

(No Model.)

W. C. DILLMAN.
ANNUNCIATOR.

No. 466,159.

Patented Dec. 29, 1891.

Fig 1

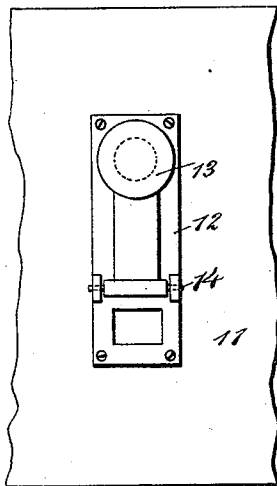


Fig 2

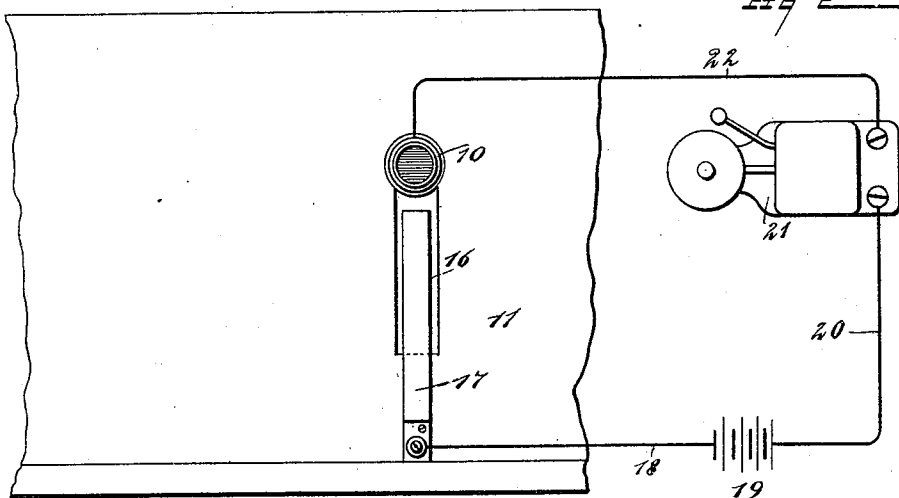
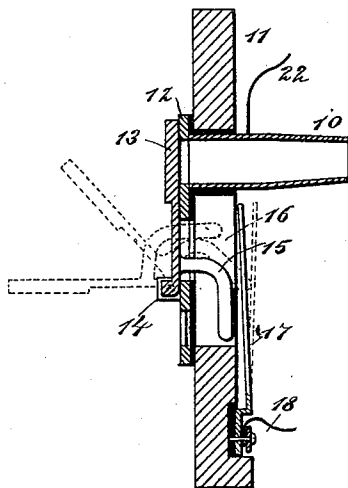


Fig 3



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM C. DILLMAN, OF BROOKLYN, ASSIGNOR TO OWEN WALSH, OF NEW YORK, N. Y.

ANNUNCIATOR.

SPECIFICATION forming part of Letters Patent No. 466,159, dated December 29, 1891.

Application filed July 10, 1891. Serial No. 399,005. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. DILLMAN, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Annunciator, of which the following is a full, clear, and exact description.

My invention relates to improvements in that class of annunciators which are used in connection with speaking-tubes. In buildings where speaking-tubes are used they are usually arranged to converge at a certain point—such, for instance, as the office of a hotel—and annunciators are used to indicate when a person is at one of the tubes and desires to talk, and also to point out which tube is to be used. In a certain class of these annunciators the indicating-bell is rung by means of a drop-leaf which is arranged at the mouth of each tube, and which when it drops closes the circuit through an electric bell. In annunciators of this class the circuit is kept closed until the leaf is raised or a circuit-breaker is operated, and as a result the batteries connected with the annunciators are soon exhausted.

My invention relates especially to improvements in this class of annunciators; and the object of the invention is to produce a device which will automatically make and break the circuit in which the electric bell is included, so that the circuit will be closed but a short time and the bell rung long enough to merely attract attention.

To this end my invention consists in certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of the swinging leaf, which is arranged at the mouth of the speaking-tube. Fig. 2 is a rear elevation of the connections at the mouth of the speaking-tube and a diagrammatic view showing the entire electrical connection of the device, and Fig. 3 is a vertical section of the apparatus at the mouth of the tube.

A plurality of these speaking-tubes 10 are generally arranged with their mouths in close

proximity, and the tubes are supported in a board 11, which is secured to a wall in any convenient way. The mouth of each tube projects through the board 11 and terminates in a plate 12, which is secured to the front side of the board and is insulated thereon, and mounted on the front side of the plate is a swinging leaf 13, which is adapted to close the mouth of the tube and is hinged at its lower end, as shown at 14. It will thus be seen that when a person is at the opposite end of the tube and wishes to speak he can blow lightly in the tube, and the air-pressure will cause the leaf to drop.

Near the bottom of the leaf 13 is a rearwardly and downwardly extending bent arm 15, which projects into a recess 16 in the board 11, and which, when the leaf is dropped, contacts with a spring 17, which is arranged in a nearly vertical position behind the bent arm, and is firmly secured to the back side of the board 11. The spring 17 connects by a wire 18 with a battery 19, and the battery connects by a wire 20 with a common form of electric bell 21, and the bell connects by a wire 22 with the tube 10 near its mouth, and the current will flow through the tube into the plate 12, the drop-leaf 13, and the bent arm 15. It will thus be seen that when the leaf is dropped the circuit will be closed and will be as follows: From the battery 19, through the wire 20, the bell 21, the wire 22, the tube 10, the plate 12, the leaf 13, the bent arm 15, the spring 17, and the wire 18 back to the battery. When the leaf is dropped, the bent arm 15 will swing upward and the free end of the arm will contact with the spring 17; but as the leaf continues to drop the free end of the arm will be carried inward away from the spring, as indicated by dotted lines in Fig. 3, so that the circuit will be closed but a comparatively brief period of time and the battery will last for a long time.

In the drawings the leaf 13 is shown as operated by air-pressure; but it is obvious that the leaf may be made to drop by any mechanical or electrical mechanism, and the effect on the bell and circuit will be the same.

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

1. The combination, with the speaking-tube and the electric bell, of a drop-leaf arranged at the mouth of the tube and forming one terminal of the bell-circuit, a yielding contact
5 arranged adjacent to the drop-leaf and forming the other terminal of the bell-circuit, and a projection on the leaf adapted to strike and pass the yielding contact when the leaf is dropped, substantially as described.
- 10 2. The combination, with a speaking-tube and the drop-leaf arranged at the mouth of the tube and provided with a rearwardly-extending bent arm, the leaf being connected with one pole of the battery, of a spring arranged in the path of the bent arm and connected with the opposite pole of the battery,
15 and a bell included in the circuit, substantially as described.

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Witnesses:

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