No. 846,359. PATENTED MAR. 5, 1907.

F. P. SPARMAKER & J. L. HENRY.

DISPLAY RACK.

APPLICATION FILED OCT. 26, 1905.

2 SHEETS—SHEET 1.

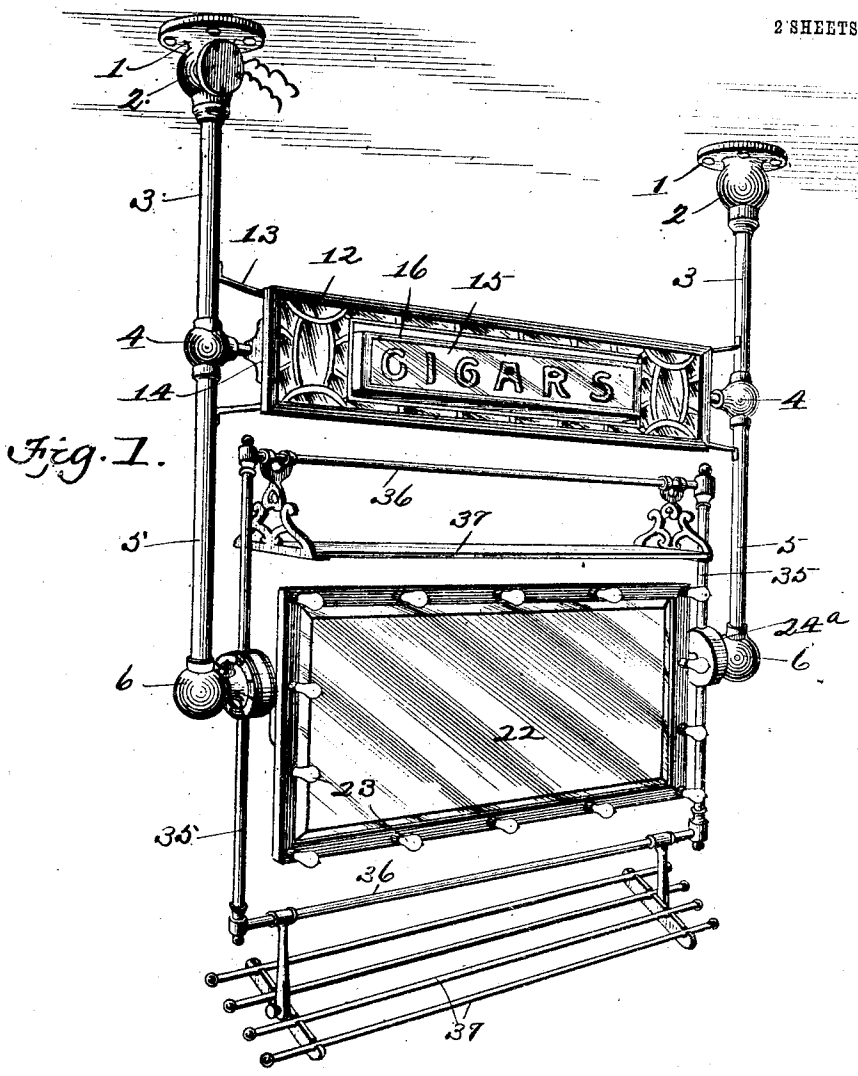


Fig. 1.

Fig. 2

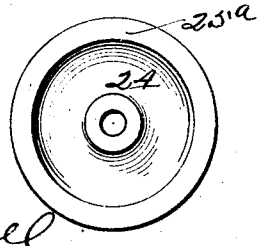
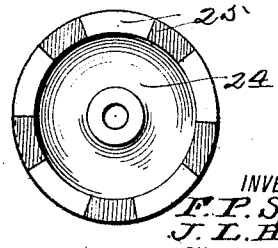


Fig. 3.



WITNESSES:

M. D. Blondell

C. B. McBath

INVENTORS.
F. P. Sparmaker.
J. L. Henry.
BY
Marshall & Brock
ATTORNEYS

No. 846,359. PATENTED MAR. 5, 1907.

F. P. SPARMAKER & J. L. HENRY.

DISPLAY RACK.

APPLICATION FILED OCT. 26, 1905.

2 SHEETS—SHEET 2.

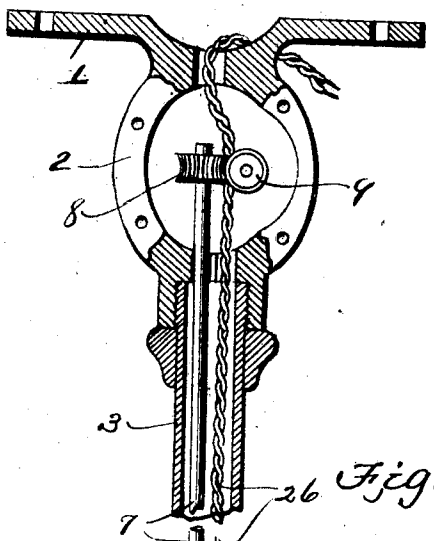


Fig. 4.

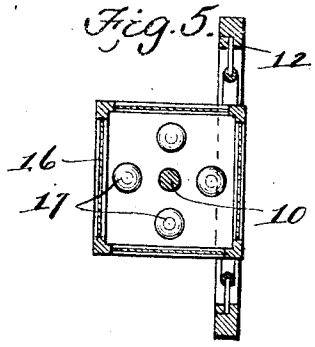


Fig. 5.

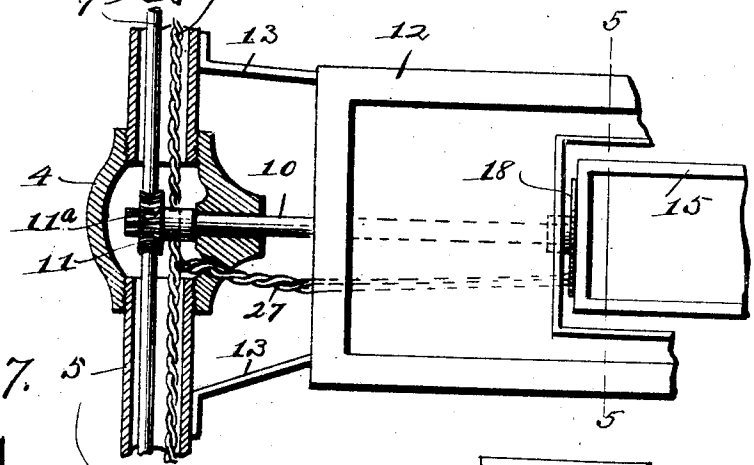


Fig. 7.

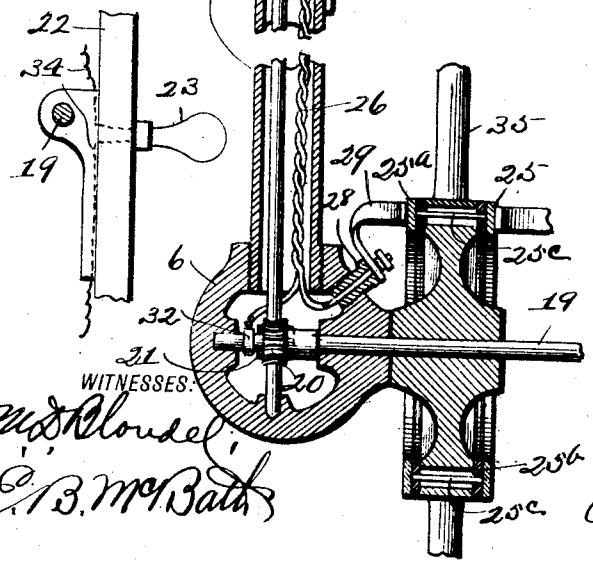
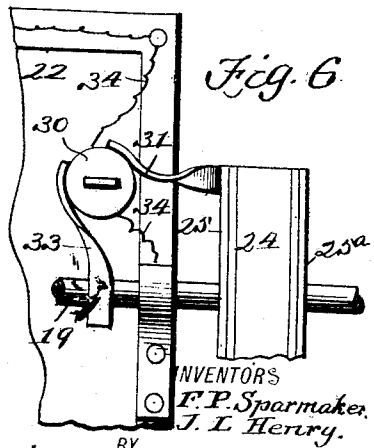


Fig. 6.



WITNESSES:

M. D. Blondel

C. B. McBath

INVENTORS

F. P. Sparmaker.

J. L. Henry.

BY

O'Meara & Brock

ATTORNEYS

UNITED STATES PATENT OFFICE.

FRANK P. SPARMAKER AND JOHN L. HENRY, OF PHILADELPHIA, PENNSYLVANIA; SAID SPARMAKER ASSIGNOR TO SAID HENRY.

DISPLAY-RACK.

No. 846,359. Specification of Letters Patent. Patented March 5, 1907.

Application filed October 26, 1905. Serial No. 284,451.

To all whom it may concern:

Be it known that we, FRANK P. SPARMAKER and JOHN L. HENRY, citizens of the United States, both residing at Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Display-Racks, of which the following is a specification.

This invention relates to an electrically-lighted revolving display rack and sign, the object of the invention being to display articles of merchandise in an attractive manner and accompanied by certain advertising devices which will attract attention to the goods displayed.

The display-rack can be inverted and stood upon a suitable platform or upon the floor of a storm-window, or it may be suspended from a ceiling, and in the accompanying drawings we have shown the rack as so suspended.

The invention consists of the novel features of construction hereinafter set forth, pointed out in the claims, and shown in the accompanying drawings, in which—

Figure 1 is a perspective view of the rack in suspended position. Figs. 2 and 3 are detail face views of opposite sides of a hub carrying circuit making and breaking rings. Fig. 4 is a detail vertical section taken longitudinally through one of the supporting-columns and diametrically through the hub shown in Figs. 2 and 3, a portion of a sign-frame being shown in elevation. Fig. 5 is a section on the line 5 5 of Fig. 4. Fig. 6 is an elevation showing the rear side of a stationary mirror, a portion of the hub, and the means for making the electrical contact with certain electrical wires carried by the mirror-frame. Fig. 7 is a detail end view of a portion of the mirror-frame, showing the electrical connection with the incandescent light.

In the drawings, 1 represents a suitable casting perforated, so that it can be secured by means of suitable screws to either a floor, platform, or ceiling, and which carries a semi-spherical casing 2.

It will be readily understood from Fig. 1 that with the exception of the electric wiring the supporting-columns of the display-rack are duplicated at each end of the rack, and a detail description of the column which carries the electrical wiring will be thought sufficient to give a clear understanding of the construction of the device.

In the casing 2 is threaded a tubular pipe-section 3, which is also threaded into a suitable casing 4, and a similar pipe-section 5 has one end threaded into the casing 4 and the other end threaded into a suitable casing 6, the tubes or pipes 3 and 5 being in vertical alinement with each other. Through these pipes and through the casing 4 extends a vertical shaft 7, one end of which is journaled in a suitable bearing formed in the casing 6, the other end projecting into the casing 2.

Referring to the parts in the position occupied when the device is suspended from a ceiling, the upper end of the rod 7 carries a worm gear-wheel 8, which meshes with a worm-gear 9, also arranged within the casing 2. This worm-gear 9 is driven in any suitable manner, as by a small electric motor, which, if desired, can be also arranged within the casing 2, or which may be arranged adjacent to the said casing, the armature-shaft passing into the casing and carrying at its end the worm 9. A shaft 10 has its end portions journaled in the casing 4 and within said casings carries worm gear-wheels 11, which mesh with suitable worm-gears 11^a, carried by the shafts 7. Between the casing 4 is arranged a frame 12, supported at the ends by suitable brackets 13, which are carried by the pipes 3 and 5. This frame is centrally cut out and may be composed of any ornamental material—such as stained glass, mother-of-pearl, &c.—and at the ends it is provided with suitable rearwardly-extending brackets 14, through which the shaft 10 loosely passes. Upon the shaft 10 and in alinement with a central cut-out portion of the frame 12 is a suitable sign-casing 15, which may be of any desired shape so as to provide it with any convenient or desired number of sides. In the drawings we have shown this sign-casing 15 as being square in cross-section and each side provided with a glass or transparent panel 16, and upon these panels are placed any suitable combination of letters or symbols. Within the sign-casing the ends carry incandescent

lamps 17, and at the ends of the sign-casing disks 18 are mounted, by means of which current is carried to the lamp 17, as will appear hereinafter. A shaft 19 has its ends journaled in the casing 6, and adjacent each end it carries a worm gear-wheel 20, which meshes with a suitable worm-gear 21, carried by the shaft 7. Upon the shaft 19 is loosely mounted a mirror 22, the frame of which carries a plurality of incandescent lamps 23.

The shaft 19, adjacent one of the casings 6, carries a hub 24 of any suitable non-conducting material, and this hub carries upon opposite sides rings 25 and 25^a, the rings 25 being formed in sections of conducting and non-conducting material, and the rings 25^a being formed of a continuous strip of conducting material. These rings are spaced from the hub by rings of suitable insulating material 25^b and are connected by conductor-rods 25^c. A stranded cable of conducting-wires 26 passes into the casing 2 and through the pipes 3 and 5 to the casing 6. In the casing 6 the strands are separated, one of them passing through a suitable insulating-plug 28 through a suitable binding-post which carries a metallic strip 29, which is in rubbing contact with the continuous conductor-ring 25^a. The other strand is connected to a suitable ring 32, carried by the shaft 19. In the casing 4 the wires forming the strand 26 are tapped by conducting-wires 27, which lead to the contact-ring 18, which ring is loosely mounted upon the shaft 10 and is in contact with the ends of the revolving sign-casing 15. The incandescent lamps 17, arranged within the casing and carried by the said end, are provided with suitable contacts in sliding engagement with the ring 18. A switch 30 of the usual construction is mounted upon the back of the mirror 22 and carries a suitable metallic strip 31, which is in contact with the rotating ring 25, and a second strip 33, which is in contact with the shaft 19. Suitable conducting-wires 34 lead from the switch to the incandescent lamps 23, carried by the mirror-frame. The hub 24 above described and a second hub 24^a, arranged upon the shaft 19 at the opposite end of the mirror 22, are provided with radial arms 35, and the arms upon the opposite hubs are connected by rods 36. From these rods depend loosely suitable display-racks 37.

It will be obvious from the construction herein described and from the drawings that the rotation of the shafts 7, 10, and 19 will rotate the sign-casing and the display-racks 37, which latter are carried upon the hubs 24 and 24^a. The sign-casing 15 during each rotation will present to view its four faces, while the display-racks will pass alternately in front of and to the rear of the mirror 22, which mirror is stationary, as is the frame 12.

It will be obvious that the sign-casing 15 will be illuminated from within by the incandescent lamps 17 and that the mirror and the display-racks will be illuminated by the incandescent lamps 23, carried by the mirror-frame, which will alternately be lighted and extinguished by means of the circuit-breaking disk or ring 25.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A device of the kind described comprising a fixed frame, a stationary mirror in vertical alinement with the frame, the said frame having a central cut-out portion, a sign-casing rotatably mounted in alinement with the cut-out portion, of the same, a plurality of display-racks, revolubly mounted adjacent the mirror and adapted to pass in advance of and in the rear of said mirror and between the mirror and the frame above mentioned, common means for rotating the display-racks and sign-casing, and means for illuminating the same.

2. A device of the kind described comprising supporting-columns, a frame carried between said columns and centrally cut out, a sign-casing rotatably mounted in horizontal alinement with the cut-out portion of the frame, a mirror stationarily held between the said columns, a rotatable shaft supported by said columns, hubs upon said shaft, said hubs being arranged at opposite ends of the mirror, radial arms carried by the hubs, connecting-rods, display-racks loosely carried by said rods and adapted to revolve about the mirror and between the mirror and the frame, and means carried by one of said supporting-columns for rotating the display-rack and sign-casing.

3. A device of the kind described comprising a supporting-column consisting of a casting carrying a casing, a pipe threaded at one end into said casing, a second casing threaded upon the opposite end of the pipe, a second pipe in alinement with the first and threaded into the second casing, a casing threaded upon the opposite end of the second pipe, a shaft extending through the pipes and intermediate casing, means in the first-mentioned casing for rotating said shaft, a shaft at a right angle to the said first-mentioned shaft extending into the intermediate casing, intermeshing gears carried in the said intermediate casing by the said shafts, a third shaft parallel to the second-mentioned shaft and having one end journaled in the last-mentioned casing, intermeshing gears carried within said casing by the first-mentioned and third-mentioned shafts, respectively, a sign-casing carried by the second shaft, a mirror loosely mounted upon the third-mentioned shaft, radial arms supported

from and rotating with the said third-mentioned shaft, connecting-rods carried by the said arms, display-racks loosely mounted upon said connecting-rods and revolving about the mirror and between the mirror and sign-casing, incandescent lamps within the sign-casing, incandescent lamps upon the mirror-frame, electrical conductors arranged within the pipes and leading to and from the said lamps, and means for alternately breaking and making the circuit of the lamps upon the mirror-frame.

FRANK P. SPARMAKER.
JOHN L. HENRY

Witnesses:
WM. A. SHRYOCK,
MILTON WOLF.