

No. 841,966.

PATENTED JAN. 22, 1907.

A. G. HIGGINS.
CARD DEALING DEVICE.
APPLICATION FILED MAR. 31, 1906.

Fig. 1.

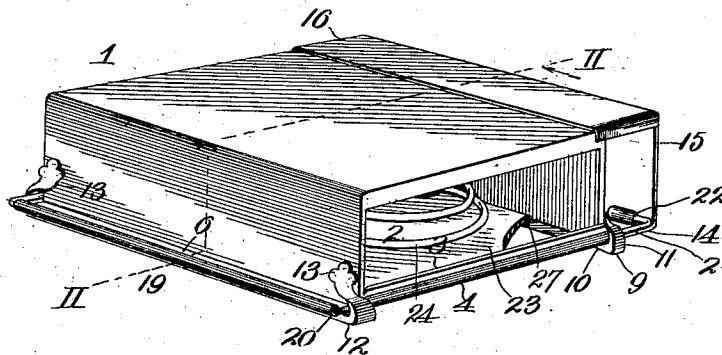


Fig. 2.

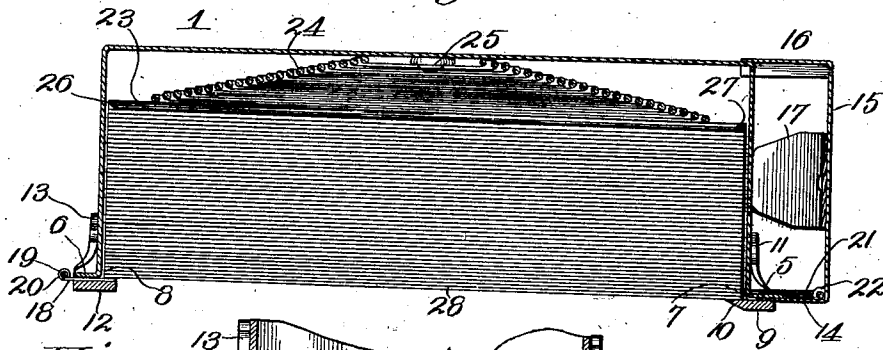


Fig. 3.

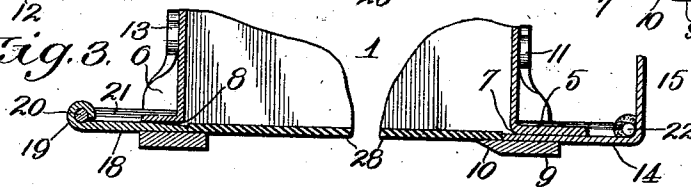
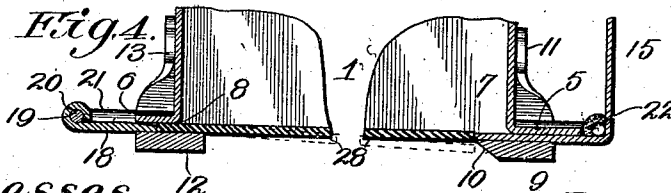


Fig. 4.



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UNITED STATES PATENT OFFICE.

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CARD-DEALING DEVICE.

No. 841,966.

Specification of Letters Patent.

Patented Jan. 22, 1907.

Application filed March 31, 1906. Serial No. 309,024.

To all whom it may concern:

Be it known that I, ALBERT G. HIGGINS, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Card-Dealing Devices, of which the following is a specification.

This invention relates to card-dealing devices; and my object is to produce a device of this character by which any one can deal cards expeditiously.

A further object is to produce a device of this character whereby it is impossible to deal more than one card at a time.

A still further object is to produce a card-dealing device which operates reliably and which is of economical and ornamental construction.

With these and other objects in view, as hereinafter appear, the invention consists in certain novel and peculiar features of construction and organization, as hereinafter described and claimed, and in order that it may be fully understood reference is to be had to the accompanying drawings, in which—

Figure 1 is a perspective view of a card-dealing device embodying my invention. Fig. 2 is an enlarged section taken on the line II II of Fig. 1 and charged with a number of cards. Fig. 3 is a similar but larger section of the lower portion of the device broken away and showing a card in position to be moved preliminary to its ejection. Fig. 4 is a view similar to Fig. 3 after the card has been moved and in position to which it is adjusted immediately prior to its ejection.

In the said drawings, 1 indicates a rectangular box proportioned to receive snugly the cards to be dealt, and said box is preferably stamped out of sheet metal and provided at one side with an opening 2, extending from the front to the rear wall and nearly the full depth of the box, the portion of said side at the lower margin of said opening being bent outwardly to provide a downwardly and inwardly beveled surface 3, and at the lower edges said sides are preferably bent back to form cylindrical guides 4, only one of which is shown. The rear and front walls, respectively, of the box are bent outwardly to form the horizontal flanges 5 and 6, respectively, so as to leave spaces 7 and 8 between the lower sides of said flanges and the plane of the lower margins of the side walls, the space

7 being somewhat shallower than the thickness of one of the cards and the space 8 slightly deeper than the thickness of one of the cards to be dealt by the device, as herein- after explained.

9 indicates a cross-bar underlying the flange 5 so as to form a closure for the bottom of the space or slot 7, provided for approximately its full length with a forwardly- projecting shelf 10 of substantially V shape in cross-section, the lower or beveled side of said shelf extending downwardly and rearwardly. Said bar is secured rigidly to the box, preferably by bending its extremities upward and inward and brazing or otherwise securing them to the rear wall of the box, as at 11.

12 indicates a cross-bar underlying flange 6 and forming a closure for space or slot 8, and said bar projects rearwardly of the front wall of the box, so as to form a shelf, the extremities of said bar being bent upwardly and inwardly, as at 13, and secured to the front wall of the box.

14 indicates a presser-plate engaged in slot 7 and formed with a suitable handle, preferably consisting of an upright portion 15 and a flange 16, projecting forward from the upper edge of portion 15 and overlapping the top of the box, said presser-plate being held retracted normally by spring-pressure, preferably by means of a flat spring 17, secured to handle 15 and bearing against the rear wall of the box.

18 indicates a reciprocatory ejector-plate fitting slidably in space or slot 8 and preferably secured at its front edge, as at 19, to the cross-piece 20 of a wire frame having side portions 21 extending slidably through guides 4 and terminating at their rear ends in inwardly-projecting arms 22, soldered or otherwise secured to the presser-plate.

23 indicates a feed-plate, arranged within the box and carried by a helical spring 24, secured by preference to the top of the box, as shown at 25, said spring being of sufficient expansive property to hold the feed-plate down upon the shelves 10 and 12, and said feed-plate is preferably of substantially the same area as the cards and has its front and rear edges beveled upwardly, as at 26 and 27, for a purpose hereinafter explained.

For use in dealing playing-cards 28 a box of oblong rectangular form is necessary, because playing-cards are almost invariably of that configuration, and the cards are adapted

to be fitted endwise through opening 2, so that their side edges shall be contiguous to the front and back walls. In placing the cards in position the operator by pressure of the thumb or fingers moves the feed-plate to within a sufficient distance of the top of the box to permit the cards to be slipped through said opening 2, as above stated, care being observed that the ends of all the cards lie within the plane of said opening. When the cards are thus arranged, the pressure of the feed-plate presses them downward until the undermost one is supported upon shelf 10 and the inner end of ejector-plate 18. The dealer then grasps the box from above with her fingers and thumb engaging the handle 15 and the front wall of the box, or vice versa, and exerts a pinching power which imparts forward movement to the presser-plate, and hence to the ejector, the result of this movement withdrawing the last-named plate from under the cards by the time the first-named plate is ready to engage the undermost card, as shown in Fig. 3, and in this connection it will be noticed that it engages said card only because it is thinner than the same and cannot bend upward because it fits so snugly in slot 7 and is held to a direct reciprocatory movement in said slot. The continued pressure of the hand next advances the card to the position shown in Fig. 4—that is, until its rear edge clears the front edge of shelf 10—the advance movement of the presser-plate being checked at such time by the flange 5, though any other suitable stop may be employed. By thus arresting the feed-plate undue lost motion is avoided and there is no danger of delay in withdrawing the ejector-plate from slot 8. As the motion of the card is thus arrested the pressure of the feed-plate on the cards compels the undermost one at its unsupported edge, which is just forward of shelf 10, to drop down slightly, as indicated by dotted lines, Fig. 4, and at the same time the pressure of the hand is relaxed to permit spring 17 to return the reciprocatory frame, constituted by the presser and ejector plates and their connections, to its original position, the reverse movement of the ejector-plate causing it to press rearwardly against the undermost card and force the same in the same direction until its front side margin clears shelf 12, when it falls upon the table (not shown) upon which the game is being played, it being understood that the beveled surface of shelf 10 permits this action to take place and that in dealing the cards the device will be held barely above the table in order that no one may observe the face of the cards, which in card games should not be disclosed.

The entire action of dealing a card occurs within the time required to simply partially close and open the hand and the cards can not only be dealt expeditiously, but it is im-

possible for more than one card at a time to be ejected.

When empty, the feed-plate is normally held upon ledge 10 and ejector-plate 18 by spring 24. If operated while empty, the presser-plate by engagement with the beveled surface 27 will raise and slide under the feed-plate while the ejector-plate will be slid from under said feed-plate. When the handle is released or the pressure thereon is relaxed sufficiently, the spring 17 will return the movable plates to their original positions—that is to say, the presser-plate will be withdrawn from under the feed-plate and the ejector-plate will engage the beveled end 26 of the feed-plate, so as to force its way thereunder to its original position. It will thus be seen that operation of the device when empty will not result in injury to the presser and ejector plates, as would be the case if the front and rear edges of the feed-plate were not beveled or correspondingly formed.

From the above description it will be apparent that I have produced a card-dealing device whereby the cards may be dealt accurately and quickly and which will be found of great convenience, especially by ladies, and I wish it to be understood that I do not wish to be restricted to the exact construction shown and described, as various modifications may be made in the form, proportion, detail construction, and arrangement of the parts without departing from the principle of construction involved.

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

1. A card-dealing device, comprising an open-bottom box, ledges underlying and spaced from opposite sides of the box and adapted to support cards therein, and means for applying downward pressure on the cards.

2. A card-dealing device, comprising an open-bottom box, ledges underlying and spaced from opposite sides of the box and adapted to support cards therein, means for applying downward pressure on the cards, means for pushing the undermost card edge-wise until it clears one of said ledges, and means for reversing the movement of said card until its opposite edge clears the other ledge.

3. A card-dealing device, comprising an open-bottom box, ledges underlying and spaced from opposite sides of the box, the rear ledge having its lower surface beveled forward and upward, means for applying downward pressure on cards bridging the space between the ledges, means for pushing the undermost card forward until it clears the beveled ledge, and means for reversing the movement of said card until its opposite edge clears the other ledge.

4. A card-dealing device, comprising an open-bottom box, ledges underlying and

spaced from opposite sides of the box, the rear ledge having its lower surface beveled forward and upward, means for applying downward pressure on cards bridging said space between the ledges, means for pushing the undermost card forward until it clears the beveled ledge, and means for imparting reverse movement to the card, of greater length than its original movement.

5. A card-dealing device, comprising an open-bottom box, ledges underlying and spaced from opposite sides of the box and adapted to support cards therein, means for applying downward pressure on the cards, a reciprocatory frame embodying a presser-plate projecting into the space between the box and one of the ledges, rearward and lying wholly in the plane of the undermost card and an ejector-plate in the corresponding space above the other ledge and underlying the undermost card.

6. A card-dealing device, comprising an open-bottom box, ledges underlying and spaced from opposite sides of the box and adapted to support cards therein, means for applying downward pressure on the cards, a reciprocatory frame embodying a presser-plate projecting into the space between the box and one of the ledges, rearward and lying wholly in the plane of the undermost card, and an ejector-plate in the corresponding space above the other ledge and underlying the undermost card, means for moving the ejector-plate forward until it is withdrawn

from below the cards and for then causing the presser-plate to advance the undermost card until its rear edge clears the corresponding ledge.

7. A card-dealing device, comprising an open-bottom box, ledges underlying and spaced from opposite sides of the box and adapted to support cards therein, means for applying downward pressure on the cards, a reciprocatory frame embodying a presser-plate projecting into the space between the box and one of the ledges, rearward and lying wholly in the plane of the undermost card, and an ejector-plate in the corresponding space above the other ledge and underlying the undermost card, and means for moving the ejector-plate forward until it is withdrawn from below the cards and then causing the presser-plate to advance the undermost card until its rear edge clears the corresponding ledge.

8. A card-dealing device comprising an open-bottom box, ledges underlying and spaced from opposite sides of the box and adapted to support cards therein, and means for ejecting the undermost card through the open bottom of the box.

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

ALBERT G. HIGGINS.

Witnesses:

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G. Y. THORPE.