(No Model.) 2 Sheets—Sheet 1.

O. S. TRUSSELL.

AUTOMATIC ADVERTISING DEVICE.

No. 262,515. Patented Aug. 8, 1882.

Fig: 1.

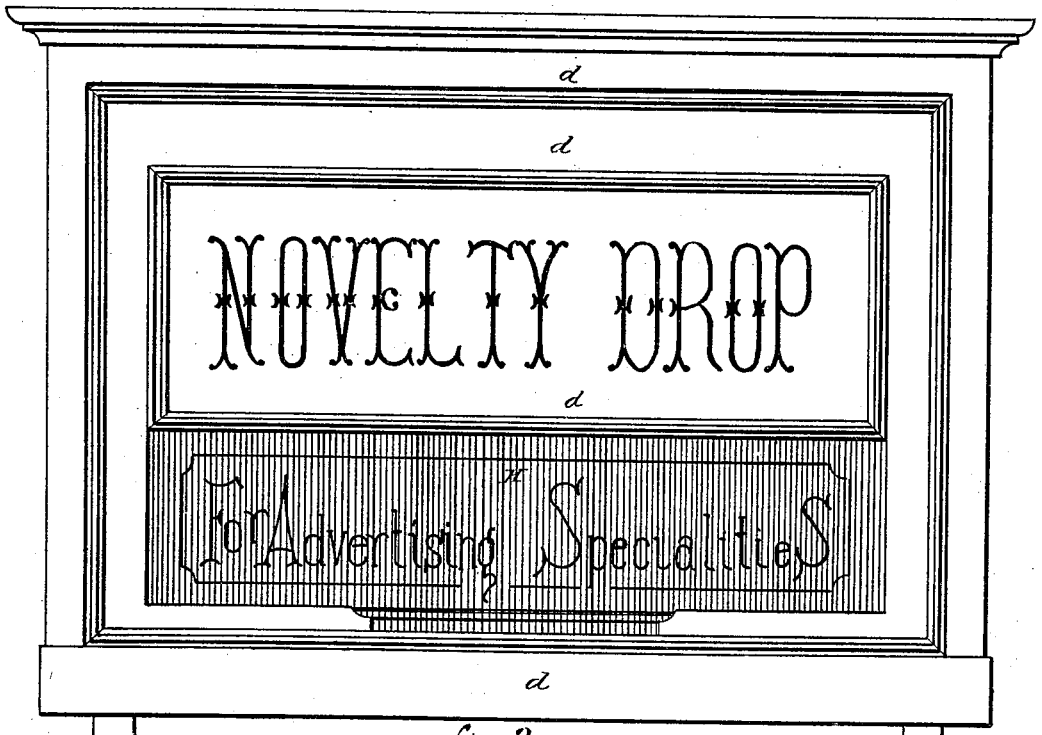
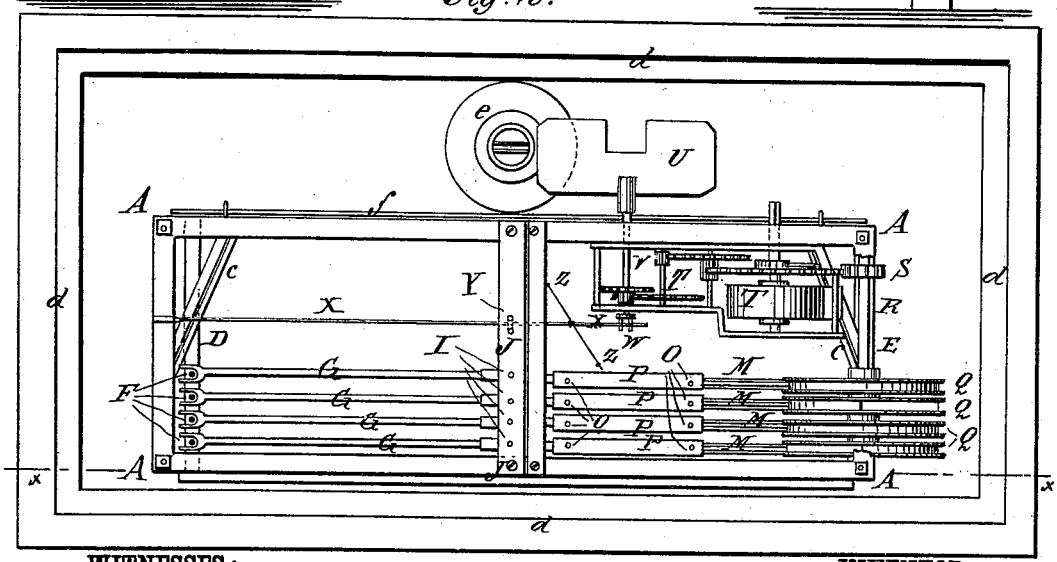


Fig: 2.



WITNESSES:

Chas. Nida.

C. Sedgwick

INVENTOR:

O. S. Trussell

BY Munn & Co.

ATTORNEYS.

(No Model.) 2 Sheets—Sheet 2.

O. S. TRUSSELL.

AUTOMATIC ADVERTISING DEVICE.

No. 262,515. Patented Aug. 8, 1882.

Fig: 3.

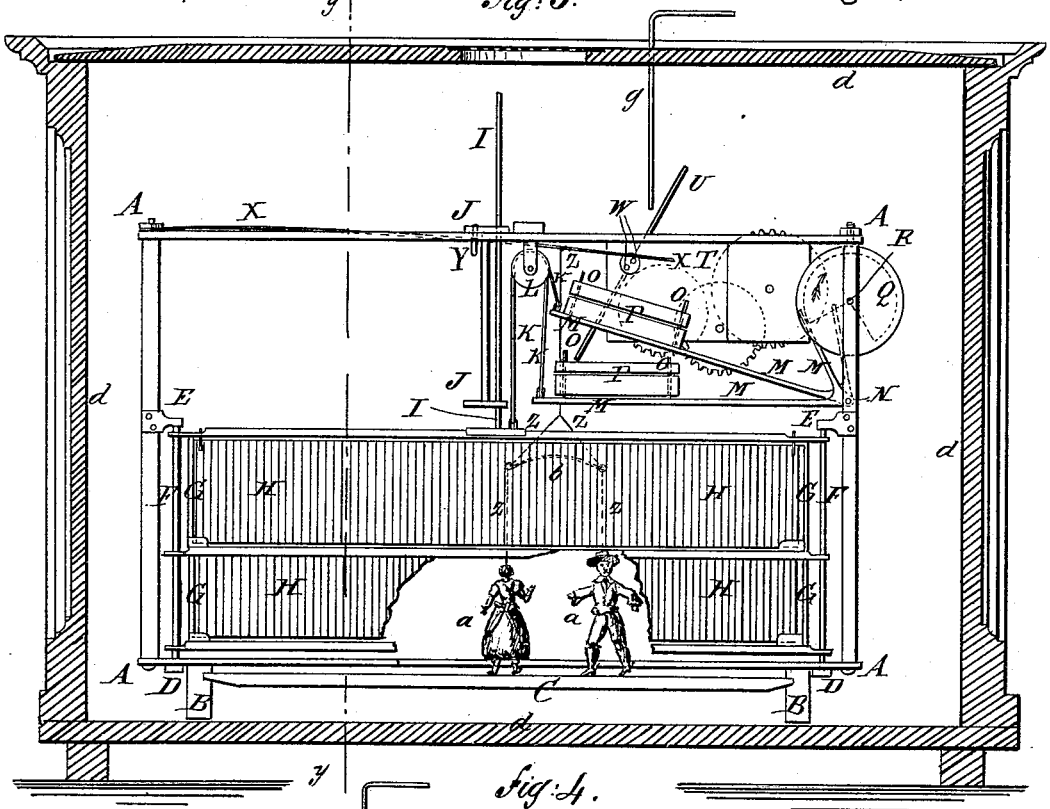


Fig: 4.

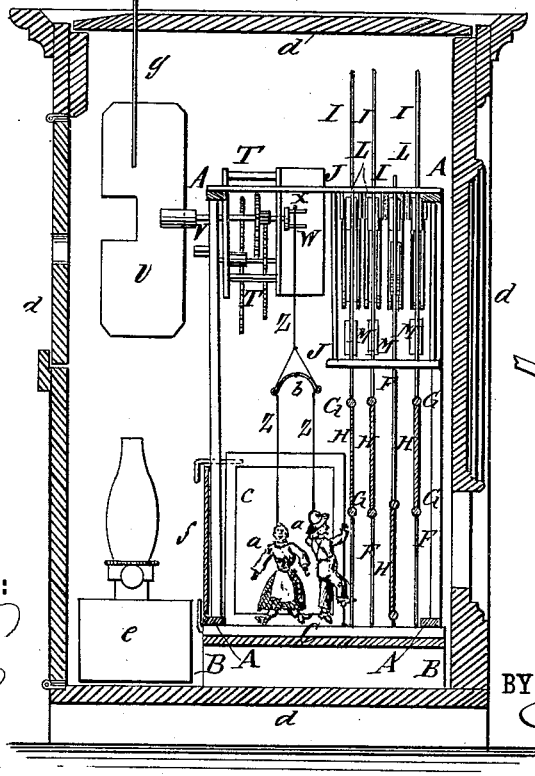


Fig: 6.

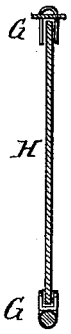
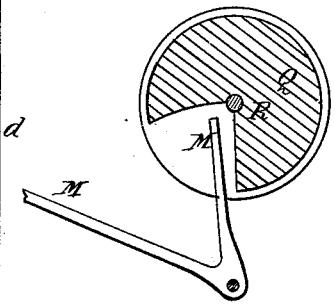


Fig: 5.



WITNESSES:

Chas. Nida

L. Sedgwick

INVENTOR:

O. S. Trussell

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ORLANDO S. TRUSSELL, OF ROCKLAND, MAINE.

AUTOMATIC ADVERTISING DEVICE.

SPECIFICATION forming part of Letters Patent No. 262,515, dated August 8, 1882.

Application filed May 4, 1882. (No model.)

To all whom it may concern:

Be it known that I, ORLANDO SOMMERVILLE TRUSSELL, of Rockland, in the county of Knox and State of Maine, 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. Fig. 2, Sheet 1, is a plan view of the same with the top of the case removed and partly in section. Fig. 3, Sheet 2, is a sectional front elevation of the same, taken through the line *x x*, Fig. 2, and part being broken away. Fig. 4, Sheet 2, is a sectional end elevation of the same, taken through the line *y y*, Fig. 3. Fig. 5, Sheet 2, is a sectional side elevation of one of the cams, and showing a part of one of the bent levers. Fig. 6, Sheet 2, is a cross-section of one of the advertising-cards and card-frames.

The object of this invention is to attract attention to advertisements exhibited in show-windows and in other places.

The invention consists in an advertising mechanism constructed with a series of frames carrying advertising-cards and provided with guides to cause them to move up and down in straight lines. The said carrying-frames are connected by cords and pulleys with a series of bent levers, which are operated by a series of cams driven by a clock-work. The fan-shaft of the clock-work is provided with prongs to agitate a wire resting upon them, and from which is suspended by a forked cord dancing figures, so that the said figures will be operated from the said clock-work. By this construction the advertising-cards will be successively displayed and withdrawn at regular intervals, leaving the dancing figure exposed to view during the periods of withdrawal, as will be hereinafter fully described.

A is an upright frame, which is attached to two base-blocks, B, or other suitable support, and is supplied with a bottom or platform, C, attached to it or to the base-block B.

To the end parts of the lowest side bars of the frame A are attached the ends of two cross-bars, D, above which and parallel therewith are placed two other cross-bars, E. The ends of the cross-bars E are bent outward, and are secured by rivets or other suitable means to the posts of the frame A.

To the pair of cross-bars at each end of the frame A are attached the ends of a number of upright rods, F, which serve as guides or ways for the ends of the card-supporting frames G to slide up and down upon.

The advertising-cards H are secured to the frame G by clamps, wire staples, or other suitable means that will allow the said cards to be readily removed and replaced with others when desired.

To the centers of the top bars of the card-frames G are attached the lower ends of vertical guide-rods I, which pass up through guide-holes in the top and bottom bars of the upright frame J, attached at its top to the top of the frame A. The guide-rods I thus assist the guide-rods F in causing the card-frames G to move up and down vertically.

To the centers of the top bars of the card-frame G are attached the lower ends of cords K, which pass over pulleys L, pivoted to supports attached to the central top cross-bar of the frame A. The other ends of the cords K are attached to the ends of the long arms of levers M, which are pivoted at their angles to a rod, N, attached to the end posts of the frame A.

To the long arm of each of the levers M are attached two pins, O, upon which are placed weights P, which are made in parts or sections, so that the gravity of the weights can be adjusted to nearly balance the weight of the card-frame and the card connected with the said frame, so that when the short arm of the bent lever is released the card-frame and card will descend promptly, but gently, and will raise the weighted long arm of the said lever M.

The levers M are operated to raise the card-frames and cards by a series of cams, Q, attached to a shaft, R, which is pivoted to the posts of the frame A at a suitable distance above the fulcrum-rod N. Each cam Q is so formed as to allow the corresponding card-frame and card to descend once at each revolution of the cam-shaft, and the cams of the series are so arranged that the card-frames

and cards will descend and rise successively and with a short interval between the descent and rise of each card-frame and card and between the rise of each card-frame and card and the descent of the next one.

To the cam-shaft R is attached a gear-wheel, S, the teeth of which mesh into the teeth of a gear-wheel attached to the spring-shaft of a clock-work, T, so that the cams Q will be operated by the said clock-work to release the levers M and allow the card-frames and cards to descend, and to operate the levers M to raise the said card-frames and cards.

The movement of the clock-work is retarded and made steady and of uniform rapidity by a fan, U, in the same manner as an ordinary clock-work, except that the fan is made larger than the ordinary clock-work fan, on account of the increased power that must be given to the clock-work spring to cause it to drive the cams Q.

The other end of the fan-shaft V is provided with two parallel prongs, W, or has a disk provided with two parallel prongs or pins, W, attached to it. Upon the prongs W rests the free end of a wire, X, which passes through a long keeper, Y, attached to the central cross top bar of the frame A, and its other end is attached to the end top cross-bar of the said frame A.

To the wire X, at a little distance from the prongs W, is attached the upper end of a cord, Z, the lower part of which is branched, and the ends of the branches are attached to the heads of two figures, *a*, the legs of which are loosely jointed. The branches of the cord Z are kept at such a distance apart that the figures *a* in their movements will not interfere with each other by a cross-wire, *b*, the ends of which are attached to the said branches. With this construction, as the fan-shaft V revolves, the prongs W will strike the wire X successively and give it an up-and-down movement, which, in connection with the elasticity of the said wire X and the twisting and untwisting of the branched cord Z, will give the figures *a* the appearance of dancing.

Inclined mirrors *c* are placed in the end parts of the frame A, so that the reflections of the dancing figures may produce the appearance of a number of figures. The frame A and its attachments are inclosed in a case, *d*, which has an opening in its front of such a size that an advertising-card, H, when lowered, will be fully displayed, and that the dancing figures *a* will be clearly seen when the card H is raised. The case *d* is made so much larger than the frame A that a lamp, *e*, can be placed within the said case *d* at the rear side of the said frame A to illuminate the cards and dancing figures when displayed at night.

A ground-glass plate, *f*, is secured to the rear side of the lower part of the frame A to mellow the light from the lamp *e*, and thus produce a better effect.

The machine can be stopped when desired, without removing the case *d*, by inserting a wire, *g*, through the top of the said case in such a position that a wing of the fan I will strike against it, as shown in Figs. 3 and 4.

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

1. An advertising mechanism constructed substantially as herein shown and described, and consisting of a series of card-supporting frames, a series of cords and pulleys, a series of weighted bent levers, a series of cams operating the levers and frames, a clock-work driving the cams, and a set of dancing figures, also operated by the clock-work, as set forth.

2. In an advertising mechanism, the combination, with the frame A and the clock-work T, of the vertically-sliding card-supporting frames G, the cords and pulleys K L, the weighted bent levers M, and the cams Q, substantially as herein shown and described, whereby the said card supporting frames will be automatically raised and lowered at regular intervals, as set forth.

3. In an advertising mechanism, the combination, with the frame A and the card-supporting frames G, having sliding guide-rods I, of the stationary rods F, substantially as herein shown and described, whereby the said frames are kept in place while moving up and down, as set forth.

4. In an advertising mechanism, the combination, with the frame A and the card-supporting frames G, of the sliding guide-rods I and the stationary guide-frame J, substantially as herein shown and described, whereby the said frames are made to move up and down in straight lines and without binding, as set forth.

5. In an advertising mechanism, the combination, with the clock-work T, having prongs W upon the end of its fan-shaft, of the wire X, the branched cord Z, and the dancing figures *a*, substantially as herein shown and described, whereby the said figures will be operated by the said clock-work, as set forth.

ORLANDO SOMMERVILLE TRUSSELL.

Witnesses:
JAMES FLANAGAN,
LEONARD ROSS.