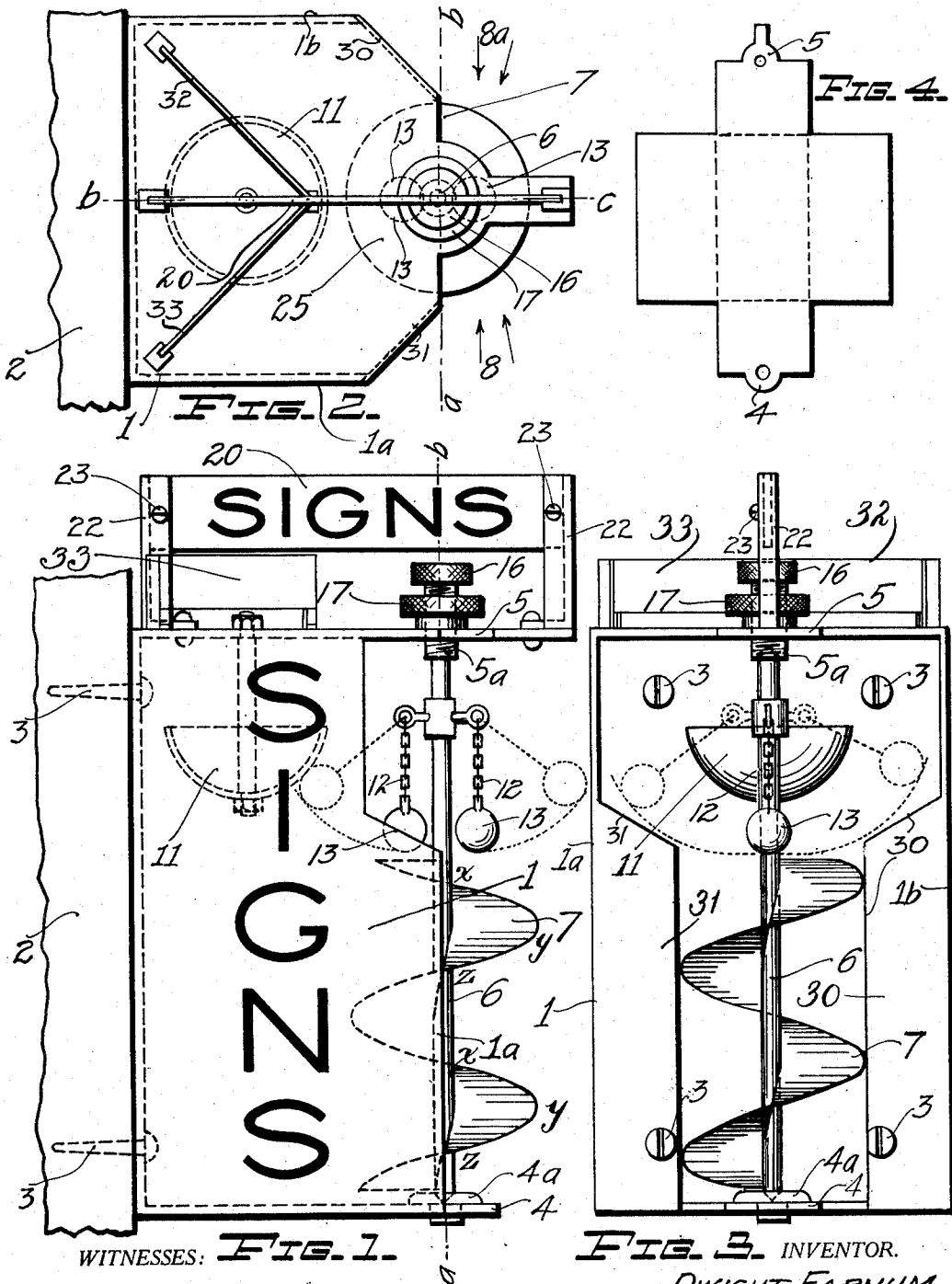


D. FARNUM.
ADVERTISING DEVICE.
APPLICATION FILED SEPT. 27, 1909.

1,015,431.

Patented Jan. 23, 1912.



WITNESSES: **FIG. 1.**

FIG. 3. INVENTOR.

DWIGHT FARNUM.

BY

D. H. Mallinckrodt.
ATTORNEY.

Mary A. Mallinckrodt
Geo M. Bridwell

UNITED STATES PATENT OFFICE.

DWIGHT FARNUM, OF DENVER, COLORADO, ASSIGNOR OF ONE-HALF TO CLIFFORD M. TYLER, OF BOSTON, MASSACHUSETTS.

ADVERTISING DEVICE.

1,015,431.

Specification of Letters Patent.

Patented Jan. 23, 1912.

Application filed September 27, 1909. Serial No. 519,896.

To all whom it may concern:

Be it known that I, DWIGHT FARNUM, a citizen of the United States, and a resident of the city and county of Denver and the State of Colorado, have invented a new and useful Advertising Device, of which the following, together with the accompanying drawings, constitute a full, clear, and exact specification, such as will enable any one skilled in the art to which it appertains to make and use the same.

This invention relates to advertising devices and its object is to provide a novel sign, with novel means for attracting the attention of passersby to the same, through the senses of hearing and sight.

The present device is intended for use in front of stores and other places of business, and in attaining its object, suitable surfaces are provided for signs, in connection with a helicoid suitably housed and adapted to be rotated by any breeze or wind and by its motion to actuate certain sound-producing members.

Referring to the drawings, Figure 1, is a side elevation of a simple form of the present invention, showing it in the working position; Figs. 2 and 3 are respectively a plan view and a front elevation of the same; and Fig. 4, is a diagram of the form of a sheet of metal used in making the body or frame for this device, the said sheet being bent into shape on the dotted lines. Fig. 4 is drawn to a reduced scale.

Throughout the different views, the same parts are designated by the same reference characters.

In its preferred form, this invention consists of a sheet metal frame or housing (1) which may be attached to a post, building or other object (2), by any suitable means, for instance by screws (3). At (4) and (5) are projections from the housing, which provide supports for the shaft bearings (4^a) and (5^a) respectively. The shaft (6), upon which is mounted a helicoidal vane or blade (7), has its ends pivoted in (14) and (15); and vane (7) is so placed that the sides (1^a) and (1^b) of the housing, form, each a deflector longitudinally, for preventing air currents, coming approximately in the directions of the arrows at (8) and (8^a), from striking directly any considerable portion of that area (indicated at 25) of the helicoid

(7), which at any moment may be back of the plane indicated by the lines *a—b*, in Figs. 1 and 2. Thus, air currents blowing (approximately) in either of the directions indicated by the arrows (8) and (8^a), will produce a pressure upon the helicoid on only the one side of its axis. This uneven pressure causes the helicoid, and consequently also the shaft (6), to assume a rotary motion about its axis, the speed varying with the velocity of the current of air acting upon it. - Suspended from the shaft (6), by suitable means, as for example, small chains (12), are suitably shaped bodies (13) of metal or other material, and at (11) is placed a suitable bell or other contrivance adapted to emit sounds when struck by the bodies (13). The shaft (6) in turning, brings centrifugal force into action upon the bodies (13), and these in being thrown outward by the centrifugal force, intermittently strike the sound producing member (11), thereby attracting attention to the source of the sound and necessarily to any advertising matter near it.

Each of the ends of the shaft (6) is turned down to a sharp conical form and both ends are adapted to be held in corresponding, V-shaped despressions in the hardened steel bearings (4^a) and (5^a), thus reducing the running friction to the minimum, and making it possible for a very slight current of air to rotate the shaft (6). The bearing (5^a) is made adjustable by being formed in the end of the screw (16) which latter engages a correspondingly threaded hole in projection (5). When (5^a) has been adjusted to the proper position required by the shaft, it may be locked in that position by means of the nut (17).

It will be noticed that the helicoid (7) is driven by the force of air currents blowing across its axis instead of by air currents blowing in line with the axis, as is usually done where a helicoid is employed to utilize the force which may be developed by a body of air, gas or liquid in motion.

Sides (1^a) and (1^b) of the housing (1) have their front ends bent inwardly as shown at (31) and (30) respectively, bringing the housing close up to the helicoid and at the same time forming deflectors to assist in directing the air-currents against the helicoid. Deflectors (31) and (30) have their

upper parts beveled off as shown in Figs. 1 and 3, so the balls (13), when in motion, will clear them.

The helicoid consists of one or more complete convolutions and therefore has one or more areas bounded by lines $x y z x$, Fig. 1 exposed to the action of the wind and lying directly in its path. The exposed portions $x y z x$ are constantly changing and are made up of consecutive, overlapping areas of the helicoid which give the effect of an infinite number of paddles mounted on shaft (6), thus making the transition of the consecutively exposed portions of the helicoid, into, and out of, the air-current, smooth and without shock or jar. In whatever position the shaft (6) may have come to rest from previous rotations, the vane is at all times in equally advantageous positions to be set in motion by very slight currents of air.

The outer surfaces of deflectors (1^a) and (1^b) are to be utilized for signs, as shown, and other suitable surfaces may be variously disposed around this device for providing further advertising space. An example of the latter is shown at (20). In order that the signs may at the same time be seen from the front and from each side of the device, as well as from all intermediate directions, the signs may be set at suitable angles as represented by surfaces (32) and (33). The advertising surfaces may all be rigidly connected to, or form parts of the structure (1), or they may be composed of removable sheets (20), to be inserted in suitable holders (22) and to be fastened therein by screws (23) or other suitable means.

The various parts of this device, and especially the moving helicoid, are to be painted in different bright colors, or suitable combinations

of such colors, in order to make the device conspicuous and attractive to the eye.

If it is so desired, the sound-producing feature may be left out of this device altogether and the moving helicoid be alone depended upon to attract the desired attention to the same and to the advertisements which may be attached thereto.

Obviously, numerous changes in the construction above disclosed could be made without departing from the spirit of this invention, therefore, the protection of the Letters Patent is desired to extend to any modifications thereof, that may come within its scope as defined in the appended claims.

Having fully described my invention, what I claim as new is:—

1. In an advertising device, the combination of a helicoid, consisting of one or more approximately complete convolutions, with a shaft suitably supported, and deflectors for directing a current of air against a portion of the helicoid in a direction perpendicular to its axis, for the purpose of rotating the said helicoid as described.

2. In an advertising device, the combination of a helicoid, consisting of one or more approximately complete convolutions, with a shaft suitably supported; a housing with deflectors partly inclosing the said helicoid, and suitably disposed advertising spaces substantially as specified.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

DWIGHT FARNUM.

Witnesses:

CLARENCE R. ANDERSON,
STEPHEN W. RYAN.