(No Model.)

R. S. & F. B. CROOKS.

GAME APPARATUS.

No. 587,281. Patented July 27, 1897.

Fig. 1.

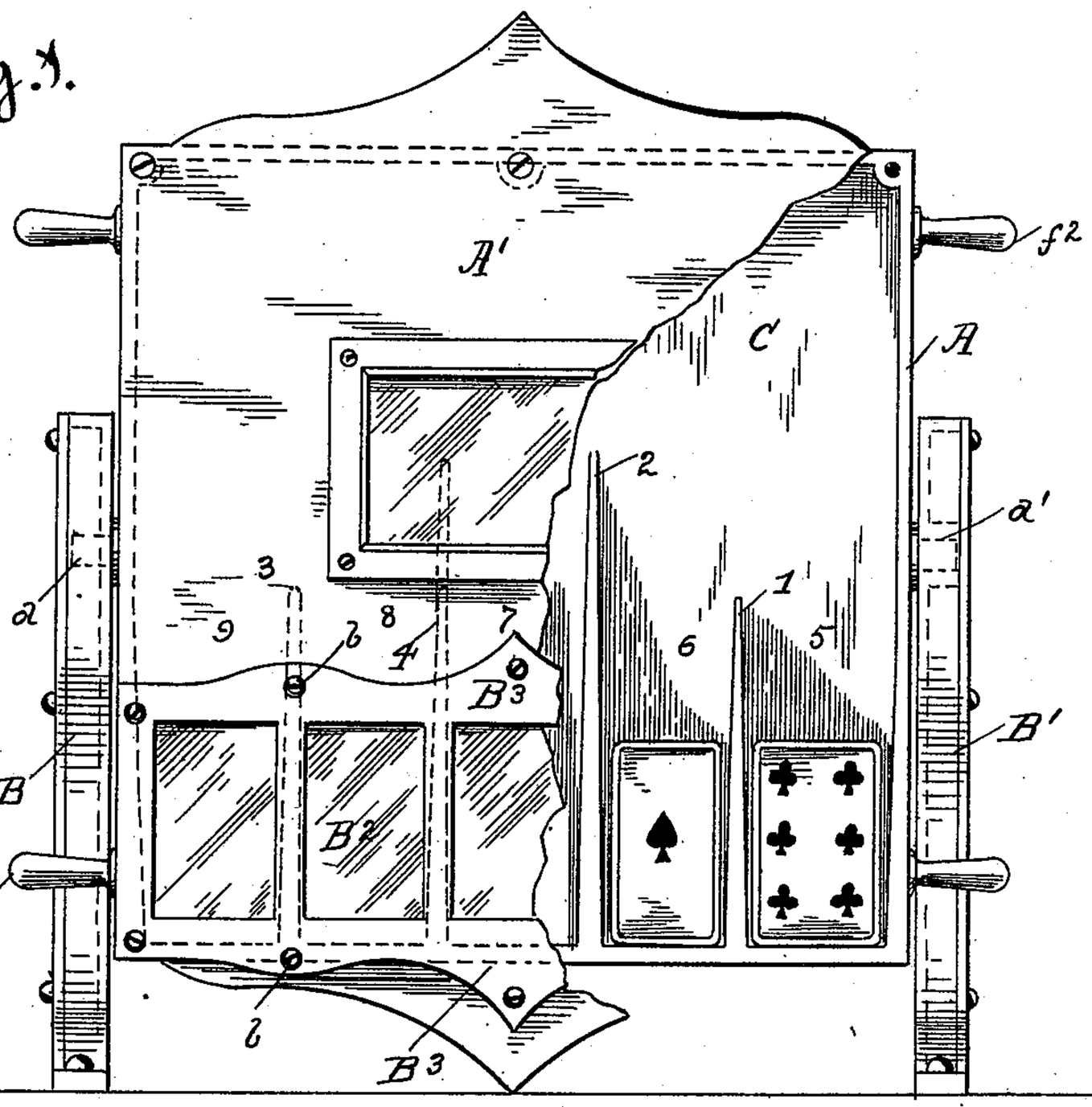


Fig. 4.

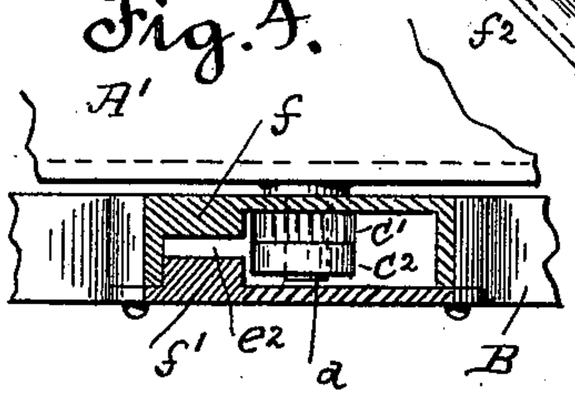
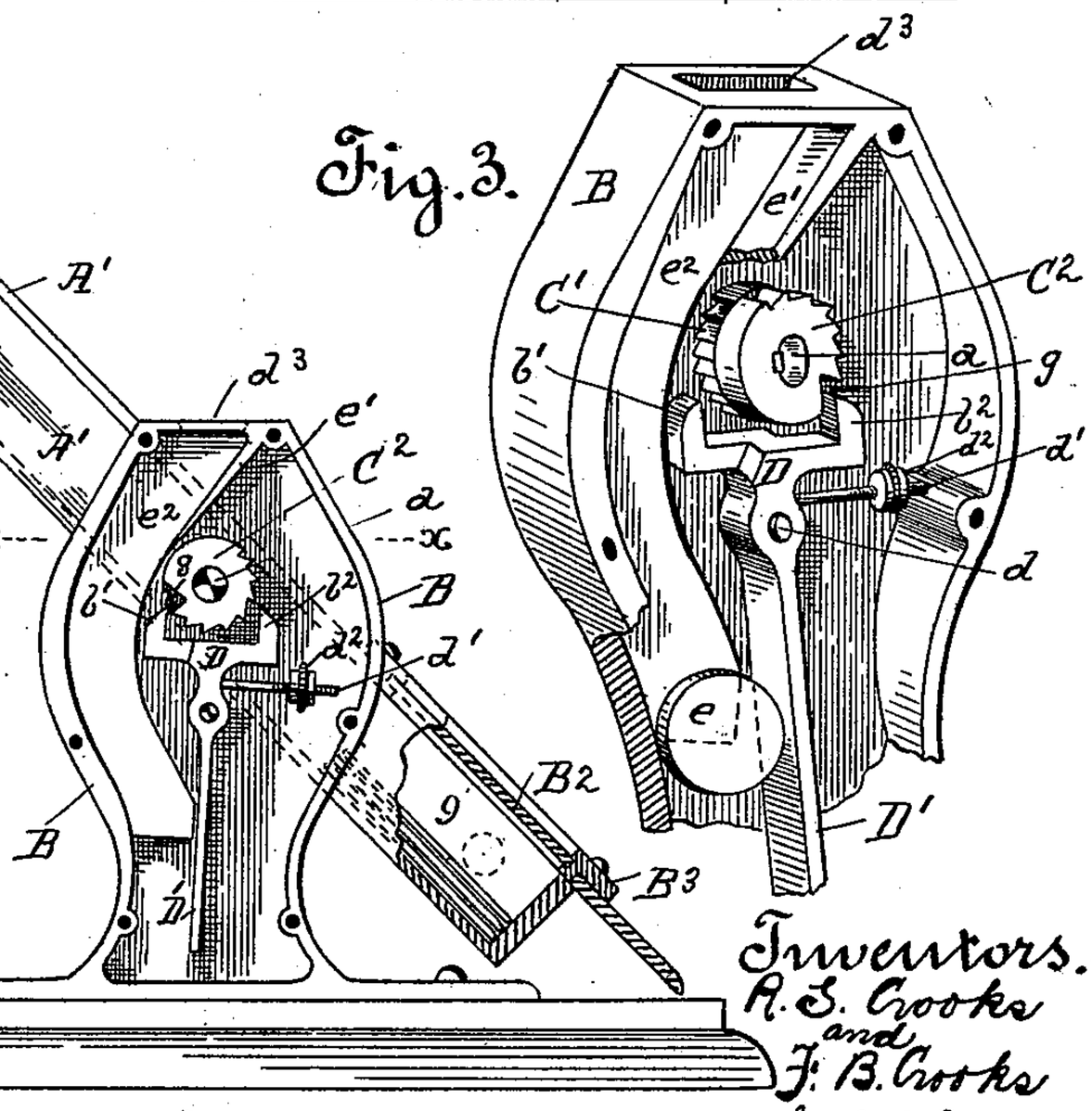


Fig. 3.



Witnesses.
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Inventors.
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and
F. B. Crooks
by McAcker,
their Atty.

Fig. 2.

UNITED STATES PATENT OFFICE.

ROBERT S. CROOKS AND FRANK B. CROOKS, OF SAN FRANCISCO, CALIFORNIA.

GAME APPARATUS.

SPECIFICATION forming part of Letters Patent No. 587,281, dated July 27, 1897.

Application filed October 22, 1896. Renewed July 6, 1897. Serial No. 643,614. (No model.)

To all whom it may concern:

Be it known that we, ROBERT S. CROOKS and FRANK B. CROOKS, citizens of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Game Apparatus; and we do hereby declare that the following is a full, clear, and exact description thereof.

Our invention relates to a certain new and useful device for shuffling and cutting cards or similar articles in games or entertainments; and it consists in the arrangement of parts and details of construction, as will be hereinafter fully set forth in the drawings, and described and pointed out in the specification.

The object of our invention is to provide a simple and inexpensive device to be used in connection with card games or entertainments for shuffling, cutting, and exposing a hand of cards in the game being played; the device being so constructed that with each throw thereof the cards or articles employed in the game are not only shuffled and cut, but a given line or row of cards is exposed to the view of the winner.

In order fully to understand the invention, reference must be had to the accompanying sheet of drawings, forming a part of this application, wherein—

Figure 1 is a full front view in elevation of the device, the front plate or cover thereof being partly broken away. Fig. 2 is a side view in elevation showing the oscillatory shuffling-box partly broken away and the face-plate of the side standard removed so as to expose the lock mechanism for the shuffling-box. Fig. 3 is a broken perspective view of the side standard, the face-plate being removed and the position which the lock mechanism assumes being shown just prior to the operating-weight escaping from its pathway; and Fig. 4 is a cross-sectional top plan view taken on line x x, Fig. 2.

In the drawings the letter A is used to indicate the swinging shuffling-box, which box is closed by the cover or top plate A′. From the sides of the shuffling-box, which is preferably made of metal, project the trunnions a a', which trunnions fit within openings formed through the inner face-plate of the hollow standards B B′. The shuffling-box is thus suspended between the hollow standards.

The lower portion of the cover or top plate A′ is cut away, so as to provide a transverse opening through which the cards exposed may be viewed, said opening being closed or covered by a glass plate B^2, which plate is held in place by the frame B^3, secured to the cover or top plate by screws b.

To the inner face of the back plate or bottom of the shuffling-box A are secured the ribs or partition-fingers 1 2 3 4, which ribs or partition-fingers may be formed integral with the shuffling-box or may be made separate therefrom. These ribs or partitions divide the lower portion of the shuffling-box into five separate compartments 5 6 7 8 9, which compartments receive and hold the shuffled cards. It will be observed by reference to Fig. 1 of the drawings that the ribs or fingers do not extend the full height of the shuffling-box, but only part way.

The upper end of the ribs or fingers 1 and 3 terminates a short distance below the axial line of the shuffling box or casing A, while the ribs or fingers 2 and 4 extend a given distance above the axial line, or about two-thirds the height of the shuffling box or casing. Consequently the upper portion of the said box or casing serves as an enlarged shuffling-compartment C.

The trunnion a projects within the hollow standard B and has secured thereon the mutilated ratchet-wheels C′ C^2. These ratchet-wheels are placed one in advance of the other upon the trunnion a, and the teeth thereof are engaged by the teeth b' b^2 of the pawl D. The tooth b^2 engages the teeth of ratchet-wheel C^2 and the tooth b' engages the teeth of ratchet-wheel C′, Figs. 2 and 3. The pawl D is fulcrumed to the back plate of the standard B by means of the pin d, and said pawl is provided with a downwardly-extending tailpiece D′. From the said pawl laterally projects the arm d', upon which arm is adjustably secured the counterbalance-weight d^2. This counterbalance-weight is sufficient to throw the tailpiece D′ to one side of its perpendicular, Fig. 2, which is its normal position. When the tailpiece stands in the position illustrated in

Fig. 2, the tooth b' of the pawl D will be thrown upward into engagement with the teeth of the ratchet-wheel C'. When in this postion, the ratchet-wheel will be locked and it will be impossible to swing the shuffling box or casing A until the pawl is released from engagement with the ratchet-wheel C'. This can be accomplished only by sufficient pressure being brought to bear upon the tailpiece D' to overcome that of the counterbalance-weight d^2.

By employing two ratchet-wheels with which one of the teeth of the pawl D at all times engages it is obvious that one of said ratchet-wheels remains locked against movement in one direction while the other is free to turn or rotate. Consequently if the shuffling-box be moved upward it cannot be moved downward until the tooth b^2 has moved out of engagement with the ratchet-wheel C^2, and after it has been moved downward it cannot be moved upward until the tooth b' is moved out of engagement with the ratchet-wheel C'.

Through the top of the hollow standard B is formed an opening d^3, through which the metal disk e for releasing the pawl is inserted. This metallic disk is sufficient in weight to overbalance the pressure of the counterbalance-weight d^2. The disk, when inserted through the opening d^3, falls upon the inclined shelf e', located within the hollow standard B, by which it is guided into the runway e^2, formed by the shoulder f, cast integral with the back plate of the said standard, and the shoulder f', cast with the face-plate E, Fig. 4. When the face-plate is secured to the hollow standard, the shoulders f f' form the passage-way e^2 for the disk. As the weight of the metal disk bears against the outer face of the tailpiece D' the said tail is forced past its perpendicular in an opposite direction and the tooth b' is moved out of engagement with the teeth of the ratchet-wheel C'. The ratchet-wheel being thus released the operator, by taking hold of one of the finger-pieces f^2, laterally projecting from the box or casing, may readily throw the shuffling box or casing into a position the reverse of that shown in position 2 of the drawings. As the box or casing is swung or tilted over the cards are thrown together and intermixed within the upper portion or chamber C of the shuffling box or casing. During the tilting of the shuffling box or casing the ratchet-wheels C' C^2 turn with the rotation of the trunnion a. By the time the shuffling box or casing has been swung or tilted over its full distance the tooth b^2 of the pawl will be opposite the deep indentation g cut in the ratchet-wheel C^2 (position illustrated in Fig. 3) and move therein by the tailpiece D' being thrown farther out of its perpendicular, owing to the pressure of the disk e' in the passage-way. As the tooth b^2 moves into the deep indentation g the tailpiece will move sufficiently far to enable the disk e to move from within the passage-way e^2 into the bottom of the hollow standard or receptacle located at the end thereof to receive the same. The moment the disk has moved out of the passage-way the pressure of the counterbalance-weight throws the tailpiece D' into the position illustrated in Fig. 2, so as to move the tooth b' of the pawl into engagement with the teeth of the ratchet-wheel C'. After the tooth b^2 has moved out of engagement with the teeth of the ratchet-wheel C^2 the shuffling box or casing is free to be swung downward. As the shuffling box or casing is thus tilted or swung over the cards contained in the chamber C fall by gravity to the lower end of the box or casing. During their downward movement the cards strike against the upper end of the ribs or cutting-fingers 1 2 3 4 and are guided into the several compartments 5, 6, 7, 8, and 9, being exposed in the compartments through the transparent covering or plate B^2.

It will thus be readily understood that the object of the game is to see which of the players can secure the highest hand by a throw or deal of the cards, the one securing the highest hand being the winner in the game.

Inasmuch as each time the shuffling box or casing is thrown upward the cards are thoroughly shuffled or mixed within the upper chamber of the said box or casing and as the box or casing is lowered the cards falling downward are cut and directed into separate compartments by means of the ribs or cutting-fingers 1 2 3 4, it is obvious that a different hand in value will nearly always be exposed to view with each throw or turn of the shuffling box or casing.

As the shuffling box or casing is locked after each throw against upward movement unless a fresh disk be inserted within the slot d^3 to release the lock mechanism it follows that the throw of the shuffling box or casing cannot be changed without deliberately releasing the lock mechanism. To provide against any one of the players securing a second throw of the shuffling box or casing unbeknown to the balance of the players by slipping a disk within the slot d^3, the disks should be under the control of one of the players, designated as the "banker."

Having thus described our invention, what we claim as new, and desire to secure protection in by Letters Patent, is—

1. In a game apparatus, the combination with the side standards, of the card-shuffling box or casing mounted to swing between the standards, the lock mechanism for controlling the movement of the shuffling-box, and the cutting ribs or fingers secured within the shuffling box or casing.

2. In a game apparatus, the combination with the card-shuffling box or casing mounted to swing between side standards, of a series of cutting ribs or fingers located within the shuffling box or casing so as to divide the lower

portion thereof into a series of independent compartments and its upper portion into a card-shuffling chamber, and of mechanism for controlling the movement of the shuffling box or casing.

3. In a game apparatus, the combination with the card-shuffling box or casing mounted to swing between side standards, of a series of independent card-compartments formed in the lower portion of the box or casing, a chamber within which the cards are shuffled or intermixed formed in the upper portion of the box or casing, an opening formed in the lower portion of the top plate or cover of the box or casing, a transparent covering for said opening, and suitable mechanism for controlling the swing or movement of the shuffling box or casing.

4. In a game apparatus, the combination with the shuffling box or casing mounted to swing between side standards, of the trunnions upon which the said box or casing turns working within said side standards, the ratchet-wheels located within one of said standards and mounted on the trunnion working therein, the fulcrumed pawl which engages the teeth of the ratchet-wheels, the tailpiece depending from the fulcrumed pawl, the counterbalance-weight for throwing one of the teeth of the pawl into locked engagement with one of the ratchet-wheels, a passage-way formed within the said side standard into and through which a weight or disk travels, which weight or disk during its travel through the said passage-way engages the tailpiece of the fulcrumed pawl and throws the same so as to release the pawl from locked engagement with the ratchet-wheels in order that the shuffling box or casing may be free to swing.

In testimony whereof we affix our signatures, in presence of two witnesses, this 3d day of October, 1896.

ROBERT S. CROOKS.
FRANK B. CROOKS.

Witnesses:
N. A. ACKER,
M. G. LOEFLER.