2 Sheets—Sheet 1.

J. O. BELKNAP.

REVOLVING SIGNS.

No. 181,029. Patented Aug. 15, 1876.

Fig. 1.

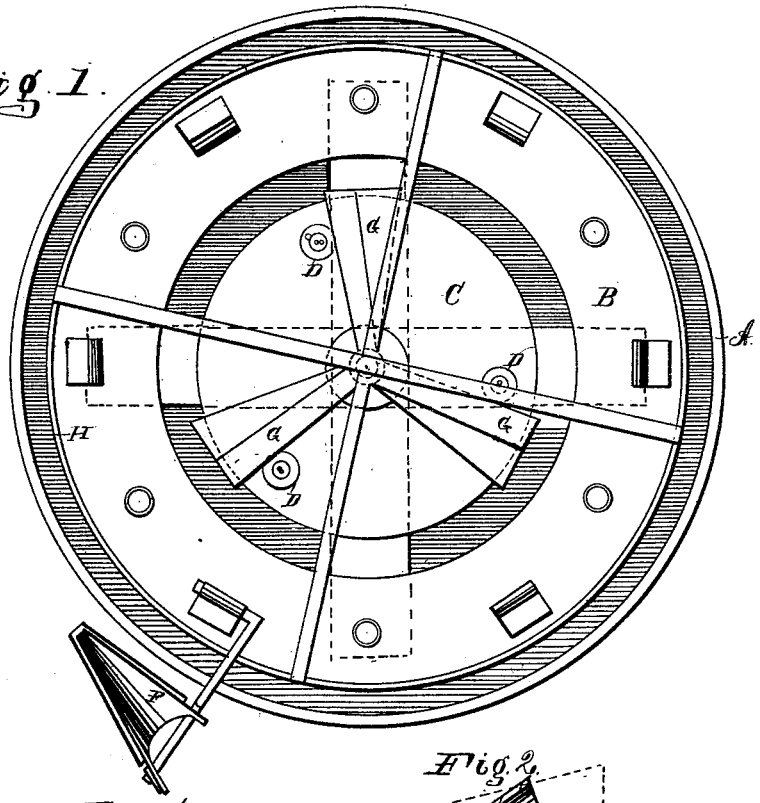


Fig. 3.

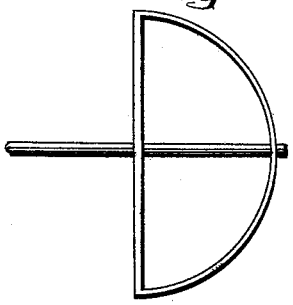
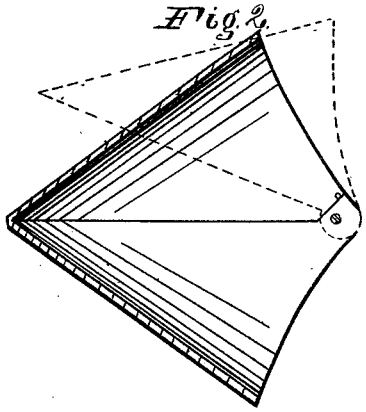


Fig. 2.



Witnesses:

H. Aubrey Toulmin

H. N. Miller

Inventor:

J. O. Belknap

per Morton Toulmin atty.

2 Sheets—Sheet 2.

J. O. BELKNAP.

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Fig. 4

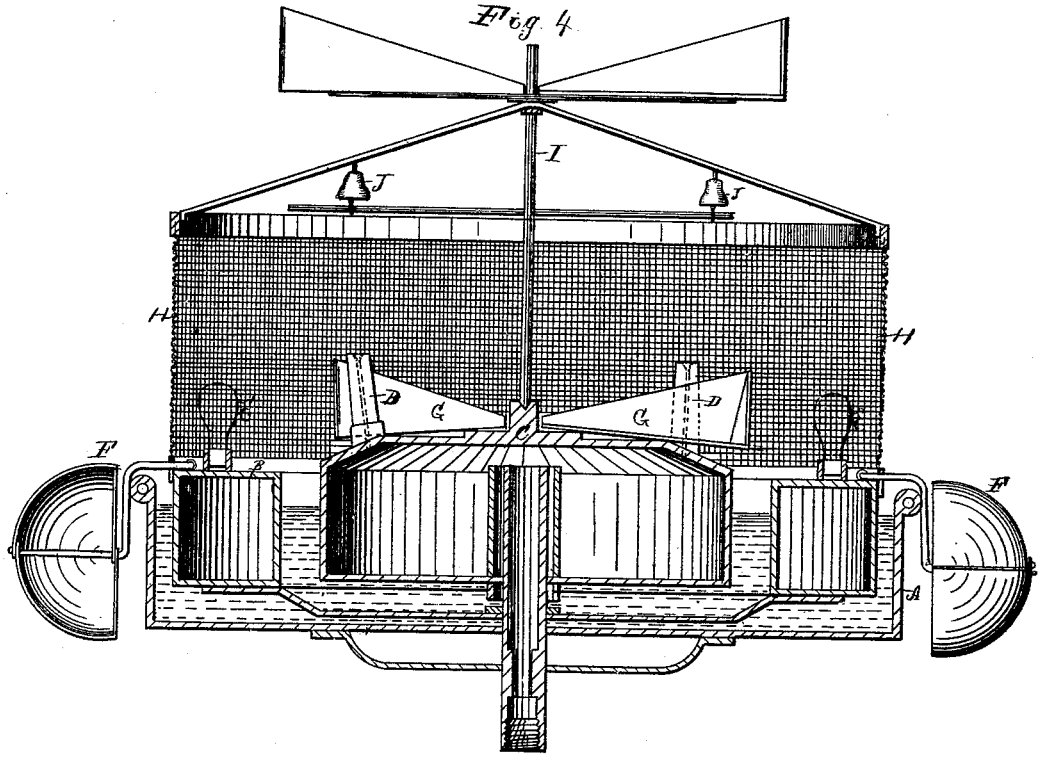


Fig. 6.

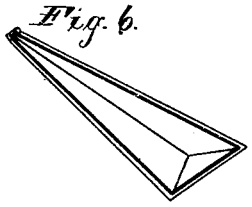
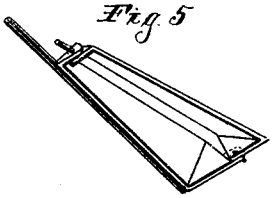


Fig. 5



Witnesses:

H. Aubrey Toulmin

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UNITED STATES PATENT OFFICE.

JACKSON O. BELKNAP, OF MOBILE, ALABAMA.

IMPROVEMENT IN REVOLVING SIGNS.

Specification forming part of Letters Patent No. **181,029**, dated August 15, 1876; application filed June 24, 1876.

To all whom it may concern:

Be it known that I, JACKSON OGDEN BELKNAP, of Mobile, county of Mobile, and State of Alabama, have invented a new and useful Improvement in Revolving Signs, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to produce an attractive device for arresting the attention or notice of persons through the medium of sound as well as sight, to be used generally in the line of signs and advertising by day and night.

Sheet 1, Figure 1 represents a plan view; Fig. 2, a sectional view of the half cone in two parts, hinged together; Fig. 3, a half cone in one part, without the hinge. Sheet 2, Fig. 4 is a vertical section of the whole machine. Fig. 5 shows a tapering double triangular fan or sail, in two parts, hinged together. Fig. 6 shows the same thing, except in one part, and not hinged.

A is a basin, with a pipe introduced through the center of the bottom, having a suitable connection on the lower end, to allow its connection to another pipe. The upper end of this pipe projects just above the edge of said basin inside. B is a ring-shaped float, air-tight or not, with one or more flat strips of metal crossing it in the center on the bottom, having an opening through them where they cross, to admit the pipe in the basin, and allow the float to revolve freely thereon, the ring-float being a little less diameter than the basin. C is another float of a different shape, the diameter of which is something less than the inner part of the ring-float, and which has an opening in the center of the bottom, surrounded by a tube inside and projecting nearly to the upper edge of the said float. Outside the bottom of this float there is a circular flange surrounding the opening in the bottom, said opening being of the proper size to allow this float to be slipped upon the pipe in the basin in the same manner as the ring-float, and, being a little less diameter than the inner walls of the ring-float, will revolve freely within the space. It will be seen that when the two floats are in position they both float upon the same water—the ring-float the deepest—and the inner float, floating above the cross-pieces on the bottom of the ring-float, revolves within the ring-float with perfect freedom. If desirable, the ring-float, or one of any shape in a basin of liquid, may sustain upon its top other basins having other floats in them, all of which may be revolved simultaneously in the same way. D represents any number of gas-burners or lamps arranged upon the inner float. E is a series of liquid or other kinds of lenses, colored or plain, or prismatic glass drops, in any form or globes, through which the lights upon the inner float are seen. Lights may also be put upon the ring-float, if desirable, and all the glass lenses, globes, and other things be protected from the heat of the burners by a lining of plain glass or mica. F is any number of half-cone-shaped sails, of metal or other suitable material, which have a rod passing through them, or otherwise connected, soldered, or secured in any way, bent in any form, and inserted into sockets or tubes on the floats, or attached by any suitable means. These half cones may be constructed in two pieces, hinged together, so as to open and close according to the force of the wind. G is a series of double triangular wind-sails upon the inner float C, so placed as to reverse its motion to that of the ring-float B, and which may be used as appears, or made in two pieces and put together by a hinge, for the purpose of relieving itself, by its own action, of too much pressure from a gusty or very heavy wind. The lifting part, hinged, may be loaded with a weight, so as to regulate its action to stand a certain pressure, and then rise, allowing the wind to escape. H is a wire cloth or net covering or protector of any shape, resting upon the ring-float, or, if required, one on each float; or it may be secured stationary onto the bottom of the basin in any proper manner. The wire covering is also designed to answer the purpose of a sign by painting and lettering its surface, attaching metal letters and any kinds of decorations, all of which adds to its beauty and usefulness. The wire cover may be entirely closed on the top, or open, with cross-pieces through the center, with an opening in them at the crossing. I is a shaft, connected to a ring of half cones or double triangular sails, as hereinbe-

fore described, constructed with the parts hinged or not. The shaft is vertical, with lower end resting in a socket of metal or glass base upon the center float, the upper end projecting through an opening in the cross-pieces at the top of the wire cover, above which the connection is made with the ring of sails or half cones; it may also be connected, by a screw or otherwise, to the float C, and be the additional driving-power of said float. This shaft is provided with projecting wire rods, horizontally arranged under the cross-pieces, or under the top of the wire cover. J is one or more bells, suspended from or firmly fixed to the cross-pieces of the wire cover, and arranged to be rung by the revolving shaft and projecting rods by the power and force of the wind. (Gongs or bells of large size can be used in this invention, and attached to it anywhere by any means; or a bell or gong may be placed at a distance from it and still rung by its action, having a suitable connection for the purpose.) The basin A being charged with liquid, the floats rise, and the wind striking the cones and sails, each float revolves in opposite directions simultaneously, the shaft also revolving, and more rapidly than the float upon which it rests. At the same time the projecting wire-rods strike the clappers of the bells, which are thus kept ringing. The bells may be secured to the projecting rods, connected with the shaft and rung by vibration, or attached to the basin outside, or upon the floats inside. The revolving shaft, with ring of half cones or triangular sails, may be used separate from the floats by placing it in a frame-work or upon a gas-fixture. Gongs or bells may be placed at a distance from it and still rung by its action, having a suitable connection for the purpose. Whole cones may be hinged together in parts, as described in the half cones herein shown; also, the double triangular sails of any sort may be hinged similar to the tapering sails herein shown.

I claim as my invention—

1. One or more floats sustained upon liquid, and capable of being revolved by the force and power of the wind, substantially as shown and described.

2. A vertical shaft connected with a series of wind-sails resting in a metal or glass socket or base, arranged to revolve by the power of the wind, and ring a bell or bells, substantially as shown and described.

3. The combination of two or more floats in a basin of liquid, arranged to revolve in opposite directions at one and the same time by the force and power of the wind, substantially as shown and described.

4. The combination of the basin A, floats B and C, burners or lamps D, lenses, globes, or prisms E, wind-sails F and G, wire covering H, shaft and wind-sails I, and bell or bells J, constructed and arranged to operate substantially as and for purposes set forth.

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Witnesses:

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