

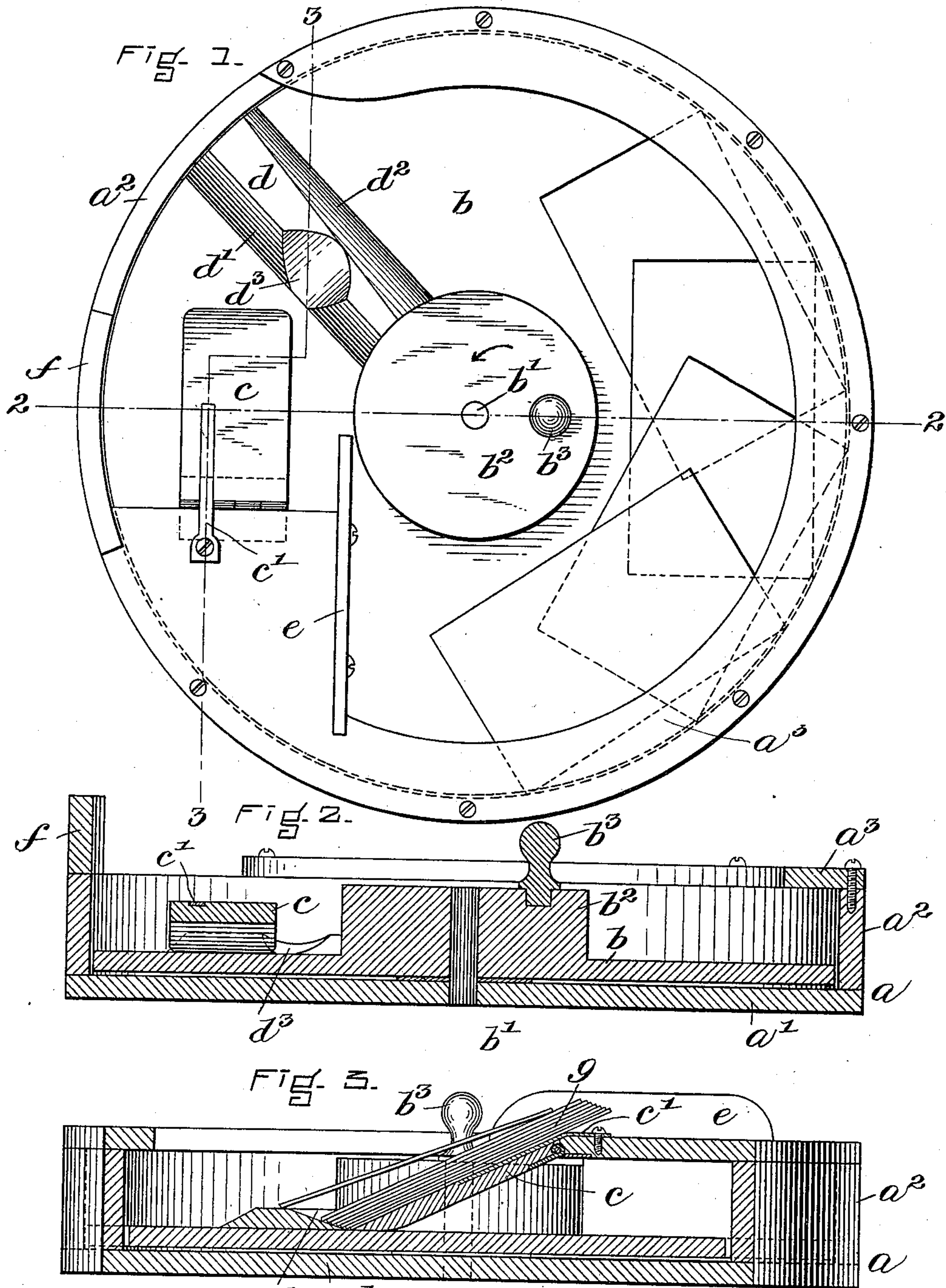
No. 629,470.

Patented July 25, 1899.

F. C. ROLLINS.
CARD SHUFFLING DEVICE.

(Application filed Apr. 7, 1899.)

(No Model.)



WITNESSES.
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UNITED STATES PATENT OFFICE.

FRED C. ROLLINS, OF BOSTON, MASSACHUSETTS.

CARD-SHUFFLING DEVICE.

SPECIFICATION forming part of Letters Patent No. 629,470, dated July 25, 1899.

Application filed April 7, 1899. Serial No. 712,132. (No model.)

To all whom it may concern:

Be it known that I, FRED C. ROLLINS, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Card-Shuffling Devices, of which the following is a description sufficiently full, clear, and exact to enable those skilled in the art to which it appertains or with which it is most nearly connected to make and use the same.

My invention relates to devices for shuffling cards, and comprises certain novel constructions and combinations of parts by which I am enabled to thoroughly and expeditiously mix or shuffle a pack of cards.

To this end my invention consists in combining with a rotary table adapted to contain and carry the cards a detent which by its variable pressure upon the cards beneath it intermittently holds back or retards the movement of some of the cards of the pack, whereby they are pushed back among the cards immediately following. By the constant repetition of this action the cards are thoroughly shuffled in an indeterminate order.

In the drawings I have illustrated one of the forms in which my invention may be embodied.

Figure 1 is a plan view thereof. Fig. 2 is a vertical sectional view taken on the plane of broken line 2 2, Fig. 1. Fig. 3 is a vertical sectional view on the plane of broken line 3 3, Fig. 1.

a designates a tray having a flat bottom a^1 and a cylindrical wall or rim a^2 . This rim is provided with an overhanging flange or top a^3 , which may project over the bottom as far as may be desired.

Inside the tray a is mounted a rotary table b . This may be pivoted upon a stud b^1 or mounted in any way suitable or convenient to permit the rotation of the table. This table may be provided with a central hub or projection b^2 , which acts as a guide for the cards and in connection with the side wall or rim of the tray prevents the cards from turning endwise. By this construction an annular depressed track or way of a little greater width than the width of a card is provided, around which the cards move when the table is rotated. A handle b^3 may be provided to facilitate the rotation of the table. To the

top or cover of the table is pivoted a detent or pawl c , which is normally pressed toward the table upon which the cards are carried by a suitable spring c^1 . On the flat surface of the table is secured a cleat or obstruction d , which may have its sides beveled, as shown at d^1 and d^2 . The side d^1 should, however, be abrupt enough to form a substantial obstruction to the cards as they lie on the table, for a purpose to be hereinafter described, and this side is therefore notched, as shown at d^3 , to permit the detent to ride easily over the cleat as the table is rotated.

The tray may be provided at its top with additional guards or guides e and f to prevent the cards from being pushed over the top of the tray.

The operation of my device is as follows: The pack of cards is placed upon the top of the detent, as shown at g in Fig. 3. The table is then rotated in the direction of the arrow shown in Fig. 1. This rotation serves to draw off the cards and to distribute or spread them upon the floor of the rotary table or cardholder, as indicated in Fig. 1. It will be understood that those cards which rest upon the cleat are subjected to a greater pressure from the detent than those that lie on the bottom of the table. This causes a retardation or holding back of the top cards in that position, and thus pushes them among the cards lying behind them. Each time the cleat passes under the detent a number of the cards are thus held back and mixed with the cards following them. In this way the detent is given an intermittent action and the cards are shuffled in an indeterminate order. The cleat also serves to slightly separate the ends of the cards and thus facilitate such action. When the cards have been thoroughly mixed, they will of course be more or less evenly distributed around the floor of the table. To gather them together, it is only necessary to reverse the movement of the table, when through the combined action of the cleat and the detent they are bunched together, since, as will be understood, the detent rides up over the cleat and beneath the projecting ends of the cards, and thus by the continued rotation the cards are once more deposited upon the top of the detent in the position in which they were placed at the outset. In order to prevent the

spring from engaging or catching the cards as they slide up, the top of the detent may be recessed to receive the spring c' , as shown in Figs. 2 and 3.

5 It is not necessary to extend the cover over the entire width of the way in which the cards travel. Indeed, if the rim be made high enough it might be dispensed with altogether.

16 Having thus explained the nature of the invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, it is declared that what is claimed is—

15 1. In a card-shuffling device, the combination of a flat rotary table adapted to hold the cards spread around its center, and means for intermittently holding back a portion of the cards from rotation with the table to mix them
20 with the remaining cards, substantially as described.

2. In a card-shuffling device, the combination of a rotary table adapted to hold the cards, a detent arranged to press normally upon the
25 cards lying on the rotary table, and means for intermittently varying the pressure of the detent upon the cards as the table is rotated, whereby a portion of the cards is mixed with the remaining cards at each revolution of the
30 table.

3. In a card-shuffler, the combination of a

rotary table adapted to hold the cards, a cleat secured to the bottom of the table formed with sloping faces on each side, a detent arranged to normally press upon the cards and
35 to hold back a portion of them as the cleat passes beneath the detent.

4. A card-shuffling device comprising a tray provided with a rim about its edge, a rotary table provided with a central hub or wall, a
40 detent yieldingly pressed against the floor of the rotary table, and a cleat secured to the floor of said rotary table in position to pass under the detent as the table rotates, substantially as described.
45

5. In a card-shuffling device, the combination of a rotary table, a cleat secured thereto having its sides beveled, one of its beveled sides provided with a sloping notch, a detent
50 pivotally supported above said table in position to be raised by the cleat as it passes beneath said detent, and a spring acting to press said detent down toward said table, substantially as described.

In testimony whereof I have signed my
55 name to this specification, in the presence of two subscribing witnesses, this 4th day of April, A. D. 1899.

FRED C. ROLLINS.

Witnesses:

GEO. N. GODDARD,
A. J. DAILEY.