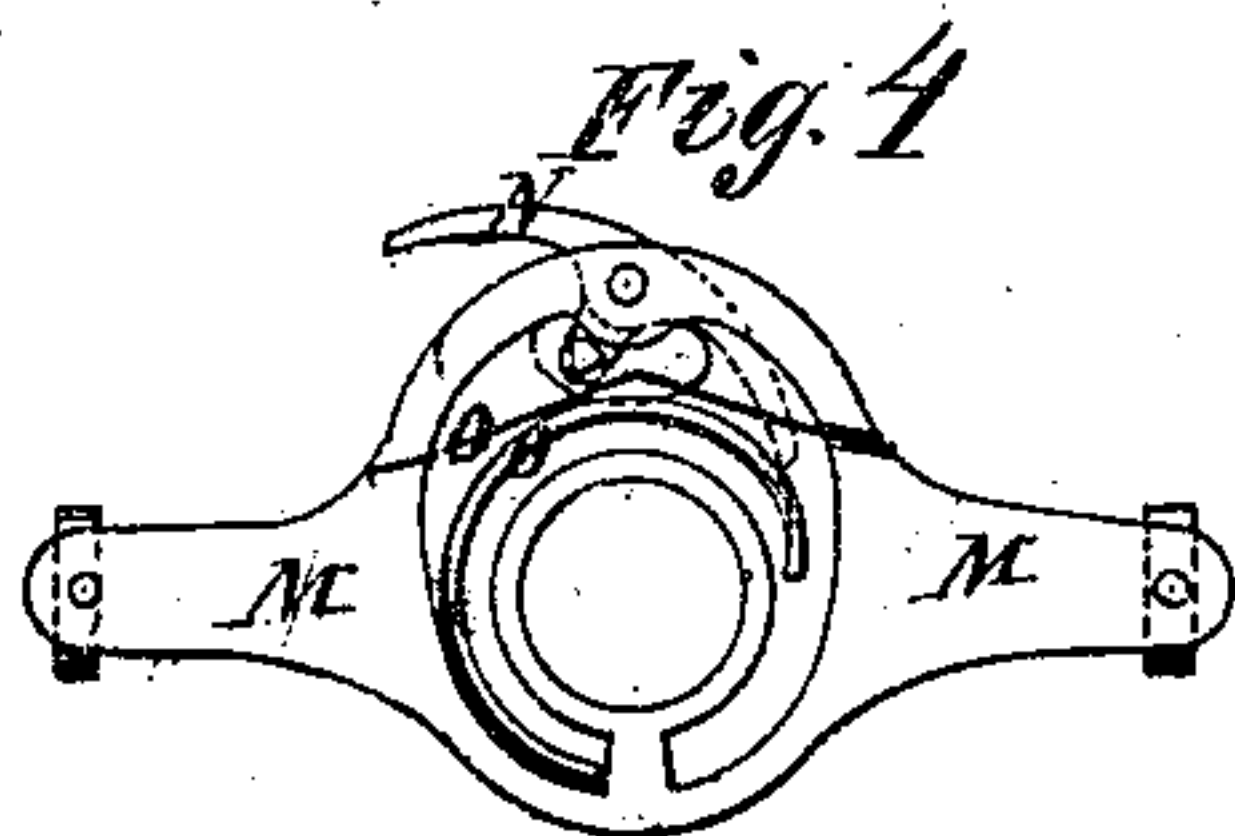
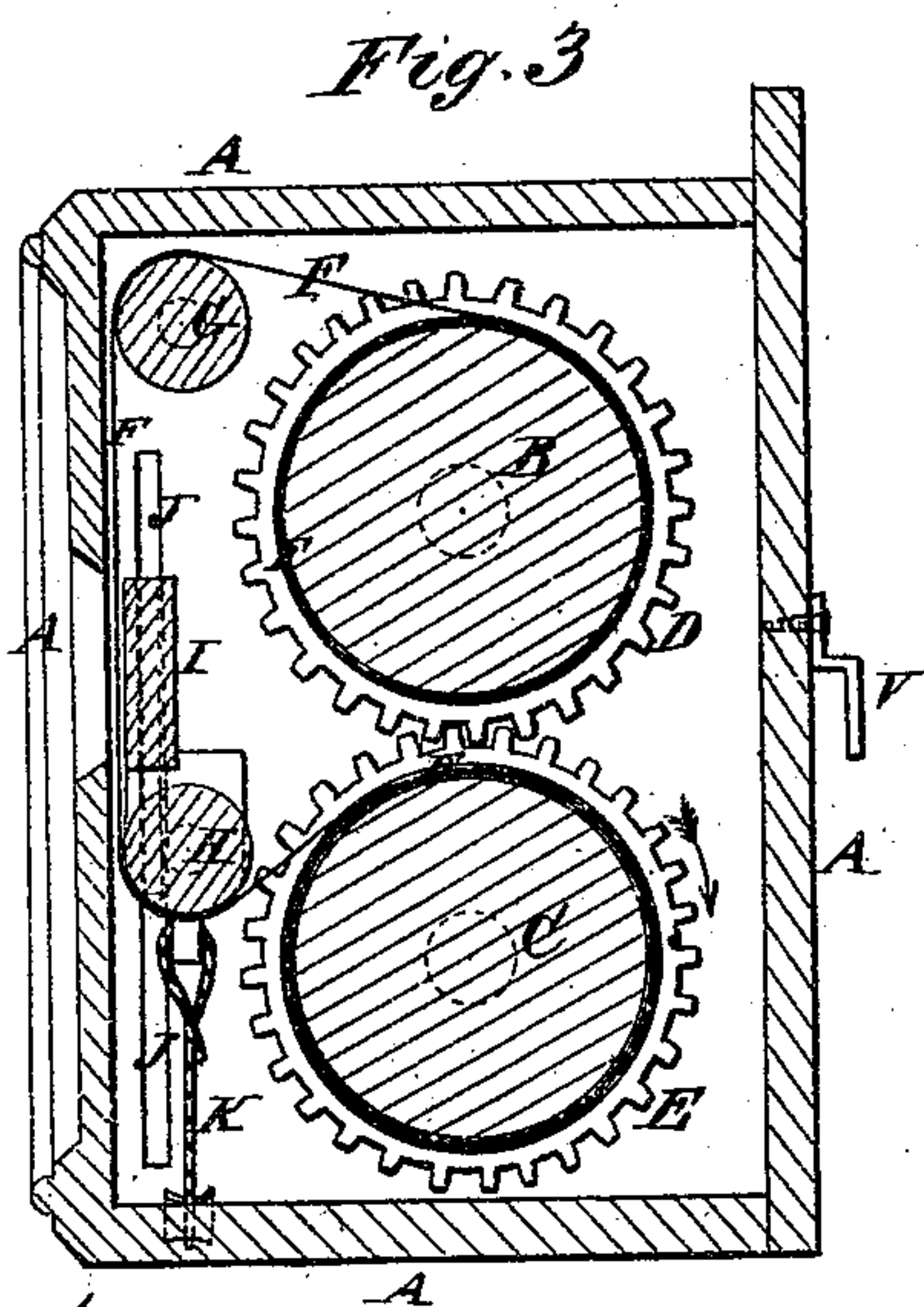
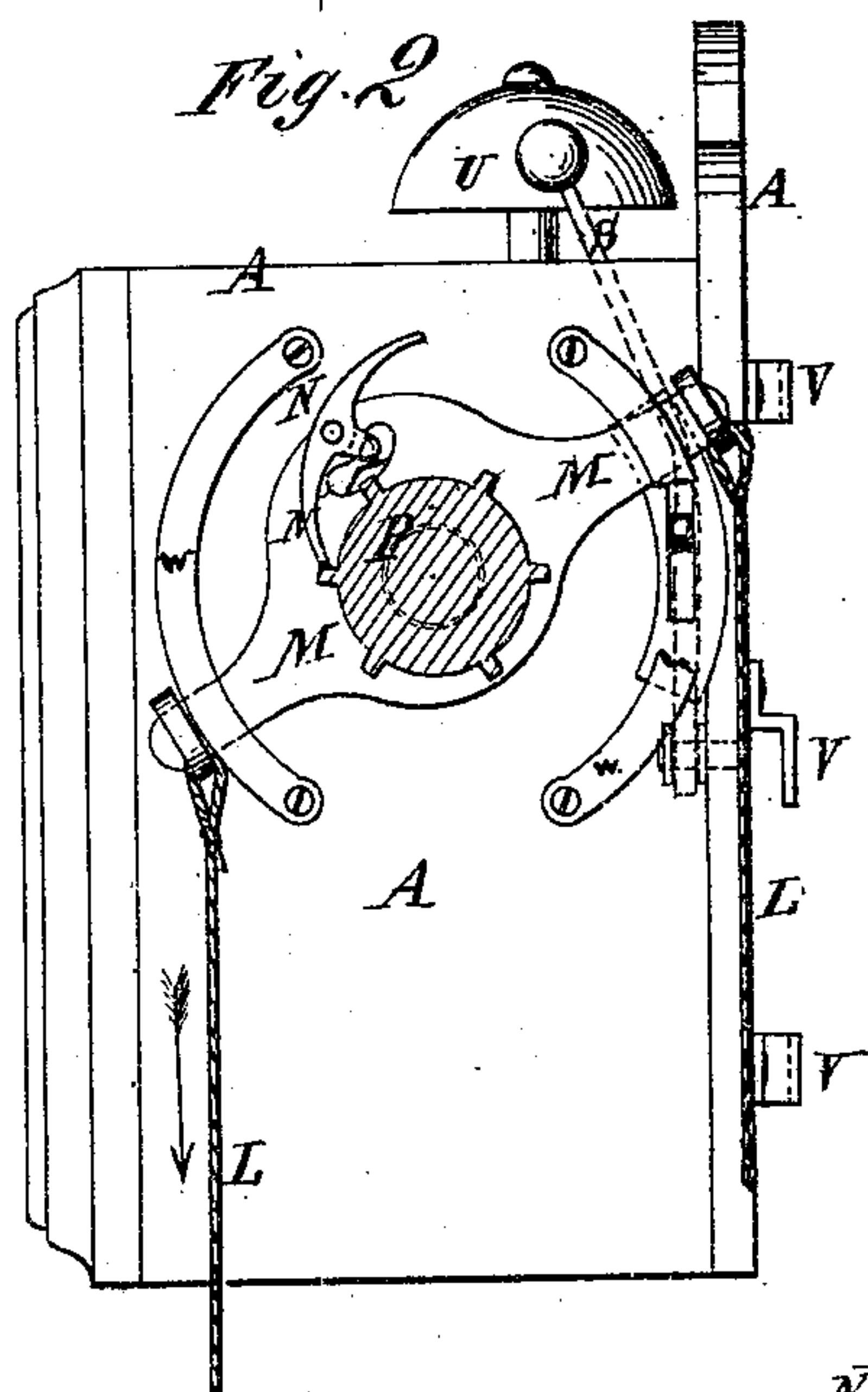
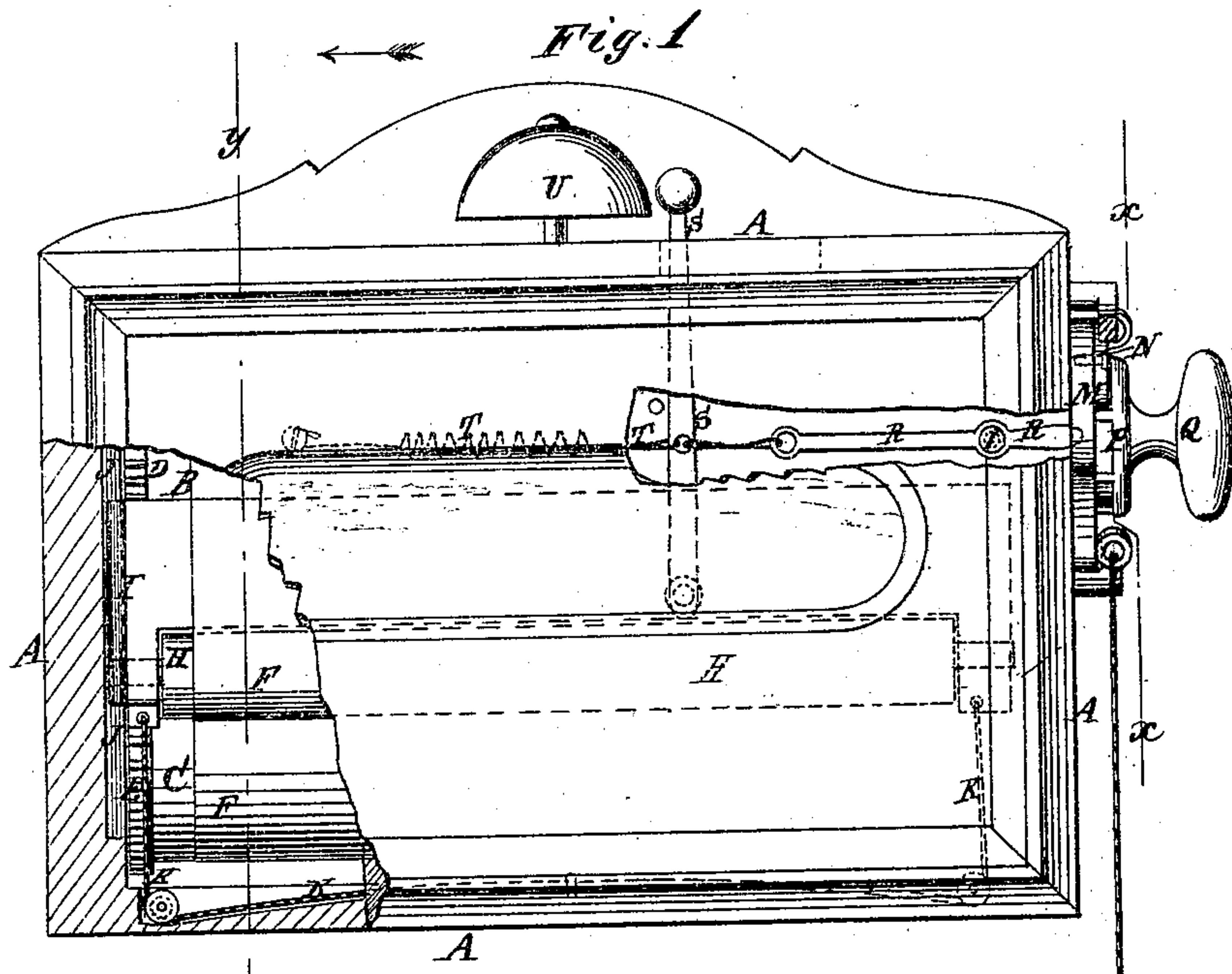


J. R. BALSLEY.
STATION-INDICATOR.

No. 178,895.

Patented June 20, 1876.



WITNESSES:

A. W. Almqvist
John Goethals

INVENTOR:

J. R. Balsley
BY *Munroe*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

J. ROBINSON BALSLEY, OF CONNELLSVILLE, PENNSYLVANIA.

IMPROVEMENT IN STATION-INDICATORS.

Specification forming part of Letters Patent No. 178,895, dated June 20, 1876; application filed May 1, 1876.

To all whom it may concern:

Be it known that I, J. ROBINSON BALSLEY, of Conneltsville, Fayette county, State of Pennsylvania, have invented a new and Improved Station and Street Indicator, of which the following is a specification:

In the accompanying drawing, Figure 1 is a front view of my improved indicator, parts being broken away to show the construction. Fig. 2 is an end view of the same, part being broken away, and partly in section, through line *ff*, Fig. 1, to show the construction. Fig. 3 is a vertical cross-section of the same, taken through the line *YY*, Fig. 1; and Fig. 4 is a detail view of the inner side of the pawl-lever.

The object of this invention is to furnish an improved device for use upon railroad and street cars, upon steamboats, and in other places, to indicate the stations, streets, landings, &c., and which shall be simple in construction, convenient in use, and easily operated.

The invention will first be described in connection with the drawing, and then pointed out in claim.

In the drawing, A is the case, in the front of which is an opening closed with a glass plate, through which the names of the stations are seen. B and C are two parallel rollers, the journals of which revolve in bearings in the ends of the case A. To one end of the rollers B C are attached gear-wheels D E, the teeth of which mesh into each other, so that the rollers B C may always move together and through equal spaces. F is a strip of canvas, upon which are printed the names of all the stations of a road, in regular order, then the names of the stations at which the fast trains stop, and the names of the stations upon the branch roads, so that the same indicators may be used upon the regular trains, the fast trains, and the trains of the branch roads, by simply adjusting the canvas so that the proper part will be used. The ends of the canvas are attached to the rollers B C, so that it can be wound from one to the other of said rollers by turning them in one or the other direction. The canvas F passes over a guide-roller, G, pivoted to the upper forward corner of the ends of the case, and over a guide-roller, H, placed below the opening in the

front of the case. The journals of the roller H work in bearings that slide up and down in grooves J in the ends of the case A, and to which are attached springs or elastic cords K, which pass over guide-pulleys pivoted to the bottom of the case A. To the projecting end of the journal of the upper roller B is attached a ratchet-wheel P, and a knob, Q. Upon the journal of the roller B, at the inner side of the ratchet-wheel P, is placed an equal armed lever, M, to the upper part of which is pivoted a reversible or double pawl, N, in such a position that either end may engage with the teeth of the ratchet-wheel P. The pawl N is held in either position by a spring, O, attached to the lever M, and bearing against a projection formed upon the middle part of the lever M, which projection may pass through a curved slot in the lever M, so that the spring O may be placed upon the inner side of the lever M. The end parts of the lever M move through keepers W, attached to the end of the case A. To the ends of the lever M are attached cords L, for convenience in operating the said lever. R is a lever, pivoted to the inner side of the back of the case A, and its outer end projects through a slot in the end of the case A, so that it may be struck and vibrated by the arm of the lever M as it moves up and down. The inner end of the lever R is connected, by a jointed or flexible connection, with the lever S, the lower end of which is pivoted to the case A, and its upper end projects through a slot in the top of the case A, and has a hammer attached to its upper end to strike the bell U, attached to the top of the said case A. With the lever-hammer S is connected a spring, T, which, when the lever R is released from the lever M, draws the said lever-hammer against the bell U, and gives the alarm.

With this construction, as the train, car, or boat leaves a station, street, or landing, one of the cords L is pulled, which turns the rollers B C, and brings into view the name of the next station, street, or landing, which operation causes the hammer S to strike the bell U to call the attention of the passengers to the indicator. As the train, car, or boat approaches the said station, street, or landing, the other cord L is pulled, which brings the

lever M into position to be again operated, and also again strikes the bell to warn the passengers that they are approaching the indicated station.

The indicator is adjusted for the return trip by simply reversing the pawl N. The indicator may be turned without sounding the bell, by means of the knob Q.

To the rear side of the case A are attached hooks V, to hook into keepers attached to the ends of the car, so that the indicator may be securely supported, and may be readily changed from one end of the car to the other, as required.

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

The combination, with roller B and ratchet P, of cords L, lever M, reversible pawl N, spring O, and lever R, substantially as and for the purpose specified.

J. ROBINSON BALSLEY.

Witnesses:

DAVIES CARSON,
JAMES CALHOUN.