

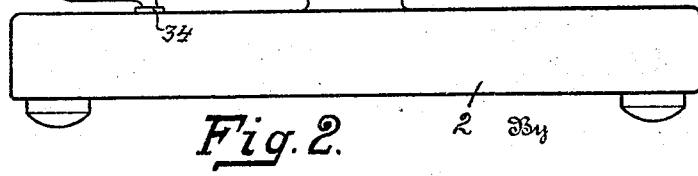
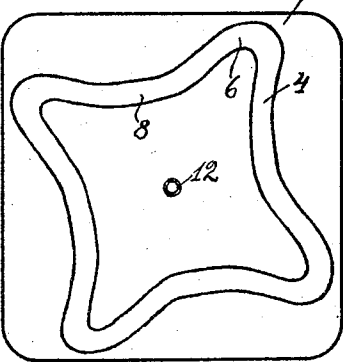
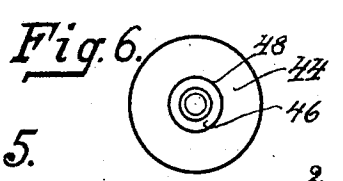
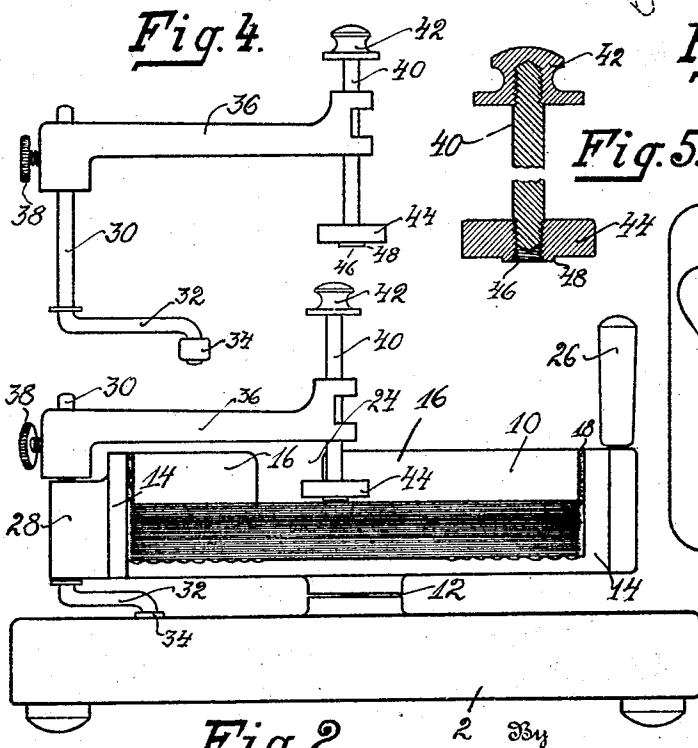
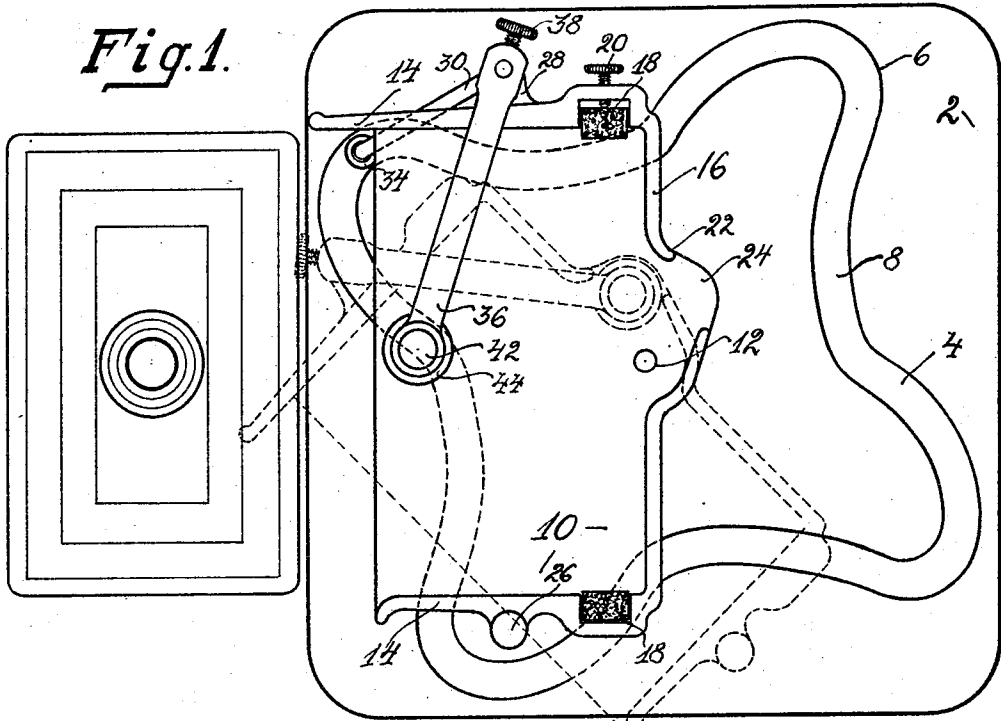
Dec. 13, 1932.

I. FLORMAN

1,891,085

CARD DEALING DEVICE

Filed Oct. 26, 1932



Inventor
Irving Florman
Corney & Co.
Attorneys

UNITED STATES PATENT OFFICE

IRVING FLORMAN, OF NEW YORK, N. Y.

CARD DEALING DEVICE

Application filed October 26, 1932. Serial No. 639,693.

My invention relates to card dealing devices for dealing a pack of playing cards one by one into a number of separate hands.

The primary object of the invention is to provide a simple and inexpensive device having very few parts which will yet deal the cards quickly and accurately.

One feature of the invention lies in the use of a card dealing member which rests on the pack of cards by its own weight only and which is provided with a flat portion which rests on the deck and a shoulder which will engage the edge of a single card to push it off the top of the deck.

A second feature is that the pack of cards is held in place by felt or similar pressure elements which engage only the back parts of the end edges of the cards. In this way, after a card has been moved a slight distance, the grip of the holder is released and the card moves freely out of the device.

A further feature resides in the provision of a single, unitary dealing arm mounted on a movable card holder and operated by a fixed cam track.

Finally, I provide means for adjusting the device to operate on different sizes of cards.

Other objects and advantages will appear more fully from the following description taken in conjunction with the accompanying drawing which forms a part thereof.

In the drawing:

Fig. 1 is a top plan view of a device according to the invention.

Fig. 2 is a side elevation.

Fig. 3 is a top plan view showing the base in reduced size.

Fig. 4 is a side elevation of the dealing arm.

Fig. 5 is an enlarged cross section through the card engaging member.

Fig. 6 is a bottom plan view of the same.

The invention includes a base 2 provided on its upper face with a cam track or groove 4 composed of four similar sections (or any other number equal to the number of hands to be dealt) each having a high or outer section 6 and a low or inner section 8. A frame 10 slightly longer than a card and of substantially the same width is pivoted at 12 on the base 2. The end walls 14 and rear wall 16 of

this frame are at least as high as the thickness of a normal pack of cards while the frame is open at its front or outer side. At the rear of each side wall is a presser member 18 of felt or the like for holding the pack of cards frictionally in the frame. One or both of these pressers may be mounted on the ends of bolts 20 threaded in the side wall, so that by turning these bolts the presser may be moved inward to grip cards of less length than the normal. A portion of the central part of the rear wall 16 is bent back as at 22 and the adjacent part of the wall is cut away as at 24 for a purpose to be described below. The frame is provided at one side with a handle 26, preferably of the type which turns freely on its axis.

On the opposite side wall of the frame is an ear 28 in which is oscillatably mounted a shaft 30. The lower end of this shaft is bent to form a horizontally extending arm 32, the end of which is bent downward and provided with a roller 34 which engages in the cam groove 4. On the upper end of the shaft is an arm 36 angularly adjustable by a set screw 38. This arm is arranged at an angle of about 30° to the arm 32, and extends out over the card holding frame and substantially to the center thereof.

A pin 40 is freely slidable vertically in the outer end of the arm 36. This pin is provided with a knob 42 by which it can be raised and lowered. The lower end carries a disc 44, the lower face of which has a central circular raised portion 46 delineated by a shoulder 48 having a height not greater than the normal thickness of a card.

The use and operation of the device should be clear. The pin 40 is raised (broken line position, Fig. 2) and a pack of cards is pushed into the holder until the end edges of the cards are engaged and held by the presser strips. The pin 40 is released and the disc 44 rests on the top of the pack. The card holder is now rotated by the handle 26. During each revolution the shaft 30 will be rocked four times, and the disc 44 will therefore reciprocate four times between the full line and the broken line positions shown in Fig. 1. At the rearward limit, a part of the flat edge por-

tion of the disc still rests on the top card of the pack, and thus prevents the disc from dropping down behind the cards, but the main body of the disc will pass into the space provided by the bent wall portion 22 and the opening 24. At this point, the disc drops slightly by its own weight so that as the arm 36 moves forward again the shoulder 48 will engage the back edge of the top card only and push it out of the holder. The other cards will be held in place by the presser strips.

After a card has been dealt to one hand the arm 36 moves back and engages the next card which is then delivered to the next succeeding hand. The rotation of the holder will thus result in the dealing of cards one at a time to the four hands.

It is quite evident that my construction is very simple and contains very few parts. The base and card holder can be die cast and thus made very cheaply. The cards are held only at the extreme rear of the holder, and when a card is once started it moves quickly and easily off the holder, and there is no danger of its failing to drop off at the proper place. By providing a positive shoulder for moving the cards, I am able to let the engaging member rest on the cards by its own weight only, and the lower cards are not pressed together. Any danger of causing the cards to stick so that two or more will be dealt is thus avoided. The whole arrangement is very efficient and accurate.

While I have thus described herein one embodiment of my invention, I wish it to be understood that I do not intend to limit myself thereby except within the scope of the appended claims.

I claim:

1. In a card dealing device, a base having a cam track therein formed of a plurality of similar sections, a card holder rotatably mounted on said base, and means mounted on said card holder for movement therewith to deal cards individually from the holder, said means being operated once by each section of said cam track.

2. In a card dealing device, a base having a cam track therein formed of four similar sections, a card holding frame rotatably mounted on said base, a vertical shaft oscillatably mounted on said frame at one end thereof, an arm on the lower end of said shaft, means on the outer end of said arm engaging in said cam track, whereby said shaft is oscillated four times during a complete revolution of said frame, an arm mounted on the upper end of said shaft, and means on the outer end of said arm engaging the cards to deal a single card from the frame at each oscillation of said shaft.

3. In a card dealing device, a base having a cam track therein formed of four similar sections, a card holding frame rotatably mounted on said base, a vertical shaft oscil-

latably mounted on said frame at one end thereof, an arm on the lower end of said shaft, means on the outer end of said arm engaging in said cam track, whereby said shaft is oscillated four times during a complete revolution of said frame, an arm mounted on the upper end of said shaft, and means on the outer end of said arm engaging the cards to deal a single card from the frame at each oscillation of said shaft, said card engaging means including a freely vertically slidable member held in engagement with the cards by its own weight only.

4. In a card dealing device, a base having a cam track therein formed of four similar sections, a card holding frame rotatably mounted on said base, a vertical shaft oscillatably mounted on said frame at one end thereof, an arm on the lower end of said shaft, means on the outer end of said arm engaging in said cam track, whereby said shaft is oscillated four times during a complete revolution of said frame, an arm mounted on the upper end of said shaft, and means on the outer end of said arm engaging the cards to deal a single card from the frame at each oscillation of said shaft, said card engaging means including a freely vertically slidable member held in engagement with the cards by its own weight only, and having positive means to engage the rear edge of the uppermost card.

5. In a card dealing device, a base having a cam track therein formed of four similar sections, a card holding frame rotatably mounted on said base, a vertical shaft oscillatably mounted on said frame at one end thereof, an arm on the lower end of said shaft, means on the outer end of said arm engaging in said cam track, whereby said shaft is oscillated four times during a complete revolution of said frame, an arm mounted on the upper end of said shaft, and means on the outer end of said arm engaging the cards to deal a single card from the frame at each oscillation of said shaft, said card engaging means comprising a pin freely vertically slidable in the outer end of said arm, a plate on the lower end of said pin, and a raised portion on said plate delineated by a shoulder having a height not greater than the thickness of a card, said plate at the rearward end of each oscillation resting on the edge of the top card and said shoulder engaging behind the rear edge of such card.

6. In a card dealing device, a base having a cam track therein formed of four similar sections, a card holding frame rotatably mounted on said base, a vertical shaft oscillatably mounted on said frame at one end thereof, an arm on the lower end of said shaft, means on the outer end of said arm engaging in said cam track, whereby said shaft is oscillated four times during a complete revolution of said frame, an arm

- mounted on the upper end of said shaft, and means on the outer end of said arm engaging the cards to deal a single card from the frame at each oscillation of said shaft, said card engaging means comprising a pin freely vertically slidable in the outer end of said arm, a plate on the lower end of said pin, and a raised portion on said plate delineated by a shoulder having a height not greater than the thickness of a card, said plate at the rearward end of each oscillation resting on the edge of the top card and said shoulder engaging behind the rear edge of such card, said frame having means at one end to engage frictionally the ends of the cards, said means being located at the rear portion of the frame only.
7. In a card dealing device, a card holding frame open at its outer side, and means at one end of said frame and adjacent the inner side only to hold cards frictionally in said frame.
8. In a card dealing device, a card holding frame open at its outer side, and means at one end of said frame and adjacent the inner side only to hold cards frictionally in said frame, said means being adjustable lengthwise of the frame.
9. A card dealing device comprising a base having a cam track therein formed of four similar sections, a card holding frame pivoted at its inner side on a vertical pivot arranged substantially at the center of said base, the outer side of said frame being open, a vertical shaft oscillatably mounted at one end of said frame, a horizontal arm on the lower end of said shaft, the outer end of said arm being bent down and engaging in said cam track, a second horizontal arm on the upper end of said shaft extending over said frame substantially to the center thereof, said frame having end walls, presser strips mounted at the inner part of each end wall to engage the ends of the cards frictionally to hold them in the frame, a pin freely vertically slidable in the outer end of said second arm, a disc on the lower end of said pin having a raised central portion on its lower face delineated by a shoulder of a height not greater than the thickness of a card, and means to turn said frame, whereby the cards will be dealt individually into four separate hands.
10. In a card dealing device, a base, a card holding frame rotatably mounted on said base, means movable with said frame to deal cards therefrom, said means including a reciprocating means and a freely vertically slidable element reciprocated by said reciprocating means and vertically supported solely by the cards to deal the same one at a time from the frame.
11. In a card dealing device, a base, a card holding frame rotatably mounted on said base, and means movable with said frame to deal the cards therefrom, said means including an arm oscillatably mounted on said frame, means controlled by movement of said frame to oscillate said arm, and an element freely vertically slidably mounted in the outer end of said arm and oscillated thereby and vertically supported solely by the cards to deal the same one at a time from the frame.
- In testimony whereof, I have hereunto set my signature.
- IRVING FLORMAN.

75

80

85

90

95

100

105

110

115

120

125

130