

May 16, 1950

E. MATTER

2,507,641

ELECTRICAL ADVERTISING DEVICE FOR DISPLAYING ARTICLES

Filed Dec. 26, 1946

Fig. 2.

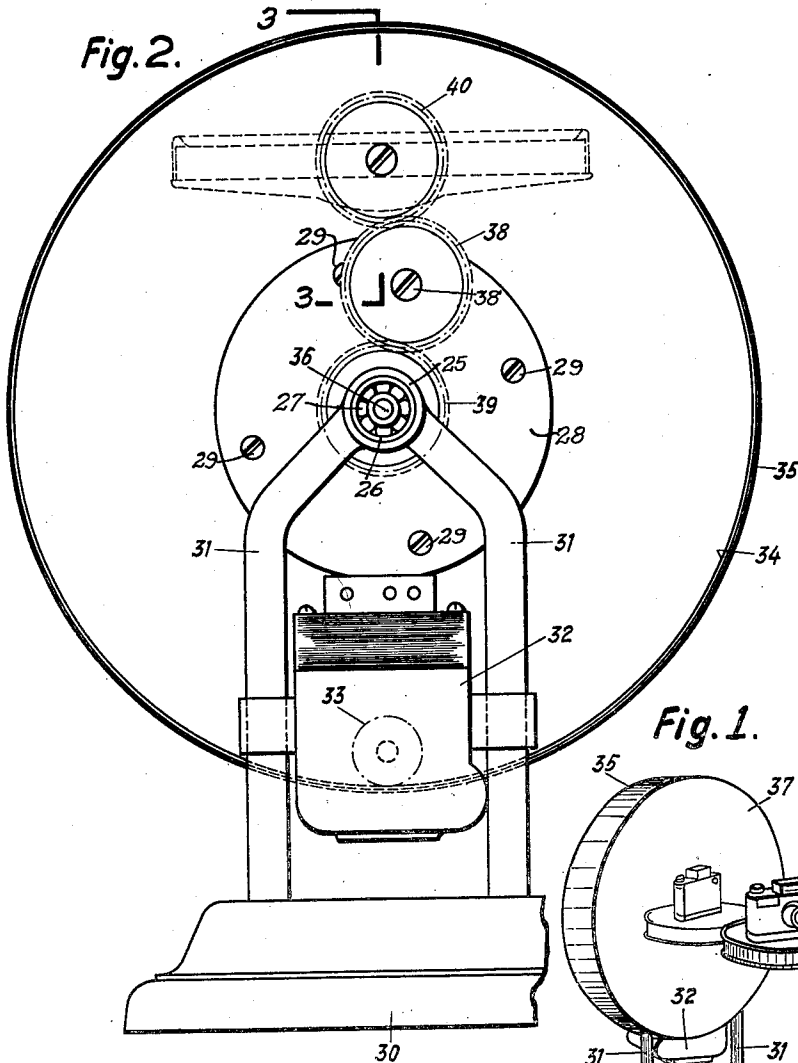


Fig. 1.

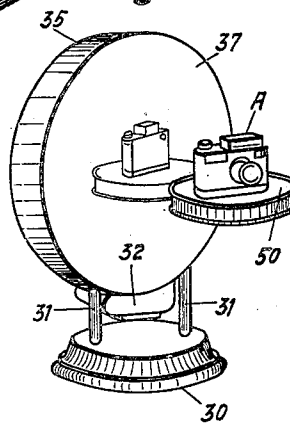
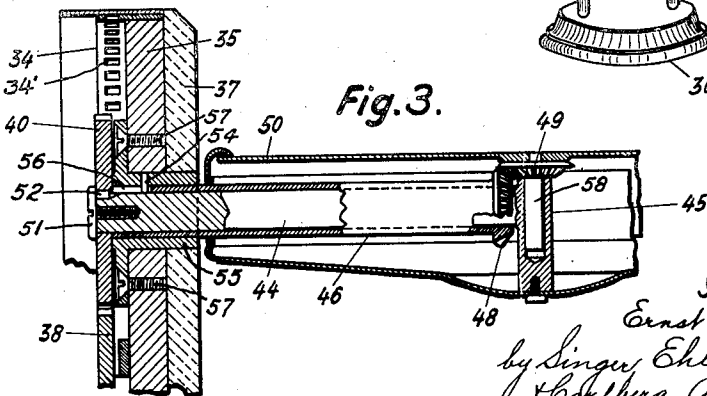


Fig. 3.



Inventor:
Ernst Matter,
by Singer, Ehler, Stern
& Dahlberg, Attorneys.

UNITED STATES PATENT OFFICE

2,507,641

ELECTRICAL ADVERTISING DEVICE
FOR DISPLAYING ARTICLESErnst Matter, Zurich, Switzerland, assignor to
Isaac Bloom, Gary, Ind.Application December 26, 1946, Serial No. 718,554
In Switzerland August 2, 1946

1 Claim. (Cl. 74-660)

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The present invention relates to a new and improved electrical advertisement device.

The main object of the invention consists in the provision of a display device which will attract attention to the object.

To attain the said object my invention consists in a carrier of the object to be displayed which is driven by a motor for instance in front of a mirror, in such a manner that the said object might be inspected by an onlooker from different sides without moving from place to place either by the mirror or in direct view. In order that the invention may be the better understood, I will now proceed to describe it in relation to the accompanying drawings.

In the drawings—

Fig. 1 illustrates an embodiment of the device in a perspective view.

Fig. 2 is a rear view of the said device, and

Fig. 3 is a section on line 3—3 of Fig. 2.

Referring to the drawing, the device comprises a base 30 with two vertical standards 31 the upper ends of which converge towards each other to form a bearing housing 25 supporting a rotatable horizontal shaft 36 on which a circular plate 28 is fixedly mounted which in turn is secured by screws 29 to a larger circular disc 35. The horizontal shaft 36 is mounted in a roller bearing 27 inserted in a sleeve 26 which latter is non-rotatably secured in the bore of the bearing housing 25. The sleeve 26 has fixedly attached to its end facing the circular plate 28 a spur gear 39. The latter is in mesh with a spur gear 38 rotatably mounted on a stub-shaft 38' secured to the plate 28. The gear 38 in turn meshes with a gear 40. On the circumference of the disc 35 is secured a band 34 having in a laterally projecting edge portion holes 34' at regular distances apart. A pinion 33 on the armature shaft of the motor 32 fastened to the standards 31 is in engagement with the holes in the band 34. The gears 39, 38 and 40 have the same diameter and the same number of teeth so that when the disc 35 rotates once with the shaft 36 each of the gears 38 and 40 makes one complete revolution.

The gear 40 is fixedly connected to the end of a shaft 44 by means of a head screw 51 and a key 52. Therefore, the shaft 44 is compelled to rotate with the gear 40. The right hand end of the shaft 44 (Fig. 3) carries a bushing 45 which latter, as shown, is preferably rigidly connected with the shaft 44. The bore of the bushing 45 extends at a right angle to the longitudinal axis of the shaft 44.

From the foregoing it appears that when the

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disc 35 rotates once about the shaft 36, the shaft 44 and the bushing 45 are moved in a circular path which is concentric to the axis of the shaft 36 but no rotation of the shaft 44 about its own axis takes place.

The shaft 44 is mounted in a tubular bearing or sleeve 46 which rotates relatively thereto, said sleeve being fastened at one of its ends to the disc 35 and carrying at its other end a bevelled gear 48 which meshes with a bevel gear 49 on a vertical shaft 58 rotatable in the bushing 45. The gear 49 (Fig. 3) carries a horizontal supporting plate 50 on which the article A (Fig. 1) to be displayed is placed. The tubular bearing 46 is secured to the disc 35 by means of a bushing 55 and a pin 54 fixedly mounted in the bushing and entering into a slot 56 of the tubular bearing 46. The bushing 55 in turn is fixedly secured to the disc 35 by means of screws 57 (Fig. 3). While the disc 35 is rotating about its horizontal axis of rotation the plate 50 moves in horizontal position in a circular path about the axis of the shaft 36. At the same time the tubular bearing 46 is caused to rotate about the axis of the shaft 44 owing to the connection of the pin 54 with the bearing 46, rotating thereby the plate 50 about the vertical axis of shaft 58 in a horizontal plane.

The disc 35 has attached to its face directed toward the plate 50 a mirror 37, and the top face of plate 50 is highly polished and serves as a mirror. In place of the apertured band 34 an internal gear may be used.

What I wish to secure by U. S. Letters Patent is:

An advertising device for displaying articles, comprising a support, a vertical disc rotatably mounted upon the support, means engaging the disc to turn it, a stationary gear mounted upon the support and arranged concentric with the disc, a horizontal shaft mounted, for relative turning movement, upon the disc radially outwardly of the stationary gear, a second gear secured to the horizontal shaft adjacent to the disc, an idler gear mounted upon the disc and engaging the stationary gear and second gear, a vertical bearing rigidly secured to the end of the horizontal shaft which is remote from the disc and entirely supported and held in position by said shaft, a vertical shaft mounted in the vertical bearing, a horizontal plate attached to the upper end of the vertical shaft, a horizontal bevel gear mounted upon the vertical shaft above the vertical bearing, a horizontal sleeve having one end attached to the disc and held against movement with relation to the disc and having its opposite

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end extending to a point remote from the disc, said sleeve slidably receiving therein the horizontal shaft and serving as the sole bearing for the horizontal shaft, and a vertical bevel gear mounted upon the sleeve at the end thereof remote from the disc and engaging the horizontal bevel gear, the sleeve serving to hold the vertical bevel gear in engagement with the horizontal bevel gear.

ERNST MATTER. 10

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