

H. LANDIS.
Station-Indicator.

No. 208,830.

Patented Oct. 8, 1878.

Fig. 3

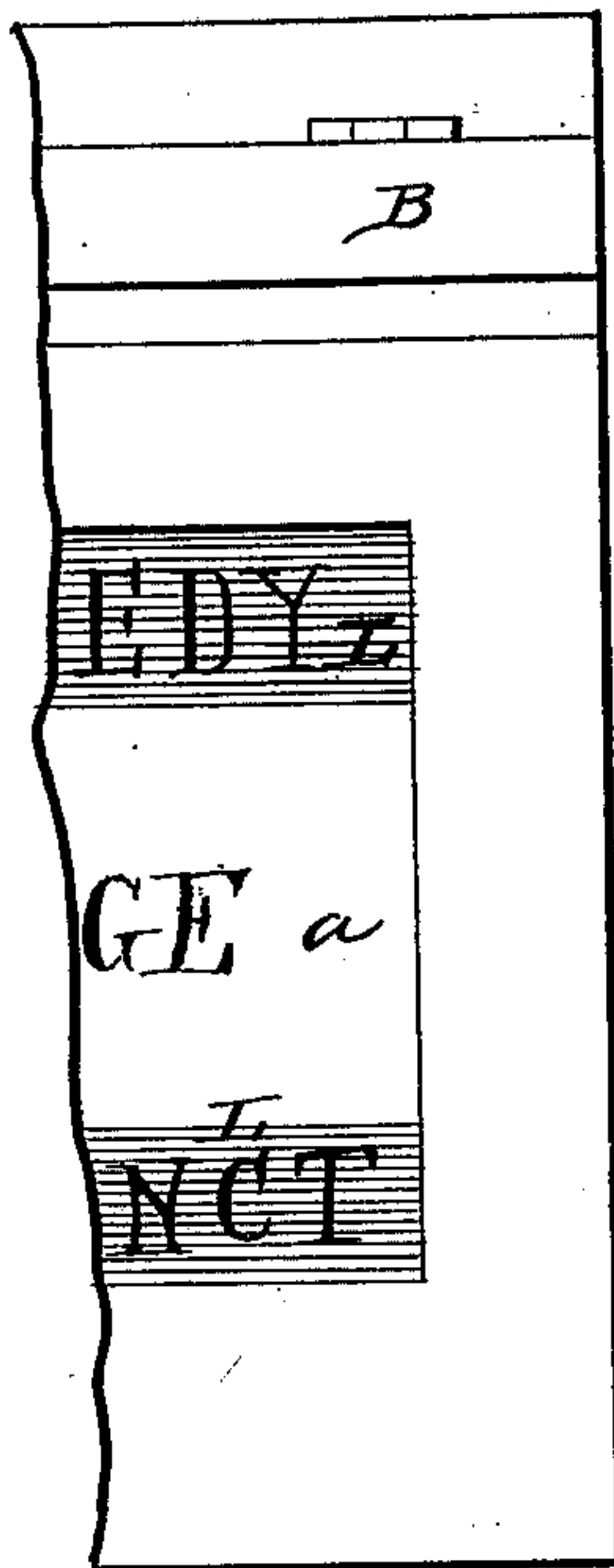


Fig. 1.

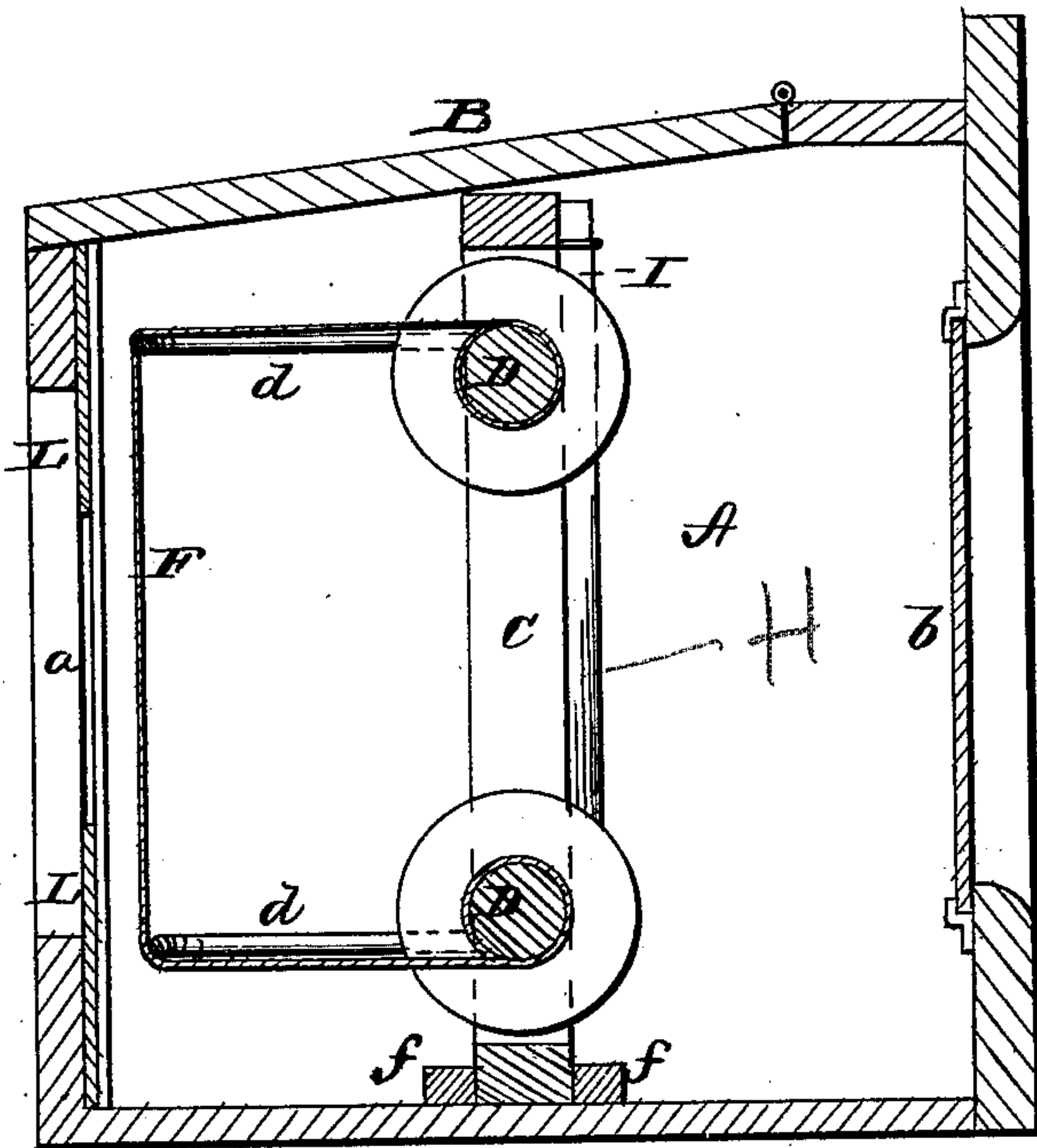
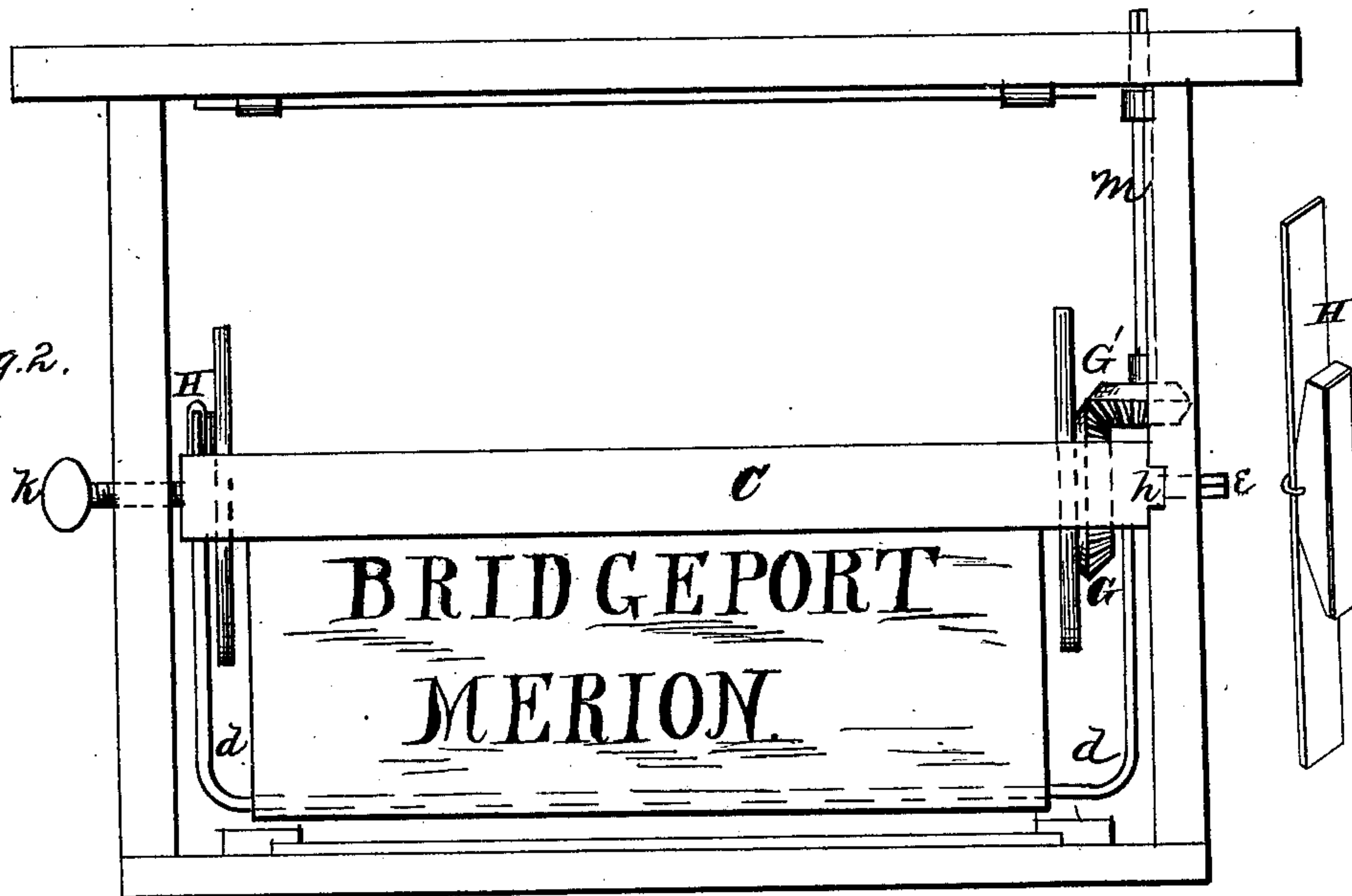


Fig. 2.



WITNESSES
F. L. Ouraud
Hankins

By

INVENTOR
Henry Landis
Alexander Mason
Attorneys

UNITED STATES PATENT OFFICE.

HENRY LANDIS, OF READING, PENNSYLVANIA.

IMPROVEMENT IN STATION-INDICATORS.

Specification forming part of Letters Patent No. **208,830**, dated October 8, 1878; application filed March 27, 1878.

To all whom it may concern:

Be it known that I, HENRY LANDIS, M. D., of Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Station-Indicators; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a station-indicator, as will be hereinafter more fully set forth.

In the annexed drawings, Figure 1 is a transverse vertical section of my invention. Fig. 2 is a front view of part thereof. Fig. 3 is a plan view with the top removed.

A represents a box of any suitable dimensions, with hinged lid B. In the front of the box is an opening, *a*, large enough to show the names of three stations or cross-streets at one time, and in the back is a glass-covered opening, *b*, as shown. This latter is, however, only intended for street-cars, in which case the back board of the box shown forms a part of the end of the car. This opening is for the purpose of enabling the driver to see that he adjusts the indicator properly after passing each crossing.

Within the box A is a movable frame, C, containing two drums or rollers, D D, to which are connected the ends of an apron or canvas, F, having the names of the stations or cross-streets arranged, by printing or otherwise, in consecutive order. This apron or canvas F passes from one roller to the other over rods or wires *d d*, arranged in such a manner as to bring a portion of the apron vertically opposite the front opening, *a*. Both rollers D D are, at their ends, provided with flanges, so that the apron will be guided properly in winding up from one to the other. At one end each roller is, within the frame C, provided with a bevel-gear wheel, G, and at this end the journal *e* of each roller is made square and projects a suitable distance beyond the frame, so

as to enter holes in the end of the box when the frame is placed in position. At the other end of the frame C is attached a spring, I, to which is connected a brake-shoe, H, provided with suitable lining, and which shoe bears against the end of both the upper and lower rollers, to produce proper tension on the apron or canvas.

The object of making the frame C removable from the box is this: On long routes the apron or canvas to contain the names of all the stations would be too long to work properly on the rollers, and in such cases I would then provide separate frames with rollers and canvas for different sections of the road, to be exchanged at the proper points. The frame C is put down near one end in the box between two strips or guides, *f f*, on the bottom thereof, and then shoved up against the other end, so that the journals *e* may enter holes prepared for them. A rib, *h*, at this end of the frame enters a groove in the end of the box, and a set-screw, *k*, through the opposite end holds the frame firmly in position. The rollers can now be turned from the end by means of a key fitting on either journal *e*.

For street-cars I provide two shafts, *m m*, at right angles with the rollers, said shafts having upon their inner ends bevel-gears G' G', which mesh with the bevel-gears G G on the rollers, and the front ends of the shafts *m* project into holes in the end of the car at the side of the opening *b*, so that the driver can operate the indicator from his position on the platform.

The front opening, *a*, of the box is provided with a strip, L, of stained glass at the top and bottom, leaving a center space either entirely uncovered or covered with plain glass. The object is to show not only the approaching station, but also the one immediately preceding and the one immediately following, but still in such a manner that no mistake can occur, the proper station's name being in plain view, while the names of the others are only faintly visible.

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

1. The combination, with the box A, having

bottom guides *f*, of the frame *C*, with rods *d*, the rollers *D D*, with projecting journals *e e*, the apron *f*, rib *h*, and set-screw *k*, substantially as and for the purposes herein set forth.

2. In a station-indicator, the stained-glass strips *L L*, arranged at top and bottom of the front opening, *a*, of the box or case, for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HENRY LANDIS, M. D.

Witnesses:

E. D. WEAND,
F. M. BANKS.