(No Model.) 2 Sheets—Sheet 1.

A. C. ALLYN.

STATION INDICATOR.

No. 525,176. Patented Aug. 28, 1894.

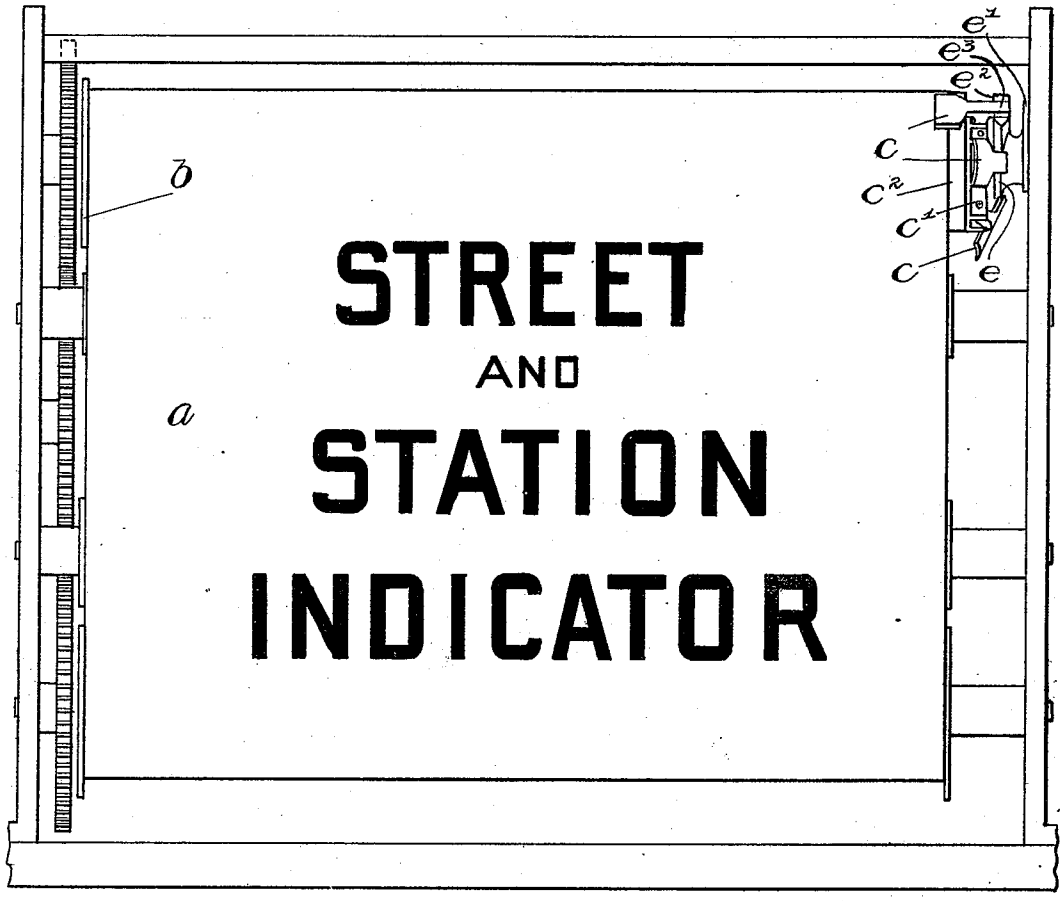


FIG. 1.

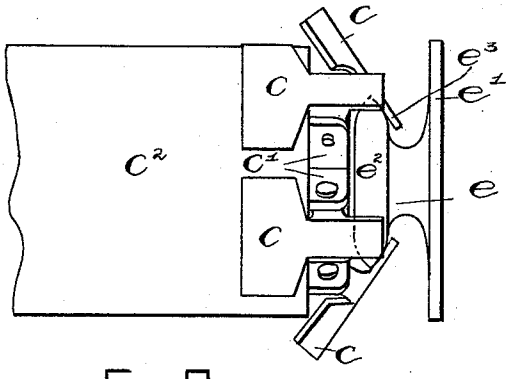


FIG. 2.

WITNESSES:
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Parker Davis

INVENTOR:
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Attys.

THE NORRIS PETERS CO., PHOTO-LITHO,, WASHINGTON, D. C.

(No Model.) 2 Sheets—Sheet 2.

A. C. ALLYN.

STATION INDICATOR.

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Fig. 3.

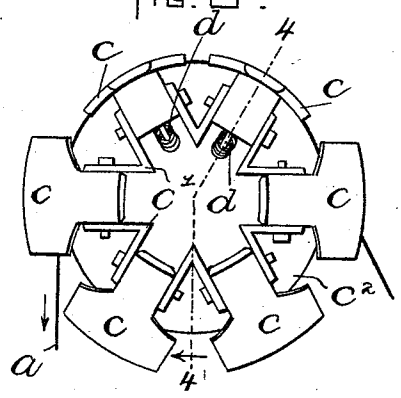


Fig. 4.

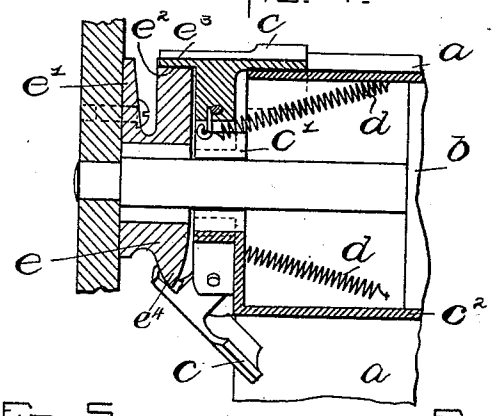


Fig. 5.

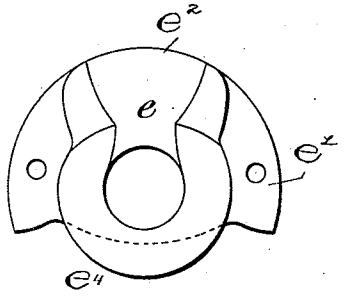
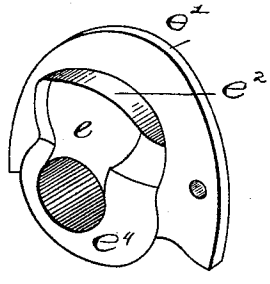


Fig. 6.



WITNESSES:
A. D. Harrison
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INVENTOR:
A. C. Allyn
by Wright Brown Quinby & Allyn.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ATHEAN C. ALLYN, OF BOSTON, MASSACHUSETTS.

STATION-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 525,176, dated August 28, 1894.

Application filed October 30, 1893. Serial No. 489,512. (No model.)

To all whom it may concern:

Be it known that I, ATHEAN C. ALLYN, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Station-Indicators, of which the following is a specification.

The object of the present invention is to provide means for positively engaging a roller or pulley and an apron, curtain or belt, whereby a fixed relation is established. The arrangement is designed for use in street and station indicators which employ a curtain bearing legends, and rollers one of which by its rotation moves the curtain so as to display the legends successively. In an appliance of this character, it is of great importance that a positive relation be established between the driving-roller and the curtain, otherwise the inscriptions on the latter will not be properly displayed. While the invention is designed to supply this desideratum in this class of devices, yet it is not limited to such devices, and may be employed in many other connections.

Of the accompanying drawings, which illustrate an embodiment of the invention: Figure 1 shows a front elevation of a street and station indicator. Fig. 2 shows a side elevation of the parts which embody the invention. Fig. 3 shows an end view of the same. Fig. 4 shows a longitudinal section. Figs. 5 and 6 show detail views of a cam.

The same letters of reference indicate the same parts in all the figures.

In the drawings: the letter *a* designates the curtain of the indicator, which bears the legends, and *b* designates the driving-roller over which said curtain passes.

In order to establish an unvarying relation between the curtain and roller, it is necessary to prevent any lost motion between them, and to this end my invention provides means for clamping the curtain to the roller as it is carried around thereby. The means here shown for accomplishing this design consists of a series of nippers *c*, pivoted to support *c'*, on a metallic sleeve c^2, fastened on one end of the roller *b*, said supports being within the periphery of the sleeve, and the nippers being so formed that, when turned in one direction on their pivots, their engaging portions are brought upon the curtain where it is in contact with the roller; and, when turned in the opposite direction, they are wholly out of the path of the curtain. The nippers are normally thrown to this latter or outward position by springs *d*, attached at one end to the nippers on the inner side of their pivots, and at the other end to the inner wall of the sleeve c^2. The outward position of a nipper is maintained until the rotation of the roller brings it to that part of the curtain which lies flat against the roller, and then the nipper is brought over upon the curtain and clamps it to the roller, and does not release its hold until it arrives where the curtain leaves the roller. The means employed for thus applying the nippers consists in a stationary cam *e*, affixed to a suitable support by means of a flange *e'*, and formed with a raised engaging surface e^2, of sufficient extent to be engaged simultaneously by two of the nippers, which are formed with outward-extending flanges e^3 to engage the cam. Under rotation of the roller, when the nippers are at the low part of the cam, the springs hold them in their outward position, so that they do not interfere with either stretch of the curtain, and when the nippers arrive at the point where the curtain engages the roller, they encounter the high part of the cam and are applied thereby, two nippers being at all times in action.

It will be seen that the above arrangement establishes a positive engagement between the curtain and roller.

The cam *e* tapers in thickness at each end of the acting section, e^2, and merges into a partly circular V-shaped blade, e^4, so that the flanges, e^3, of the nippers will ride easily into and off from said surface, e^2, and will take over and behind the blade e^4, so as to be guided thereby. Thus the nippers are at all times properly controlled, being held to the cam and blade by the springs, their outward movement being limited by the blade.

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

The combination with a roller and curtain of nippers pivoted to the roller and adapted to extend over the curtain and clamp the

same against the roller, said nippers having flanges projecting on the outer sides of their pivots, a fixed cam having a section which co-acts with the said flanges to move the nippers against the roller and a tapered blade over which the flanges may take when the nippers move away from the roller, and springs impelling the nippers away from the rollers.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 25th day of October, A. D. 1893.

ATHEAN C. ALLYN.

Witnesses:
F. PARKER DAVIS,
ARTHUR W. CROSSLEY.