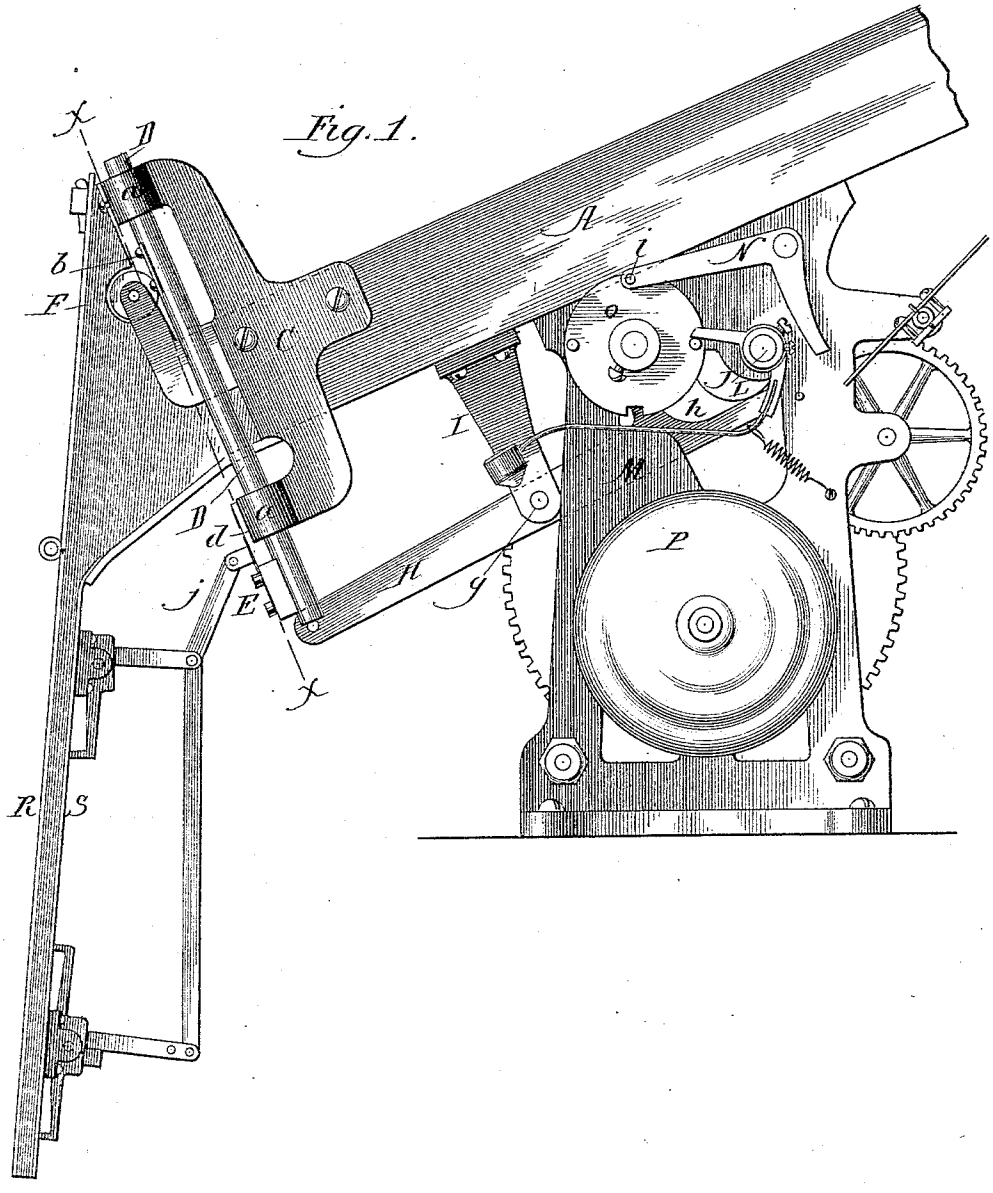
(No Model.) 4 Sheets—Sheet 1.

O. C. HOFFMANN.

DEVICE FOR DISPLAYING ADVERTISING CARDS.

No. 380,391. Patented Apr. 3, 1888.

Fig. 1.



Witnesses:
Albert H. Adams.
Harry Jones.

Inventor:
Otto C. Hoffmann.

PETERS, Photo-Lithographer, Washington, D. C.

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O. C. HOFFMANN.

DEVICE FOR DISPLAYING ADVERTISING CARDS.

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Fig. 2.

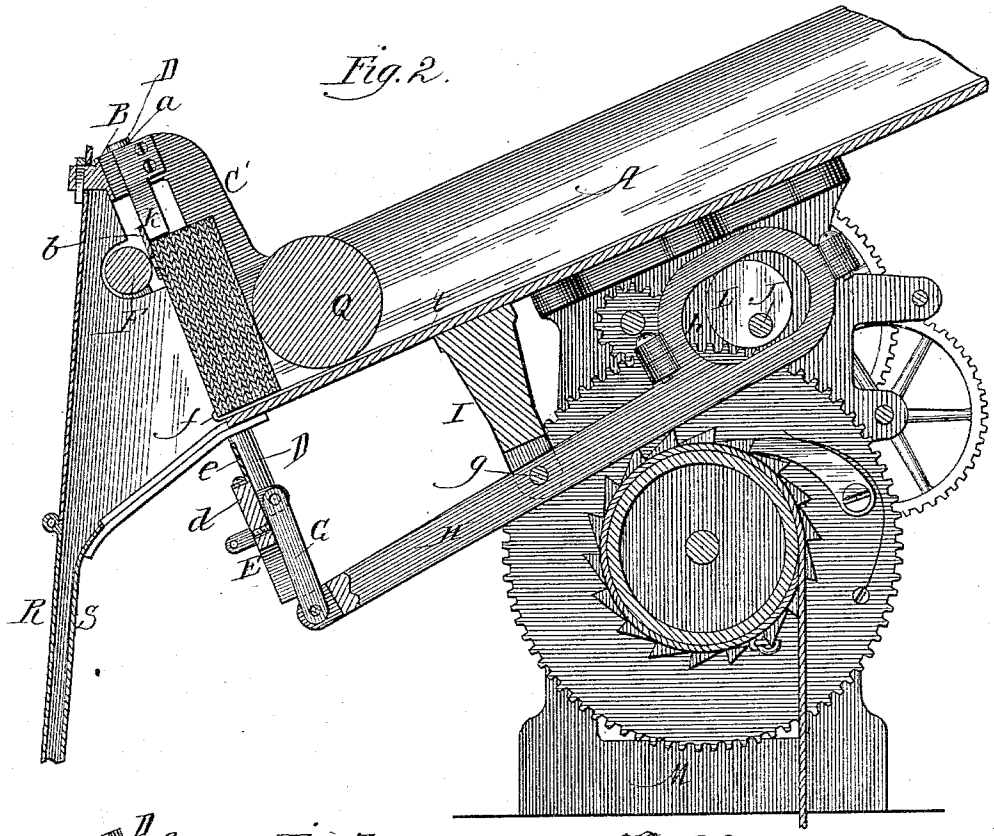
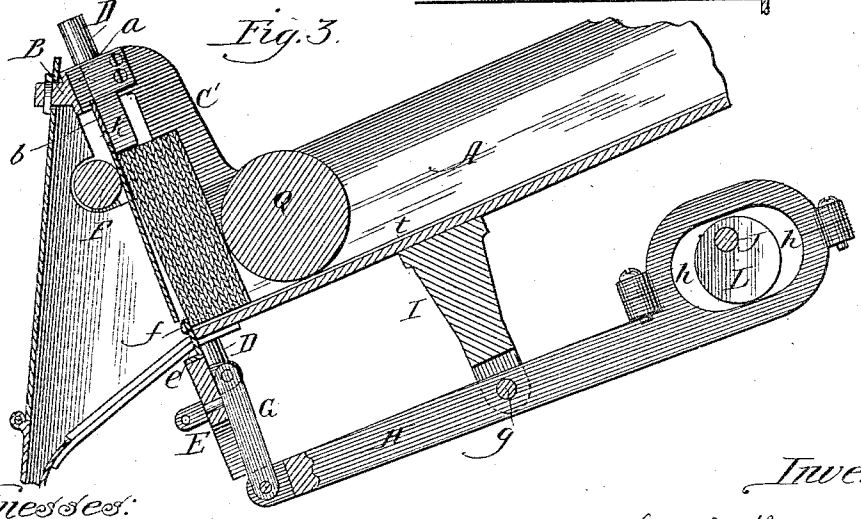


Fig. 3.



Witnesses:
Albert H. Adams.
Harry Jones.

Inventor:
Otto C. Hoffmann.

N. PETERS, Photo-Lithographer, Washington, D. C.

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O. C. HOFFMANN.

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Fig. 4.

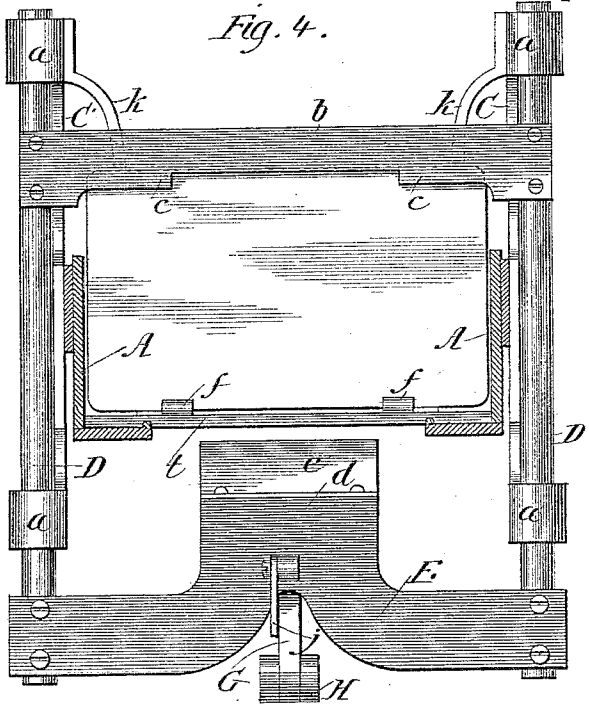
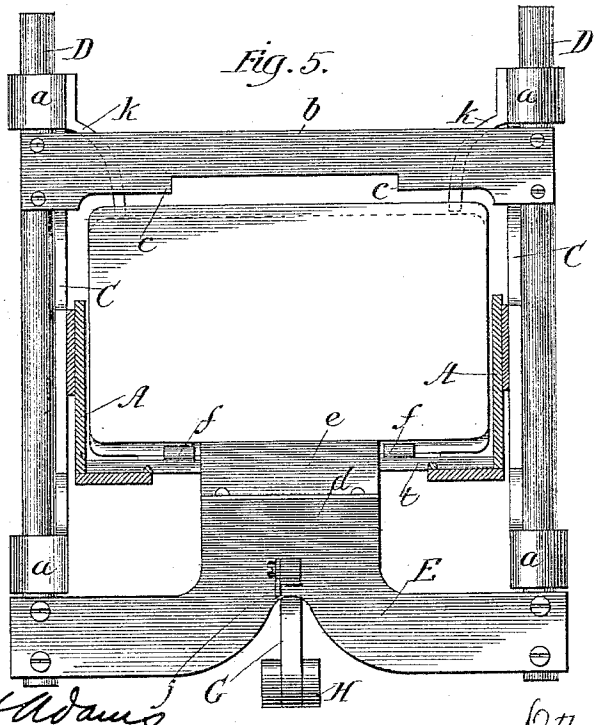


Fig. 5.



Witnesses:
Albert H. Adams
Harry Jones.

Inventor:
Otto C. Hoffmann

N. PETERS, Photo-Lithographer, Washington, D. C.

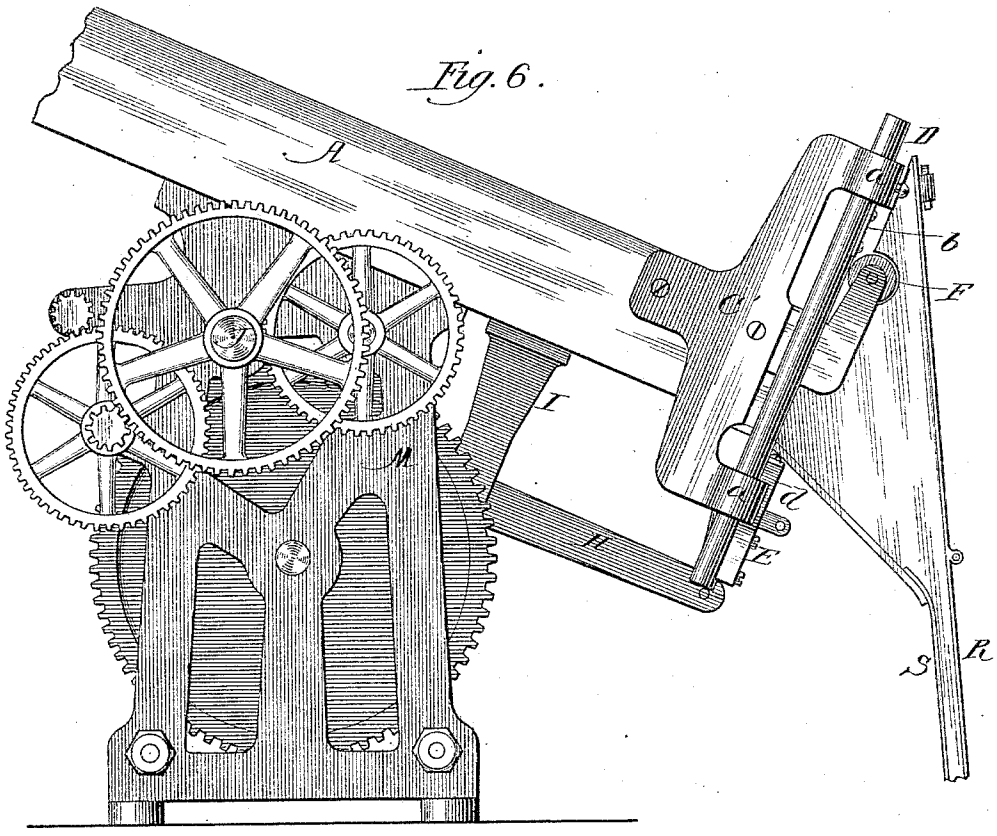
(No Model.) 4 Sheets—Sheet 4.

O. C. HOFFMANN.

DEVICE FOR DISPLAYING ADVERTISING CARDS.

No. 380,391. Patented Apr. 3, 1888.

Fig. 6.



Witnesses:
Albert H. Adams.
Harry Jones.

Inventor:
Otto C. Hoffmann.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

OTTO C. HOFFMANN, OF CHICAGO, ILLINOIS, ASSIGNOR TO JAMES H. ROMAIN, OF SAME PLACE.

DEVICE FOR DISPLAYING ADVERTISING-CARDS.

SPECIFICATION forming part of Letters Patent No. 380,391, dated April 3, 1888.

Application filed June 14, 1887. Serial No. 241,308. (No model.)

To all whom it may concern:

Be it known that I, OTTO C. HOFFMANN, residing at Chicago, in the county of Cook and State of Illinois, and a citizen of the United States, have invented a new and useful Improvement in Devices for Displaying Advertising-Cards, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation. Fig. 2 is a central vertical section, some parts being in elevation. Fig. 3 is a detail, being a central longitudinal vertical section of the parts shown, which parts are also shown in Fig. 2; but in Fig. 2 the operative parts are in a different position from that shown in Fig. 1. Fig. 4 is a section at line *x* of Fig. 1, looking to the right, and showing the operative parts in view down. Fig. 5 is the same as Fig. 4, except that the operative parts are shown up. Fig. 6 is a side elevation of the parts shown, looking at the side opposite to that shown in Fig. 1.

The object of my invention is to provide an improved mechanism for displaying advertising-cards at intervals, which I accomplish as illustrated in the drawings, and as hereinafter fully described.

Those things which I claim as new will be set forth in the claims.

In the drawings, A represents an inclined trough, which, as shown, is open at the top, and is supported on standards M, and is adapted to receive and hold any suitable number of cards. The front end of this trough is open.

B is a cross-bar above and at the front of the trough. C C′ are castings bolted to the trough, one on each side. The ends *a* of these castings are enlarged, and are provided with sockets or holes.

D are vertical rods or bars which pass through the holes in the sockets *a*. *b* is a bar of metal, which is rather thin, and is secured at its ends to the rods D. As shown, the central portion of this bar is cut away, leaving near each end a long shoulder, *c*.

E is a bar which is secured to the lower ends of the rods D. The central portion, *d*, of this bar extends upward some distance, and to its upper end is bolted a rather thin piece of metal, *e*. The rods D, cross-bar *b*, and casting or bar E form a movable frame.

f are two projections which extend up a little distance above the bottom *t* of the trough, against which the lower edge of the front card in the trough comes in contact.

F is a roller supported in bearings at the front end of the trough, and so located that the upper edges of the cards in the trough can come in contact with such roller. Instead of a roller a fixed bar might be used. The thin bar *b* is so arranged that when the upper edge of a card is against the roller the card will be directly under this bar *b*, and the strip of metal *e* is so arranged that when the frame rises it will come in contact with the lower edge of the front card in the trough.

G is a link the upper end of which is pivoted to the inside, about the center, of the bar E.

H is a lever which is pivoted at *g* to a fork, I, which depends from the bottom of the trough. The forward end of the lever H is pivoted to the lower end of the link G. The other end of the lever is provided with a slot, *h*.

J is a shaft the ends of which are supported in suitable bearings in standards M. On this shaft is a cam, L, located in the slot *h*. This shaft J is driven, as shown, by a suitable clockwork, which is represented in the drawings, but need not be described. As shown, there is a pivoted lever, N, one end of which is provided with a pin, *i*, arranged to engage at fixed intervals with notches upon the periphery of a wheel, O, of the train, which will arrest the movement of the train until the pin *i* is released from the notch, which may be done automatically by devices not shown. P is a gong which may or may not be used.

At the front of the machine there is a face-plate, R, having openings for displaying the cards, a little back of which face-plate there is another plate, S, between which two plates the cards pass down.

j is a link pivoted at its upper end to a projection upon the bar E. Its lower end is pivoted to a system of levers which operate catches which pass into the passage back of the face-plate and hold the cards for a time, which catches are then withdrawn to release the cards, substantially as shown and described in a patent granted on my application, which patent is dated April 12, 1887, No. 360,881, and there-

fore these levers and catches need not be here particularly described.

k are two arms secured to the inside of the upper ends of the castings C. These arms are curved inward a little and arranged so that the cards pass readily under their lower ends.

Q is a round weight in the trough, which may be used to force the cards forward.

The operation is as follows: Suppose the parts to be in the position shown in Figs. 2 and 4, at which time the frame, which consists of the rods D and bars *b* E, will be at its lowest point and the lower edge of the front card in the trough will be in engagement with the two projections *f* and the upper edge in engagement with the bar *b*. By the rotation of the cam L the rear end of the lever will be depressed and the forward end raised, carrying with it said frame, lifting the bar *b*, which is a part of the frame, and lifting, also, the piece of metal, *e*, which is connected to the bar E. When the bar *b* is carried above the tops of the cards, they will move forward, so that the upper edge of the forward card will come in contact with the roller F. Then, as the frame continues to rise, the upper edge of the strip *e* will come in contact with the lower edge of the front card and will lift it, so that it will be cleared from the projections *f* and the weight behind will force the lower edge of the card forward a little, the parts then being in the position shown in Figs. 3 and 5. By the continued rotation of the cam L the frame will next be moved downward, and then the shoulders *c* (which are in fact a part of the lower edge of the bar *b*) will come in contact with the upper edge of the forward card and force it down, and it will fall into the passage behind the face-plate. The movement of the lever H and the said frame also operates the levers and catches which hold the cards in and release the same from the passage behind the face-plate, such levers and catches being operated through the link or arm *j*. When the frame descends, the bar *b*, at the same time that it forces downward the front card in the trough, passes in front of the next card, and then the parts will be returned to the position shown in Figs. 2 and 4, ready for repeating the operation.

The roller or bar F serves the purpose of a stop, and the pressure upon the front card will hold it against such stop and prevent it from dropping after its lower edge has been released from the projections or stops *f* until forced down by the bar *b*. The arms *k* are so arranged as not to interfere with the raising of the forward card in the trough, but will prevent any of the cards behind the forward one from being raised when the forward card is raised by the ascending frame.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a device for displaying advertising-cards, an inclined trough or receptacle for holding cards, in combination with a stop against which the upper part of each card can come in contact when brought to the front, a movable frame carrying a thin bar, *b*, and a thin strip or piece, *e*, said bar *b* and strip *e* being arranged so as to come in contact, one with the upper edge and the other with the lower edge of the forward card, and a pivoted lever, H, loosely connected at its forward end to the movable frame, substantially as and for the purpose specified.

2. In a device for displaying advertising-cards, an inclined trough or receptacle for holding cards, in combination with a stop, F, and one or more stops, *f*, a movable frame provided with a cross-bar, *b*, and with a thin strip, *e*, a pivoted lever, H, loosely connected at its forward end to the movable frame, and provided with a slot at its rear end, and a cam, L, on a rotating shaft, J, substantially as and for the purposes specified.

3. In a device for displaying advertising-cards, an inclined trough or receptacle for holding cards, in combination with stops with which the upper and lower edges of the cards can come in contact, a movable frame provided with a cross-bar, *b*, and with a thin strip, *e*, arms *k*, pivoted lever H, loosely connected at its forward end to the movable frame, and provided with a slot at its rear end, and a cam, L, on a rotating shaft, substantially as and for the purposes specified.

4. In a device for displaying advertising-cards, an inclined trough or receptacle for holding cards, in combination with stops with which the upper and lower edges of the cards can come in contact, a movable frame carrying a thin bar, *b*, and a thin strip or piece, *e*, a pivoted lever, H, loosely connected at its forward end with the movable frame, and a link, *j*, pivoted at its upper end to the movable frame and pivoted at its lower end to a system of levers which operate catches which hold the cards for a limited time between the plates R S, substantially as and for the purposes specified.

OTTO C. HOFFMANN.

Witnesses:
ALBERT H. ADAMS,
HARRY T. JONES.