

No. 615,991.

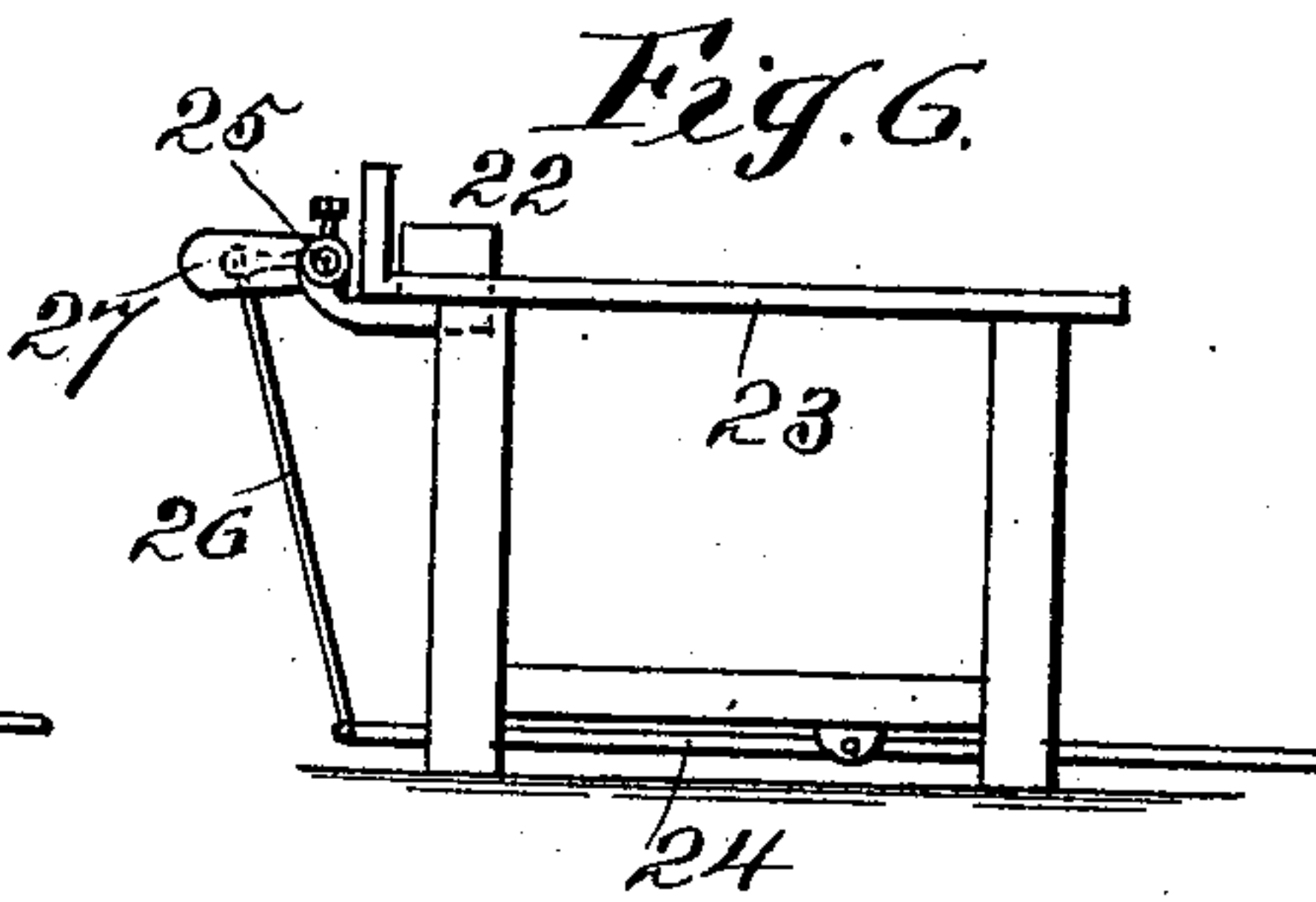
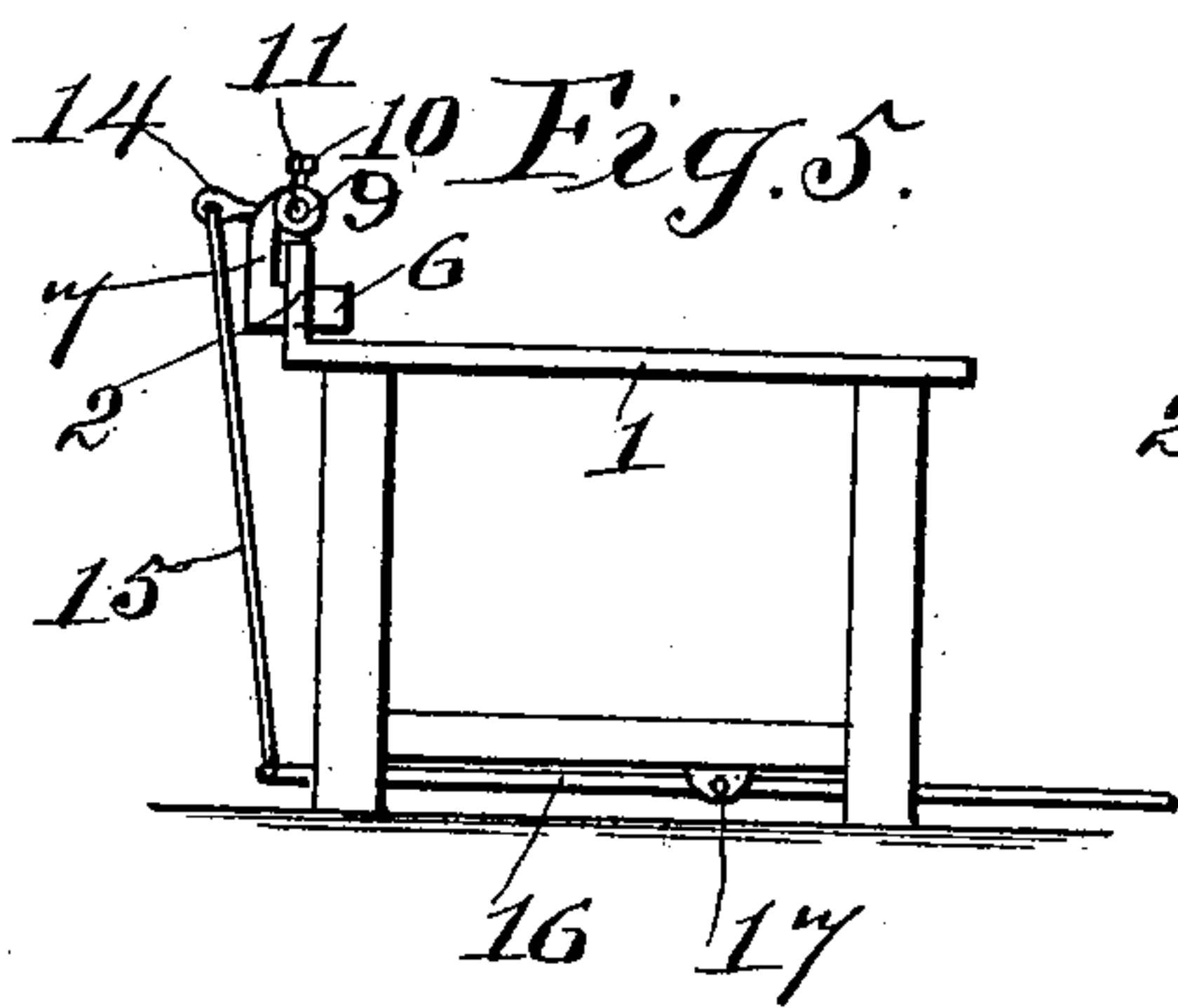
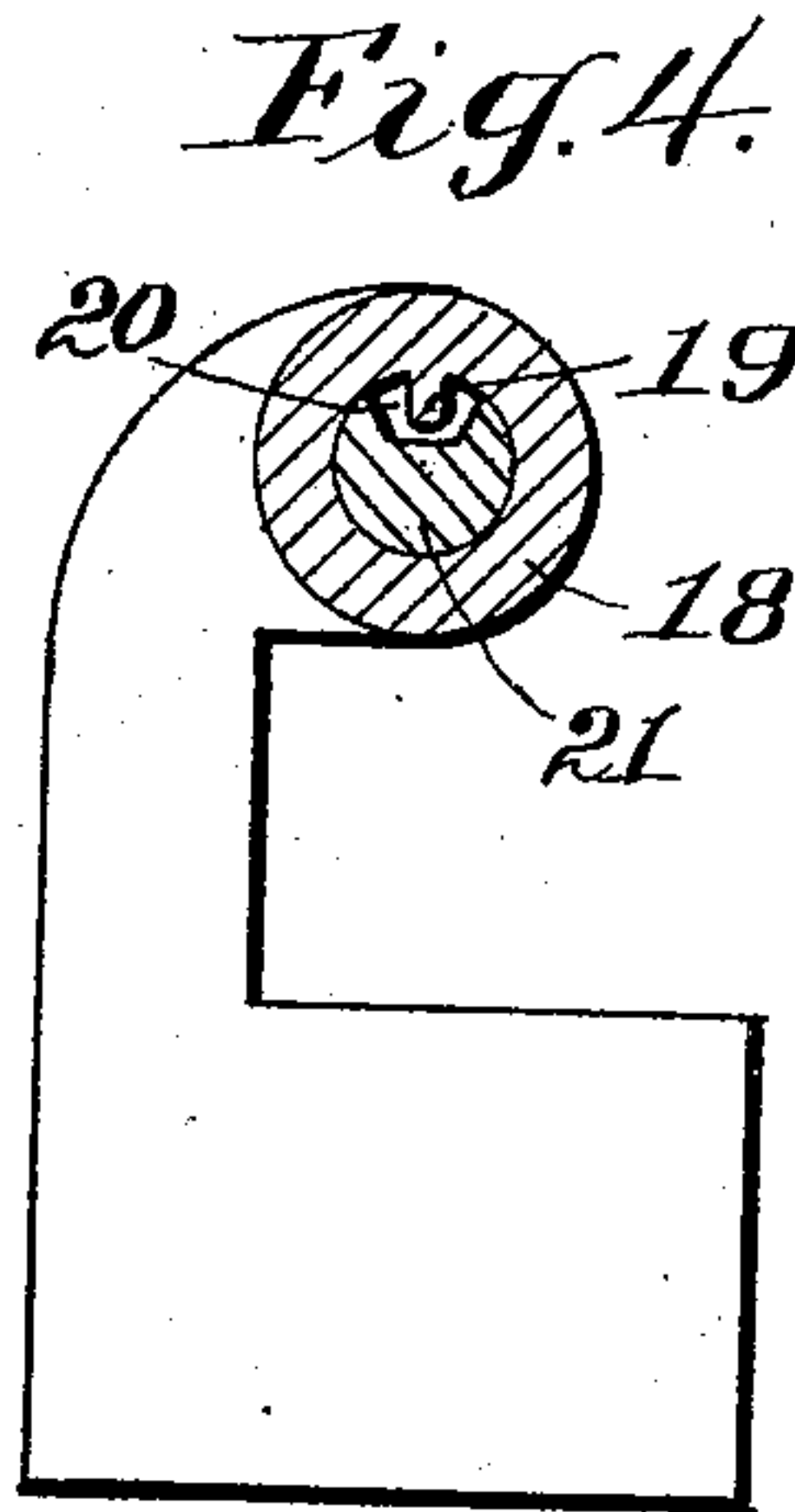
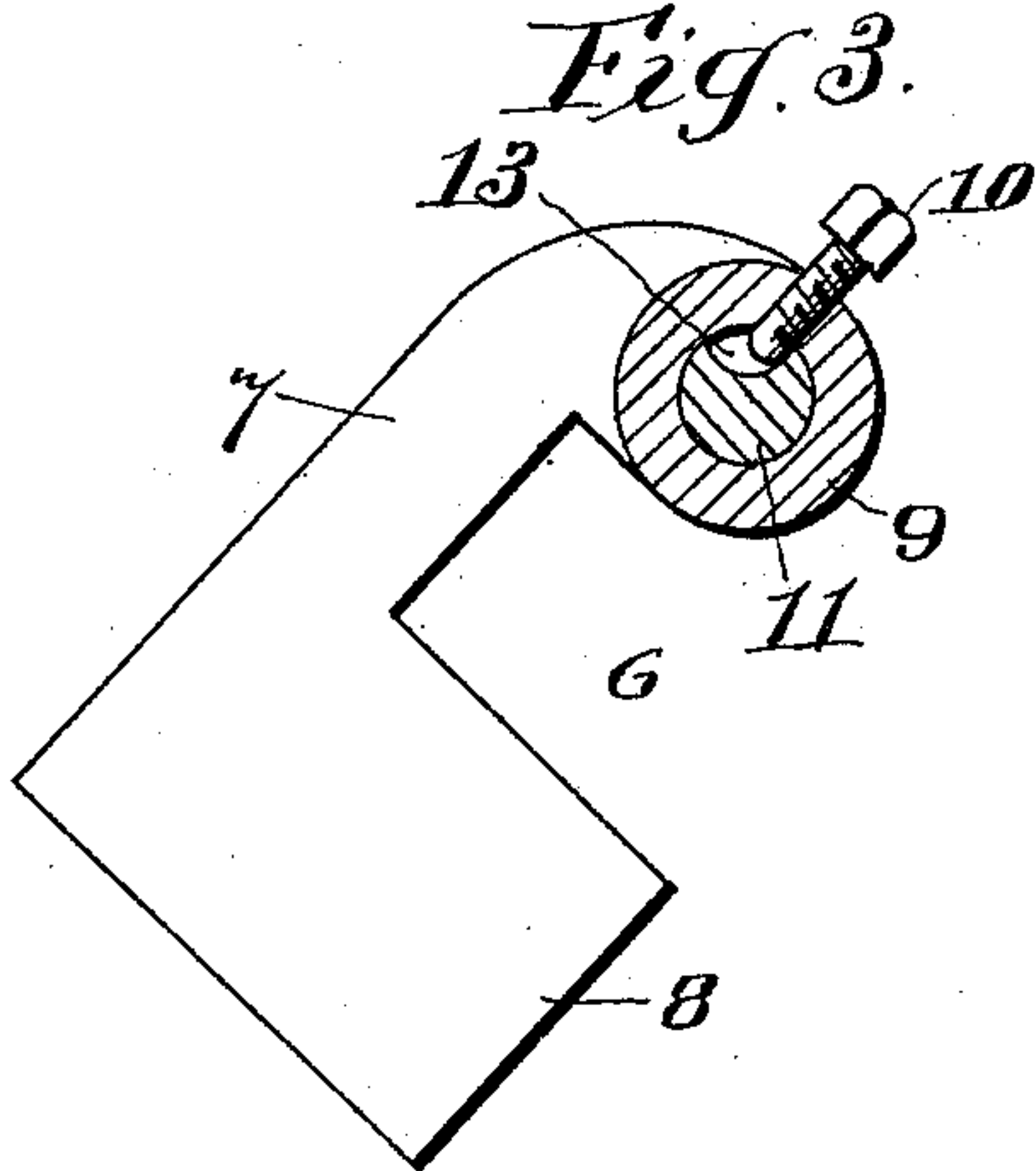
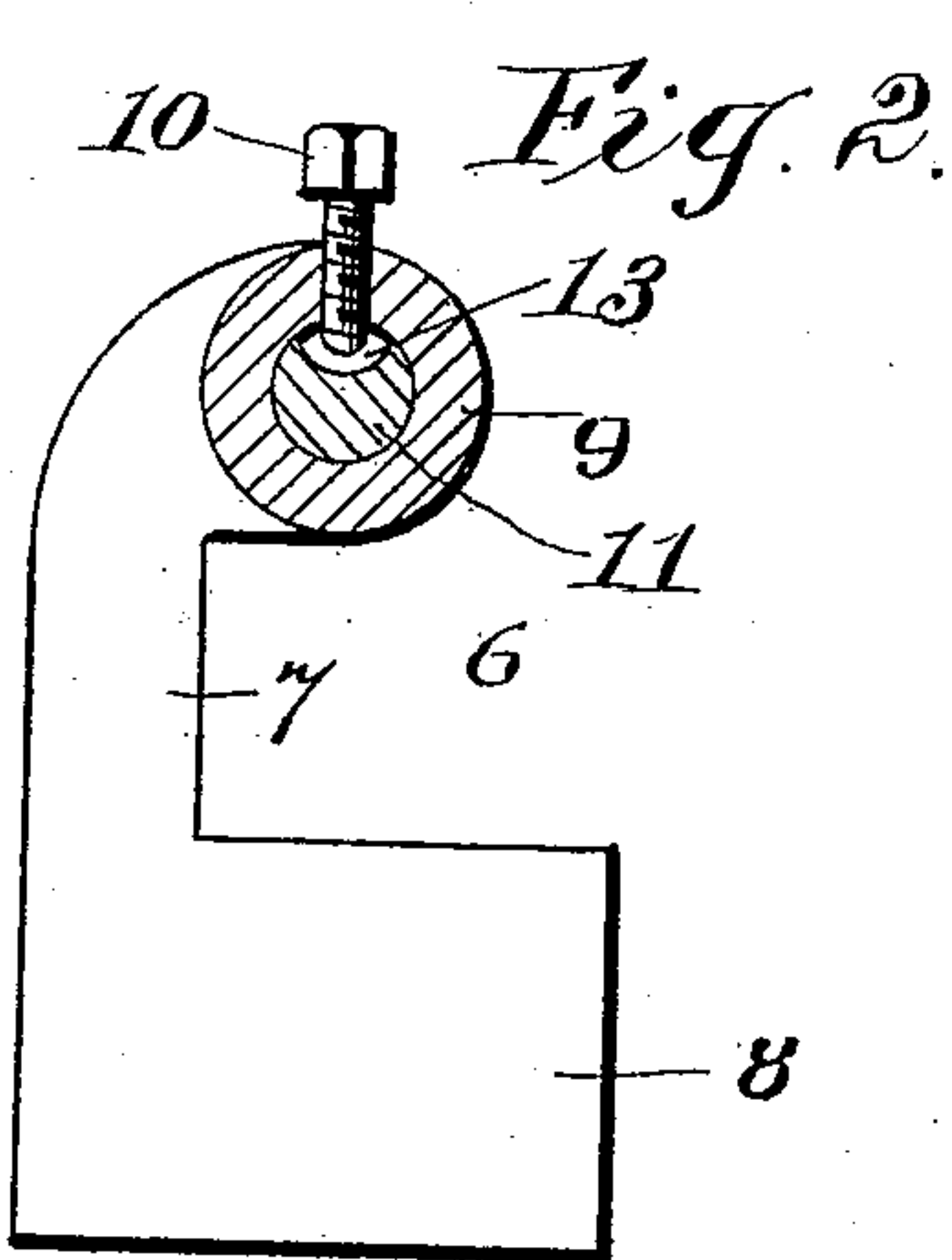
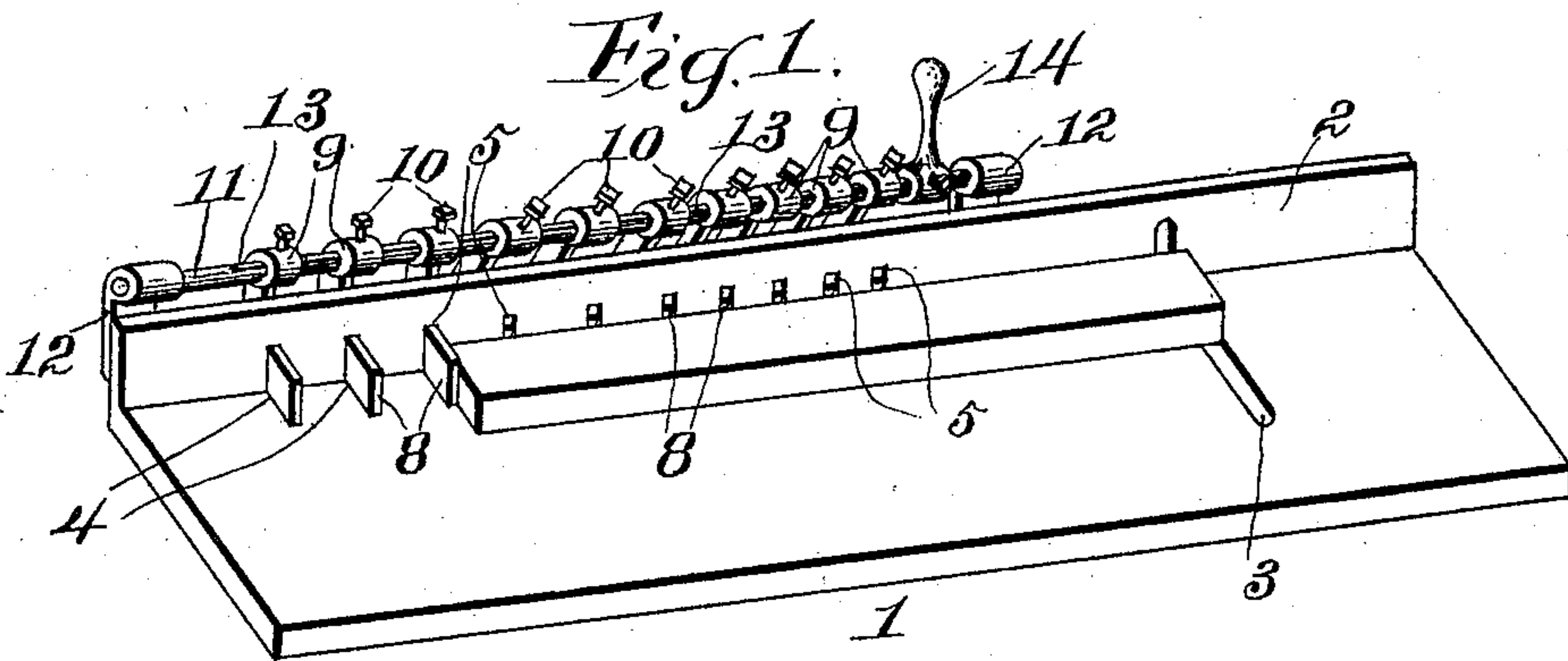
Patented Dec. 13, 1898.

S. S. INGMAN.

AUTOMATIC STOP GAGE FOR CUT-OFF SAW TABLES.

(Application filed Feb. 28, 1898.)

(No Model.)



Witnesses.

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UNITED STATES PATENT OFFICE.

SAMUEL S. INGMAN, OF GEORGETOWN, SOUTH CAROLINA.

AUTOMATIC STOP-GAGE FOR CUT-OFF SAW-TABLES.

SPECIFICATION forming part of Letters Patent No. 615,991, dated December 13, 1898.

Application filed February 28, 1898. Serial No. 671,947. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL S. INGMAN, a citizen of the United States, residing at Georgetown, in the county of Georgetown and State of South Carolina, have invented certain new and useful Improvements in Automatic Stop-Gages for Cut-Off Saw-Tables, of which the following is a specification.

This invention relates to sawing-machines, and particularly to an automatic stop-gage for cut-off saw-tables.

The prime object of the invention is to provide an automatic stop-gage for cut-off saw-tables comprising a shaft and a series of stops so hung from the shaft that they may swing separate upon the shaft independent of the movement of the latter and of each other, yet with such relative arrangement and connection to the shaft that a slight turn of it will swing and displace all the stops simultaneously.

A further object of the invention is to provide a series of stops loosely hung upon a slotted shaft journaled at the ends, the stops being automatically swung into and out of place with or without moving the shaft and the shaft and stops adapted to be operated simultaneously to displace all the stops after the lumber has been put in position on the table, so that said lumber may be adjusted without lifting, removing, or displacing it from the table or the table-back.

A still further object of the invention is to provide an automatic saw-table gage comprising a series of stops adapted to be operated either through the table or the table-back by hand or foot lever connected to a shaft upon which the stops are loosely mounted.

Other objects and advantages accruing from the invention and from the special construction and arrangement of the several parts constituting the same will be disclosed in the specification and claims to follow.

In the accompanying drawings, forming part of this application, Figure 1 is a perspective view of my gage applied to a cut-off saw-table, showing a piece of lumber in position to be sawed. Fig. 2 is a cross-section of the shaft through one of the stop-collars, showing the stop in normal position. Fig. 3 is a similar view showing the stop displaced. Fig. 4 is a similar view to Fig. 2 of a modification. Fig.

5 is an end view of a saw-table, showing a foot-lever connected to the gage. Fig. 6 is a similar view with the device adapted to be operated through the face or top surface of the table.

The same numeral references denote the same parts throughout the several figures of the drawings.

The saw-table 1 has a suitable back 2, a saw-slot 3, through which a saw is operated, and a series of edge slots 4. The back 2 has a series of slots 5 at graduated distances apart in feet and inches and fractions thereof, which register with the edge slots 4 and form a passage for the wing of the stops 6.

The stops 6 are all of the same construction, and therefore only one will be here described in detail. It consists of an arm 7, which terminates at one end in a lateral wing 8 and at the other end in a sleeve or collar 9, provided on top with a set-screw 10.

The automatic gage comprises a shaft 11, journaled in brackets 12, secured to each end of the table-back 2, and having a longitudinal groove 13, preferably U-shaped in cross-section, and the series of stops 6 loosely mounted upon the shaft and having the set-screws 10, projecting into the groove 13, with sufficient space between the set-screw and the walls of the groove to permit free pivot action of the collars on the shaft and the stop-wings through the passage-ways without moving the shaft.

The shaft 11 is provided with a suitable handle 14, which may be connected by a lever 15 to a foot-lever 16, fulcrumed at 17, for operating the shaft.

In the modification shown by Fig. 4 the stop-collar 18 has an inside projection 19 from its top, and the groove 20 of the shaft 21 is angular.

Fig. 6 depicts the gage-stops 22, adapted and arranged to be operated from beneath and through the table 23 by means of a fulcrumed foot-lever 24, connected to the shaft 25 by a lever 26, the said stops being controlled by counterweights 27 to keep them in normal position.

The operation of the device is as follows: The stops being in normal position with the set-screw in the position shown by Fig. 2, leaving the stops hanging loose on the shaft and all the wings projecting through the ta-

ble-back, the lumber to be cut is placed on the table with one end against a certain stop-wing and then moved against said back, which displaces all the intervening stops between said end and the end to be cut or trimmed. Should it be found that the lumber will trim longer, the shaft is turned to throw back or displace all the stops, so that the lumber can be adjusted without contact with any of the stop-wings and without lifting or removing the lumber from the table or away from the table-back, and when the desired adjustment is attained the shaft is released, which permits the stops to assume their proper positions relative to the lumber.

It will be observed that the lumber can be quickly and expeditiously adjusted on the table without interference of the stops and without the usual trouble and inconvenience of lifting or removing the lumber from the table or out of contact with the table-back.

It is obvious that a spring may be substituted for the counterweights, hereinbefore referred to, to return the stops to normal position.

I do not wish to be understood as limiting myself to the exact location of the gage, to the number of stops, or to any particular means projecting into the shaft-slot from the stop-collars, nor to the size of the gage or the material composing the same; but,

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

1. An automatic gage for cut-off saw-tables, comprising a journaled shaft having a slot, a series of stops loosely hung upon the

shaft, and means engaging the slot to limit the independent movement of the stops.

2. An automatic gage for cut-off saw-tables, comprising a journaled shaft having a slot, a series of stops loosely hung upon the shaft, means engaging the slot to limit the independent movement of the stops, and a handle secured to the shaft for moving the latter and the said stops simultaneously.

3. An automatic gage for cut-off saw-tables, consisting of a journaled shaft having a longitudinal slot, a series of stops each comprising an arm terminating at one end in a lateral wing, and at the other end in a sleeve or collar, means extending from the sleeves or collars into the slot to hold the stops loose upon the shaft and to limit their independent movement, and means for turning the shaft, as set forth.

4. The combination, with a cut-off saw-table having a series of slots, and the journal-brackets secured to the table, of the slotted shaft journaled in the brackets, a series of stops comprising collars loose on the shaft and connected to wings which engage the said table-slots, a projection through or from the collars into the shaft-slot to permit a free swing of the stops without moving the shaft, and means for turning the shaft and the stops together, as set forth.

In witness whereof I hereunto set my hand in the presence of two witnesses.

SAMUEL S. INGMAN.

Witnesses:

G. B. POE,

G. F. FRAWLEY.