

(No Model.)

K. S. NICKERSON.  
STATION INDICATOR.

No. 382,006.

Patented May 1, 1888.

FIG. 1.

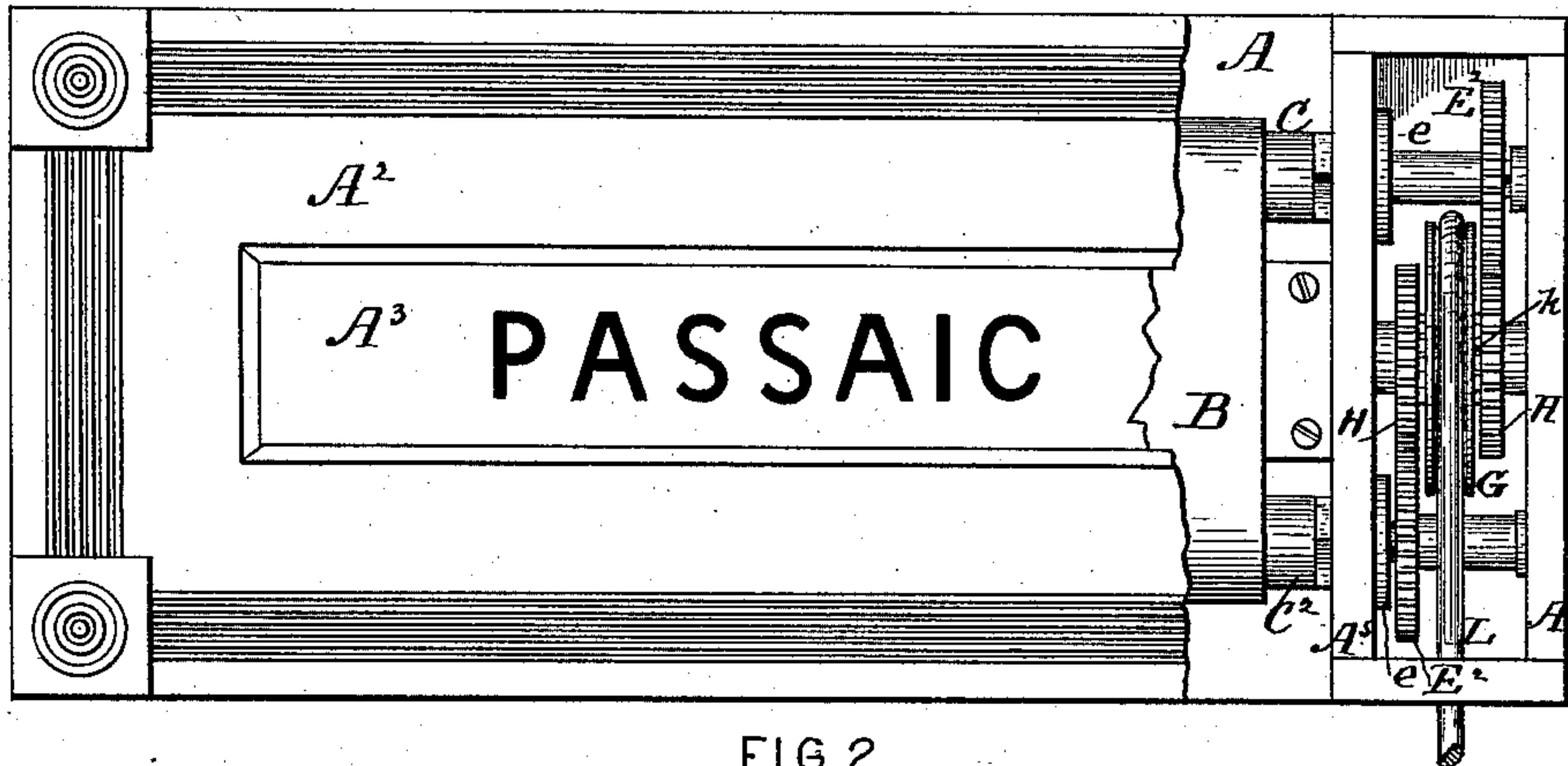


FIG. 2.

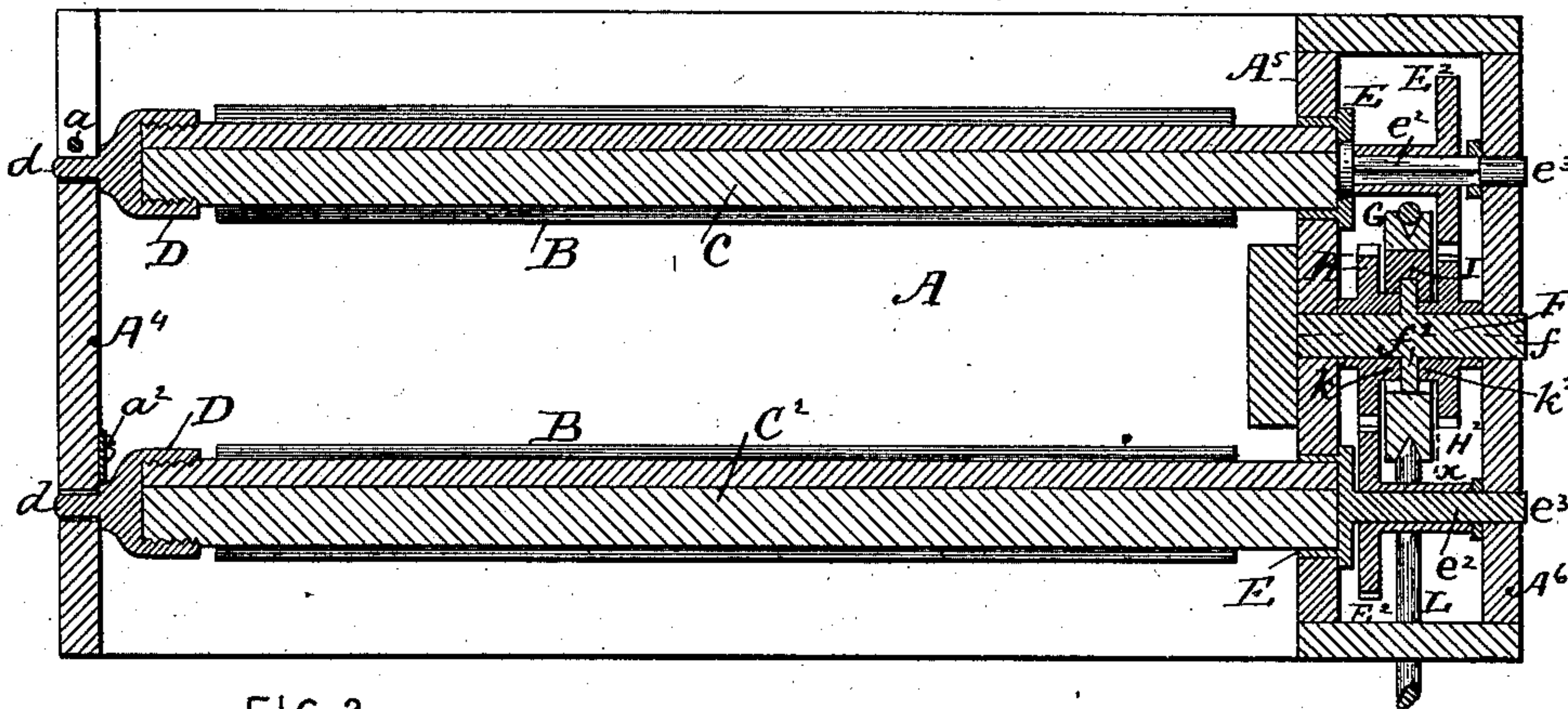


FIG. 3.

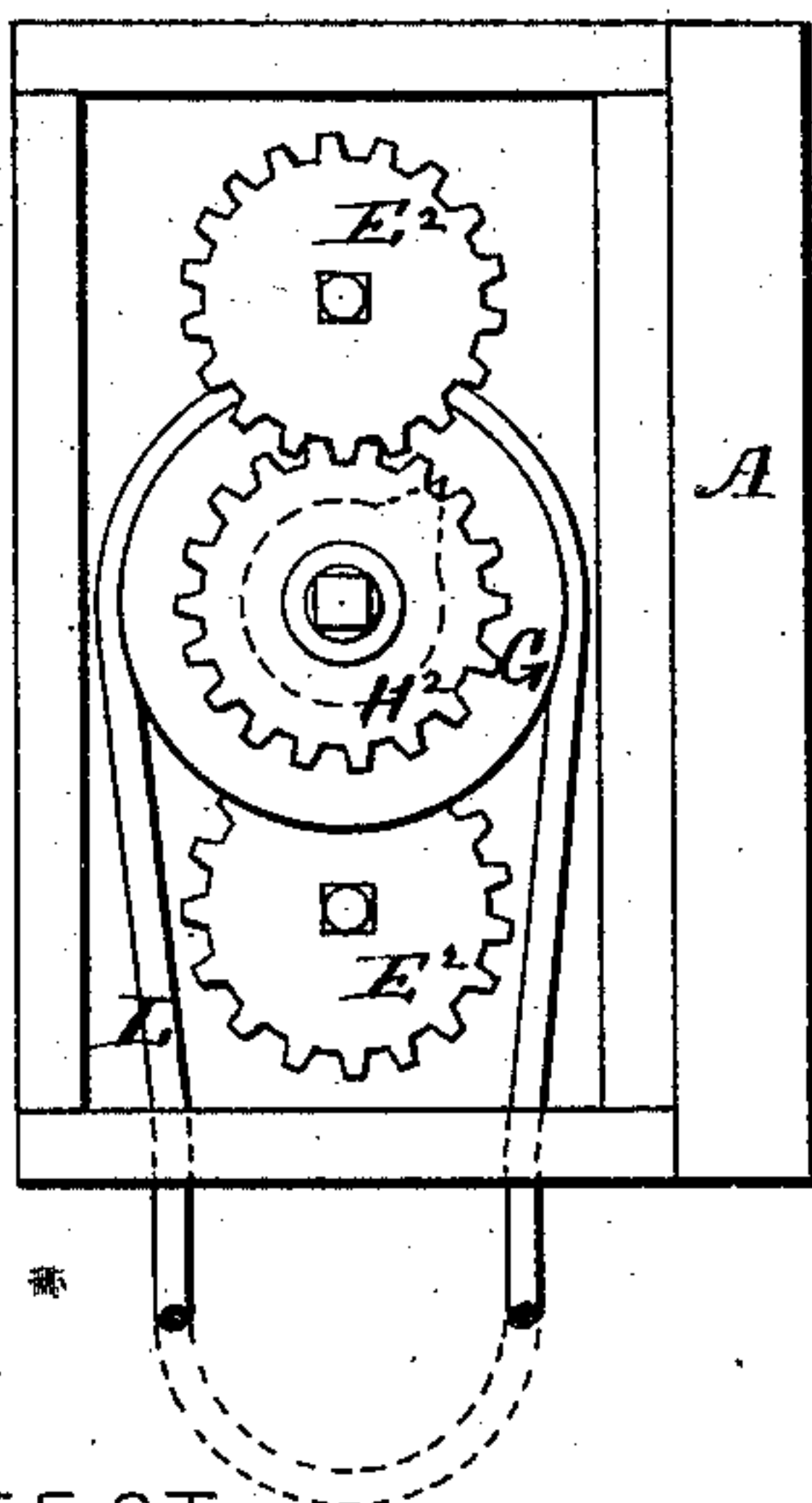


FIG. 5.

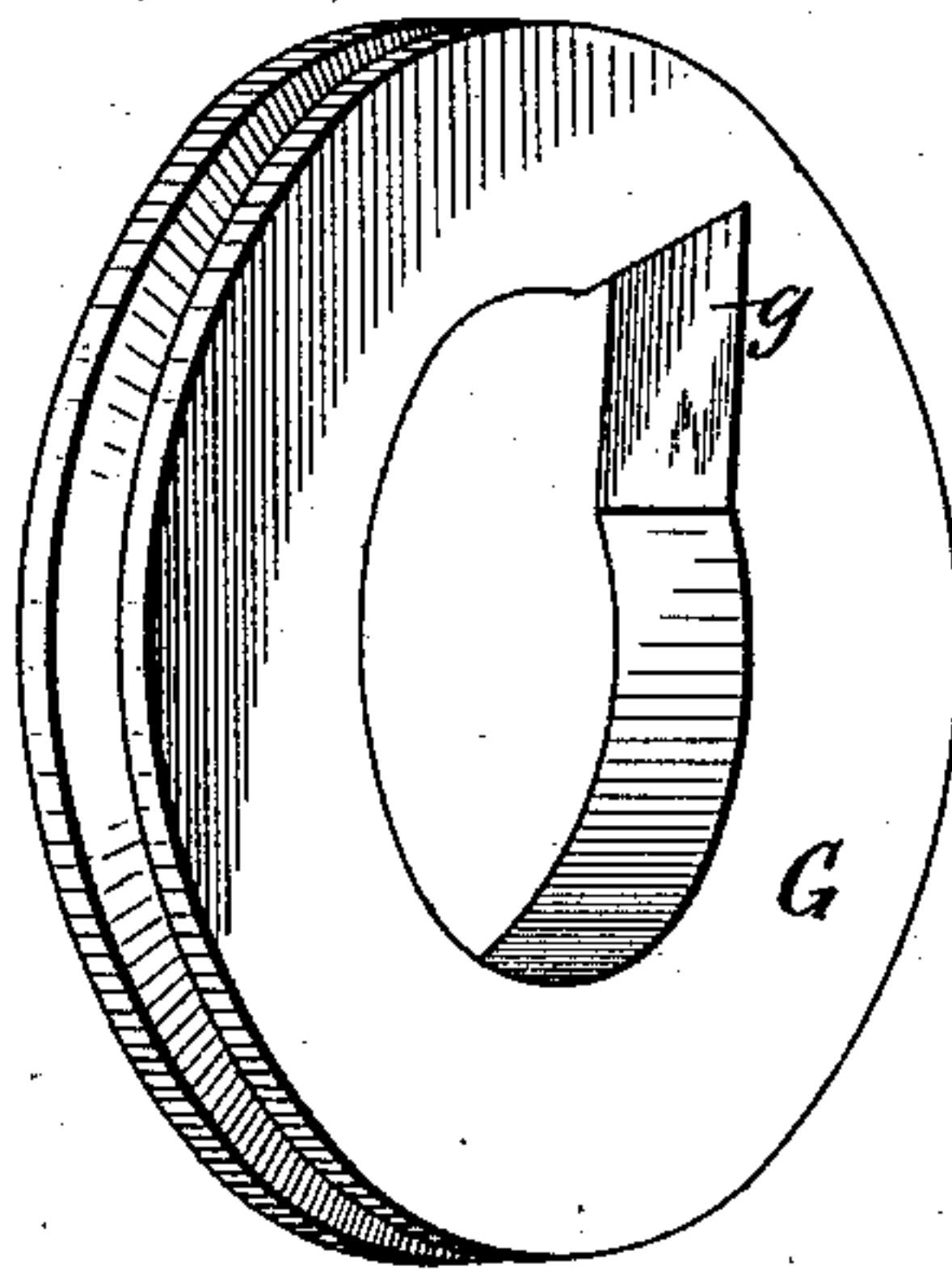


FIG. 4.

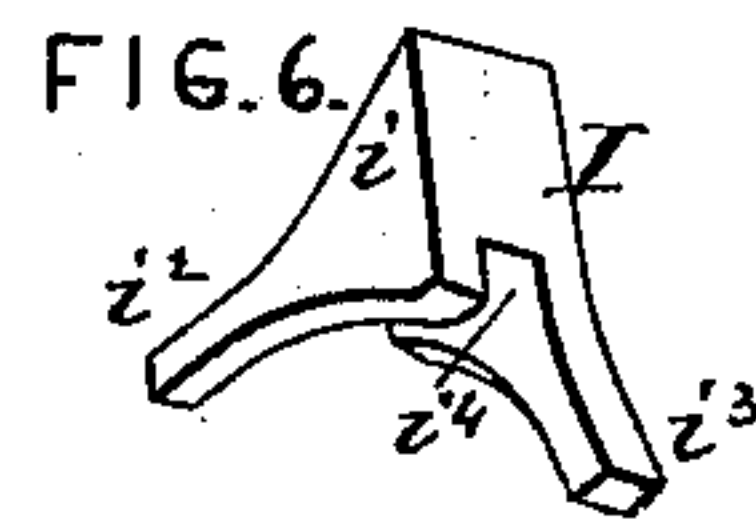
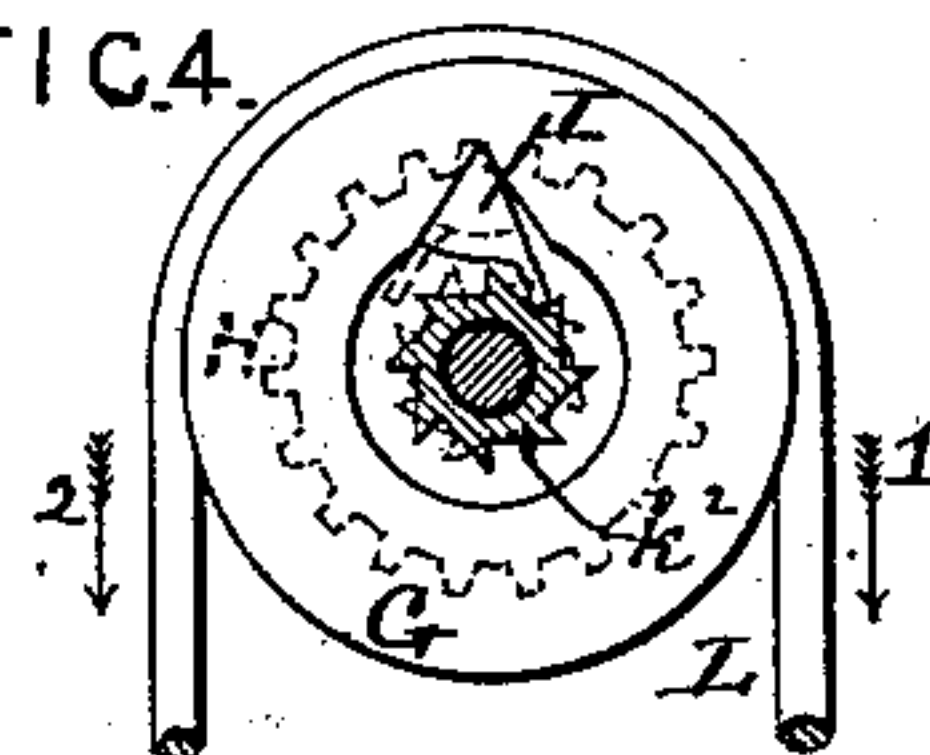
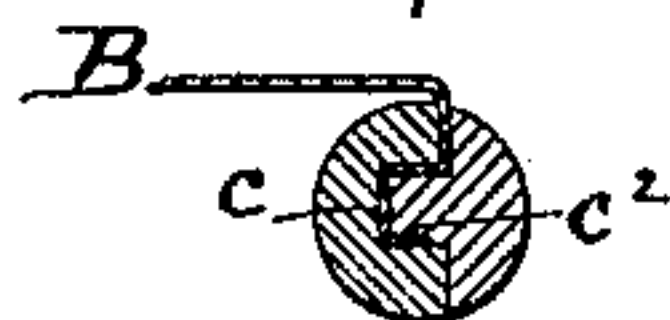


FIG. 7.



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# UNITED STATES PATENT OFFICE.

KINGSBURY S. NICKERSON, OF PASSAIC, NEW JERSEY.

## STATION-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 382,006, dated May 1, 1888.

Application filed January 13, 1888. Serial No. 260,671. (No model.)

*To all whom it may concern:*

Be it known that I, KINGSBURY S. NICKERSON, a citizen of the United States, residing at Passaic, in the county of Passaic, State of New Jersey, have invented certain new and useful Improvements in Station-Indicators, of which the following is a specification, reference being had therein to the accompanying drawings

My invention relates to improvements in that class of station-indicators in which the names of the different streets or stations on the line of a road are printed or painted on a band of textile fabric or other suitable material wound on rollers to indicate to passengers in railway-cars the stations to which they are approaching.

The invention consists in the peculiar construction and arrangement of parts herein-after more fully described, and then pointed out in the claims.

In the accompanying drawings, Figure 1 is front view of a station-indicator constructed in accordance with my invention, the front of the box being broken away to show a portion of the interior and the operating mechanism. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is an end view of the same open to show the operating mechanism. Fig. 4 is a front view of the operating-pulley and one of the gear-wheels provided with a ratchet-wheel (in section on line  $x$  of Fig. 2) and the double pawl having one of its arms in engagement therewith. Fig. 5 is a perspective view, on a larger scale, of the operating-pulley. Fig. 6 is a perspective view of the double pawl. Fig. 7 is a transverse section of one of the rollers carrying the printed band of the indicator.

In said drawings, A represents the rear board of the indicator, by which it can be secured to the end of a car.

A<sup>2</sup> represents the front thereof, provided with an opening covered by glass, A<sup>3</sup>, through which can be seen the names of streets or of stations printed or painted on a band, B, of textile fabric or of other suitable material, that can be wound on rollers C and C<sup>2</sup>. These rollers are formed of two halves, one of which is provided with a longitudinal groove,  $c$ , to receive a tongue,  $c^2$ , extending the length of the other, and between these two halves and their tongue and groove one end of the band B is

clamped and firmly retained; but these two halves are easily separated when it is desired to change or to renew this band. To retain the two halves of the rollers united together, one end is screw-threaded and is received in an internally-screw-threaded cap, D, having on its outer end a journal,  $d$ , that is received in an open bearing in the end A<sup>4</sup> of the frame, where it is retained either by a pin,  $a$ , or by a pivoted hook,  $a^2$ , resting upon it, but from which bearing the journal can be lifted when it is desired to change the band of names. The opposite end of the rollers is made square and is received in a cap, E, having a similar square recess, but a cylindrical periphery to act as a journal for that end of the roller, and is received in a bearing in the end A<sup>5</sup> of the frame. This cap E has a collar,  $e$ , to bear against the outer face of the board A<sup>5</sup> and prevent any end motion of the cap in one direction. This cap is also provided on one end with a spindle, the body  $e^2$  of which is square to receive the square socket in the hub of its operating gear-wheel E<sup>2</sup>; but the outer end of said spindle is cylindrical and forms a journal,  $e^3$ , that is received in a bearing made in the end board, A<sup>6</sup>, of the frame.

Half-way between the bearings for the spindles or journals  $e^3$  the boards A<sup>5</sup> A<sup>6</sup> have a square perforation to receive the square ends  $f$  of a journal, F, having on the middle of its length a cylindrical enlargement,  $f^2$ , that constitutes the journal for the operating-pulley G, and on each side of the enlargement  $f^2$  (between it and the square ends  $f$ ) the shaft F is cylindrical to act as a journal for the cog-wheels H and H<sup>2</sup>, upon which they can revolve in either direction under the impulse of a double-arm pawl, I, pivoted in an angular radial recess,  $g$ , of the pulley G. Said recess  $g$ , being wider than the angular end  $i$  of the pawl, permits either one of the arms  $i^2$   $i^3$  of said pawl to engage with the teeth of the ratchet-wheel  $k'$   $k^2$ , secured to one side and forming a part of the cog-wheels H H<sup>2</sup>. The pawl I is centrally secured at  $i^4$  to straddle the enlargement  $f^2$  of the journal F, and is free to work in its recess  $g$  when the pulley G is revolved under the impulse given by the conductor or other railway-officer to the endless band L, passing with sufficient friction in the peripheral groove of said



pulley. This endless band may be of suitable length to be conveniently grasped whatever may be the location of the indicator. When the car is advancing in one direction of its route, the conductor pulls the band L in the direction of the arrow 1 in Fig. 4, after having passed a station, to bring in view the name of the next station. When he is returning on his route, he pulls the band L in the direction of the arrow 2 and the pawl I is automatically reversed from engagement with one ratchet-wheel to engage with the other.

Having now fully described my invention, I claim—

1. In a station-indicator, the combination of two rollers made in two halves, one of which is tongued and the other grooved, an internally-screw-threaded cap inclosing one end thereof and a square-socketed cap inclosing the other, said square socket having a square spindle and a cylindrical journal at the end, gear-wheels

mounted upon the square spindles, and intermediate gears uniting them, substantially as and for the purpose described.

2. The combination of two rollers carrying a printed band between them, each having a square spindle at one end, a gear-wheel upon each spindle, a journal, F, and two gear-wheels thereon located between the gears upon the spindles and carrying ratchet-wheels, a pulley, G, inclosing said ratchet-wheels and having an angular recess, *g*, therein, and a pawl having an angular end, *i*, located in said recess and having also two arms for engagement with said ratchet-wheels, substantially as described.

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

KINGSBURY S. NICKERSON.

Witnesses:

A. S. KILGOUR,

W. W. SCOTT.