UNITED STATES PATENT OFFICE.

WILLIAM S. MARTIN, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN FOG-SIGNALS.

Specification forming part of Letters Patent No. **167,848**, dated September 21, 1875; application filed August 19, 1875.

To all whom it may concern:

Be it known that I, WILLIAM S. MARTIN, of the city of Baltimore and State of Maryland, have invented certain new and useful Improvements in Fog-Bells, of which the following is a specification; and I do hereby declare that in the same is contained a full, clear, and exact description of my said invention, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

My invention relates to a hammer and sliding bolt, adapted to be allowed to come alternately in contact with a rigid or fixed bell, to produce a sound at intervals of time, the length of which are governed by the speed of certain mechanism hereinafter described, the opposite motion of the said hammer and bolt, or that in which they are withdrawn from contact with the aforesaid bell, being caused by the motive mechanism aforesaid.

In the further description of my invention which follows due reference must be had to the accompanying drawing, forming a part of this specification, and in which—

Figure 1 is a side view, partly in section, of my invention; and Fig. 2, a plan or top view of the same.

Similar letters of reference indicate similar parts in both figures.

A is the frame, to which the fog-bell B is secured by means of bars; and C the hammer, which is brought into contact with the bell, as hereinafter described. D is the sliding bolt before alluded to, resting within bearings extending from the upper edges of the frame A. The hammer C is secured to a vibrating shaft, *a*, and in striking the bell is actuated by gravity alone. The backward motion of the hammer, or that in which it is withdrawn from the bell, is obtained by means of a bar, *b*, extending from the vibratory shaft *a*, and which comes into contact with the pins *c'* projecting laterally from one of the gear-wheels E. The disk *e* is moved by means of a series of gear-wheels driven by a weighted cord or other device. The sliding bolt is moved toward the bell by the extension of the spiral spring *f*.

The withdrawal of the bolt D from the bell, and the compression or contraction of the spiral spring, is caused by the vibration of the lever *g*, one end of which comes into contact with the projecting pins *c* during their revolution. An adjustable bar, *h*, secured to the vibratory shaft *a*, provides means whereby motion may be transmitted to a second hammer or other striking device, or to a hammer adapted to strike a second bell located in a different portion of the building in which the invention is placed.

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

The fog-bell B, hammer C, vibrating shaft *a*, bar *b*, sliding spring-bolt D, lever *g*, disk *e*, gear-wheel E, provided, respectively, with pins actuating the said bar and bolt, all combined substantially as described.

In testimony whereof I have hereunto subscribed my name this 31st day of July, A. D. 1875.

WILLIAM S. MARTIN.

Witnesses:
WM. T. HOWARD,
W. W. WHARTON.

C. A. MAYNARD.

Fire-Kindler.

No. 167,849. Patented Sept. 21, 1875.

Fig. 1.

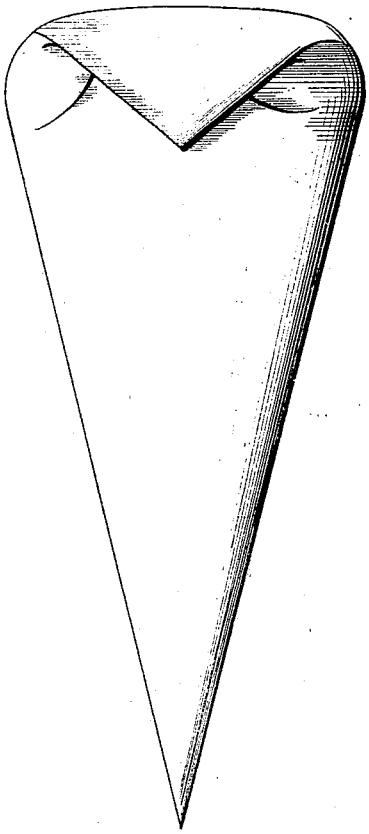
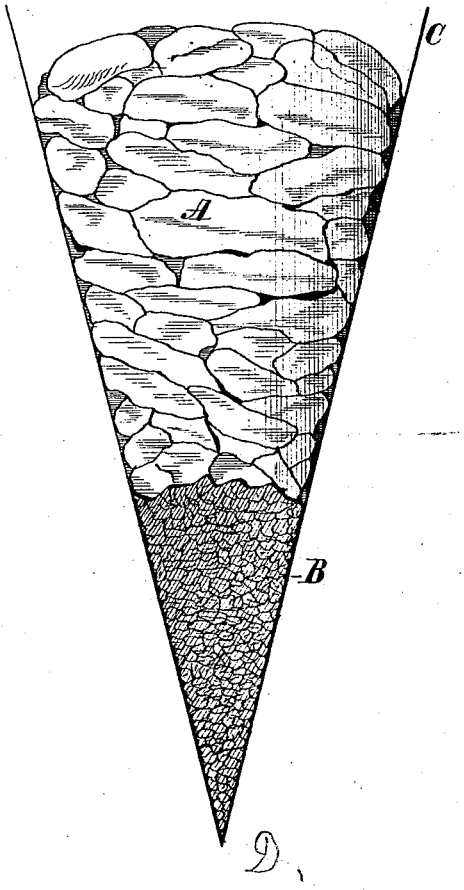


Fig. 2.



Attest:

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