

N. A. PATTERSON.
ANNUNCIATOR.

No. 98,794.

Fig. 1. Patented Jan. 11, 1870.

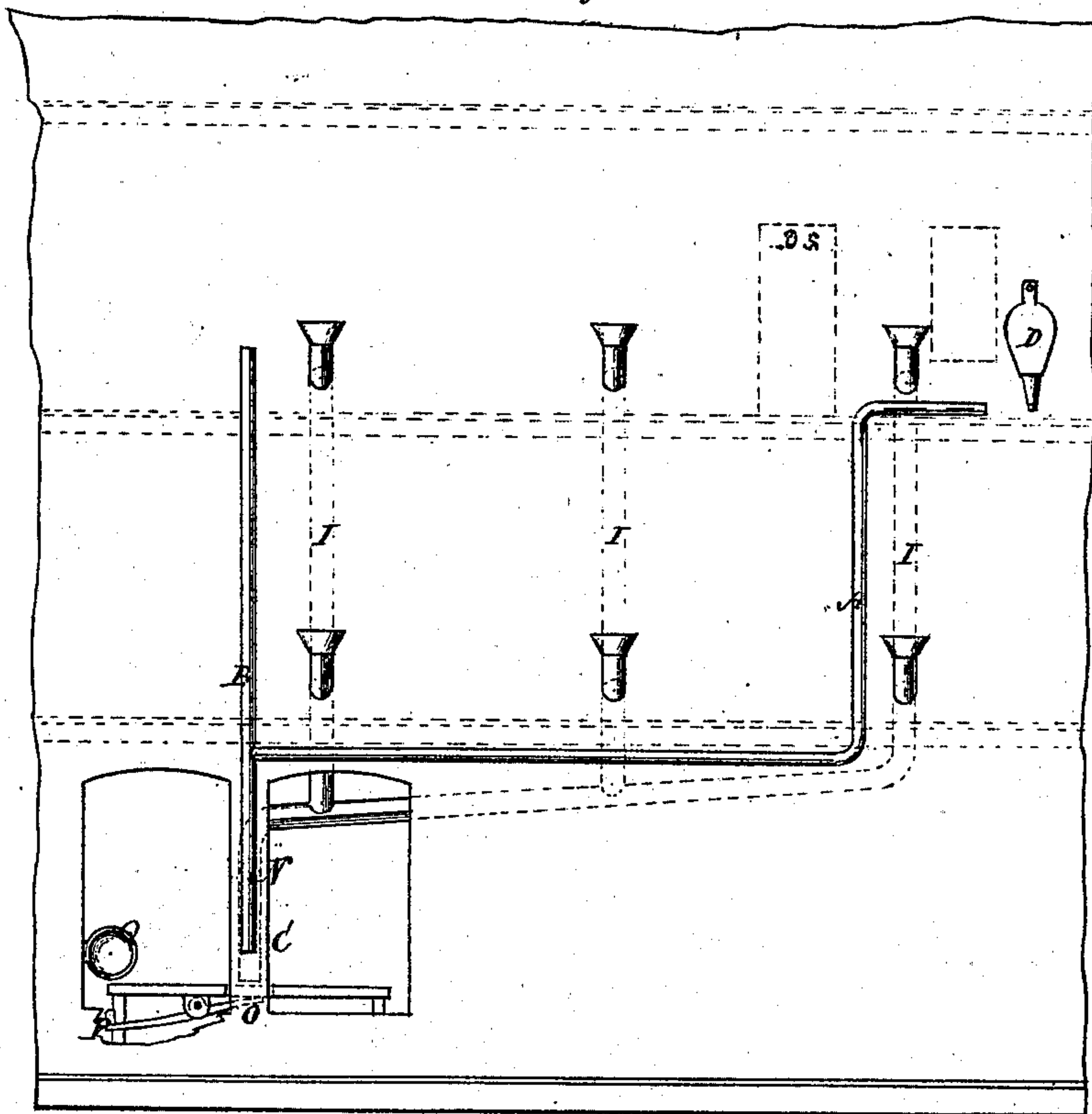


Fig. 2.

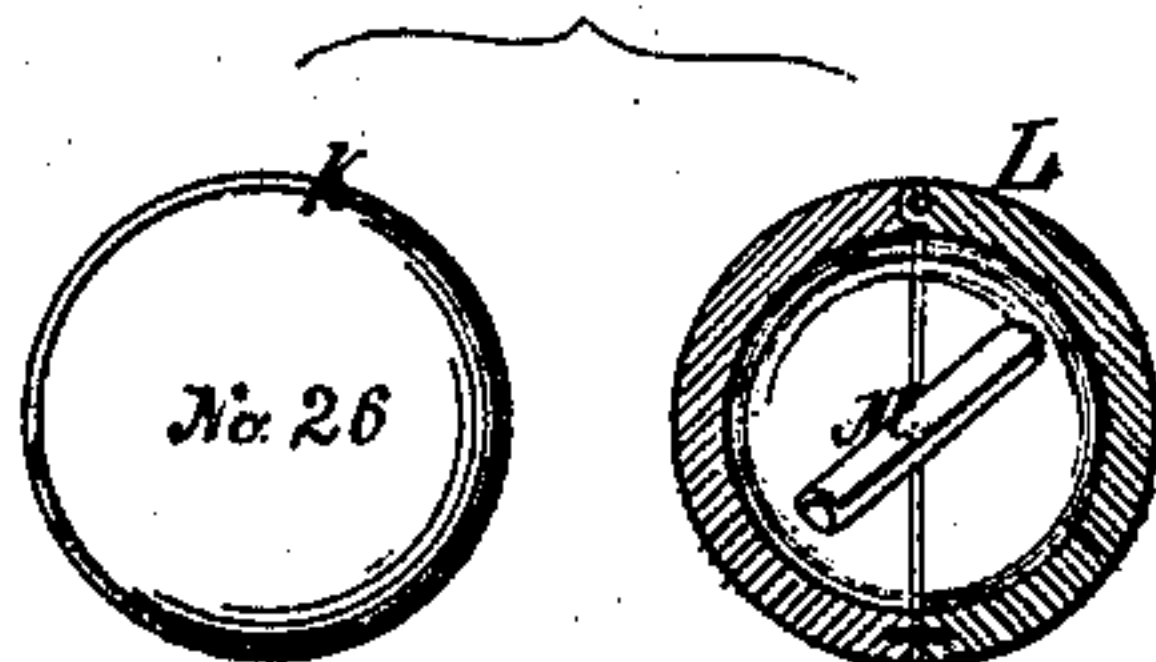
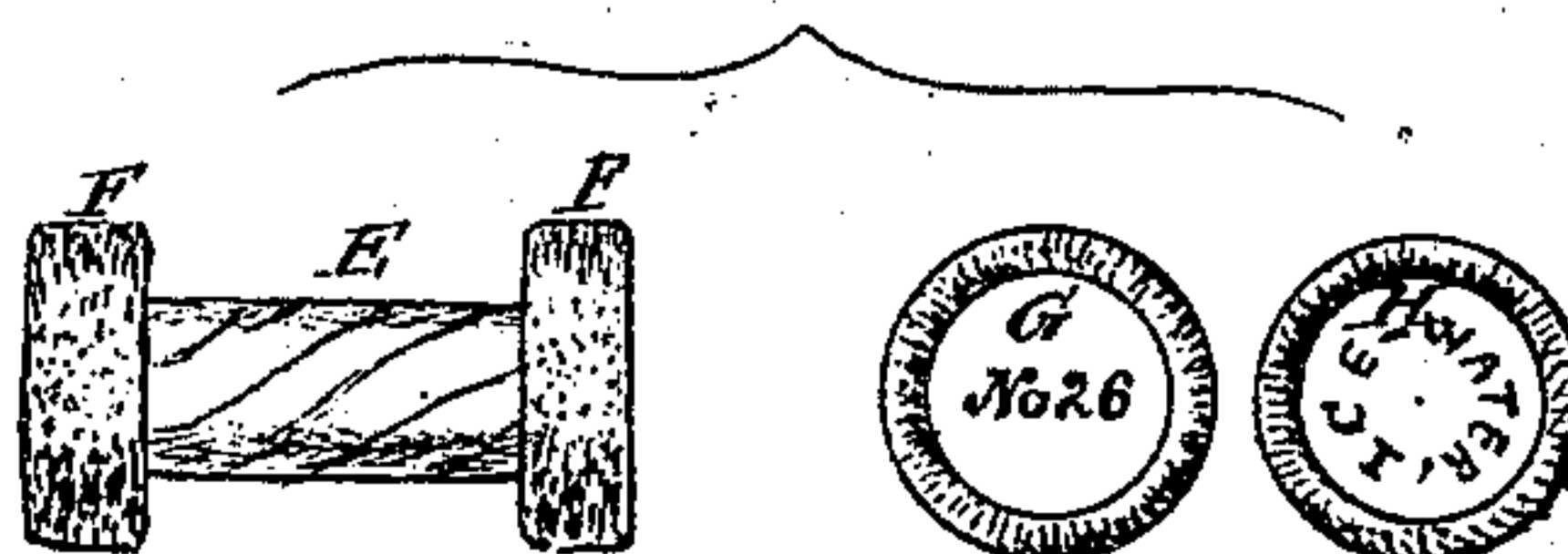


Fig. 3.



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N. A. PATTERSON, OF NASHVILLE, ASSIGNOR TO HIMSELF, THOMAS S. RAMSEY, OF LENOIRS, AND D. E. DAVENPORT, OF DECHERD, TENNESSEE.

Letters Patent No. 98,794, dated January 11, 1870.

IMPROVEMENT IN COMMUNICATING-APPARATUS FOR HOTELS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, N. A. PATTERSON, of Nashville, in the county of Davidson, and State of Tennessee, have invented a new and improved Hotel Communicating-Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in apparatus for use in hotels, business-houses, steamboats, depots, and the like, for communicating the wants of the occupants of rooms to the clerk, or headquarters, in a way to save the time and labor now required, in answer to the bell-calls from the rooms, of a journey to the room, by the servants, to be told by the occupant of the room what is wanted.

The invention consists in an arrangement of tubes leading from the rooms to the office or headquarters, and the employment of arrows or balls, with the number of the rooms marked on them, and either having the "wants" marked on them, or made hollow and capable of enclosing and conveying special messages written on paper, the said arrows or balls to be passed through the said tubes to the office, the arrows being impelled by air forced in by bellows, or other means, supplied to each room, and the balls being impelled by gravity, the tubes being arranged so as not to obstruct the action of gravity, and also being so arranged at the corners as to permit the passage of double flush-headed arrows.

Figure 1 represents a sectional elevation of a wall of a building, showing two systems of pipes leading from the rooms to the office;

Figure 2 represents, in elevation and section, the balls such as I contemplate using; and

Figure 3 represents, in elevation, an end view of the arrows, such as I use.

A is a tube, shown running from room, say No. 26, to an upright tube, B, running down through the hotel to the clerk's desk at C.

In room 26, is represented a bellows, D, by means of which double-headed arrows E are driven through the tube to the main upright tube B, through which they fall down to the clerk's desk.

The arrows, so called, will be made some two inches in length, and with flush or floss-heads F at each end, covering the periphery of the head, the face of each end or head being exposed. On one end, the number of the room, say 26, would be placed, as shown at G. On the other end, a hotel want, such as fuel, water, towels, &c., as at H, as many arrows being used as there may be wants in a general list. Another arrow for each room would have the number of the room on one end, the other end being made hollow, to receive a small card or piece of paper rolled closely, on which

would be written a special message, not embraced in the list of "wants."

The forms of the arrows and the tubes will allow them to pass easily around curves of the tubes. Each room will require a tube, A, extending to the upright or receiving-tube B, running down to the clerk's desk.

For a business-house, or depot, or steamboat, where reciprocal communications would be desired, each end of the tube used must be supplied with a bellows of any convenient form, by means of which an arrow, with a hollow body to contain the message or paper closely rolled up, could be shot or driven through the tube, forth and back, up or down.

By this means, communication can be had through or between the apartments of the largest buildings, or even between buildings separated by considerable distance.

On the reverse side of the model is shown in dotted lines, a similar system of pipes I, applicable to hotels and other houses, even in private residences, in sending messages to rooms below or off from the house, where a grade sufficient can be obtained.

It consists of a system of tubes I from each room in a hotel, concentrating in a common or main tube, which ends at the clerk's desk, through which tubes, balls K, of any convenient heavy material, are passed to the clerk's desk.

Each room is supplied with a suit of balls, bearing the number of the room, and each a separate hotel want, such as water, fuel, towels, baggage, or servants, &c., and a single or extra ball, L, made of two hollow hemispheres, put together with a hinge and clasp, of any convenient form.

In this ball, which contains on its surface only the number of the room, a special message on paper is enclosed, as shown at M.

The ball is placed in the tube, for instance of room No. 26, and rolls through as fast or faster than any one would walk, and on reaching the last perpendicular tube over the clerk's desk, drops on the ends of a sound-board O, which causes a hammer, P, attached to it, to strike a bell. The ball then rolls out to the clerk's hand, and all he has to do is to call a servant and deliver the ball, without speaking a word. The ball tells the servant where and what is wanted. He takes the article called for, and the ball, and delivers them to the guest. It will make no difference how many guests start balls at the same time, as the balls will not clog, the tubes being made about one and one-half the diameter of the balls, and each ball calls for a servant.

For use in an ordinary dwelling, a tube may be laid to the servants' room, through which orders of almost every conceivable character may be sent, as to time of meals, or the peculiar dishes, quantity, &c., to be served, as well as general orders, or calls.

A tube may be laid to the stables, through which orders for carriages, horses, &c., may be sent; or, in steamboats, or in ships of large tonnage, the plan may be adapted for the transmission of all messages from an elevated position. Where the arrows are employed, messages may be conveyed, either up or down, or in any direction.

The special advantage of this system is the certainty of communication in general use, but especially for hotels. Added to the advantage of certainty, is that the call may be responded to in less than half the usual time, as the trip up stairs now required, to inquire the want, is avoided. It has also the advantage of placing in the hand of the servant a printed order, and it saves the clerk the trouble of talking, as he need only deliver the ball or arrow.

Measurably, the same may be said for the efficiency of the plan for uses in other houses. With its use, about one-half the errand-servants of a hotel may be dispensed with.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. A communicating-apparatus for hotels and other buildings, consisting of a system of tubes A or I, leading from the different rooms to a common tube, terminating at the office, or other place of attendance, and arrows or balls, either hollow or solid, numbered to correspond with the number of the room to which they belong, and either having the messages printed, or otherwise placed on the exterior, or enclosed in the hollow spaces, and arranged to be impelled through the said tubes by gravity or air, all substantially as specified.

2. The combination, with the tubes A or I, arranged as described, of the sounding-board O, bell-hammer P, and bell Q, all substantially as specified.

3. The flush-headed arrows E, constructed, arranged, and adapted for use with the systems of tubes, substantially as specified.

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Witnesses:

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