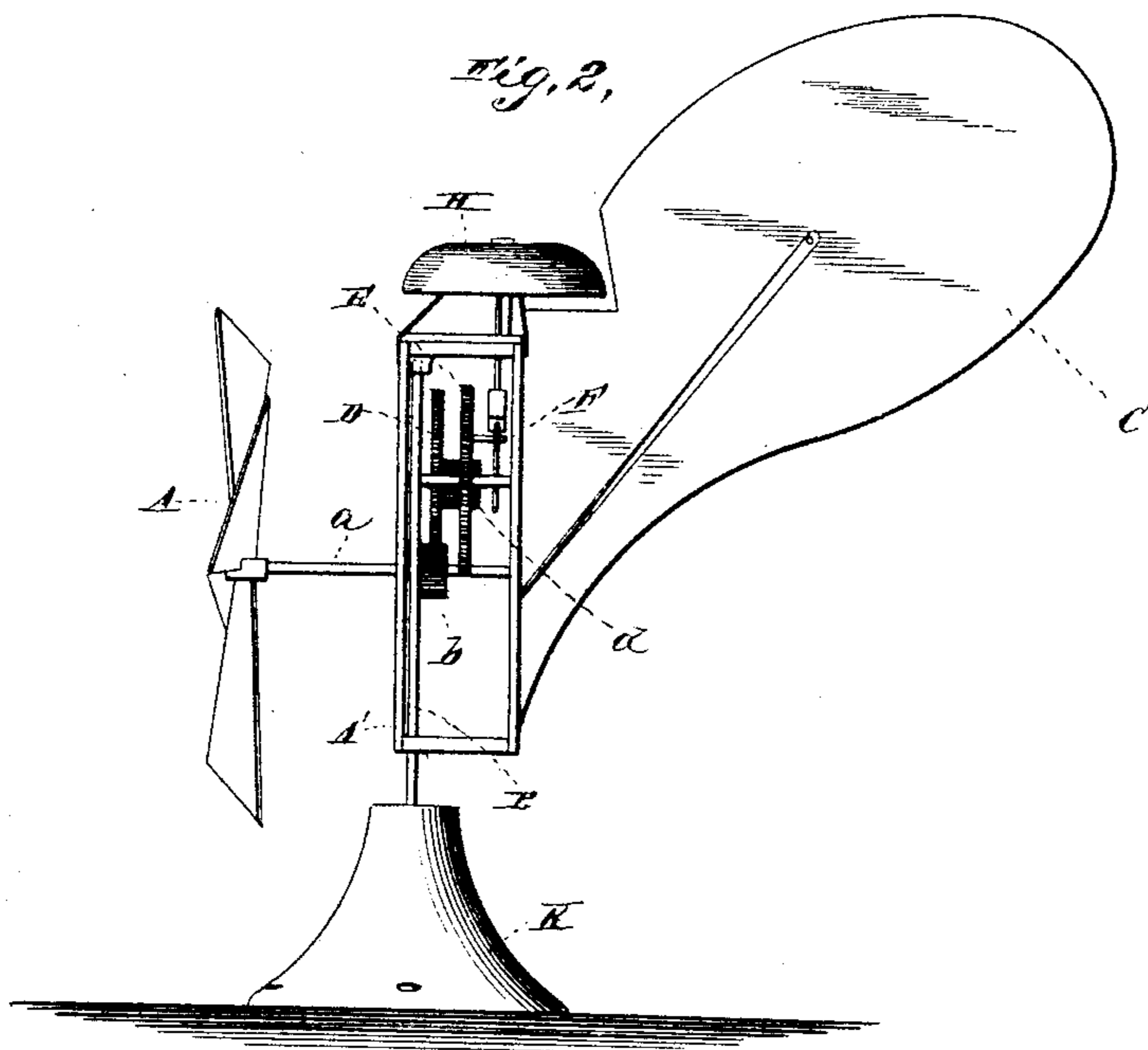
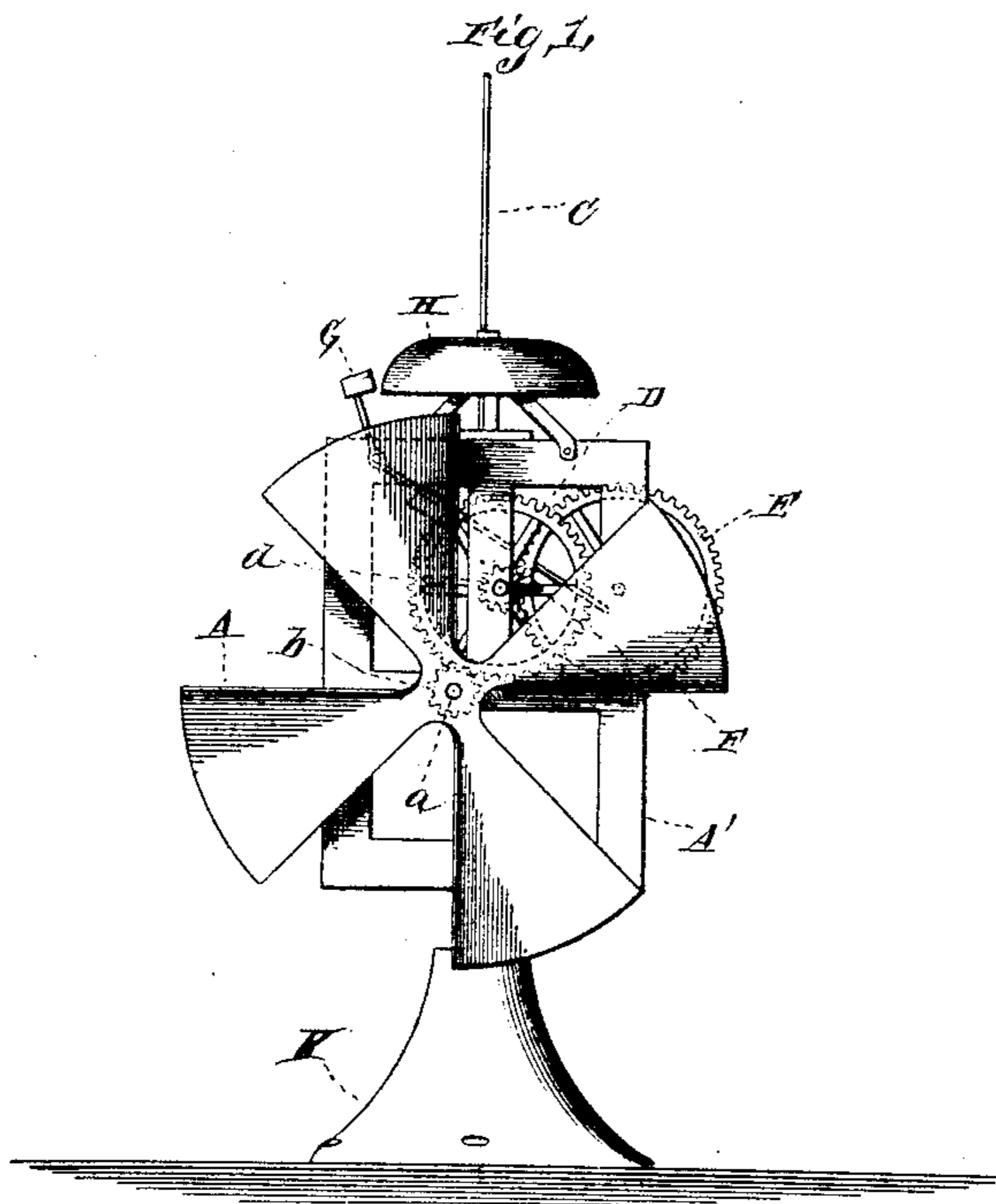


(No Model.)

H. G. MALONEY.  
FOG SIGNAL.

No. 464,375.

Patented Dec. 1, 1891.



WITNESSES:

*Chas. L. Taylor,*  
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# UNITED STATES PATENT OFFICE.

HARRY G. MALONEY, OF BOSTON, MASSACHUSETTS.

## FOG-SIGNAL.

SPECIFICATION forming part of Letters Patent No. 464,375, dated December 1, 1891.

Application filed February 18, 1891. Serial No. 381,988. (No model.)

*To all whom it may concern:*

Be it known that I, HARRY G. MALONEY, a subject of the Queen of England, and a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Fog-Signals; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of a front view illustrating this invention. Fig. 2 is a side view of the same.

This invention has relation to fog and marine signals, the object being to provide a device of this character which will be especially applicable to rivers and bays where there is not sufficient swell to operate a bell-buoy or boat.

With this object in view the invention consists in the novel construction and arrangement of parts, as hereinafter set forth.

In the accompanying drawings, the letter A designates a wind-wheel, having its horizontal shaft *a* journaled in the frame A', which is loosely mounted upon the vertical shaft or spindle B and adapted to revolve thereon under the action of the wind upon the fan or tail C, secured thereto, as shown. A pinion *b* is carried by the shaft *a*, and is arranged to mesh with and operate a gear-wheel D, also journaled in the said frame, and having a pinion *d*, meshing with a second and larger gear-wheel E. This wheel E carries a pin or projection F, which is adapted to engage the arm *h* of hammer G, which projects into the plane of the path of said stop in its revolution, so that with each revolution of the wheel E a bell or gong H, mounted in the frame A, will be sounded by said hammer.

It will be seen that by means of the alternate pinions and the gear-wheels of greater diameter the wheel E will only be revolved by numerous revolutions of the wind-wheel, and by varying the intermediate gear the bell may be sounded at any required interval. The shaft or spindle B has a perforated base K, to enable it to be secured in the desired position.

By making the frame or casing to which the fan is attached and in which the wind-wheel shaft is journaled and the gearing hung revoluble upon the shaft it will be seen that the relative position of all the parts is kept the same, no matter from which direction the wind may be blowing, and the gearing is operated direct from the wind-wheel shaft without necessitating any means for making a connection between the shaft and gear as the wheel is swung to different positions under the action of the wind.

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

The wind-operated signal comprising the vertical stationary shaft and its support, a frame or casing loosely carried by said shaft and revoluble thereon, a fan or wing connected to said casing, a horizontal shaft journaled in said frame and projecting therefrom, said shaft carrying a wind-wheel at its outer end and a pinion on its inner portion, a series or train of reducing gear hung in said frame and in engagement with said pinion, and an alarm intermittently sounded by the operation of said gear, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

HARRY G. MALONEY.

Witnesses:

BENJAMIN M. DREW,  
M. C. FRANK.