(No Model.)

# C. M. NEWLIN.

## CLOCKWORK ADVERTISING APPARATUS.

No. 549,811. Patented Nov. 12, 1895.

Fig. 2.

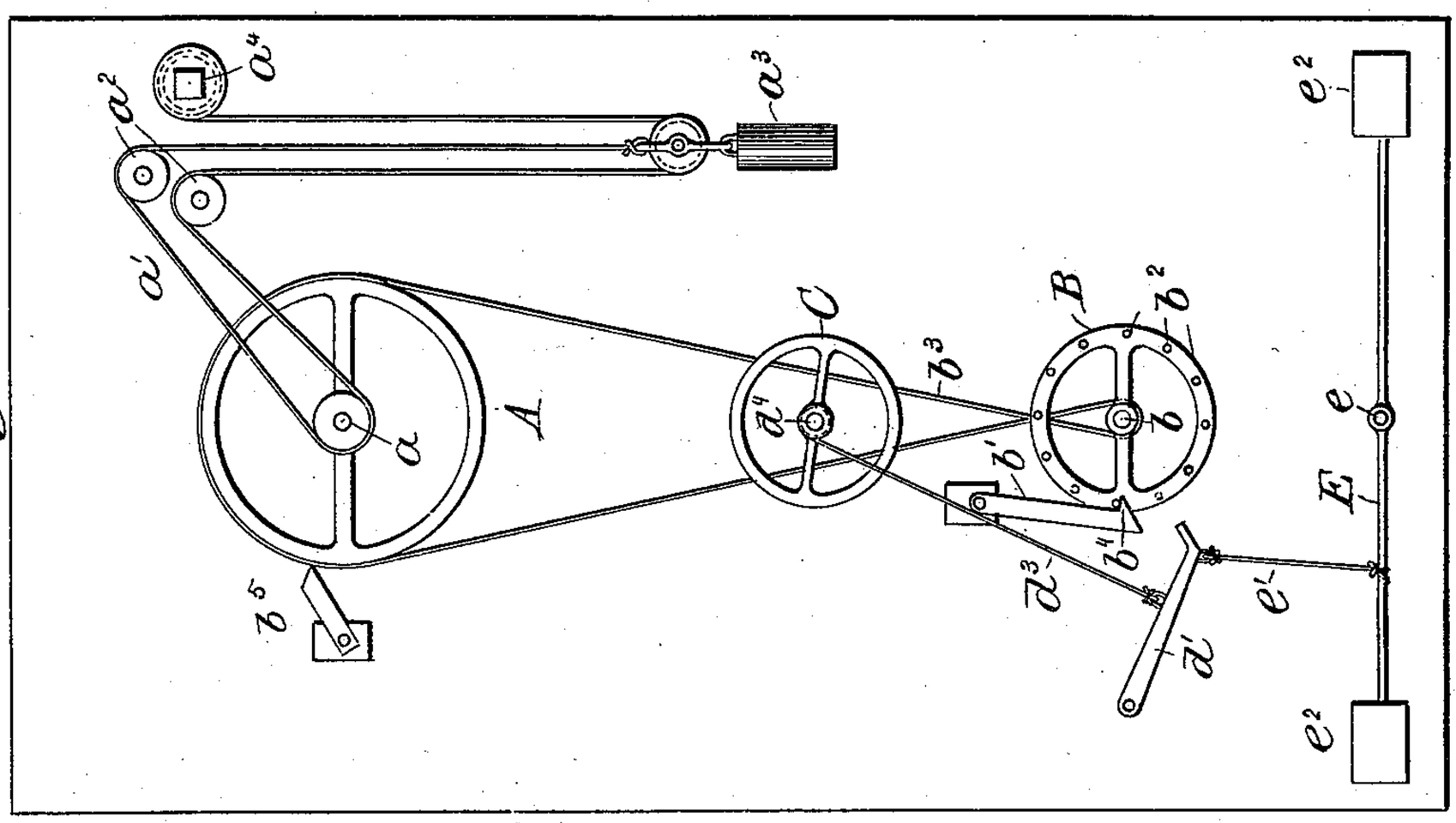
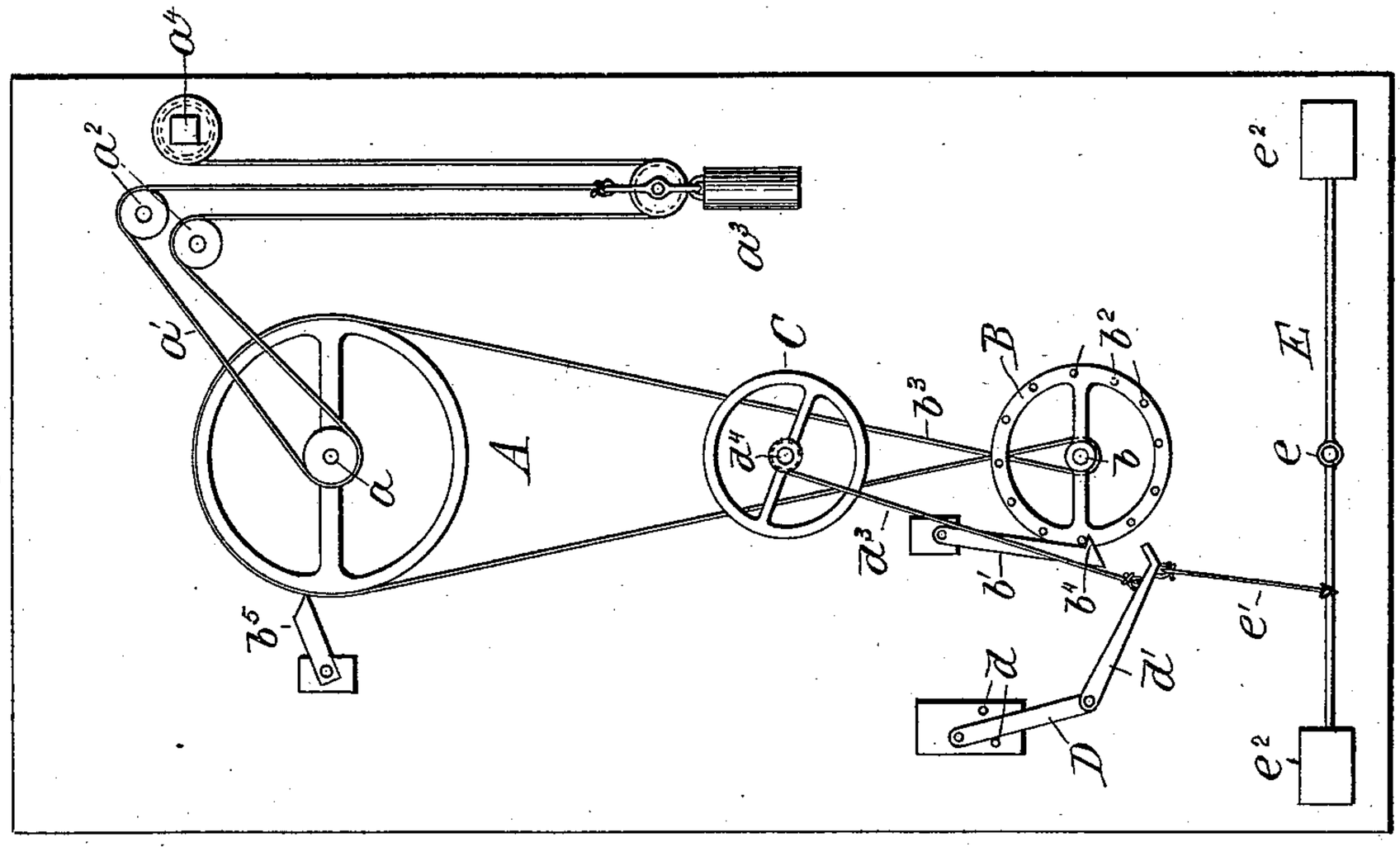



Fig. 1.

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# UNITED STATES PATENT OFFICE.

CHARLES M. NEWLIN, OF LINTON, INDIANA.

## CLOCKWORK ADVERTISING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 549,811, dated November 12, 1895.

Application filed March 2, 1895. Serial No. 540,313. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES M. NEWLIN, a citizen of the United States, residing at Linton, in the county of Greene and State of Indiana, have invented certain new and useful Improvements in Clockwork Advertising Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention contemplates certain new and useful improvements in advertising apparatus, and has for its object the production of simple and novel mechanism which is designed to operate in such manner that two or more display cards or advertisements may be alternately brought into view at suitable holes or openings in a clock or other casing.

The invention comprises the novel features of construction, and also the detail combination and arrangement of parts, substantially as hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a front elevation illustrating my invention. Fig. 2 is a similar view of a slight modification.

Referring to the drawings, A designates the main operating-wheel, which is mounted on a shaft $a$ near the top of the clock-casing. Around the hub of this wheel is passed a cord $a'$, which, after being passed over pulleys $a^2$, is secured at one end to a weight $a^3$, its other end being fast to a winding-shaft $a^4$. While I have shown and described a weight for imparting motion to the main wheel, yet it is obvious that any suitable motor may be employed. An escapement-wheel B is located below the main wheel A, the same being mounted on a suitable shaft $b$. Adjacent to said wheel B is pivoted a locking-lever $b'$, which is designed to engage pins or projections $b^2$ in the periphery of said wheel as the latter is revolved. The escapement-wheel is rotated by means of an elastic belt or sprocket-chain $b^3$, which connects said wheel with the main wheel A. This lever $b'$ is provided with a lip $b^4$ on its lower end. A sprag or brake $b^5$, bearing against wheel A, acts in conjunction with the elastic belt $b^3$ to form a retaining-power, the elasticity of said belt serving to keep the mechanism in motion for several minutes after the motor has run down or while the same is being rewound.

C is what I term the "balance-wheel," the same being mounted adjacent the escapement-wheel B and is adapted to revolve in either direction. Adjacent to the locking-lever $b'$, and below said balance-wheel, is pivoted a vibrating lever D, the movement of which is limited by two banking-pins $d$. To the lower end of this vibrating lever is pivoted an impulse-lever $d'$, the same being provided with an outer bent end $d^2$. This lever $d'$ is raised and lowered by means of a cord or thread $d^3$, secured thereto at one end, its other end being secured to the shaft $d^4$ of the balance-wheel C in such manner as to be wound thereon when said wheel is revolved.

E is a lever pivoted at $e$ to the clock-casing and connected by a cord or thread $e'$ to the impulse-lever $d'$, whereby said former lever may be raised and lowered in conjunction with said impulse-lever. Cards or advertisements are placed on the ends $e^2$ of lever E, and the same are alternately displayed at suitable holes or openings (not shown) in a clock or other casing.

In Fig. 2 I have shown a slight modification of my invention, which consists solely in pivoting the impulse-lever F directly to the clock-casing and thereby dispensing with the vibrating lever D.

The operation is as follows: The cord or thread $d^3$ is first wound upon the shaft $d^4$ of wheel C in any preferred manner, and by that means the impulse-lever $d'$ is raised from its normal position. This winding movement is continued until the bent end $d^2$ of said lever engages the lip $b^4$ of lever $b'$ and moves the latter out of engagement with the pins or projections of the escapement-wheel B. From this stage the operation of all the parts is entirely automatic. As soon as the said disengagement is effected, the wheel B commences to revolve under the action of the main operating wheel and weights until one of the pins $b^2$ engages said impulse-lever and impels the same downward, whereupon lever $b'$ will drop to its normal position and engage one of said pins or projections, thus immediately stopping the revolution of wheel B. The impulse given to lever $d'$, however, causes the same to fall very rapidly and unwind the cord or

thread $d^3$, thereby effecting the revolution of wheel C at a high rate of speed in a reverse direction. This revolution is so rapid that the momentum thereof will cause the wheel to continue its revolution after said lever $d'$ has reached its normal position, and immediately rewind the cord or thread $d^3$ on the shaft of said wheel to an extent sufficient to again raise the impulse-lever into engagement with lever $b'$, whereupon said lever $d'$ is again forced down by said escapement-wheel and the foregoing operation is repeated, except that the direction of revolution of wheel C is again changed. The foregoing operation continues until the weight $a^3$ reaches the lowest extent of its movement. The mechanism must then be rewound in order to again impart motion to the escapement-wheel. The movement of the impulse-lever is communicated to lever E through the medium of cord or thread $e'$, and by this means the cards or advertisements on the ends of said lever E are alternately displayed.

In the foregoing operation, when the vibrating lever D is employed, the impulse-lever $d'$, because of its pivotal connection thereto, will in its downward movement follow the circular or peripheral motion of the escapement-wheel until one of the pins of said wheel is locked by the locking-lever $b'$, whereupon said escapement-wheel is brought to a standstill. By this time the vibrating lever has reached the lowest limit of its movement and rests against the lowermost banking-pin $d$, and the bent end $d^2$ of lever $d'$ is thus carried out of the line of travel of the pins $b^2$ of wheel B. From this position the upward movement of lever $d'$ is unobstructed until the same engages the locking-lever $b'$, the hooked end of said lever $d'$ being then directly in the line of the peripheral movement of wheel B, whereby said lever is again forced downward, as hereinbefore described.

I claim as my invention—

1. In an advertising device, a main operating wheel, an escapement wheel, an elastic belt connecting said wheels, a locking lever for engaging said escapement wheel, and means for periodically disengaging said locking lever from said latter wheel, substantially as set forth.

2. In an advertising device, a main wheel, means for imparting motion thereto, an escapement wheel, connections between the same and said main wheel, a locking lever for engaging said escapement wheel, an impulse lever for disengaging said locking lever, and means for periodically raising said impulse lever, substantially as set forth.

3. In an advertising device, a main wheel, means for imparting motion thereto, an escapement wheel having pins or projections on its periphery, connections between said wheels, a locking lever pivoted adjacent to said escapement wheel and designed to engage said pins or projections, an impulse lever for disengaging said locking lever, and means for periodically raising said impulse lever, substantially as set forth.

4. In an advertising device, a main wheel, means for imparting motion thereto, an escapement wheel, connections between the same and said main wheel, a locking lever for engagement with said escapement wheel, a vibrating lever pivoted adjacent said escapement wheel, an impulse lever pivoted to the lower end of said vibrating lever, and means for periodically raising said impulse lever, substantially as set forth.

5. In an advertising device, a main wheel, means for imparting motion thereto, an escapement wheel, connections between said wheels, a locking lever for engagement with said escapement wheel, a balance-wheel, an impulse lever, and a cord or thread for connecting said balance wheel with said impulse lever, whereby the latter may be raised, substantially as set forth.

6. In an advertising device, a main wheel, means for imparting motion thereto, an escapement wheel having pins or projections on its periphery, a belt designed to connect said wheels, a locking lever designed to engage said pins or projections, a vibrating lever pivoted adjacent said escapement wheel, a balance wheel, an impulse lever pivoted to the lower end of said vibrating lever, and a cord or thread connecting said balance wheel and said impulse lever, whereby the latter may be periodically raised, substantially as set forth.

7. In an advertising device, a main wheel, means for imparting motion thereto, a sprag or brake in engagement with said main-wheel, an escapement wheel having pins or projections on its periphery, an elastic belt designed to connect said wheels, a locking lever designed to engage said pins or projections, a vibrating lever pivoted adjacent said escapement wheel, an impulse lever pivoted to the lower end of said vibrating lever, a balance wheel, and a cord or thread connecting said balance wheel and said impulse lever, whereby the latter may be periodically raised, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES M. NEWLIN.

Witnesses:
H. G. STRIETELMEIER,
JASPER SCHLOOT.