

No. 797,861.

PATENTED AUG. 22, 1905.

A. MELGAREJO.
CAR PLATFORM.

APPLICATION FILED MAY 16, 1905.

2 SHEETS—SHEET 1.

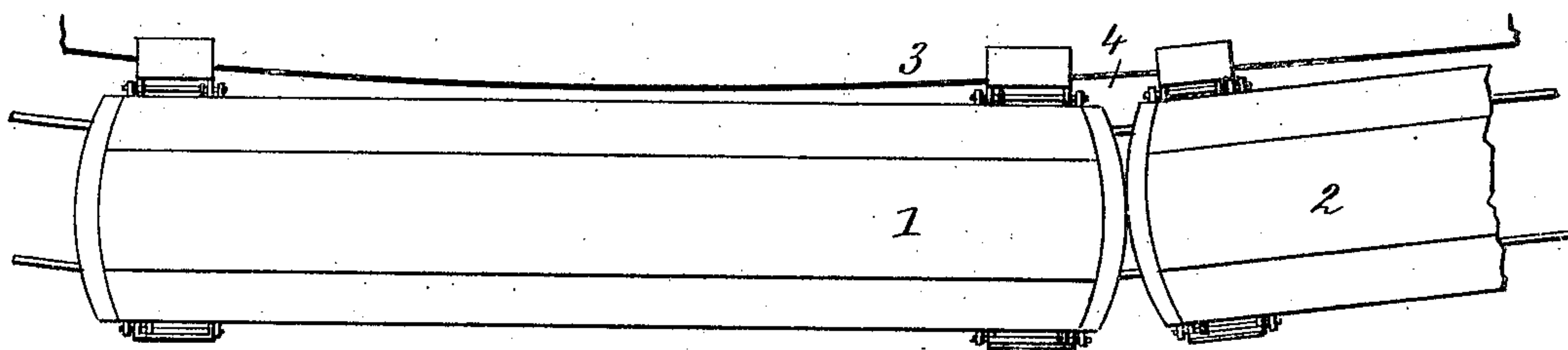


FIG. 1

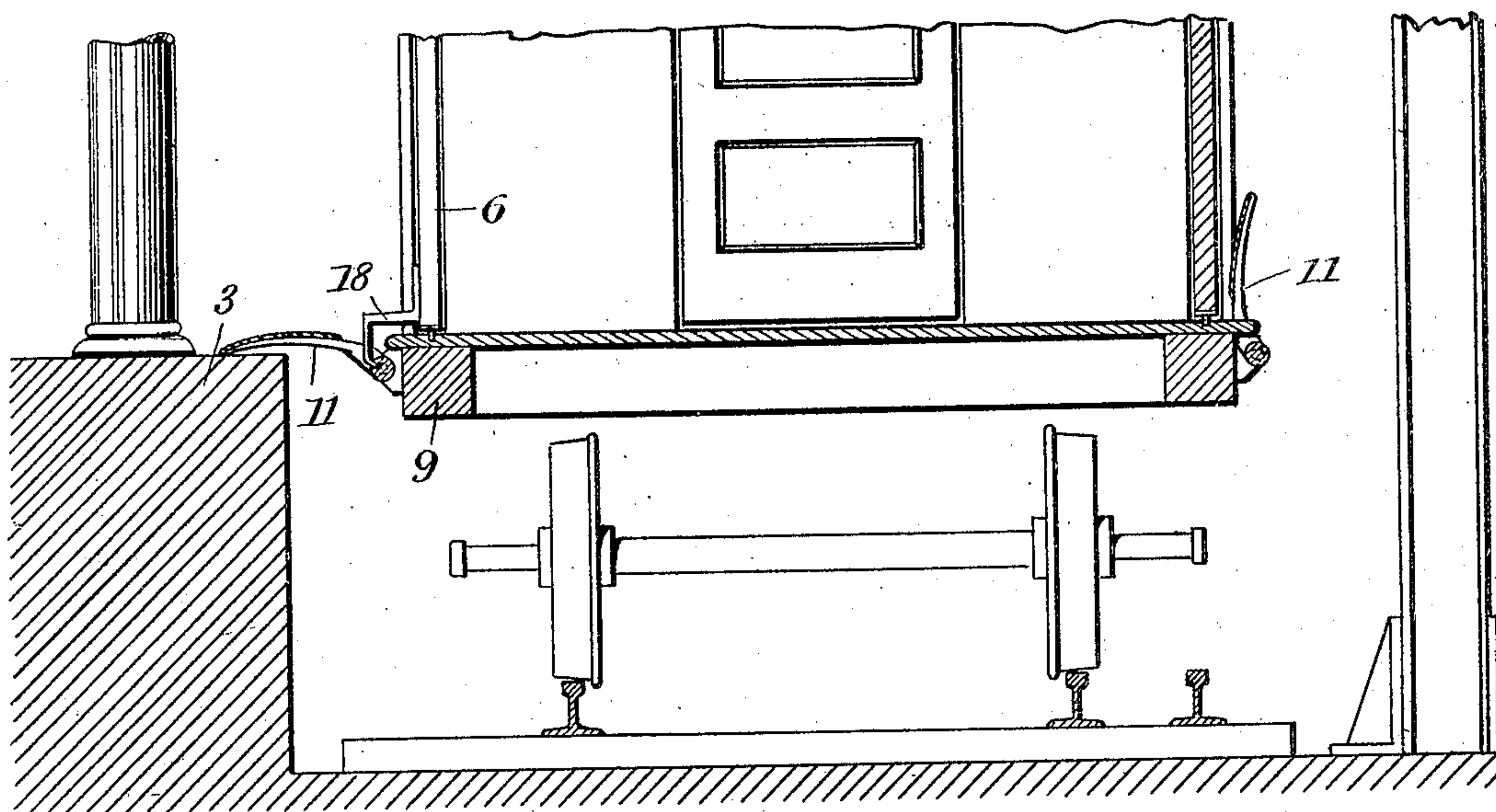
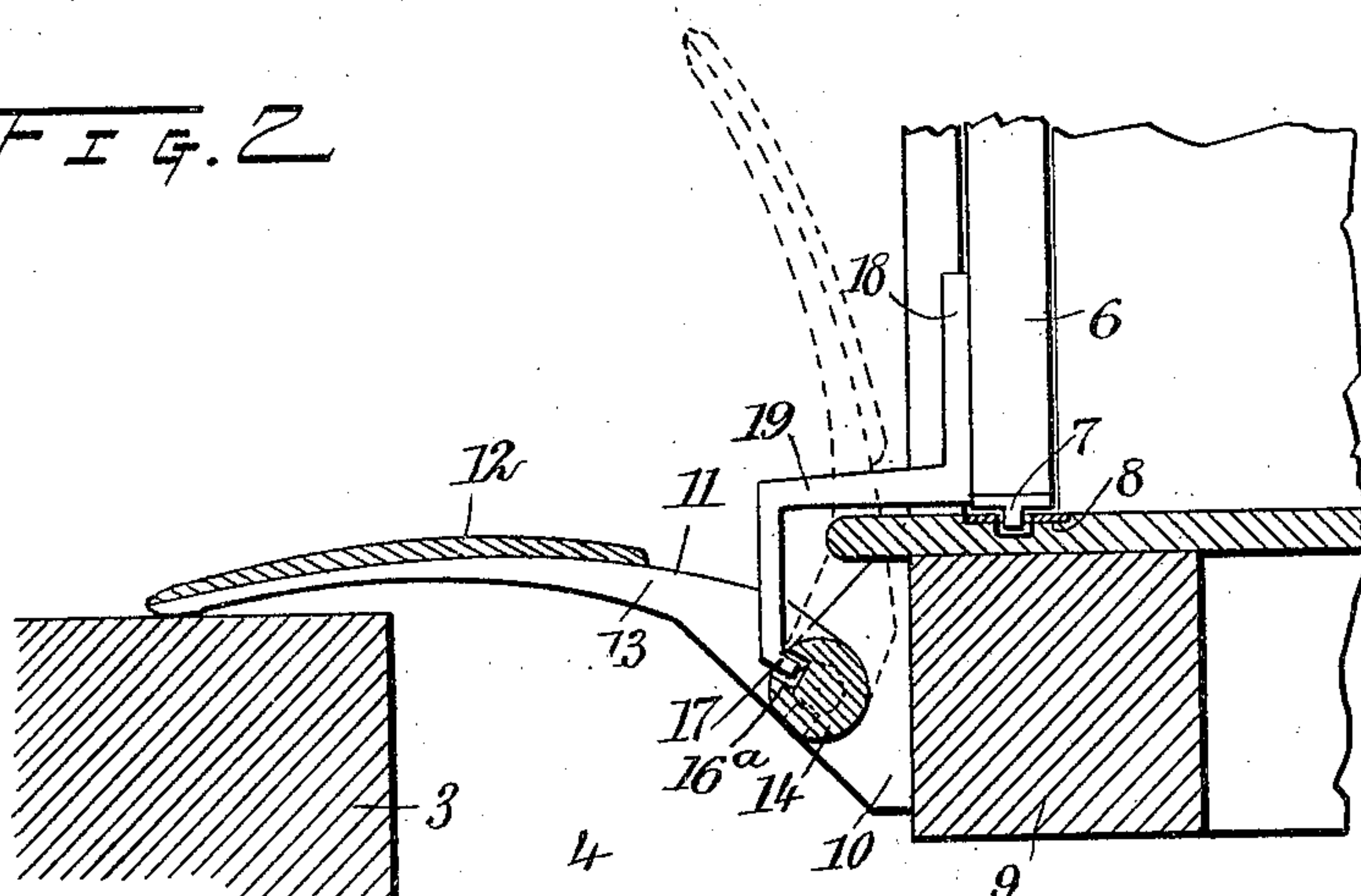


FIG. 2



WITNESSES:

John J. Kiddle
J. D. Ammen

FIG. 3

INVENTOR

Augustine Melgarejo

BY *Wm. M. M.*
ATTORNEYS

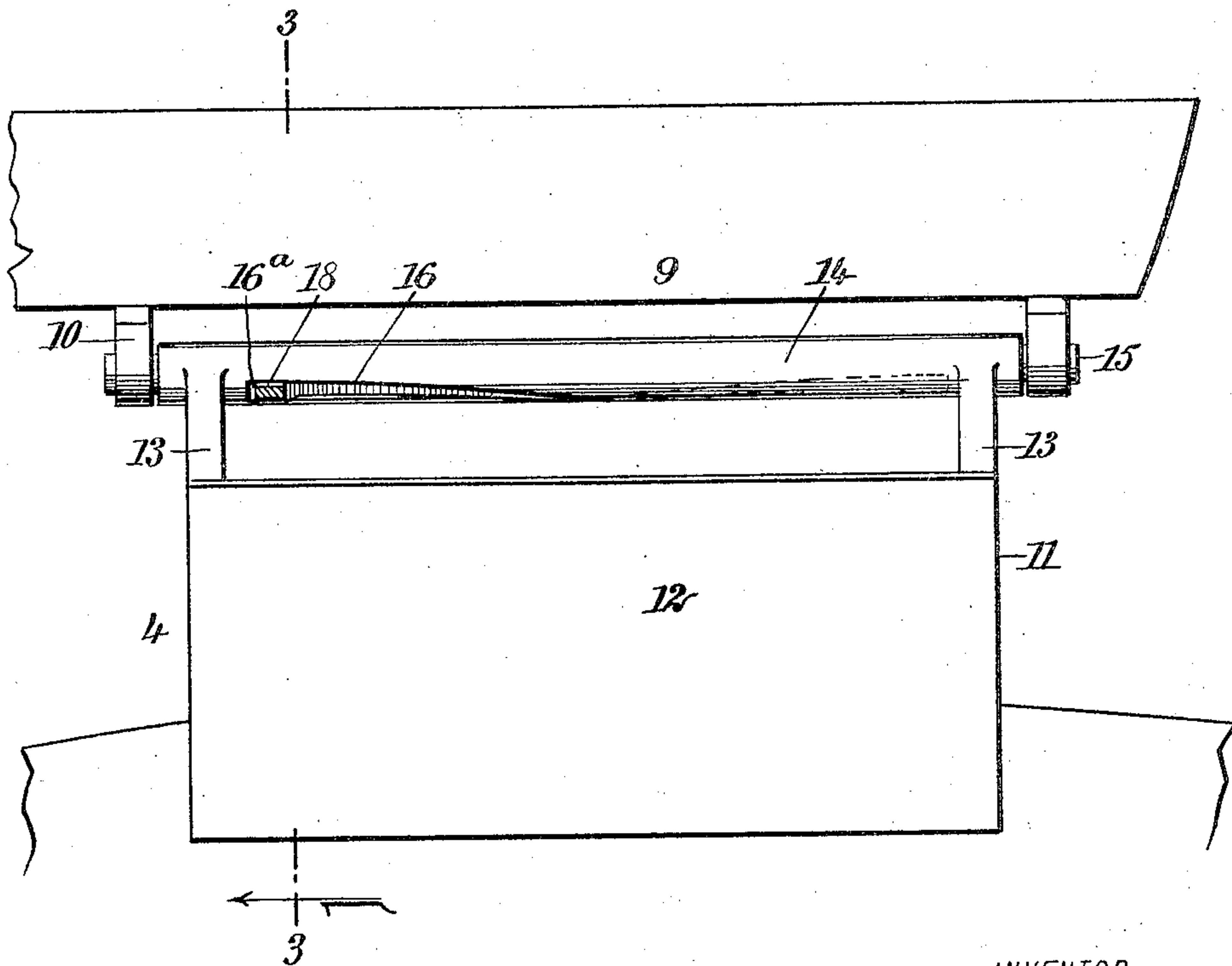
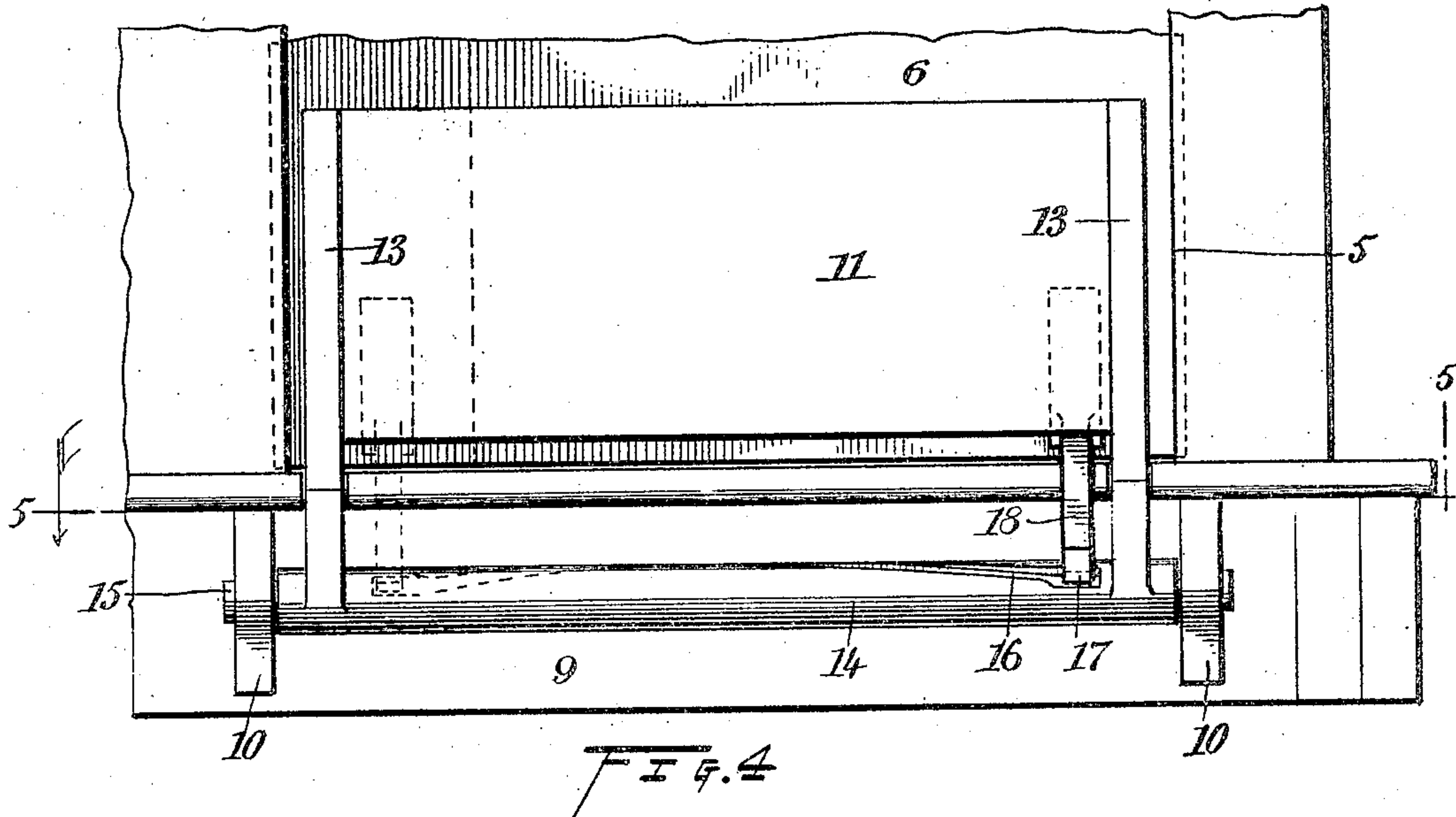
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WITNESSES:

John J. Kille
J. D. Bremer

FIG 5

INVENTOR

Augustine Melgarejo

BY

Wm. M. M.
ATTORNEYS

UNITED STATES PATENT OFFICE.

AUGUSTINE MELGAREJO, OF HARRISON, NEW YORK.

CAR-PLATFORM.

No. 797,861.

Specification of Letters Patent.

Patented Aug. 22, 1905.

Application filed May 16, 1905. Serial No. 260,696.

To all whom it may concern:

Be it known that I, AUGUSTINE MELGAREJO, a citizen of Mexico, and a resident of Harrison, in the county of Westchester and State of New York, have invented a new and Improved Car-Platform, of which the following is a full, clear, and exact description.

This invention relates to railroad-cars, and especially to the construction of their platforms, the general purposes of the invention being to avoid accidents to passengers in getting on or off at stations and to expedite traffic.

In railway operation gaps sometimes occur between the car and the station-platform at the doorways through which the passengers must pass. This defect frequently becomes much exaggerated on curves. Such circumstances as those suggested have caused many accidents to occur by persons falling into the space at the points referred to, and it is the object of this invention to produce an improved platform adapted to overcome the defects stated above.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan showing a short section of a curved platform and two adjoining cars supposed to be standing at a station. Fig. 2 is a transverse section through the car-platform and the station-platform, illustrating how the device bridges the gap referred to. In this view parts of the truck are omitted, as will appear. Fig. 3 is a section showing an edge of the car-platform and contiguous parts upon an enlarged scale, as will appear. In this view the extension or step which bridges the gap is shown in dotted lines in a folded position. This section is taken upon the line 3 3 of Fig. 5. Fig. 4 is a side elevation of a portion of a car at the doorway and showing the extension-step folded at the side thereof; and Fig. 5 is a plan of an extension-step and a portion of the car-sill, being substantially a section taken upon the line 5 5 of Fig. 4.

Referring more particularly to the parts and especially to Fig. 1, 1 and 2 represent two adjacent cars of a train supposed to be standing at a curved platform 3. Under these circumstances a wide gap or space 4 is formed at the ends of the cars where the doorways are located. These same conditions occur when cars are on the inside of a curve or on a straight line.

Referring especially to Figs. 2 to 5, at the

doorway 5 a sliding door 6 is located, the lower edge whereof is provided with a tongue 7, running in a guiding-strip 8 of any common form, such as that shown.

In applying my invention I apply to the outer side of the side stringer 9 of the car-body a pair of bearing-blocks 10, which are located, as indicated in Fig. 4, each side of the doorway. Between these bearing-blocks 10 an extension-step 11 is rotatably mounted. This step comprises a slightly-curved body or board 12, which is rigidly attached to arms 13, which project laterally from a rotatable shaft 14, the said shaft having reduced extremities or necks 15, which are rotatably mounted in the bearing-blocks 10, as indicated. In the body of the shaft 14 between the arms 13 there is provided a helical groove 16. Into this groove projects the tip 17 of a bracket 18, which bracket is rigidly attached to the outer edge of the door 6, near the lower portion thereof, and formed with a bent arm 19, which reaches over a point near the shaft 14, as indicated.

Referring now especially to Fig. 4, it is assumed that the door 6 would be opened by moving the same toward the left of the figure. In such case the helical groove 16 would be right-handed, as indicated, and from this arrangement when the car-door is opened the shaft 14 will be rotated so that its upper side moves away from the car-body. The groove is so placed upon the shaft that when the door is folded or closed the arms 13 will extend upwardly substantially vertically, so that the step will assume practically the position in which it is represented in dotted lines in Fig. 3. When the door is opened to allow passengers to get on or off, the step will be swung to the position in which it is shown in full lines. In this way the placing of the extension-step in position is automatically effected.

Attention is called to the fact that when a train is not standing at a platform the extension-steps are folded closely against the sides of the cars, so as not to come into contact with obstructions near the roadway. This feature is especially valuable in the application of the invention to cars running in tunnels or in similar situations where clearance is necessarily small.

That end of the groove 16 which is occupied by the tip of the bracket when the step is down is widened out, as indicated in Figs. 2 and 5, so as to form an enlarged pocket 16^a. In this way an appreciable clearance or "play"

arises in the connection between the shaft 14 and the bracket. This play enables the step to adjust itself to slight variations in level between the station-platforms and the car-platforms and permitting the outer edge of the step being supported in a more or less elevated position, as will be readily understood.

While the drawings illustrate especially the advantages of the invention as applied to gaps at the platform at curves, it must be understood that these gaps occur also where the platforms and track are straight. They occur also whether the train is standing on the convex or concave side of the curve, as will be inferred by reference to Fig. 1.

At present there is considerable delay in transferring people on and off the cars, as they must advance with great caution to avoid accident at the gap referred to. When my invention is in use, the passengers can hurry without danger, and in this way the invention will materially facilitate passenger traffic.

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

1. A car-platform having an extension-step, a horizontal shaft carrying said step and having a helical groove formed therein, in combination with a sliding door, and a member moving with said door and engaging said groove to rotate said shaft.

2. A car-platform having an extension-step,

means for supporting said step upon a substantially horizontal axis of revolution, means for normally maintaining said step in a substantially vertical plane, means for rotating said step into a substantially horizontal position, and means for yieldingly supporting said step when in said horizontal position.

3. A car-platform having an extension-step, a shaft to which said step is attached, means for supporting said shaft in a substantially horizontal position near the doorway of the car, said shaft having a helical groove in the surface thereof, a sliding door, and a member moving with said door and projecting into said helical groove to rotate said shaft, said groove having an enlarged pocket at one extremity thereof whereby a yielding connection is produced.

4. A car-platform having an extension-step rotatably attached thereto, a shaft in connection with said platform, the rotation whereof actuates said step, a sliding door, said shaft having a helical groove, and a projection from said door engaging said groove.

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

AUGUSTINE MELGAREJO.

Witnesses:

CHAS. EDW. LONG,
ROBERT COWARD.