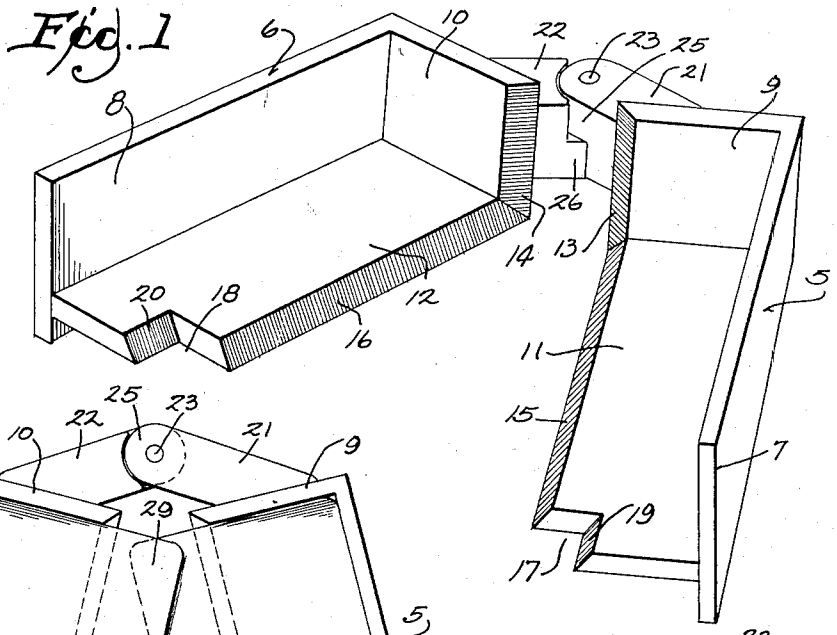
Jan. 29, 1952 P. A. NAPIECINSKI 2,583,871

CARD SHUFFLING AID

Filed Feb. 3, 1950

Fig. 1



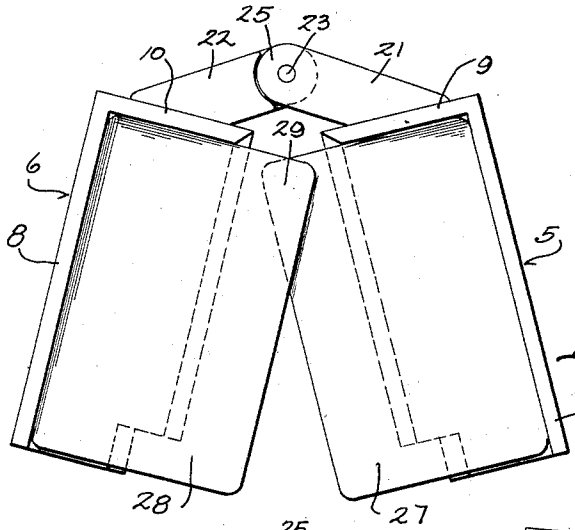


Fig. 2

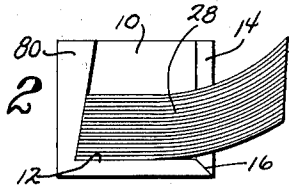
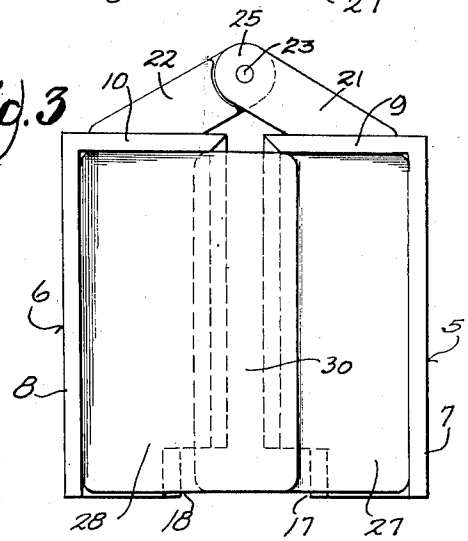


Fig. 5

Fig. 3



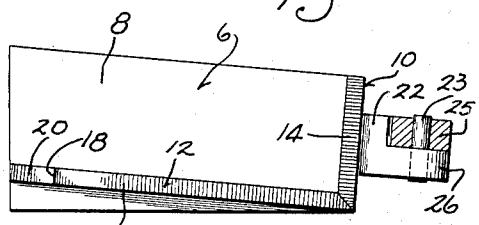


Fig. 4

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Patented Jan. 29, 1952 2,583,871

UNITED STATES PATENT OFFICE

2,583,871

CARD SHUFFLING AID

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Application February 3, 1950, Serial No. 142,205

7 Claims. (Cl. 273—149)

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This invention relates to a card shuffling aid.

It is the object of the invention to provide a rack into which cards may be shuffled in the conventional manner, whereupon the rack will be used to reassemble the deck.

More specifically, it is desired to provide a rack mechanism comprising laterally and upwardly open box elements having closed ends beyond which the respective elements are pivoted to each other, the pivot being offset from such ends and the respective box elements having inclined bottoms slanting toward their closed ends and beveled toward each other to faciiltate their use for the intended purpose.

It is important to the accomplishment of the purposes of this invention that the respective rack elements be both open and pivotally movable, since, if either of these features is omitted, they will not function as desired.

In the drawings:

Fig. 1 is a view in perspective showing a device embodying my invention as it appears when in open position to have a deck of cards shuffled therein.

Fig. 2 is a view on a reduced scale in plan showing the device as it appears when two packs of cards have been shuffled together into the rack.

Fig. 3 is a plan view showing the two parts of the rack moved into parallelism to interleave the cards which have been shuffled into them.

Fig. 4 is a view in inner side elevation of the lefthand rack element, the connecting hinge of the righthand element being shown in section.

Fig. 5 is a fragmentary detail view of a modified tray embodiment in end elevation as it appears in use.

The right and lefthand rack elements 5 and 6 comprise side walls 7 and 8, respectively, and end walls 9 and 10, respectively, and bottoms 11 and 12, respectively. The side and end walls may be joined at right angles and the bottoms, in each instance, desirably inclined toward the rear or end wall of the rack, being flush with the bottom of the end wall at the rear of the rack but spaced well above the bottom of the side wall at the open front of the rack. The side wall may, in each instance, be higher at the front than the rear to provide a uniform depth above the bottom.

The opposed inner margins of the end walls and bottoms may be beveled as indicated at 13, 14, 15 and 16 in Fig. 1. In addition, the bottoms of the respective trays are desirably notched as indicated at 17 and 18, the bottoms being marginally beveled at 19 and 20 beside the respective notches.

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Projecting rearwardly from the respective rear walls 9 and 10 at intersecting oblique angles are the arms 21 and 22 which are pivoted together by a pintle 23 desirably spaced materially to the rear of the rear walls 9 and 10 of the respective trays 5 and 6. To receive the pintle, the arm 21 may be provided with an ear at 25 constituting an extension of its top surface while the arm 22 has an ear at 26 constituting an extension of its lower surface. The pintle 23 connects the lapping ears.

In using the device, the angularly open trays are placed before the operator in the position shown in Fig. 2 and the deck to be shuffled is divided in the usual manner into two packs which are thereupon shuffled together in the open rack, one of the packs 27 being shuffled into the tray 5 and the other pack 28 being shuffled into the tray 6.

The angular position of the two trays will be such that at the conclusion of the shuffling operation only the corner portions of the cards of the respective packs will lap as shown at 29 in Fig. 2. However, it will be observed that the opposing side walls 7 and 8 of the laterally open trays have confined the individual cards to prevent them from escaping laterally, thus requiring all of them to enter into the interleaved relationship illustrated. The cards also tend to be held by the inclination of the bottoms of the respective trays in their proper position in abutment with the respective end walls 9 and 10. When the deck which is being shuffled is a double deck, the cards are particularly apt to escape from the desired interleaved relationship but they are accurately and properly confined in such relationship when shuffled into the hingedly connected trays illustrated.

At the conclusion of the shuffling operation shown in Fig. 2, the two trays are moved pivotally toward each other as shown in Fig. 3, thus bringing the beveled margins 15 and 16 of the two trays into proximity. It is not necessary that they be brought into actual contact, since it is sufficient that the lap of the cards of the respective packs, which was originally limited to the small areas shown at 29 in Fig. 2, is now continuous throughout the lengths of the cards and to a substantial proportion of their widths as indicated at 30 in Fig. 3.

The operator may now readily lift the lapping cards from the trays by putting his thumb or finger beneath the cards in the space provided by the proximate notches 17 and 18 in the bottom walls. The inclination of the bottom walls so raises the ends of the cards nearest to the opera-

tor as to facilitate the grasp of the cards from beneath.

The beveled surfaces of the two trays prevent the trays from catching upon cards which are irregularly disposed. By reason of these beveled surfaces, the trays will move hingedly from the relative positions of Fig. 2 to the relative positions of Fig. 3 with smoothness, regardless of the carelessness or lack of skill with which the shuffling may have proceeded.

In this connection, it is important that the closed ends of the trays, as well as the open ends thereof, have movement toward each other to increase the overlap of the cards from that minimum overlap which is required of the cards in the Fig. 2 position of the trays. Such approach is assured by the oblique disposition of the hingedly connected arms **21** and **22**, which locates the pivot point well outwardly of the closed ends of the trays.

The mode of using the modified embodiment shown in Fig. 5 is the same as in the device already described. This view is included merely to indicate that, if desired, the notch may be omitted from the open ends of the trays and the side wall **80** may be formed with an overhang to assist an unskilled person in forming the card pack **28** in a manner to facilitate the shuffling thereof. As will be observed, the overhanging wall **80** forces the successive cards of the pack into successively inwardly offset positions. In all other respects, the construction may be the same.

I claim:

1. A card shuffling aid comprising a pair of trays having arms in hinged connection, each tray having a corresponding closed end from which its respective arm extends, the other end and proximate sides of the respective trays being open, the respective trays having side walls at their outer sides and being wholly open at their tops to permit two packs of cards to be shuffled together into the respective trays while the trays are angularly related, the trays being movable on the hinge to diverge therefrom toward the said other ends of the trays and being movable into substantial parallelism to increase the interleaving of the cards of such packs when the shuffling has been completed.

2. The device of claim 1 in which the hingedly connected arms extend obliquely from the ends of the respective trays toward their hinged connection, whereby the point of hinged connection is spaced outwardly from the closed ends of the trays.

3. The device of claim 1 in which the bottom of each tray is elevated at the open end of the tray and inclined downwardly toward the closed end thereof.

4. The device of claim 3 in which the proximate corners of the tray bottoms at the open ends of the tray are notched to facilitate manipulation of cards after the trays have been hingedly moved into parallelism.

5. A device of the character described comprising right and lefthand trays, each comprising a fully exposed bottom downwardly inclined rearwardly and having an inner side margin beveled, each tray being provided with a side wall along the outer margin of its bottom and with an end wall at the rear end of its bottom, and arms connected with the respective trays and extending rearwardly in oblique directions upon intersecting paths, said arms having lapping ear portions, and a pintle pivotally connecting such ear portions at a point spaced rearwardly from the rear walls of the respective trays and substantially centered between them.

6. The device of claim 5 in which each tray has a notch at its forward inner corner to facilitate removal of shuffled cards therefrom.

7. A device of the character described comprising right and lefthand trays each having a bottom and one end and one side wall, the side wall overhanging the bottom at an acute angle, and means pivotally connecting the trays for relative pivotal movement, the respective trays having their said side walls outermost and having open sides in proximity to each other.

PETER A. NAPIECINSKI.

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The following references are of record in the file of this patent:

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