

R. A. BERGER.
CARD DEALING MACHINE.
APPLICATION FILED OCT. 27, 1909.

955,044.

Patented Apr. 12, 1910.

2 SHEETS—SHEET 2.

FIG. 3.

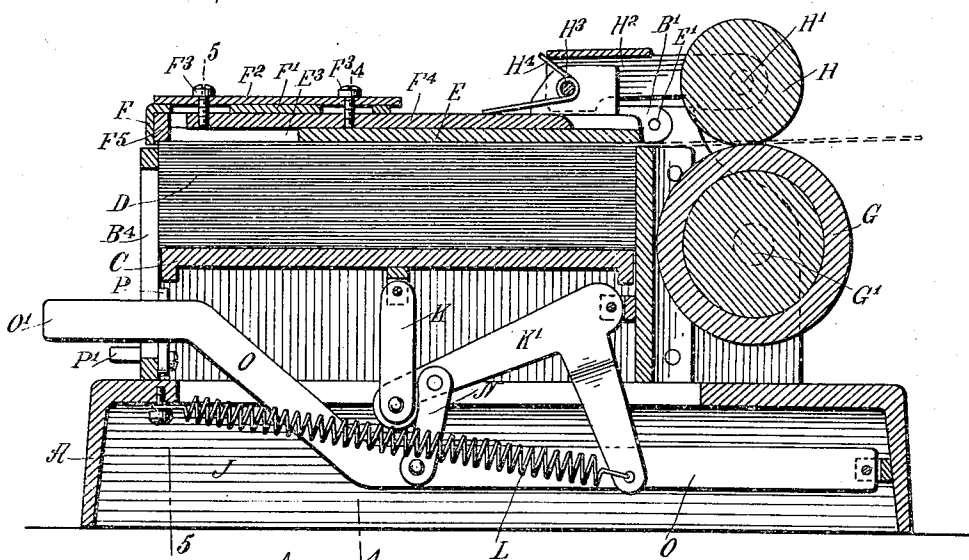


FIG. 4.

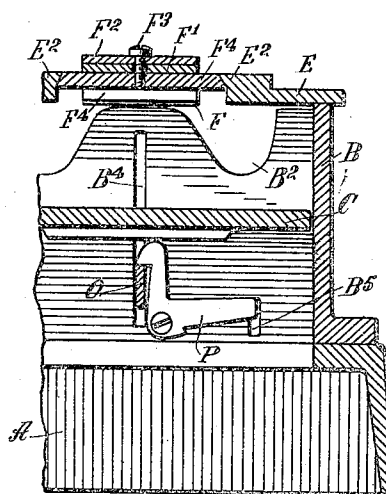
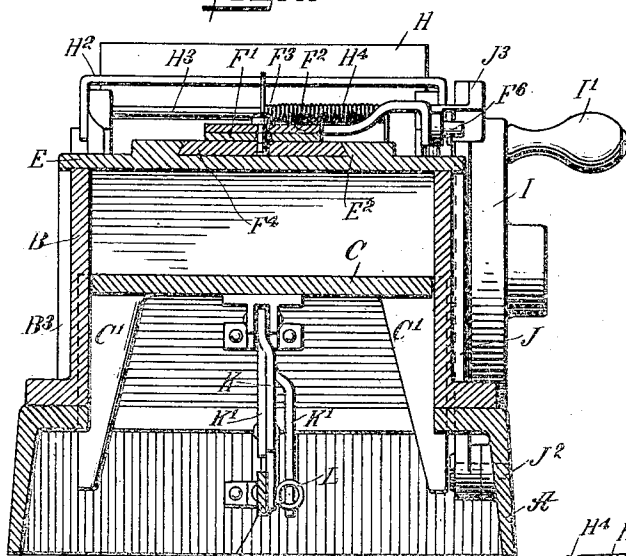
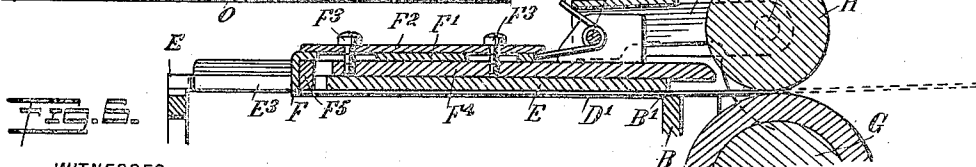


FIG. 5.



WITNESSES

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RICHARD ALFRED BERGER, OF NEW YORK, N. Y.

CARD-DEALING MACHINE.

955,044.

Specification of Letters Patent.

Patented Apr. 12, 1910.

Application filed October 27, 1909. Serial No. 524,808.

To all whom it may concern:

Be it known that I, RICHARD A. BERGER, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Card-Dealing Machine, of which the following is a full, clear, and exact description.

10 The invention relates to card game accessories, and its object is to provide a new and improved card-dealing machine, arranged to permit accurate and quick dealing of the cards one by one, without the cards being
15 handled or touched by the dealer, thus preventing cheating by sharpers, and as the cards are not touched by the dealer, soiling thereof by wet fingers is prevented, thus keeping the cards in a sanitary condition.

20 A further object of the invention is to keep the cards straight and to prevent disputes among the players as to whose turn it is to deal the cards, especially as the machine is portable and can be readily shifted over
25 the table from the last dealer to the next one, so that the position of the machine indicates the last dealer.

For the purpose mentioned, use is made of mechanical means for moving the top card
30 of a deck of cards off the deck and discharging it from the machine.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in
35 which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the card-dealing machine; Fig. 2 is a side elevation of the same, the crank wheel being omitted;
40 Fig. 3 is a longitudinal central section of the same; Fig. 4 is a cross section of the same on the line 4—4 of Fig. 3; Fig. 5 is a transverse section of part of the machine, the section being on the line 5—5 of Fig. 3;
45 and Fig. 6 is a longitudinal section of part of the machine and showing the top card entered between the drawing rollers.

The card-dealing machine is mounted on a suitably constructed base A supporting a receptacle B having a vertically movable bottom C supporting a deck of cards D, the top card D' of which abuts against the under
50 side of a top plate E, pivoted at its forward end E' on the receptacle B, to allow of swinging the top plate E upward when plac-

ing the deck of cards into the receptacle B. The top card D' is adapted to be engaged at its rear edge by an intermittently reciprocating pusher F, for pushing the top card forward until the front end of the top card D' passes between a pair of drawing rollers G and H, employed for finally drawing the top card D' completely off the deck of cards and discharging it in front of the machine onto the card table on which the machine
60 rests. The drawing roller G is preferably covered with rubber or other elastic material, and its shaft G' is journaled in suitable bearings arranged on the forward part of the receptacle B, and on the other end of
65 the shaft G' is secured a wheel I having a handle I' adapted to be taken hold of by the dealer for turning the wheel I in the direction of the arrow *a* to rotate the drawing roller G. The top drawing roller H has its
70 shaft H' journaled in bearings arranged on a frame H² mounted to swing on a pivot H³ held on top of the plate E, and the said frame H² is pressed on by a spring H⁴ so as to cause the drawing roller H to bear down
75 onto the top card D' and thus press the top card in contact with the drawing roller G, so that when the latter is rotated the top card D' is drawn forward off the deck of cards and discharged at the front end of the
80 machine. The pusher F is provided with an angular arm F' adapted to be clamped by a clamping plate F² and screws F³ to a slide F⁴, mounted to slide longitudinally in suitable bearings E² formed on the top plate E.
85 In order to prevent the pusher F from passing down beyond the thickness of the top card D', a stop or gage block F⁵ is secured to the pusher F and which is adapted to rest on the upper surface of the top card D' at the
90 time the pusher F is in its rearmost position, that is, beyond the rear edge of the top card D'. The pusher F extends downward through a cut-out portion E³ in the rear of the top plate E, to pass beyond the rear edge
95 of the top card D' to drop behind the rear edge of the said card, as will be readily understood by reference to Figs. 1 and 3, so that on the next forward movement of the pusher F the top card is pushed forward and
100 through a passage B' formed between the front end of the receptacle B and the under side of the top plate E (see Figs. 3 and 6). On loosening the screws F³, the pusher F may be adjusted in a longitudinal direction
105 110

so as to bring the pusher F in proper relation to the cards, that is, to bring the pusher F beyond the rear end of the uppermost top card D' at the time the pusher is in its rear-
 5 most position. The rear end of the receptacle B has cut-out portions B², to allow convenient placing of the cards in position in the receptacle B at the time the top plate E is swung open.

10 In order to impart a reciprocating motion to the pusher F, the following arrangement is made: On the inner face of the wheel I is formed a cam groove I² (see dotted lines in Fig. 2), engaged by a friction roller J'
 15 held on a lever J, fulcrumed at J² on the base A. The upper end of the lever J is pivotally connected by a link J³ with a pin F⁶ projecting transversely from the clamping plate F², and hence when the wheel I is
 20 rotated as previously explained, then a swinging motion is given to the lever J, which by the link J³ imparts a reciprocating motion to the pusher F, it being, however,
 25 understood that the cam groove I² is so formed that the pusher F comes to rest at the end of its rearmost stroke during each revolution of the wheel I and the drawing
 30 roller G. By this arrangement the top card D' is completely removed from the deck of cards previous to the next following top
 card being started forward by the pusher F.

The bottom C of the receptacle B is spring-pressed and manually controlled, and for this purpose the following arrangement
 35 is made: The bottom C is provided at its sides with depending guiding arms C' (see Fig. 4) mounted to slide in bearings B³ arranged in the sides of the receptacle B, and the under side of the bottom C is pivotally
 40 connected by a link K with a bell crank lever K', pressed on by a spring L attached to the base A, as plainly indicated in Fig. 3. By this arrangement the bottom C is pressed
 45 in an upward direction so as to hold the top card D' of the deck of cards D in contact with the under side of the top plate E, as previously mentioned. The bell crank lever
 50 K' is pivotally connected by a link N with a lever O, fulcrumed on the base A and having a handle end O' extending through a
 55 vertical slot B⁴ formed in the rear end of the receptacle B. When the dealer presses the handle end O' in a downward direction then a swinging movement is given to the bell crank
 60 lever K', which by the link K moves the bottom C in a downward direction, to allow of conveniently placing the deck of cards in position in the receptacle B, the lowermost
 65 card resting on the bottom C. The lever O is adapted to be locked in its lowermost position by a spring-pressed catch P (see Fig. 5), having a handle end P' extending
 through a slot B⁵ in the rear end of the receptacle B. Now when the lever O is
 pressed downward, the spring-pressed catch

P engages the lever O and locks the same in place until the dealer presses the handle end P' of the catch P to release the lever O, with
 a view to allow the spring-pressed bell crank lever K' to move the bottom C upward as
 70 the top cards are removed one by one on using the machine for dealing the cards to the players in the desired number.

The operation is as follows: When the receptacle B is empty and it is desired to place
 75 a deck of cards into the receptacle for dealing the cards by the use of the machine and in the desired numbers, to the individual players, it is first necessary for the dealer to press the handle end O' of the lever O
 80 downward until the lever is locked in place by the spring catch P and the bottom C is in its lowermost position. The dealer now swings the top plate E upward, then places
 85 the deck of cards into the receptacle, after which the top plate E is swung back to its normal position of rest, and then the dealer presses the handle end P' of the spring catch
 90 P to release the lever O, thus allowing the spring L, the bell crank lever K' and the link K to press the bottom C upward and with it the deck of cards, until the top card
 95 D' rests against the under side of the top plate E. The dealer now turns the handle I', and in doing so the pusher F is moved
 100 into its rearmost position beyond the rear edge of the top card D', and then the pusher F is moved forward carrying along the top card D' until the forward end thereof is
 105 pushed between the drawing rollers G and H, which rotate on turning the handle I'. The drawing rollers G and H now draw the card forward while the pusher F returns to its rearmost position for engagement with
 110 the next top card, and the pusher F remains for the time being at a standstill until the first top card has been completely drawn out by the drawing rollers G and H and discharged by the same from the machine. A
 115 further turning of the handle I' causes the pusher F to start the next top card until the forward end thereof has passed between the drawing rollers G and H, when the above
 120 described operation is repeated.

From the foregoing it will be seen that by
 115 the arrangement described the cards are singly pushed off the deck and discharged from the machine at the front end thereof. Now the dealer having charge of the machine can readily move the same on the card
 120 table so as to discharge the desired number of cards in front of each player, the machine being retained by the dealer until the game is over, and then the machine is pushed to the next player for him to deal the cards.
 125

In case some of the cards are not dealt out for a game, the remaining cards in the receptacle B can be readily removed on the dealer lifting the top plate E, so that all
 130 the cards in the deck can be shuffled, and

then the entire deck be replaced in the machine, as above described, for dealing the cards for the next game.

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

1. A card dealing machine, comprising a receptacle having a movable bottom for supporting a deck of cards, a pivoted top plate for closing said receptacle, and a pusher mounted to slide on said top plate, and adapted to engage the rear edge of the top card of the said deck of cards.

2. A card dealing machine, comprising a receptacle having a spring-pressed bottom for supporting a deck of cards, a pivoted top plate for closing said receptacle, a pair of drawing rollers, and a pusher mounted to reciprocate on said top plate and operating in unison with the said drawing rollers, the said pusher pushing the cards successively between the drawing rollers.

3. A card dealing machine provided with a receptacle having a spring-pressed bottom for supporting a deck of cards, a pivoted top plate on said receptacle, a reciprocating pusher mounted to slide on the said top plate and adapted to engage the top card of the said deck of cards, a pair of drawing rollers between which the cards are successively pushed by said pusher, and a spring-pressed frame pivoted on the top plate and in which the top drawing roller is journaled.

4. In a card dealing machine, a receptacle having a movable bottom for a deck of cards to rest on, a spring-pressed bell crank lever connected with the under side of the said bottom, an operating lever connected with the said bell crank lever, and means for temporarily locking the said operating lever in lowermost position.

5. In a card dealing machine, a receptacle having a movable bottom for a deck of cards to rest on, a spring-pressed bell crank lever connected by a link with the under side of the said bottom to press the bottom in an upward direction, an operating lever connected with the said bell crank lever, and a manually controlled spring catch adapted to temporarily lock the said operating lever in lowermost position.

6. A card dealing machine, comprising a receptacle having a movable bottom for a deck of cards to rest on, a spring-pressed bell crank lever, a link connecting said bell crank lever with the under side of the said bottom, a pusher mounted to reciprocate on top of the said receptacle and adapted to engage the rear edge of the top card of the said deck of cards, a pair of drawing rollers in front of the said receptacle and between which the front end of the said top card is pushed by the said pusher, and manually controlled means for rotating the drawing

rollers and for imparting a reciprocating motion to the said pusher.

7. A card-dealing machine, comprising a receptacle having a movable bottom for a deck of cards to rest on, a spring-pressed bell crank lever connected with the under side of the said bottom, an operating lever connected with the said bell crank lever, means adapted to temporarily lock the said operating lever in lowermost position, a pusher mounted to reciprocate on top of the said receptacle and adapted to engage the rear edge of the top card of the said deck of cards, a pair of drawing rollers in front of the said receptacle and between which the front end of the said top card is pushed by the said pusher, and manually-controlled means for rotating the said drawing rollers and for imparting a reciprocating motion to the said pusher.

8. A card-dealing machine, comprising a receptacle having a movable bottom for a deck of cards to rest on, a pusher mounted to reciprocate on top of the said receptacle and adapted to engage the rear edge of the top card of the said deck of cards, a pair of drawing rollers in front of the said receptacle and between which the front end of the said top card is pushed by the said pusher, a spring-pressed pivoted frame in which one of the said drawing rollers is journaled, a crank wheel on the shaft of the other drawing roller for turning the latter, the said crank wheel having a cam groove, a lever having a friction roller engaging the said cam groove, and a link connecting the said lever with the said pusher.

9. A card-dealing machine, provided with a receptacle having a spring-pressed bottom for supporting a deck of cards, a pivoted top plate for closing the said receptacle and having a cut-out portion at the rear, and a reciprocating pusher mounted to slide on the said top plate and having a pushing lip extending transversely and below the under side of the said top plate to engage the rear edge of the top card of the said deck of cards.

10. A card-dealing machine provided with a receptacle having a spring-pressed bottom for supporting a deck of cards, a pivoted top plate for closing the said receptacle and having a cut-out portion at the rear, the forward end of the receptacle being spaced from the under side of the said top plate to form a passage for the top card of the deck, and a reciprocating pusher mounted to slide on the said top plate and having a pushing lip extending transversely and below the under side of the said top plate to engage the rear edge of the top card of the said deck of cards.

11. A card-dealing machine provided with a receptacle having a spring-pressed bottom for supporting a deck of cards, a

pivoted top plate for closing the said receptacle and having a cut-out portion at the rear, a reciprocating pusher mounted to slide in the said top plate and having a
5 pushing lip extending transversely and below the under side of the said top plate to engage the rear edge of the top card of the said deck of cards, a pair of drawing rollers in front of the said receptacle, a spring-
10 pressed frame pivoted on the said top plate and in which the top drawing roller is journaled, manually-controlled means for turning the lower drawing roller, and means for imparting a reciprocating motion to the
15 said pusher.

12. A card dealing machine, provided with a receptacle having a spring-pressed vertically movable bottom for supporting a deck of cards, a top plate pivoted at its
20 forward end on said receptacle, a slide mounted to slide longitudinally in bearings formed on the top plate, and a pusher adjustably secured to said slide and having a pushing lip extending transversely and below the underside of the said top plate to
25 engage the rear edge of the top card.

13. A card dealing machine, provided with a receptacle having a vertically movable bottom for a deck of cards to rest on,

a top plate on said receptacle, a slide mounted to slide longitudinally in bearings on the top plate, a pusher adapted to engage the rear edge of the top card of the said deck of cards, a clamping device for clamping the
30 pusher to the said slide, and means for reciprocating the slide. 35

14. A card dealing machine, provided with a receptacle having a vertically movable bottom for a deck of cards to rest on, a top plate for said receptacle, a slide mounted
40 to slide longitudinally in bearings on the top plate, a pusher secured to said slide and adapted to engage the rear edge of the top card, a pair of drawing rollers in front of the said receptacle and between which the
45 front end of the said top card is pushed by the said pusher, a cam rotating with one of the said drawing rollers, and means controlled by the cam for reciprocating the
50 said slide.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

RICHARD ALFRED BERGER.

Witnesses:

F. BIENZ,
A. BOESCH.