

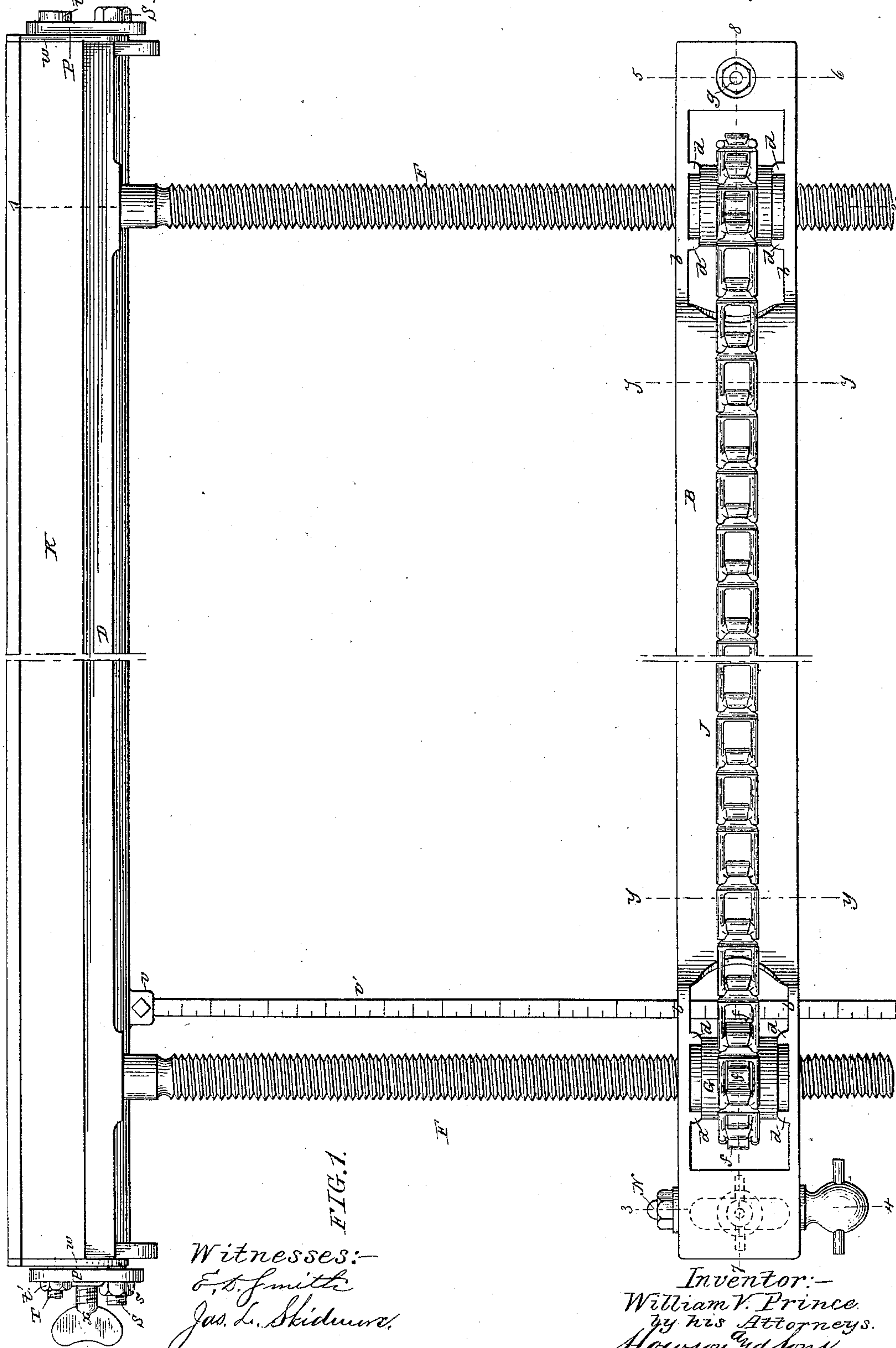
(No Model.)

3 Sheets—Sheet 1.

W. V. PRINCE.
ADJUSTABLE SAW GAGE.

No. 396,666.

Patented Jan. 22, 1889.



(No Model.)

3 Sheets—Sheet 2.

W. V. PRINCE.
ADJUSTABLE SAW GAGE.

No. 396,666.

Patented Jan. 22, 1889.

FIG. 10.

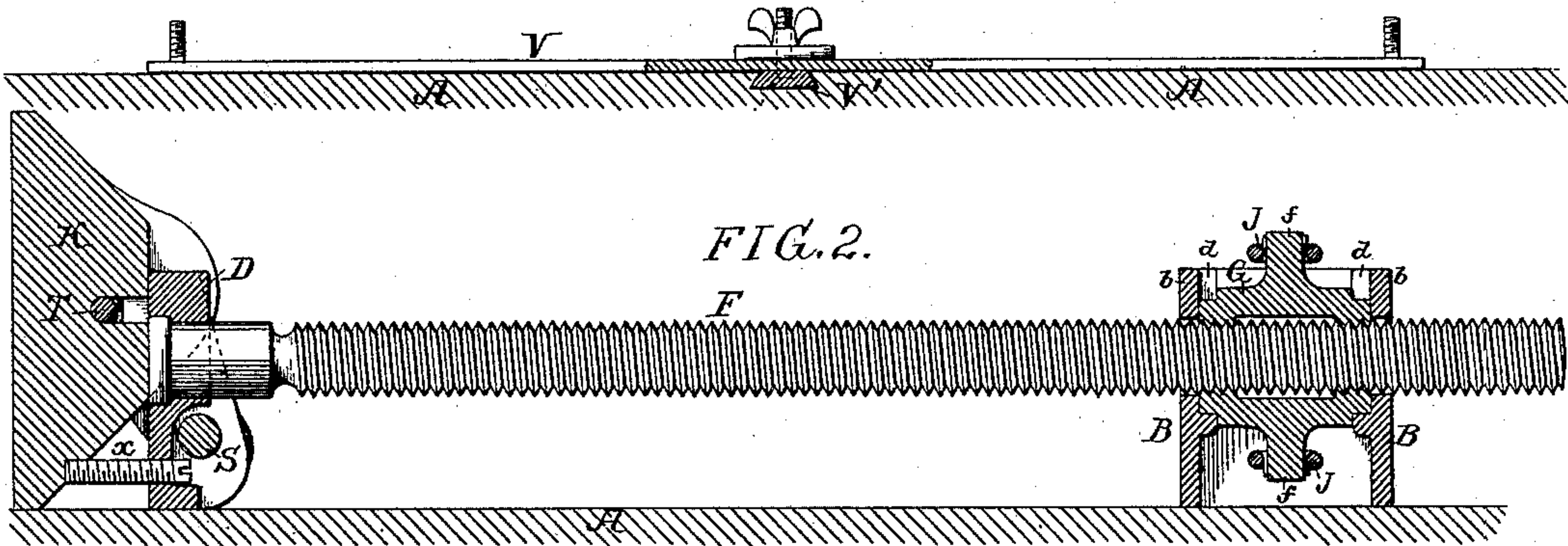


FIG. 2.

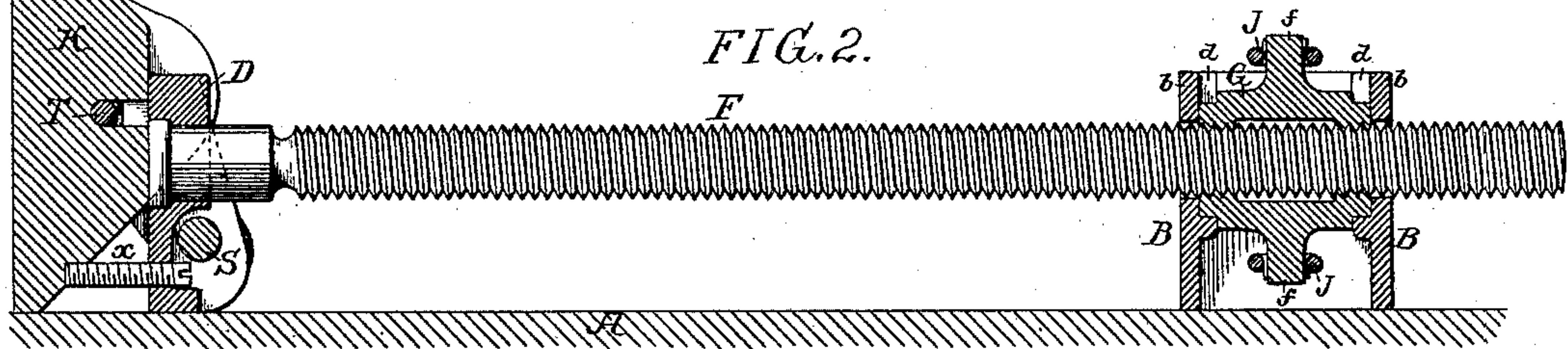


FIG. 8.

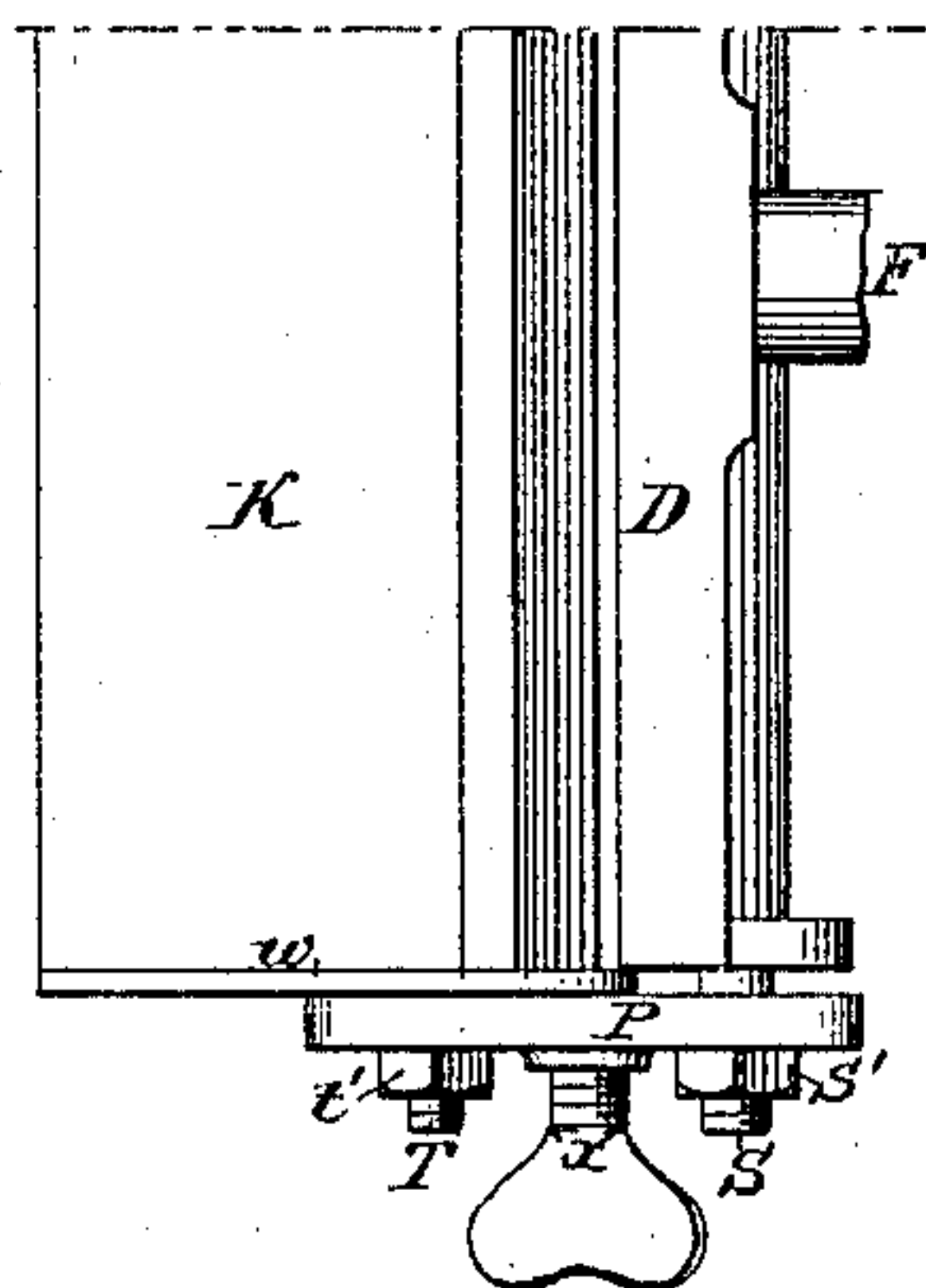


FIG. 7.

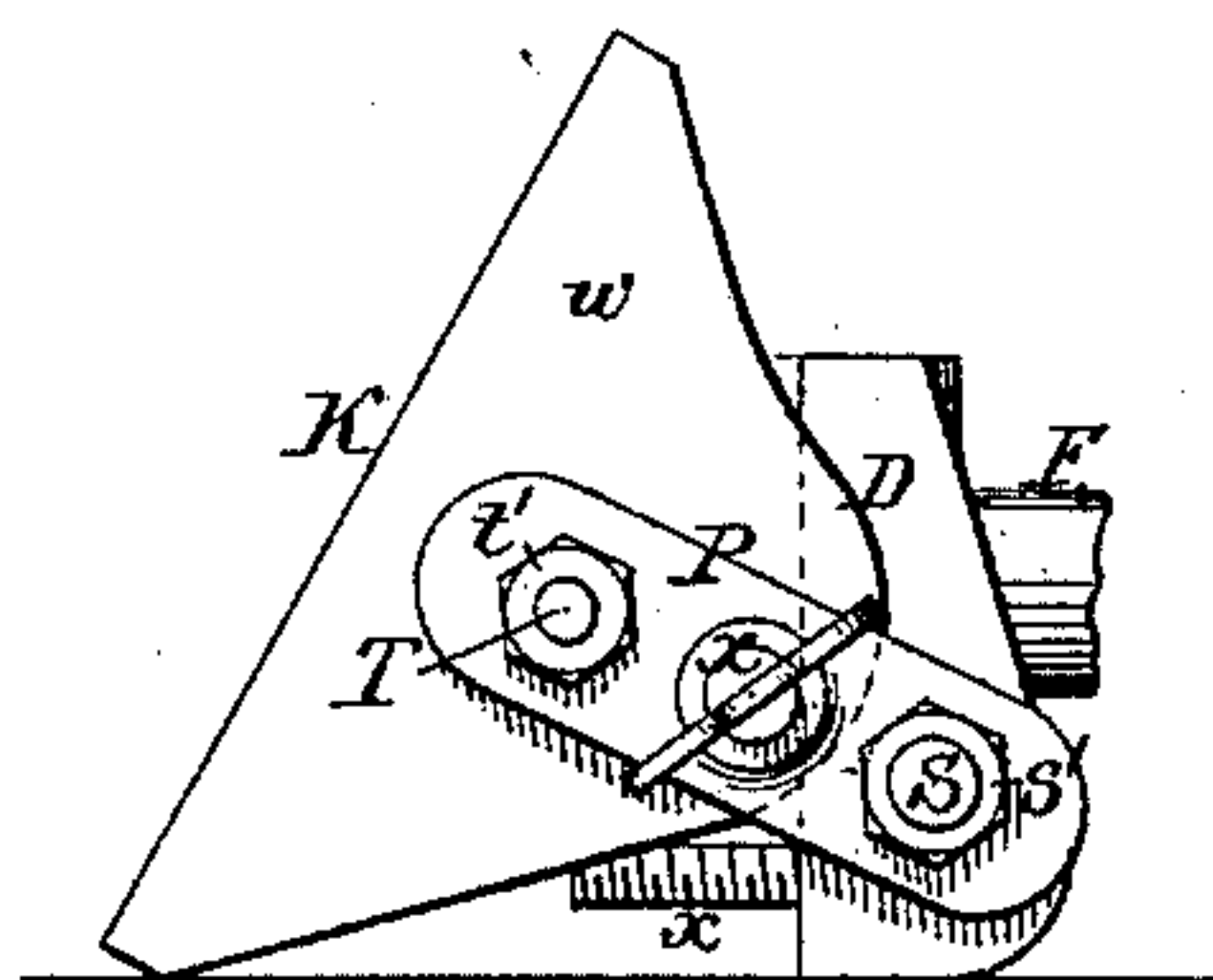


FIG. 3.

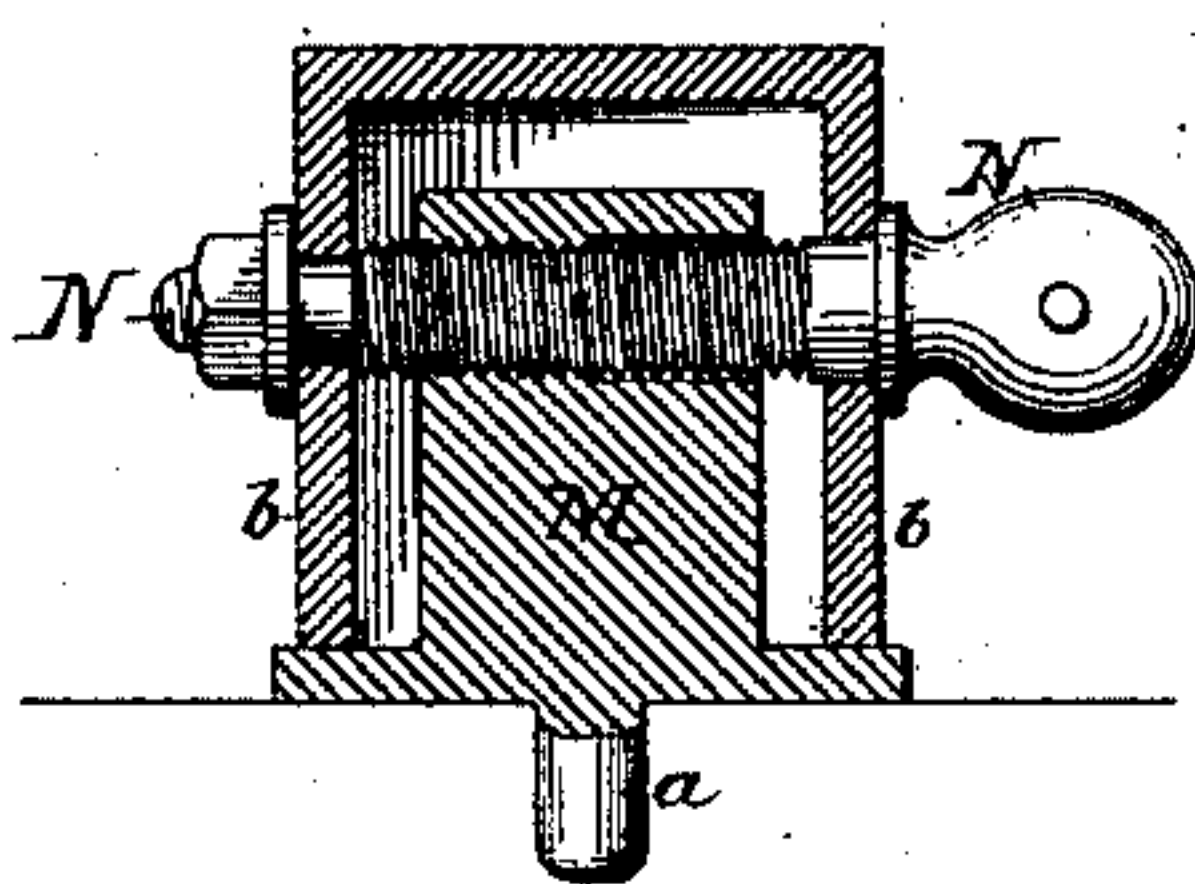


FIG. 5.

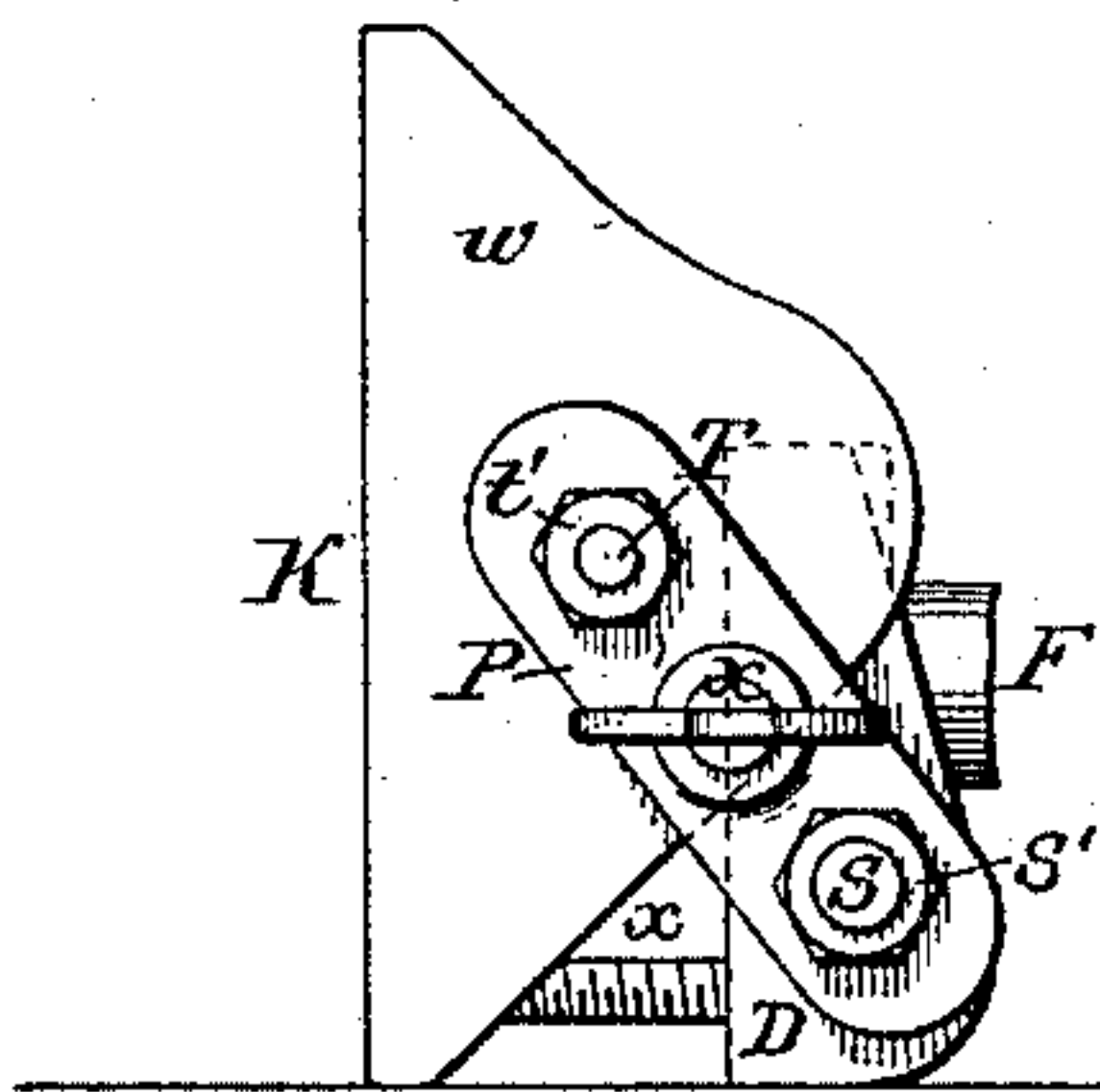
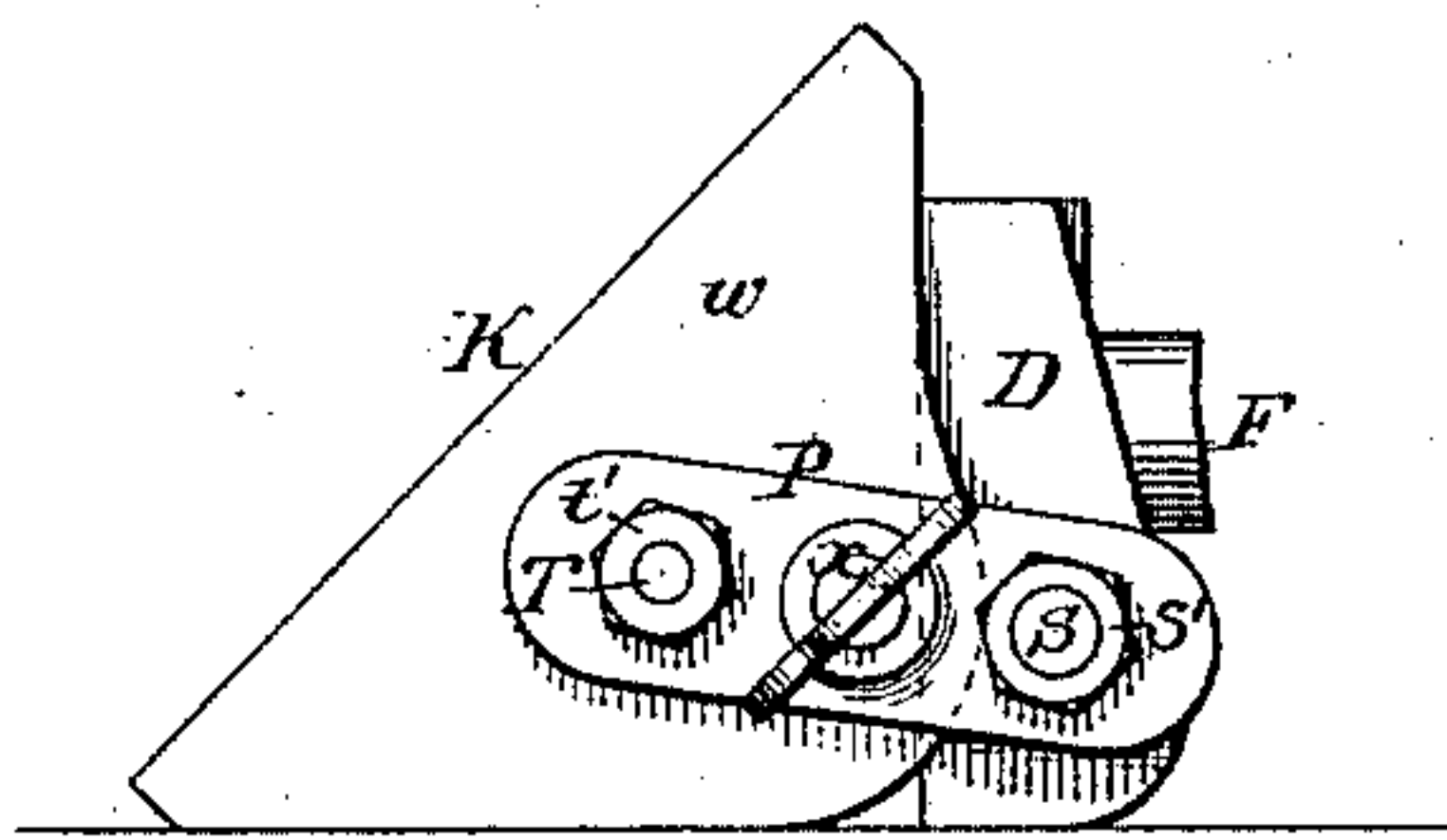


FIG. 6.



Witnesses:
William D. Conner.
David S. Williams.

Inventor:
William V. Prince
by his Attorneys
Howson and Sons

(No Model.)

3 Sheets—Sheet 3.

W. V. PRINCE.
ADJUSTABLE SAW GAGE.

No. 396,666.

Patented Jan. 22, 1889.

FIG. 4.

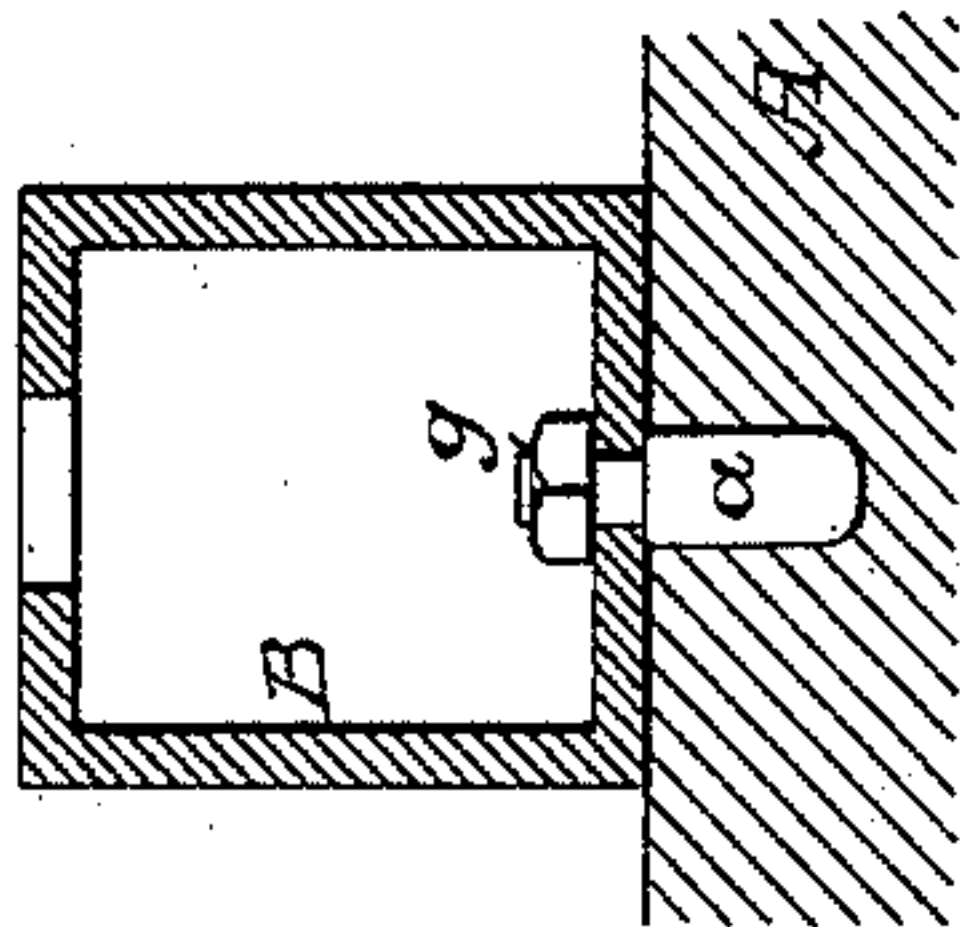
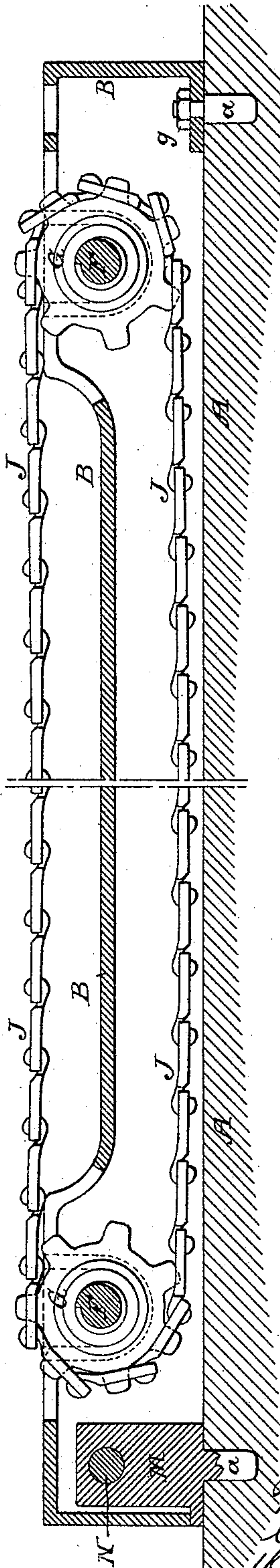


FIG. 9.



Witnesses.
Hamilton W. Turner
David S. Williams

Inventor
Wm. V. Prince
by his Attorneys
Houson & Houson

UNITED STATES PATENT OFFICE.

WILLIAM V. PRINCE, OF VINELAND, NEW JERSEY.

ADJUSTABLE SAW-GAGE.

SPECIFICATION forming part of Letters Patent No. 396,666, dated January 22, 1889.

Application filed August 25, 1886. Serial No. 211,869. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM V. PRINCE, a citizen of the United States, residing in Vineland, New Jersey, have invented certain Improvements in Adjustable Saw-Gages, of which the following is a specification.

One of the objects of my invention is to provide for the ready and accurate adjustment of the gage and the secure locking of the same after adjustment, a further object being to provide for the proper longitudinal alignment of the gage, and a still further object being to permit the adjustment of the bearing-block of the gage to any desired angle which the shape of the work to be sawed may require.

In the accompanying drawings, Figure 1 is a plan view of an adjustable saw-gage constructed in accordance with my invention; Fig. 2, a transverse section, partly in elevation, on the line 1 2, Fig. 1; Fig. 3, a transverse section, partly in elevation, on the line 3 4, Fig. 1; Fig. 4, a transverse section, partly in elevation, on the line 5 6, Fig. 1; Figs. 5, 6, and 7, end views showing different adjustments of the gage-block; Fig. 8, a plan view of Fig. 7; Fig. 9, a longitudinal section on the line 7 8, Fig. 1; and Fig. 10, a sectional view showing how my improved gage can be applied to an ordinary slotted saw-table.

A represents part of the work bed or table of the saw, on which at a suitable distance from the saw and parallel with the line of the latter is a longitudinal hollow frame, B, a pin, *a*, near each end of this frame projecting into an opening in the table, and these pins thus serving to confine the frame B in position both longitudinally and laterally.

The gage-bar D has at the back two projecting screw-stems, F F, which are adapted to nuts G, confined laterally between the opposite sides *b b* of the frame B and fitted between inwardly-projecting lugs *d* on said side bars, as shown in Fig. 1, so that while each nut is confined laterally and longitudinally to the frame B it can turn freely in its bearings in said frame. Each nut has on its periphery projecting teeth *f*, so that it constitutes in effect a sprocket-wheel for the reception of the endless chain J, the latter serving to connect the two nuts together and insure their

joint and simultaneous operation when the upper portion of the chain belt is grasped by the hand and moved in one direction or the other, the top of the frame B being recessed between the opposite bearings, as shown in Fig. 9, so as to expose the chain J and permit the ready grasping of the same. Supposing, therefore, that the gage-bar D is parallel with the frame B in the first instance, it must preserve this parallelism during any movement from or toward the saw, which is effected by the operation of the nuts G, no amount of pressure against the gage-bar sufficing to move the same from its proper position, as such movement can only be effected by the rotation of the nuts. It happens in some cases, however, that the bearing-block K, carried by the gage-bar, becomes worn unevenly, and in order to compensate for any variation of this character I provide for the lateral adjustment of one end of the frame B. The pin *a* at one end of this frame is a fixed pin, being secured in position by means of a nut, *g*, as shown in Figs. 1 and 4; but the pin at the opposite end is secured to or forms part of a nut, M, which is guided laterally in the frame and is under the control of a screw-stem, N, the latter being confined laterally to the frame, but free to turn in bearings in the opposite side bars, *b*, of the same, one end of the stem being so constructed as to provide a convenient handle whereby said stem can be manipulated. It will be seen, therefore, that as the pin *a* occupies a fixed position laterally in respect to the saw the nut is likewise a fixture, so that by turning the screw-stem N in one direction or the other there will be a lateral movement of the end of the frame B to or from the saw, so that any variation in the truth of the face of the bearing-block K can be readily remedied.

In order that in the ordinary use of the device the face of the gage-block K may be perfectly plumb with respect to the saw, the gage-bar D has a set-screw, *x*, which serves as a stop to determine the inward movement of the lower portion of the gage-block, so that by manipulating this screw the face of the gage-block may be adjusted as desired.

In order to provide for adjusting the face of the bearing-block K to different angles, as

may be required by the different classes of work which have to be sawed, I hang said bearing-block to the gage-bar D by means of opposite links P, a bolt, S, passing longitudinally through the gage-bar and through openings near the lower ends of the links, and being provided at one end with a head, s, bearing on one link, and at the opposite end a nut, s', bearing on the opposite link. A similar bolt, T, having head t and nut t', passes through the upper ends of the links P and through the bearing-block K.

The bearing-block has at the opposite ends cheek-pieces w, which overlap the ends of the gage-bar D, and one of the links P has a set-screw, x, bearing upon the adjacent cheek-piece w of the gage-block, so that after adjusting the gage-block to the desired angle the tightening of this set-screw will cause the cheek-piece upon which it acts to press firmly against the end of the gage-bar and will draw the opposite link firmly into contact with the opposite cheek-piece, thereby imparting such friction to the gage-block as will effectually prevent the accidental displacement of the same from the position to which it has been adjusted.

Various modifications of my invention may be devised without departing from the essential features thereof. For instance, the pin a at the end of the frame B might pass through a lateral slot in said frame and be threaded at the upper end for the reception of a thumb-screw, (see dotted lines, Fig. 1,) so that the frame can be adjusted laterally and secured in position after adjustment; but this lacks the self-locking feature of the screw-stem and nut, which I therefore prefer to use.

To a lug, v, on the back of the gage-bar D, is secured one end of a graduated bar, v', Fig. 1, which passes through openings in the side bars of the frame B and serves to aid in effecting an accurate adjustment of said gage-bar.

In cases where the saw-table is already furnished with a lateral slot for the clamp of the usual T-gage, a plate, V, may be secured to the clamp-block V', as shown in Fig. 10, this plate having near each end a bolt, whereby the frame B can be secured thereto, the necessity of forming pin-holes in the table being thus obviated.

I claim as my invention—

1. The combination of the gage-bar having rearwardly-projecting screw-stems, toothed nuts to which said stems are adapted, an endless chain adapted to said toothed nuts, and a single fixed bar or frame adapted to rest upon the saw bench or table and having bearings for both of the toothed nuts, the whole forming a single self-contained structure applicable to or removable from the saw bench or table as a unit, all substantially as specified.

2. The combination of the work table or bed, the frame B, pivoted thereto at one end, but free to swing at the opposite end, means for securing said free end of the frame after adjustment, a gage-bar having projecting screws, nuts carried by the frame B and adapted to said screws, and means for simultaneously operating said nuts, all substantially as specified.

3. The combination of the work table or bed, the gage-bar, the pivoted frame B, a screw-connection between the same and the bar, a pin adapted to an opening in the work-table and having a nut, and a screw-stem carried by the frame B and adapted to said nut, all substantially as specified.

4. The combination of the gage-bar, the gage-block, the hanging-links, pivot-bolts for connecting one end of each link to the gage-bar and the other end to the gage-block, cheek-pieces interposed between the links and the ends of the gage-blocks, and a clamping-screw carried by one of the links and bearing against one of the cheek-pieces, all substantially as specified.

5. The combination of the gage-bar, the frame B, and the screw-connection between the two, with the work-table having a groove and a plate having a block adapted to said groove, and bolts for the reception of the opposite ends of the frame B, all substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM V. PRINCE.

Witnesses:

A. E. PRINCE,
R. H. STARKWEATHER.