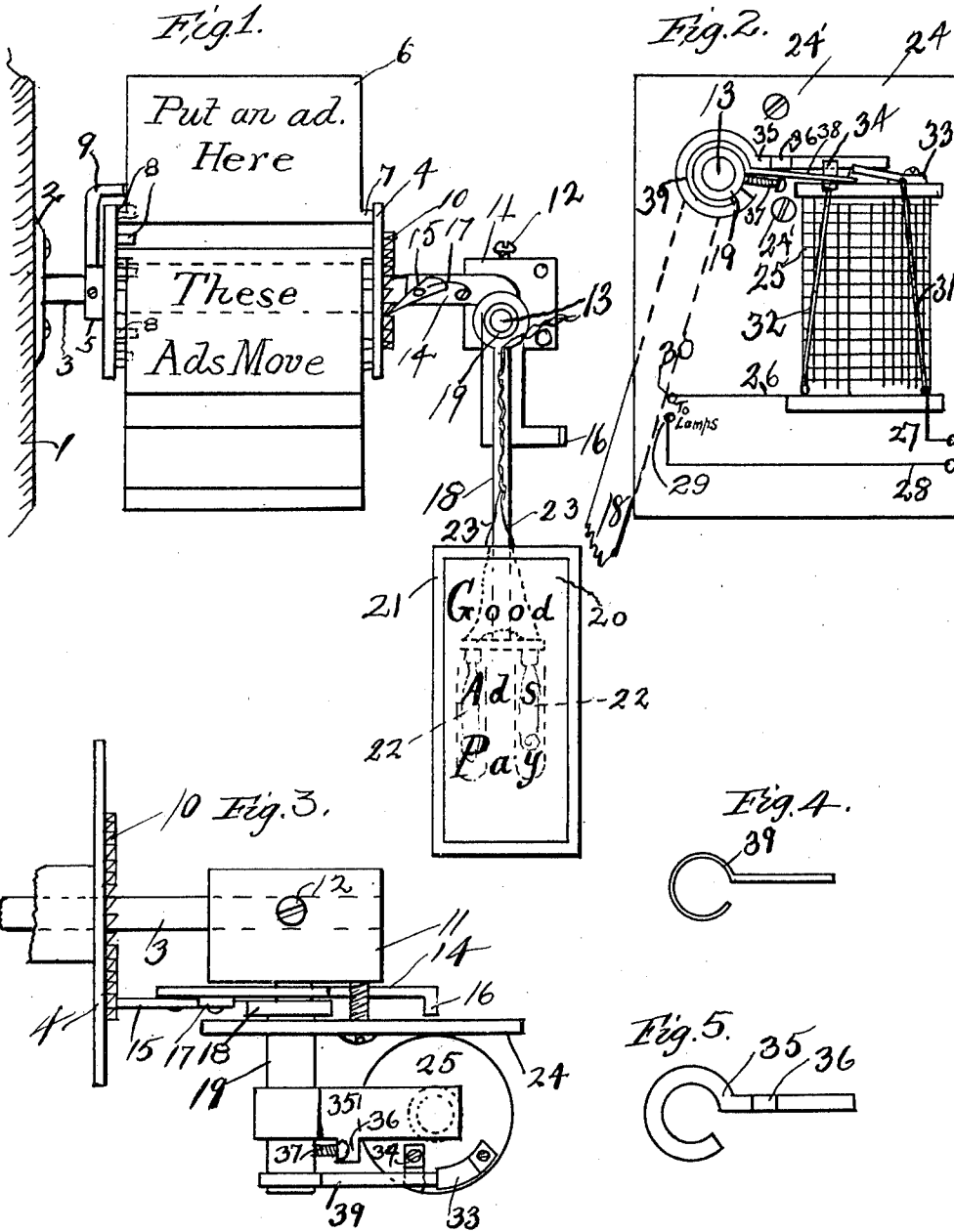


M. H. SHOENBERG.
ADVERTISING DEVICE.
APPLICATION FILED JAN. 29, 1912.

1,061,505.

Patented May 13, 1913.



Witnesses
C. H. Kephart.
R. N. Jones.

Inventor
M. H. Shoenberg
by Carlos P. Griffin,
his Attorney

UNITED STATES PATENT OFFICE.

MILTON H. SHOENBERG, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO PRESTO ELECTRICAL MANUFACTURING COMPANY, OF SAN FRANCISCO, CALIFORNIA, A CORPORATION OF CALIFORNIA.

ADVERTISING DEVICE.

1,061,505.

Specification of Letters Patent.

Patented May 13, 1913.

Application filed January 29, 1912. Serial No. 674,285.

To all whom it may concern:

Be it known that I, MILTON H. SHOENBERG, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented a new and useful Advertising Device, of which the following is a specification in such full and clear terms as will enable those skilled in the art to construct and use the same.

This invention relates to an advertising sign and its object is to provide means whereby a plurality of advertising cards may be displayed successively and to provide means whereby one advertising card may be intermittently illuminated.

Another object of the invention is to produce a movable sign for the purpose of attracting the passerby, and which will use a very small amount of electric current in the operation of the same.

Another object of the invention is to produce an electric sign which will be self-starting, all that is necessary to start the same being the turning on of the electric current.

In the drawings in which the same numeral of reference is applied to the same portion throughout the several views, Figure 1 is a front elevation of the sign, with the operating coil and plate supporting the same removed for purposes of illustration. Fig. 2 is an enlarged view of the operating coil and plate supporting the same. Fig. 3 is a plan view of the operating coil and spool turning the arm. Fig. 4 is a side elevation of the friction switch cut-out, and Fig. 5 is a side elevation of the armature.

In the drawings the numeral 1 represents a suitable wall to which a plate 2 is suitably secured, said plate having an arm 3 extending therefrom which forms a support for a card carrying spool 4, said spool being revoluble on said arm 3 and having its position thereon determined by means of a collar 5 secured to said arm. The spool 4 carries a series of signs or advertising cards 6 which have trunnions 7 pivoted in the flanges of the spool. The left hand flange of the spool has a projection 8 adjacent each card, which projection permits said cards to fall forwardly as soon as they have passed the spring 9, which bears thereon and which is secured to the collar 5. These projections 8, however, cause the cards to

remain in a radial position when traveling toward the top of the spool, thus displaying the advertisements they may carry. The right hand flange of the spool is formed on the side thereof with ratchet teeth for the purpose of rotating said spool step by step, as will be explained later.

Supported on the arm 3 at a short distance from the spool is a block 11, a screw 12 fixing the position of said block in respect to said arm. This block carries a horizontal shaft 13 at right angles with the arm 3, said shaft pivotally supporting a bell crank 14 which carries a pawl 15 and which has a short arm 16 for the operation thereof. The short arm 16 is for the purpose of causing the cards 6 to move from one position to another. This is accomplished by the pendulum rod 18 striking the arm 16 and causing the pawl 15 to move the disk 4 carrying the ratchet teeth around on its support, thus dropping the cards 6 one at a time. The pawl 15 is pivoted to the bell crank and has a small spring 17 to hold said pawl in engagement with the ratchet teeth 10. Also supported on the shaft 13 is a pendulum 18, said pendulum having a tube 19 rigidly secured thereto which surrounds said shaft 13.

The pendulum 18 supports a sign or advertising transparency 20 in a frame 21. In the rear of the transparency there are placed electric lamps 22 for the intermittent illumination of said transparency, wires 23 leading to said lamps in a well known manner. Mounted upon the block 11 in front of the pendulum are screws 24 holding a plate 24 in place. Said plate supports an electromagnet 25, to which electric wires 26 and 27 lead. The plate 24 has another wire 28 thereon, which, with the wire 26, leads to suitable binding posts 29 and 30 on the plate from which binding posts suitable wires, not shown, lead to the wires 23 connected to the lamps.

The magnet 25 is provided with cut-out wires 31 and 32, which extend from the bottom thereof to plates 33 and 34 secured on the top of said magnet. Mounted loosely on the tube 19 is an armature 35, which armature extends over the top of the core of the magnet. This armature has an arm 36 which contacts with a screw 37, which is secured in a hole in the sleeve 19. Imme-

diately in front of the screw 37 is a small spring arm 38, said spring arm having its end 39 bent into more than one-half a circle so that it will fit the tube 19 tightly.

5 The result of the above construction is that whenever the magnet is energized, as it will be whenever the pendulum hangs in its normal position, that the armature will be attracted to the core of the magnet, thus
 10 giving an impulse to the pendulum which, of course, continues to swing with each impulse. As the small arm 38 contacts with the plate 34, any movement of the tube (anti-clock-wise note Fig. 2) will tend to
 15 cause the arm 38 to come into contact with the plate 33, thus short circuiting the magnet 25 and to permit the lamps to become very much brighter, whereupon the pendulum will continue its movement and will,
 20 by means of the screw 37, lift the armature a small amount. At the end of the throw to the right (Fig. 2) the pendulum will start to return and the return of the pendulum will disconnect the arm 38 from the
 25 plate 33, thus energizing the magnet and giving an impulse to the pendulum. Since the lamps and the magnet are in series, this will result in giving the lamps very little current so that they will give off very little
 30 light and since the coil is only short cir-

cuted out, there is no tendency for the electric current to spark on the interruption of said current at the plate 33.

Having thus described my invention what I claim as new and desire to secure by Letters Patent of the United States is as follows:

1. In a display device, a pendulum having a sign thereon, an electromagnet to give impulses to said pendulum, a movable circuit breaker carried by the pendulum, and an electric circuit connecting the magnet, the illuminating means and said circuit breaker to intermittently illuminate the signs on said pendulum, substantially as described.

2. In a display device, a pendulum having a sign thereon, means operated by the pendulum to intermittently illuminate said sign, and an electromagnet to give impulses to said pendulum, substantially as described.

In testimony whereof I have hereunto set my hand this 20th day of January A. D. 1912, in the presence of the two subscribed witnesses.

MILTON H. SHOENBERG.

Witnesses:

C. P. GRIFFIN,

L. H. ANDERSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."