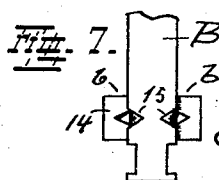
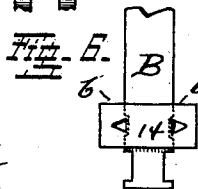
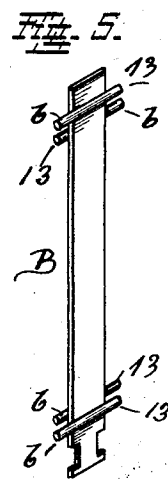
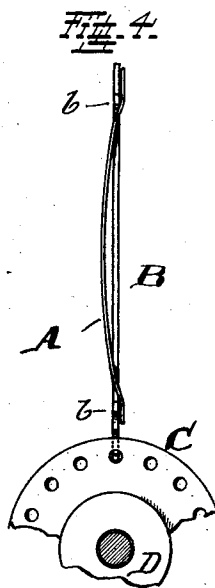
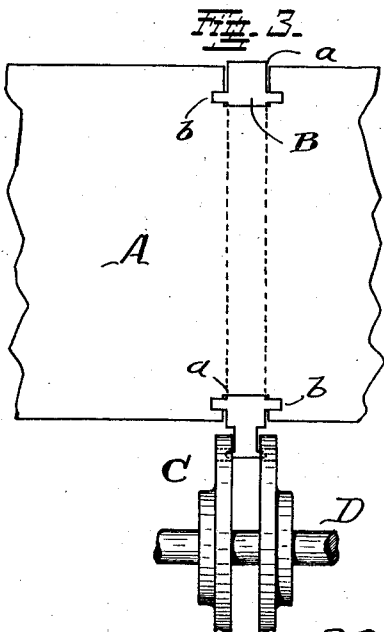
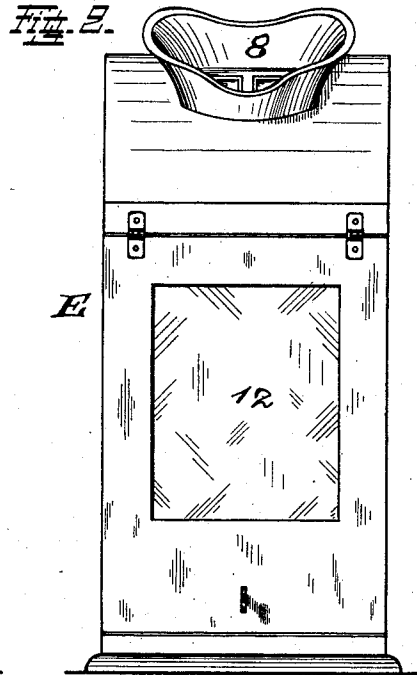
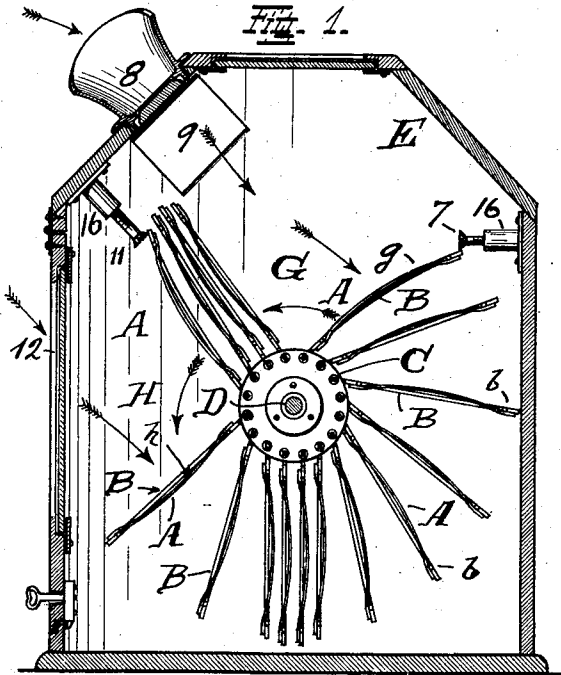


R. R. WHITING.
CARD EXHIBITING DEVICE.
APPLICATION FILED NOV. 13, 1911.

1,062,068.

Patented May 20, 1913.



Witnesses.
A. C. Clifton
T. LeBeau.

Inventor.
Richard R. Whiting
by C. Spongel atty.

UNITED STATES PATENT OFFICE.

RICHARD R. WHITING, OF NORWOOD, OHIO.

CARD-EXHIBITING DEVICE.

1,062,068.

Specification of Letters Patent.

Patented May 20, 1913.

Application filed November 13, 1911. Serial No. 660,057.

To all whom it may concern:

Be it known that I, RICHARD R. WHITING, a citizen of the United States, and a resident of Norwood, Hamilton county, State of Ohio, have invented certain new and useful Improvements in Card-Exhibiting Devices; and I do declare the following to be a clear, full, and exact description of the invention, attention being called to the drawing which accompanies this application and forms a part thereof.

This invention concerns devices in which exhibits in card-form are presented for inspection and viewing. The exhibits may be pictures, photos, stereoscopic views, or other matter which may be presented in card-form.

One of the features of the invention relates to the construction and arrangement whereby two card-faces are exposed simultaneously for view and in convenient positions for viewing by one person. The matter so displayed on the two-faces may be independent, one from the other, or be related, as for instance one card-face may bear matter descriptive or explanatory with reference to the matter on the other card-face exposed at the same time.

Another feature relates to the means whereby the cards are attached and supported and whereby they are held in position for viewing.

In the following specification and particularly pointed out in the claims at the end thereof, will be found a full description of my invention, together with its operation, parts and construction, which latter is also illustrated in the accompanying drawing, in which:—

Figure 1 shows a vertical cross-section of my device, including the means whereby the cards are supported and manipulated. Fig. 2, is a front-view of this device. Fig. 3, shows part of the front-side of one of the view-cards and of the means for attaching it in position. Fig. 4, shows these parts in side-elevation. Fig. 5, shows in perspective view a modified construction of the supporting means. Figs. 6 and 7, in front and rear-views respectively, show another modified construction of these means.

View-cards A, are attached to slender elastic arms B, which arms are each attached to a hub C. This latter is mounted upon a shaft D, which is supported for rotation in

a case E. Rotation may be had in any manner, directly manual, or by any suitable mechanism. The connection of the arms to this hub is in a manner permitting each arm to have an individual, limited movement on said hub and in the plane of rotation of the same, but independent thereof. This part of the arrangement and construction may be substantially as shown in my U. S. patents numbered respectively 963,841 and 979,117.

The views in their movement with the hub are temporarily arrested, one at a time, by means of a stop 7, located so as to project in the path of the cards, engaging by preference the ends of the arms which carry the cards. This retardation produces a gap between the views as shown at G in Fig. 1 whereby the view held back is caused to stop in a position for convenient observation, either directly, or through a view-glass 8, which may be either a stereoscope, or a graphoscope. In case a stereoscopic glass is used, it becomes necessary to provide a septum 9. The effect of this retardation is that when the rotary movement of the hub proceeds, a spring-tension is set up in the retarded arm and the continuation of the movement effects finally the forcible release of the retarded arm from stop 7. This causes said arm, under the impulse of the spring-action to flop at once over to the other side of the gap, so that the view next following it becomes visible for observation in like manner. The views so released encounter in due time a second stop 11, whereby another gap H is produced as best shown in Fig. 1. The object of this second gap is to expose another card-face which may be the back of the card which has preceded the card held back by stop 11, to render visible any matter which may be provided thereon and which matter becomes observable through an opening 12 in the front of the case. By preference this opening is closed by a plain glass to protect the interior of the case and the contents thereof.

The action and operation of the parts involved is so timed that two cards are always retarded and two card-faces are always simultaneously in view, this being the front-side of one card and the rear-side of another. The matter so exhibited on the two visible sides may be related to each other, as for instance the matter on the card visible through opening 12 may be descriptive matter ex-

planatory of the view, visible through view-glass 8. However this need not necessarily be so, and the exposed faces may carry each independent matter.

5 It will now be understood from the description rendered, that each card-face on each side of each card will bear matter, and when the matter on one card-face is descriptive for instance, it would not relate to the
10 matter on the other card-face on the same arm, but to the matter on a card-face carried by another arm spaced from the arm first mentioned, the space being dependent on the length of arms B and on the position
15 of stops 7 and 11 respectively. Thus for instance, referring to Fig. 1, the matter on card-face *h* in gap H and visible through opening 12, if related to the matter on card-face *g* in gap G and visible through glass 8,
20 is not carried on the same arm, but on the opposite side of another arm. Therefore if the two sides of a card are to be used, this matter would be on the opposite side of another card. However instead of using both
25 sides of a card in this manner, two cards having matter on one side only, might be secured back to back to arms B, these latter being constructed accordingly to permit such attachment of two cards.

30 The manner of attachment of the cards to the arms is illustrated in Figs. 3, 4, 5, 6 and 7. The cards have rectangular notches on opposite edges as shown at *a*, the width of the notches between their parallel edges
35 being slightly in excess of the width of the arms. These latter have lateral projections *b*, on opposite sides near each end adapted to catch the card after it has been slightly flexed and to hold it by lying over and engaging the opposite edges of these notches.
40 Observe Figs. 3 and 4. These projections may be integral with the arms as shown in Figs. 3 and 4, or short cross-pieces 13 may be soldered or otherwise secured to the arms
45 as shown in Fig. 5. This figure illustrates also possibility of attaching two cards to an arm by having two sets of such projections *b* on opposite sides of each arm.

50 Another form is illustrated in Figs. 6 and 7, where pieces of sheet-metal 14 are secured flatwise against the arms by having tangs

15, forced out of said metal and clenched around the edges of the arms.

Stops 7 and 11 are preferably obtained by means of screws, adjustably seated, each
55 in a post 16, whereby accurate adjustment may be had for the purpose of regulating the degree of retardation of each card-face and of timing the proper and simultaneous release of the two faces to be on view at a
60 time.

Having described my invention, I claim as new:

1. In a card-exhibiting device, the combination of a hub, means to rotate it, yielding
65 arms carried thereon which have lateral projections on each side near each of their ends and cards having notches in opposite edges adapted to be occupied by portions of said arms, the cards being held in position
70 against the arms by the projections mentioned which extend over and engage the opposite edges of the notches.

2. In card-exhibiting devices, means for holding view-cards in position having
75 notches in opposite edges and which means consist of holding-arms provided with lateral projections on each side near each end, said projections being adapted to hold the cards against the arms by engaging the
80 opposite edges of the notches therein.

3. In a card-exhibiting device, arms which have lateral projections near each end, in combination with cards which have notches in opposite edges and are adapted to be held
85 in place against said arms by the projections on these latter while in engagement with the notched portions of the cards.

4. In a card-exhibiting device, the combination of view-cards having rectangular
90 notches in opposite edges in combination with means adapted to hold them in position by being in engagement with the opposite parallel edges of the notched portions of said cards and with part of the cards be-
95 tween the notches on one side thereof.

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

RICHARD R. WHITING.

Witnesses:

C. SPENGEL,
T. LE BEAU.