

W. W. PURSELL.
ATTACHMENT FOR MITERING MACHINES.
APPLICATION FILED AUG. 18, 1908.

936,355.

Patented Oct. 12, 1909.

2 SHEETS—SHEET 1.

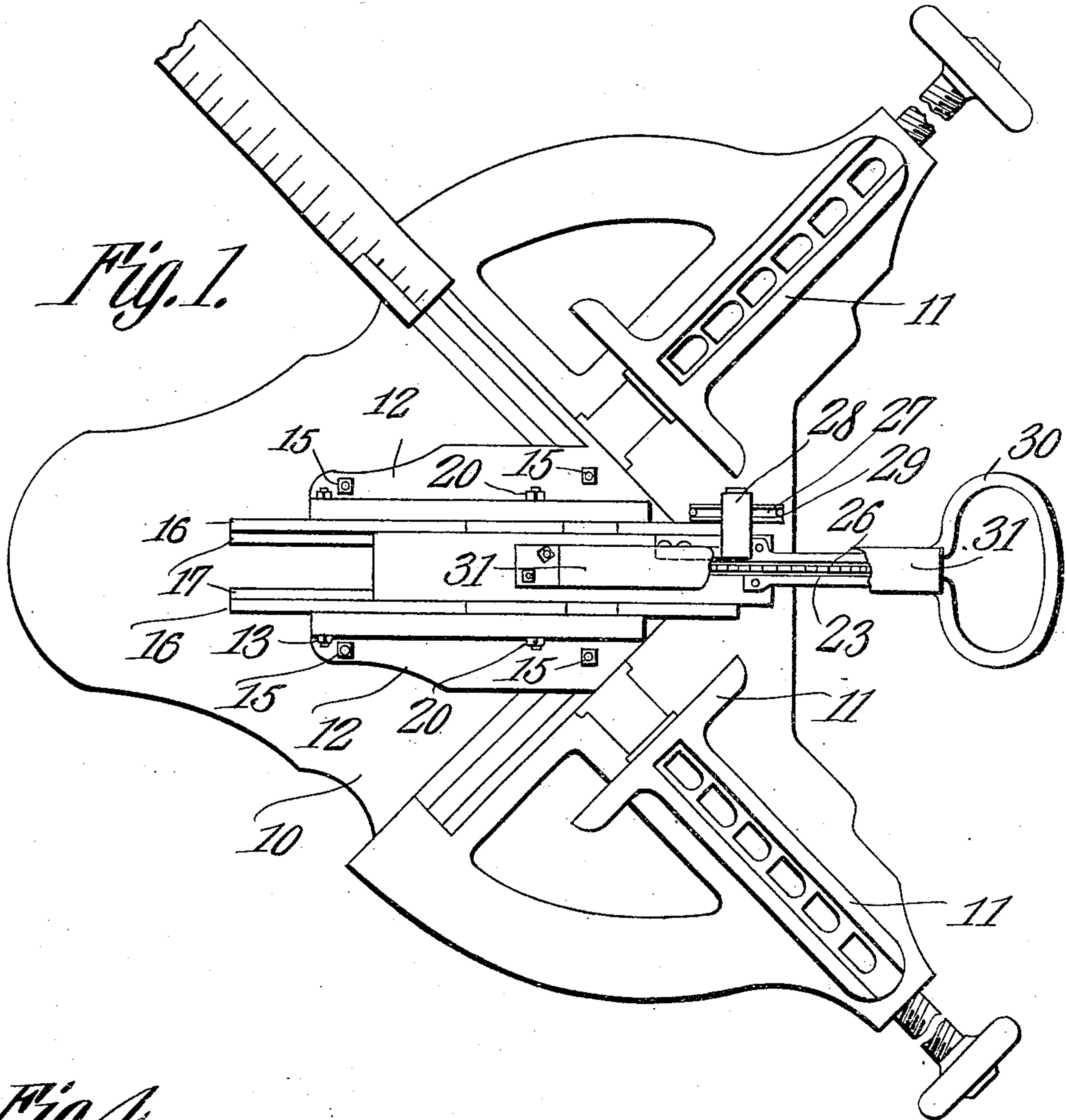


Fig. 4.

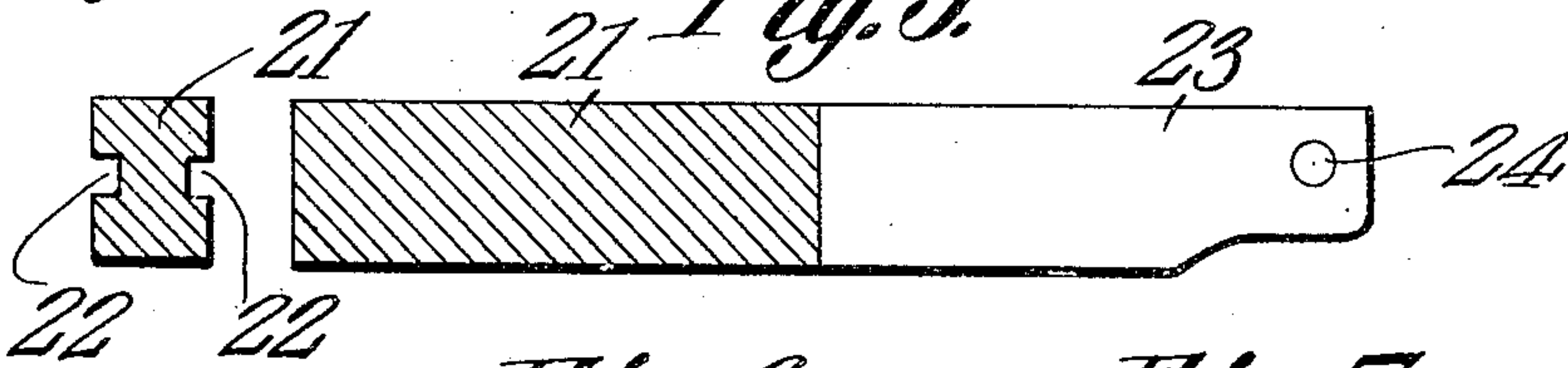


Fig. 5.

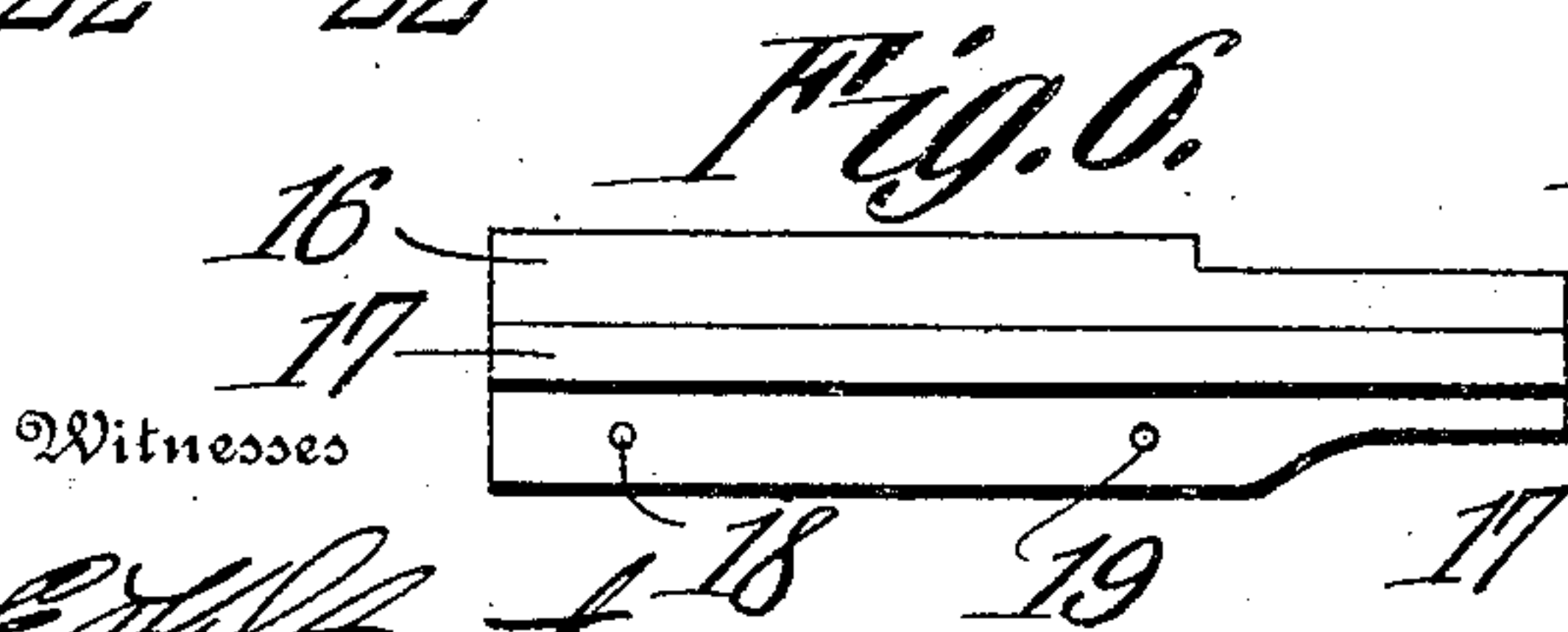


Fig. 6.

Fig. 7.

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Witnesses

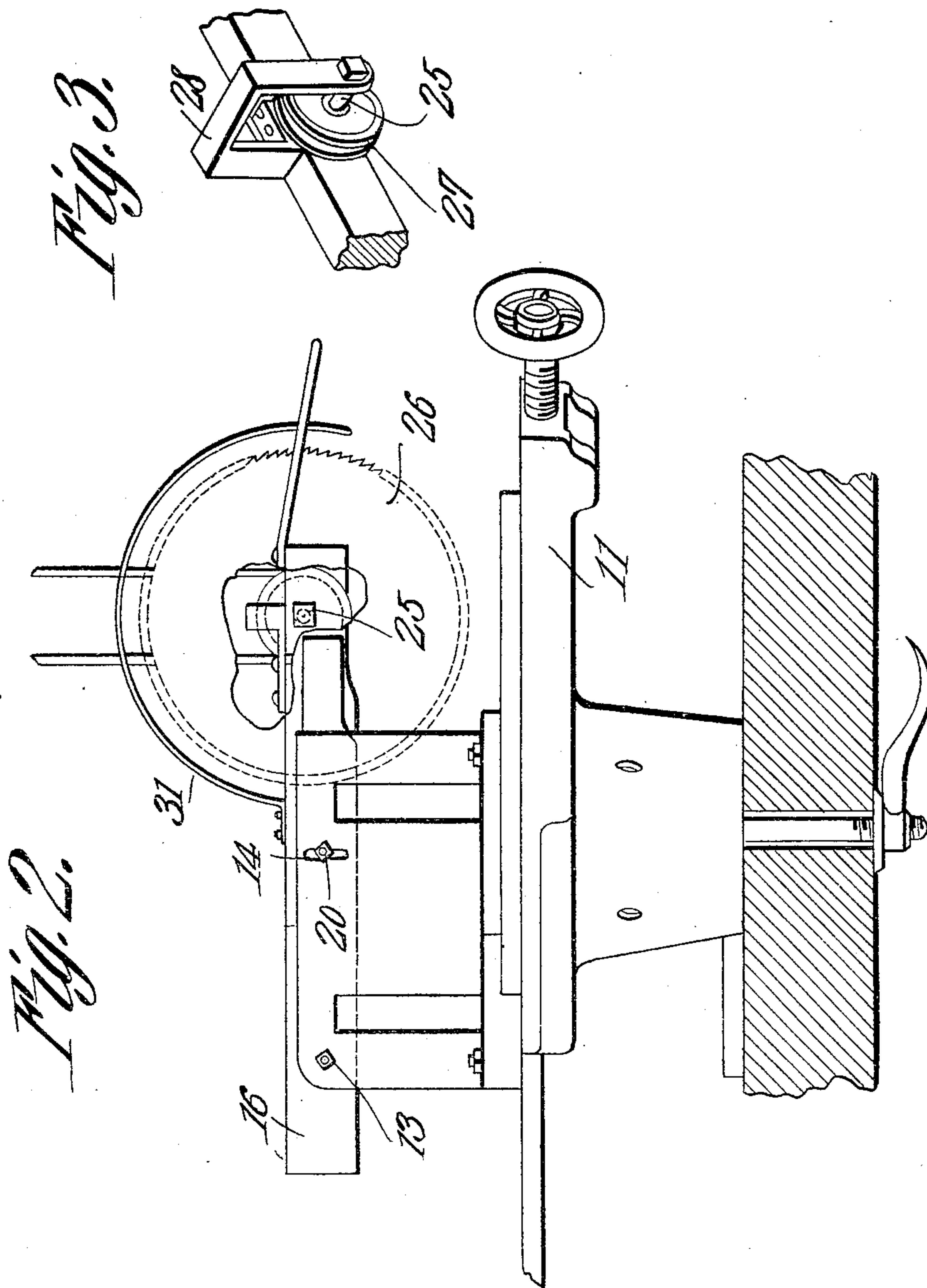
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UNITED STATES PATENT OFFICE.

WILLIAM W. PURSELL, OF PITTSBURGH, PENNSYLVANIA.

ATTACHMENT FOR MITERING-MACHINES.

936,355.

Specification of Letters Patent.

Patented Oct. 12, 1909.

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To all whom it may concern:

Be it known that I, WILLIAM W. PURSELL, a citizen of the United States, residing at Pittston, in the county of Luzerne and State of Pennsylvania, have invented a new and useful Attachment for Mitering-Machines, of which the following is a specification.

This invention relates to mitering machines, and especially to an attachment therefor, arranged for the use of a circular saw, in place of the usual miter saw.

The object of the invention is to provide an attachment for mitering machines carrying a circular saw, means to guide the saw in a rectilinear path, at a predetermined angle, and means to reciprocate and drive said saw.

The invention consists, in general, of an attachment for mitering machines, comprising a pair of guides, having a sliding bar mounted therebetween, a saw carried on one end of the sliding bar, an actuating means for said saw, and a reciprocating handle therefor.

The invention further consists in certain novel details of arrangements and combinations of parts, hereinafter fully described, illustrated in the drawings, and specifically set forth in the claims.

In the accompanying drawings, like characters of reference indicate like parts in the several views, and:—

Figure 1 is a top plan view of an ordinary mitering machine, equipped with this device. Fig. 2 is a similar view in side elevation. Fig. 3 is a perspective detail of the pulley-supporting bracket. Fig. 4 is a detailed cross-section of the sliding bar. Fig. 5 is a longitudinal median section of Fig. 4. Fig. 6 is a detailed side elevation of one of the guides. Fig. 7 is a detailed end elevation of Fig. 6.

The numeral 10 indicates the base of an ordinary mitering machine. On this base is mounted a pair of clamps, 11, of any desired form. This base is further provided with a pair of saw-guides, 12. These saw-guides are those ordinarily used with the common stiffback miter saw; but, in the present invention, are equipped with a suitable bolt-hole, near one end, through which passes bolt 13. An arcuate slot, 14, is formed in each of these guides, preferably near the opposite ends, and has its center at the center of the bolt 13. For the purpose of applying the attachment, these guides 12, are

spaced at a greater distance than the width of the saw-blade, by means of suitable bolts, 15, passing through bolt-holes in the base.

The attachment itself comprises a pair of tracks, 16, each provided with a rib, 17, and having further a pair of bolt-holes, 18 and 19. Each of these tracks is held to one of the guides 12 by means of the bolt 13 passing through the hole 18. This bolt forms a pivot connection for one end of the corresponding one of the tracks, while a bolt, 20, passing through the arcuate slot 14, at the hole 19, forms an adjustment for the other end, so that the same may be raised or lowered, as desired. A bar, 21, is slidably mounted between the guides 16, being provided with channels, 22, for the reception of the ribs, 17, of the said tracks. This bar is slotted as at 23, and is provided with oppositely disposed bearings, 24. A saw mandrel, 25, is mounted in the bearings 24, and serves to support the circular saw, 26. This saw mandrel extends outward from one side of the bar 21, and carries a suitable belt pulley, 27. An out board bearing, 28, is mounted on the bar 21, and serves to support the outer end of the saw mandrel. Around the belt-pulley 27, passes a belt, 29, which extends over-head to a pulley there located, but not deemed necessary here to be shown. This latter pulley is actuated in any desired manner, so that the saw may be rotated by the rotation of this pulley. There is further mounted on the bar 21, an operating handle 30 projecting beyond the saw in the direction of the length of the bar. The guard 31 is also provided for the saw, likewise being mounted on the bar. This guard is broken away in Fig. 1, to show the saw and slot in the slot end of the operating bar.

In the operation of the device the saw is adjusted to the proper depth of cut by means of the bolt 20, moving in the arcuate slot 14. The molding to be cut having been securely clamped by one of the clamps 11, the saw is set in motion in any of the ordinary manners. The handle 30 is then grasped, and the saw drawn forward, thus quickly cutting the molding at the desired bevel. There has thus been provided a simple and efficient device of the character described, for the purpose specified.

It is obvious that minor changes may be made in the form and construction of the parts, without departing from the material principles thereof. It is not therefore de-

sired to confine the invention to the exact form herein shown and described, but it is wished to include all such as properly come within the scope of the invention.

5 Having thus described the invention, what is claimed as new is—

1. An attachment for mitering machines comprising parallel saw guides each having a bolt hole and a slot spaced therefrom, a
10 track pivoted to each guide and also secured thereto by a bolt passing through it and the slot in the guide, a longitudinally slidable
20 bar having one end formed to engage the track on the guides and also carrying journal bearings, a circular saw mounted in the
15 said bearings, and a handle on the bar at the end remote from that engaging the tracks and between which ends the saw is mounted.

2. An attachment for mitering machines
20 comprising parallel saw guides each having

a bolt hole and a slot spaced therefrom, a track pivoted to each guide and also secured thereto by a bolt passing through it and the slot in the guide, a longitudinally slidable bar formed at one end with opposite side
25 grooves to receive the track and longitudinally slotted at the other end, a circular saw mounted in said slot and having journal bearings in the bar in the sides of the slot, and a handle attachable to the correspond-
30 ing end of the bar and extending beyond the saw in the direction of the length of the bar.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WILLIAM W. PURSELL.

Witnesses:

NELLIE M. CORCRAN,
H. S. PURSELL.