

No. 673,986.

Patented May 14, 1901.

C. H. KENNEY.
CUSPIDOR FOR RAILWAY CARS.

(Application filed June 12, 1900.)

(No Model.)

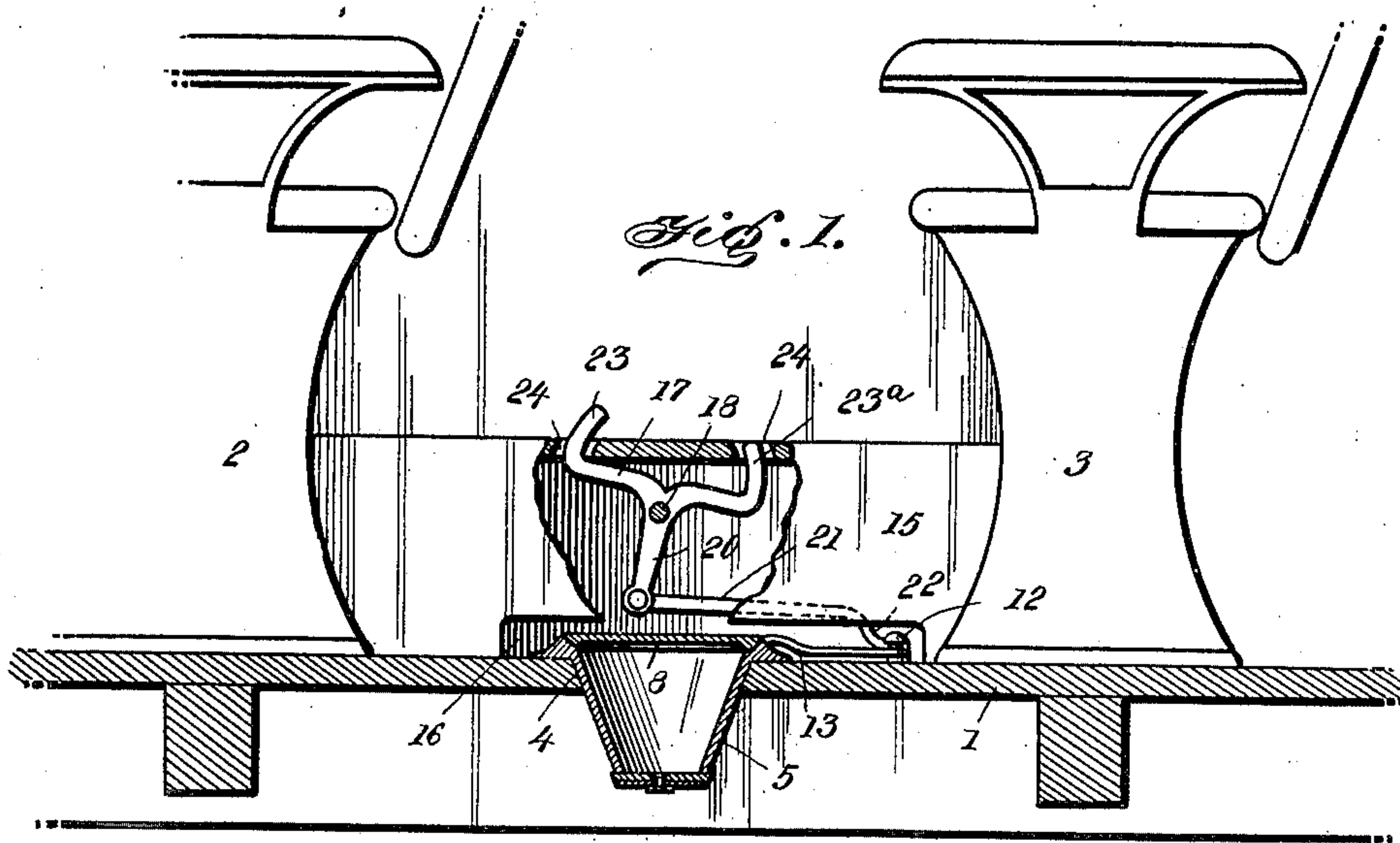


Fig. 2.

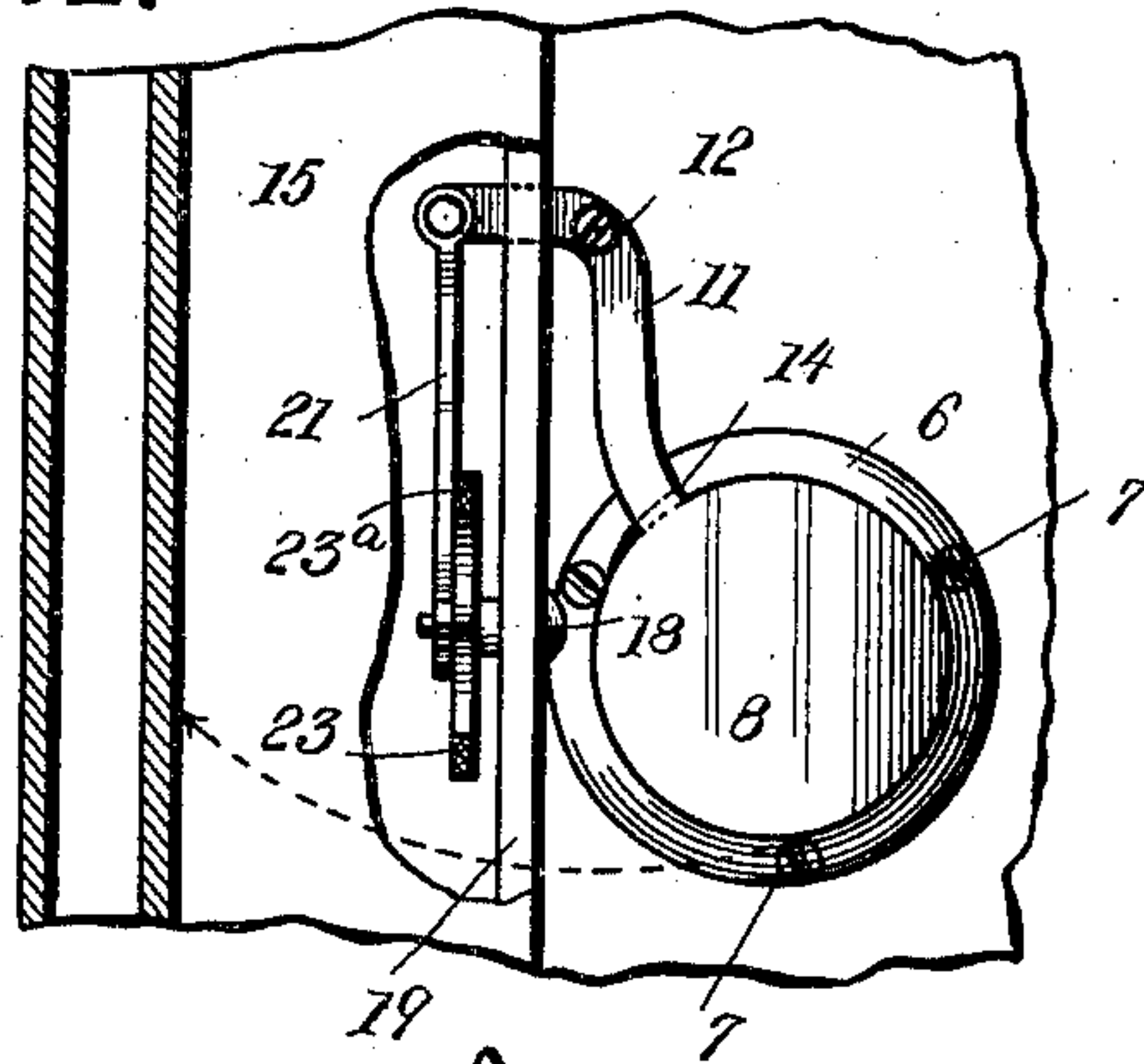


Fig. 3.

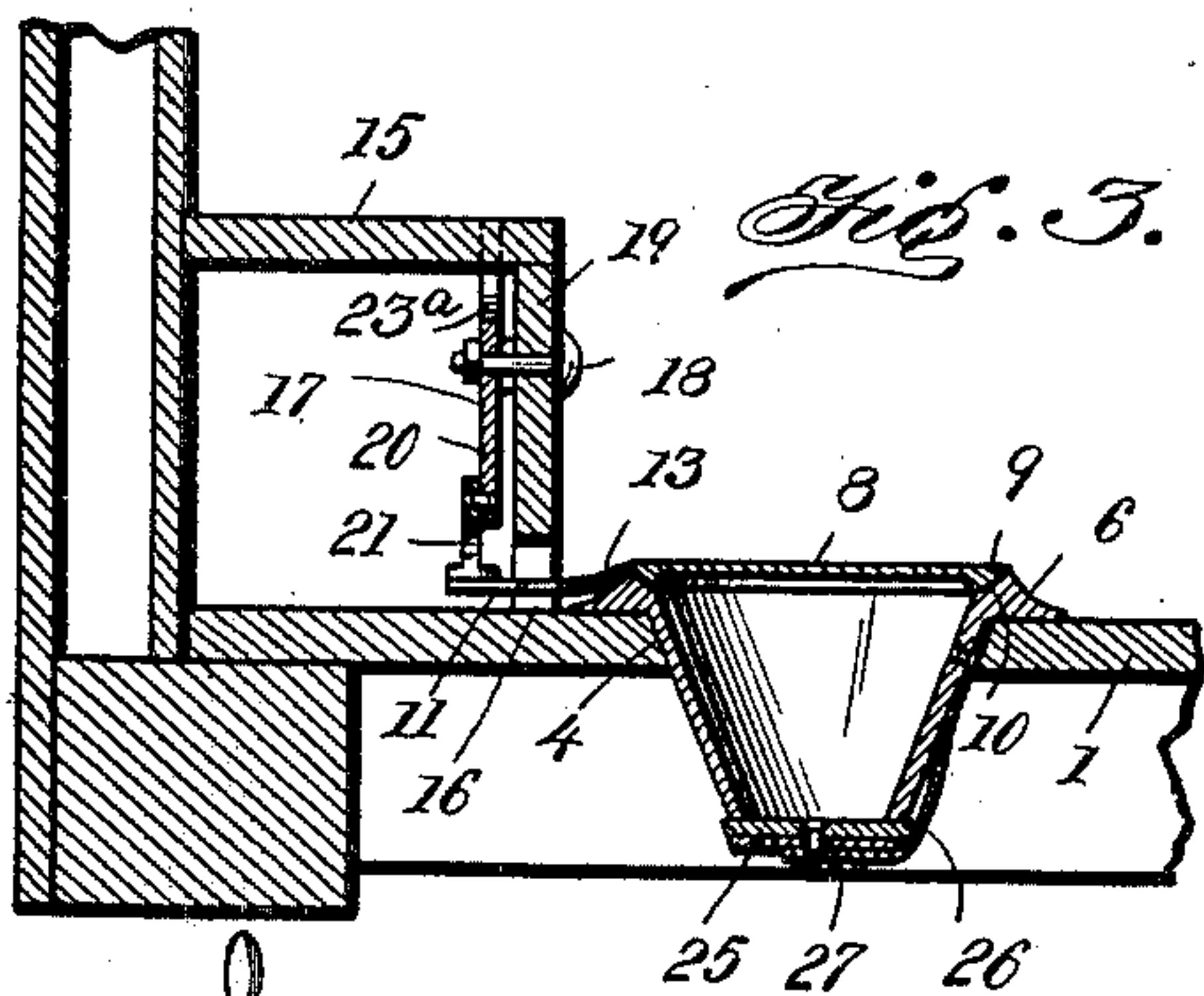


Fig. 5.

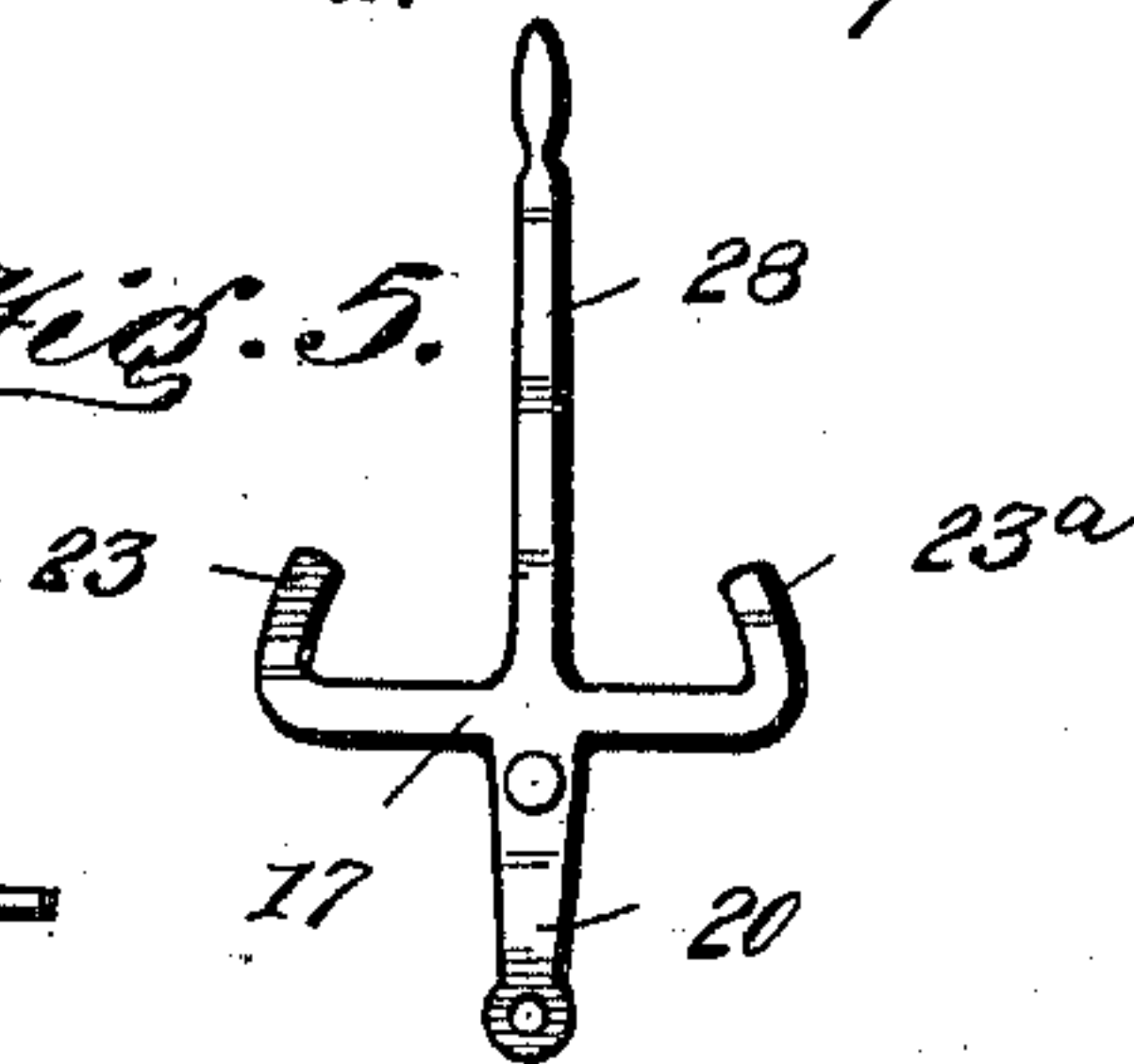


Fig. 4.

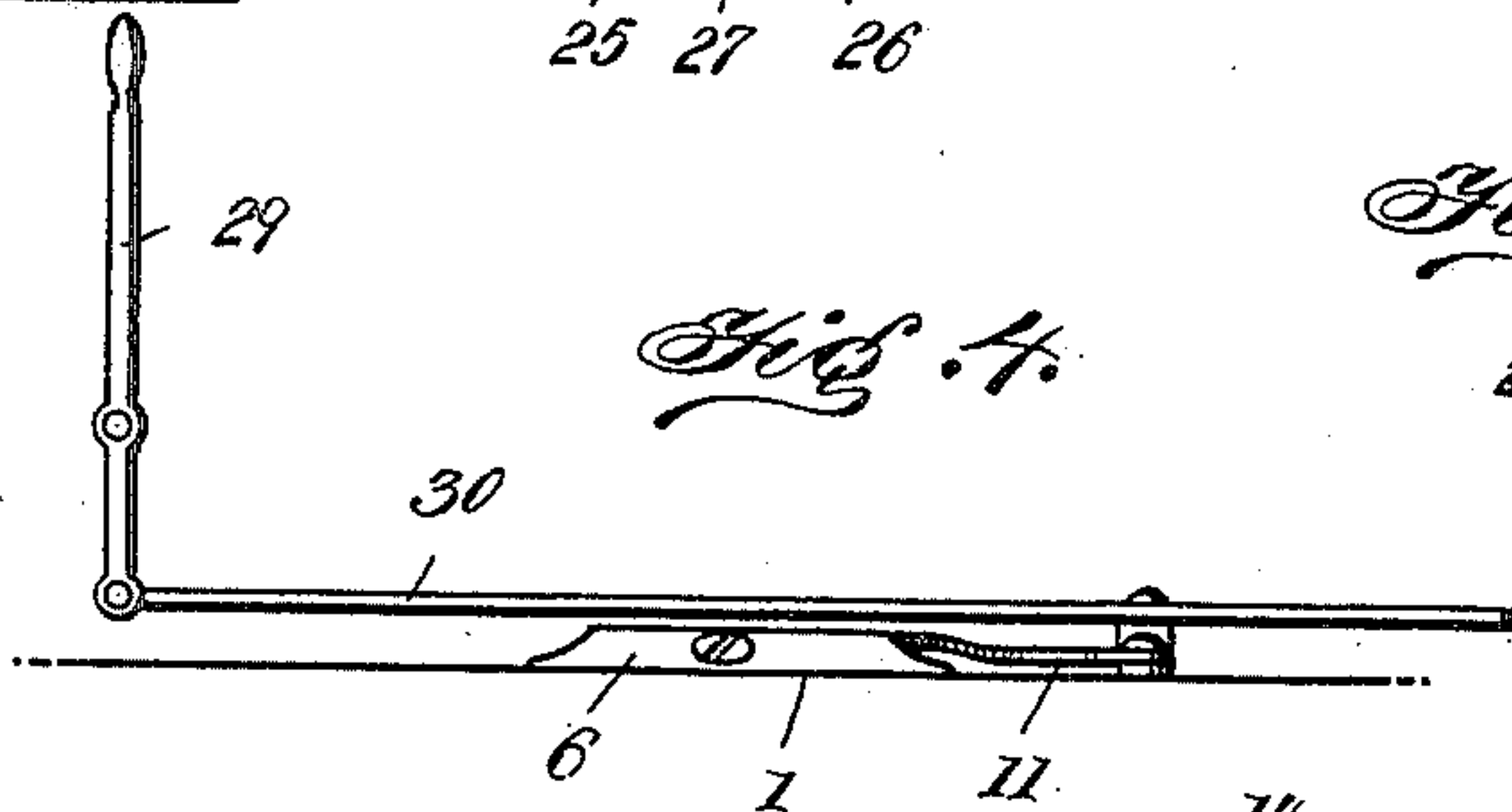
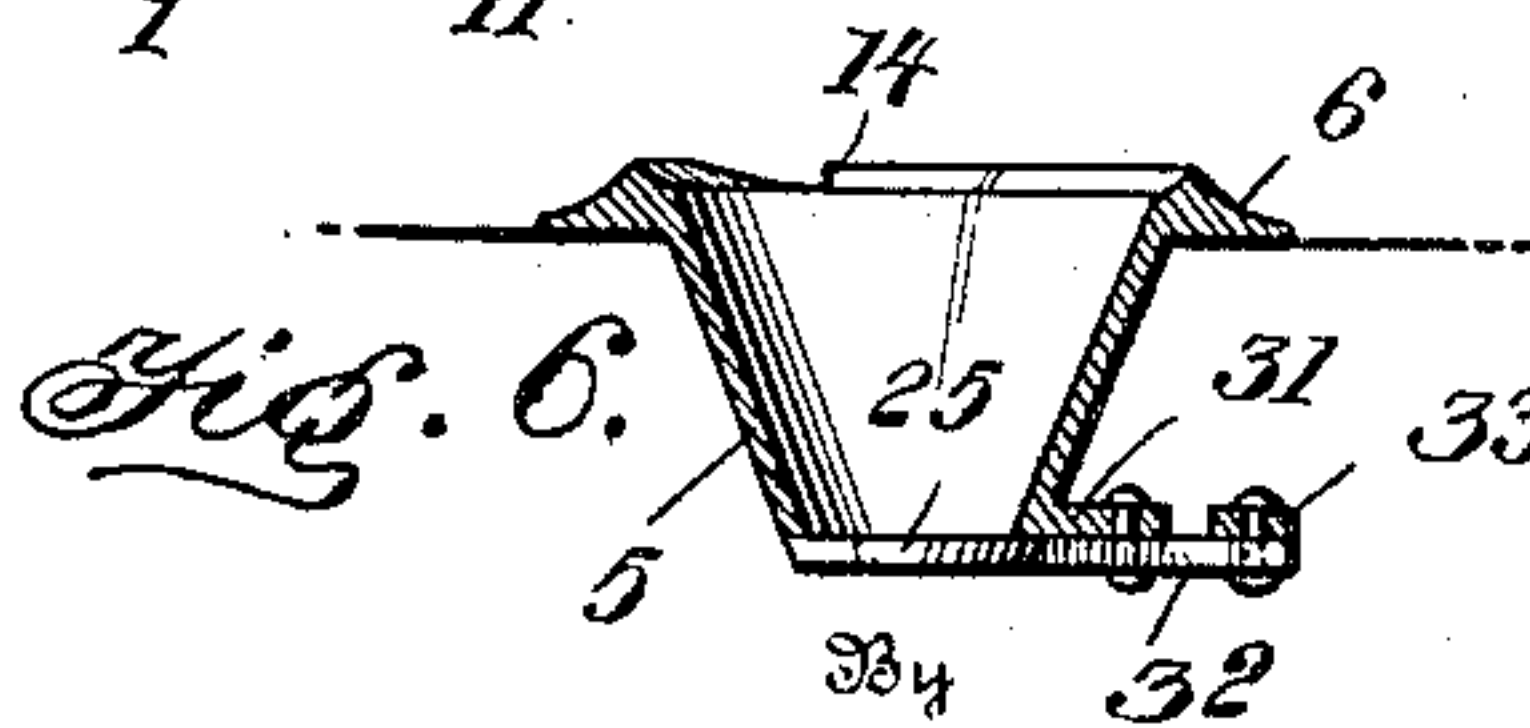


Fig. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

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CUSPIDOR FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 673,986, dated May 14, 1901.

Application filed June 12, 1900. Serial No. 20,098. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. KENNEY, a citizen of the United States, residing at Laurel, in the county of Sussex and State of Delaware, have invented new and useful Improvements in Cuspidors for Railway-Cars, of which the following is a specification.

My invention relates to cuspidors for railway-cars, one object being to provide a device of this character adapted to be set into the floor of the car and having a cover and improved means for moving said cover to open or close the cuspidor.

A further object of the invention is to provide a cuspidor for cars, in combination with means for covering and uncovering the same and means for readily emptying the cuspidor.

The invention also includes means for moving a plurality of the cuspidor-covers simultaneously.

The construction of the improvement will be fully described hereinafter in connection with the accompanying drawings, which form a part of this specification, and its novel features will be defined in the appended claims.

In the drawings, Figure 1 is a vertical section of a portion of a railway-car with my invention applied thereto. Fig. 2 is a section showing the cuspidor and its cover and cover-operating mechanism in plan. Fig. 3 is a transverse section of part of a car, the cuspidor, and its cover-operating devices. Fig. 4 is an elevation of a lever and connecting-rod for operating a plurality or row of cuspidor-covers from one end of the car. Fig. 5 is an end elevation of a combined treadle and hand-lever constituting a modification of the means shown in Fig. 1 for moving the cuspidor-cover, and Fig. 6 is a section through a modified form of cuspidor.

The reference-numeral 1 designates the car-floor, formed between adjacent seats 2 and 3 with an opening 4, the walls of which are preferably beveled or tapering to conform to the contour of a conical cuspidor 5, which fits down within the opening and is formed with an annular horizontal flange 6, resting on the floor and secured thereto by screws 7, passing through the flange into the floor.

8 designates the circular cover of the cus-

pidor, formed with a beveled edge 9, which snugly fits the correspondingly-beveled inner surface 10 of the cuspidor.

From one side of the cover 8 projects a bell-crank lever 11, fulcrumed upon the floor at the angle-point 12, as best shown in Fig. 2. The long arm of this lever 11 is bent upward at the point 13 to extend over the flange 6, and the latter is cut away to form a shoulder 14, serving as a stop to hold the lever 11 against movement, except when raised out of engagement with the stop, as hereinafter described. The lever 11 is fulcrumed adjacent to the box 15 at the side of the car which encloses the steam-heating pipes, and said box is formed at its lower edge opposite said lever 11 with a slot 16, through which the short arm of the lever normally extends and the long arm and cover are adapted to pass when the cover is moved away from the cuspidor.

17 designates a double bell-crank lever fulcrumed upon a bolt or other pivotal support 18 on the inner side of the vertical wall 19 of the box 15. The depending arm 20 of the double bell-crank 17 is pivotally connected to the short arm of the lever 11. The upper ends of the arms 23 and 23^a of the lever 17 are bent toward each other to form treadles, which extend through slots 24, formed in the top of the box 15, Fig. 1.

25 designates the bottom of the cuspidor, comprising a disk of suitable material secured to the cuspidor by means of a spring 26, the upper end of which is attached to the outer side of the cuspidor, while the lower end is bent under the bottom and secured thereto by a rivet 27 or like means.

The operation of the mechanism is as follows: Normally the cover 8 is in position upon the cuspidor and the treadle 23 projects upward through its slot 24. Pressure upon the treadle 23 tilts the lever 17, and through the medium of the connecting-rod 21 the lever 11 is slightly tilted to lift its long arm out of engagement with the shoulder 14 and then swung upon its pivot 12, carrying the cover within the box 15 through the slot 16. The fulcrum-pin 12 of the lever 11 is of sufficient height to permit the slight tilting movement necessary to release the long arm of the lever

11 from the flange 6. A reverse movement of the lever 17 returns the cover to its position, as will be apparent.

If desired, the lever 17 may be formed with a handle extension 28, as shown in Fig. 5, to enable it to be thrown by hand as well as by means of the treadles.

In order to operate the covers of all of the cuspidors at one side of the car simultaneously, I employ a lever 29, fulcrumed at one end of the car and connected by a rod 30 with the short arms of the several bell-crank levers 11. By turning the lever upon its fulcrum all of the covers are moved together to cover or uncover the cuspidors.

To empty and clean the cuspidor, it is only necessary to force the bottom 25 downward by means of a stick or other implement, the spring 26 serving to return the bottom to its place, the bottom thus serving as a flap-valve.

In Fig. 6 I have shown a modified form of cuspidor. In this construction the cuspidor is provided with an ear 31, to which is pivoted an arm 32, which extends from the bottom 25 of the cuspidor. This arm is preferably pivoted to a rod or bar 33, which may extend longitudinally of the car and be similarly connected to similar arms formed upon the bottoms of the remaining cuspidors.

I claim—

1. The combination with a car-floor formed with an opening; of a cuspidor fitting said opening; a cover for the cuspidor; and means for raising said cover and moving it laterally to close and open the cuspidor.

2. The combination with a car-floor having an opening, and with the steam-pipe box of a car; of a cuspidor fitting said opening; a cover for the cuspidor; a bell-crank lever to one arm of which the cover is secured; and means arranged within said steam-pipe box for operating said bell-crank lever to first raise the cover and then move it laterally.

3. The combination with a car-floor having an opening therein and with the steam-pipe box of the car; of a cuspidor fitting said opening and having a flange resting on the floor; a movable cover; a bell-crank lever fulcrumed

on the car-floor and secured to said cover; and means within the steam-pipe box for operating said bell-crank lever to lift the cover and then move it laterally.

4. The combination with a car-floor having an opening therein, and with the steam-pipe box or casing formed with slots; of a cuspidor fitting said opening and having a flange resting on the floor and cut away to form a shoulder; a cover fitting within said flange; a bell-crank lever one arm of which is secured to said cover and adapted to engage the shoulder of the flange; a double bell-crank lever within the box or casing connected to the cover-lever, and having projecting ends serving as treadles.

5. The combination with a car-floor having an opening therein; and with a steam-pipe box or casing located at the side of the car; of a cuspidor fitting said opening; a cover fitting the cuspidor; means within said box or casing for moving said cover to open or close the cuspidor; and a movable bottom having a spring connection with the cuspidor.

6. The combination with a car-floor having an opening; and with a steam-pipe box or casing at the side of the car; of a flanged cuspidor fitting said opening; a cover; a bell-crank lever adapted to extend through a slot in said box or casing; a double bell-crank lever fulcrumed within said box, and having extensions projecting therethrough; and a connection between said double bell-crank lever and the cover-lever for raising the cover and moving it through the slot in the box or casing.

7. The combination with a car-floor formed with an opening; of a cuspidor fitting said opening; a slotted box or casing adjacent to said cuspidor; a cover for said cuspidor; means for lifting the cover and moving it through the slot of the box or casing; and a movable bottom for the cuspidor.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES H. KENNEY.

Witnesses:

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B. F. FUNK.