(No Model.)

W. N. LEY.

SIGN.

No. 584,181. Patented June 8, 1897.

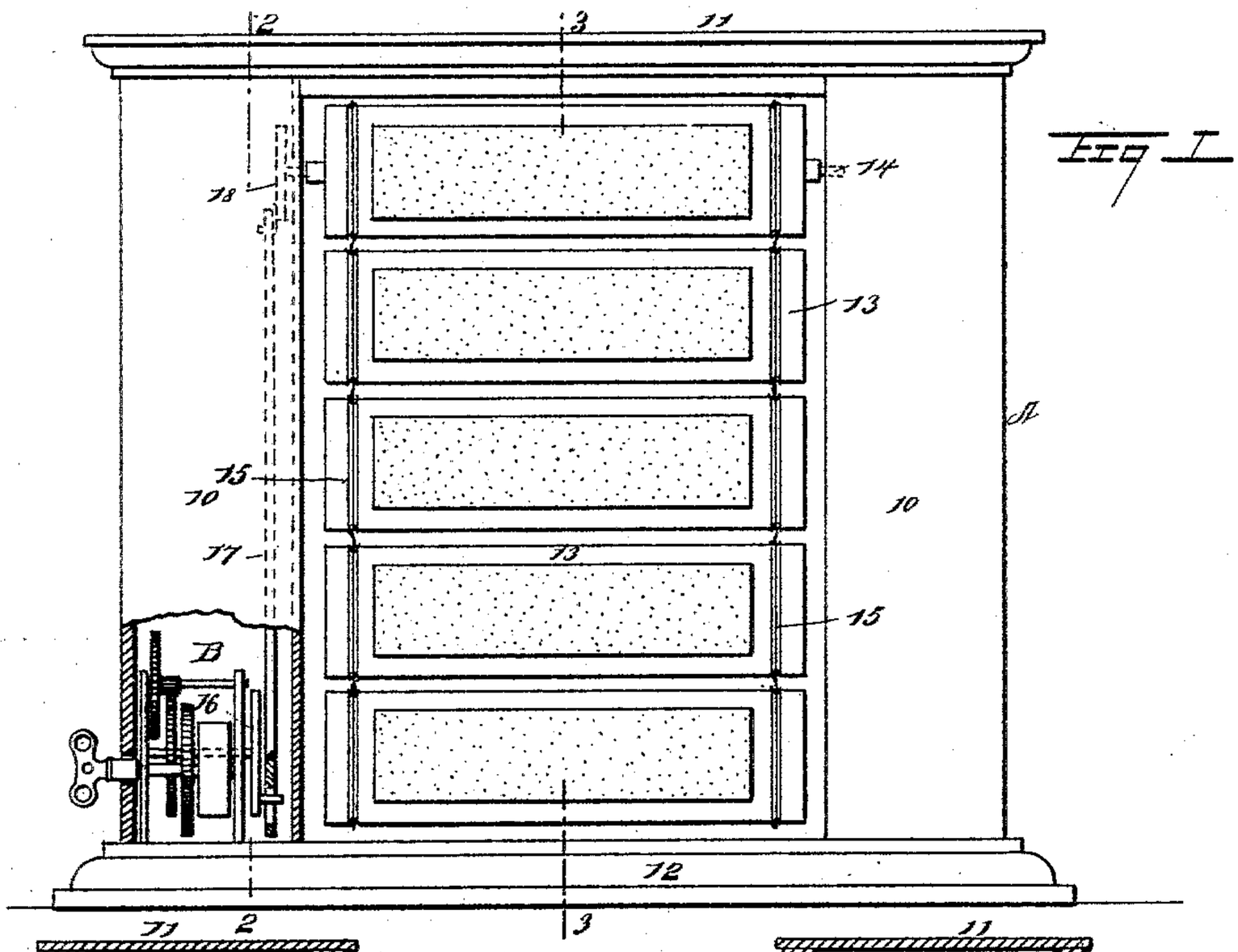

Fig 1

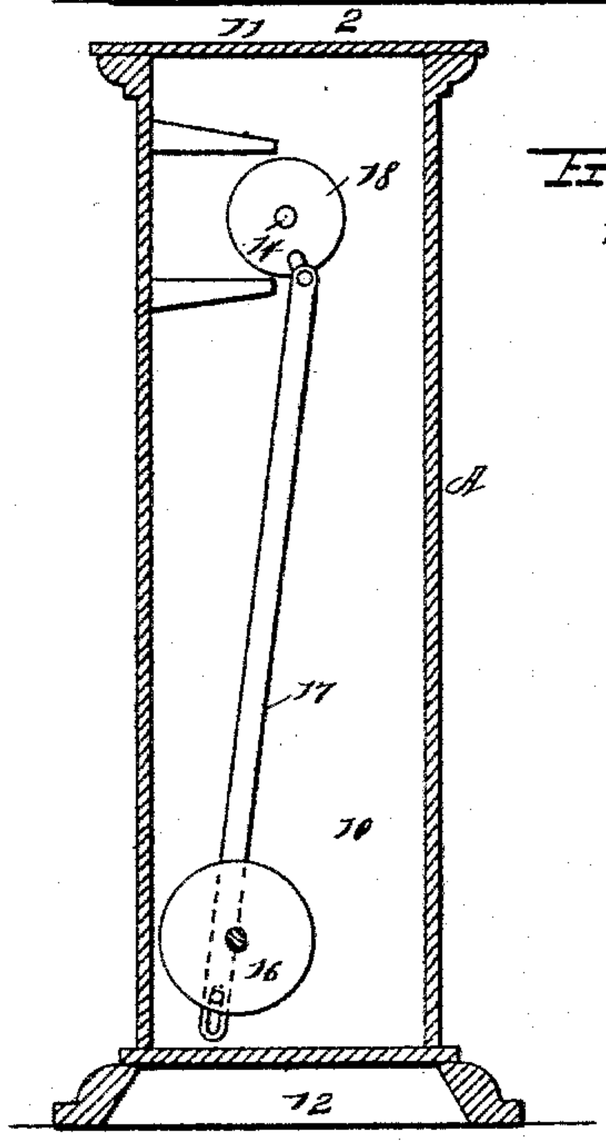

Fig 2

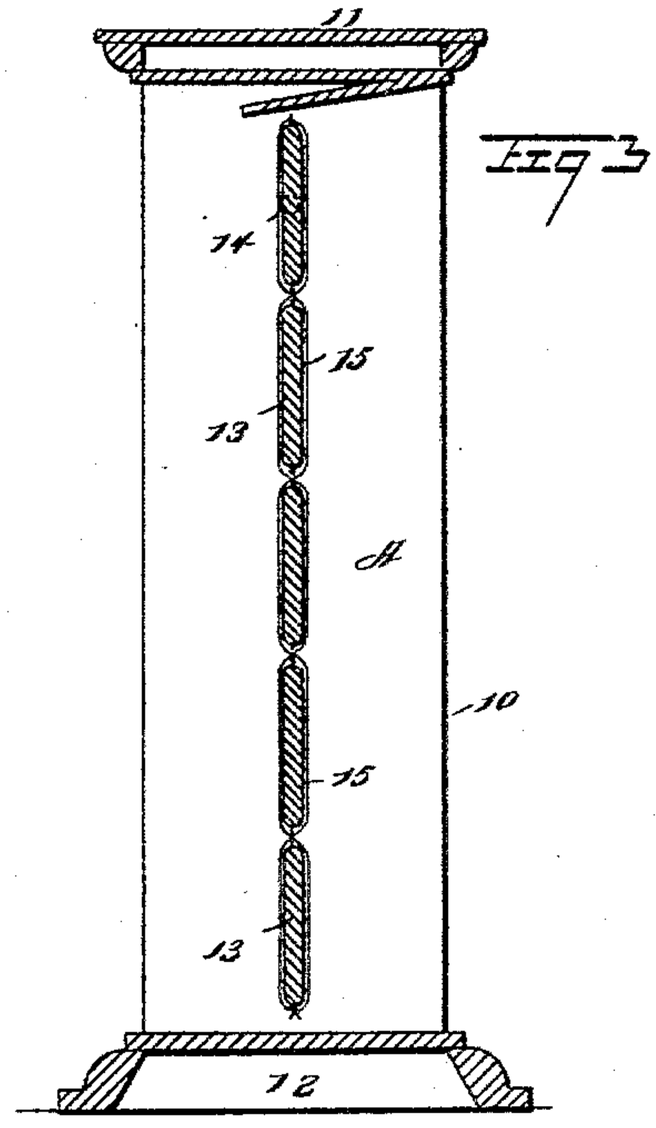

Fig 3

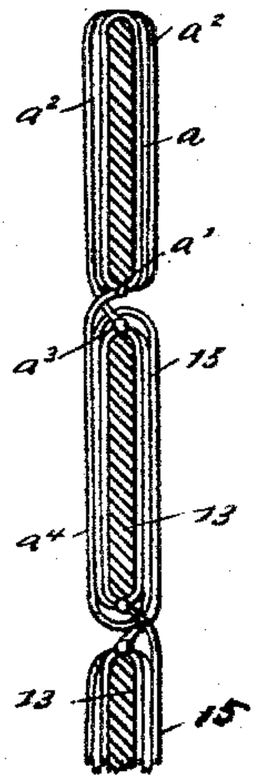

Fig 4

WITNESSES:

H. Walker

J. Fred. Acker.

INVENTOR

W. N. Ley

BY

Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM N. LEY, OF WILBUR, WASHINGTON.

SIGN.

SPECIFICATION forming part of Letters Patent No. 584,181, dated June 8, 1897.

Application filed September 5, 1894. Serial No. 522,172. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM N. LEY, of Wilbur, in the county of Lincoln and State of Washington, have invented a new and Improved Sign, of which the following is a full, clear, and exact description.

My invention relates to an improvement in signs; and it has for its object to provide a sign so constructed that a number of slat-sections will be connected by a series of loops arranged in such manner that upon rocking one of the slats in a certain direction the entire series will be reversed, presenting what was formerly their rear faces to the front, and whereby when the same slat is rocked in a reverse direction the slats will be restored to their normal position, the restoration of position and change of position taking place alternately below the slat manipulated, whereby the observer, when the slats move, will imagine the uppermost slat turned as moving along the line of slats to the bottom; and a further object of the invention is to so support the series of slats that through the medium of a motor the uppermost slat will be constantly rocked, producing automatically the aforesaid kaleidoscopic effect.

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

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

Figure 1 is a front elevation of the advertising device, parts being in section. Fig. 2 is a vertical section taken substantially on the line 2 2 of Fig. 1. Fig. 3 is a similar section taken through the slats, practically on the line 3 3 of Fig. 1; and Fig. 4 is an enlarged view of sundry of the slats, illustrating the manner in which they are connected.

In carrying out the invention a frame A is employed, of any desired shape, that shown in the drawings consisting of two uprights or pillars 10, one or both of which are made tubular, the said pillars or uprights being connected at the top preferably by an ornamental cross-bar 11 and at the bottom by a base 12 of any approved design.

Within the space occurring between the pillars a series of slats 13 is suspended, one below the other, the uppermost slat being provided at each end with a trunnion 14, and the trunnions are journaled in the pillars 10. Each slat has produced upon both of its faces advertising matter or descriptive matter of any character, applied either directly upon the slats or through the medium of cards or panels.

The slats are connected by threads, cords, or cables 15, applied at the ends of the slats and extending from one to the other, forming a series of loops respectively at the front and back of each slat, enabling the slats to change position—that is, change faces when one of the slats is rocked. For example, if the upper slat is rocked toward the front, what had been the rear faces of the slats will be brought to the front or turned over, the slats turning one after the other, commencing with the one immediately below that first turned. Upon rocking the upper slat in a reverse direction each slat below it will turn completely over, bringing the face formerly presented again to the front, the change occurring one slat after the other along the entire series.

The manner of attaching these slats together is shown in Fig. 4, in which, upon the upper slat, a cord is bound around the same to form a loop a, which is fastened at the lower edge of the slat by a nut, tack, or equivalent device a'. One end of the cord is then carried up around the upper slat, forming a second loop a^2, then down the opposite face of the upper slat to an attachment to the upper edge of the next lower slat at a point a^3, and the opposite end of the upper loop a, secured to the upper slat, is carried down from the point a', forming a loop a^4 around the next lower slat, and is fastened at the point a^3. This looping is continued throughout all of the slats of the series at both of their ends.

Within one of the hollow pillars 10 a motor B is located, which may be, and preferably is, a clock-motor, as shown in Fig. 1. The driving-shaft of this motor in this event is provided with a crank-disk 16, with which a pitman 17 has sliding and pivotal connection, the said pitman being likewise pivoted at its upper end to a crank-disk 18, attached to one of the trunnions of the upper slat.

Thus while the motor is in operation the upper slat will be automatically constantly shifted in a manner to produce a constant shifting of the faces of all the slats in the sign.

Such a sign is exceedingly effective, and is not only simple but exceedingly economic in its construction. It will be understood that the motor employed may be clockwork, as shown, an electric motor, or a water or wind motor, and that the connection between the motor and the trunnion of the upper slat may be varied as demanded by the construction of the motor, but in every case the motor will impart to the said slat a rocking or rotary movement.

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

1. A sign, comprising a supporting-frame, a plurality of slats having looped connection one with the other and one suspended below the other, the upper slat being pivoted in the frame, and the loops connecting the slats being so formed that upon the reversal of one of the slats all of the said slats will be correspondingly reversed, and means for rocking the said upper slat, substantially as and for the purpose set forth.

2. A sign, comprising a plurality of slats connected together by a cord or strip passed around the upper slat and secured to the lower edge thereof and then having one end passed around the said upper slat to form a second loop and secured to the upper edge of the adjacent slat, the other end of the cord or strip being passed around the said adjacent slat forming a loop around the same and secured to the upper edge thereof, the upper slat being provided with trunnions at its ends to permit it to be pivoted in a frame, and means for rocking the said upper slat, substantially as and for the purpose specified.

3. A sign consisting in a stationary rectangular open frame A, one of the vertical members of which is hollow and provided with a motor, a series of slats, one above the other visible through both sides of the frame and having looped connection one with the other, the top slat having end pivots mounted in the upper ends of the frame-uprights, and a crank-and-pitman connection between one of the pivots and the said motor to impart an oscillating rotary motion to the top slat, and cause the consecutive reversal of all the other slats, substantially as described.

WILLIAM N. LEY.

Witnesses:
ALEX. ALEXANDER,
JNO. THOMISON.