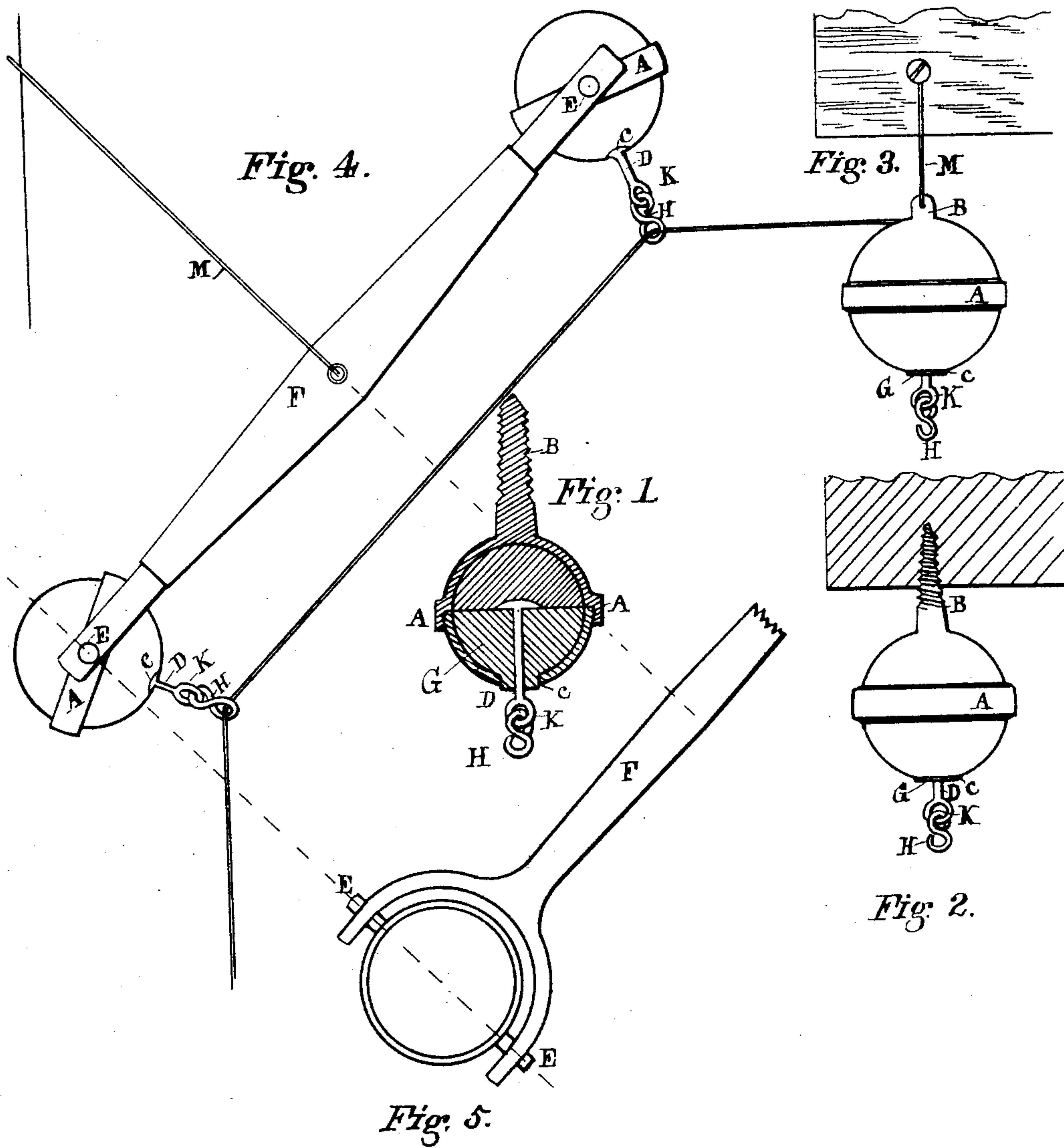


(No Model.)

W. J. BOWEN.
INSULATOR.

No. 481,132.

Patented Aug. 16, 1892.



WITNESSES:

M. J. Woods
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WILLIAM J. BOWEN, OF NORWALK, OHIO, ASSIGNOR TO WILLIAM HUBBARD,
OF ELGIN, ILLINOIS.

INSULATOR.

SPECIFICATION forming part of Letters Patent No. 481,132, dated August 16, 1892.

Application filed May 2, 1891. Serial No. 391,437. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. BOWEN, a citizen of the United States, residing at Norwalk, in the county of Huron and State of Ohio, have invented certain new and useful Improvements in Acoustic and Electric Insulators; 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 the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in insulators for suspending conducting-wires, all of which will be hereinafter more particularly described and pointed out.

In the accompanying drawings, forming part of this specification, similar letters of reference indicate corresponding parts in all of the figures, in which—

Figure 1 is a sectional view of my improved insulator. Fig. 2 is a side elevation of same. Fig. 3 is a view in elevation, the suspending-wire M being substituted for the screw B of Figs. 1 and 2. Fig. 4 is a view in elevation showing the insulator provided with central pivots by which it is supported in the forked ends of arm F, which is in turn supported by wire M. Fig. 5 is a plan view of Fig. 4.

A represents the spherical shell of the insulator, which may be made of any suitable material, preferably metal, and for convenience of inserting insulating material may be split or divided in halves, one part being provided with an extended rim and screw-threaded, the lower half being screwed into the rim of the upper half, as shown, or the two halves may be secured together by any substantial means. The upper half is provided with a lug or projection B, which may be in the form of a screw, as in Figs. 1 and 2, and this turned directly into the cross arm or support, Fig. 2, or it may be shorter and have a hole bored through crosswise near shell and be suspended by wire, as shown in Fig. 3. The lower half is provided with a hole C somewhat larger than the suspending-pin D. (Shown in Fig. 1.)

Figs. 4 and 5 show a modification of my device, in which the lug B, Figs. 1, 2, and 3, is

removed altogether and pivots E E E E substituted as a means of connecting the shell of insulator to forked arm F, by which two insulators are supported in proper position for turning the line around a corner. The pivots E E E E, Figs. 4 and 5, must be placed on a line through center of shell A, so that it will be self-adjusting to the angle, as shown. The arm F is suspended by a wire M near the center, as usual.

The shell A is filled with suitable insulating material G, such as rubber, and preferably filling hole C, so as to prevent contact between shell A and suspending-pin D. The pin D is completely embedded at its upper end in the insulating material G and provided with a suitable head to prevent pulling out, while the lower end is formed into an eye K, to which the line-wire may be attached by hook H H H H, which holds the line after being closed. It will be seen that as the pin D is embedded in insulating material G it cannot come in contact with shell A. Therefore no sound-vibrations or electricity can pass off from the line through pin D to shell A and the supports. At the same time insulating material G is protected from the weather. The spherical shape of the shell A reduces the cost of manufacture, being ornamental in appearance and can be placed in positions that would be difficult and inconvenient to place other forms.

As an improvement upon the patent of W. J. Bowen, dated October 16, 1883, No. 286,681, I claim—

The combination of a hollow spherical shell divided through the middle, having screw-threads on each half for attaching them together, the top half provided with means for fastening the same to any support, an insulating material within the shell, having embedded within it a headed pin passing through the same and provided at its outer end with an eye to which the conductor is connected and supported, substantially as described.

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

WILLIAM J. BOWEN.

Witnesses:

KATHARINE LAWRENCE,
E. G. BOUGHTON.