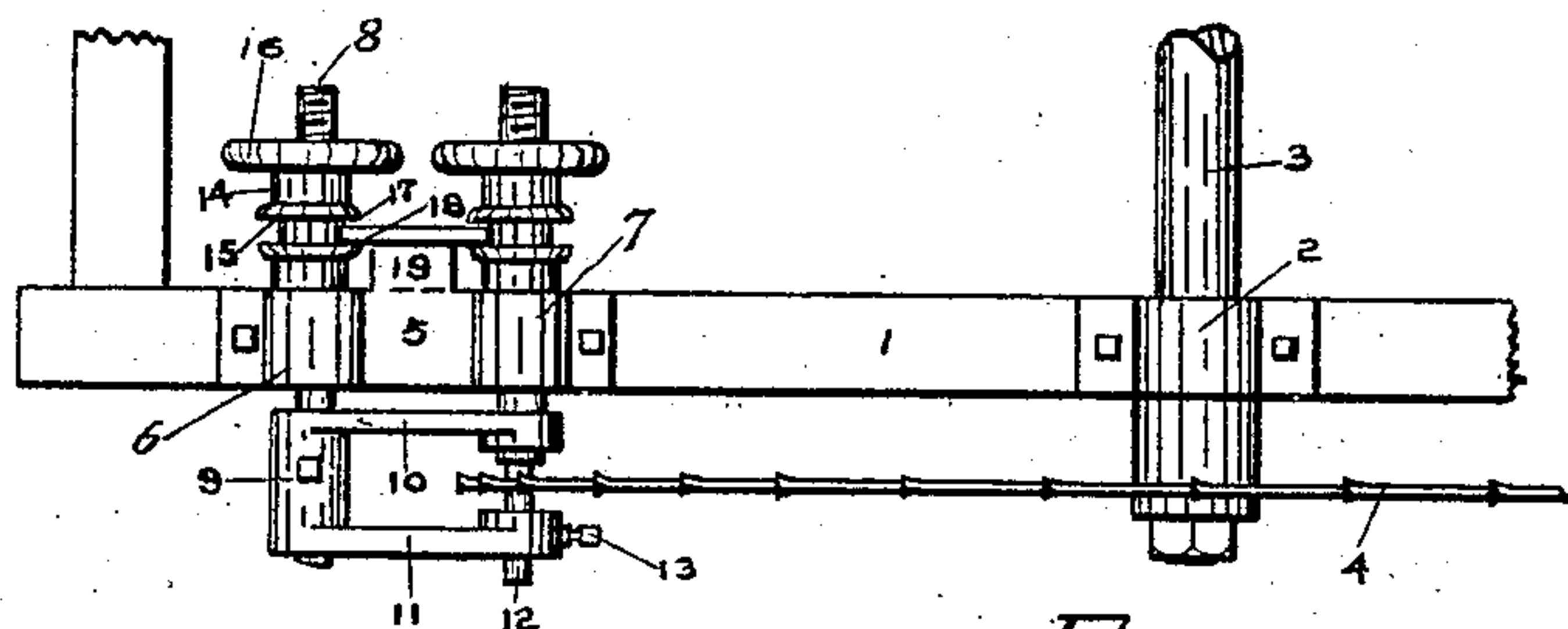


FIG. 2.

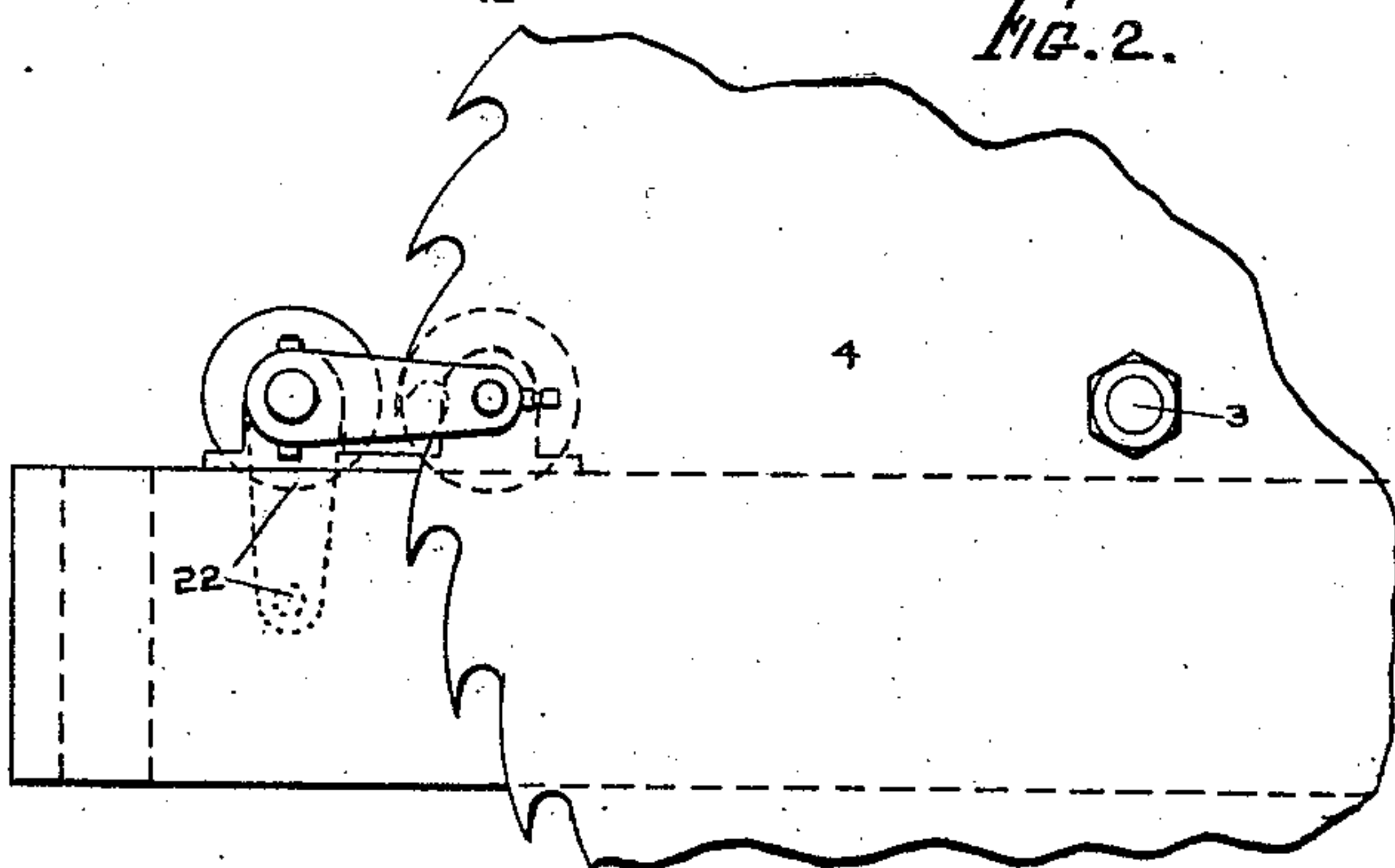


FIG. 3.

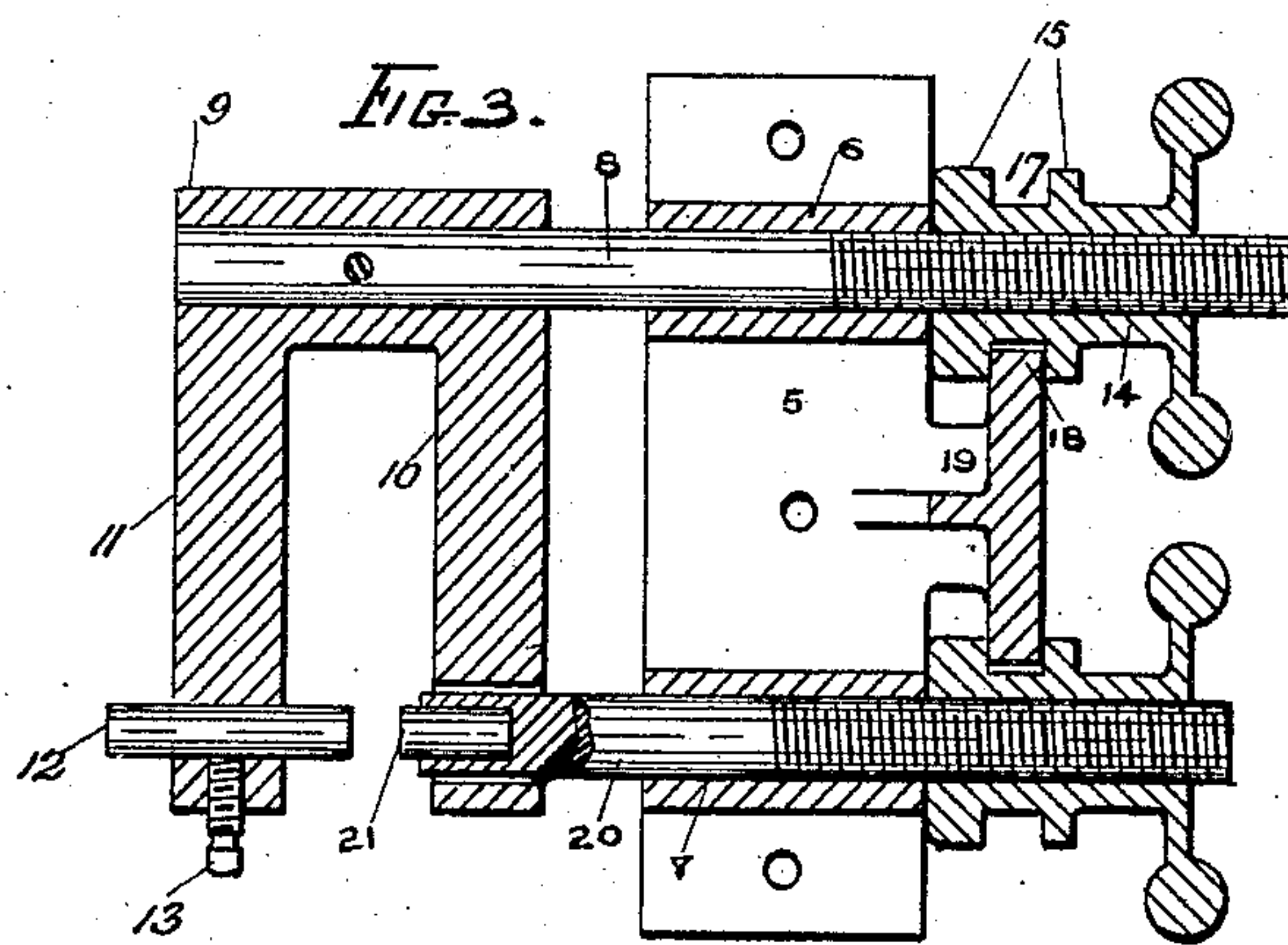
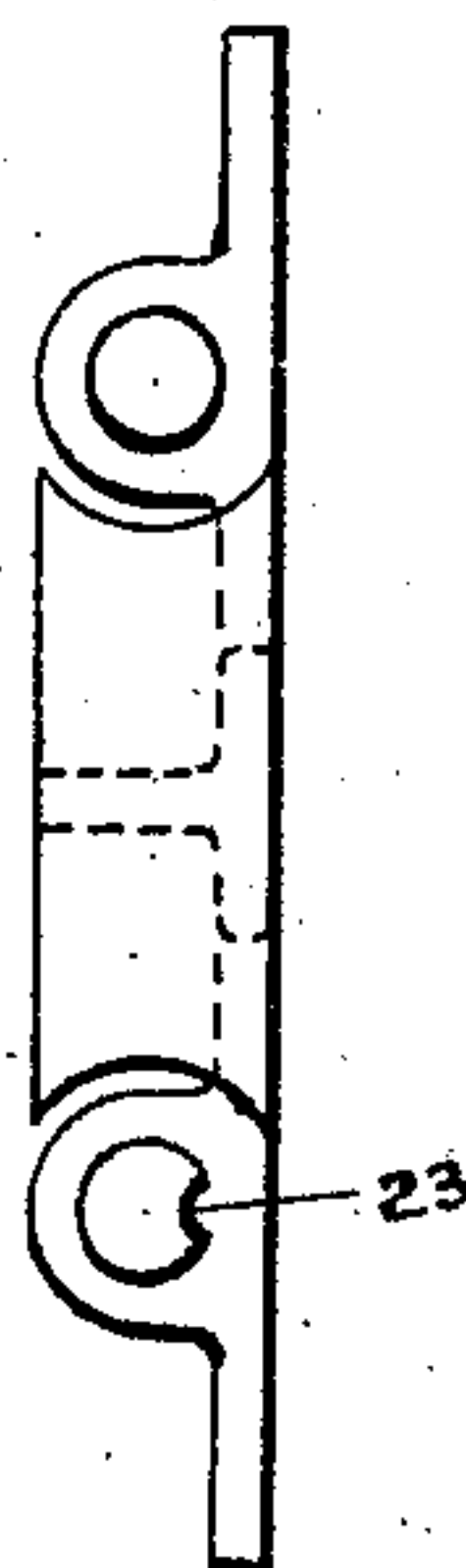


FIG. 4.



Witnesses

G. W. Seaman

J. A. Frey

By

Inventor

Amos Harrold

John H. Cass

Attorney

UNITED STATES PATENT OFFICE.

AMOS HARROLD, OF MANSFIELD, OHIO, ASSIGNOR TO THE AULTMAN & TAYLOR MACH. COMPANY, OF MANSFIELD, OHIO, A CORPORATION OF OHIO.

GUIDE FOR SAWS.

No. 848,548.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, AMOS HARROLD, a citizen of the United States of America, and a resident of Mansfield, county of Richland, and State of Ohio, have invented certain new and useful Improvements in Guides for Saws, of which the following is a specification.

My invention relates to a guide for saws used in working up timber on an ordinary mill.

In the operation of a mill the saw, owing to the condition and size of the timber, has a tendency to waver, buckle, and "run out of true" with the arbor upon which it is mounted, impeding and retarding the operator in his work and producing lumber, &c., irregular in size, with a rough and unfinished surface.

The objects of my improvements are to construct an adjustable guide to counteract the tendency of the saw to run out of true which can be adjusted while the saw is in operation performing its work without the use of wrenches of any kind and at such a remote point from the moving saw as will insure absolute safety to the operator.

A further object is to afford facilities for adjusting either of the guide-rods independent of each other to conform to the requirements of the operator.

I attain these and other objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a top plan view of my device, showing the application of the guide to the saw. Fig. 2 is a side view of a broken section of a saw and end view of the guide with dotted lines showing position of guide when it is desired to remove the saw from the arbor. Fig. 3 is a cross-sectional top view of the guides, bearings, and guide-rod nuts, showing method of adjusting the guides. Fig. 4 is a side view of the guide-rod bearings.

In the drawings, 1 represents a part of the frame of a mill upon which is mounted a bearing 2, into which an arbor 3 is journaled, carrying a saw 4. A box 5, having two bearings 6 and 7 formed therein parallel with and in front of the arbor-bearing 2, is secured to the frame. The distance between the bearing 2 and the bearings 6 and 7 is regulated by the diameter of the saw, the object being to place the bearings at such a point on the

frame that will permit the guide-pins to be adjusted toward either side or face of the saw in close proximity to the periphery thereof.

A guide-rod 8 is fitted to the bearing 6, leaving both ends extending beyond the box 5. To one end of the guide-rod 8 a guide 9 is fitted, having arms 10 and 11 extending toward and on each side of the saw. A pin 12 is journaled in an aperture in the end of the arm 11 and adjustably retained in place by the set-screw 13. The opposite end of the guide-rod 8 is screw-threaded and is adapted to engage with the screw-threaded interior of a nut 14, the face of which is brought in contact with the side of the box 5 when it is desired to adjust the guide-pin 12 to and from the face of the saw. Annular flanges 15 are made integral with the nut between the face and the operating-wheel 16, forming a groove 17, into which the flange 18 of the projecting portion 19 of the box 5 extends, providing a means of retaining the nut in contact with the box, while movement in either direction is imparted to the nut for the purpose of adjusting the guide-rod.

An inner guide-rod 20 is fitted to the bearing 7, leaving one end extending beyond the frame into an aperture formed in the end of the arm 10 of the guide and supporting the guide in proper position.

A guide-pin 21 is fitted to an aperture in the end of the guide-rod. The guide-rod 20 is provided with a nut 22, similar to the nut 14, and is retained in place in the same manner. The end of the guide-rod 20 which supports the guide moves freely in the aperture in the arm 10 when the nut is turned to the right or left for the purpose of adjustment independent of and without affecting the position of the guide-rod 8. To remove or replace the saw upon the arbor, the guide-rod 20, through the medium of the nut, is drawn out of the aperture in the arm 10, and both arms of the guide drop by gravity to the position shown by the dotted lines 22 shown in Fig. 2. The guide-rod 20 is prevented from turning by the key 23.

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

1. In a saw-guide, a box having two bearings formed therein parallel with each other, a projecting portion extending from one side

of said bearing-box, a rod journaled in one of said bearings with one end screw-threaded, a guide secured to the opposite end of said rod, a similar rod journaled in the other bearing with one end adapted to support the guide in position when in use, two nuts provided with screw-threaded apertures fitted to the screw-threaded ends of said rods, annular flanges formed upon the outer periphery of said nuts extending on each side of the projecting portion whereby the nuts are retained in place when the rods are adjusted.

2. In a saw-guide, a box provided with two parallel bearings, rods of different lengths journaled therein, a guide with two arms extending therefrom secured to one of said rods, two nuts having screw-threaded apertures fitted to the screw-threaded ends of said rods, annular flanges forming grooves made integral with the outer periphery of a portion of said nuts, a projecting T-shaped portion extending from one side of the bearing-box with the head adapted to fit into the annular grooves provided on the nuts whereby the nuts are retained in place when the rods are adjusted.

3. In a saw-guide, a journal-box having two bearings formed therein parallel with each other, a projecting T-shaped portion extending from one side of said box, two rods slidably journaled in said bearings, a guide having two arms forming a yoke secured to one of said rods, nuts having annular grooves

formed on the outer periphery thereof to fit the head of the projecting portion.

4. In a saw-guide the combination of a bearing-box having two bearings formed therein parallel with each other, a T-shaped projecting portion extending from one side, rods journaled in said bearings, a guide fitted to one of said rods, two nuts fitted to the screw-threaded ends of said rods, annular flanges formed on the outer periphery of said nuts extending on each side of the projecting portion thereby movably locking the nuts in place when rotated for the adjustment of the guide and rods.

5. In a guide for saws, a bearing-box having two bearings formed therein parallel with each other, an outwardly-projecting T-shaped portion extending from one side of said box, two rods slidably journaled therein, a yoke fitted to one end of one of said rods, a pin adjustably fitted to one arm of said yoke, an aperture provided in the other arm of said yoke into which one end of the other rod extends, nuts fitted to the ends of said rods having annular grooves engaging with the head of the projecting portion.

Signed at Mansfield, Ohio, this 19th day of August, 1905.

AMOS HARROLD.

Witnesses:

JOHN H. COSS,
H. E. BELL.