A. LO CASTO.

CHANGEABLE EXHIBITOR.

APPLICATION FILED JAN. 28, 1920.

1,344,642.

Patented June 29, 1920.

3 SHEETS—SHEET 1.

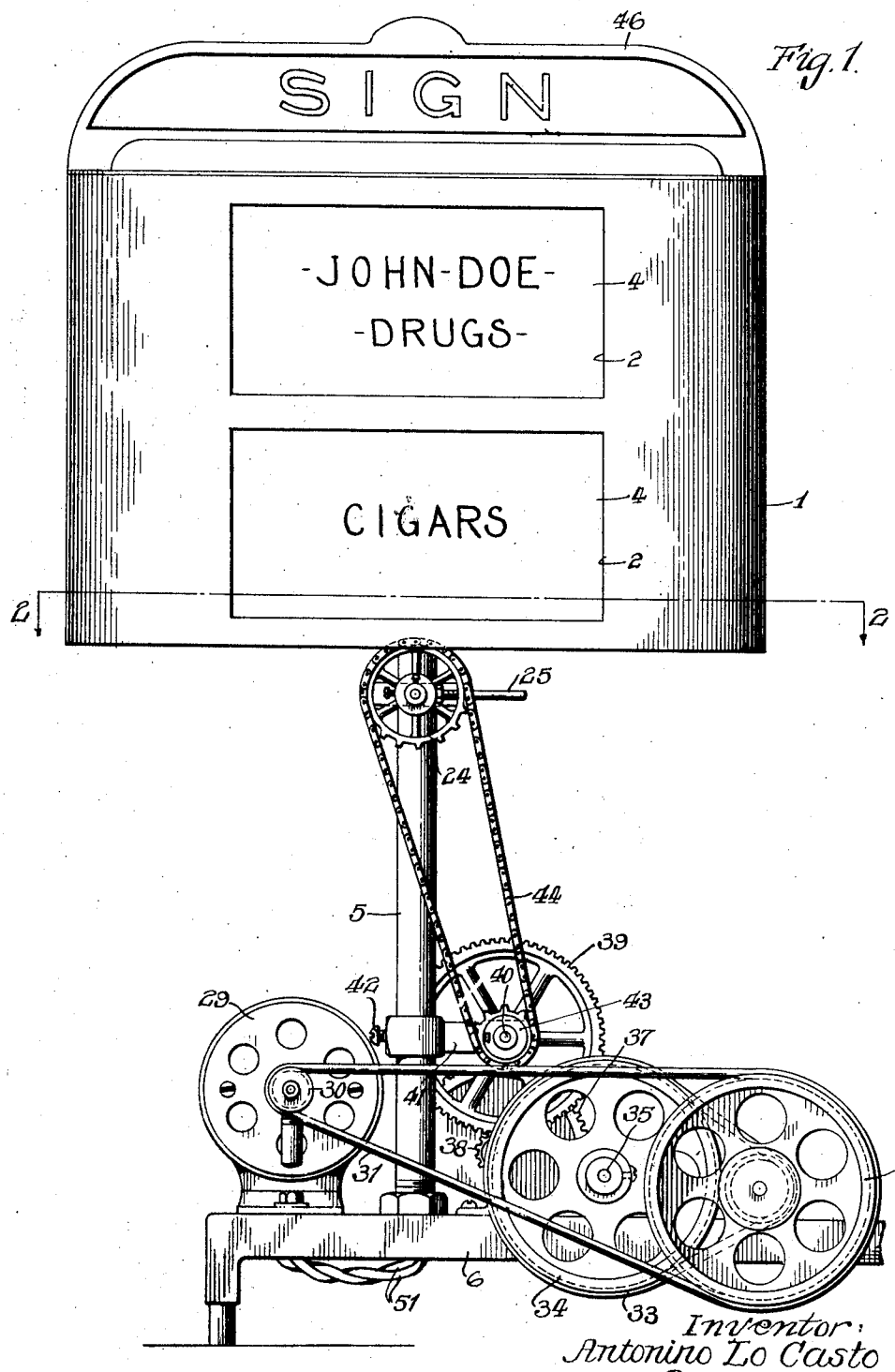


Fig. 1.

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3 SHEETS—SHEET 2.

Fig. 2

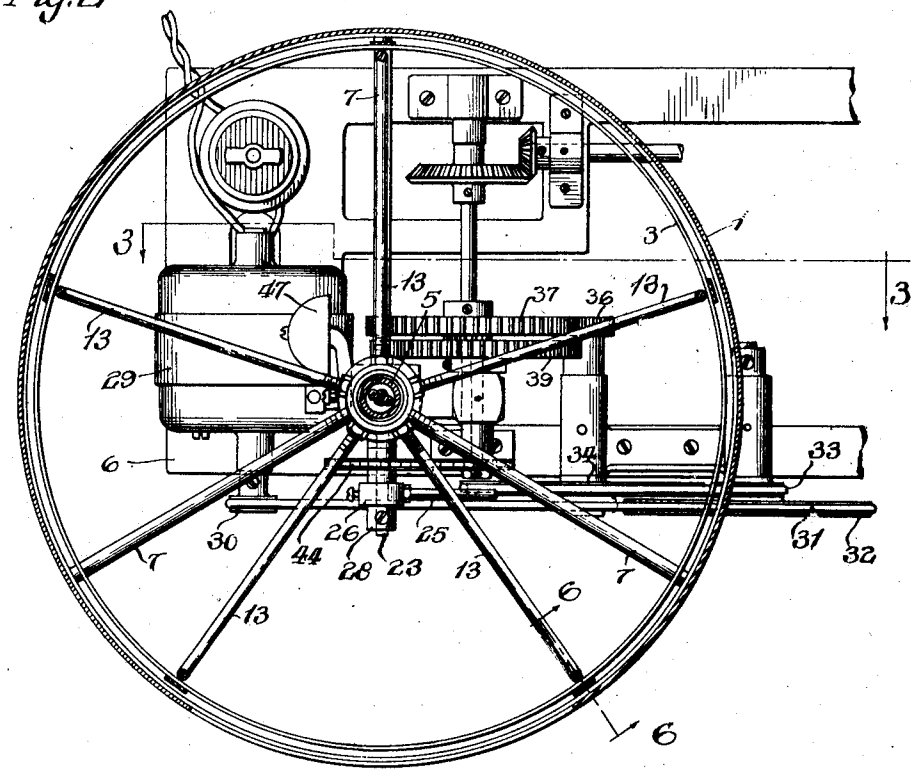
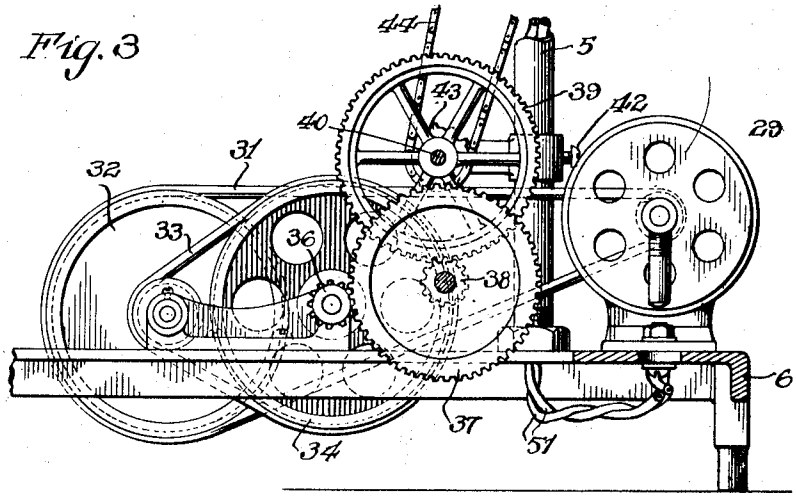


Fig. 3



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3 SHEETS—SHEET 3.

Fig. 4

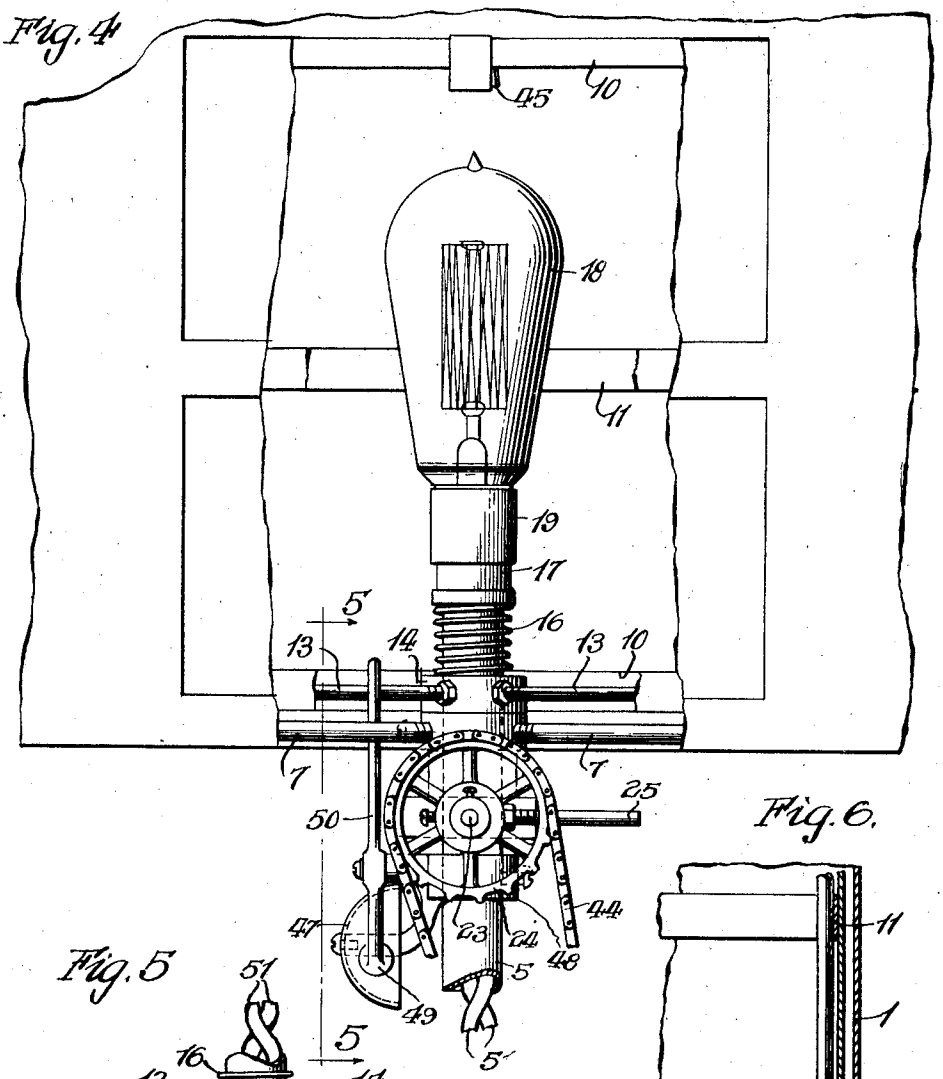


Fig. 5

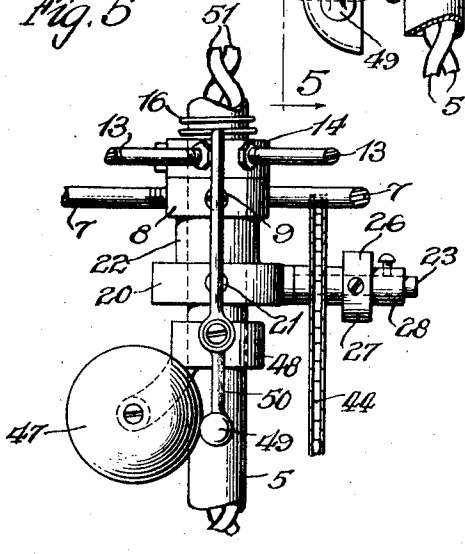
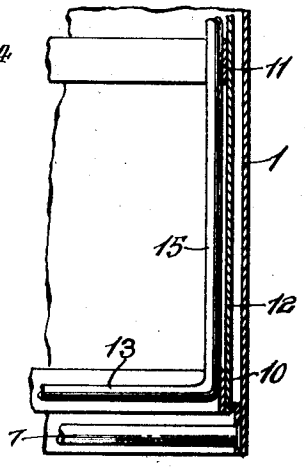


Fig. 6.



Inventor:
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UNITED STATES PATENT OFFICE.

ANTONINO LO CASTO, OF CHICAGO, ILLINOIS.

CHANGEABLE EXHIBITOR.

1,344,642. Specification of Letters Patent. Patented June 29, 1920.

Application filed January 28, 1920. Serial No. 354,547.

To all whom it may concern:

Be it known that I, ANTONINO LO CASTO, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Changeable Exhibitors, of which the following is a specification.

This invention relates to an advertising device in the nature of a changeable exhibitor operated by an electric motor and more particularly adapted for use with a razor honing machine of the type set forth in my prior Patent No. 1,091,939, granted March 31, 1914.

Among the objects of my invention is to provide a device which is simple and inexpensive in construction and which may be operated by the motor on the machine with which the device is used, and further to effect the changing of the signs by having the motor intermittently rotate a member carrying the signs and thus bring them into view through windows or openings in the casing surrounding the sign carrying member.

The invention consists further in the matters hereinafter described and more particularly pointed out in the appended claims.

In the accompanying drawings—

Figure 1 is a front view of an advertising device constructed in accordance with my invention and shown as mounted on and operated by the motor of a razor honing machine of the type mentioned, only so much of that machine being illustrated as to indicate the manner in which the rotatable sign carrying member is connected with and operated by said motor;

Fig. 2 is a horizontal sectional view taken on line 2—2 of Fig. 1 and looking downward as indicated by the arrows;

Fig. 3 is a vertical sectional view taken through the base of the razor honing machine on line 3—3 of Fig. 2, and looking at the motor and pulleys and gear wheels operated thereby from the rear;

Fig. 4 is a view showing the incandescent electric lamp bulb at the top of the upright post or standard of the advertising device and the mechanism employed for giving intermittent rotation to the rotatable sign holding member; the latter and the casing inclosing the same, supported by said post and surrounding said bulb, being broken away to show the bulb;

Fig. 5 is a view taken on the vertical line 5—5 of Fig. 4 and showing said operative mechanism for a different position; and

Fig. 6 is an enlarged vertical sectional view taken on line 6—6 of Fig. 2 to show a detail of construction.

The advertising device of my invention, as shown in the drawings, comprises a tubular casing 1, arranged with its marginal wall vertical and preferably cylindrical in shape, although any other shape for ornamental or other purposes may be employed if desired. In the marginal wall of the casing are one or more windows or openings 2, 2, preferably rectangular in shape, and, as shown in Fig. 1, two windows are provided and arranged one above the other, so that two signs, arranged in a like manner, may be displayed through said windows at the same time, when brought there for that purpose. Located in the casing 1 is a member 3 for carrying the signs, which may be in the form of cards or sections, these being indicated by 4, 4 in the drawings, and the member 3 is rotatably mounted on a vertical axis for bringing the cards carried thereby into view at the windows. When two windows, as shown in Fig. 1, are used, the member 3 carries two sets of cards or signs, an upper set for the upper window and a lower set for the lower window, the cards of one set being above the corresponding cards in the other set, and each card having the same shape and size as its associated window so as to extend across the same when brought into view. The casing 1 and the member 3 are both mounted on an upright post or standard 5, secured to a supporting base 6, which as shown in the drawings is the base of a razor honing machine, although it is to be of course understood that the base may be used for the advertising device alone when the latter is not mounted on and used with a razor honing or other machine.

The casing 1, as shown, is open at the top and bottom, and, to mount it on the post, said casing is provided at its bottom with a plurality of inwardly extending, radial arms 7, 7. The outer ends of said arms are secured to the marginal wall of the casing, and the inner ends of said arms are secured to a collar 8, applied on the post 5 and rigidly fastened thereto by a set screw 9, or in any other preferred manner. The member 3 is cylindric in shape, and is formed of top

and bottom rings 10, 10 and an intermediate ring 11, all secured together by a plurality of vertical strips 12. These are spaced apart circumferentially, preferably the same distances, and divide the member 3 into a plurality of card or sign holding sections. The member 3 is also open at top and bottom, and, to connect it with the post 5, said member 3 is provided at its bottom with a plurality of radially arranged spokes 13, 13, the inner ends of which are secured to a collar 14 applied on the post 5 above the collar 8, as shown in Figs. 4 and 5. The spokes 13 have their outer ends bent upward, as indicated at 15 in Fig. 6, and are secured to the inside of the rings 10 and 11 to the rear of the vertical strip 12, as shown. The collar 14 rests on the collar 8 and is loosely mounted on the post 5, which is held stationary by its connection with the base 6. Thus, the member 3 may be turned or rotated about the post 5 and within the casing 1, which is also held stationary by its connection with said post. The collar 14 is held against the collar 8 by a coil spring 16 surrounding the post 5 above the collar 14, and the compression of said spring may be varied at will by a nut 17 screwed on the upper end of the post 5, as shown in Fig. 4. The force of the spring on the collar 14 is sufficient to hold the member 3 against rotation when it is not being rotated or turned by the power driven mechanism provided for that purpose and to be presently described, and, as the member 3 is only intermittently rotated by such mechanism, it follows that said member has periods of rest, and thus will hold to view, at the windows 2, certain of the cards 4 during such periods. To illuminate the display or advertising cards 4 from within the casing 1 and when at the windows 2, I provide an incandescent lamp 18 held in a lamp socket 19 applied on the upper end of the post 5 above the nut 17, as shown.

For imparting intermittent rotation to the member 3 and thus bring the cards 4 carried thereby successively into view at the windows 2, I provide mechanism constructed as follows. Applied to the post 5 below the collar 8 is a collar 20 fixed thereto in any preferred manner, as by a set screw 21. Said collar 20 is spaced the distance required below the collar 8 by an interposed sleeve 22, which may be made integral with either of said parts. Fixed to said collar 20 and extending horizontally outward therefrom is a shaft 23, on which is loosely mounted a sprocket wheel 24, the hub of which carries a fixed pin 25 arranged substantially at right-angles to the shaft 23 and having a length to reach the spokes 13 of the member 3 for intermittently rotating the same. In the particular form of construction illustrated, the pin 25 is secured to a collar 26, which is fastened to the hub of said sprocket wheel by a set screw 27, and the sprocket wheel is held from movement off the shaft 23 by a stop collar 28. This construction is provided to facilitate assembling the parts and also disassembling them for the purpose of repair and adjustment. When the sprocket wheel 24 is rotated, the pin 25 is carried upward against one of the spokes 13 standing in its path of movement, and the member 3 will be rotated as long as said pin 25 remains in contact with such spoke. The parts are so arranged and proportioned that this period of movement is sufficient to carry one set of cards or signs 4 away from the windows 2 and bring the following set to the windows for display in place of the set previously displayed. As soon as such set of signs are brought into full display position, the pin 25 moves out of contact with the spoke and the member 3 is held from further rotation by the spring 16, and the signs brought into view at the windows remain there until the pin 25 moves into contact with the following spoke 13. When that happens, the member 3 is again rotated to bring the next set of signs into view at the windows, and this intermittent rotation of the member 3 continues as long as the sprocket wheel 24 is turned. In the device shown, only one set of windows 2 is used, but if it is desired to display the signs at more than one point about the casing 1, additional windows could be provided.

Any type of power driven means could be used for rotating the sprocket wheel 24, but when the advertising device is used with a razor honing machine of the type mentioned, the sprocket wheel 24 is driven from the electric motor 29 of that machine, in the following manner. As shown, the motor 29 is mounted on the base 6, and to its armature shaft is secured a grooved pulley 30, over which is trained a belt 31, which also extends about a larger grooved pulley 32 journaled on the base 6. This pulley 32 has an inwardly extending hub grooved to receive a belt 33, which is trained over a grooved pulley 34 mounted on a shaft 35 journaled in standards on said base 6. At the inner end of said shaft 35 is a gear pinion 36 in mesh with a gear wheel 37, on the shaft of which is a gear pinion 38, which meshes with a gear wheel 39 mounted on a shaft 40. This shaft is journaled in a bracket 41 clamped to the post 5 by a set screw 42 or the like. Said shaft 40 is provided with a sprocket wheel 43 to receive a sprocket chain 44 trained over the sprocket wheel 24 above, as shown. Thus, when the motor 29 is operated, the card holding member 3 will be intermittently rotated, as described, at the same time the razor honing parts of the machine are actuated. Thus,

attention of passers-by may be attracted to the machine by the changeable exhibitor, which projects high enough above the machine for that purpose, and not depend on the novel movement of the machine to attract attention. Moreover, the signs change with frequent rapidity to hold attention, yet are stationary long enough to be read with ease. The advertising medium may be of any kind desired, either applied directly to the character of machine on or with which it is used, or to allied or other subjects. When the advertising device is used alone, any subject-matter of the advertising desired may be used, as the cards 4 are removably connected with the member 3 by inserting their ends between the strips 12 and the bent ends 15 of the arms 13, or the cards may be held in place by clips 45, as shown in Figs. 2 and 4.

In addition to the changeable signs, I may use a fixed or stationary one, as by providing a frame 46 extending over the top of the casing 1 and secured to the same in any preferred manner.

With the changeable signs, I may use a bell 47, carried by a collar 48 fixed by a set screw or the like to the post 5. The hammer 49 of said bell is at the lower end of an arm 50 pivoted on the collar 48, as shown in Fig. 5. The upper end of said arm 50 extends in the path of movement of the spokes 13 and is moved thereby to ring the bell each time the member 3 is moved to change the sign. The post 5 is made hollow to allow the wires or conductors 51 to be led up to the lamp socket 19.

While I have shown and described in detail an advertising device of my invention, it is of course to be understood that the details of construction and arrangement of parts shown may be variously modified and changed without departing from the spirit and scope of my invention.

I claim as my invention:

1. A device of the character described, comprising an upright post, a tubular casing mounted on said post and having a window in its upright marginal wall, a sign carrying member in said casing and rotatably mounted on said post and having radial projections, a rotary member on said post and provided with a pin acting on said projections to impart intermittent rotation to said sign carrying member for bringing the signs thereon successively into view at said window, means for holding said sign carrying member against rotation when not acted on by said pin, and means, including a motor, for rotating said rotary member.

2. A device of the character described, comprising an upright post, a tubular casing mounted on said post and having a window in its upright marginal wall, a sign carrying member in said casing and rotatably mounted on said post and having radial spokes, two sprocket wheels on said post and both below said spokes, the uppermost sprocket wheel having a pin acting on said spokes to impart intermittent rotation to said sign carrying member for bringing the signs thereon successively into view at said window, a sprocket chain trained over said sprocket wheels, and a motor for driving the lowest of said sprocket wheels.

3. A device of the character described, comprising an upright post, two collars on said post, one being fixed and the other being free to revolve, a tubular casing having a window in its upright marginal wall and provided with inwardly extending arms secured to said fixed collar, a sign carrying member in said casing and having spokes secured to said loose collar, a third collar fixed on said post below the other two, a shaft secured to said third collar and extending outwardly therefrom, a rotary member loosely mounted on said shaft, a pin fixed to said rotary member and adapted to act on said spokes to impart intermittent rotation to said sign carrying member for bringing the signs thereon successively into view at said window, a coil spring about said post above and bearing downward on said loose collar for holding said sign carrying member against rotation when not acted on by said pin, and means, including a motor, for rotating said rotary member.

4. A device of the character described, comprising a base, an upright post secured to said base, three collars on said post, arranged one above the other with the lower two fixed to the post and the top one loose to rotate about said post, a tubular casing having a window in its upright marginal wall and provided with inwardly extending arms secured to one of said fixed collars, a tubular, sign carrying member in said casing and having spokes secured to the loose collar, a shaft secured to the other fixed collar, a sprocket wheel loosely mounted on said shaft, a pin fixed to said sprocket wheel and acting on said spokes to impart intermittent rotation to said sign carrying member for bringing the signs thereon successively into view at said window, a second sprocket wheel secured to said post, a sprocket chain trained over said sprocket wheel, and a motor on said base for rotating the second sprocket wheel.

5. A device of the character described, comprising an upright post, a tubular casing mounted on said post and having a window in its upright marginal wall, a sign carrying member in said casing and rotatably mounted on said post and having spokes, a rotary member on said post and provided with a pin acting on said spokes to impart intermittent rotation to said sign carrying member for bringing the signs

thereon successively into view at said window, means for holding said sign carrying member against rotation when not acted on by said pin, a bell secured to said post and having a hammer operated by said spokes upon the rotation of said sign carrying member to ring said bell each time a sign is changed at said window, and means, including a motor, for rotating said rotary member.

In testimony that I claim the foregoing as my invention, I affix my signature, this 23rd day of January, A. D. 1920.

ANTONINO LO CASTO.