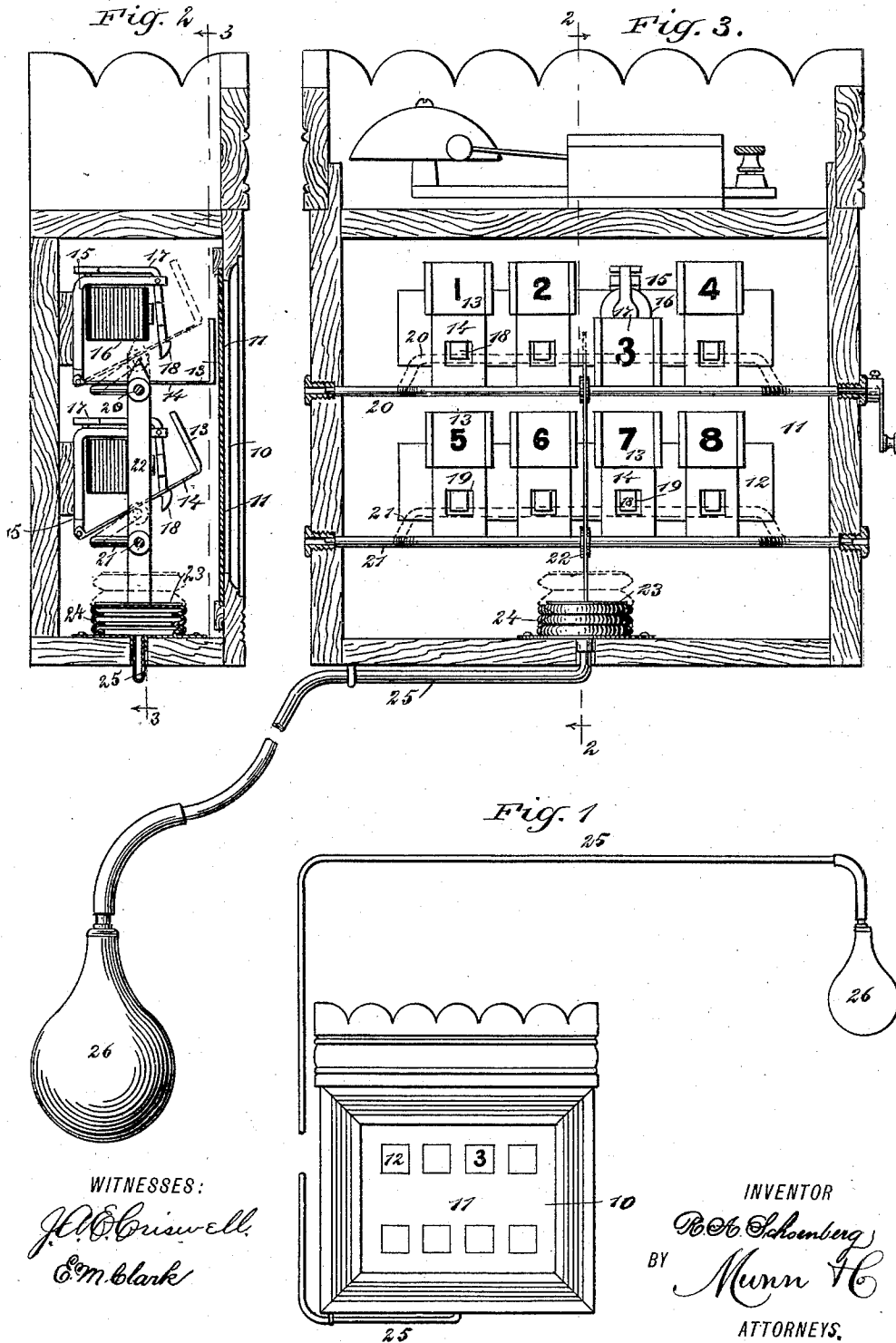


(No Model.)

R. A. SCHOENBERG.
RESETTING DEVICE FOR ANNUNCIATORS.

No. 468,697.

Patented Feb. 9, 1892.



UNITED STATES PATENT OFFICE.

RALPH A. SCHOENBERG, OF NEW YORK, N. Y.

RESETTING DEVICE FOR ANNUNCIATORS.

SPECIFICATION forming part of Letters Patent No. 468,697, dated February 9, 1892.

Application filed July 31, 1891. Serial No. 401,271. (No model.)

To all whom it may concern:

Be it known that I, RALPH A. SCHOENBERG, of New York city, in the county and State of New York, have invented a new and Improved
5 Pneumatic Attachment for Electric Annunciators, of which the following is a full, clear, and exact description.

My invention relates to a pneumatic attachment for annunciators, and has for its object
10 to provide a means whereby the annunciator may be pneumatically reset without jarring or subjecting the annunciator to any shock whatever and whereby, also, the annunciator may be placed upon any desired support in
15 any locality without interfering with its proper manipulation.

A further object of the invention is to so construct the attachment that it may be operated from any room at any distance from
20 the annunciator or close thereto, as required.

Another object of the invention is to provide a means whereby before ringing and causing a drop-finger to disclose the number of the room or floor the operator may be assured
25 that every drop-finger is elevated and concealed from view in front of the annunciator-window.

A further object of the invention is to provide an attachment that is exceedingly simple
30 and economic and capable of expeditious and convenient attachment to any annunciator.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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.

40 Figure 1 is a front elevation of the annunciator having the invention applied thereto. Fig. 2 is a transverse section taken centrally through the annunciator practically on the line 2 2 of Fig. 3, and Fig. 3 is a vertical longitudinal section taken practically on the line
45 3 3 of Fig. 2.

In the annunciator illustrated the front window 10 is provided with the usual opaque surface 11 and transparent openings 12, at which
50 the dial-face 13 of the drop-fingers 14 is adapted to appear. Upon the back board of the casing of the annunciator the usual brackets

15 are secured, carrying magnets 16, and upon said brackets the armatures 17 are pivoted, and one member of each armature is provided
55 with a latch-head 18, or the interior arrangement of the annunciator may be materially different from that shown and described. The drop-fingers 14 are illustrated as pivoted at the lower ends of the brackets, and they are
60 provided with openings 19, through which the latch-heads 18 of the armatures extend when the fingers are carried upward to their normal position, as shown in positive lines in the lower portion of Fig. 2 and in dotted lines at
65 the upper portion thereof. The drop-fingers are arranged in horizontal rows, and below each upper row of drop-fingers a shaft 20 is located, having its ends fulcrumed in the casing of the annunciator, and below the lower
70 row of drop-fingers another shaft 21 is placed. Both of the shafts 21 and 20 are preferably crank-shafts, and both the shafts are connected at or near their central portion by a rod or bar 22, the said rod or bar being loosely
75 secured to the shafts. The lower end of the rod or bar extends downward a distance below the lower shaft 21, and integral with its lower end a disk 23 or the equivalent thereof is formed. This disk is adapted to normally
80 rest upon a bellows 24, located at the bottom of the annunciator-case. A tube 25 connects with the bellows and air is forced into the latter through the tube through the medium of a hand-bulb 26 or the equivalent thereof.
85 The moment that the bulb 26 is compressed the bellows is inflated, the disk 23, attached to the rod 22, is elevated by the bellows, and the crank-arms of both shafts are carried upward, and if any of the drop-fingers of the an-
90 nunciator are in their lowermost or display position they will be carried upward to an engagement with their armatures. When the drop-fingers are in their lower or display position, they rest upon the shaft immediately
95 below the line to which they belong.

In the operation of the annunciator if a person in a room distant from the annunciator should desire to give notice through the medium of the annunciator it is very desirable
100 that the operator should first ascertain whether or not any of the drop-fingers are in their lowermost or display position, as should any of them be in such position and the at-

tendant not notice the finger dropped it would be difficult for said attendant to determine from which room or floor the last call was made. Heretofore this has been very difficult to determine, and, in fact, no device heretofore employed has proved at all accurate.

By the use of the simple attachment herein shown and described this annoyance or objection is, however, overcome, as before touching the button to make the call all that the operator need do is to press the bulb, whereupon the shaft in the annunciator will be actuated and any drop-fingers that may be in their lowermost position will be thrown upward and concealed from view. As soon as this is accomplished the alarm can be given and the operator may rest assured that unless another person has simultaneously given an alarm the indicator or drop-finger belonging to his or her floor or room will be the only one displayed.

It will be observed that when my improved attachment is employed the cord or wire now used to reset annunciators, and the use of which often results in injury to the annunciator, is entirely dispensed with and that the tube employed need not be very large and may be run alongside of the electric wires and thereby concealed.

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

1. In an annunciator, the combination, with the magnets and their armatures, of display drop-fingers adapted to be engaged by the said armatures when raised, crank-shafts below the drop-fingers for operating them, a bellows operating the crank-shafts, and an air-compressing device connected with the bellows, substantially as described.

2. In an annunciator, the combination, with pivoted display drop-fingers, of a crank-shaft below each finger and engaging the same, a rod connected to the crank-shafts and provided at its lower end with a disk, a bellows below the disk of the rod, and an air-compressing device connected with the bellows, substantially as described.

3. In an annunciator, the combination, with the magnets and their armatures, each having a latch-head, of the pivoted display drop-finger adapted to be engaged by the latch-heads of the armatures, a crank-shaft below each finger, a rod connecting the crank-shafts and provided with a disk at its lower end, a bellows below the disk of the rod, and an air-compressing device connected with the bellows, substantially as herein shown and described.

RALPH A. SCHOENBERG.

Witnesses:

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