

W. M. BULLOCK.
ADVERTISING SIGN.
APPLICATION FILED JULY 26, 1910.

973,623.

Patented Oct. 25, 1910.

Fig. 1.

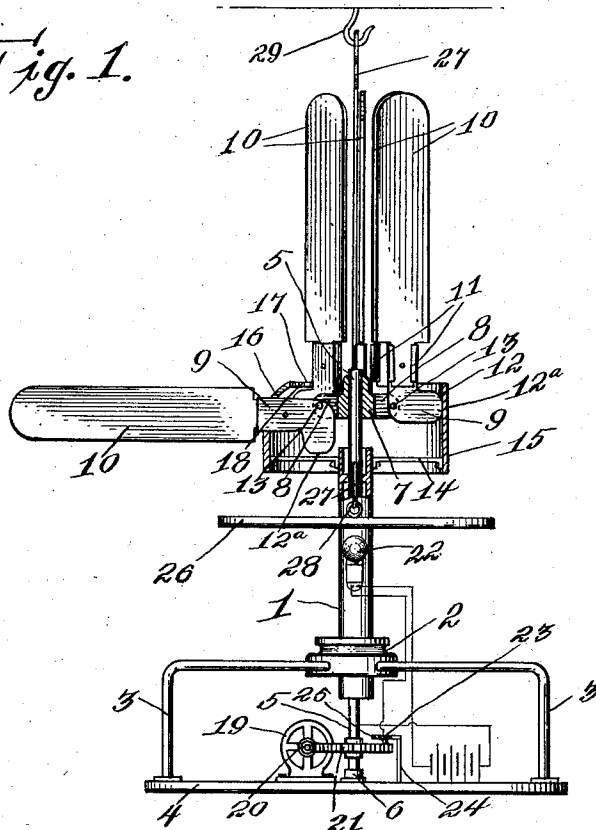


Fig. 3.

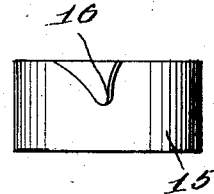
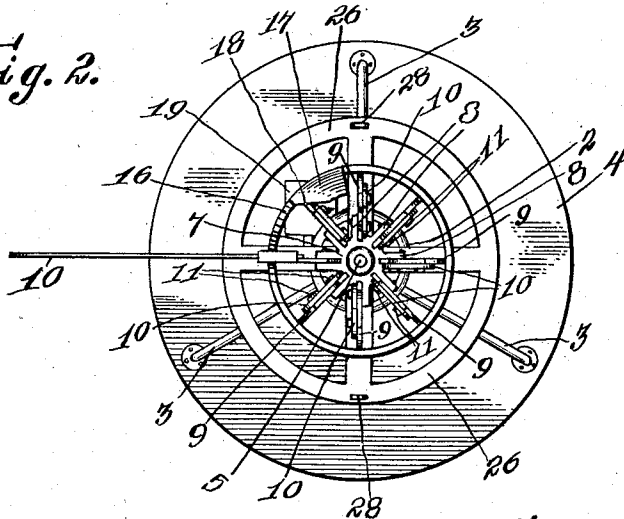


Fig. 2.



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UNITED STATES PATENT OFFICE.

WILLIAM M. BULLOCK, OF GRAND RAPIDS, MICHIGAN.

ADVERTISING-SIGN.

973,623.

Specification of Letters Patent.

Patented Oct. 25, 1910.

Application filed July 26, 1910. Serial No. 573,863.

To all whom it may concern:

Be it known that I, WILLIAM M. BULLOCK, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Advertising-Signs, of which the following is a specification.

My invention relates to an advertising sign, and has for its principal object to provide a device of this character in which a plurality of sign boards are rotated about a common center in a vertical position, but which will be caused to automatically drop to a horizontal position one after another.

In the accompanying drawing, which forms a part of this specification, and in which like reference numerals indicate corresponding parts throughout the several views;—Figure 1 is a side elevation of the device but being partly in section to more clearly illustrate its construction. Fig. 2 is a top plan view, and Fig. 3 is a side elevation of the means for controlling the swinging movement of the sign boards.

Reference being had to the drawing and the reference numerals indicated thereon, 1 denotes a hollow standard or tube which may be of any desired length, and to which, near its lower end, is fixed a block 2. A suitable number of arms 3 are secured to the block 2 and carry a platform or base 4.

Rotatably mounted in the tube 1 there is a shaft 5, the lower end of which rests in a suitable bearing 6 fastened to the platform 4. As shown in Fig. 1, the upper end of the shaft 5 extends beyond the upper end of the tube 1 and has fixed thereto a hub 7 having a plurality of spaced ears 8, between which are pivoted hinge members 9 which carry the sign boards 10. The hinge members 9 each comprise a single piece of sheet metal cut at substantially right angles, and having the edges of one portion turned inwardly, as at 11, and the outer end of its other portion curved, as at 12, and are pivoted between the ears 8, of the hub 7, near their inner edges, as shown at 13 in Fig. 1. The sign boards 10 are preferably formed of sheet metal and have their lower reduced ends inserted between the inturned edges 11 of the hinge members 9, and securely fastened to said hinge members by means of rivets or the like.

Secured to the upper end of the tube 1 by means of brackets 14, there is a ring 15,

against the inner face of which the outer curved ends 12 of the hinge members 9 are adapted to travel, thereby holding the sign boards 10 in a vertical position, as shown in Fig. 1. As shown most clearly in Fig. 3, the upper edge of the ring 15 is cut away to form a notch 16. The notch 16 extends below the line on which the outer curved ends of the hinge members 9 travel, whereby, when said hinge members reach the notch 16, the weight of the sign boards will cause the same to drop, as shown on the left hand side of Fig. 1 until the outer edge of the hinge member comes in contact with the bottom of the notch 16, when the sign board 10 will be in a horizontal position and the advertising matter thereon in position to be easily read. It will be noted that one edge of the notch 16 is inclined and as the edge of the hinge member 9 rides along the inclined edge of said notch, it will cause the hinge member 9, and consequently the sign board 10, to rise. To completely raise the sign boards to their vertical position, the upper edge of the ring 15 is provided with a lug 17, having a cam face 18. As shown in Fig. 2, the cam face 18 begins at the end of the inclined edge of the notch 16 and extends inwardly far enough to raise the sign boards to a complete vertical position and the outer curved ends 12, of the hinge members 9, to come in contact with the inner face of the ring 15, as shown on the right hand side of Fig. 1. To prevent any liability of the weight of the sign boards 10 moving the outer ends 12 of the hinge members 9 out of contact with the ring 15 before the notch 16 is reached, said outer ends 12, instead of being entirely curved, have that portion which comes in contact with the ring left straight, as at 12^a, to furnish a better bearing surface.

As shown in the present instance, motion is imparted to the shaft 5 by means of a small electric motor 19, which is mounted on the platform 4. The shaft of the motor 19 is provided with a worm 20, which drives a gear 21, fixed to the shaft 5, near its lower end. However, the shaft 5 may be rotated in any other suitable manner.

For the purpose of calling attention to the sign, I employ an electric bell 22 which is caused to ring at every complete rotation of the sign. I accomplish this by means of an automatic switch comprising a plate 23 supported by a suitable bracket 24, and a pin 25 carried by the gear 21 and which is

adapted to contact said plate as it moves thereunder. The current is furnished by a suitable battery 26 carried by the platform 4, and by using the shaft 5 as a ground and forming the connections, as shown in Fig. 1, every time the gear 1 makes a complete turn the bell 22 will ring.

The sign may be used either as a hanging or standing sign and to provide for its use in the former manner, I use a ring 26, fastened to the tube 1, and a wire yoke 27, having its lower ends fastened to eyes 28 carried by said ring 26, and which is adapted to have its upper end placed on a hook 29 or the like. When the sign is to be used standing, the ring 26 and yoke 27 may be omitted, as unnecessary.

From the foregoing it will be seen that I provide an advertising sign which, while being extremely simple and inexpensive of construction, will be strong and durable and, owing to the intermittent movement of its sign boards, will attract considerable attention.

I claim:

1. A sign comprising a hollow standard, a shaft rotatably mounted in said standard, a hub fixed to said shaft, a plurality of hinge members pivotally connected to said hub to swing in a vertical plane, and a sign board fastened to each of said hinge members, a ring mounted on the aforesaid standard, and so arranged that the outer ends of the hinge members will contact the inner face thereof to hold the same in a vertical position, a notch formed in said ring to allow the hinge members to drop to horizontal position, and a cam on the ring for returning the hinge members to a vertical position.

2. A sign comprising a rotatable vertical shaft, a hub fixed to the shaft, signs, attaching shanks for said signs pivoted to the hub to permit the signs to swing in a vertical plane, said shanks having lateral extensions, a stationary annular member surrounding the hub and having its inner periphery engageable by the extremities of the aforesaid extension to hold the aforesaid signs in vertical position, said annular member having a top depression into which the shanks successively drop to lower the signs into horizontal position, and means on one side of the depression engageable by the shanks for swinging the same into vertical position.

3. A sign comprising a rotatable vertical shaft, a hub fixed to the shaft, a stationary annular member surrounding the hub, signs, attaching shanks for said signs pivoted to the hub to swing in a vertical plane, said signs being connected to one of the branches of the shanks, and the extremities of the other branches of the shanks being in engagement with the inner periphery of the annular member to hold the signs in vertical position, said annular member having a top depression into which the shanks successively drop to lower the signs into horizontal position, and means on one side of the depression engageable by the shanks for swinging the same into vertical position.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM M. BULLOCK.

Witnesses:

ARTHUR WESLEY,
H. M. TAYLOR.