No. 702,819. Patented June 17, 1902.

M. O. PARENTEAU.

CAR ROUTE INDICATOR.

(Application filed Dec. 13, 1900.)

(No Model.)

Fig I,

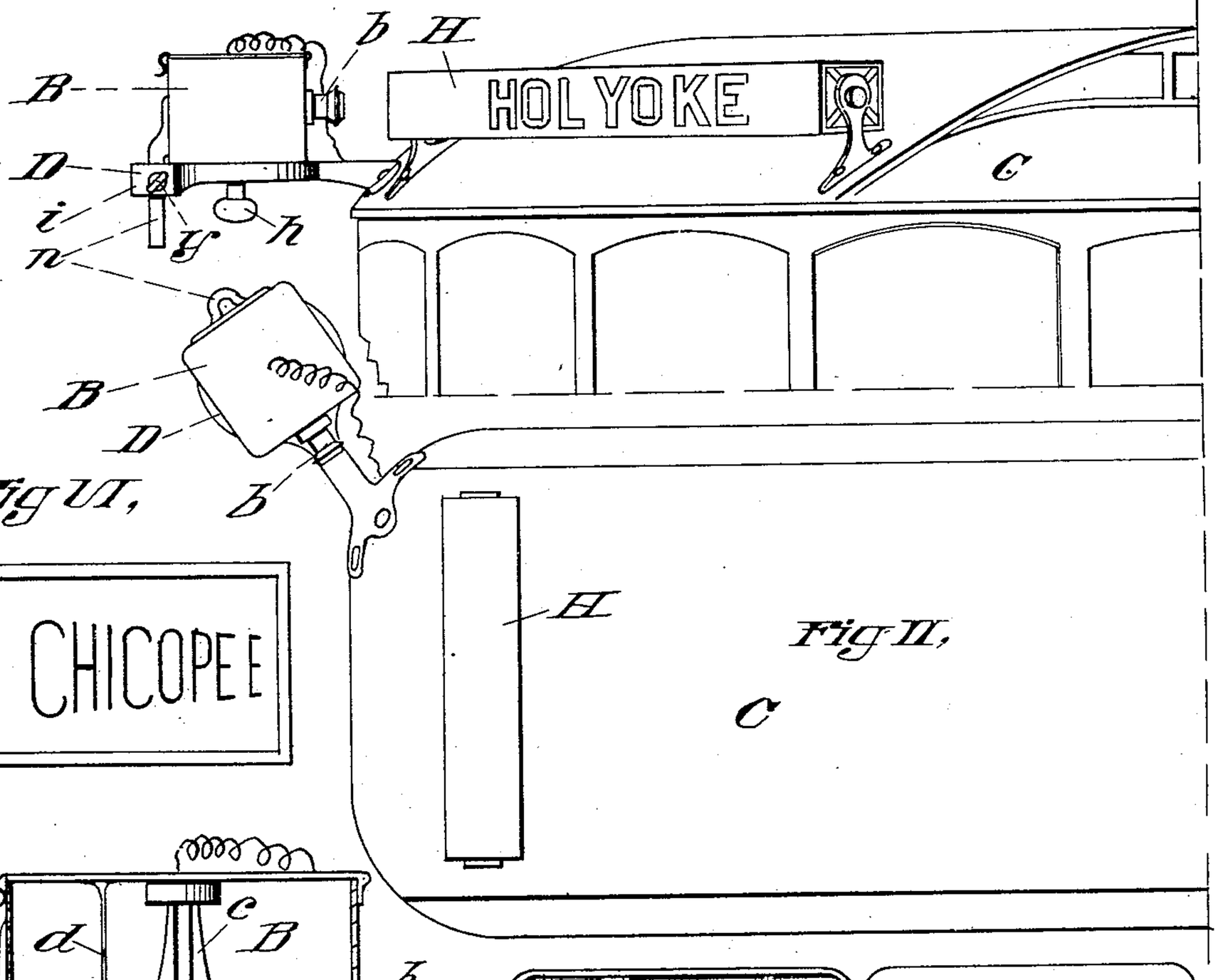

Fig II,

Fig III,

Fig IV,

Fig V,

Fig VI,

Witnesses,
Geo. Kyle
H. L. Williams

Inventor,
M. O. Parenteau
by his attorney
R. F. Hyde

UNITED STATES PATENT OFFICE.

MAXIME O. PARENTEAU, OF SPRINGFIELD, MASSACHUSETTS.

CAR-ROUTE INDICATOR.

SPECIFICATION forming part of Letters Patent No. 702,819, dated June 17, 1902.

Application filed December 13, 1900. Serial No. 39,640. (No model.)

To all whom it may concern:

Be it known that I, MAXIME O. PARENTEAU, a citizen of the United States, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Car-Route Indicators, of which the following is a specification.

My improvements relate to mechanism for illuminating the face of a car-route-indicator sign, and have for their object a stronger illumination than heretofore, so that the lettering upon the sign can be read at a greater distance, and also for their object a multiplication of the number of routes that can be indicated upon the face of the rotatable sign in common use upon the tops of street-cars.

The invention consists in the combination and arrangement as hereinafter described, and more particularly pointed out in the claims.

My invention is fully illustrated in the accompanying drawings, in which—

Figure I is a side elevation of so much of a street-car as is necessary to illustrate the invention combined therewith. Fig. II is a top plan view of the same. Fig. III is an enlarged broken vertical sectional view of the lantern resting upon its base. Fig. IV is a top view of the interior of the lantern, the cover being thrown open. Fig. V is a partial detail view, and Fig. VI is a plan view, of one of the lantern-slides.

Referring to the drawings, B is a lantern having the lenses *b*, adapted, as in the "magic lantern," to be adjustable and to concentrate a light within the lantern upon a limited and well-defined field in front of them, and for the purposes of my invention it is immaterial whether the lens reverses the figure it throws or whether such reverse is corrected. The employment of an electric-light bulb *c* with a reflector *d* is also common in a lantern. The lantern B provided with these well-known features is specially adapted for the purposes of my invention, as follows: D is a base securely bracketed to the car C at one end and at its other adapted to seat the lantern in a horizontal plane, being perforated in the center of the seat to permit the passage therethrough of the stem of handle *h* and being provided in a line with its medial center with a socket *i* to receive an extension from the lantern. The base is so arranged relative to the car C as to bring the mouth of the lens *b* in a line with the horizontal center of the sign H. The base is projected from the car C at an angle to the face of sign H, as more particularly shown in Fig. II, so as to leave the face unobstructed to a front view, but so as to be still capable of illuminating the face.

The base D is made so solid as to have no vibration independent of the car, and in practice the face of a sign so illuminated from the outside is much plainer to read than one illuminated from its interior.

In Fig. I the lantern is supposed to illuminate the face of a sign provided with solid black letters.

The lantern B has firmly secured to its back end a dowel-pin *n*, which, passing through socket *i* in the base D and having a set-screw *y* through the socket, furnishes a means of raising the lantern from the base and there securing it, as well as a way of adjusting the lantern upon the horizon and there securing it. In the bracket and lantern in the position shown there is nothing to interfere materially with a clear view of the face of the sign; but the lantern is quickly removable when it is not needed in the day-time by simply detaching the electric feed-wire to the lamp, loosening the set-screw holding the pin *n*, and lifting the lantern from its base D, in which a hole is left to permit the passage therethrough of the handle *h*, as indicated in dotted lines, Fig. III. The lantern thus removed when not needed may be as quickly replaced at the time when the headlights are put in place for night service.

In order to multiply the number of routes which may be indicated upon the face of the rotatable sign, generally provided with four sides, one side is left blank, as shown in Fig. II, as a field upon which to be projected images in the form of letters from the lantern B. In the lantern a slide-case I is rotatably seated upon the bottom of the lantern, so as to be capable of rotating in a horizontal plane upon a center coincident with that of the lantern, and is provided with a central downward-extending stem through the base D, terminated by a handle-knob *k*, which is in convenient reach of the conductor or motorman.

The top surface of the case I is provided with sockets *m* as a convenient means of seating the slides *t* by receiving their lower ends therein. In Fig. IV one of these sockets is shown, and the slides are so combined with the case as to be capable of being interposed one at a time between the lantern-lamp and the lens or lenses through the rotation of the case. In the drawings eight faces are shown formed of as many slides, and in practice one of these faces is left without any slide or with plain glass, so that the lantern can be employed only to illuminate the lettered faces of the sign. The slides *t* are preferably formed of glass, though they may be made of thin opaque material having the letters cut through them in stencil form, as I have found in practice that illuminated letters projected upon the field are much more brilliant than solid letters upon an illuminated background.

The electric bulb *c* and reflector *d* are attached to the lantern-top, as shown in Fig. IV, so as to follow it when thrown open and so that both take their place within the slides when the top is closed, as shown in Fig. III.

As shown in Figs. III and V, the bottom of case I rests upon a track *x*, fixed to the bottom of the lantern and of a corresponding diameter, and spurs or detents *z*, fitting into corresponding depressions *e* in the track, are so spaced as to permit each of the slides to occupy in turn a position square across the space between the bulb and the lens, as it is only necessary to push up by the handle *h* the slide-case until the spurs *z* ride on top of track *x*, when the case can be rotated until the desired slide is in position and then dropped to be locked in place. Pins in the bottom of the case I, fitting into corresponding holes through the bottom of the lantern, would be an obvious equivalent.

As letters thrown upon a field at an angle would be magnified in proportion to their distance from the lens, and so distort the word they spelled, I have found it necessary to correct such aberration by forming the letters as shown on the slide, Fig. VI, and as the angle is a constant one and the distance a fixed one there is no difficulty in forming the words so that their letters will take the same place on the blank sign that they would if they were painted to be permanent. By these means not only are the names of routes on the sign in common use brilliantly illuminated, but in addition a large number of routes can be added to supplement the few unchangeably attached to the sign, which is a great advantage where, as in large cities, there are many routes where it is desirable to shift a car to at short notice and which has not been done for want of indicators possessed by the car.

Now having described my invention, what I claim is—

1. In a car-route indicator, the combination with a revoluble polygonal sign, having a plurality of indicator-faces and one blank face, of a lantern in position to illuminate all the faces of the sign, and a series of movable transparent slides for the lantern, which slides carry indices which may be thrown on the blank face of the sign, substantially as described.

2. In a car-route indicator and in combination, a revoluble polygonal sign having one blank face, a lantern in position to illuminate the face of the sign, and a series of transparent slides one being blank and all mounted end to end and constituting approximately a ring arranged to rotate about the light within the lantern, so as to pass the light from the lantern through any one of the slides and exhibit the same on the sign.

3. The combination with a revoluble sign having a blank face acting as a screen, of a lantern arranged at an angle to said screen, and a transparent slide connected to the lantern and having letters on its face differing in size in determined relation to the screen, so that the letters on the screen may appear of uniform size, substantially as described.

4. In a car-route indicator, the combination of a lantern having a plurality of movable transparent slides, with a movable sign-carrier having a plurality of sign-faces, any one of which faces can be turned into the illuminating-field of the lantern, and serve as a screen therefor.

M. O. PARENTEAU.

Witnesses:
R. F. HYDE,
H. S. CULLUMUS.