

(No Model.)

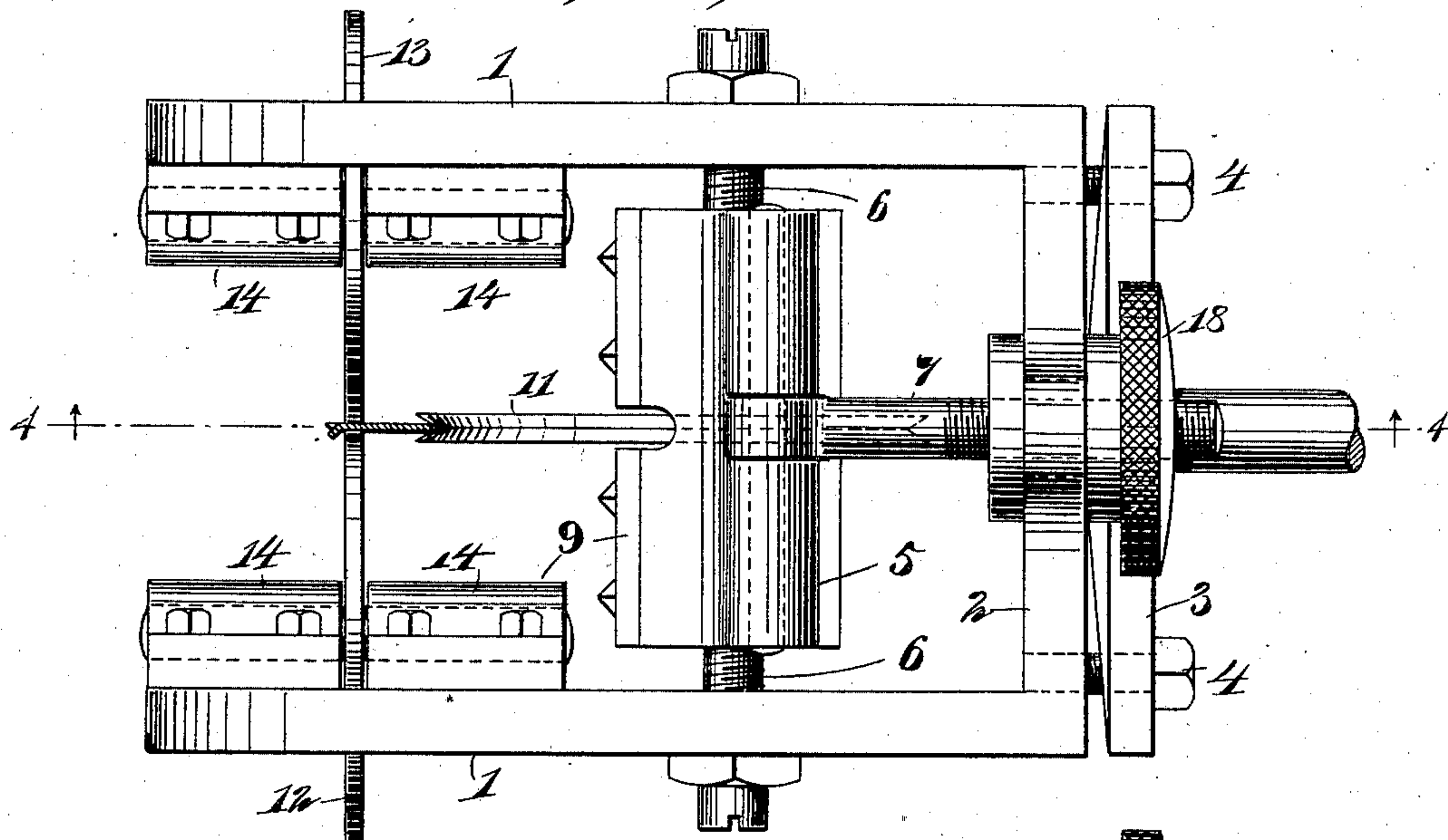
2 Sheets—Sheet 1.

J. A. MARTIN.  
BAND SAW GUIDE.

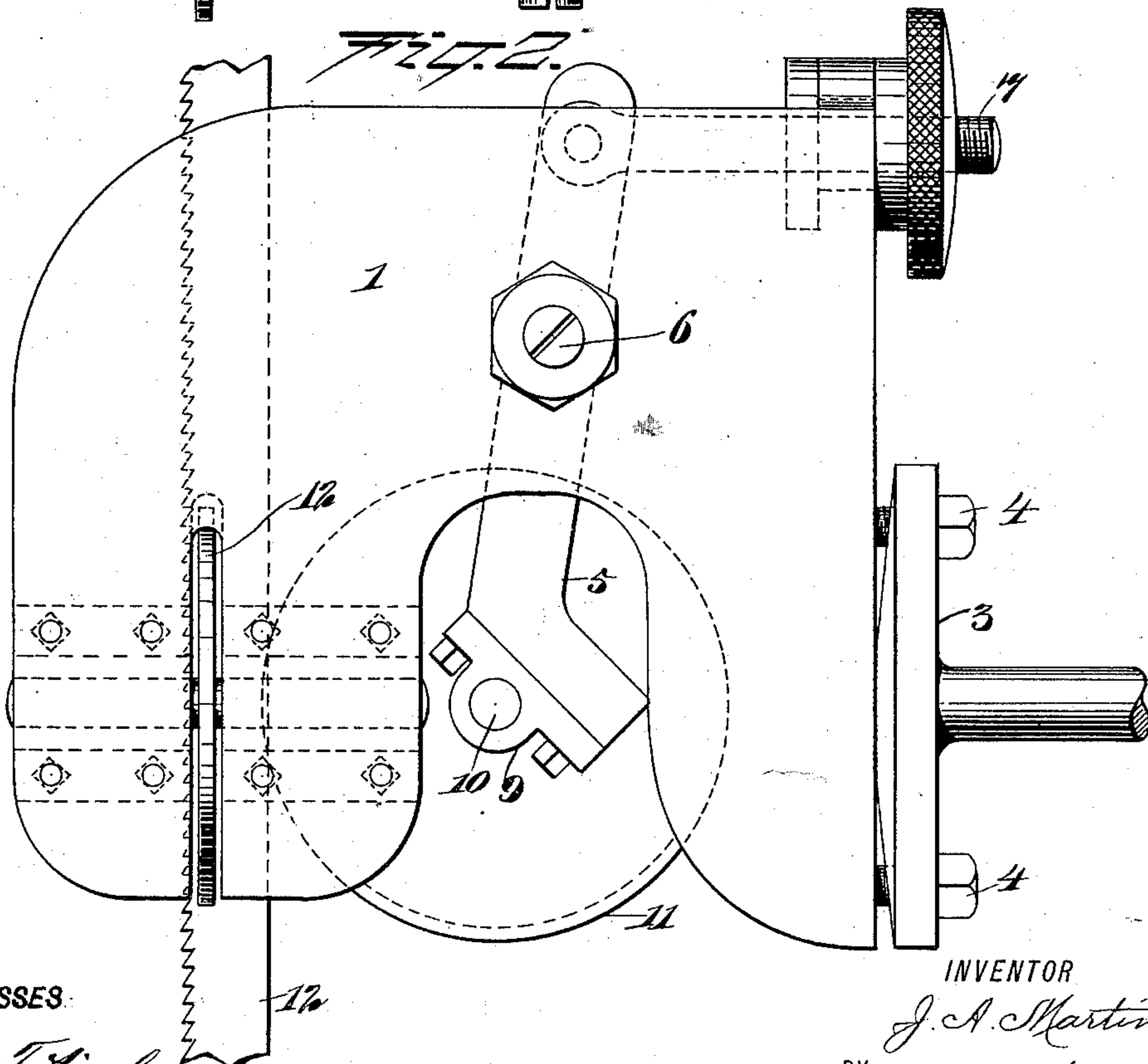
No. 567,859.

Patented Sept. 15, 1896.

*Fig. 1.*



*Fig. 2.*



WITNESSES.

*Henry T. Hirsch.*  
*C. R. Ferguson*

INVENTOR

*J. A. Martin.*

BY

*Wm. B. [Signature]*

ATTORNEYS.

(No Model.)

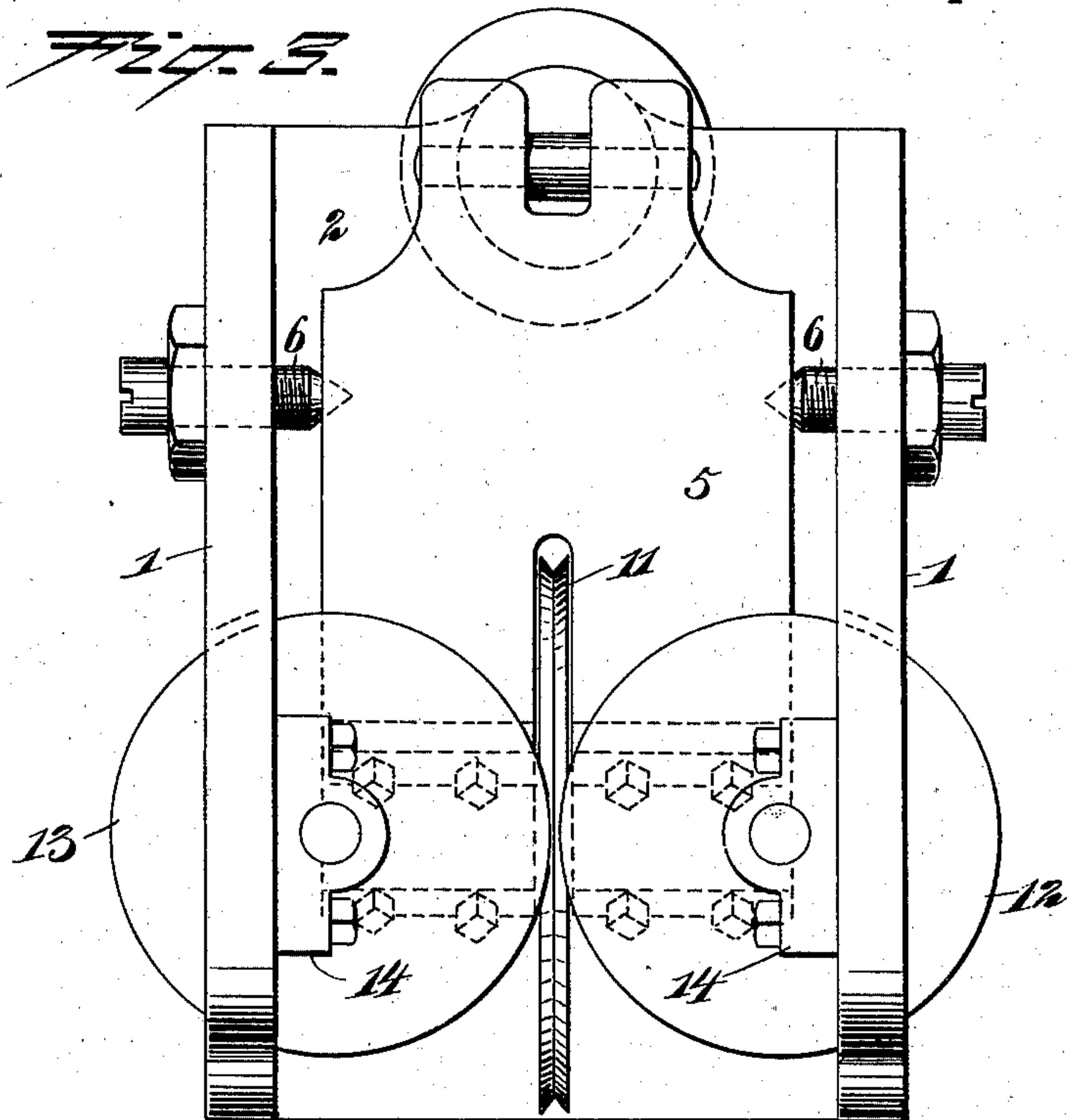
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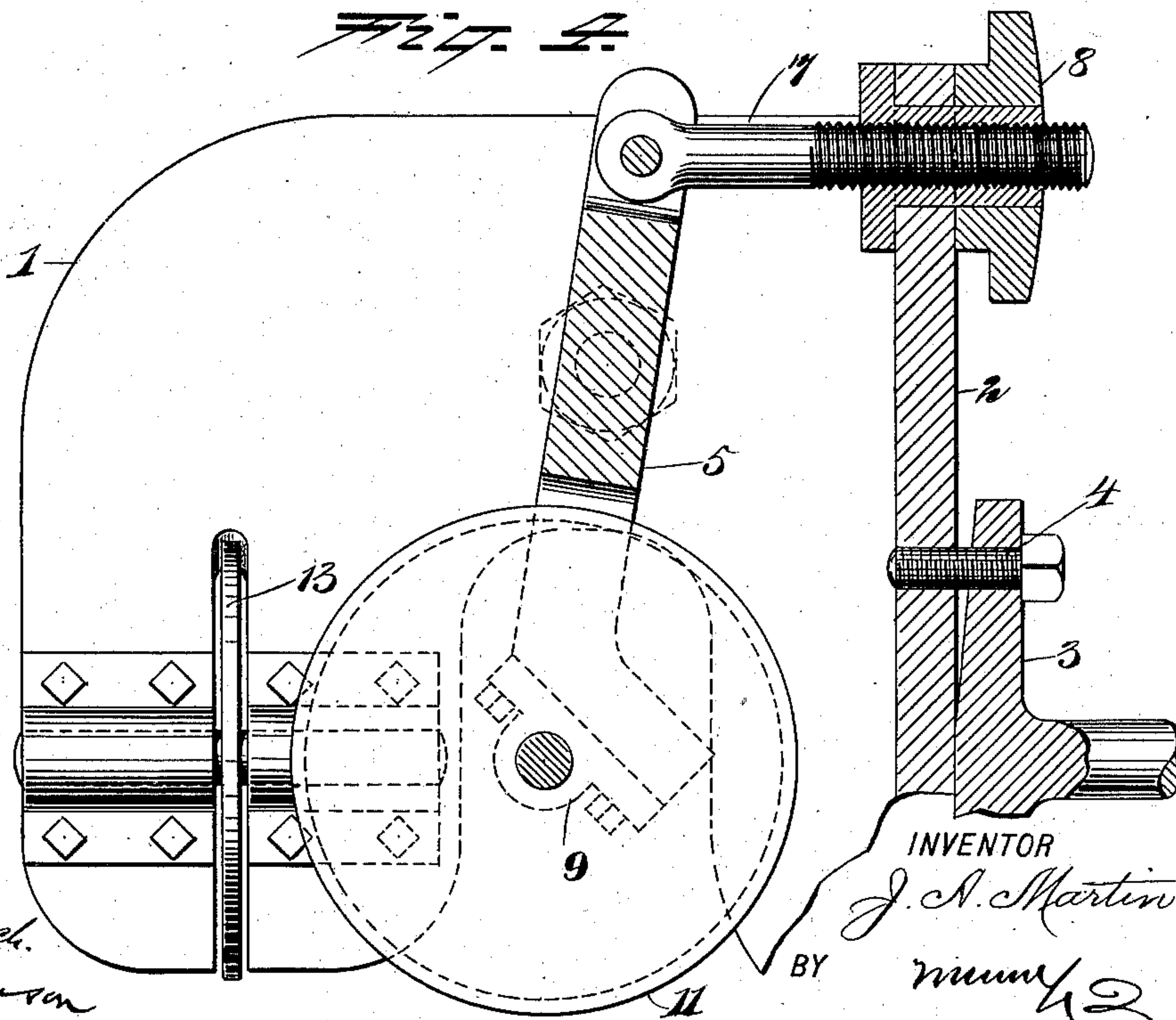
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*Fig. 5.*



*Fig. 4.*



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# UNITED STATES PATENT OFFICE.

JOHN A. MARTIN, OF MORGANFIELD, KENTUCKY.

## BAND-SAW GUIDE.

SPECIFICATION forming part of Letters Patent No. 567,859, dated September 15, 1896.

Application filed June 5, 1896. Serial No. 594,387. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN A. MARTIN, of Morganfield, in the county of Union and State of Kentucky, have invented a new and Improved Band-Saw Guide, of which the following is a full, clear, and exact description.

This invention relates to guides for endless or band saws; and the object is to provide a device for this purpose in which the bearings against the saw are practically frictionless, and with which there can be no perceptible vibration of the saw, thus insuring a clear cut through the wood operated upon.

I will describe a saw-guide embodying my invention, and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of a saw-guide embodying my invention. Fig. 2 is a side elevation thereof. Fig. 3 is a front elevation, and Fig. 4 is a section on the line 4 4 of Fig. 1.

The device comprises a frame having side pieces 1 and a rear end piece 2, which is attached to the cone-block 3 by means of set-screws 4. A guide-wheel-carrying frame 5 is pivotally connected between the side pieces 1. As here shown, this frame 5 has pivotal bearings on screws 6, passing through tapped openings in the side pieces 1. To the upper end of this frame 5 is pivotally connected an adjusting-screw 7, which engages with an adjusting-nut 8, mounted to rotate in the back piece 2. At the lower end this frame 5 is inclined rearward and downward, and on this inclined portion are secured boxings 9 for the shaft 10 of a bearing wheel or disk 11, designed to engage the rear edge of a saw 12. This wheel or disk 11 has a peripheral groove, here shown as V-shaped in cross-section, and into this groove the back end of the saw-blade may pass. Forward of the wheel or disk 11, and arranged at right angles thereto, are lateral bearing-wheels 12 and 13, adapted to engage against the sides of the saw-blade. These lateral guide or pressure wheels have their journal-bearings in boxes 14, secured to the inner sides of the side pieces 1.

In operation, by manipulating the screw 7 the wheel or disk 11 may be adjusted to en-

gage the rear side of a saw of any width, and the lateral or side bearing-disks may be given a small amount of lead or adjustment toward or from the base of the saw-teeth by manipulating the screws 4. This lead or adjustment that may be given to the lateral pressure-disks prevents the saw from being pulled off its pulleys when backing out of the work. This pressure is brought to bear directly in front of the point of resistance on the saw-blade, so that there will be no strain on the toothed side of the saw, and thus prevent the breaking or cracking of the saw-blade at its narrowest points. By this construction it will be seen that a saw will run perfectly straight. The bearings 6 for the frame 5 will hold said frame firmly in place against the resistance of the saw on the wheel or disk, and also serve as an oscillating point for said frame. The side pieces 1 of the frame being slightly resilient, the disks or wheels 12 and 13 may yield toward and from each other should they meet any inequality in the thickness or gage of the saw-blade, and therefore no other mechanical construction is necessary to provide a clearance or adjustment.

I may add the following as directions for setting the guide with relation to a saw: After placing the saw on its pulleys and setting the pulleys so that the saw will run in its proper place while the guide is in its rearward position the screws 6 are to be tightened, so as to slightly spread the side pieces 1. This will separate the wheels 12 and 13, so that they may pass across the saw without touching it. Then the screws 6 must be relaxed to allow the wheels 12 13 to engage the saw with sufficient grip to resist about five pounds pressure at the back of the saw.

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

1. A band-saw guide, comprising a frame having side pieces, a frame mounted to swing therein, a peripherally-grooved bearing-wheel mounted in said swinging frame, a screw-rod and nut for adjusting said swinging frame, and lateral pressure wheels or rollers carried by the side pieces of the first-named frame, substantially as specified.

2. A band-saw guide, comprising a frame, means for adjustably connecting the same to

a cone-block, a swinging frame mounted in  
pivot-screws extended through the side pieces  
of the first-named frame, a screw-rod having  
pivotal connection with the upper portion of  
5 said swinging frame, a nut attached to the  
first-named frame and engaging said screw-  
rod, journal-bearings on the lower portion of  
said swinging frame, a peripherally-grooved  
wheel having its journals engaged in said  
10 bearings, and lateral pressure disks or wheels

forward of the grooved disk or wheel and  
mounted to yield toward and from each other,  
to compensate for variations or inequalities  
in the gage of a saw-blade, substantially as  
specified.

JOHN A. MARTIN.

Witnesses:

J. W. WALKER,  
W. R. PAULEY.