

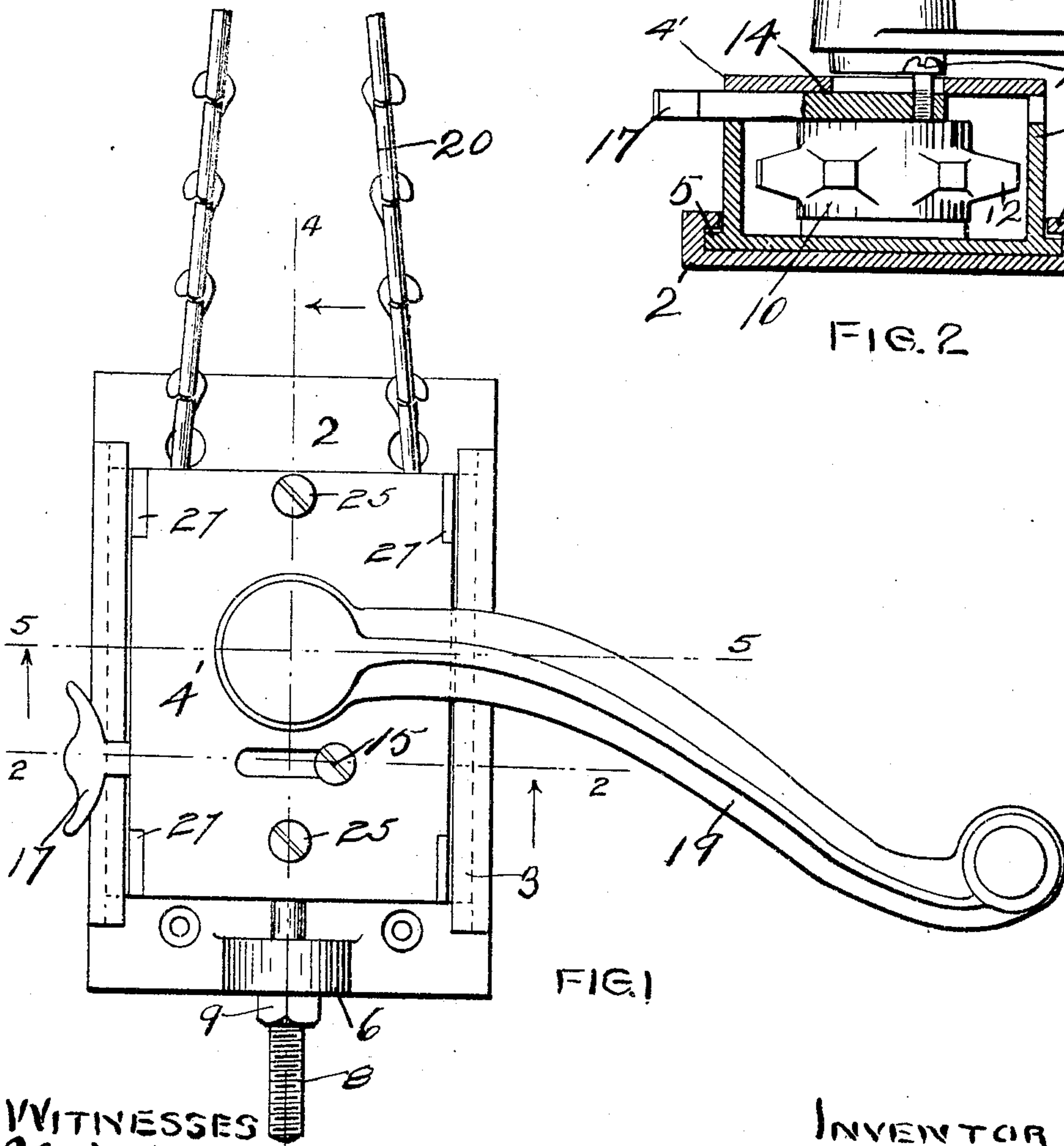
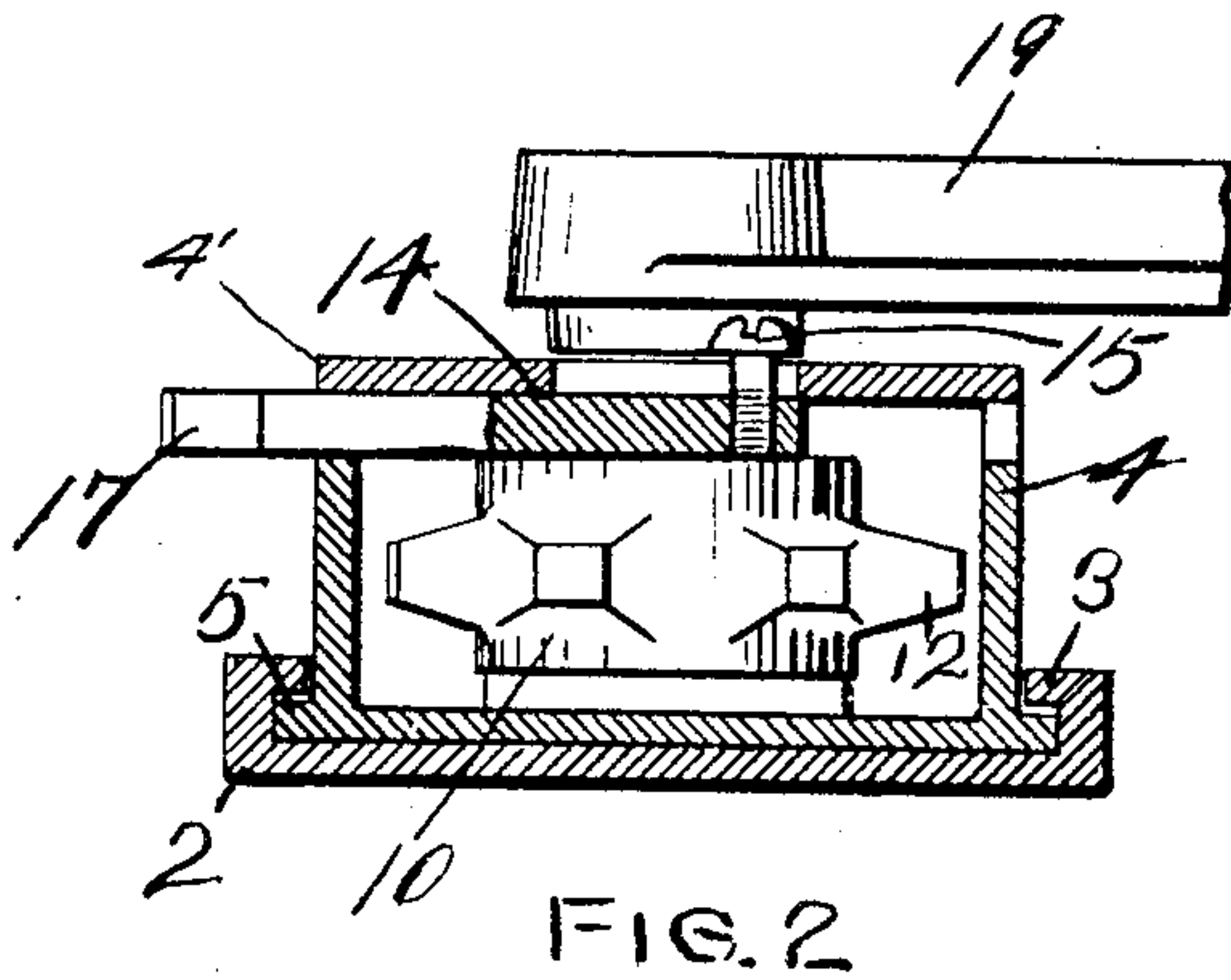
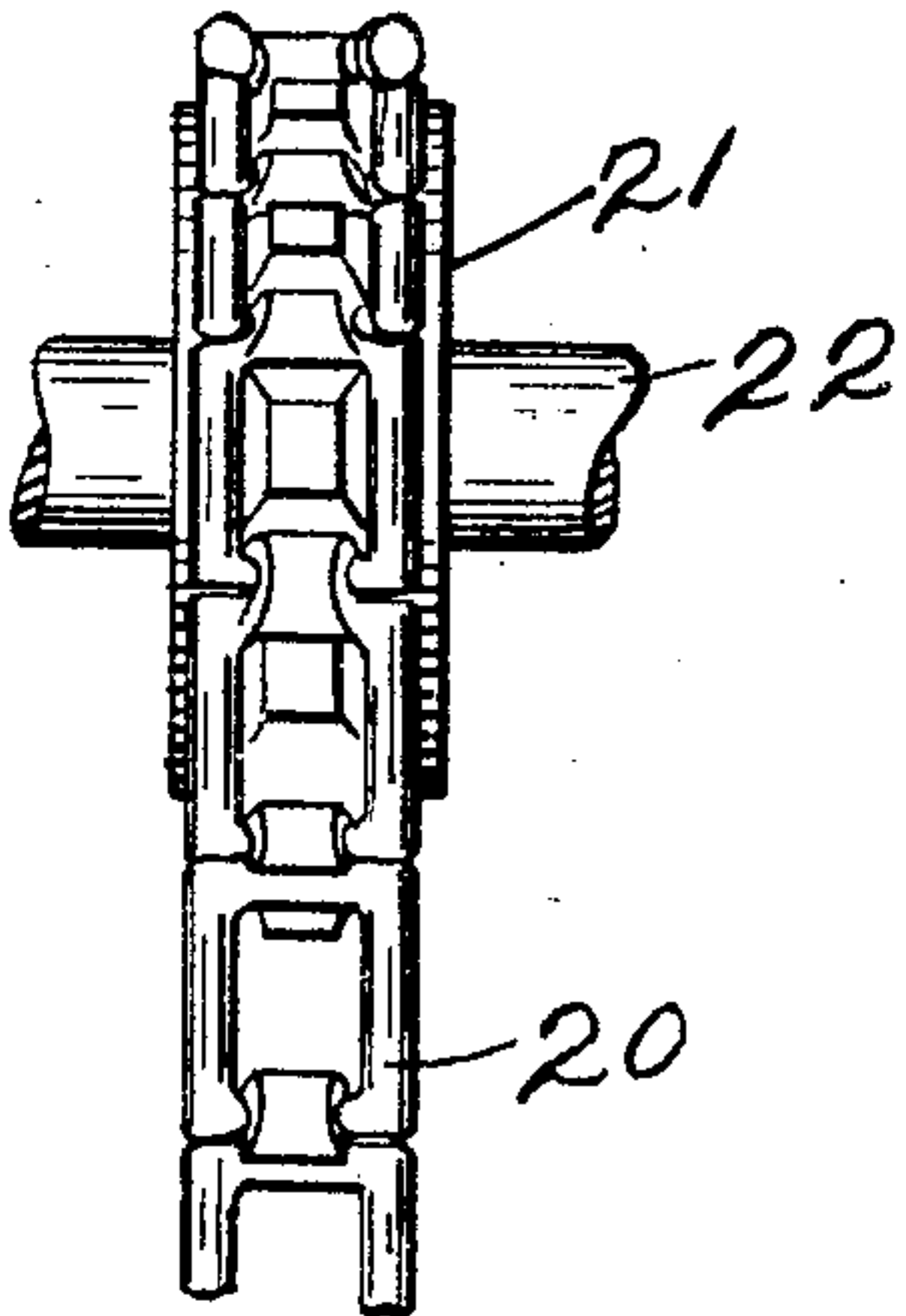
No. 774,841.

PATENTED NOV. 15, 1904.

S. M. HAUSER.  
AWNING ROLLER CHAIN BOX.  
APPLICATION FILED NOV. 23, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES  
E. J. Stauder  
O. G. Hanson.

INVENTOR  
SAMUEL M. HAUSER  
BY *Paul & Paul*  
HIS ATTORNEYS

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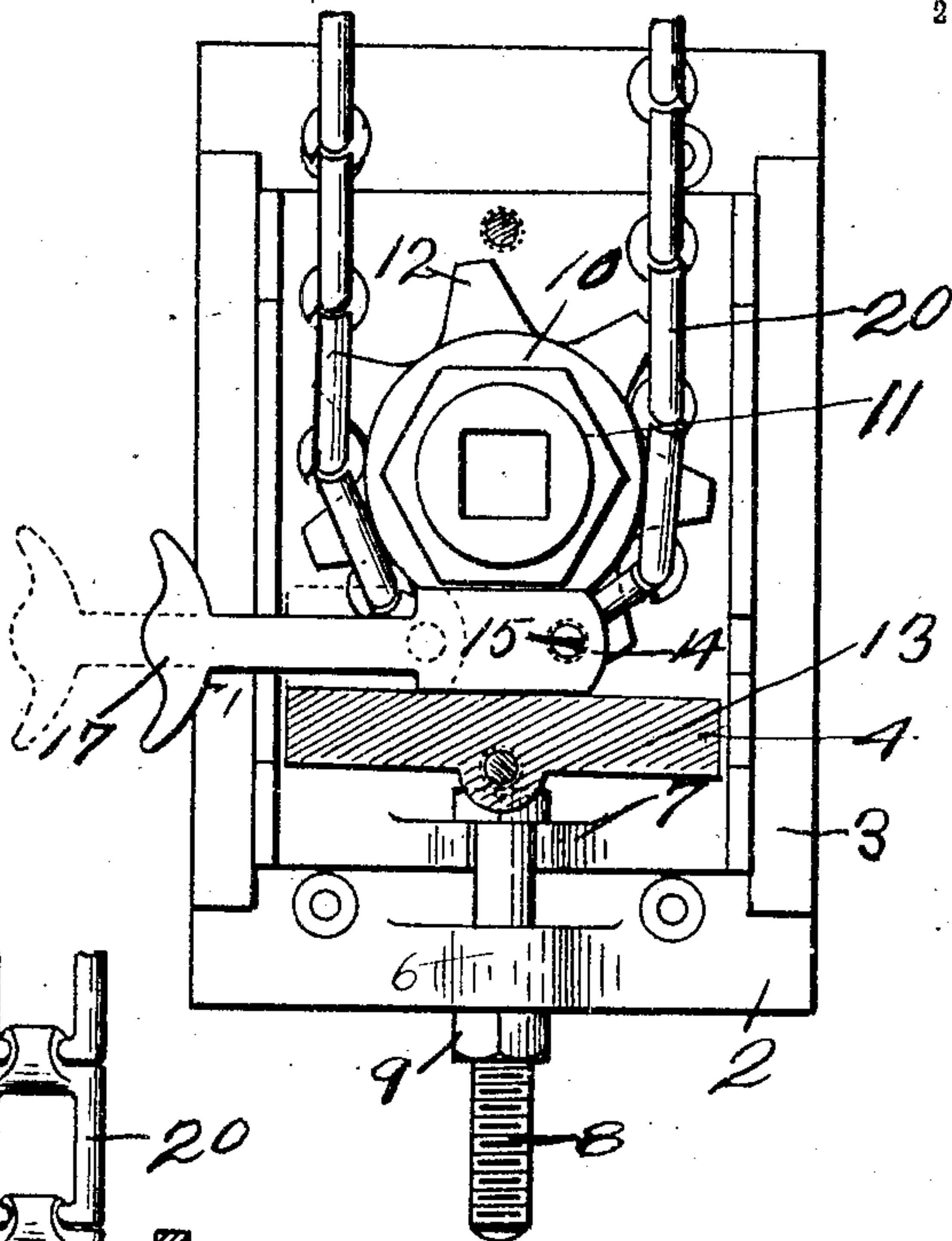


FIG. 3

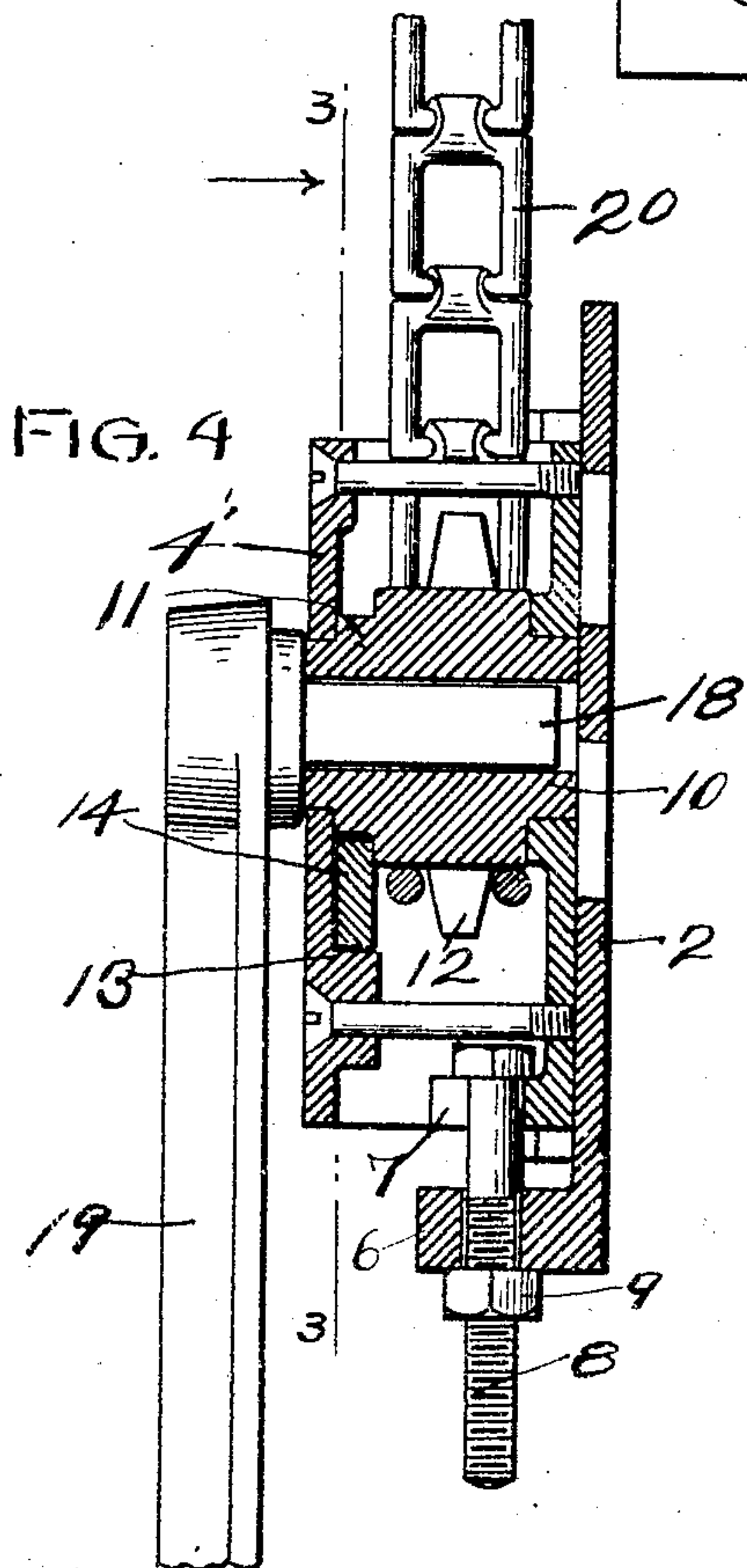


FIG. 4

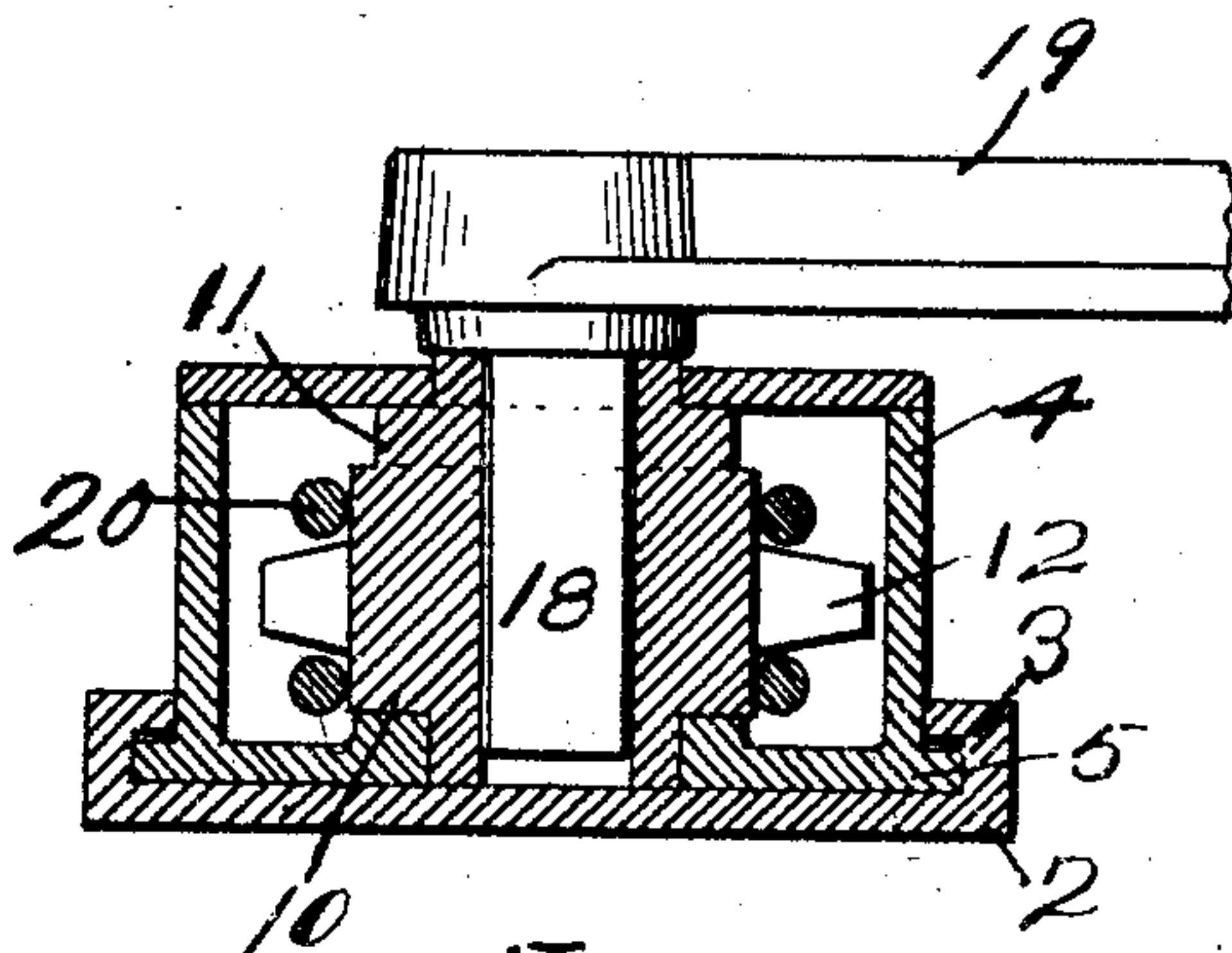


FIG. 5

WITNESSES

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# UNITED STATES PATENT OFFICE.

SAMUEL M. HAUSER, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR TO  
HERBERT G. NEAL, OF MINNEAPOLIS, MINNESOTA.

## AWNING-ROLLER CHAIN-BOX.

SPECIFICATION forming part of Letters Patent No. 774,841, dated November 15, 1904.

Application filed November 23, 1903. Serial No. 182,228. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL M. HAUSER, of Minneapolis, in the county of Hennepin, State of Minnesota, have invented certain new and useful Improvements in Awning-Roller Chain-Boxes, of which the following is a specification.

This invention relates to improvements in chain-boxes for operating awning-rollers; and the objects I have in view are to provide a chain-box that is simple in its construction, positive in its working, and practically indestructible.

The invention consists generally in the constructions and combinations hereinafter described, and particularly pointed out in the claim.

In the accompanying drawings, forming part of this specification, Figure 1 is a front elevation of a chain-box embodying my invention, a portion of the awning-operating chain extending above the box and a small section of the awning-roller with the upper part of the chain engaged therewith being also shown. Fig. 2 is a section on line 2 2 of Fig. 1 looking in the direction of the arrow. Fig. 3 is a section on line 3 3 of Fig. 4 looking in the direction of the arrow. Fig. 4 is a section on line 4 4 of Fig. 1 looking in the direction of the arrow, and Fig. 5 is a section on line 5 5 of Fig. 1 also looking in the direction of the arrow.

In the drawings, 2 represents a suitable back plate adapted to be secured to the front of a building or to any other suitable support by means of screws or nails passing through openings in the plate. This plate is provided with the vertical flanges 3, which form vertical guides at either edge of the plate. A vertically-sliding box 4 is arranged upon the back plate 2 and is provided with flanges 5, that engage the flanges at the edges of the plate. By this means the box is guided while it is being raised or lowered upon the back plate. A lug 7 is provided at the lower end of the box, and a lug 6 is provided at the lower end of the back plate. A bolt 8 engages these lugs and is provided with a nut 9. By screwing up this nut on the bolt the box

may be drawn downward, causing it to move over the back plate and tightening the operating-chain. Mounted in suitable bearings in said box is a hub 10, having a polygonal portion 11 and provided also with the teeth 12, which with said hub form a sprocket-wheel adapted to receive the operating-chain.

The box is provided in its lower portion with the inwardly-projecting ledge 13, and a sliding locking-bar 14 is arranged upon this ledge, and it is provided with a pin or screw 15, projecting through a slot in the forward portion of the box and with a handle 17, that projects through an opening in the side wall of the box. When the sliding bar 14 is in the position shown by the full lines in Fig. 3, the hub is locked and the chain and awning cannot be moved. The hub 10 is provided with a square or other polygonal opening adapted to receive a square or other polygonal projection 18 on the operating crank or arm 19. The box is open at the top and the awning-chain 20 passes into the box and around the hub, engaging the teeth thereon, and extends upward and engages a suitable sprocket-wheel 21 on the awning-roller 22. An opening is preferably provided in each side wall of the box, so that the locking-bar may be arranged to project from either side of the box, and the box may be used at either end of the awning.

There are several special advantages in this chain-box. The box in which the mechanical devices are contained is complete in itself. The arrangement of the box upon the back plate permits of a vertical adjustment, which is advantageous in many instances. By raising or lowering the box the chain may be loosened or tightened at will. Another special advantage results from the employment of a hub with a polygonal opening therein and with the cooperating projection provided upon the crank-arm. By this construction the face of the chain-box is left even and power is applied directly at the point of the strain, thus materially reducing the power required to raise or lower an awning. There is no knob or axle sticking out of the box to tear clothing or to be tampered with by those



mischievously inclined. The locking-bar extends between a solid flat face on the hub and the solid projection or ledge 13 on the inner wall of the box and effectually locks the awning. The strain of the awning upon the chain and of the chain upon the hub draws the corners of the polygonal hub so tightly against the locking-bar as to make it impossible to remove the bar without first introducing the projection upon the crank into the opening in the hub and giving the hub a slight backward turn. The front of the box 4' is preferably secured in position by means of suitable screws 25, and I prefer to provide at each corner of the box a projecting lug 27, which fits into a recess in the front plate 4'. This distributes the strain from the axle upon the lugs 27 and takes it off from the screws 25.

I claim as my invention—

The combination, with the back plate provided with vertical flanges at its edges, of the chain-box mounted upon said plate and pro-

vided with flanges engaging the flanges upon the back plate, said chain-box being also provided with an open top and with an inwardly-projecting ledge, a hub mounted in bearings in said box with its ends substantially flush with the outer walls of said box and provided with teeth adapted to be engaged by an awning-chain passing through the open top of the box and provided also with a polygonal central opening adapted to receive a correspondingly-shaped projection upon an operating-crank and with a polygonal surface at one end, and a reversible sliding locking-bar arranged upon said ledge and adapted to engage the polygonal portion of said hub, substantially as described.

In witness whereof I have hereunto set my hand this 6th day of November, 1903.

SAMUEL M. HAUSER.

In presence of—

RICHARD PAUL,  
A. O. PAUL.