G. C. KNIFFIN

STREET AND STATION INDICATOR.

No. 175,713. Patented April 4, 1876.

Fig. 1.

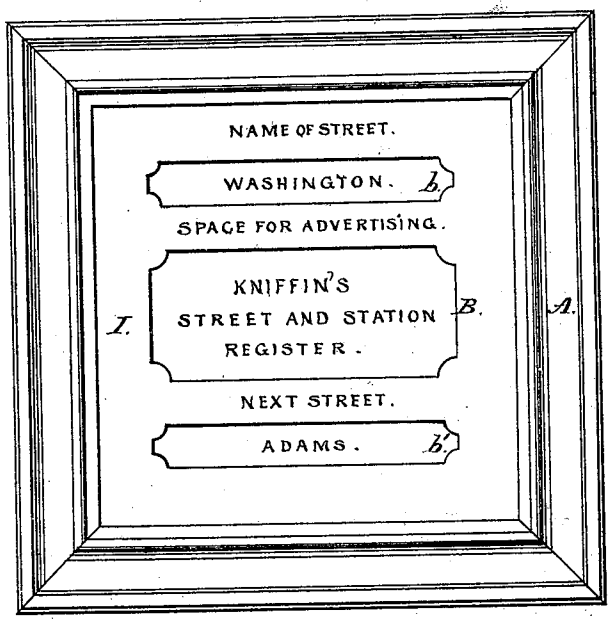

Fig. 3.

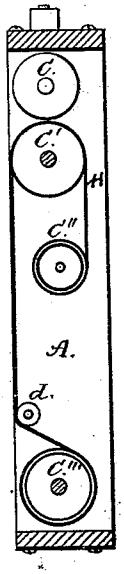

Fig. 2.

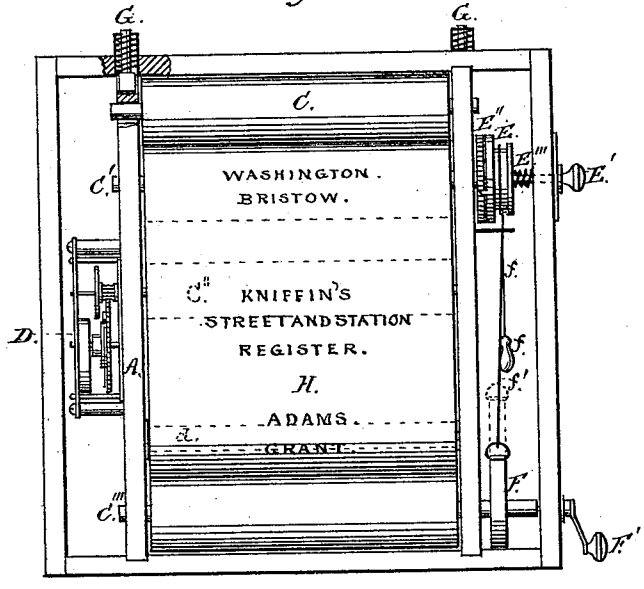

Fig. 4.

Witnesses;
F. W. Howard
Stanley J. Stuart

Inventor;
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UNITED STATES PATENT OFFICE.

GILBERT C. KNIFFIN, OF PARIS, KENTUCKY.

IMPROVEMENT IN STREET AND STATION INDICATORS.

Specification forming part of Letters Patent No. **175,713**, dated April 4, 1876; application filed March 15, 1876.

To all whom it may concern:

Be it known that I, GILBERT C. KNIFFIN, of Paris, Bourbon county, Kentucky, have invented a Combined Street-Station Register and Advertising Medium, of which the following is a specification:

The object of this invention is to produce a combined street or station indicator and advertising medium; and consists of the combination of certain devices to that end, as hereinafter more fully set forth in the accompanying specification and drawing, in which latter—

Figure I represents a face or plan view of my device; Fig. II, a like view, with the face removed; Fig. III, a vertical section; and Fig. IV, certain details of construction.

The mechanism is inclosed by a casing, A, which may be made of any ornamental and durable material, the front of which is covered by a glass and a mat, having suitable opening to display the names of streets or stations, and such advertisements as may be printed upon the band. This band begins on the roller C″, and passing up over the roller C′, thence down over the roller *d*, terminates at and is attached to roller C‴. That the roller C′ may carry the band H with it in its revolution, a roller, C, is placed above the roller C′, and is pressed down upon the band by springs placed above its bearings. The band is rotated by means of a cord, *f*, attached to and passing around the loose pulley E, which is provided with a pawl, which meshes into a ratchet-wheel, E″, attached to the end of roller C′. To carry the pulley, and with it its pawl, back to get a new hold upon the ratchet, a spring, F, provided with a cord, *f*′, is secured to the side of the frame-work, and the cord attached to the pulley E. At each revolution of the pulley E the cord *f*′ winds around it, and when the tension is removed from the cord *f*, the spring F quickly carries the pawl back upon the ratchet ready for another revolution.

The revolution of the rollers C and C′, above described, operating after the manner of clothes-wringer rollers, carries with them so much of the band H as serves to remove from view the name of the street at the opening *b*, and substitute for it the name of the street at opening *b*′, and thus a new advertisement appears at opening B, and the name of the next street or station upon the route at the opening *b*′. The roller C″, to which the upper end of the band is secured, is provided with a clock-work attachment, which immediately winds up that portion of the band, which has passed between the rollers C and C′. The revolution of the rollers C and C′, above described, taking place at the passing of each street or station upon the route, exhausts the band at the terminus of the route, and it is then necessary to supply the roller C‴ by winding the band back upon it. This is done by means of the crank F′, and the act of winding also winds up the spring in the clock-work D attached to the roller C″. The pulley E is held in engagement with the ratchet E″ by means of the coiled-wire spring E‴, through which a bolt passes, the head of which is secured to the pulley E by means of a plate. Before winding the band back upon the roller C‴ the pulley is drawn away from the ratchet by a knob, E′, at the outer end of the bolt above mentioned, and held in this position by means of a shoulder thereon engaging in the slot shown in Fig. 4.

At the end of the route it is necessary to exhibit at the openings a new series of streets for the return-trip. This is done by printing the second series immediately under the first series, in such a manner that one series only will show through the openings, while the other is hidden by the mat. The above mode of printing the names of streets or stations is represented in Fig. 2, in which case Washington is the first street at one end of the route, and Bristow the first at the other end.

I prefer using rubber upon rollers C and C′, but in practice other material may be substituted. A bell may be attached to the end of roller C′ for the purpose of attracting the attention of passengers.

The cord F is carried through the end of the car and over a pulley under the roof, so as to be readily pulled by the hand or foot of the street-car driver or conductor, or by the brakeman upon railway-trains; but a knob upon the outside of the car may be found preferable.

The roller C‴ may be tightened, if the band

is too loose, by using gum or spring pressure upon the bearings, the same as described for roller C.

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

1. The combination of an apron, having upon its face two or more series of streets or stations, a face-plate provided with two or more openings through which to exhibit the streets or stations, and mechanism substantially as described, whereby the indicating-apron may be adjusted to expose the desired series.

2. The combination, in a street or station indicator, of the roller C′, pulley and ratchet E″ and E, roller C″, clock-work D, band H, spring F, and cords *f* and *f′*, substantially as and for the purpose set forth.

3. The combination, in a street or station indicator, of the roller C′ having ratchet E″, the pulley E having a pawl on its periphery and the disengaging and locking bolt E′ of the spring E‴, substantially as and for the purpose set forth.

Witness my hand this 14th day of February, 1876.

GILBERT C. KNIFFIN.

Witnesses:
STANLEY S. STOUT,
A. MOORE.