P. H. HARRIS.

Station-Indicator.

No. 168,639. Patented Oct. 11, 1875.

Fig. 1.

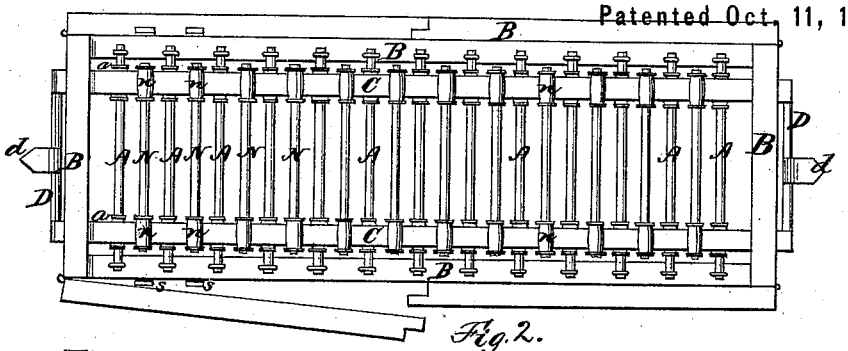


Fig. 2.

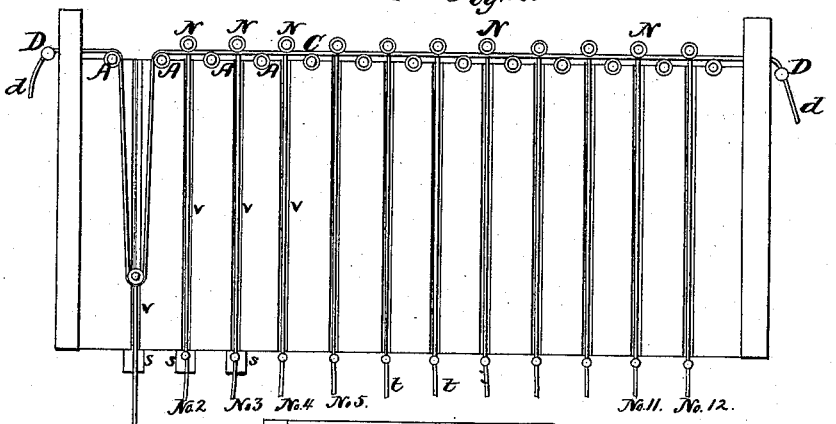
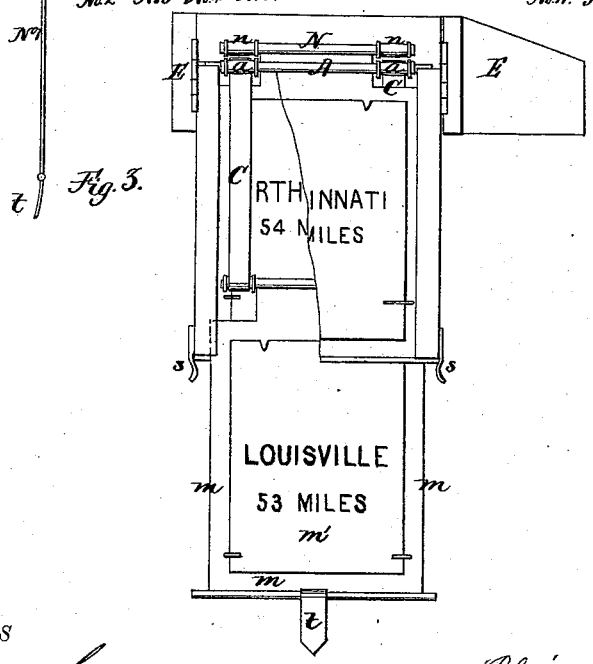


Fig. 3.



WITNESSES

E. L. Karner.

By

INVENTOR

Pliny H. Harris.

Hill & Ellsworth

His Attorneys

UNITED STATES PATENT OFFICE.

PLINY H. HARRIS, OF SAN ANTONIO, TEXAS.

IMPROVEMENT IN STATION-INDICATORS.

Specification forming part of Letters Patent No. **168,639**, dated October 11, 1875; application filed March 18, 1875.

To all whom it may concern:

Be it known that I, PLINY H. HARRIS, of San Antonio, in the county of Bexar and State of Texas, have invented certain new and useful Improvements in Railroad-Station Indicator; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top plan view. Fig. 2 is a side elevation, the side of the box having been removed; and Fig. 3 is an end elevation, the end of the box having been removed.

Similar letters of reference in the accompanying drawings denote the same parts.

The object of this invention is to provide for the use of railroad companies a simple and convenient device for indicating to the passengers in the cars the successive stations and the distances between them; and the invention consists, first, in the employment of a series of sliding cards, or the equivalent thereof, arranged in a suitable case or supporting-frame, and connected in such a manner that when one is projected from the frame, so as to reveal the name of the next station and the distance thereto inscribed upon it, any other card which may have been previously exposed to view will be withdrawn and rendered invisible; and it consists, secondly, in the combinations of mechanism by which the cards are supported and operated, all substantially as I will now proceed to describe.

In the drawings, B is the box, in which the mechanism is contained. A A A are transverse horizontal rods or wires, supported by the sides of the box, and provided with flanged pulleys or sleeves *a a*. C C are two flexible bands lying upon the pulleys *a a*, with their ends extending through the ends of the box, where they are connected by a rod, D, provided with a tag, *d*. N N N are rods or wires provided with similar pulleys *n n*, and resting upon the upper surface of the bands, as shown. *m m* are light frames supported by the rods N N, and provided with tags *t*, and guided by vertical grooves *v* in the sides of the box, and *m'* are removable and reversible cards supported by the frames *m*, and containing the names of the respective stations and their distances from each other.

The pulleys *a n* may be omitted, if preferred, but, if used, will cause the apparatus to work more easily. Springs *s* may be arranged to bear against the edges of the slides *m*, at any suitable point, to hold them in position in case the bands should break, and while first putting them in.

The whole apparatus, and each part thereof, may be made of any suitable material, in any practicable form, and of any design that may be preferred. A convenient mode of constructing the box is to make the ends higher than the sides, as shown in Fig. 2, and provide doors *e* to close the space above the sides. Upon opening the doors access can readily be had to the mechanism within the box whenever necessary. The box is to be attached to the top ceiling, near the middle of the car, so that the names and distances can be read from either end of the car. It may, however, if preferred, be attached to the end or side wall of the car.

The practical operation of the device is as follows: At the end of the route the conductor or other attendant draws down one of the tags *d*, which raises all the card-frames into the box. When the train starts he draws down the end card—say, No. 1 of Fig. 2—which displays on each side the name of the next station, and the number of miles thereto. As soon as this first station is passed he draws down card No. 2, which has the effect to automatically raise card No. 1 into the box. Card No. 2 displays the next or second station, and the distance from the first to the second station, and so on to the end of the route. He now takes out each card from its frame, reverses it, and puts it in again, and draws all the cards up into the box as before; and on starting on the return trip he draws down, first, card No. 12, then card No. 11, and so on, simply reversing the order of the cards to correspond to the reversed movement of the train.

The advantages attendant upon the use of this device in railroad-cars are too obvious to require particular description. It conveys to the passengers the information which is at the time most important to them, saves them

from a great deal of anxiety and care, and from all danger of mistaking the stations, and saves time and labor on the part of the railroad company's employés.

I claim as my invention—

1. In a railroad-station indicator, a series of sliding cards containing the names and distances of the stations arranged in a box, and so combined that the act of drawing out one from the box returns into the box any one that may previously have been drawn out, substantially as described.

2. The sliding cards or card-frames, combined with the box, the bands C C, and the two series of transverse wires or rods, substantially as and for the purpose described.

3. The springs *s*, combined with the box and the card-frames, substantially as and for the purpose described.

PLINY H. HARRIS.

Witnesses:

JNO. ROSENHEIMER,

C. G. ARTZT.