

No. 803,348.

PATENTED OCT. 31, 1905.

C. W. LEBEIS.
ANNUNCIATOR.

APPLICATION FILED JAN. 24, 1905.

2 SHEETS—SHEET 1.

FIG. 1.

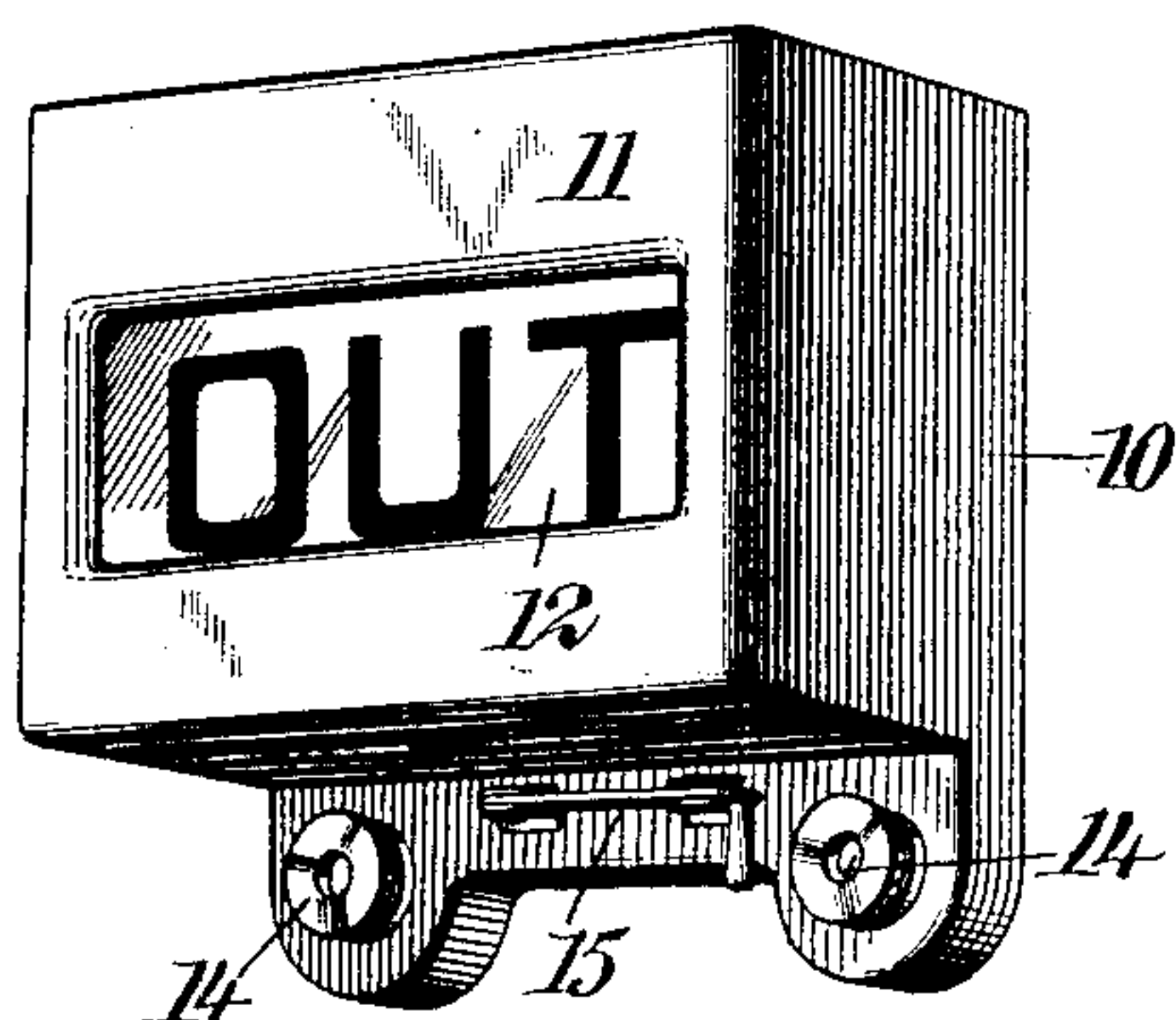


FIG. 2.

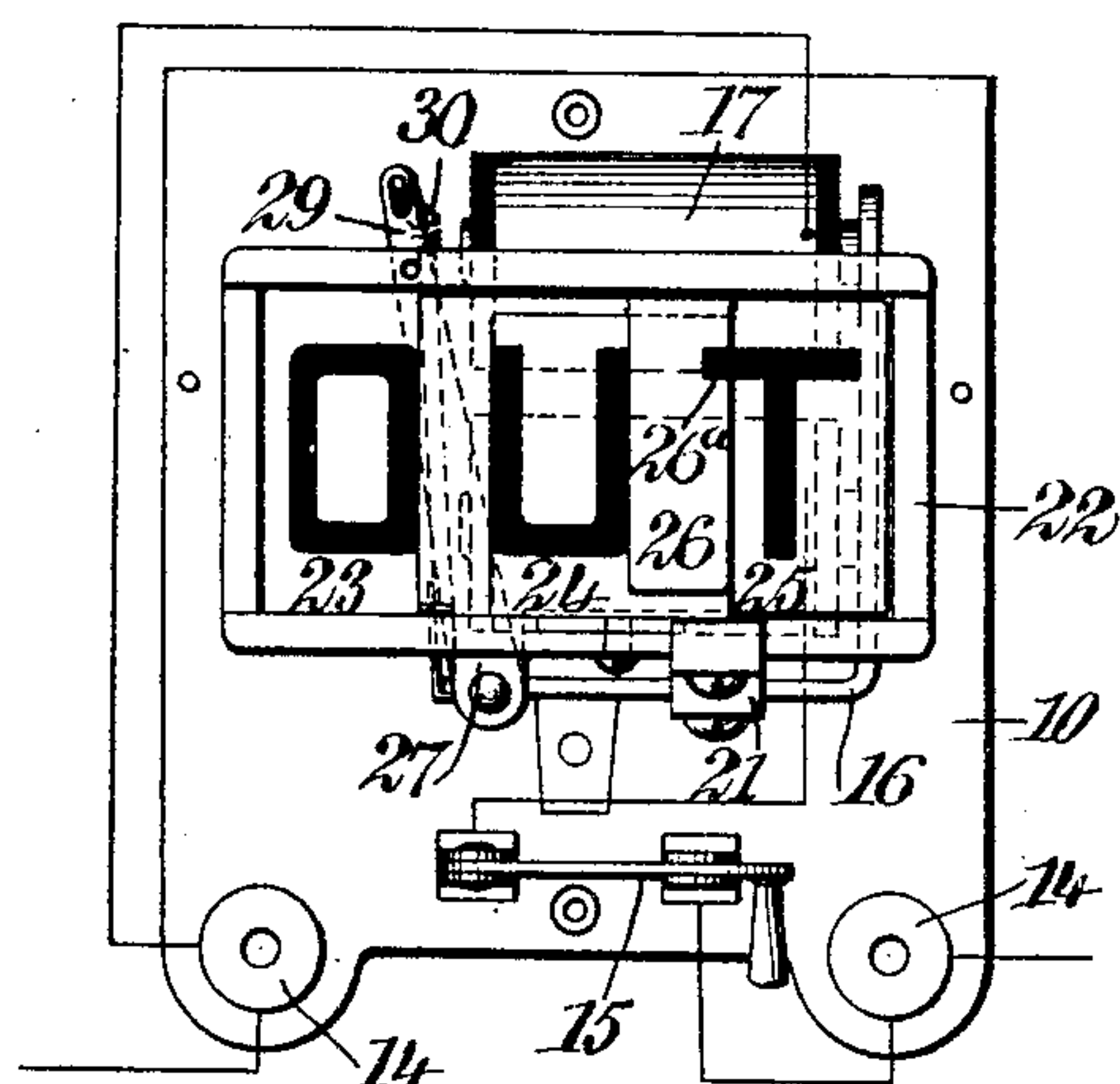
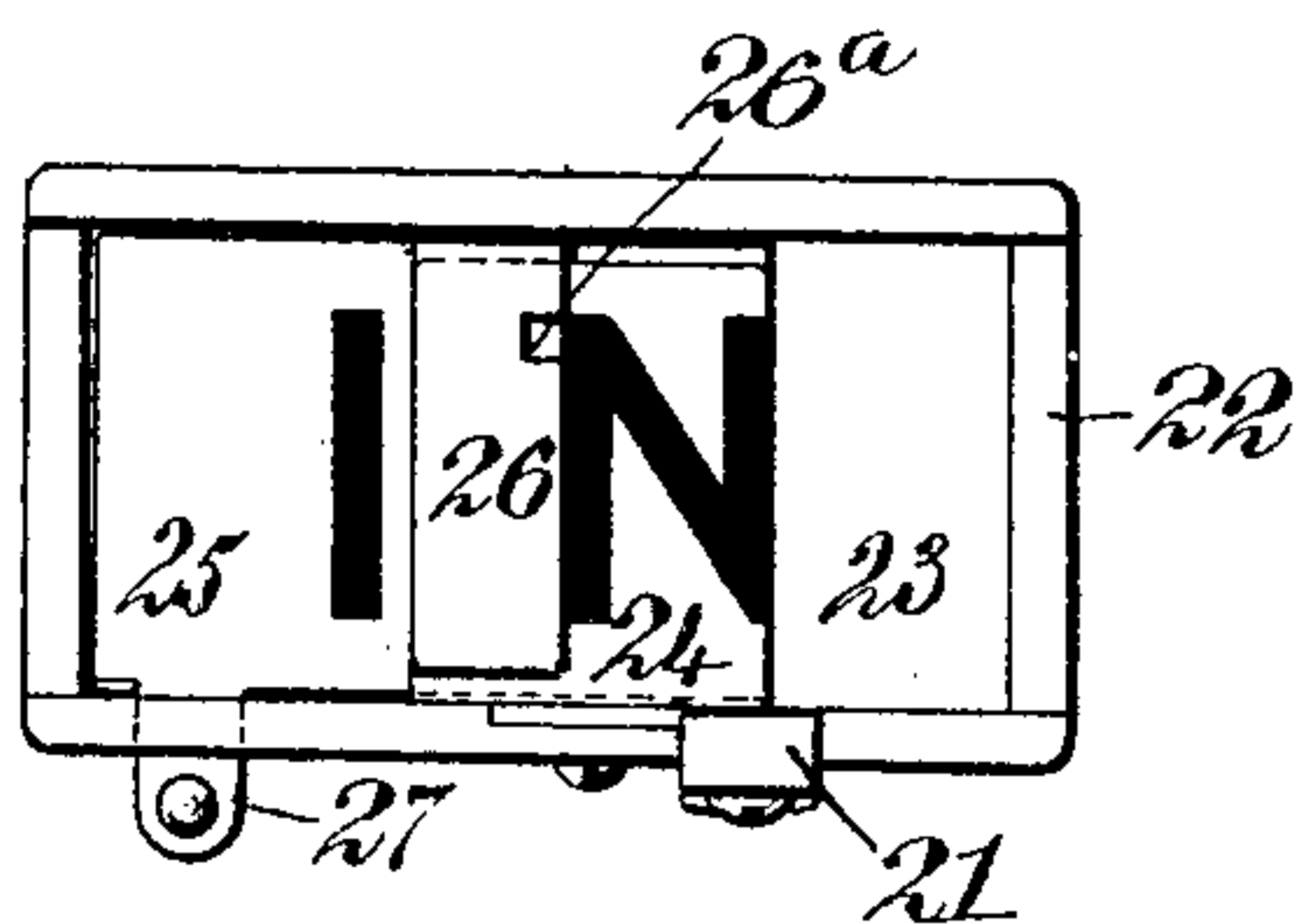


FIG. 3.



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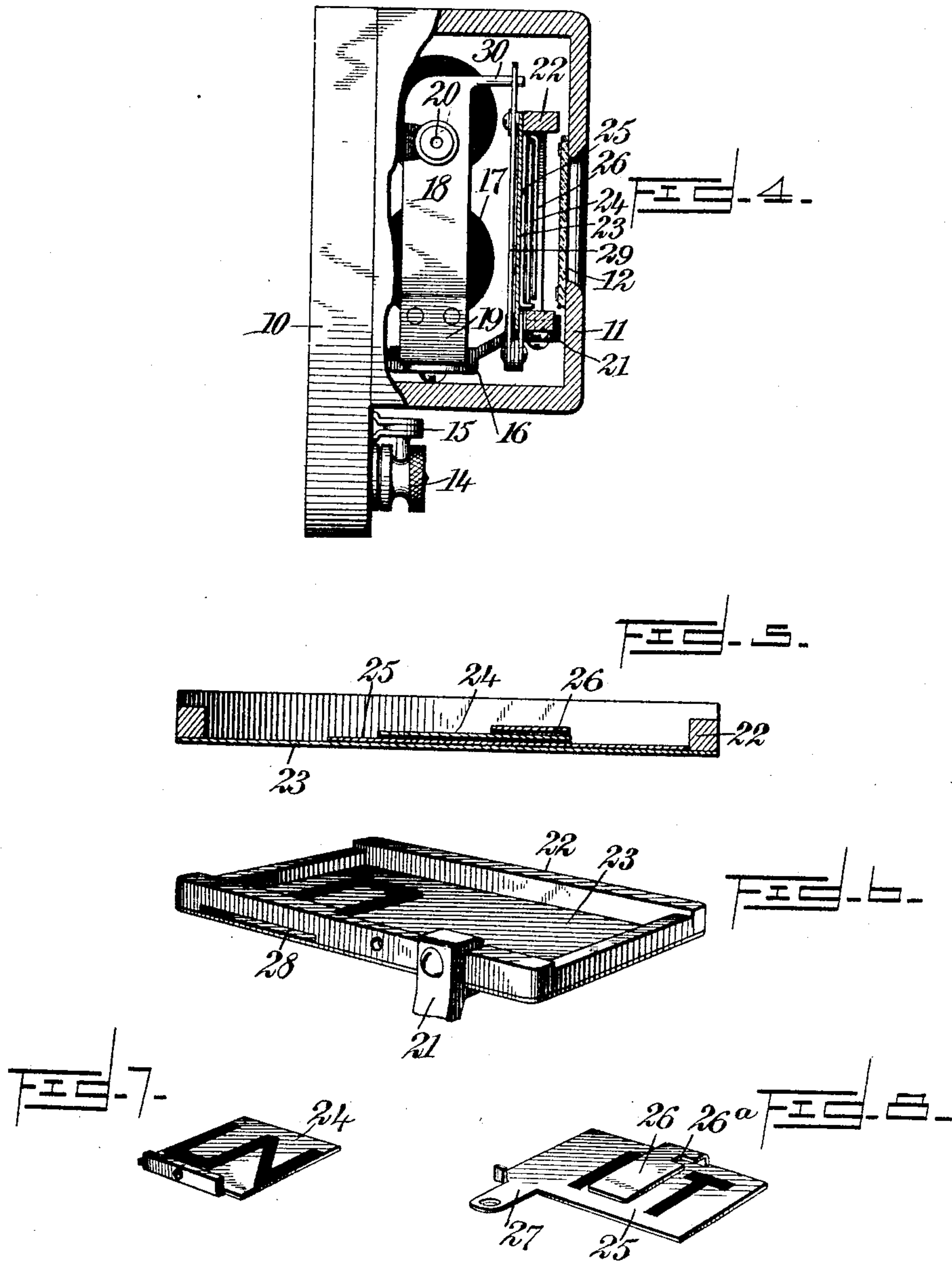
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2 SHEETS—SHEET 2.



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ANNUNCIATOR.

No. 803,348.

Specification of Letters Patent.

Patented Oct. 31, 1905.

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To all whom it may concern:

Be it known that I, CARL WALTHER LEBEIS, a citizen of the United States, and a resident of Yonkers, in the county of Westchester and State of New York, have invented a new and Improved Annunciator, of which the following is a full, clear, and exact description.

The invention relates to an annunciator especially intended to show whether an apartment is occupied or unoccupied or whether a person is in or out of an office, although the invention may be used in various other ways as will suggest themselves to persons skilled in the art.

The annunciator comprises a changeable sign of a certain novel structure, the sign showing one word, symbol, or device in one position and another word or words or symbols when in the other position, and said sign is actuated, preferably, by an electromagnet forming part of a circuit which is made or broken by the action of a person leaving or entering an apartment, or by a special switch, or by other means which are not material to my invention.

Hereinafter reference is to be had to the accompanying drawings, which illustrate, as an example, the preferred embodiment of my invention, in which drawings like characters of reference indicate like parts in the several views, and in which—

Figure 1 is a perspective view of the annunciator complete. Fig. 2 is a front elevation of the annunciator with the cover removed and its changeable sign in the adjustment showing the word "Out." Fig. 3 is a front view of the changeable sign in the adjustment opposite to that shown in Fig. 2—to wit, in the adjustment showing the word "In." Fig. 4 is an enlarged central vertical section of the annunciator, showing the magnet in elevation. Fig. 5 is a longitudinal or horizontal section taken through the changeable sign; and Figs. 6, 7, and 8 are detail perspective views showing, respectively, the parts of the changeable sign.

10 indicates the back plate or base of the device, which is provided with a cover 11, having an opening in the front wall covered by glass or other plate 12 to permit observing the sign within the cover. The base 10 is provided with binding-posts 14, to which the terminals of the electric circuit are connected,

and also with a switch 15, by means of which the circuit may be broken when it is desired to render the annunciator inactive.

Attached to the base 10 by means of a frame 16 is an electromagnet 17, the armature 18 of which is joined to the frame by a spring connecting-piece 19.

20 indicates an adjustable pin for limiting the outward movement of the armature. The spring 19 holds the armature normally against the pin 20, and the magnet when energized attracts the armature and moves it away from said pin. The magnet 17 forms part of the circuit in which the binding-posts 14 and switch 15 are included.

The changeable sign is supported on the frame 16 by means of a bracket 21. This bracket projects forwardly from the magnet-frame and is attached to the rectangular frame 22 of the changeable sign. Said rectangular frame of the changeable sign is provided with a back wall 23, on which, according to the example of the invention here given, is produced the letter "O," said letter lying at one end of the back wall, as shown best in Fig. 6. The frame 22 also carries rigidly a plate 24, which lies in front of the back wall and is spaced therefrom, and this plate bears on its outer face the letters "U N" run together as are the parts of a diphthong. (See Fig. 7.) Sliding between the back wall 23 of the sign and the rigid plate 24 is a plate 25. (Shown best in Fig. 8.) This plate is provided with the letters "I T," and it carries a blind 26, which moves with it and is intended to lie over the rigid plate 24. The letter "T" of said plate is shortened at one end, as shown in Fig. 8. The blind is formed on one side with a notch 26^a. Now it will be seen that when the parts of the sign are in the position shown in Fig. 2, in which the sliding plate 25 is in its extreme right position, the letter "O" on the back wall 23 is uncovered and the letter "U" on the rigid plate 24 is uncovered. The letter "N" on said rigid plate 24 is covered by the blind 26, excepting for the part which is exposed by the notch 26^a, and this notch, lying directly opposite the head of the "T" at the right-hand end of the slide-plate 25, exposes enough of the "N" on the plate 24 to make up the complete "T," so that the word "Out" is clearly exhibited by the sign. When, however, the sliding plate 25, with its

blind 26, is moved to the leftward position, as shown in Fig. 3, it will be seen that said plate covers the "O" on the back wall 23 and moves the "T" under the rigid plate 24. The
 5 "I" on the sliding plate 25 is then exposed on the left-hand side of the rigid plate 24, and the blind 26 uncovers the "N" on the plate 24 and covers the "U" on said plate, resulting in showing the word "In." It follows,
 10 therefore, that by simply shifting the sliding plate 25 from one position to the other the sign is changed from "Out" to "In," and it will be clear that by changing the proportions of the sliding and non-sliding parts and
 15 changing the lettering thereof various other words, symbols, or devices may be displayed and changed at will. The sliding plate 25 has a projection 27 extending through an opening 28 in the sign-frame 22. To this
 20 projection is pivoted a lever 29. This lever is fulcrumed on the upper part of the frame 22 and is connected by a stud 30 with the armature 18, so that when the armature is attracted to the magnet it rocks the lever 29
 25 and moves the plate 25 leftward, as shown in Fig. 3. Upon deenergizing the magnet the spring 19 asserts itself and throws the armature to the position shown in Fig. 2, thus returning the sliding plate 25 to its rightward
 30 position and changing the sign.

The invention may be practically employed in various connections. An important use to which the invention may be practically put is that of indicating whether bath-rooms
 35 in boarding-houses and hotels are occupied. In doing this one of my improved annunciators should be placed in each room of the hotel or boarding-house and their circuits arranged with the bolt or latch of the bath-room door,
 40 so that a person may determine without leaving his room whether the bath-room is occupied or not.

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

1. The combination of a frame part or support, a magnet sustained thereby, an armature coacting with the magnet, a sign-frame also sustained by the frame part or support,
 50 said sign-frame having a back plate, a stationary plate held by the sign-frame and spaced from the back plate, a sliding plate moving between the back plate and stationary plate, a blind attached to the sliding
 55 plate and moving over the face of the stationary plate, and a connection between the sliding plate and the armature.

2. The combination of a back plate having a part of the sign produced thereon, a stationary
 60 ary plate lying in front of the back plate and spaced therefrom and also having a part of the sign produced thereon, a sliding plate moving between the back and stationary

plates and having a part of the sign produced thereon, and a blind carried by the sliding
 65 plate and movably mounted over the face of the stationary plate.

3. The combination of a back plate having a part of the sign produced thereon, a stationary
 70 ary plate lying in front of the back plate and spaced therefrom and also having a part of the sign produced thereon, a sliding plate moving between the back and stationary
 75 plates and having a part of the sign produced thereon, and a blind carried by the sliding plate, the said blind having a notch therein adapted when in one position to expose a portion of the stationary plate.

4. The combination of a back plate having a part of the sign produced thereon, a stationary
 80 ary plate lying over the back plate and spaced therefrom and also having a part of the sign produced thereon, and a sliding plate arranged to move between the two
 85 first-named plates, the sliding plate also having a part of the sign produced thereon whereby the sign may be changed.

5. The combination of a back plate having a part of the sign produced thereon, a stationary
 90 ary plate lying over the back plate and spaced therefrom and also having a part of the sign produced thereon, a sliding plate arranged to move between the two first-named
 95 plates, the sliding plate also having a part of the sign produced thereon whereby the sign may be changed, an electromagnet, an armature coacting therewith, and a lever connected to the armature and to the said sliding plate.

6. The combination of a back plate having a part of the sign produced thereon, a stationary
 100 ary plate lying over the back plate and spaced therefrom and also having a part of the sign produced thereon, a sliding plate arranged to move between the two first-named
 105 plates, the sliding plate also having a part of the sign produced thereon whereby the sign may be changed, and a blind arranged to move in unison with the sliding plate and overhanging said stationary plate.
 110

7. The combination of a frame or supporting part, a magnet sustained thereby, an armature coacting with the magnet, a back
 115 plate, a lever connected to the armature, a sliding plate lying in front of the back plate and having a projection in connection with the lever, a stationary plate lying in front of the sliding plate, and a blind carried to move in unison with the sliding plate, said back
 120 plate, stationary plate and sliding plate having parts of the sign produced thereon, for the purpose specified.

8. The combination of a frame, a magnet sustained thereby, an armature coacting with the magnet, relatively movable parts
 125 having portions of a sign produced thereon;

said parts being sustained by the frame and
lying in front of the magnet, a lever ful-
crumed on the frame and pivoted to the ar-
mature and to one of said parts having por-
5 tions of the sign thereon, and a case inclosing
the magnet and said parts and having an ori-
fice exposing said parts having the sign.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

CARL WALTHER LEBEIS.

Witnesses:

CHARLES W. BOOTE,
CHARLES F. WHEATON.