

No. 609,377.

Patented Aug. 16, 1898.

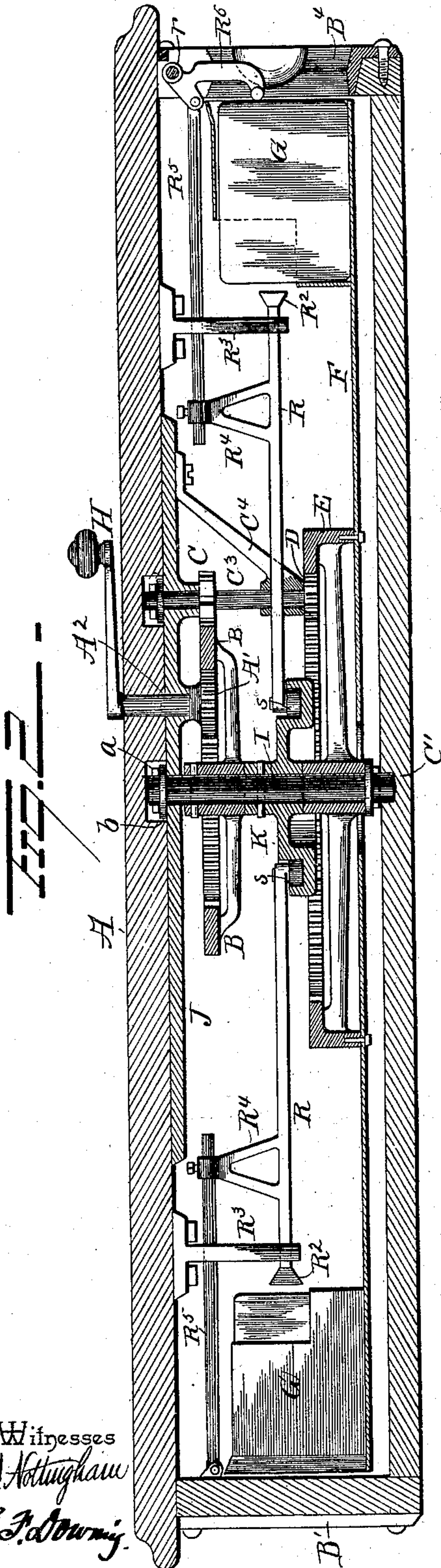
H. M. WEAVER.

WHIST TABLE.

(Application filed July 2, 1896.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses
Ed. Nottingham
G. J. Downing

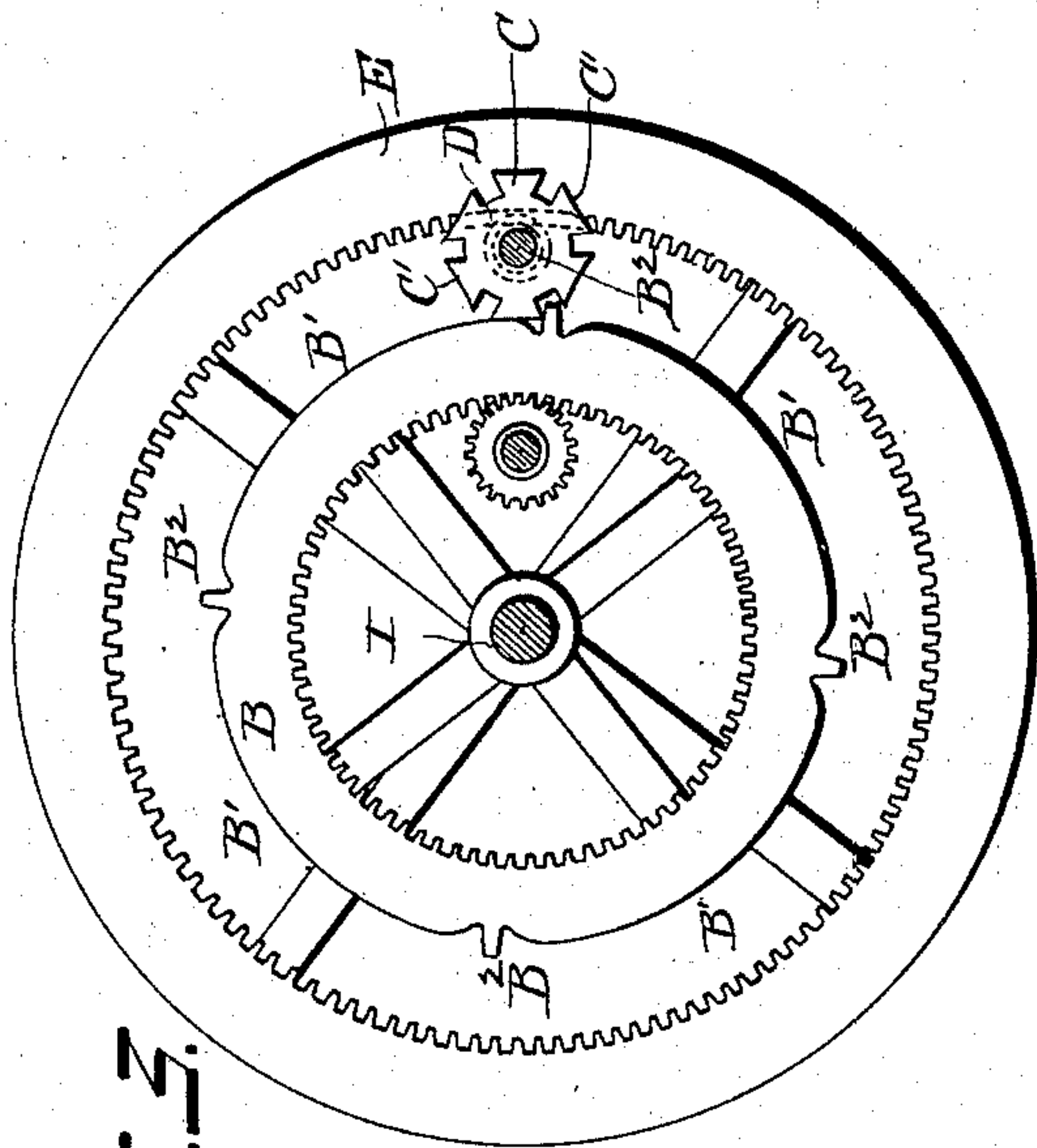
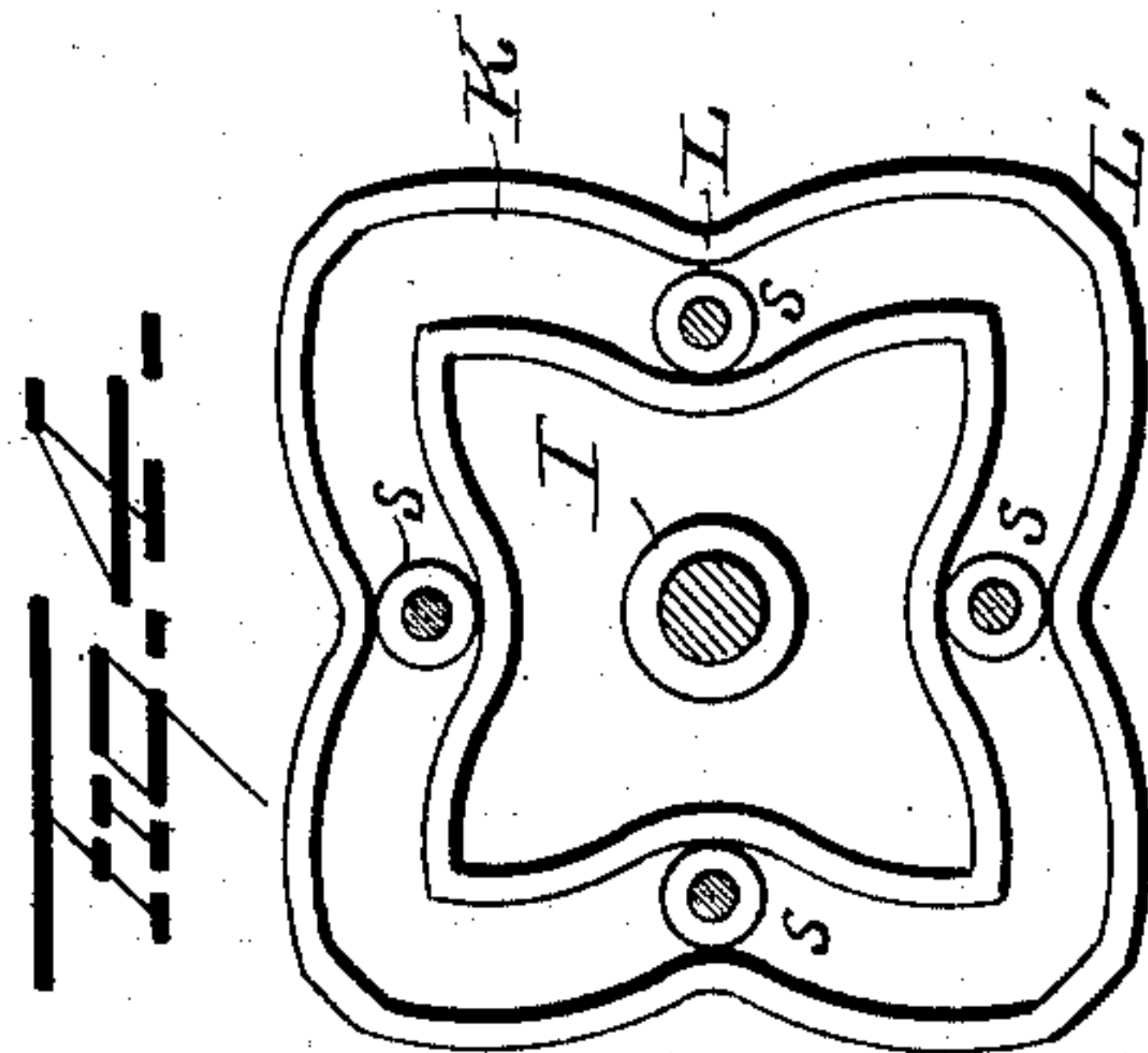


Fig. 5.

Inventor
H. M. Weaver
By H. A. Seymour
Attorney

UNITED STATES PATENT OFFICE.

HENRY M. WEAVER, OF MANSFIELD, OHIO.

WHIST-TABLE.

SPECIFICATION forming part of Letters Patent No. 609,377, dated August 16, 1898.

Application filed July 2, 1896. Serial No. 597,884. (No model.)

To all whom it may concern:

Be it known that I, HENRY M. WEAVER, a resident of Mansfield, in the county of Richland and State of Ohio, have invented certain new and useful Improvements in Whist-Tables; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in card-tables especially adapted for playing duplicate whist, and is designed more particularly as an improvement on the construction disclosed in my application, Serial No. 585,609, filed March 31, 1896.

The object sought in the game is to keep the "hands" intact, and after each set of partners have played with a series of hands the series are exchanged and then played by their opponents in the game. In this way the skill of the opposing sides and the individual players is clearly demonstrated.

In my application above referred to I disclose a table having four slots or openings therein equidistant from each other, a series of radial card-receptacles, and means for rotating the part carrying the card-receptacles, whereby four hands are simultaneously exposed at the four openings.

The main object of the present invention is to provide means for simultaneously pushing the four hands exposed at the openings through or partly through said openings, whereby they can be conveniently grasped by the players.

A further object is to provide devices for restoring the hands to their receptacles after same have been played.

In the accompanying drawings, Figure 1 is a plan view of a table embodying my invention, a portion of the table-top being removed. Fig. 2 is a view in section, showing the mechanism for rotating the part containing the receptacles and for ejecting the cards. Fig. 3 is an enlarged view in elevation of a portion of the actuating mechanism, and Fig. 4 is a view in plan of the cam.

It is essential to have as many packs of cards as there are hands played, and usually the number of hands will be a multiple of four—e. g., eight, twelve, sixteen, twenty, &c.—so

that in my table, supposing it to be adapted to hold twenty packs of cards, there will be eighty receptacles, each holding thirteen cards, constituting a single hand.

In the drawings, A represents the table of any design, provided at its sides, immediately below the top, with four openings B⁴, arranged at diametrically opposite points. These openings are of a size sufficient to permit of the ready passage of one hand of cards.

Secured to the under side of the table-top is the casting J, which latter carries the shaft I, located centrally below the table-top. The shaft is supported in the casting J against vertical displacement by pin *a* and washer *b*, while its lower end is supported and held in place by a seat formed in the bottom section C' of the table-top.

Rigidly secured to shaft I is the gear B and cam K, and loosely mounted on said shaft is the gear E. Gear B is provided internally with eighty-eight teeth and meshes with wheel A' on shaft A², the wheel A' being provided with twenty-two teeth. The shaft A² is suitably mounted in casting J and in the table-top and preferably terminates below the top, so as to present a smooth top to the table when the crank H is removed from the shaft. Wheel B is also provided on its outer edge with four teeth B², arranged equidistant apart, the sections B' of the wheel between the teeth being curved in the arc of a circle and forming locking-surfaces which operate to hold the wheel C against rotation as the wheel B is rotating from one tooth B² to the next tooth B².

Wheel C is provided with six teeth C', and as it is rotated by teeth B² on wheel B it will be seen that a quarter-revolution of wheel B will turn wheel C one-sixth of a revolution and that but a limited movement of B is necessary to impart the necessary movement to wheel C. During the further movement of wheel B from one tooth B² to the next tooth B² the surface B' of wheel B, engaging the curved outer edges of teeth C' of wheel C, locks the latter wheel against rotation.

Wheel C is secured on shaft C³, which is suspended from casting J by a pin and washer and is supported near its lower end by the brace C⁴. Secured to the lower end of this shaft, below brace C⁴, is the pinion D, which is provided with twelve teeth and meshes

with the teeth of the internal gear E. This gear E has one hundred and sixty teeth, and hence it will be seen that a one-sixth revolution of wheel C will rotate gear E two teeth, and as the gear has one hundred and sixty teeth it follows that one movement imparted to the wheel C by the mutilated gear B moves gear-wheel E one-eightieth of a total revolution.

Secured rigidly to the lower face of gear-wheel E is the support or disk F, on which the pockets G to hold the cards or hands are secured. There are eighty of these pockets, each of a size to readily hold thirteen cards, or a whist hand.

The support or disk F is preferably made of sheet metal and rests slightly above the lower section C' of the table-top. The card-receptacles G are arranged radially around the outer edge of the disk or support F and are regularly spaced, so that at each movement of the shaft C³ the disk or support is moved one-eightieth of a complete revolution, thus presenting one card-receptacle at each of the four openings B⁴ in the table.

A complete revolution of crank H and wheel A moves the wheel B one-quarter revolution, and as the wheel C is given its partial turn by a single tooth B² of wheel B the time consumed by the remaining portion of wheel B through its quarter-stroke is utilized by the devices employed for pushing cards out through the openings B⁴ and pushing cards back into the receptacles.

Located immediately behind and in line with the openings B⁴ are the rods R, one at each opening, and on the inner end of each rod is a cam-roller s. As the operation of the four ejecting devices is identical, an explanation of the construction and operation of one will suffice for all.

The cam-roller rests within the cam-groove in wheel K, which, as before explained, is rigidly secured to the shaft I, and hence, like the wheel B, makes a quarter-revolution at each complete turn of the crank H. The cam-groove in the wheel K is divided into four sections, each of which resembles the letter V and presenting in plan four projections. When the cam-roller s is at the juncture of two of these V-shaped sections or when at a point L nearest the shaft I, the roller is at a point of rest and represents the position of the roller when the cards have been pushed into the receptacles. The slot is so shaped that this state of rest is continued sufficiently long for the master-wheel B to rotate wheel C one-sixth of a revolution, and thus move the disk or support F a distance equal to the space of one card-receptacle. The movement of the cam-roller s from the point L to the point L' moves the rod R outwardly. This rod, as before stated, is located in a line with the opening B⁴ and when moved outwardly, as above explained, the head R² comes in contact with the cards in the receptacle G, which latter has been moved between the

head R² and the opening B⁴, the upper rear section of the receptacle G being cut away or open to permit the head R² to engage the cards. As the rod R moves outwardly the cards in receptacle G are forced outwardly until their outer ends project sufficiently outside of opening B⁴ to permit them to be readily grasped by the player.

The rod is mounted in a bearing R³ and also by a bearing (not shown) near its inner end and is provided at a point in rear of the bearing R³ with an upwardly-projecting arm R⁴, to which the rod R⁵ is secured. This rod R⁵ is pivotally secured at its outer end to the restorer R⁶, which is bent somewhat in the shape of a U and is pivoted at r within the opening B⁴. The lower or free end of this restorer R normally rests well down in the opening and prevents the withdrawal of the cards opposite the opening. When, however, rod R is moved outwardly, rod R⁵ is also moved in the same direction, thus causing the restorer to turn on its pivot r to a position above the cards, thus permitting the latter to be pushed out by the rod R. When the rod is moved inwardly by the cam K, the restorer descends and pushes the cards which have been inserted in the opening B⁴ into the receptacle G. The position of the parts at the commencement of a game or after the hands played have been restored to their receptacle is shown in Fig. 2, and when in such position the cam rests in its position nearest the shaft I. While the four hands are being played, the cam rests in the portions of the groove farthest removed from the shaft I. Hence the rod R would be projected outwardly and the restorer elevated. By placing the hands in the openings B⁴ and turning the crank the cams move inwardly, thus withdrawing rods R and lowering the restorers R⁶, and after these parts reach their innermost positions they come to a temporary rest, as before explained, and it is during this rest that the next series of receptacles are brought into alinement with the four openings.

It will be noticed that the crank can be rotated in either direction, thus permitting the parts to be moved in either direction.

In using the table the cards are regularly shuffled and dealt, and the four hands (of thirteen cards each) comprised in a pack of cards are then placed each in a receptacle which for convenience I have designated as "No. 1," there being one such receptacle to each of the four divisions of the table, or, if desired, the cards may be distributed among the several players and the hands played, after which the crank is turned (if necessary) to raise the restorers. The cards are then placed, each hand in its own receptacle, and the crank again turned. The first movement of the parts lowers the restorer, which forces the cards snugly back into place, while the continued movement turns the disk or support F and brings the next set of receptacles G into alinement with the openings B and ele-

vates the restorer. The next pack of cards is then placed in receptacles 2, and this is continued until the twenty (or lesser number of) packs are in place, when the table is loaded and ready for the game. The crank H is now turned, thus presenting at the four openings the four hands in the receptacles numbered 1. The hands are then played and returned to their proper receptacles, and another turn of the crank forces them in and brings the next series 2 of the receptacles into alignment with the openings, and so on until the entire series constituting one section has been played. By continuing the rotation of the disk or support F it is evident that the hands which have been played now pass in succession to the opposing players and the duplication of the play commences. With this construction it will be seen that after the cards have been once dealt and distributed they are securely held in place, and only the single pack of cards, comprising four hands, is exposed at one time. This absolutely prevents the possibility of the packs or hands getting mixed.

It will be seen that many variations in the construction may be made and yet not depart from the spirit of the invention. Instead of the mutilated-gear movement by which the disk or support F is revolved step by step a ratchet or other well-known device can be used. So, also, can other devices be substituted for the ejecting and restoring devices shown by me, and instead of pushing the cards out at the sides of the table they can be thrust through the openings formed in the top.

It is evident that numerous slight changes might be made in the general form and arrangements of parts herein shown and described without departing from the spirit and scope of my invention, and hence I would have it understood that I do not limit myself to the precise details of construction shown, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A duplicate-whist table comprising a top, radial card-receptacles mounted to move below said top, means for moving said receptacles so as to successively register them with openings adjacent to the four sides of the table and means for pushing the cards in the receptacles through said openings.

2. The combination with a series of radial receptacles each adapted to contain a hand,

of a cover for these receptacles, said cover having four slots or openings therein whereby to simultaneously disclose four hands, and means for simultaneously ejecting the four hands.

3. The combination with a series of radial receptacles each adapted to contain a hand, of a cover for these receptacles, said cover having four slots or openings therein, means for simultaneously ejecting the four hands and means for restoring the cards to the receptacles.

4. The combination with a series of radial card-receptacles, of means for closing these receptacles having four slots or openings therein equidistant from each other, and means for simultaneously ejecting the four hands.

5. A card-table having a series of diametrically opposite openings in the sides thereof, a rotary support, a series of receptacles carried by said support and adapted to align with said openings as the support is turned and means for simultaneously ejecting the four hands.

6. A card-table having a series of openings in the sides, a support, a series of receptacles for each opening, the said receptacles being carried by the support, means for rotating the support whereby the corresponding receptacles of each series are simultaneously presented at the several openings, and means for simultaneously ejecting the four hands.

7. A card-table having a series of openings in its sides, series of movable receptacles each receptacle adapted to contain a "hand," means for moving the receptacles whereby the corresponding receptacles of each series are simultaneously presented at the several openings, and means for simultaneously ejecting the four hands.

8. A card-table comprising a pivoted support, a series of openings in the sides of the table, receptacles carried by the support gearing for rotating the support, and means for simultaneously ejecting a plurality of hands.

9. A duplicate-whist table comprising a top having apertures therein, card-receptacles mounted to move below said top, and means for ejecting the cards in the receptacles opposite the openings in the top.

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

HENRY M. WEAVER.

Witnesses:

FRED S. MARQUIS,
C. H. HUSTON.