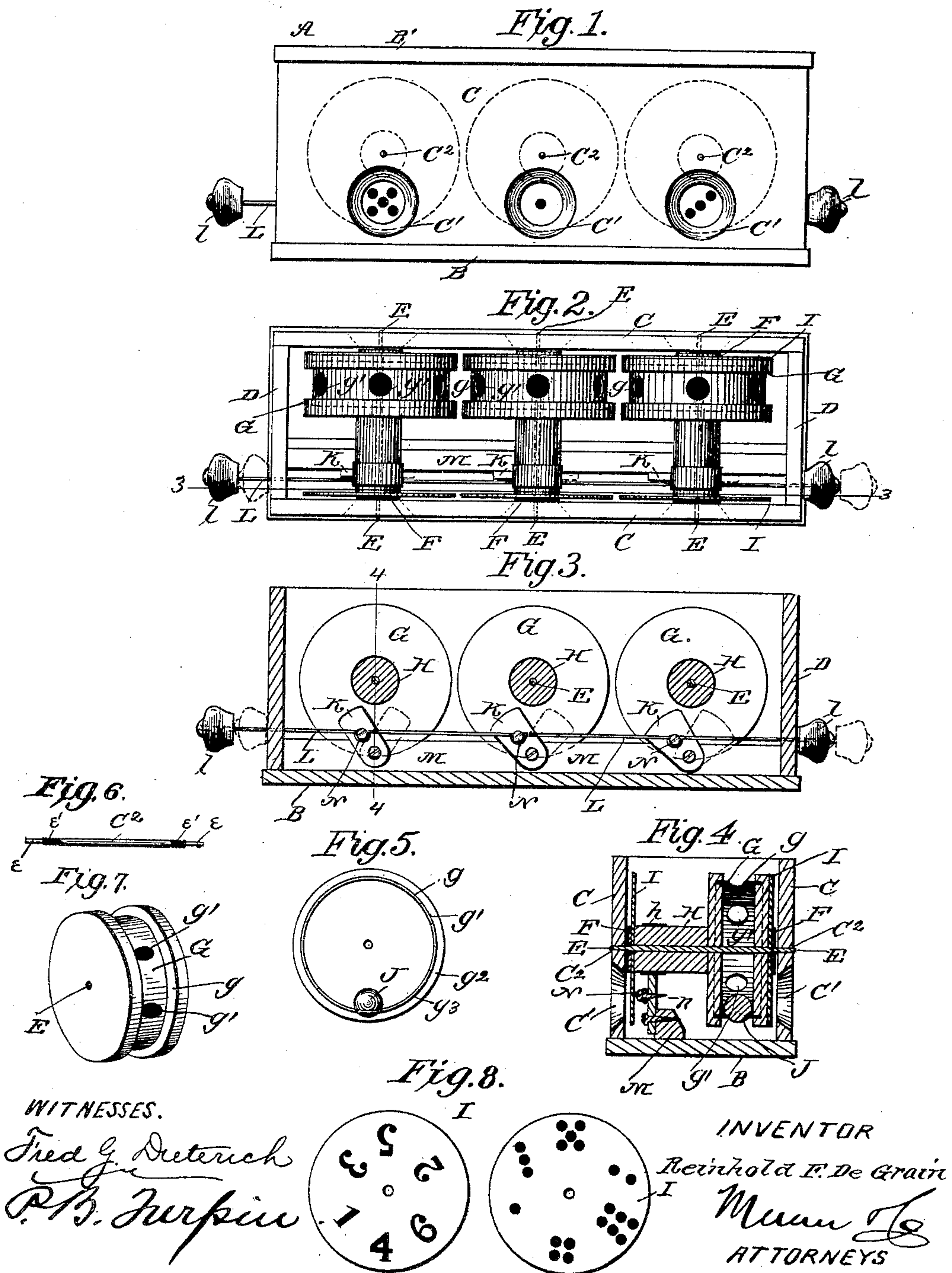


(No Model.)

R. F. DE GRAIN.
GAME APPARATUS.

No. 435,805.

Patented Sept. 2, 1890.



UNITED STATES PATENT OFFICE.

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GAME APPARATUS.

SPECIFICATION forming part of Letters Patent No. 435,805, dated September 2, 1890.

Application filed April 25, 1890. Serial No. 349,554. (No model.)

To all whom it may concern:

Be it known that I, REINHOLD F. DE GRAIN, of Washington city, in the District of Columbia, have invented a new and useful Improvement in Game Apparatus, of which the following is a specification.

This invention is an improvement in game apparatus, relating particularly to an improved raffle-box.

The invention consists in the novel construction of the controlling-wheel, and in the construction for supporting, securing, and operating such wheel and the numbered disks.

The invention consists, further, in the novel constructions and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a side view of my improved raffle-box. Fig. 2 is a top plan view thereof, the lid being removed. Fig. 3 is a vertical section on about line 3 3 of Fig. 2. Fig. 4 is a vertical cross-section on about line 4 4 of Fig. 3. Fig. 5 is a side view of the controlling-wheel, one of the side disks being removed. Fig. 6 is a detail view of the shaft-rod. Fig. 7 is a detail view of the controlling-wheel, and Fig. 8 shows two of the figured disks.

In the construction shown I provide a case A, comprising base B, sides C C, ends D, and top B', the sides C being provided with coincident sight-openings C' and with bearings at C' for the shaft-rods E. These rods E have at their ends smooth round portions e, and are provided next to said smooth ends with threaded portions e' to receive the clamping-disks F. On these shaft-rods, between clamping-disks F, I support the controlling-wheels G, the hub or pulley H, and the figured disks I, said parts G, H, and I being clamped together in the arrangement shown by the disks F threaded on the shaft-rod, as shown.

It will be understood from Figs. 1, 2, and 8 that each of the disks has a series of figures or characters which are arranged to be exposed alternately through the openings C'. By preference the characters on one disk I correspond to the usual dice-spots, while the opposite disk I or disk on the same shaft is provided with the ordinary numerals or figures. Now the disk I on the same shaft may be adjusted to expose on one side dice-spots

corresponding in number to the figure or numeral shown on the opposite side; or the disks may be adjusted to expose on one side dice-spots differing in number from the figure or numeral shown on the opposite side, the manner of securing the parts upon the shaft-rod permitting the independent adjustment of the disks on the same shaft-rod, as may be desired. The object of the adjustable disks is to either have like readings on both sides or to have two distinctly-different readings with one movement. The hub or pulley H is preferably provided with rubber rings or other suitable cushions h for engagement by the free ends of the swinging arms, as will be presently described.

The wheel G, which for convenience of reference I call the "controlling-wheel," is an important feature of my invention, and I do not desire to be limited, with respect to such wheel, to the use thereof in the particular construction of game apparatus shown, as it may be used in various kinds of game apparatus in which it is desired to employ a wheel which on being turned will, in stopping, be caused to stop in some one of a series of predetermined positions. I make this wheel with a rim-plate g, having a series of seats g' for the weight-ball J, such seats being preferably formed, as shown, by perforating the plate, which may be conveniently formed by punching or in other suitable manner. This construction—that is to say, a rim-plate for a controlling-wheel of a game apparatus, having openings formed through it which form seats for the weight-ball—is a distinctive and important feature of the invention, as it affords convenient efficient seats for the ball, which can be produced at the minimum cost. The wheel G also has a side disk or disks g², preferably two, as shown, and arranged one at each side of the plate g and having in their inner faces circular grooves g³, which receive the opposite edges of the rim-plate. Now this is also an important and distinctive feature of my invention—namely, the provision in a controlling-wheel of a rim-plate having seats for the weight-ball, and having its edge or edges held in a circular groove in a side disk or disks, as such construction may be easily and cheaply made, and quickly fitted together

or taken apart, as may be desired. The disks g^2 are preferably of wood, but may be made of any other suitable material, and the rim-plate may be made of any suitable sheet metal, the ordinary sheet-tin being found to answer all purposes; but it will be understood that such rim-plate may be made of suitable card-board, a thin sheet or veneer of wood, or other suitable material, as may be found desirable.

To operate the shafts, I provide swinging arms K, pivoted at their lower ends, having their upper ends arranged to engage hub or pulleys H, and the operating connection L, joined to arms K above their pivots. By preference the arms K are pivoted to the side of a bar M, extended from end to end of the case, and the connection L fastens to such arms by means of screws N, which project at n from the side of the arms and serve by engaging the top of bar M to limit the movements of the arms in opposite directions. The connection L is preferably a wire extending at its ends beyond the ends of the case and having hand-knobs l , by which it may be drawn in one or the opposite direction. It will be noticed from Fig. 3 that the arms K are of different widths at their upper ends, the arm at the right being the widest and that in the middle narrower than the one at the right, but wider than the one at the left. The purpose of this is to cause the arms to operate their wheels differently, so that as the operating connection is drawn in one and then in the opposite direction it will not have a tendency to duplicate combinations.

Having thus described my invention, what I claim as new is—

1. An improved controlling-wheel for game apparatus, having a rim-plate suitably supported and perforated to form seats for the weight-ball by which the position of the wheel is controlled, substantially as and for the purposes set forth.

2. In a game apparatus, the improved controlling-wheel herein described and shown, consisting of the rim-plate perforated at intervals to form seats for the ball, and the side disks having grooves arranged to receive the opposite edges of the rim-plate, substantially as set forth.

3. The improved game apparatus herein described, consisting of the case having sight-openings C' , the shaft-rods E, the wheels G, supported on said rods and consisting of perforated rims and grooved side pieces and weight-balls operating in the said wheels, the hub or pulleys H on said shaft-rods having cushions h , the figured disks I on said shaft-rods E, the pivoted swinging arms K, and the operating connection, all substantially as and for the purposes set forth.

4. The improved game apparatus substantially as herein described, comprising the case having in its opposite sides sight-openings, the figured disks arranged in said case, fixed on a common shaft and provided on their outer faces or sides with dice-spots, figures, or the like arranged to show through the openings in the opposite sides of the case, and devices for turning the said disks, all substantially as and for the purposes set forth.

5. In a game apparatus substantially as described, the combination of the case having in its opposite sides sight-openings, the shaft journaled in said case, the figured disks supported on the said shaft and having on their outer faces dice-spots, figures, or the like arranged to show through the openings in the case, and clamping devices by which said disks may be secured on the shaft in different relations, whereby the disks on the same shaft may be caused to show through their respective openings dice-spots, figures, or the like of different values, substantially as and for the purpose set forth.

6. In a game apparatus substantially as described, the combination of the rod having threaded portions near its end, the controlling-wheel, pulley or hub H and the figured disk supported on said shaft-rod between the said threaded portions, and the clamp-disks threaded on the shaft, whereby the controlling-wheel, pulley H, and the figured disks may be clamped in any desired relation, all substantially as described, and for the purposes set forth.

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Witnesses:

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