

E. L. PITTS.
STATION INDICATOR.
APPLICATION FILED MAR. 10, 1909.

944,207.

Patented Dec. 21, 1909.

2 SHEETS—SHEET 1.

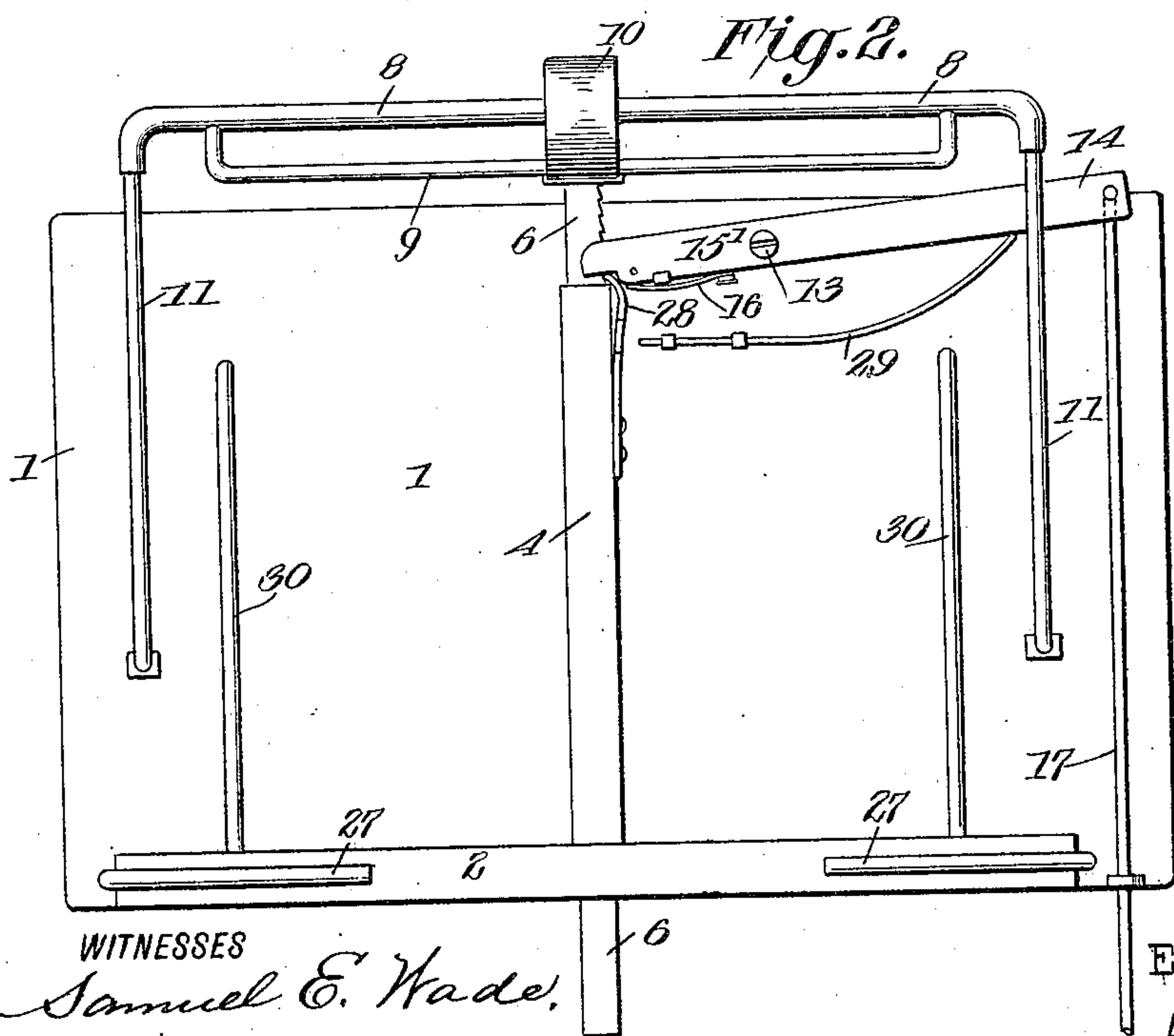
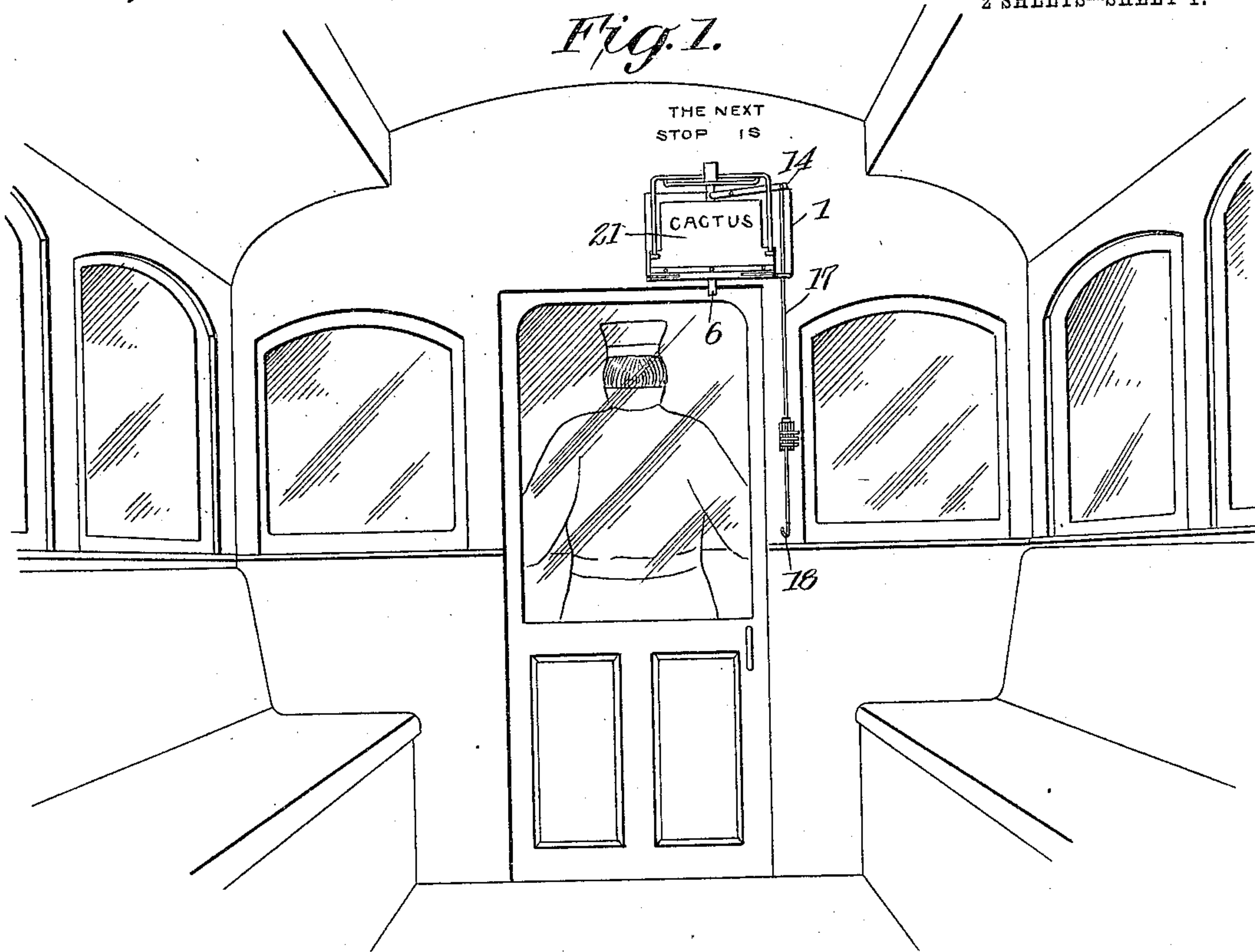
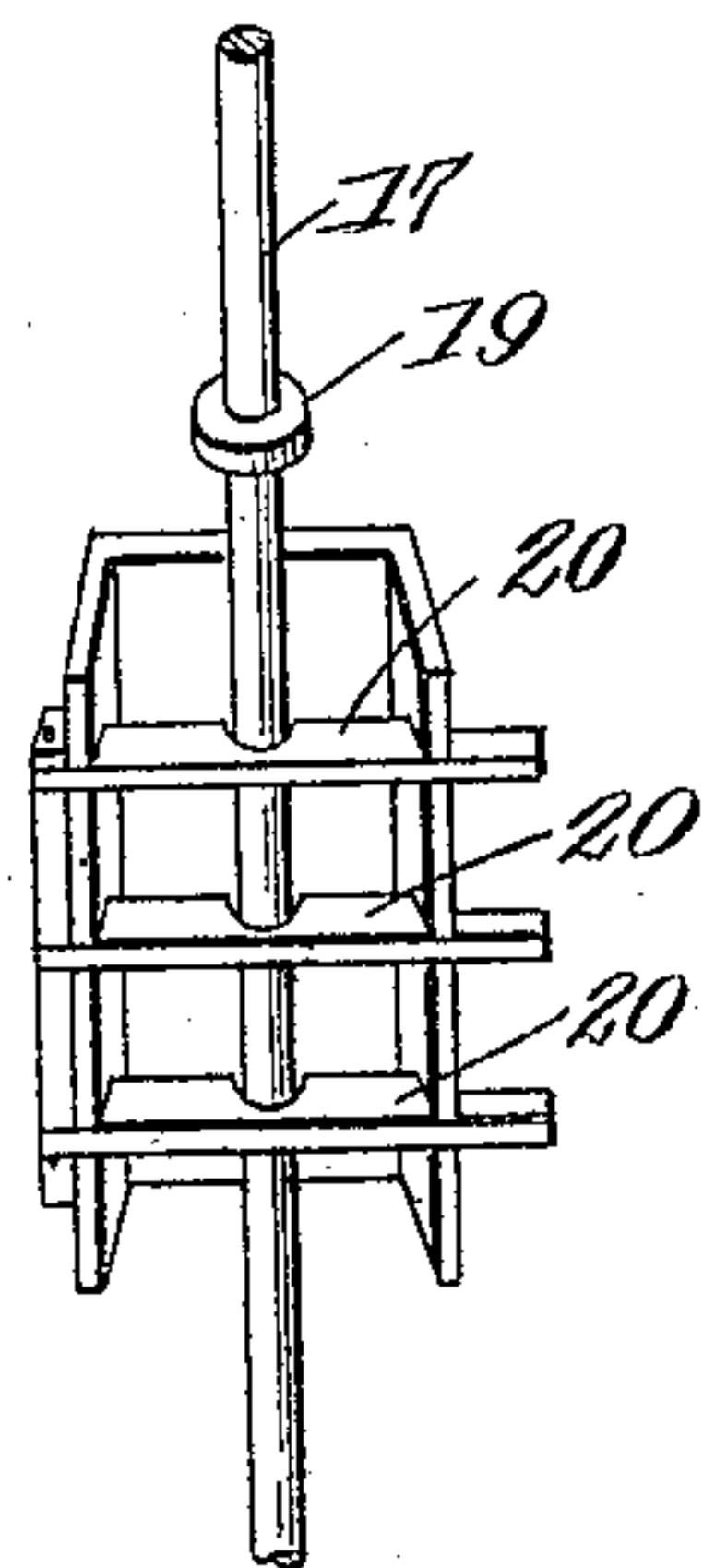


Fig. 3.



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2 SHEETS—SHEET 2.

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Fig. 6.

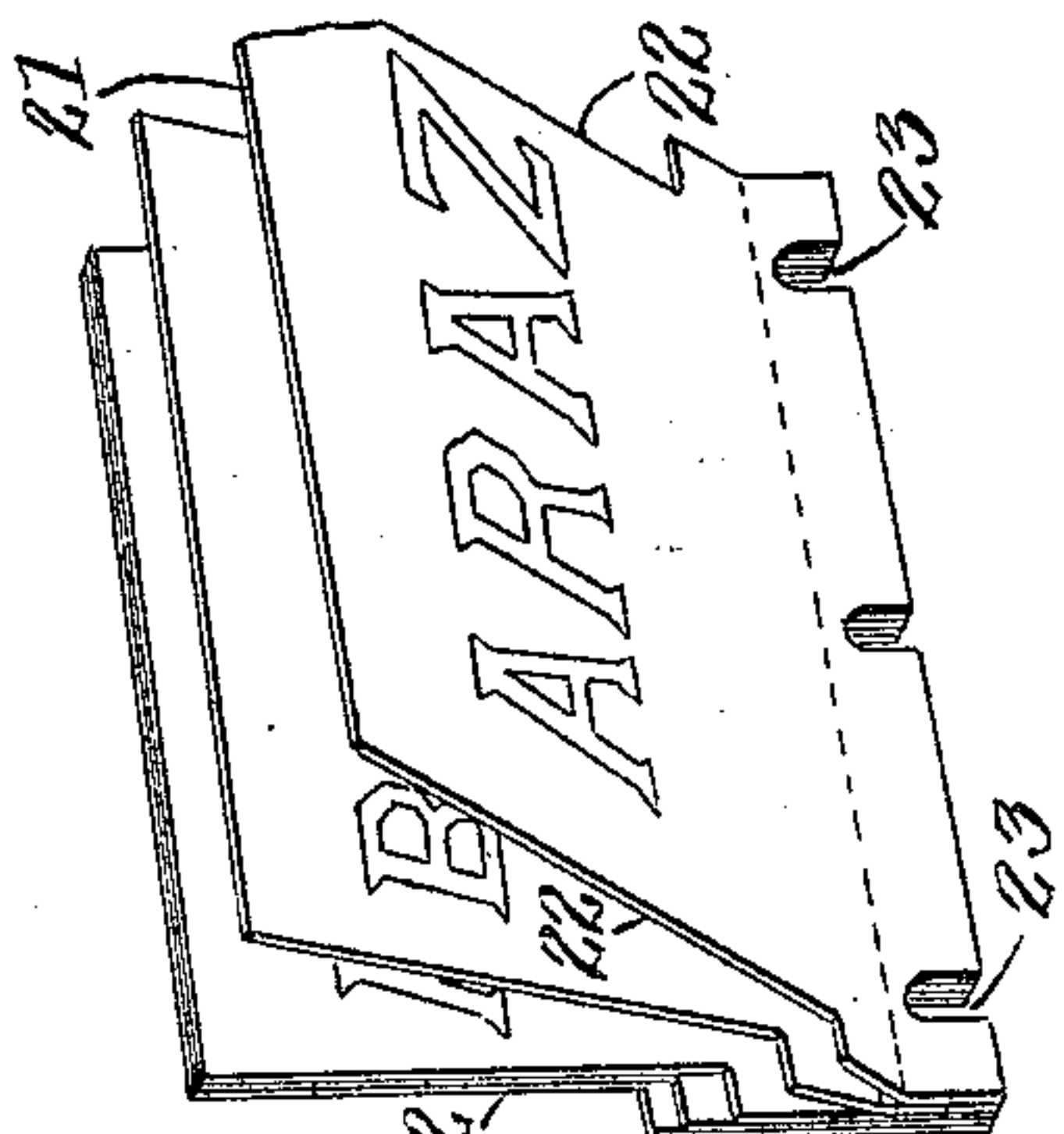


Fig. 4.

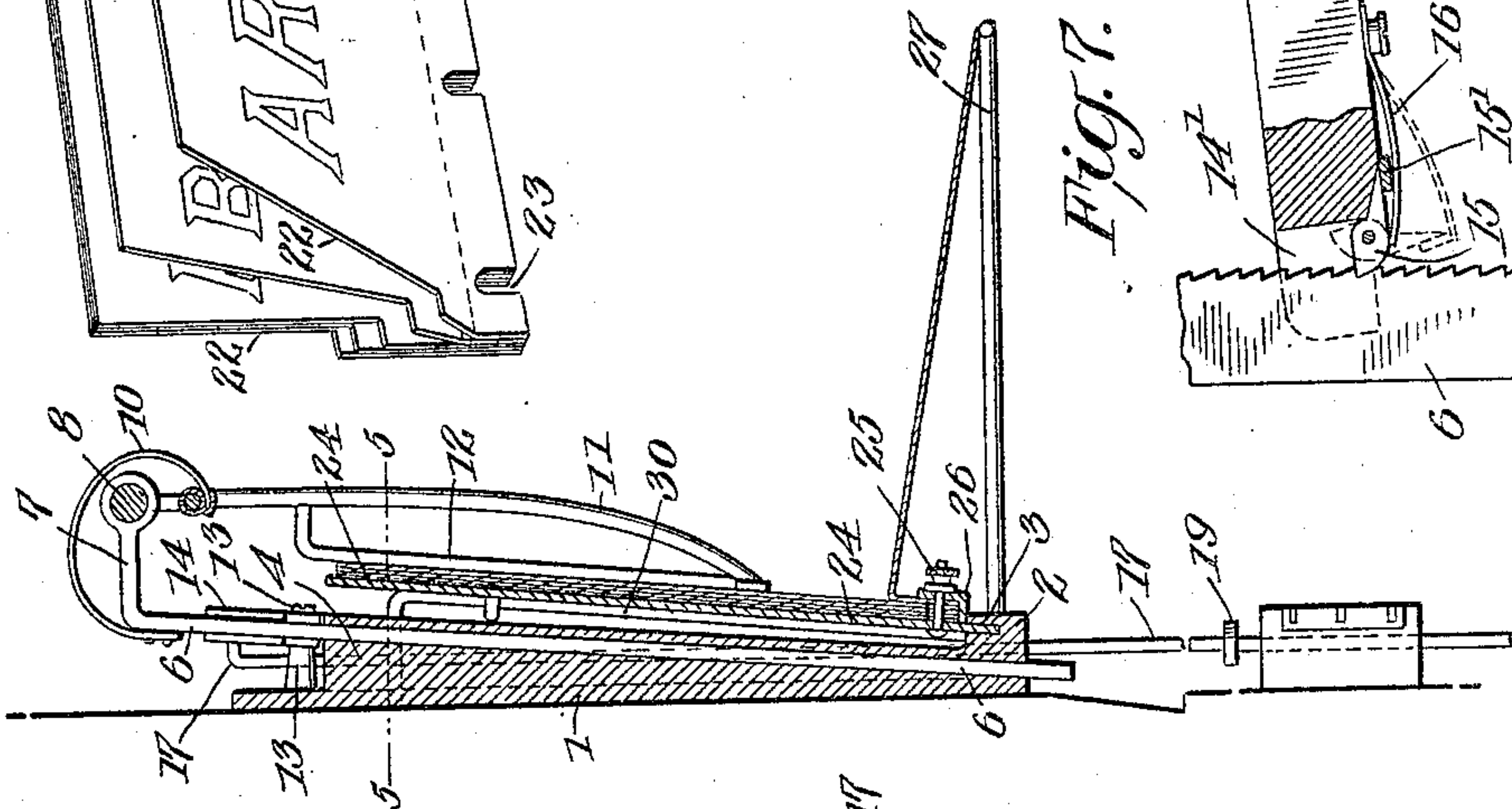


Fig. 7.

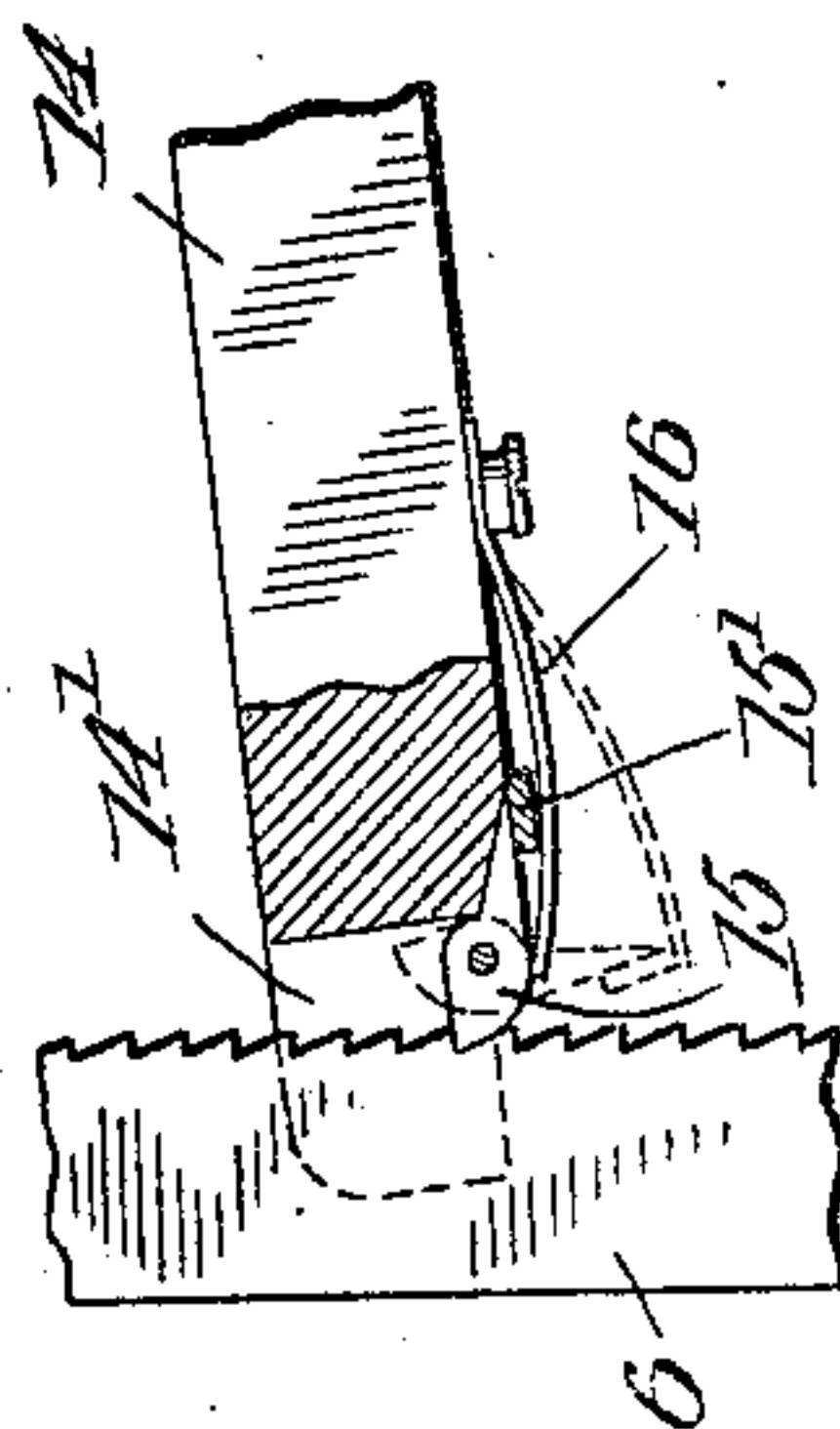


Fig. 3.

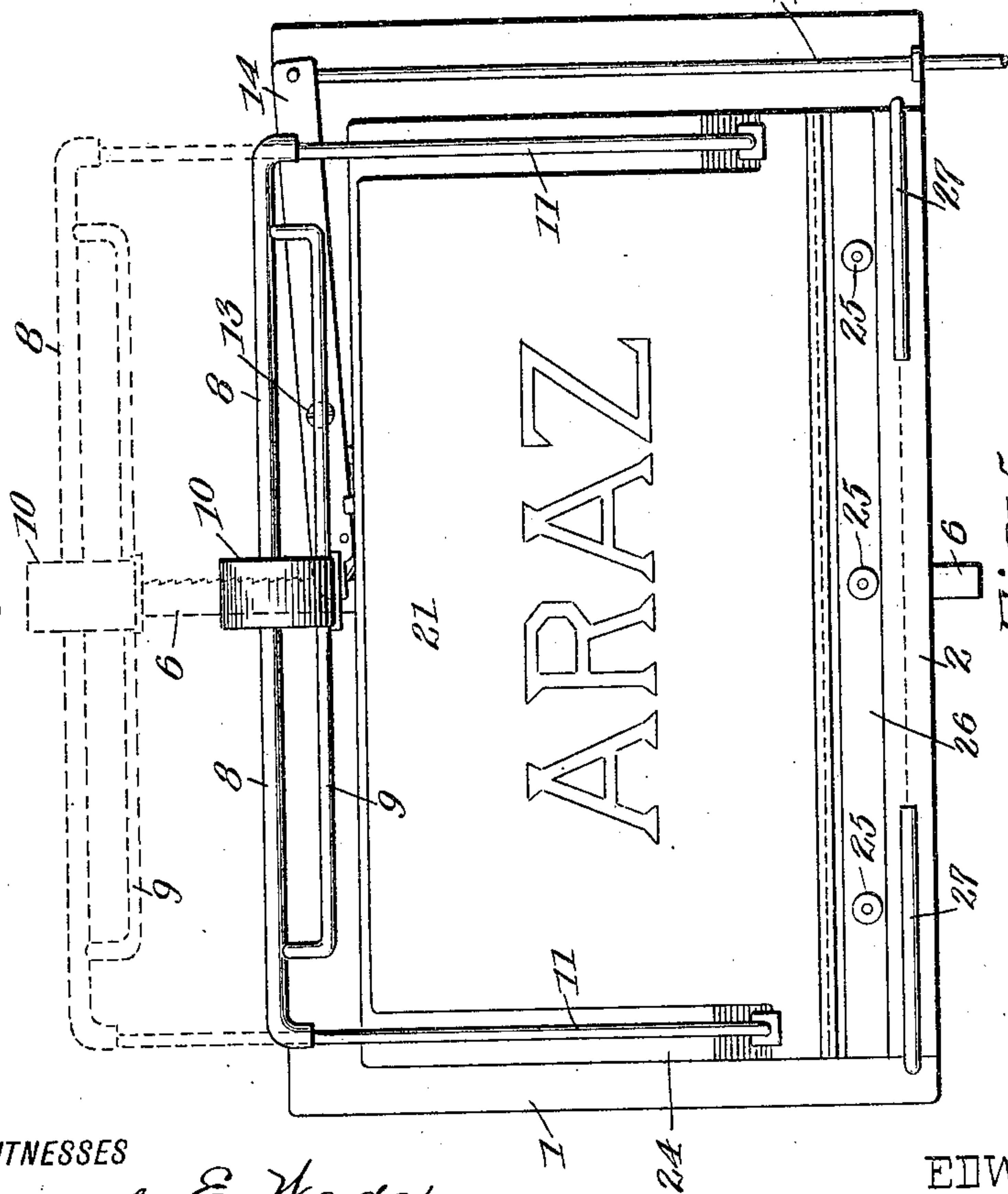
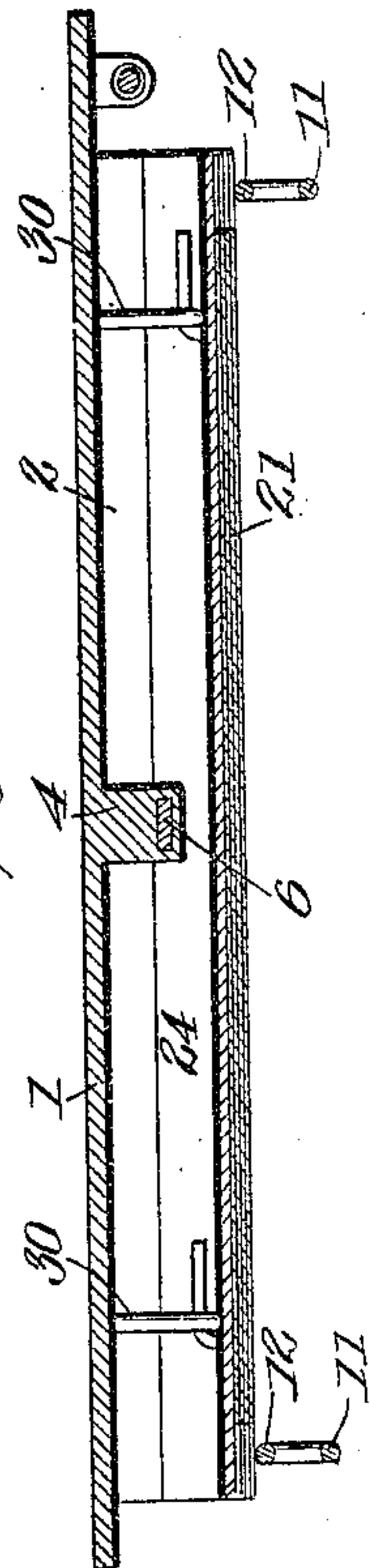


Fig. 5.



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UNITED STATES PATENT OFFICE.

EDWARD L. PITTS, OF YUMA, ARIZONA TERRITORY, ASSIGNOR OF ONE-THIRD TO ANDREW J. LOCKE AND ONE-THIRD TO JACOB E. LUDY, OF YUMA, ARIZONA TERRITORY.

STATION-INDICATOR.

944,207.

Specification of Letters Patent.

Patented Dec. 21, 1909.

Application filed March 10, 1909. Serial No. 482,472.

To all whom it may concern:

Be it known that I, EDWARD L. PITTS, a citizen of the United States, and a resident of Yuma, in the county of Yuma and Territory of Arizona, have made certain new and useful Improvements in Station-Indicators, of which the following is a specification.

My invention relates to improvements in means for indicating the stopping places along railways, street car lines and the like, and it consists in the combinations, constructions and arrangements hereinafter described and claimed.

An object of my invention is to provide a device which may be located in some conspicuous position and which may be operated by the brakeman or other employee so as to indicate the next point at which the train will stop.

A further object of my invention is to provide an improved means for accomplishing the above result which can be readily changed to indicate the stations on several different routes without dismantling the apparatus.

A further object of my invention is to arrange a device for displaying successively the names of the stopping points which may be operated to omit one or more of the station signs as desired.

Other objects and advantages will appear in the following specification and the novel features of the device will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawings in which similar reference characters indicate like parts in the several views, and in which—

Figure 1 shows the interior of a car provided with my station indicator. Fig. 2 is a detail view of the main operating mechanism. Fig. 3 is a view showing the relation of the signs to the operating mechanism. Fig. 4 is a central sectional view at right angles to Fig. 3. Fig. 5 is a sectional view along the line 5—5 of Fig. 4. Fig. 6 is a perspective view showing the arrangement of the sheets. Fig. 7 is a detail view of the operating lever and rack, and Fig. 8 is a perspective view showing an adjustable stop device.

In carrying out my invention I provide a main plate 1, which is preferably in the form of a casting, see Fig. 4. This plate is

provided with a projecting flange 2 at its bottom having a groove 3 on its upper side.

The casting 1 has a central portion 4, see Figs. 4 and 5, which is provided with an inclined slot, arranged to receive the rack bar 6, which is adapted to move up and down in the slot in the manner hereinafter indicated. The rack bar 6 is provided with a laterally extending portion 7 at its upper end, to which is pivotally secured a rock shaft 8, see Fig. 3. The latter has a loop 9, which is securely attached to one end of a spring 10, the other end of the spring being secured to the main rack bar 6. On the outer ends of the rock shaft 8, see Fig. 3, are downwardly depending curved arms 11, which are provided with contacting members 12 for a purpose hereinafter explained.

Pivotally secured at 13 to the plate 1 is a lever 14 provided with a slotted end 14' arranged to straddle the rack bar 6. Within the slot 14' a pawl 15 is pivotally mounted which is normally held in an extended position by means of a leaf spring 16, see Fig. 7, but which may be turned upwardly into the position shown in dotted lines in Fig. 7, when it will be held in this position by means of the spring. At the opposite end of the lever there is an operating rod 17, which extends downwardly and terminates in a handle 18. The rod is provided with a stop 19 arranged to engage pivoted bars 20, see Fig. 8, to limit the downward movement of the rod.

The indicator proper consists of a series of leaves or sheets 21 secured together in the manner shown in Fig. 6, each sheet having a cut away portion 22 on either side, the cut-away portion of the first sheet being greater than that of the second, and that of the second greater than that of the third, as clearly indicated in the figure. The bottom of the book thus formed is provided with a series of slots 23. The book thus formed may be secured to a firm backing 24, see Fig. 4, by clamping it through the medium of the screws 25 which enter the slots 23 between said backing and a flange 26, as clearly shown in the figure.

From the foregoing description of the various parts of the device, the operation thereof may be readily understood. The indicator is secured in a conspicuous position as in the forward part of the car and a

book having leaves with the names of the stations of the route is placed in position by inserting the backing 24 in the groove 3 provided for the purpose. The rack bar 6 being in its lowest position and the parts being arranged as shown, the uppermost leaf will show the first stopping place. When the station has been passed the brakeman or other operative pulls down on the rod 17, thereby causing the lever 14 to step up the rack 6, carrying with it the arms 11 and their contact portions 12, so that the first leaf, which as seen by Fig. 4, is in an inclined position, is left without any support, the arms 11 having cleared the first leaf. The first leaf thereupon turns down in the manner shown in Fig. 4 into contact with the laterally projecting rest 27, the contact members 12 retaining the other leaves in position through the force of the spring 10. The rack is kept in its suspended position by the leaf spring 28, see Fig. 2. The lever 14 is returned to its original position by means of the spring 29, see Fig. 2, so that at each depression of the rod the rack and its retaining arms will be forced upwardly and a sheet will be permitted to drop. In case the operator wishes to skip one sheet he throws back the uppermost stop member 20, see Fig. 8, thereby permitting the rod to descend to the next stop member and permitting two sheets to fall instead of one. If he wishes to pass by two of the sheets, he throws back two of the stop members 20, thereby permitting three sheets to fall, and so on. When the end of the route is reached the projection 15' on the pawl 15 may be turned downwardly, thereby bringing the pawl into the position shown in dotted lines in Fig. 7. Now by drawing back the spring 28, the rack and the arms will descend to their original positions.

The books with the appropriate signs may be assembled as heretofore explained and substituted one for the other without dismantling the mechanism. By turning the contact members 12 upwardly where they may be held by means of the spring 10, the arms will be out of the way, so that a new book may be inserted. In order to insure the dropping of the leaves I have arranged the supports 30 against which the backing 24 of the books is clamped by means of the spring arms, so that the leaves are in a tilted position. It will be noted that the hinged portions of the sheets are arranged

in a series of steps, each hinge being higher than the one immediately preceding it. This insures the free dropping of each leaf when it is released.

The lever 14 may obviously be operated from without the car by a cord or other flexible member as well as from within.

I claim—

1. In a station indicator, a main plate, a rack carried thereby, spring arms secured to said rack, a series of leaves carried by said plate, each of said leaves having cut away portions on either side in alinement with said spring arms, and means for moving said rack to bring said arms in registration with the cut away portions of the sheets successively, thereby permitting the sheets to drop successively.

2. In a station indicator, a main plate provided with a slot, a rack carried by said main plate and arranged to slide in said slot, a lever for operating said rack, spring arms secured to said rack, a series of sheets carried by said plate and disposed in a normally inclined position, each of said sheets having a cut away portion at each end thereof in alinement with said spring arms, the cut away portions of each sheet being less in extent than those of the preceding sheet, and a handle for operating said lever to bring said spring arms into registration with the cut away portions of said sheets, thereby permitting the latter to tilt downwardly in succession.

3. In a station indicator, a main plate provided with a slot, a rack carried by said main plate and arranged to slide in said slot, a lever having a pivoted pawl for operating said rack, spring arms secured to said rack, a series of sheets carried by said plate and disposed in a normally inclined position, each of said sheets having a cut away portion at each end thereof in alinement with said spring arms, the cut away portions of each sheet being less in extent than those of the preceding sheet, a handle for operating said lever to bring said spring arms into registration with the cut away portions of said sheets, thereby permitting the latter to tilt downwardly in succession, and means for regulating the movement of the handle.

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Witnesses:

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