

(No Model.)

W. SCHWAGERMAN.
ANNUNCIATOR DROP.

No. 572,378.

Patented Dec. 1, 1896.

Fig. 1

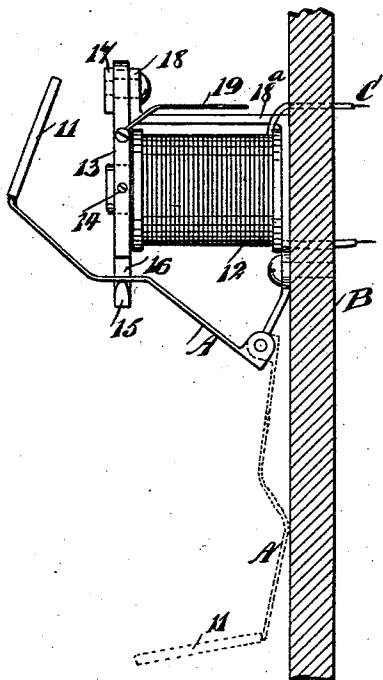


Fig. 2

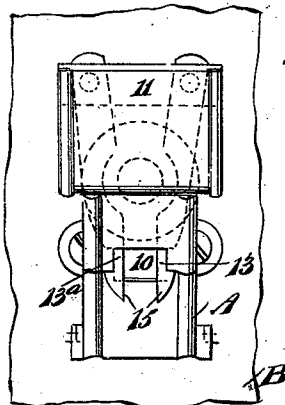


Fig. 3

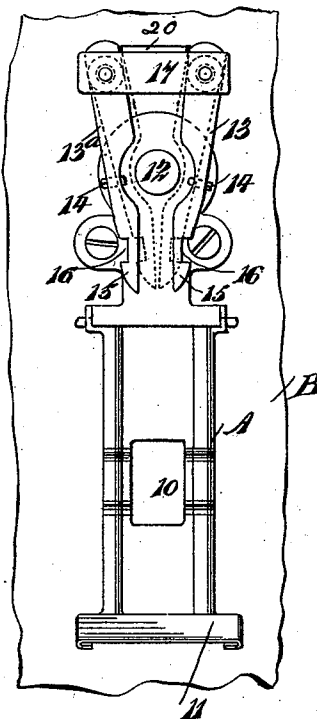
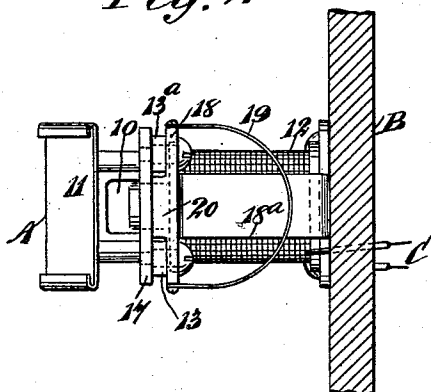


Fig. 4



WITNESSES:

C. Neveux
J. H. Fletcher

INVENTOR

W. Schwagerman

BY

Wm. J. S.

ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM SCHWAGERMAN, OF YONKERS, NEW YORK, ASSIGNOR OF ONE-HALF TO OSCAR WIEDERHOLD, OF SUMMIT, NEW JERSEY.

ANNUNCIATOR-DROP.

SPECIFICATION forming part of Letters Patent No. 572,378, dated December 1, 1896.

Application filed February 24, 1896. Serial No. 580,435. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM SCHWAGERMAN, of Yonkers, in the county of Westchester and State of New York, have invented a new and Improved Annunciator-Drop, of which the following is a full, clear, and exact description.

The object of the invention is to so suspend or support an annunciator-drop in its elevated or normal position that the said drop will not be discharged from its support when the annunciator is subjected to severe or constant jar or violently agitated from any cause.

A further object of the invention is to provide an annunciator with an armature which will be an effective lock for the drop, the armature being of the twin type and so arranged as to automatically pass to locking engagement with the drop when the latter is raised.

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

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a vertical section through a portion of an annunciator-box, illustrating also in side elevation a magnet, a locking-armature, and a drop in locking engagement with the armature. Fig. 2 is a front elevation of the armature, magnet, and drop in the position shown in Fig. 1. Fig. 3 is a front elevation of the armature, magnet, and drop, the latter being disconnected from the armature and as in its dropped and lower position; and Fig. 4 is a plan view of the magnet, armature, and drop, the latter being in its elevated or locked position, and the said view likewise illustrates a horizontal section through a portion of the armature-box.

In carrying out the invention the annunciator-drop A is pivoted, preferably, at its rear end upon a suitable support secured to a casing B, and the said annunciator-drop comprises a body portion which ordinarily has a central section at an angle to its end portions, as shown in Fig. 1, and in this central section, as shown in Fig. 3, an opening 10 is made, and at the outer or free end of the body

of the said drop a socket or a clasp 11 is formed, adapted to receive a number or a slip bearing any predetermined character or designation. When the annunciator-drop is in its upper position, displaying the character produced at its socket portion, the said socket will be in front of a magnet 12, as shown in Fig. 1, and the aforesaid magnet is adapted to attract two armatures 13 and 13^a, located one at each side of the core of the magnet, the inner edges of the armatures being preferably dished or concaved, so that they may be drawn close to the said core, and at the concaved portion of each magnet a contact-point 14 is arranged in any suitable or approved manner.

Each armature terminates in a head 15 at its lower end, the inner side edges of the heads being practically straight and their outer edges more or less convexed; and just above the head portion of each armature a recess 16 is produced in its outer edge. The upper end of each armature is pivoted between an outer plate 17 and the head 18 of a bracket 18^a, which is secured to the casing B or other convenient support and extends horizontally over the magnet. These armatures are normally held separated and free from the core of the magnet by means of a spring 19 of any approved construction, the form of spring illustrated in the drawings being a bow-spring.

The magnet 12 is located in an electric circuit C, and the outward movement of the armatures 13 and 13^a is limited, preferably, by a stop 20, located between the upper or pivoted ends of the armatures and forming a portion of the head of the bracket 18^a, as illustrated in Figs. 3 and 4.

In the operation of the device, the drop being in the lower position shown in dotted lines in Fig. 1 and in positive lines in Fig. 3, when the said drop is carried upward to display the number or character carried thereby, the head portions of the armatures will pass through the slot 10, and the armatures will be thrown outward by the spring 19, the side edges of the slot in the drop engaging with the base wall of the recesses 16 in the armatures and the drop will then rest upon the heads 15 of the armatures, as shown in Fig. 1, and no

matter to what extent the annunciator may be shaken or jarred the drop will remain in its upper locked position. When the magnet is energized, it will attract the armatures, bringing them together and freeing the drop, which will gravitate downward to its lower position. The device is exceedingly simple, it is durable, and, furthermore, it is economic.

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

1. In an annunciator, a magnet, a drop having an opening therein, and an armature located at each side of the magnet and normally held out of contact with the same, said armatures being each provided with a head adapted to enter the opening of the drop and support the same, substantially as described.

2. In an annunciator, a magnet, an armature located at each side of the magnet, being normally held out of contact with the same, the said armatures being provided with extensions at their free ends, and a drop having an opening through which the free ends of the armatures pass, the walls of the said

drop-opening being adapted to be supported by the extensions of the armatures, as and for the purpose specified.

3. In an annunciator, a magnet, armatures pivoted at one end and arranged at each side of the magnet, being adapted to be attracted thereby, a tension device normally holding the free ends of the armatures separated, the said free ends being provided with extensions, and a drop arranged for locking engagement with the armatures when the latter are spread apart, the drop being released by the armatures when the magnet is energized, as and for the purpose set forth.

4. The combination, with a magnet, and spring-controlled armatures adapted to be attracted by the magnet, being normally held separated therefrom, of a drop arranged for locking engagement with the aforesaid armatures when the latter are not influenced by the magnet, as and for the purpose specified.

WILLIAM SCHWAGERMAN.

Witnesses:

JNO. M. RITTER,

J. FRED. ACKER.