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A. CAHN RECEPTACLE WITH LID-OPERATED LIFTER

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# UNITED STATES PATENT OFFICE

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**RECEPTACLE WITH LID-OPERATE** 

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3 Claims. (Cl. 206-1)

The present invention relates to improvements in receptacles and is particularly directed to certain novel features which adapt said receptacles for containing a deck of playing cards.

It is an object of the invention to provide an 5 air-tight and dust-tight receptacle which has incorporated therein a simplified means for raising an article contained therein from a normal flat position to a manually accessible position upon movement of the receptacle lid to its open 10 position.

Another object of the invention is to provide in a playing card receptacle having a card-raising mechanism, a means whereby the cards normally rest upon a flat surface to thereby preclude de- 15 formation of the cards in the receptacle during storage.

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rear wall, exclusive of the hinge knuckles 16-16 and 17, is concave in transverse extension. A lid 19 is provided for the box and has end hinge knuckles 20-20 formed at its rear edge which are cylindrical in cross-section and are adapted to snugly seat in concave portions 21-21 of the rear wall formed between the hinge knuckles 16-16 and their respective side walls. All the knuckles are provided with aligned apertures through which a hinge pintle 22 passes and about which the cover rotates relative to the box. As is most clearly illustrated in Fig. 6, the rear edge 23 of the lid extending between the knuckles 20-20 is concave in transverse extension so that a snug fit is effected between its surface and the adjacent portions of the cylindrical knuckles 16—16 and 17 formed on the box.

A further object of the invention is to provide a novel raising member for articles within a receptacle which is normally disposed within the 20 confines of its interior surfaces to thereby provide a compartment therein which snugly receives said articles and precludes their movement during shipment or handling.

provide a simplified and practical raising member having the foregoing features which may be economically manufactured.

Other objects will be apparent from the following specification and drawings, in which:

Fig. 1 is a perspective view of my receptacle.

Fig. 2 is an enlarged, cross-sectional view taken on line 2-2 of Fig. 1.

Fig. 3 is an enlarged, cross-sectional view taken on line 3—3 of Fig. 1, the lid of the receptacle being illustrated in partially opened position.

Fig. 4 is an interior, perspective view of a box corner with the lid removed.

Fig. 5 is a perspective view of the raising arm for the receptacle.

Fig. 6 is a fragmental, perspective view of the hinge edge of the receptacle lid.

The lid is provided with an integrally formed finger piece 24 disposed centrally on the front edge of the lid and said lid is furthermore provided with a continuous down-turned flange 25 spaced inwardly from the interior marginal edges of the lid and which cooperates with the upper portions of the side walls to provide an effective A still further object of the invention is to 25 seal for the receptacle when the lid is in its closed position.

> A raising arm 26, actuated by the opening movement of the receptacle lid, is provided for each of the compartments and as their construction is identical, only one of them will be here-30inafter described. This raising arm, as shown in Fig. 5, has a cylindrically formed upper portion 27 which is snugly mounted for independent rotary movement between the knuckles 16 and 17 of the box, an aperture 28 being formed there-35 through for receiving the hinge pintle 22. A narrow, extended body portion 29 depends from the cylindrical portion 27 and terminates in an inturned portion 30 effected through a smooth, 40 curved portion 31. It will be noted by reference to Figs. 2 and 4 that the central portion of the rear wall in each compartment is provided with an inset portion 32 which is disposed between the hinge knuckles 16 and 17 and extends substantially the vertical distance of the rear wall. The depth of this inset has the same dimension as the thickness of the raising arm 26 so that when said raising arm assumes its inoperative position, it is snugly received in the recess 32 and its front surface lies flush with the interior surface of 50the rear wall.

My receptacle 8 comprises an open-topped box 9, having a flat bottom 10, a front wall 11, a rear wall 12 and side walls 13 and 14. An inte- 45 grally formed wall 140 extends centrally between the front and rear walls and divides the box into two equally proportioned compartments, each of which is adapted to snugly receive a deck of playing cards 15, or the like.

The upper edge of the rear wall 12 is provided with integrally-formed and cylindrically-shaped end hinge knuckles 16-16 and a centrally disposed hinge knuckle 17. As most clearly illus-

The inturned portion 30 of the raising arm extends downwardly into an arcuately shaped recess 33 formed in the bottom of the playing card trated in Figs. 2 and 4, the upper edge 18 of the 55 compartment and as indicated in Fig. 2, said in-

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turned portion 30 extends below the lower rear edge of the playing cards 15 which rest upon the flat bottom of the box and the arcuate recess 33 therefore permits rotation of the arm from its said inoperative, inset position to its raised position.

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The raising arm is actuated by the opening movement of the lid by means of a lug 34 projecting rearwardly from the concave rear edge 23 of the lid and extending into a slot 35 formed in 10 the forwardly facing, upper portion of the raising arm 26. With particular reference to Figs. 2 and 3, the lug 34 is disposed in an intermediate position in the slot 35 when the lid is in its closed position so that considerable lost motion occurs upon the initial opening of the lid from its closed position to its position shown in full lines in Fig. 3. This lost motion permits the lid to be raised to a position indicated in full lines in Fig. 3 before the playing card deck begins its initial rising mo-20 ton to thereby permit sufficient clearance for unobstructed, deck movement. Upon engagement of the lug with the upper portion of the slot 35 and upon continued opening action of the lid 19, the arm 26 is rotated on the pintle 22 and the lower inturned edge 30 contacts the underside of the deck of cards and raises it to a position indicated in dotted lines in Fig. 3 and upon further opening movement of the lid, said cards are brought into an accessible position. It will therefore be understood that the particular formation and cooperation between the hinge elements on the lid and box and the raising arms provide an air-tight and dust-proof pivotal connection for the parts and the particular disposition of the lug and slot arrangement interiorly of the hinge pintle precludes the passage of air or dirt between the raising member, the lid or the box edge. Furthermore, the inset position of the raising arm in the rear wall and the disposition of the lower inturned portion 30 of the arm subjacent the bottom of the card deck permits a compact construction of the compartment which confines the card deck in a relatively small space to preclude movement of the deck during shipment or handling. As illustrated in Fig. 2, the depending flange 25 on the lid is adapted to engage the confines of the card deck around its upper portion to preclude vertical movement of the deck. Although my receptacle has been described and illustrated as useful in packaging decks of playing cards, it is contemplated that said receptacle could be used for packaging other articles, or that my receptacle could be modified by those skilled in the art for packaging other articles without departing from the scope of the following claims.

les on the box and in rotatable contact with the concave portions on the box and the lid, a slot formed in the forward surface of the arm, and a lug projecting rearwardly from the concave portion of the lid and extending into the slot.

2. In a receptacle the combination of an open topped box, side walls for the box, a transversely extending concave portion on the upper edge of one side wall, spaced cylindrical knuckles projecting upwardly from said side wall, a lid for the box having a transversely extending concave portion on one side thereof, cylindrical knuckles extending from said lid side and disposed in axial alignment with the knuckles on the box, a hinge 15 pintle passing through the knuckles, a raising arm freely pivoted on the pintle and having a cylindrical portion snugly disposed between the knuckles on the box and in rotatable contact with the concave portions on the box and the lid, an extended body portion depending from the cylindrical portion of the arm, an inturned portion formed on the lower free end of the body portion, an inset formed in the said side wall for receiving the body portion of the arm, a slot formed in the forward surface of the arm, and a lug projecting rearwardly from the concave portion of the lid and extending into the slot. 3. In a receptacle the combination of an open topped box having a bottom and side walls, a transversely extending concave portion on the  $30^{\circ}$ upper edge of one side wall, spaced cylindrical knuckles projecting upwardly from said side thereof, a lid for the box having a transversely extending concave portion on one side thereof, cylindrical knuckles extending from said lid side 35 and disposed in axial alignment with the knuckles on the box, a hinge pintle passing through the knuckles, a raising arm freely pivoted on the pintle and having a cylindrical portion snugly disposed between the knuckles on the box and in rotatable contact with the concave portions on the box and the lid, the arm having an extended body portion depending from the cylindrical portion of the arm, an inturned portion formed on the lower free end of the body portion, an inset formed in the said side wall for receiving the body portion of the arm, an arcuate inset formed in the bottom of the box for permitting rotational movement of the inturned portion of the arm about the pintle, said arcuate inset intersecting 50 the inset in the said side wall at a common box corner, a slot formed in the forward surface of the arm, and a lug projecting rearwardly from the concave portion of the lid and extending into the slot. 55

What is claimed is:

1. In a receptacle the combination of an opentopped box, side walls for the box, a transversely  $^{60}$  file of this patent: extending concave portion on the upper edge of one side wall, spaced cylindrical knuckles projecting upwardly from said side wall, a lid for the box having a transversely extending concave por-65 tion on one side thereof, cylindrical knuckles extending from said lid side and disposed in axial alignment with the knuckles on the box, a hinge pintle passing through the knuckles, a raising arm freely pivoted on the pintle and having a cylindrical portion snugly disposed between the knuck- 70

## ADOLPH CAHN.

### REFERENCES CITED

The following references are of record in the

### UNITED STATES PATENTS

Name	Date
Evans	Oct. 11, 1887
Karp	Aug. 7, 1917
Gerojohn	Sept. 5, 1922
Rathbun	June 30, 1936
Boenecke	June 25, 1940
Hiscock	July 16, 1940
Ibach	Jan. 12, 1943
	Evans Karp Gerojohn Rathbun Boenecke Hiscock

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