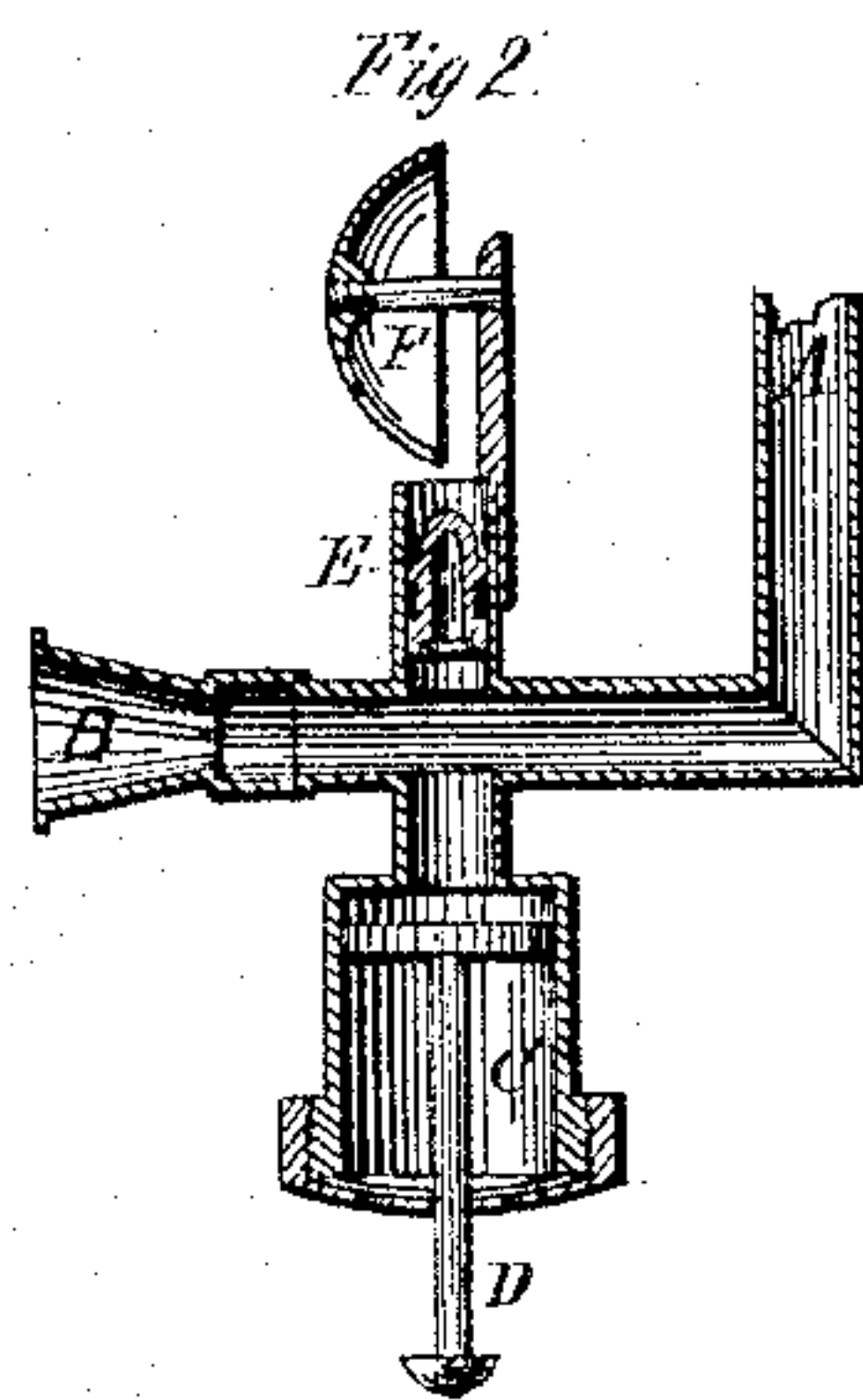
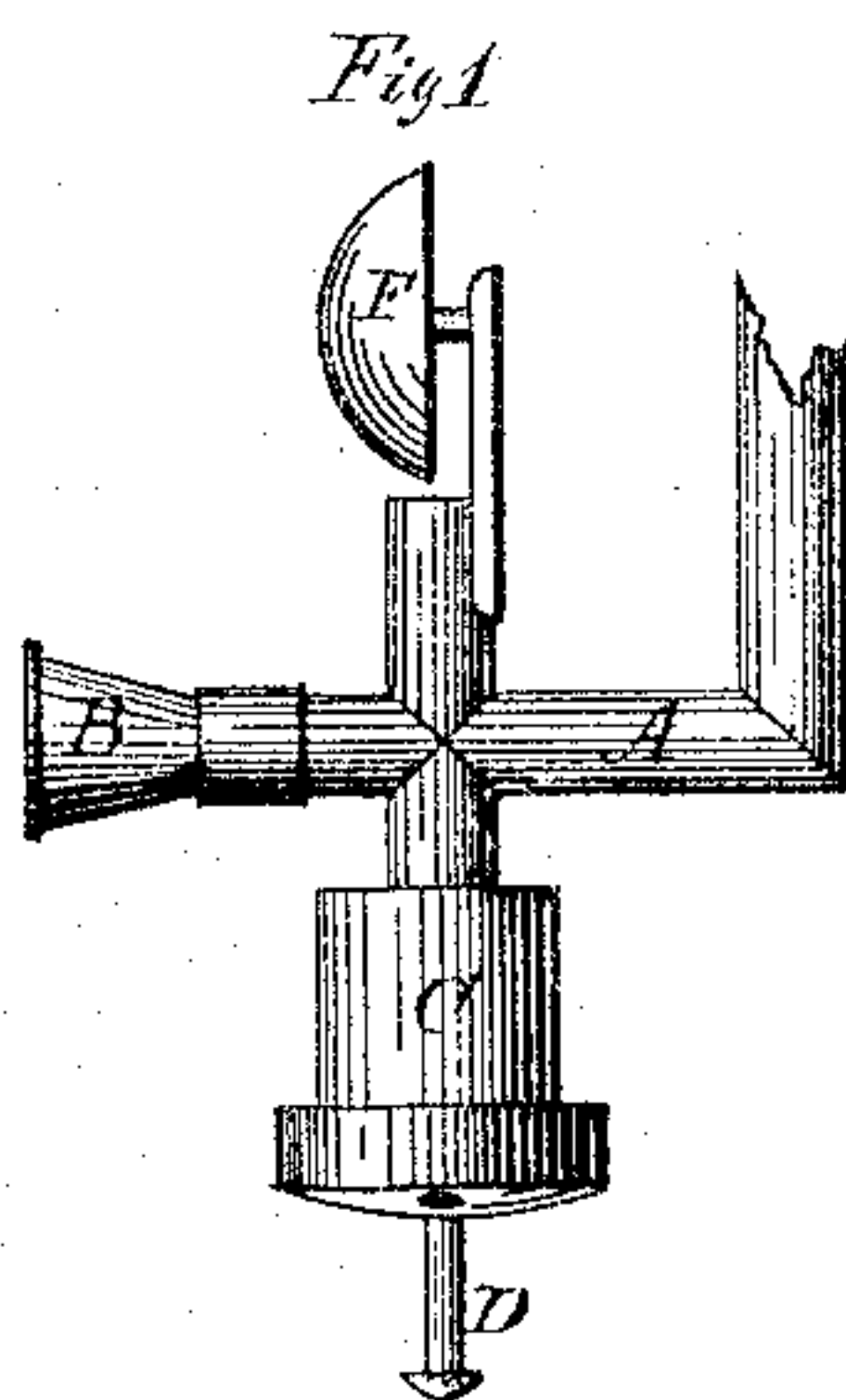


B. HOWARD & J. BEADLE.

Speaking-Tube.

No. 162,476.

Patented April 27, 1875.



WITNESSES.

J. W. Garner.
C. W. Lemon.

INVENTORS.

Benjamin Howard
Jesse Beadle
per F. A. Lehmann atty.

UNITED STATES PATENT OFFICE.

BENJAMIN HOWARD AND JESSE BEADLE, OF SHICKSHINNY, PA.

IMPROVEMENT IN SPEAKING-TUBES.

Specification forming part of Letters Patent No. **162,476**, dated April 27, 1875; application filed April 2, 1875.

To all whom it may concern:

Be it known that we, BENJAMIN HOWARD and JESSE BEADLE, of Shickshinny, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Alarm Attachments to Speaking-Tubes; and we do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to an improvement in alarm attachments to speaking-tubes; and it consists in attaching to the speaking-tube a cylinder and piston, by means of which the air contained in the tube is suddenly forced up or down, as the case may be, which air pushes a globular valve against a bell or gong, thereby giving the alarm, as will be more fully described hereafter.

The accompanying drawing represents our invention.

A represents a speaking-tube, and which extends in any direction desired. To the speaking-tubes are attached mouth-pieces B, which are closed when not in use, by valves or otherwise, and opened by hand when wanted. At any place from whence communications are to be made is attached to the speaking-tube a cylinder, C, provided with a piston and a rod, D, which rod has a knob at

its outer end and is to be operated by hand. This piston moves freely in the cylinder and returns to its position by its own weight after having been suddenly pushed upward. The effect produced by the sudden concussion of the air is extended throughout the length of the tube. At the place to which the communication is directed, a globular valve, E, closes the tube, and this valve, when struck by the air is lifted from its seat and violently thrown up against the gong or bell F, secured to the upper end of the tube, immediately over its mouth. The alarm thus given may be repeated in rapid succession, the globular valve returning to its seat by recoil and its own weight as suddenly as it was lifted from it. Instead of using the piston-rod D to give the alarm, it may be done by blowing into the tube by bellows or with the mouth.

Having thus described our invention, we claim—

An alarm attachment for speaking-tubes, consisting of the combination of the speaking-tube A, cylinder C, piston-rod D, valve E, and bell or gong F, substantially as shown.

In testimony that we claim the foregoing, we have hereunto set our hands this 29th day of March, 1875.

BENJAMIN HOWARD.
JESSE BEADLE.

Witnesses:

HARRISON BRIGHT,
M. P. FOWLER.