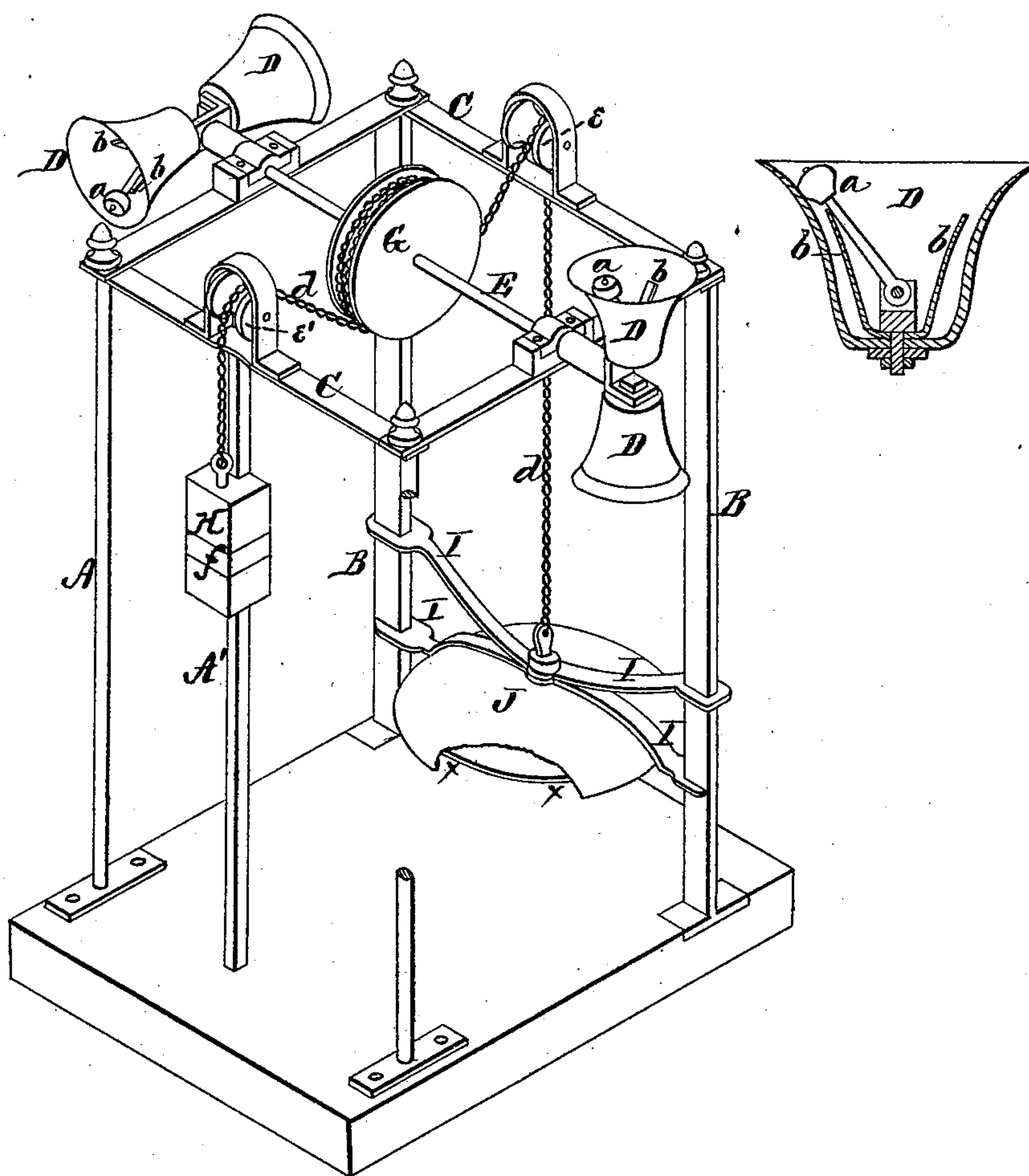


G. C. PATTISON.
Fog-Signals.

No. 151,618.

Patented June 2, 1874.



WITNESSES.

Henry N. Miller
E. L. Everts

By

INVENTOR

G. C. Pattison,
Alexander Mason

Attorneys.

UNITED STATES PATENT OFFICE.

GURNEY C. PATTISON, DECEASED, (MARGARET J. PATTISON, ADMINISTRATRIX,) OF BALTIMORE, MARYLAND.

IMPROVEMENT IN FOG-SIGNALS.

Specification forming part of Letters Patent No. **151,618**, dated June 2, 1874; application filed January 2, 1874.

To all whom it may concern:

Be it known that I, GURNEY C. PATTISON, of Baltimore, in the county of Baltimore and in the State of Maryland, have invented certain new and useful Improvements in Fog-Signals; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a self-adjusting fog-alarm or fog-signal, operated by the swell or waves of the water, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view of my fog-alarm, and Fig. 2 is an enlarged section of one of the bells used in the same.

A A and B B represent four posts driven in the ground, and connected at their upper ends by a frame, C. The posts A A may be round, or any other shape desired, while the posts B B should be flat or square. Across the center of the frame C, in suitable bearings, is placed a shaft, E, upon each end of which are attached two bells, D D, set in opposite directions, as shown, and the bells at one end sit at right angles with the bells at the other end of the shaft. I do not confine myself to any particular number of bells, but I prefer to use the number and arrangement above mentioned, because in this case there will always be one bell upward ready to be sounded by the least motion of the water. Each bell D is provided with a hinged or pivoted clapper, *a*, and a spring, *b*, on each side thereof, on the line of its movement, so as to prevent the clapper, after striking the bell, from deadening the sound. On the center of the shaft E is secured a pulley, G, around which is wrapped a chain, *d*, as shown. One end of this chain passes over a pulley, *e*, on the frame C, and is

attached to a float or buoy, J, while the other end of the chain passes over another pulley, *e'*, on the other side of the frame, and is attached to a counterbalancing-weight, H. This weight is held by a band, *f*, to a post, A', which is also driven in the ground, to guide the weight perpendicularly up and down. The float or buoy J is constructed in any suitable form or shape, and cup-shaped on its under side, as shown at *x x* in Fig. 1, so as to catch the air underneath and make its movement gentle and easy in striking the water. To the top of the buoy J are attached guide-arms I, two to each of the posts B. The upper one of these arms on each side is slotted at its outer end, and the post B passes through said slot, while the lower arm is only forked to straddle the post on the inner side. By the swell or waves of the water the float or buoy J is moved up and down, causing a corresponding motion of the weight H, thereby revolving or rocking the shaft E, so as to sound the bells D D. The alarm is self-adjusting with the tide, as the buoy floats on the water, and the weight H counterbalances it. It is, of course, understood that the float or buoy J should be somewhat heavier than the counterbalancing-weight H, so that when the water recedes the buoy will fall with it.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The float or buoy J, made cup-shaped on its under side, as shown at *x*, for the purposes set forth.

2. The combination of the float or buoy J, chain *d*, pulleys *e e'*, weight H, pulley G, shaft E, and one or more bells, D, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of December, 1873.

GURNEY C. PATTISON.

Witnesses:

A. N. MARR,
F. L. OURAND.