(No Model.)

R. P. GARSED.

PNEUMATIC ANNUNCIATOR.

No. 384,144. Patented June 5, 1888.

Fig. 1.

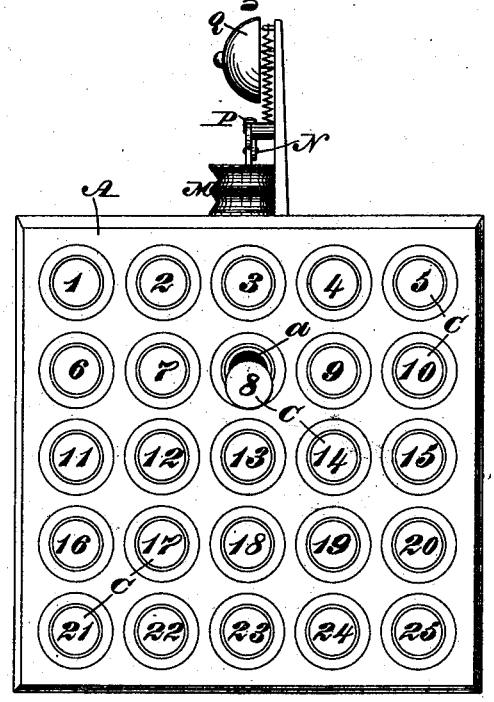
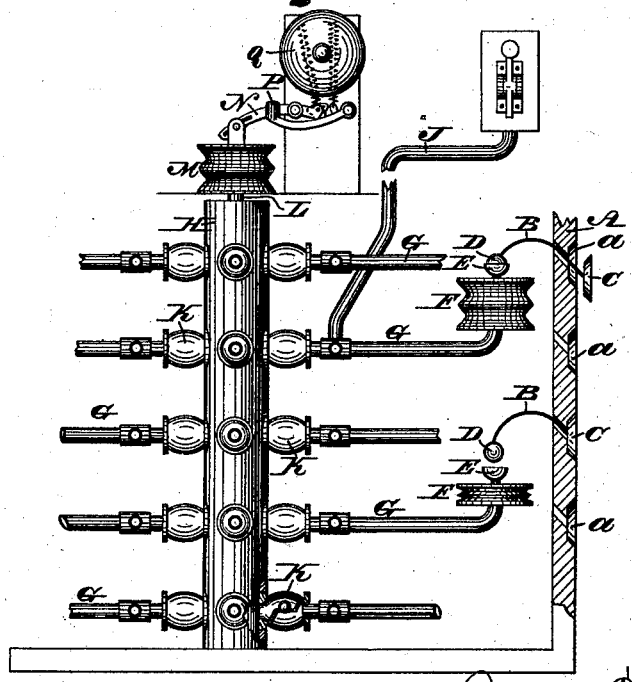


Fig. 2.



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ROBERT P. GARSED, OF NORRISTOWN, PENNSYLVANIA.

PNEUMATIC ANNUNCIATOR.

SPECIFICATION forming part of Letters Patent No. 384,144, dated June 5, 1888.

Application filed May 13, 1887. Serial No. 238,095. (No model.)

To all whom it may concern:

Be it known that I, ROBERT P. GARSED, a citizen of the United States, residing at Norristown, in the county of Montgomery, State of Pennsylvania, have invented a new and useful Improvement in Pneumatic Annunciators, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a pneumatic annunciator in which an annunciator dial or plate may be readily operated, as will be hereinafter fully set forth.

It also consists of means for ringing a bell or sounding an alarm, and thus directing attention to the operation of the annunciator, as will be hereinafter fully set forth.

Figure 1 represents a front view of an annunciator embodying my invention. Fig. 2 represents a partial vertical section and partial side elevation thereof.

Similar letters of reference indicate corresponding parts in the two figures.

Referring now to the drawings, A represents a plate or board which is located in the office of a hotel or other apartment, and formed with a series of inclined openings, *a*, through which are passed the arms B, which carry on the front or outer ends the dials or annunciator-plates C, which, as will be seen, are numbered, or may have other indicating characteristics usual in annunciators.

To the rear end of each arm B is secured a knob or ball, D, which is adapted to be engaged by a cup or socket, E, on the top of an inflatable body or bellows, F, the latter being attached to and communicating with a branch pipe, G, of the main air-pipe H of the device, said pipe H having as many branch pipes as there are dials or plates C to be operated.

Connected with the branch pipes G are tubes J, which extend from the various apartments of the hotel, &c., and form communication between said apartments and the annunciator.

Interposed between the place of connection of the pipes G J and the main pipe H are check-valves K, which prevent improper entrance of air into the branch pipes G.

Connected with the top of the main pipe H, and in communication therewith, is a pipe, L, to which is attached an inflatable body or bellows, M. Connected with said bellows M at the top thereof is the tripping-lever N of the hammer P of the bell or gong Q, which is properly supported above or adjacent to the board A.

The operation is as follows: The pull or lever of an air-pump in the apartment from which it is desired to have attention or make a call is moved, or other means are employed whereby air is forced through the respective pipe J, and consequently through the connected branch pipe G, so that the bellows F is inflated and the cup E rises. The ball D is engaged by said cup E, so that the arm B is thrown outwardly and downwardly, and the attached plate C drops with the same, which in the present case is numbered 8. The check-valve K of the respective branch pipe G opens, but the check-valves of the other branch pipes are held closed on their seats. Air enters the main pipe H, but is prevented by said check-valve from entering the other branch pipes. Through the pipe L the bellows M is inflated, whereby, by means of the lever N, the hammer P is operated and the bell or gong Q struck, thus directing attention to the operation of the annunciator, especially to the dial 8, that has been displaced. By pushing back said dial it is restored to its normal position, the arm B by gravity, owing to the knob or weight D on the inner end thereof, holding the dial against the board A.

It will be understood that the device may be operated by the entrance of air from one branch pipe, or from a number or all of the branch pipes at the same time, whereupon the bell acts the same in any case, the dials or plates C showing the rooms calling.

The pipe H may be denominated as the "main container for air."

The devices hereinbefore set forth are shown and described in an application for patent, Serial No. 81,126, filed by me on the 6th day of January, A. D. 1883.

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

1. A pneumatic annunciator consisting of a main pipe with branch pipes, air-supply pipes connected with the branch pipes, bellows attached to the branch pipes, a dial-carrying arm operated by said bellows, and check-valves

in the branch pipes, the parts being combined substantially as described.

2. In a pneumatic annunciator, the combination of the main pipe H, having an alarm connected therewith, the pipes G, having one end closed and the other leading into the main pipe H, the air-supply tubes J, leading into pipe G, the check-valves K, located at the connection of pipe G and main pipe H, and mechanism, substantially as described, connected to said main pipe and alarm, whereby the inlet of air into said main pipe operates the alarm, substantially as described.

3. A pneumatic annunciator consisting of a board with an inclined opening therein, arm B, passing through said opening and having the dial C on the front end and the ball D on the rear end thereof, the tube J, with air-pump, the branch pipe G, connected with said tube, and the inflated body F, with socket or cup E thereon, said parts being combined substantially as and for the purpose set forth.

4. In a pneumatic annunciator, the main pipe H, with the pipe L, inflated body M, a gong with hammer, and tripping device therefor, in combination with the branch tube G, having check-valve K, the inflated body F, with socket E, a board with an opening, and an arm passing through said opening, and having a dial on its front end and a ball or knob on its rear end, said ball operating in said socket, substantially as described.

5. A pneumatic annunciator consisting of a board with a series of inclined openings therein, arms passing through said openings and having dials at their front ends adapted to close said openings, a main pipe, branch tubes connected with said main pipe, separate tubes leading to each of said branch tubes from air-pumps, a check-valve in each of said branch tubes between said main pipe and air-pump tube, the said arms having pivotal connection with inflated bodies on said branch tubes, and an alarm connected to said main pipe, said parts being combined substantially as and for the purpose set forth.

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