

No. 834,189.

PATENTED OCT. 23, 1906.

F. W. CHADBOURNE.

IMPLEMENTS TO BE USED IN PLAYING DUPLICATE WHIST.

APPLICATION FILED NOV. 22, 1904.

3 SHEETS—SHEET 1.

Fig. 1.

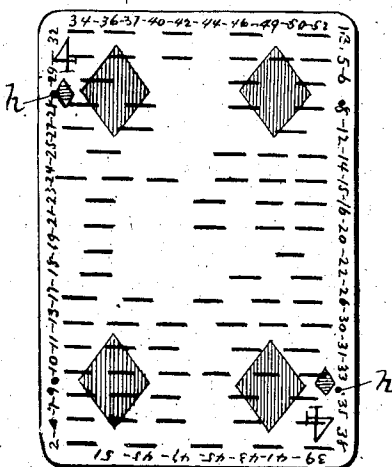


Fig. 3.

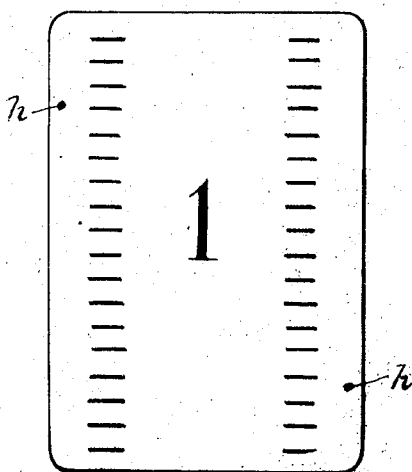
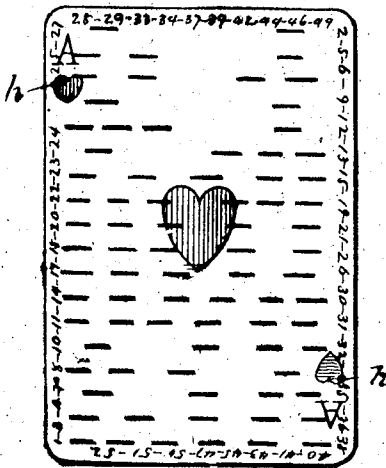
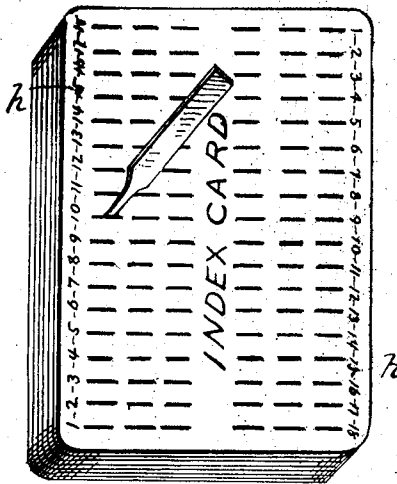


Fig. 2.

Fig. 4.

Inventor,

F. W. Chadbourne.

Witnesses:

Arthur W. Crossley.
L. L. Burket.

334
Lawyer & Co.
Attorneys.

No. 834,189.

PATENTED OCT. 23, 1906.

F. W. CHADBOURNE.

IMPLEMENTS TO BE USED IN PLAYING DUPLICATE WHIST.

APPLICATION FILED NOV. 22, 1904.

3 SHEETS—SHEET 2.

Fig. 5.

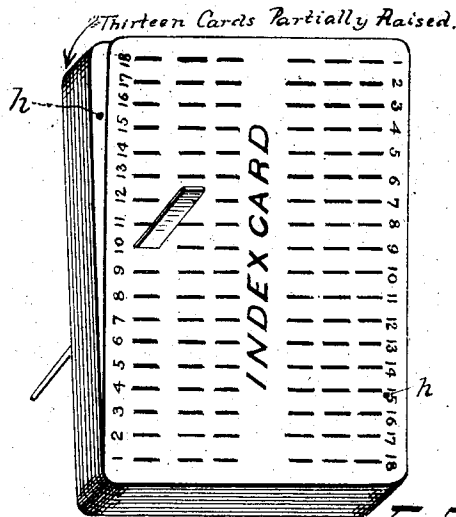
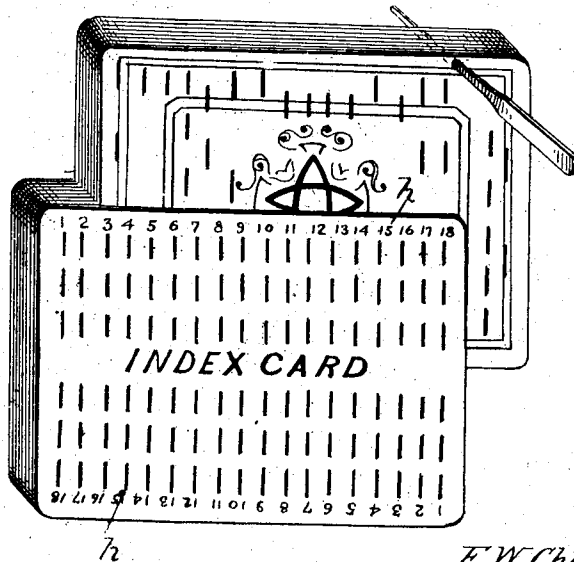


Fig. 7. Fig. 8.

Fig. 6.



Inventor.

F. W. Chadbourne,

Witnesses:

Arthur W. Crossley.
L. S. Burket.

By

Sam. Payer & Co.,

Attorneys.

No. 834,189.

PATENTED OCT. 23, 1906.

F. W. CHADBOURNE.

IMPLEMENTS TO BE USED IN PLAYING DUPLICATE WHIST.

APPLICATION FILED NOV. 22, 1904.

3 SHEETS—SHEET 3.

Fig. 9.

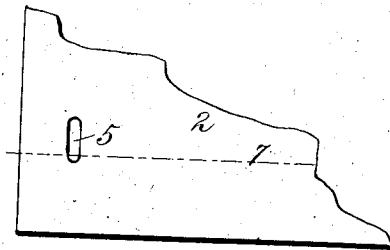


Fig. 10.

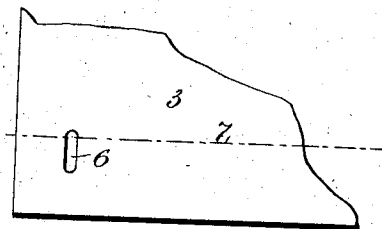


Fig. 11.

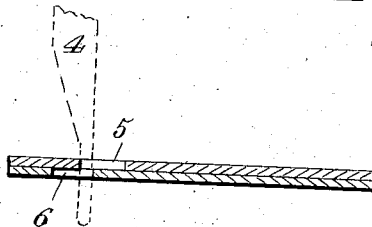
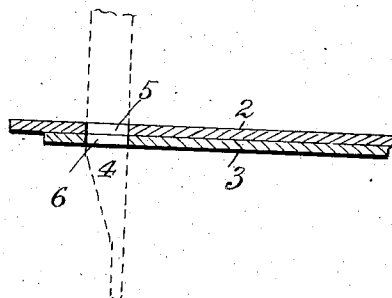


Fig. 12.



Witnesses:

Arthur W. Crossley,
C. J. McKeever.

Inventor:

F. W. Chadbourne.

By *Law, Rogers & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

FRANKLIN W. CHADBOURNE, OF FOND DU LAC, WISCONSIN.

IMPLEMENTS TO BE USED IN PLAYING DUPLICATE WHIST.

No. 834,189.

Specification of Letters Patent.

Patented Oct. 23, 1906.

Application filed November 22, 1904. Serial No. 233,845.

To all whom it may concern:

Be it known that I, FRANKLIN W. CHADBOURNE, a citizen of the United States, residing at Fond du Lac, in the county of Fond du Lac and State of Wisconsin, have invented new and useful Improvements in Implements to be Used in Playing Duplicate Whist, of which the following is a specification.

My invention relates to implements used in the playing of the game known as "duplicate whist," in which a single deck of playing-cards is perforated and prepared in such a manner that a game of duplicate whist of any length may be played with the single deck instead of with a large number of decks, as is usually required in the playing of the game; and the object of my improvement is to so prepare and construct a single deck of cards that by a simple operation the deck may be quickly, easily, and accurately divided into hands for the playing of duplicate whist, which operation may be repeated a great number of times, each time the hands being different and yet so under control that any particular hand wanted for play in the return or duplicate plays may be obtained quickly, easily, and accurately.

I attain the object of my invention by systematically perforating the various cards of a deck of playing-cards along certain lines, the perforations differing so far in alinement or in character or design in predetermined cards that a pin or other instrument passed through any one of a number of sets of perforations and raised will select and lift out of place only those cards having the peculiar alinement, character, or design of perforation distinctive of any particular hand.

The drawings hereto annexed and forming a part of this specification will assist in giving an entirely clear understanding of the invention, in which drawings—

Figures 1 and 2 represent two of the regular cards of a deck as perforated for use according to the invention. Fig. 3 represents one of the "personal index-cards" used for indicating the person to whom the hand separated belongs. Fig. 4 represents the full deck of cards ready for play and with pin inserted for withdrawing the hand for player No. 1 on hand No. 10, as indicated by the "general index-card" placed on the side of the deck facing the operator. Fig. 5 represents the full deck of cards as in Fig. 4, but with the pin forced through the deck sufficiently far to raise above the balance of the

deck the thirteen cards for player No. 1, as above noted. Fig. 6 represents the same deck, the pin, however, having been withdrawn from the hole in which it was first inserted and inserted in a small perforation *h* near the edge of deck for the purpose of completely separating said hand from the balance of the deck, the holes *h* in all of the cards of the pack being in alinement. Figs. 7 and 8 represent an edge and side view of the pin that may be used for removing the various hands from the deck. Figs. 9, 10, 11, and 12 are diagrams herein referred to and explained.

There are four of the so-called "personal index-cards" shown in Fig. 3 and numbered from "1" to "4" and so perforated as to always be raised from the balance of the deck with the first, second, third, and fourth hands, respectively, there being four players, numbered from "1" to "4" before the game begins; and four personal index-cards numbered from "1" to "4;" and since one of these four cards will always be separated from the balance of the deck with each hand of thirteen cards these personal index-cards will indicate the player to whom the hand separated belongs, player No. 1 taking the separated hand having the personal index-card numbered "1" with it, player No. 2 taking the separated hand having the personal index-card numbered "2" with it, and so on.

In the drawings all of the cards are shown as on end, excepting in Fig. 6, where they are represented as arranged on their sides.

The various regular cards of the deck, of which Figs. 1 and 2 and the raised card the face of which is visible in Fig. 6 are samples, are numbered around the edge and perforated, each of the cards in the deck being both differently numbered and perforated, yet each being so systematically numbered and perforated that when the cards are arranged with any one of the marginal numbers on the upper side or right end of each card in the deck, with said deck held as in Fig. 6, an insertion of the pin in any one of the eighteen holes of the upper row, as indicated by the general index-card, will separate thirteen cards from the balance of the deck; after which cards have been removed an insertion of the pin in the hole under that in which the pin was first inserted will separate thirteen more cards from the balance of the deck; after which cards have been re-

moved an insertion of the pin in the hole under that in which the pin was inserted the second time will separate thirteen more cards from the balance of the deck, which balance will then consist of thirteen cards, making in all four sets of thirteen cards each for the four hands necessary for one round or hand of whist. The removal of the cards above referred to is completed in each case by the withdrawal of the pin from the hole in which it is first inserted for the separation of any one of the four hands, then inserting it through one of the small round perforations near the edge of the thirteen cards separated, and, finally, by a lift completely separating such thirteen cards from the balance of the deck. Figs. 4, 5, and 6 will help to make this explanation clear.

Before proceeding further with a description of "operating the deck" it may be best to set forth fully the system of perforating the various cards of the deck, which I will now proceed to do. The perforations in the cards are arranged in sets of from one to three perforations, there being eighteen of these sets of perforations on each half of the cards divided lengthwise, and the perforations are elongated. In other words, each set of from one to three perforations with the spaces between them takes up but one-half of the width of each card in the deck. As before stated, each set of perforations consists of from one to three perforations, depending on whether the card is to be raised on the first, second, or third individual hand or left to make up the fourth individual hand or set of thirteen cards. The first perforation in each set is placed either almost all above or almost all below an imaginary line running lengthwise of the card, having respect to the position of the cards as they are portrayed in Fig. 6, the small portions left either below or above in each respective instance being sufficient to overlap the first perforations on the balance of the cards sufficiently to allow the entrance of the pin, as illustrated. Referring to Fig. 6, if the card is to be raised above the balance the perforation is placed thus $\oplus$ in relation to said imaginary line, while if it is to be left in the deck it is placed thus $\ominus$. For instance, the thirteen cards to be raised and separated for the first player in any particular one of the eighteen sets have each but one perforation in that set, and that one perforation is placed below the line of perforations in the balance of the thirty-nine cards. The thirteen cards to be raised and separated for the second player from the balance of the thirty-nine cards in the same particular one of the eighteen sets have each two perforations, the first one having been placed above the first line of perforations, as shown above, and the second one being placed below the line of perforations in the balance of the twenty-six

cards. The thirteen cards to be raised and separated for the third player from the balance of the twenty-six cards in the same particular one of the eighteen sets have each three perforations, the first two having been placed above the first and second lines of perforations, as shown above, and the third one being placed below the line of perforations in the balance of thirteen cards. The balance of thirteen cards have each three perforations in this particular set, each of said three perforations being placed above the three lines of perforations in the balance of the cards, and thus being never raised when this particular one of the eighteen sets of perforations is utilized. Each one of the eighteen sets of three perforations each consists in the whole deck of thirteen perforations in as many different cards arranged as above explained for the first player, twenty-six perforations in thirteen more of the cards arranged as above for player No. 2, thirty-nine perforations in thirteen more of the cards arranged as above for player No. 3, and thirty-nine perforations in the balance of thirteen cards arranged as above for player No. 4. Thus each one of the eighteen sets of perforations through one-half of each card in the deck being arranged in above system will enable the operator to separate the deck into four individual hands of thirteen cards each, and since each set of perforations is different, in that the cards are arranged differently in perforating in each of the eighteen sets, there can be eighteen different hands of whist, each hand consisting of four individual hands of thirteen cards each, separated for play.

The next operation in the perforation of a deck is the perforation of the other half of the deck and the numbering of the cards around the margin in order to multiply the combinations of hands obtainable. In perforating the other half of each card the fifty-two cards of the deck are paired or arranged in twenty-six sets of two cards each. Each pair is now perforated as follows: The blank side or half of each card is perforated exactly the same as the side already perforated in the other card of the pair to which it belongs. By this operation the two cards in each pair will be the reverse of the other in so far as the perforations are concerned, or if one of the cards of each pair were to be turned end for end the two cards constituting each pair would be perforated exactly alike. Now by keeping the cards in the same position as they were in before the last half of each card was perforated, or, in other words, keeping the cards in such a position that the perforations in each card of a pair will be the reverse of the other card of such pair, the deck will be so constituted that by the use of the needle, as explained elsewhere in the specification, thirty-six hands of whist, each consisting of

four individual hands of thirteen cards each, will be separated for play. This is true for the reason that the whole deck may be inverted and eighteen hands of whist separated by the use of the perforations on either half of the deck. Since each card in the deck has its opposite, by reversing the whole deck the number and position of the perforations will be the same in the opposite half, except that they will be every one on different cards and no hand removed by using one side of the deck will have the same card or cards in it as the corresponding hand removed by using the other side of the deck. This set of thirty-six different hands we will now call "combination No. 1," and to keep the cards in the proper position or relation to each other end for end a number "1" is printed on the margin of each card and on the same side or end of each card when such cards are held as above indicated. After this is done, so long as the figure "1" appears on the same edge of each card in the deck when the deck is held in position for operation the same original thirty-six hands will always be removed by the use of any one of the thirty-six sets of perforations, and of course if any one of the cards were turned end for end with the balance of the deck the combination would be broken and some one of the four hands in each hand of whist removed by the use of any set of perforations would have but twelve cards and one of the others would have fourteen cards. Of course the deck may be mixed or shuffled as much as is wanted, but the same cards will always be raised if the cards are kept in proper position end to end by the use of the figure "1" in the margin. Now following this explanation another step, it will be easily understood that if any one or more of the twenty-six pairs were reversed or placed end to end with the balance of the deck, the hands removed by the operation of the deck would all be different from the thirty-six hands removed by the first combination, and yet all of the sets of perforations would remove four hands of thirteen cards each, for the reason that when any particular card is placed end for end with the balance of the deck its opposite will also be turned to take its place. Care must always be taken, however, to invert the cards in their proper pairs and not singly, or the four hands by any particular set of perforations removed will not each of them contain thirteen cards. For instance, if five of the pairs were inverted or placed end for end with the balance of the deck there would be a change of ten cards in each hand of whist, or, in other words, ten of the fifty-two cards would be in different individual hands of thirteen cards from what they were in the first instance, and if on this inversion of the five pairs of cards the whole deck was numbered on the same mar-

gin of each card this would then give us a second combination of thirty-six hands of whist for play, which could always be removed so long as the figure "2" appeared on the same margin of each card in the deck. In this same way the balance of the combination-numbers are placed on the margin of the cards, there being scarcely any limit to the number of combinations obtainable, since twenty-six pairs can be placed in as many different relations to each other as there are words capable of being obtained by the use of the English alphabet. Since each new combination-number means thirty-six different hands of whist, the number of hands obtainable by this deck are practically unlimited.

A word now regarding the index-cards. The general index-card is perforated so that it will never be raised with any hand withdrawn, and each half of the card is perforated alike and each one of the eighteen sets of perforations on each half alike. This is also true of each of the individual index-cards, except that the individual index-card for player No. 1 is so perforated as to be raised with the first thirteen cards removed on any one of the thirty-six sets of perforations in the deck. Individual index-card No. 2 is so perforated as to be always raised with the second individual hand of thirteen cards removed on any one of the thirty-six sets of perforations in the deck, No. 3 with the third hand, and No. 4 (being perforated the same as the general index-card) always remains with the fourth individual hand of thirteen cards. Since these four individual index-cards are always placed at the back of the deck, they will always be behind the thirteen cards, and so cover the face of the last one of the thirteen cards from view, as well as indicate the player to which the individual hand belongs. It will make no difference whether the perforations differ in alinement or character or design, so long as the pin acts upon the cards to select them as specified. It will be noted that the pin need not be provided with the flat portion, since after its insertion in the perforations it need only be lifted to make selections of hands, as specified.

In operating the deck as above the general index-card is always placed, as shown in Figs. 4, 5, and 6, on the side of the deck nearest to or facing the operator. The deck proper is held with the back of the cards nearest the operator, and the four personal index-cards used for indicating the players to whom any particular hand of thirteen cards belongs (one of which four cards illustrated in Fig. 3) are placed at back of deck—that is, the side of the pack away from the operator—and with the back of the cards the same as the regular cards in the deck proper—i. e., toward the operator. These four personal

index-cards serve as well to shield from observation the cards withdrawn as to indicate the different players. It is immaterial in which order any of the cards, either the personal index-cards or the cards in the deck proper, are placed, since an insertion of the pin in the same hole will always produce the same thirteen cards with its proper personal index-card at the front for a shield and index.

I claim—

1. A deck of cards for playing duplicate whist, provided with unaligned elongated perforations formed in lines dividing the cards into four sets or hands, and means for engaging registering perforations of said lines.

2. A deck of cards for playing duplicate whist provided with unaligned elongated perforations formed in lines dividing the cards into four sets or hands, combined with a pin to be inserted in the said perforations to make the deals by being adapted to enter said perforations and separating the cards having the out-of-line perforations from the others.

3. A deck of cards having lines of perforations forming a certain number of sets, the perforations, of each set being in perfect alinement with each other but being in only partial registration with the other sets.

4. A deck of cards for playing duplicate whist, having lines of elongated perforations on each longitudinal side of the card, the perforations being in perfect alinement transversely but out of alinement longitudinally.

5. A deck of cards for playing duplicate whist, having lines of elongated perforations on each longitudinal side of the cards, said perforations being in perfect alinement transversely but out of alinement longitudinally.

6. A deck of cards for playing duplicate whist, having elongated unaligned perforations, and the same perforations extending in sets, in perfect alinement, said sets being numbered consecutively.

7. A deck of cards for playing duplicate whist, having lines of elongated perforations, said perforations being in perfect alinement transversely but out of alinement longitudinally, in combination with an index-card to direct the dealer in dividing the deck into hands.

8. A deck of cards for playing duplicate whist having elongated perforations, said perforations being in perfect alinement transversely, but out of alinement longitudinally,

in combination with a pin to assist the dealer in dividing the deck into hands.

9. An instrument for assisting in dealing cards for duplicate whist consisting of a flat piece of metal rounded at the side of one end and inclined on one side where the rounded portion joins the flat part.

10. A deck of cards provided with elongated perforations, certain of which are in registration with each other and in partial registration with the perforations of the other cards of the deck, in combination with a pin adapted to be passed through the opening formed by said partial registration and bring the elongated perforations of the said other cards into complete registration with the other perforations and at the same time to partially separate the said other cards from the deck.

11. A deck of cards provided with elongated perforations, certain of which are in registration with each other and in partial registration with the perforations of the other cards of the deck, in combination with a pin adapted to be passed through the opening formed by said partial registration and bring the elongated perforations of the said other cards into complete registration with the perforations of the aforesaid cards and at the same time to partially separate the said other cards from the deck, and a secondary perforation in the partially-separated cards through which the pin is adapted to be inserted to completely separate the said partially-separated cards.

12. A deck of cards provided with a series of perforations divided into sets or hands each set adapted to divide the deck into four hands, in combination with a pin adapted to be inserted in each set.

13. A deck of cards each provided with elongated perforations, the perforations dividing the deck into a plurality of deals of four hands to each.

14. A deck of cards each provided with elongated perforations, the perforations dividing the deck into a plurality of deals of four hands each, combined with a pin to enter the perforations and effect the deals.

In testimony whereof I affix my signature in presence of two subscribing witnesses.

FRANKLIN W. CHADBOURNE.

Witnesses:

W. E. GRISWOLD,
TESSIE NORMILE.