Feb. 27, 1923.

1,446,749.

F. L. JOHNSON.

AIR ACTUATED MOTOR SIGN.

FILED AUG. 8, 1922.

2 SHEETS—SHEET 1.

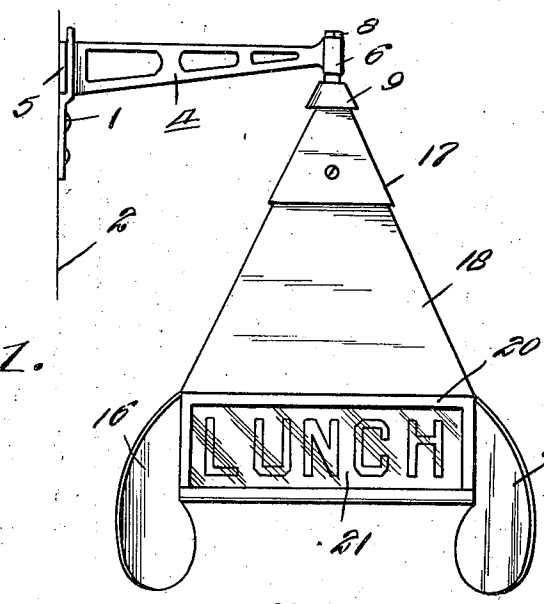


Fig. 1.

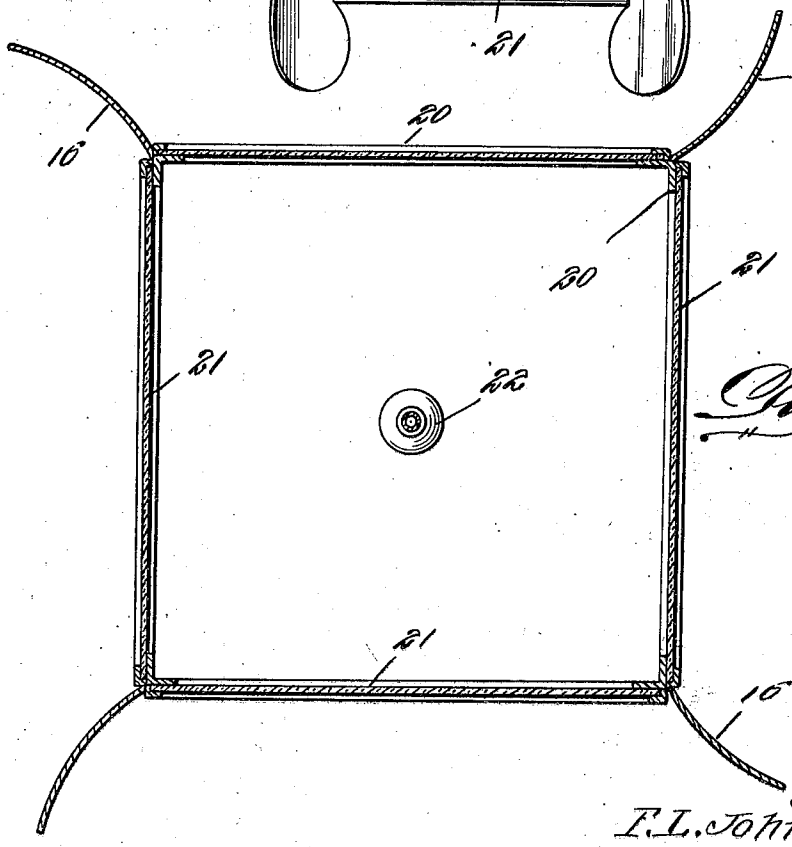


Fig. 3.

Witnesses:
F. L. Fox
N. Berman

Inventor
F. L. JOHNSON,

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2 SHEETS—SHEET 2.

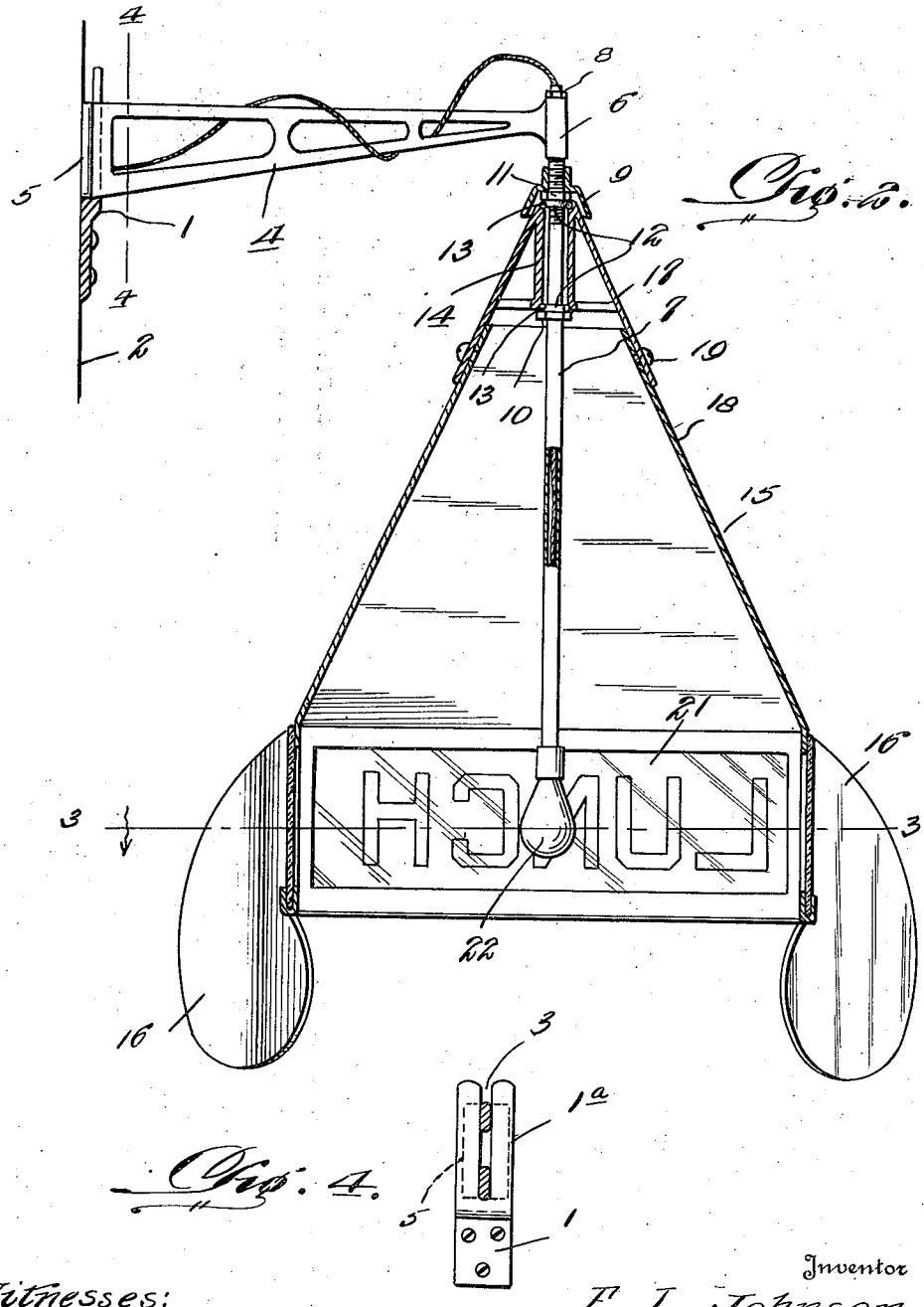


Fig. 2.

Fig. 4.

Witnesses:
F. L. Fox,
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Patented Feb. 27, 1923.

1,446,749

UNITED STATES PATENT OFFICE.

FRED LOUIS JOHNSON, OF MEEKER, COLORADO.

AIR-ACTUATED MOTOR SIGN.

Application filed August 8, 1922. Serial No. 580,407.

To all whom it may concern:

Be it known that I, FRED L. JOHNSON, a citizen of the United States, residing at Meeker, in the county of Rio Blanco and State of Colorado, have invented new and useful Improvements in Air-Actuated Motor Signs, of which the following is a specification.

One object of my said invention is the provision of a simple, inexpensive and attractive sign in the form of a rotor, operable—i. e., rotatable by the action of currents of air and therefore calculated to catch the eye and hold the attention of persons within sight of the sign.

Another object of the invention is the provision of a sign characterized as indicated in a peculiar and advantageous combination with means for suspending the same and illuminating the same at night.

To the attainment of the foregoing, the invention consists in the improvement as hereinafter described and definitely claimed.

In the accompanying drawings, forming part of this specification.

Figure 1 is a side elevation of a sign constituting the best practical embodiment of my invention that I have as yet devised.

Figure 2 is an enlarged vertical section of the same with some parts in elevation.

Figure 3 is a horizontal section taken in the plane indicated by the line 3—3 of Figure 2, looking downwardly and showing the lamp bulb in plan.

Figure 4 is a detail vertical section on the line 4—4 of Figure 2, looking toward the left.

Similar numerals of reference designate corresponding parts in all of the views of the drawings.

In the illustrated embodiment of my invention I employ among other elements a bracket 1, Figures 1, 2 and 4, designed to be opposed to and appropriately fixed on a building wall 2 or any other upright support. The said bracket 1 is provided with an upper offset portion 1^a in spaced relation to the support 2, and in the said portion 1^a is a vertical central bifurcation 3.

Detachably associated with the bracket 1 is an arm 4 comprised in my invention. The said arm 4 is of much greater height than width and hence is adapted to be seated in and securely though removably held against lateral deflection by the bifurcation 3. At its inner end the arm 4 is provided with a preferably integral T-head 5, Figures 1, 2 and 4, which removably rests between the offset bracket portion 1^a and the support 2, and strongly precludes downward canting of the arm 4 under the weight suspended from the outer end thereof. It will be noticed, however, that when desired the arm 4 may be expeditiously and easily lifted out of and disassociated from the bracket 1 and may as readily be replaced in engagement with the bracket. The arm 4 terminates at its outer end in a vertically-disposed sleeve 6, and through the said sleeve is extended the upper threaded portion of a gas pipe or other tube 7 which is supported in the sleeve by a nut 8 superimposed on the upper end of the sleeve. Threaded on the tube 7 below the sleeve 6 is a cap 9, and under the cap 9 and on the tube are spaced abutments 10 and 11, the upper abutment 11 being by preference in the form of a threaded nut. Between and against the said abutments 10 and 11 are cones 12, against which bear series of anti-frictional balls 13, and interposed and rotatable between the balls 13 and about the tube 7 is a box 14 arranged within and fixed to the upper portion of the rotor 15. In this connection it will be observed that the cap 9 overhangs in lapped relation the upper end of the rotor 15 and hence serves to prevent rain from entering said end and from gaining access to the anti-friction bearing.

The rotor 15 is equipped with blades 16 and hence is adapted to be turned about the tube 7 by currents of air. The said rotor may within the purview of my invention be of any appropriate construction and configuration. I prefer, however, to have the rotor comprise two upwardly-tapered sections 17 and 18 lapped and connected together at 19 by screws as shown or any other suitable connecting devices, and I also prefer to provide the lower section 18 at the lower ends of its sides with frames 20 in which are panels 21, preferably though not necessarily, transparent, designed to bear advertising or directional legends.

Any appropriate means may be employed to illuminate the novel sign at night, the burner or lamp being carried by the tube 7 and the said tube being utilized as a gas conduit when a gas burner is employed. I pre-

fer, however, to illuminate the sign through the medium of an incandescent electric lamp 22 at the lower end of the tube 7, the said lamp being electrically connected in connectional manner with insulated wires 23 which are interposed between a source of electric energy and the lamp and are carried through and over the arm 4 and through the tube 7 as illustrated in Figure 2.

Manifestly when illuminated and when not illuminated my novel sign because of its rotary capacity is calculated to attract attention and to serve efficiently as an economical advertising medium; the rotor being freely rotatable so that there is practically always sufficient movement of air to turn it in one direction or the other.

I have entered into a detailed description of the construction and relative arrangement of the parts embraced in the present and preferred embodiment of my invention in order to impart a full, clear and exact understanding of the said embodiment. I do not desire, however, to be understood as confining myself to the specific construction and relative arrangement of parts inasmuch as in the future practice of the invention various changes and modifications may be made such as fall within the scope of my invention as defined in my appended claim.

Having described my invention, what I claim and desire to secure by Letters-Patent, is:—

The combination of an appropriately supported axle-like member and a sign supported by and rotatable about said member, and provided with means against which currents of air can act to rotate it, the said axle-like member being equipped with spaced anti-friction balls and abutments therefor, and the sign being provided in the upper portion with a box surrounding the axle-like member and interposed between and bearing against said balls, an incandescent lamp at the lower end of the axle-like member, an arm supporting said member and from which the same is pendent, wires extending through the axle-like member to said lamp and a cap on the axle-like member above the said box and balls and overhanging the upper end of the sign for preventing access of dirt or moisture into said box.

In testimony whereof, I affix my signature.

FRED LOUIS JOHNSON.