

(No Model.)

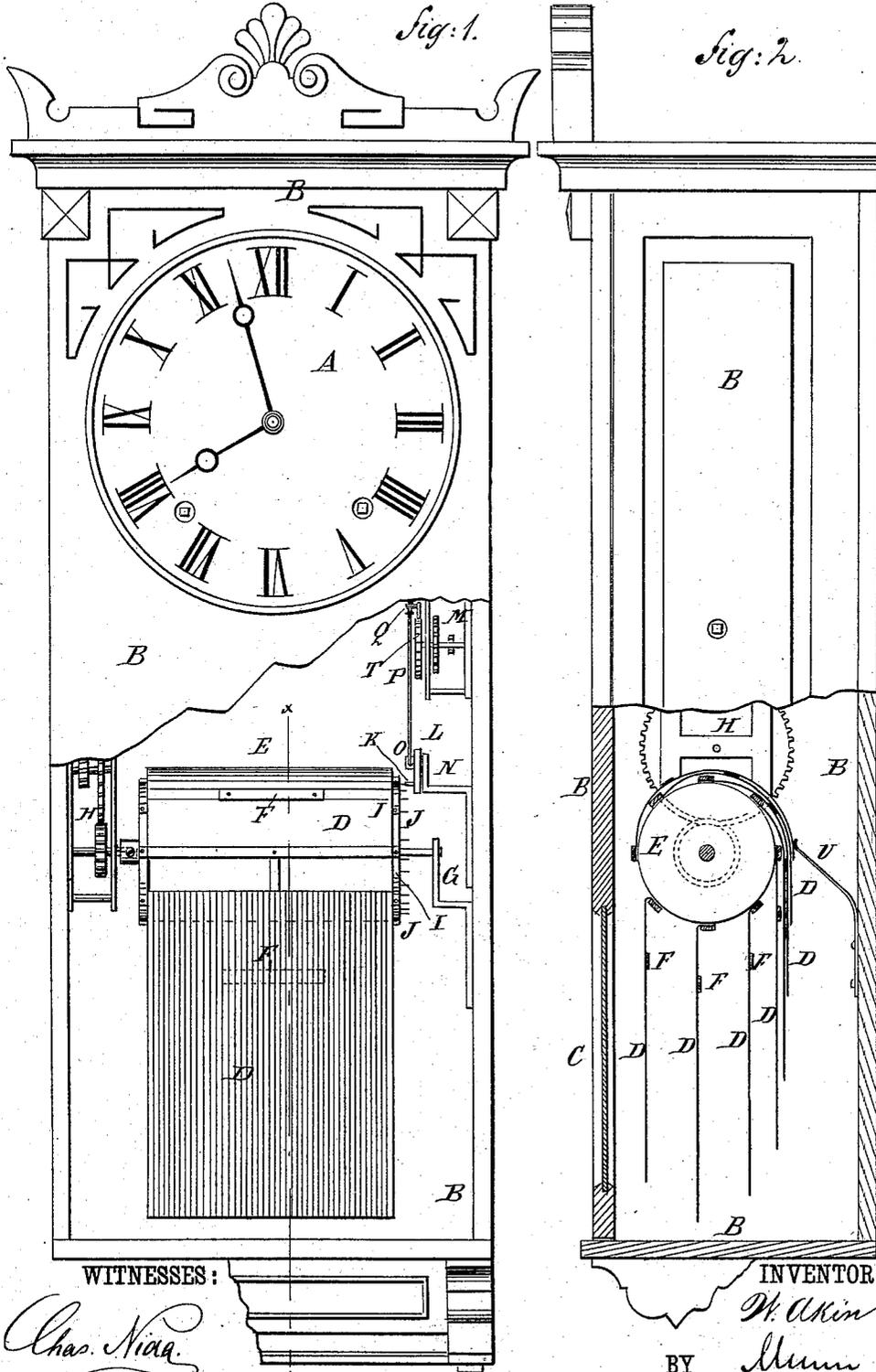
2 Sheets—Sheet 1.

W. AKIN.

AUTOMATIC ADVERTISING DEVICE.

No. 268,595.

Patented Dec. 5, 1882.



WITNESSES:

Chas. Nara.
L. Sedgwick

INVENTOR:

W. Akin

BY

Munn & Co.

ATTORNEYS.

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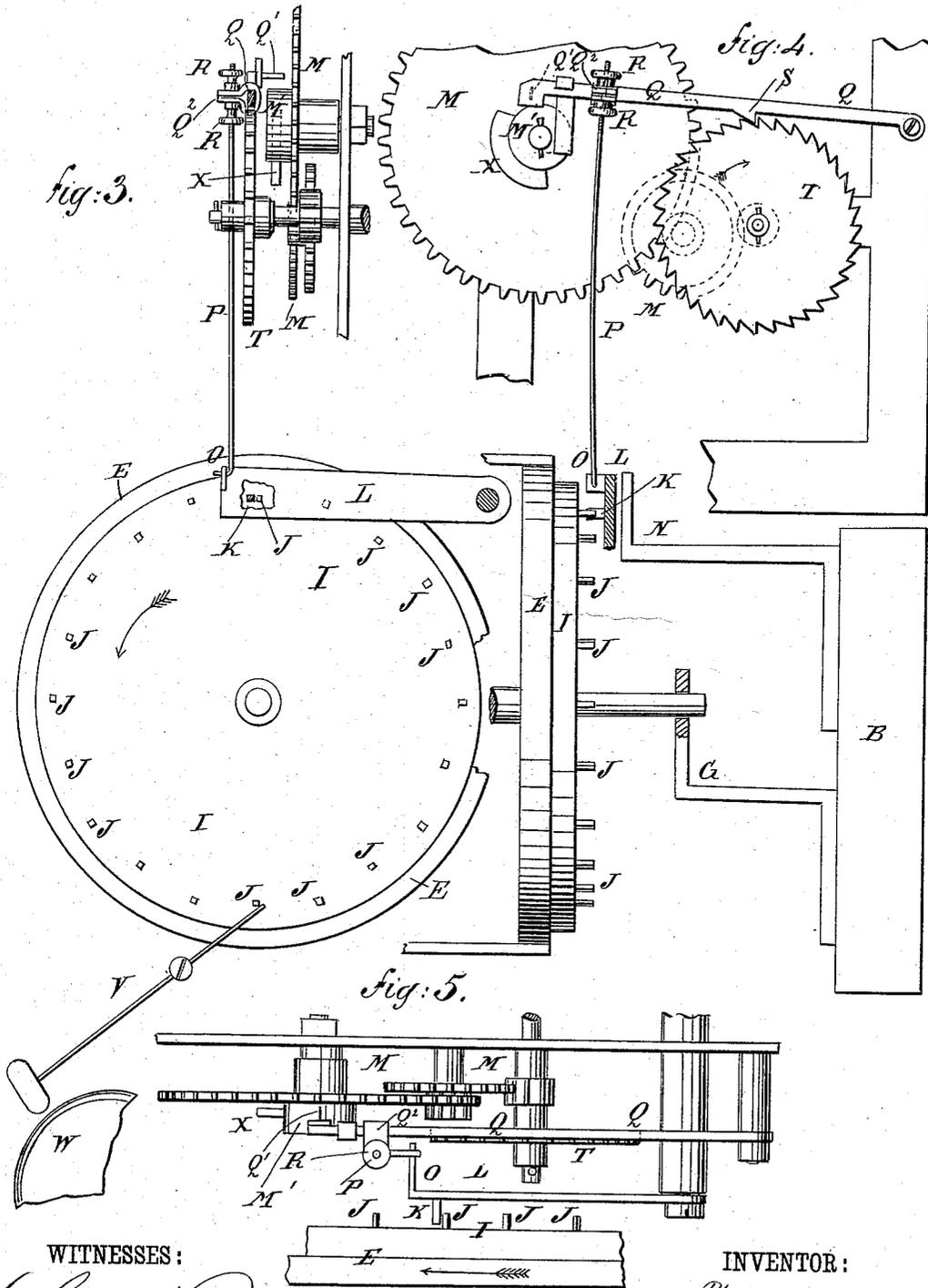
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UNITED STATES PATENT OFFICE.

WILLIAM AKIN, OF NEW YORK, N. Y.

AUTOMATIC ADVERTISING DEVICE.

SPECIFICATION forming part of Letters Patent No. 268,595, dated December 5, 1882.

Application filed July 12, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM AKIN, of the city, county, and State of New York, have invented a new and useful Improvement in Automatic Advertising Devices, of which the following is a full, clear, and exact description.

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

Figure 1, Sheet 1, is a front elevation of my improvement, part being broken away. Fig. 2, Sheet 1, is a side elevation of the same, partly in section, through the line *xx*, Fig. 1. Fig. 3, Sheet 2, is a side elevation of a part of the mechanism enlarged. Fig. 4, Sheet 2, is a front elevation of the same. Fig. 5, Sheet 2, is a plan view of the same.

The object of this invention is to display a number of advertisements successively and for fixed times by an automatic mechanism.

The invention consists in an automatic advertising device constructed with two clock-works, one driving a drum carrying a series of advertising-sheets and provided with a wheel having a zigzag circular row of projecting pins, and the other operating a bar provided with a pin to engage with the pins of the wheel attached to the drum, and connected by a rod with a lever having a pawl-tooth and vibrated by a ratchet-wheel connected with the said clock-work, as will be hereinafter fully described.

A is an ordinary clock, the case B of which is made wide, deep, and long, and has a glass plate, C, in the lower part of its front, through which the advertisements are seen. The advertisements are printed or otherwise formed upon sheets D of paper, cloth, or other suitable material, which sheets are attached at their upper edges and at equal distances apart to a drum, E. To each advertising-sheet D, at a little distance from its upper edge, is attached a weight-bar, F, as shown in Figs. 1 and 2. With this construction, as the drum E is revolved the advertising-sheets D will be carried over it and will be allowed to drop down successively at its forward side, so as to be seen through the glass plate C. One end of the drum E is pivoted to a bracket, G, attached

to the side of the case B, and its other end is attached to a shaft of an ordinary clock-work, H, the frame of which is attached to the other side of the case B, and which is driven by a spring or weight, as may be desired.

To the first-mentioned end of the drum E is attached a disk or wheel, I, to the outer side of which, at a little distance from its circumference, are attached projecting pins J, which are arranged alternately out and in, or in a zigzag circular row, as shown in Fig. 3, so as to engage successively with a pin, K, attached to the side of the outer end of a bar or lever, L, hinged at its inner end to the frame of the clock-work M, to the case B, or other suitable support. The outer end of the hinged bar L is held in place close to the wheel I by a guide-bracket, N, along the upright arm of which the said end of the bar L moves up and down.

Upon the upper corner of the outer end of the hinged bar L is formed an eye, O, into which is hooked a hook formed upon the lower end of the connecting-rod P. The upper part of the rod P passes through an eye, Q¹, formed upon the side of the outer part of the lever Q, which is hinged at its inner end to the frame of the clock-work M or to some other suitable support. The upper part of the rod P has a thread formed upon it to receive the two nuts R, which are screwed upon it—one above and the other below the edge of the lever Q—so that the length of the said rod can be readily regulated.

Upon the lower side of the lever Q is formed a tooth, S, to engage with the teeth of the ratchet-wheel T, attached to a shaft of the clock-work M, the frame of which is attached to the clock-case B, and which may be driven by a spring or weight. With this construction, as the ratchet-wheel T is turned by the clock-work M in the direction of the arrow the teeth of the ratchet-wheel T will raise the lever Q and allow it to drop successively. Each upward movement of the lever Q raises the tooth K of the hinged bar L from an inner tooth, J, of the wheel I, and brings it into position to engage with the next outer tooth, J, which tooth is released by the next downward movement of the bar L, and so on successively. As each tooth J is released the drum E is

revolved by the clock-work H until its next tooth J engages with the tooth K. Each movement of the drum E causes an advertising-sheet, D, to drop into view, so that each advertising-sheet will be displayed while the ratchet-wheel T is moving through half the space of one tooth, which will be half a minute, more or less, according to the number of teeth formed in the ratchet-wheel T. The advertising-sheets D are held from dropping until the roller E has been turned so far that the weight-bars F will cause them to drop quickly by one or more springs, U, attached to the back of the clock-case in such a position that the free edge of each advertising-sheet will pass out from beneath the said spring or springs at the proper time for the said sheet to drop.

To the side of the clock-case B or other suitable support is pivoted a bell-hammer, V, in such a position that its end will be struck by one of the pins J at each movement of the drum E, and the head of the said hammer made to strike a bell, W, to call attention to the advertisement displayed.

The clock-work M is so constructed that its large wheel will revolve once in twenty-four hours, and upon its hub M' is formed a segment, X, of a ring-flange. The length of the flange X is such a part of a circle as the number of hours during which it is desired to have the advertising-drum stand still is of twenty-four hours—as, for instance, if the drum E is to stand still from ten o'clock at night to six o'clock the next morning, (eight hours,) the flange X should be one-third of a circle. The flange X should be of such a height that at the proper time it will pass beneath the spring Q', attached to the end of the lever Q when the said lever is raised by a tooth of the ratchet-wheel T and prevent the said lever Q from dropping and releasing the drum E until the fixed time has elapsed. In case the end

of the flange reaches the spring Q' when the lever Q is down the said spring will yield until the lever again rises, when the said spring will rise and pass upon the said flange.

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

1. An automatic advertising device constructed substantially as herein shown and described, consisting of the case B, the two clock-works H M, the drum E, carrying weighted advertising-sheets D, and provided with a wheel, I, having projecting pins J, the hinged bar L, having pin K, the adjustable connecting-rod P, the hinged lever Q, having pawl-tooth S, and the ratchet-wheel T, as set forth.

2. In an automatic advertising device, the combination, with the clock-work M and the clock-work H, operated by drum E, carrying advertising-sheets D, of the wheel I, having a zigzag circular row of projecting pins, J, the hinged bar L, having projecting pin K, the connecting-rod P, the hinged lever Q, having pawl-tooth S, and the ratchet-wheel T, substantially as herein shown and described, whereby the drum E will be automatically stopped to display an advertisement and released to change the advertisements, as set forth.

3. In an automatic advertising device, the combination, with the hinged lever L, having a tooth or pin, K, engaging a zigzag circular row of pins, J, on a wheel, I, of the rod P, hooked into one end of the lever L, the lever Q, having the spring-arm Q', and the tooth S, ratchet-wheel T, and the hub M', having segmental flange X of the large wheel of the clock-work M, substantially as and for the purpose set forth.

WILLIAM AKIN.

Witnesses:

JAMES T. GRAHAM,
EDGAR TATE.