July 27, 1926. 1,593,720

W. HANSON

ADVERTISING AEROPLANE

Filed Dec. 2, 1925 2 Sheets-Sheet 1

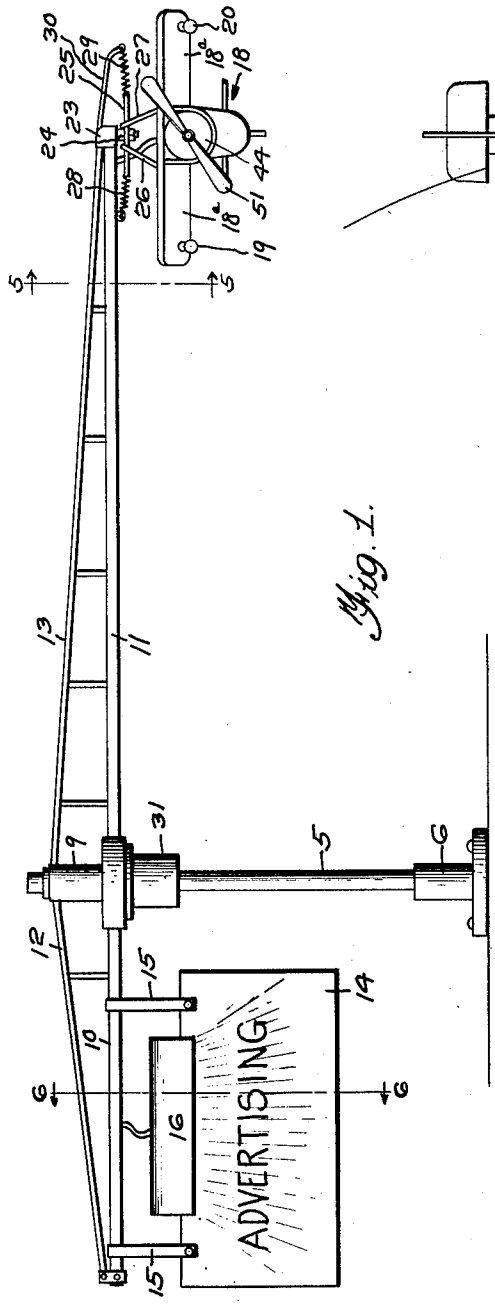


Fig. 1.

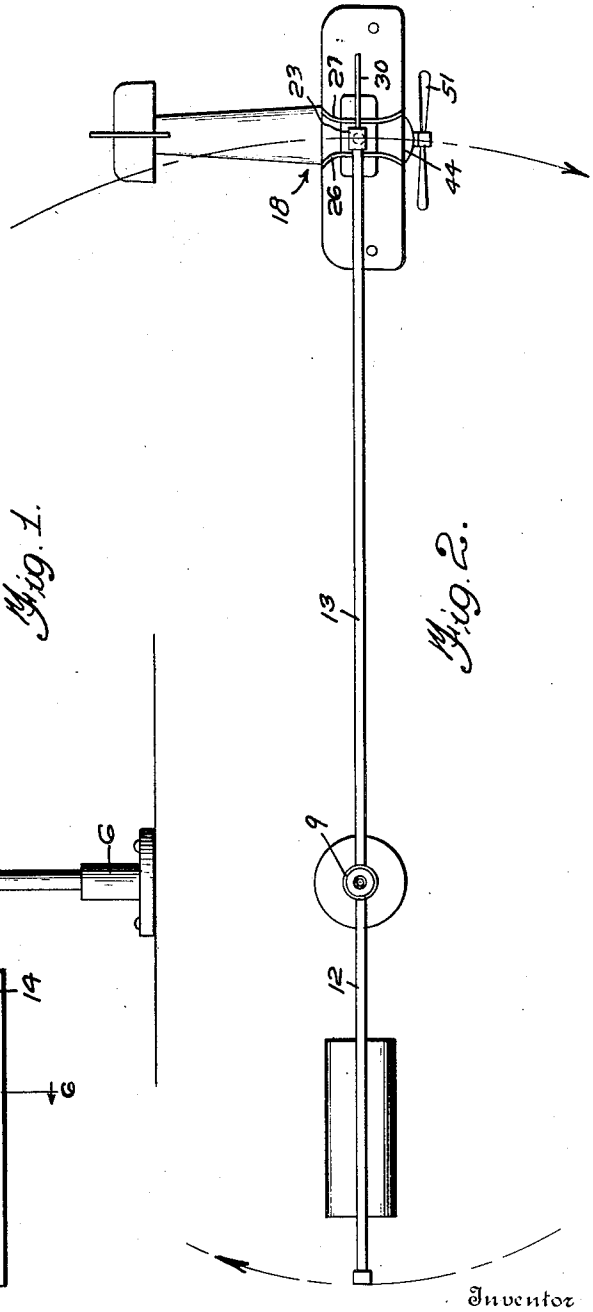


Fig. 2.

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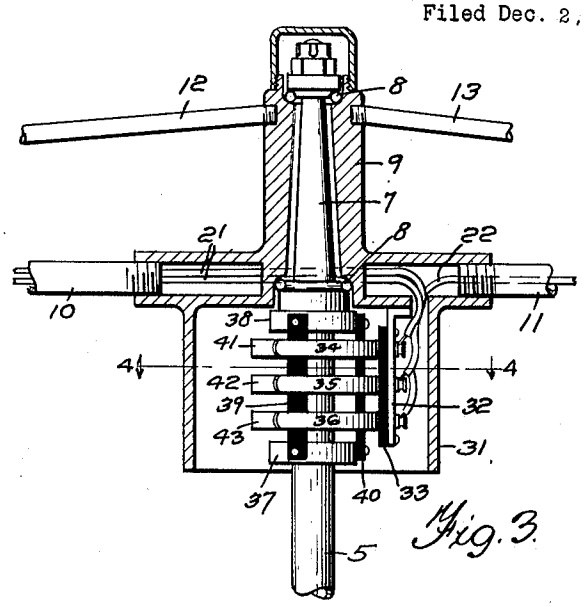


Fig. 3.

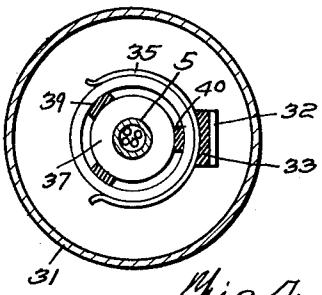


Fig. 4.

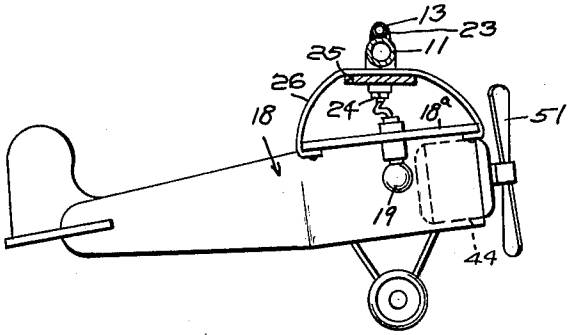


Fig. 5.

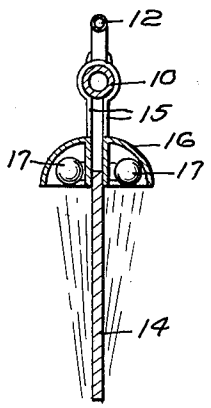


Fig. 6.

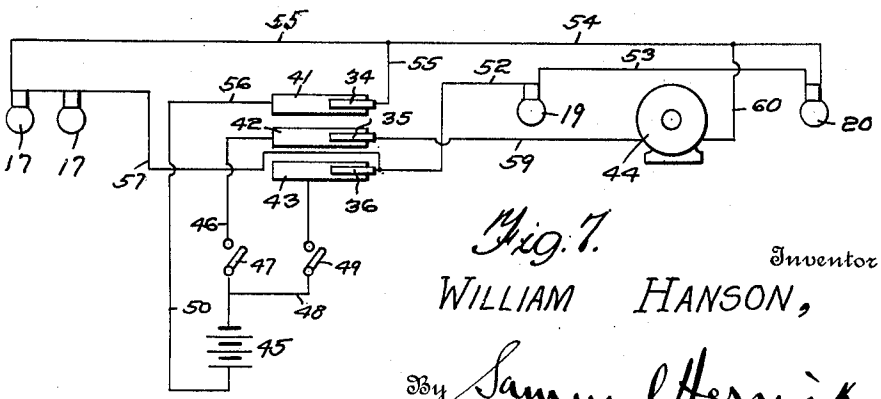


Fig. 7.

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Patented July 27, 1926. 1,593,720

UNITED STATES PATENT OFFICE.

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ADVERTISING AEROPLANE.

Application filed December 2, 1925. Serial No. 72,713.

This invention relates to an advertising device of the character of that shown in my Patent No. 1,561,073, issued on the 10th day of November, 1925. This invention provides for certain refinements of construction by which increased efficiency is had, and in addition, is arranged to provide materially more advertising space, than was possible with the former construction.

Further objects and advantages of the invention will be set forth in the detailed description which follows:

In the accompanying drawing:

Fig. 1 is a side elevation of an advertising device constructed in accordance with the invention,

Fig. 2 is a plan view thereof,

Fig. 3 is an enlarged vertical sectional view through the mounting of the swinging beam and through the contact elements,

Fig. 4 is a horizontal sectional view on line 4—4 of Fig. 3,

Fig. 5 is a detail view of the aeroplane constituting the motive power of the structure,

Fig. 6 is a vertical sectional view on line 6—6 of Fig. 1, and

Fig. 7 is a diagrammatic view illustrating one arrangement of electrical connections which may be employed.

Like numerals designate corresponding parts in all of the figures of the drawing.

A suitable standard 5 is supported upon a base 6, said standard being provided, at its upper end, with a spindle 7. Antifriction bearings 8 mount a hub 9 for rotation with respect to the spindle. This hub is threaded for the reception of tubes 10 and 11, which with braces 12 and 13, constitute a swinging beam which rotates in a horizontal plane with the hub 9. The tube 11 is materially longer than the tube 10 so that the beam, as a whole, will comprise a long arm and a short arm. The short arm of the beam carries a sign or other advertising element, indicated at 14, which is hung from the tube 10 by means of hangers 15. A light shield 16 houses electric bulbs 17, which constitute a source of light for illuminating the faces of the advertising sign 14. A small aeroplane 18 is hung at the outer end of the long arm of the beam. Wings 18ª, of the plane, carry incandescent electric lamps 19 and 20, at their outer ends. Current carrying wires for the lights 17, 19 and 20, pass through the tubes 10 and 11, the sheathing of said wires being indicated at 21, with respect to the lights 17 and at 22, with respect to the lights 19 and 20. The more detailed arrangement of these wires is illustrated in the diagrammatic Fig. 7 which will be presently described.

At the outer end of the long arm of the swinging beam, brace 13 is connected with the tube 11 by an elbow or fitting 23. A bolt 24, carried by this fitting, passes through a plate 25. Wires 26 and 27, welded to the plate 25, are secured at their lower ends to the wings of the aeroplane. Thus this plate constitutes a part of the mounting of the aeroplane upon the long arm of the standard. One end of the plate 25 is connected by a spring 28 to the tube 11. The other end of the plate 25 is connected by a spring 29 to the outer end of a finger 30 which projects from the outer end of the long arm of the beam. The purpose of this structure is to, more or less, yieldingly mount the aeroplane with respect to the beam but to keep the aeroplane facing in a forward direction with respect to its line of travel or in a direction where it will lie substantially at right angles to the length of the long arm of the beam.

Referring now to Fig. 3, it will be seen that the hub 9 comprises an apron 31, which constitutes a housing for the contact elements by which current is delivered to the motor of the aeroplane and to the lights. A plate 32, which is secured to and rotates with the hub 9, carries a fibre block 33, by which three bowed-spring contact members, 34, 35 and 36, are insulated from the plate 32. The standard 5 carries a pair of spaced collars 37 and 38, between which fibre strips, 39 and 40, extend. These fibre strips, in turn, support three rings, 41, 42 and 43.

Various ways of arranging the electrical connections to supply current to the motor 44 (see Fig. 7) of the aeroplane, and to the lights, may be employed. One such arrangement is illustrated in the diagrammatic Fig. 7. In this figure, 45 designates a battery or other source of electromotive

force, such as a city electric light circuit. One side of this circuit may be connected by a conductor 46, with ring 42, through switch 47. The other side of this circuit may be connected by a conductor 48, through switch 49, with ring 43, and the negative side of the circuit may be connected by a conductor 50, with ring 41. The bowed contact elements, 34, 35 and 36, make spring contact with the rings 41, 42 and 43, respectively, as the beam rotates through the influence of the propeller 51, of the aeroplane, it being understood that this propeller is actuated by the motor 44. The wiring is arranged in Fig. 7 in such manner that the motor may be energized without lighting the lights, it being manifest that when the advertising structure is used in the daytime, the lights are not necessary. If the switches 47 and 49 be closed, current will flow through conductor 48, switch 49, ring 43, contact 36, conductor 52, light 19, conductor 53, light 20, conductors 54 and 55, contact 34, ring 41 and conductor 56, to the source of power. At the same time, the light 17 will be lighted because current will flow from contact 36 through conductor 57, light 17 and conductor 58, to the conductor 55 and thence to the negative side of the source of power. At the same time, current will flow through switch 47, conductor 46, ring 42, contact 35, conductor 59, motor 44, conductor 60, conductors 54 and 55, contact 34, spring 41 and conductor 56. Thus, at this time, the motor will be energized and the lights will be lighted. However, it is manifest that, by opening switch 49, the lights may be extinguished while leaving the motor in operation.

A structure of this character forms an attractive advertising device, because it attracts immediate attention. The lights may be of any desired color or of varied colors. The material employed in the construction of the device may be of any desired kind. The aeroplane may be of either wood or metal. By providing a standard consisting of one long arm and one short arm, the aeroplane will counterbalance a relatively large advertising sign.

It is to be understood that the invention is not limited to the precise construction set forth but that includes within its purview whatever changes fairly come within either the terms or the spirit of the appended claims.

Having described my invention, what I claim is:

1. A device of the character described comprising a vertical standard, a beam mounted for rotation in a horizontal plane thereon and comprising a long arm and a short arm, an aeroplane hung from the outer end of the long arm, an advertising structure hung from the short arm and means for energizing the propeller of the aeroplane to cause the beam to rotate under the action of said aeroplane.

2. A structure as recited in claim 1 in combination with lights carried by the sign and lights carried by the aeroplane, and means for supplying current to said lights.

3. A device of the character described comprising a vertical standard, a plurality of fixed rings carried thereby, a beam mounted for rotation in a horizontal plane on said standard and comprising a hub, a long arm and a short arm, a member secured to said beam, an insulating element carried by said member, a plurality of bowed contact pieces carried by said insulating element, an aeroplane hung from the outer end of the long arm of the beam, and a sign carried by the short arm of the beam, and electrical connections for the motor, of which the bowed contact pieces constitute a part.

4. A structure as recited in claim 3 in combination with an apron carried by said hub and housing said contact elements.

5. A device of the character described comprising a horizontally swinging beam, an aeroplane, a plate to which the aeroplane is secured, means for securing said plate to the outer end of the beam and spring means connecting said plate and beam.

6. The combination with a horizontally swinging beam, of an aeroplane, a plate to which the aeroplane is secured, a vertically disposed bolt carried by the beam and passing through said plate, a spring connected to one end of said plate and to the beam and a second spring connected to the other end of the plate and to an extension of said beam.

7. A structure of the character described comprising a vertical standard, a beam comprising a hub, a long arm and a short arm, antifriction bearings between the hub and the standard, a sign hung from the short arm of the standard, a hood above said sign, lights within said hood adapted to illuminate said sign, an aeroplane hung at the long arm of the beam, a motor for the aeroplane, a propeller for the aeroplane driven by said motor, lights carried by the aeroplane, current carrying wires for the lights and for the motor, disposed contact elements to which said wires are connected, fixed rings carried by the standard and engaged by said bowed contact elements, and an apron carried by the hub for housing said contact elements and rings.

8. A structure of the character described comprising a vertical standard, a beam mounted for horizontal rotation on said standard, said beam comprising a long arm and a short arm, a sign hung from the short arm of the standard, a hood above said sign, a light within said hood adapted to illumi-

nate said sign, an aeroplane hung at the outer end of the long arm of the beam, a motor in the aeroplane, a propeller for the aeroplane driven by said motor, lights carried by the aeroplane, current carrying wires for the lights and for the motor, contact elements to which said wires are connected, fixed rings carried by the standard and engaged by said contact elements, and means for housing said contact elements and rings.

In testimony whereof he affixes his signature.

WILLIAM HANSON.