

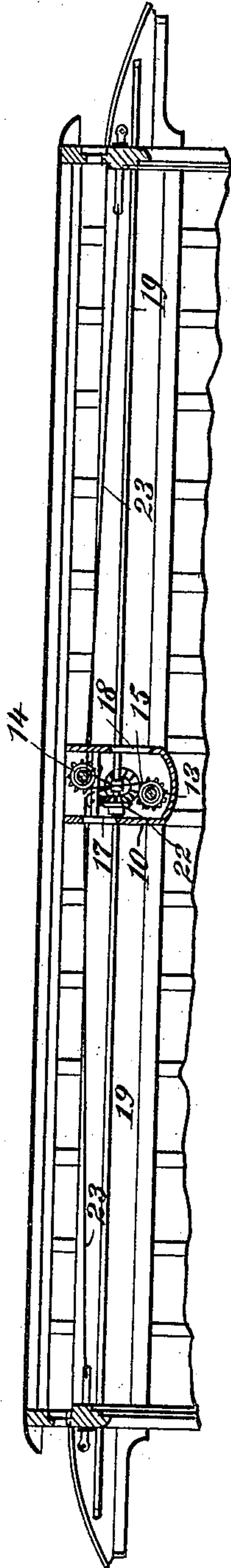
(No Model.)

J. TULLIUS.  
STATION INDICATOR.

No. 397,824.

Patented Feb. 12, 1889.

Fig. 1.



WITNESSES:

Donn Twitchell  
C. Sedgwick

Fig. 3.

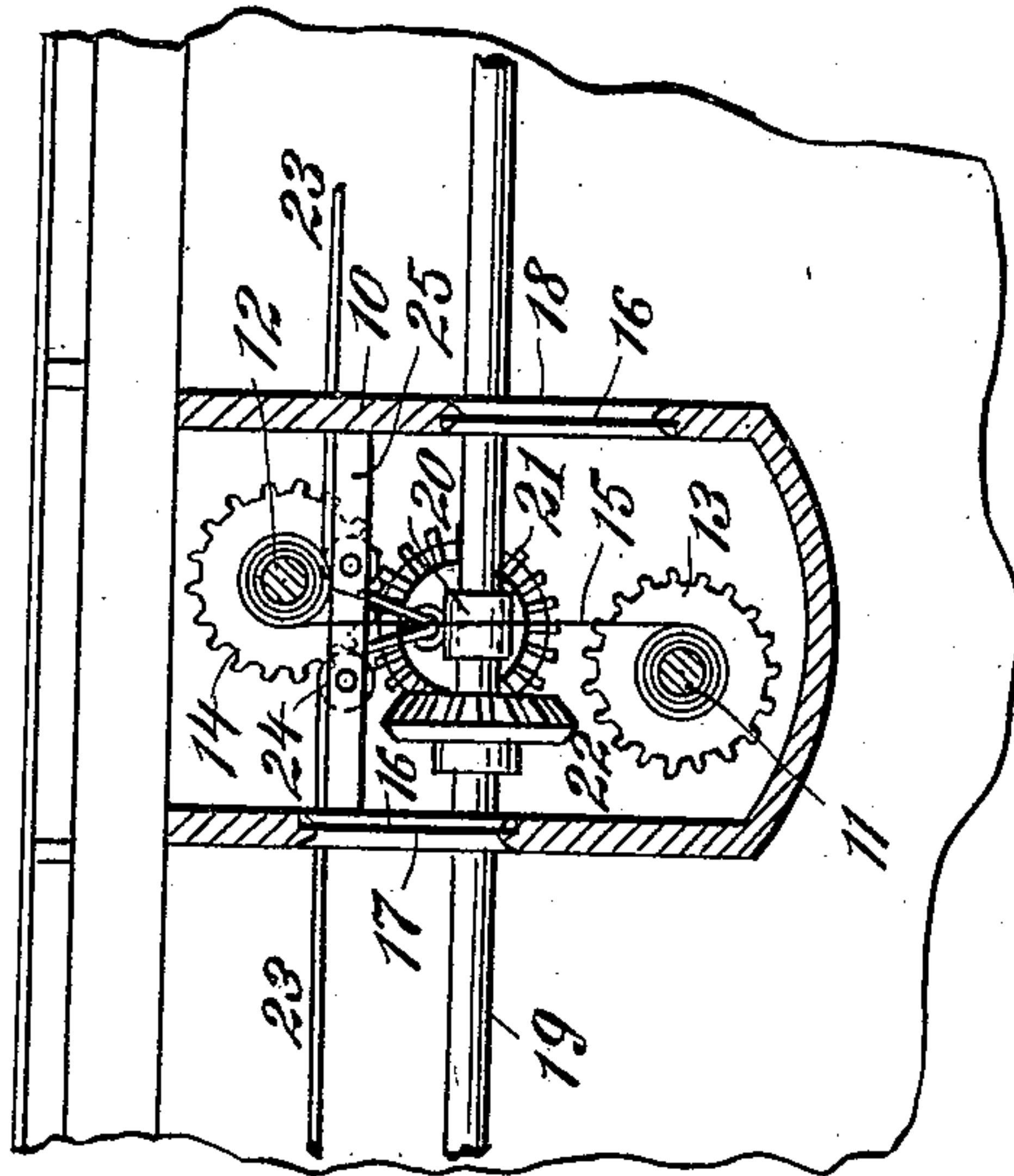


Fig. 2.

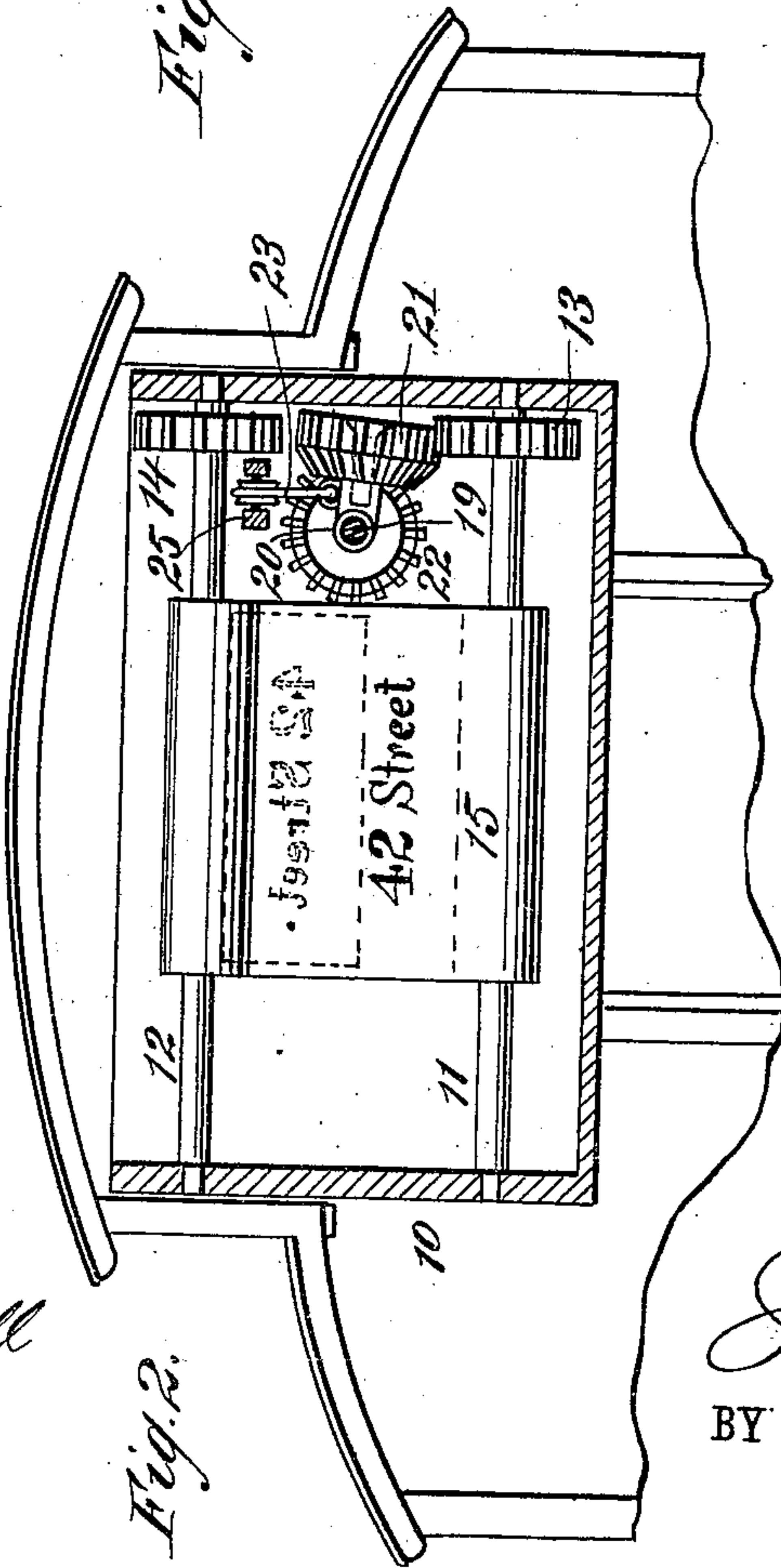


Fig. 5.

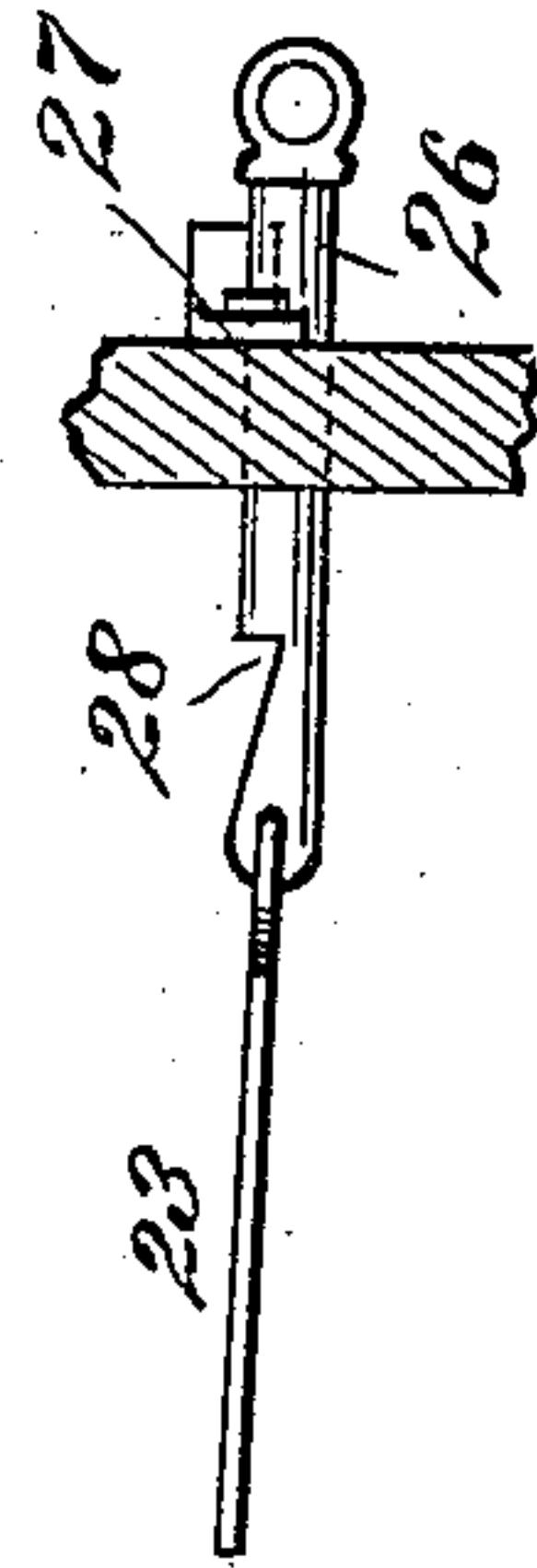
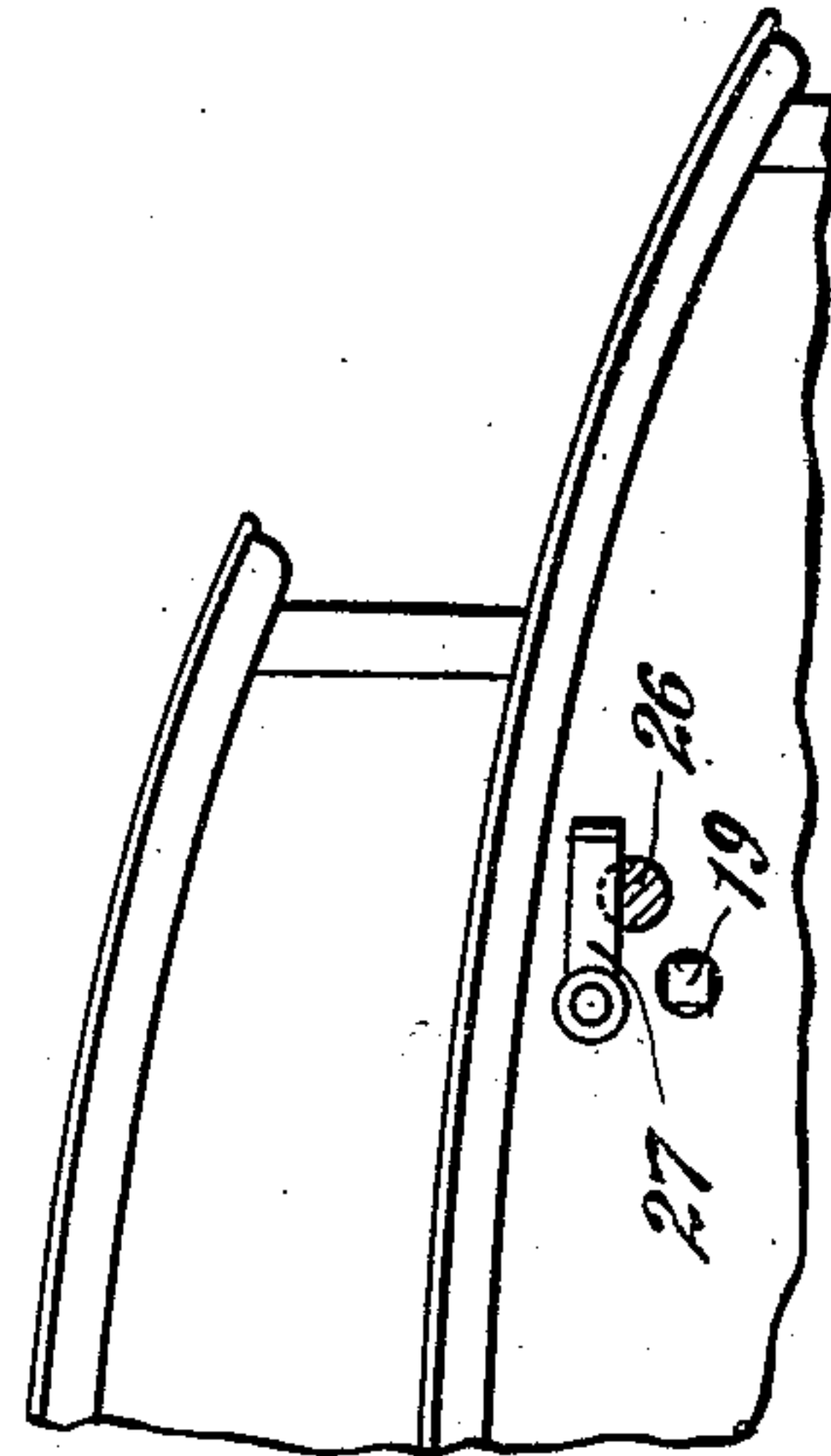


Fig. 4.



INVENTOR:

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# UNITED STATES PATENT OFFICE.

JULIUS TULLIUS, OF NEW YORK, N. Y.

## STATION-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 397,824, dated February 12, 1889.

Application filed September 19, 1888. Serial No. 285,795. (No model.)

*To all whom it may concern:*

Be it known that I, JULIUS TULLIUS, of the city, county, and State of New York, have invented a new and Improved Station-Indicator, of which the following is a full, clear, and exact description.

My invention relates to an improvement in station-indicators, and has for its object to provide a means whereby the conductor or brakeman of a train may conveniently display in full view of the passengers of the various cars of a train the names of the several stations before the same are reached.

The invention consists in the construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a longitudinal sectional view through the clear-story of a car having my device applied. Fig. 2 is a central transverse section through the car and a longitudinal section through the body of the device; Fig. 3, a transverse section through the body of the device. Fig. 4 is a partial end view of the car, and Fig. 5 is a detail view of the shifting or reversing device located in the ends of the car.

In carrying out the invention about centrally of the car, in the clear-story thereof, a box or casing, 10, is attached, in which casing two drums, 11 and 12, are longitudinally journaled one below the other, the lower drum being slightly in advance of the upper drum, or vice versa. Each drum is provided at one end—for instance, upon the right—with a spur-wheel, (designated, respectively, as 13 and 14.)

In further carrying out the invention a curtain, 15, of canvas, cotton, linen, or similar material, is attached at the ends to the upper and lower drums, adapted to be rolled upon either or both, as occasion may demand, as best illustrated in Figs. 2 and 3. It will be observed by reference to said Figs. 2 and 3 that by reason of the axes of the drums being out of vertical alignment the stretch of

curtain between the drums is at all times perpendicular.

The names of the stations are printed, painted, or otherwise produced upon both sides of the curtain, the name upon one side being slightly below the same name upon the opposite side of the curtain, as shown at 15 in Fig. 2.

The names of the stations are visible through panes of glass, 16, inserted in openings 17 and 18, cut in the sides of the casing, as illustrated in Fig. 3, and as the opening 17 is lower than the opening 18 should the paint or material used to produce the station-name upon the curtain show through the stain will not be visible to the passengers, being concealed by the casing, as shown in Fig. 2.

The drums are manipulated by a rotary shaft, 19, journaled in the ends of the car and passing transversely through the casing 10. Within the casing 10 a spindle, 20, is loosely collared upon the shaft 19, and upon the outer end of said spindle a combined spur-and-miter pinion, 21, is loosely mounted.

The spur-pinion is located between the spur-wheels attached to the drums, and is proposed to mesh with either, as desired, and the miter-pinion, which is formed upon the inner face of the said spur-pinion, meshes with a miter-gear, 22, fast on the line-shaft 19.

The miter-gear and pinion are always in contact, and the spur-pinion is normally in mesh with the spur-wheel of the lower drum, as shown in Fig. 2. When in this position, the curtain is drawn from the upper drum and rolled upon the lower one.

In order to reverse the travel of the curtain, the pivoted spur-pinion is made to disengage from the lower spur-wheel, 13, and mesh with the upper spur-wheel, 14, as shown in Fig. 3. This is effected by attaching a wire, cord, or chain, 23, to the spindle 20 near its connection with the line-shaft and passing the ends of the wire upward in opposite directions over friction-rollers 24, journaled in a cross-bar, 25, and along the clear-story to the ends of the car, where the said wire lines are attached to the inner end of a notched and handled pull-bar, 26, sliding in the said ends of the car-body.



The pull-bar projects beyond the outer face of the car, and when drawn outward to elevate the reversing device is retained in such position by a latch, 27, pivoted to the car-body, entering one of the notches 28, as shown in Fig. 5. When the latch is elevated, the reversing device drops by gravity to its normal position.

The outer ends of the line-shaft may be squared to receive a key, as shown in Fig. 4, or provided with a knob or crank.

If it is found desirable, the line-shafts of two or more cars may be coupled and operated by one man.

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

1. The combination, with the clear-story of a car, a casing provided with sight-openings therein secured in said clear-story, and curtain-carrying drums journaled in said casing, provided with a spur-wheel at one extremity, of a line-shaft journaled in the ends of the car carrying a miter-gear, a combined spur-and-bevel pinion pivoted upon the line-shaft

in the casing between the spur-wheels, and a pull-cord attached to the spindle of the combined pinion extending outward through the ends of the car, substantially as shown and described.

2. The combination, with the clear-story of a car, a casing provided with opposing non-aligning sight-openings secured in said clear-story, and non-aligning curtain-carrying drums journaled in said casing, provided with a spur-wheel at one end, of a line-shaft journaled in the ends of the car carrying a miter-gear, a combined spur-and-miter pinion pivoted upon the line-shaft between the spur-wheels, a pull-cord attached to the spindle of the combined pinion extending to the ends of the car, a notched bar sliding in the car-body connected with the pull-cord, and a latch engaging the notches of said bar, substantially as shown and described.

JULIUS TULLIUS.

Witnesses:

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JOSEPH SILVESTRE.