JACKSON & JUDSON.

Annunciator.

No. 4,816. Patented Oct. 17, 1846.

Fig. 1

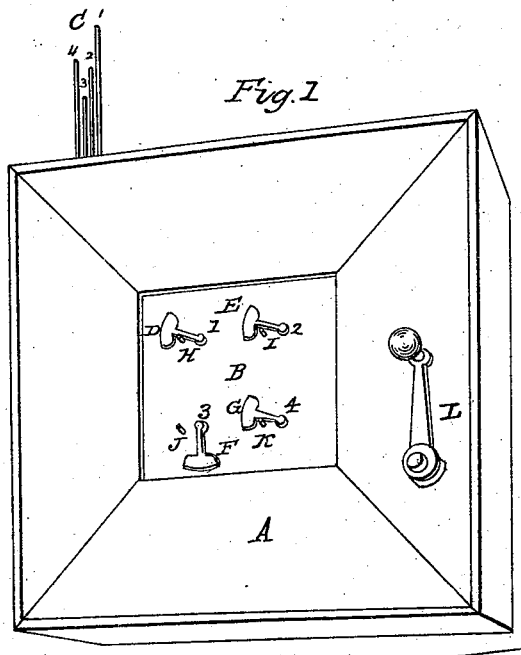
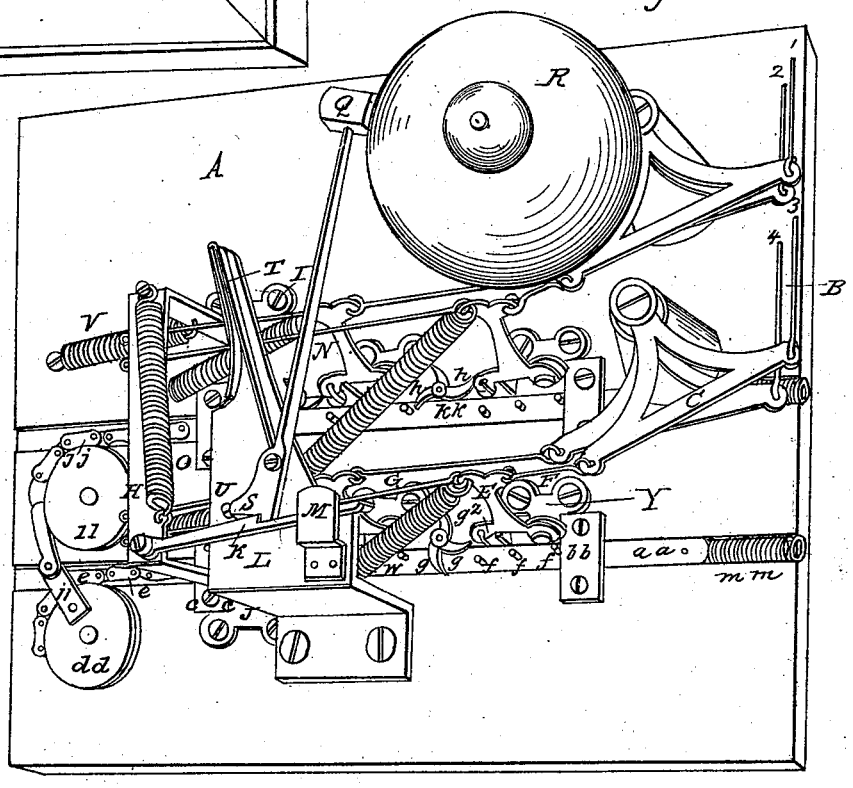


Fig. 3

Fig. 2



UNITED STATES PATENT OFFICE.

TIM. DEMARCK JACKSON AND ALFRED JUDSON, OF ROCHESTER, NEW YORK.

BELL MACHINERY FOR HOTELS, &c.

Specification forming part of Letters Patent No. 4,816, dated October 17, 1846; Reissued April 18, 1848, No. 111.

To all whom it may concern:

Be it known that we, TIMOTHY DEMARCK JACKSON and ALFRED JUDSON, of the city of Rochester, county of Monroe, and State of New York, have invented a new and useful machine which we entitle an "annunciator," which is to be placed in the bar or some conspicuous place in hotels or other buildings where communication is required from the different apartments by means of a bell; and we do hereby declare that the following is a full and exact description of the same.

The nature of our invention consists in providing a case similar to a clock case with a face sufficiently large to receive the number of each room from which communication is required each number occupying not more than from an inch to an inch and a half square, and the numbers corresponding with the numbers of the rooms. Annexed to each number is a drop placed in a horizontal position resting on a pin or wire passing through the face plate and is connected with a combination of machinery and bell which is so arranged within the case that by having wires running from the case to the different rooms and connected with the bell pull, so that by pulling the bell pull in either of the rooms rings the bell and at the same time causes the drop annexed to the number corresponding with the number of the room to fall into a perpendicular position which denotes the room in which the bell was rung, the advantage of our invention is in having a wire running from each room let there be two or five hundred, all acting on one bell and the case occupying comparatively a small space compared with the ordinary way which is now in use, that is having a bell for each room hanging on the walls of the room and occupying a large space and the only means of knowing which bell was rung is by the motion of the bell. Another advantage in our invention, is, when the bell is rung the drop falls and remains down to denote from which room the bell was rung until it is thrown back into a horizontal position by means of a crank on the front of the case, which is to be turned by the bar tender or any one in attendance.

To enable others skilled in the art to make and use our invention we will proceed to describe the construction and operation of the same reference being had to the annexed drawings making a part of this specification in which—

Figure 1 is a perspective view of our annunciator when complete, arranged for four rooms or apartments. Fig. 2 is a perspective view of the back side of the face plate of our annunciator with the case removed showing the machinery and bell. Fig. 3 is a section through dotted line on the rack H Fig. 2.

A, Fig. 1, the case of our annunciator; B, Fig. 1, the face containing the drops D E F G, No. 1, 2, 3, 4; C, Fig. 4, shows the wires which go from our annunciator to the rooms corresponding with their respective numbers, the wires 1, 2, 3, 4 at C are connected with the wires or pins by which the drops are held up. The drops 1 2 and 4 or D E G are represented as resting on the pins H I K, when the wire at C, No. 1 is drawn upward it will ring the bell and at the same time draw back the pin H and the drop D No. 1 will fall into the position as represented by drop F, No. 3 and show that the bell was rung from room No. 1, the wires 2 and 4 at C are connected with the wires or pins I K and act in the same manner as described No. 1 drop D and wire No. 1 at C Fig. 1. When either of the drops D E F G or 1 2 3 4 have dropped down into the position represented drop F No. 3 they are thrown over and rest on the pins H I K into the position represented 1 2 4 or D E G by means of crank L, by turning the crank L Fig. 1 to the right, down into a horizontal position the drops are thrown up onto the pins, the drops are then in readiness so that when a wire from either of the rooms is pulled the drop will fall, the number corresponding with the number of the room where the bell was rung by means of a bell pull. A Fig. 2 shows the plate to which the bell and combination of machinery is fastened, the face of the plate represented B Fig. 1 containing the drops is on the opposite side of the plate A Fig. 2. B Fig. 2 shows the wire represented C Fig. 1, No. 3. The wire B No. 3 Fig. 2 is connected with the crank C Fig. 2, the crank C Fig. 2 is connected with the lever E Fig. 2 by the wire F Fig. 2. The wire G Fig. 2 is connected with the lever E and passes through a strap on the back of the rack H and is turned up to form a head as represented D Fig. 3, the rack H Fig. 2 is hung on hinges

formed by the knees represented I J, Fig. 2, when the wire B No. 3 Fig. 2 is drawn upward a motion is given to the crank C Fig. 2 which draws the rack H in the direction of the crank C Fig. 2. The sear K being connected to the rack H by a screw on which it acts has the same motion as the rack H and is drawn in the direction of crank C sliding between the striking plate L Fig. 2 and the sear cap M. The sear K is held up against the heel of the hammer shaft N by the spring O, the hammer shaft N is fastened to the striking plate L by the screw P which answers as an axle on which it acts. The sear point K locks into the heel of the hammer shaft N below the screw P and when the sear K is drawn in the direction of the crank C, the hammer Q is raised or carried away from the bell R by the motion of the sear K acting on the heel of the hammer shaft. When the hammer Q is carried back at a proper distance from the bell the point at S on the heel of the hammer shaft throws the sear K down so that the point of the sear K is thrown out of the lock of the heel of the hammer shaft and by means of the spring T bearing against the hammer shaft causes the hammer Q to strike against the bell R.

U is a pin fastened into the striking plate L and acts as a stop against which the heel of the hammer shaft at S rests and prevents the hammer Q from resting on the bell R.

V is a spring connected with the rack H and fastened to the plate A Fig. 2 which keeps the rack H back into its position against the heads of the wires which pass through the rack H, W spring connected with the lever E Fig. 2, is fastened to the plate A Fig. 2, and draws the lever E in the direction of the rack H, the lever E Fig. 2 stops against the stop X which is placed under the lever E and fastened to the plate A Fig. 2.

Y is a knee screwed to the plate A Fig. 2 which forms a hinge on which the lever E acts, to the lever E at Z is connected a wire which passes through the plate A Fig. 2 which forms the pin as represented but this arrangement may be dispensed with by letting the arm of the drop lever E to which the wire Z is attached perform the same duty. J Fig. 1 on which the drop F rests when thrown up by means of lever L Fig. 1 as has been described, when the wire B No. 3 Fig. 2 is drawn up by means of a bell pull in room No. 3 it will give a motion to the crank C Fig. 2 and draw the lever E in the direction of the crank C which will draw back the point of the lever E at Z to which the wire is connected.

The wire connected with the lever E at Z passes through the plate A Fig. 2 and forms the pin represented J Fig. 1 so that when the wire B is drawn upward the lever E Fig. 2 is drawn in the direction of the crank C and the wire connected with the lever E at Z being the same as represented at J Fig. 1 is drawn back or into the plate B Fig. 1 and causes the drop F to fall which denotes that the bell has been rung from room No. 3 the wires represented 1 2 3 4 C Fig. 1 are the same as the wires represented 1 2 3 4 Fig. 2 the numbers corresponding with each other when either of the wires 1, 2 or 4 are drawn by means of a bell pull in the room corresponding with their numbers the same effect will be produced as has been described wire No. 3 at C Fig. 1 and wire No. 3 B Fig. 2. We will now suppose the wire No. 4 Fig. 2 to be drawn upward and the rack H drawn in the direction of the crank C as has been described it would not effect the wire connected with the lever E Fig. 2 and passing through the rack H, because the spring W keeps the wire back into its position, the wires passing through the rack as represented D Fig. 3 are made to go loose so that the rack H may be drawn forward in the direction of the crank C by either one of the wires and the wires not drawn will keep their position. The numbers 1, 2 and 4 are arranged and act in the same manner and produce the same effect as has been described by No. 3 C Fig. 1 and drop F No. 3 Fig. 1 and wire B No. 3 Fig. 2.

a a, Fig. 2, is a slide let into the plate A and is kept in place by the strap *b b* and *c c*, *d d* is a pulley, *e e* is a chain fastened to the slide *a a*, and the pulley *d d*, *f f f* are pins fastened into the slide *a a*, the crank L Fig. 1 is fastened to an arbor which passes through the plate B Fig. 1 and the plate A Fig. 2 and is fastened to the pulley *d d*, when the crank L Fig. 1 is turned down to the right hand it gives a motion to the pulley *d d*, and draws the slide *a a* in the direction of the pulley *d d*, which brings the pins *f f f* in contact with the points of the tumbler *g g g* (the length of each arm of the tumbler being adapted to the positions of the pins *f*, *f*, *f*, on the slide) and carry the tumbler over into the position as represented tumbler *h h*, the tumbler *g g g* is fastened to an arbor which passes through the plate A Fig. 2 and the plate represented B Fig. 1 the drop F No. 3 is fastened to the same arbor so that when a motion is given to the slide *a a* as has been described the drop F No. 3 will be thrown over onto the pin J by means of the tumbler *g g g* when the drop F is thrown up onto the pin as represented No. 1, 2, 4 or D E G the tumbler *g g g* will stand in the same position as represented by the tumbler *h h* then the pins *f f f* will pass the tumbler *g g g* without hitting it.

i i is a connector which is fastened to the pulley *d d* and to the chain *j j*, the chain *j j* is connected with the slide *k k* so that

when a motion is given to the slide *a a* by means of the crank L Fig. 1 the slide *k k* moves with (and in the same manner as has been described) slide *a a*, it will be seen that when either of the drops are down they are thrown up onto the pins by turning the crank L Fig. 1 to the right and downward. *l l* is a pulley on which the chain *j j* moves, *m m* is a spring which draws and holds the slide *a a* back into its position. This apparatus is arranged for four rooms but is intended to be multiplied according to the number of apartments in the building where it may be used and the wires from each room or apartment are to act on one bell as has been herein described.

What we claim as our invention and desire to secure by Letters Patent is—

The combination of the drops with the tumblers, drop-levers and slides, substantially in the manner and for the purpose herein set forth.

T. D. JACKSON.
ALFRED JUDSON.

Witnesses:
P. G. BUCHAN,
A. WENTWORTH.

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