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J. G. KOEGLE

GAME

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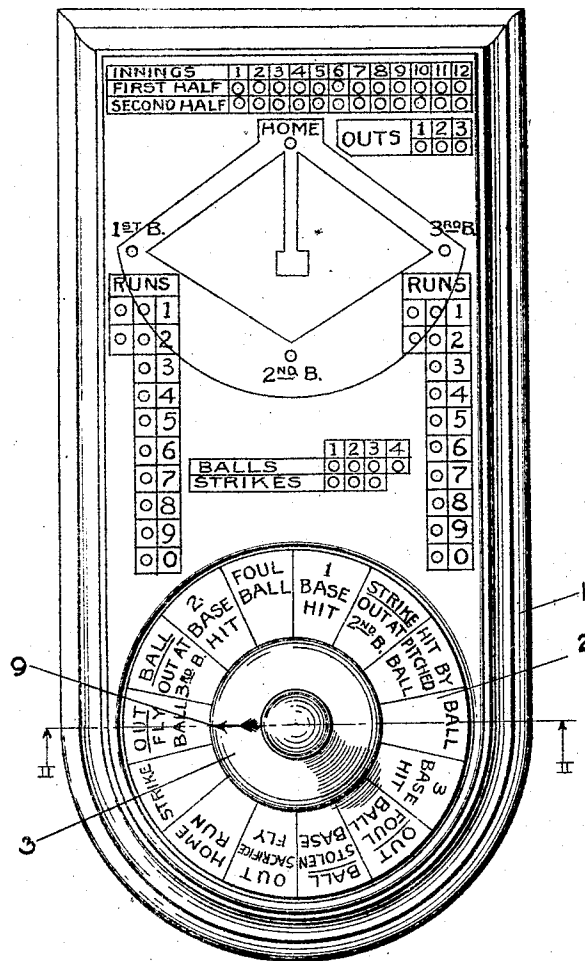


Fig. I.

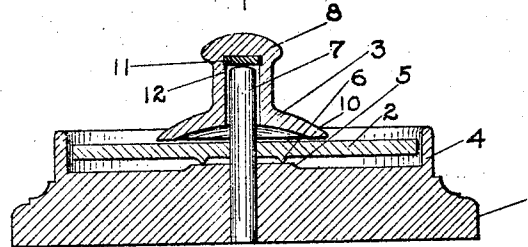


Fig. II.

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GAME.

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To all whom it may concern:

Be it known that I, JOHN G. KOEGLE, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Games, of which I declare the following to be a full, clear, and exact description.

This invention relates to a game device wherein indicator is manipulated by a participant in the game.

More particularly the invention applies to a device in which a participant in a game rotates an indicating member to make an indication without being able to predetermine the character or value of this indication.

Novel means are provided whereby an indication is determined by the relative angular position of two rotary members, each of which has been rotating at a varying speed, the variation in the speed of one member being different from the variation in the speed of the other member.

Another object of the invention is to provide a structure in which one rotary member is supported in such a manner as to be subject to a definite coefficient of friction of small magnitude, while another rotary member with which the first mentioned member cooperates, is subject to a greater coefficient of friction, thus giving rise to a constant difference in friction.

Other objects, and objects relating to details of construction and economies of manufacture will appear as I proceed with the description of that embodiment of the invention, which for the purposes of the present application I have illustrated in the accompanying drawing.

Figure I is a plan of one embodiment incorporating my invention.

Fig. II is a vertical sectional view taken substantially on the line II—II, Fig. I.

In Fig. I is shown a base 1 upon one end of which are mounted the two rotatable members 2, and 3.

The relation of the members 2 and 3 is more clearly illustrated in Fig. II. The base one is shown provided with a circular recess 4, from the center of which rises the

platform 5 which forms a seat upon which the V-shaped annular bearing edge or ring 6 of the disk 2 is supported. The supporting pin 7 is preferably rigidly secured in the base 1 and forms an axis upon which the disk 2 may rotate. The member 3 is provided with a knob 8 by which it is manipulated, and with an indicating mark 9 such as an arrow to point out some indication on the disc 2. A contact surface 10 on the lower side of the disc 3 is arranged to engage in frictional contact with the upper surface of the disc 2, so that disc 2 and element 3 may be frictionally locked in contact with each other. A cushion or pad of resilient material 11, such as rubber supports the member 3, and is located at the inner end of the hole 12 between the pin 7 and knob 8, being preferably secured to the knob as shown in Fig. 2. When the knob 8 is depressed, so that the contact surface 10 of the member 3 engages with the upper surface of the disc 2, the cushion 11 is compressed, and on release of the knob 8, the cushion expands to force member 3 out of engagement with disc 2.

The operation is as follows: Knob 8 is grasped between the thumb and fingers of the hand, pressed down so that the surface 10 of the member 3 comes into firm contact with disc 2, and given a quick twist while being pressed. While twisting the knob at its maximum velocity it is suddenly released from the thumb and fingers, whereby the member 3 is immediately forced away from contact with disc 2 and its rotation is retarded after release at a greater rate than that of the disc 2 on account of the member 3 having less momentum than the disc 2 and the fact that the cushion 11 of rubber produces a greater amount of friction for the member 3 than exists between the less elastic substances of elements 1, 2 and 7. The indication resulting from the rotation of disc 2 and member 3 is dependent upon the differential angular displacement of those elements occurring after release of knob 8.

Inasmuch as member 3 when spun is brought to rest at a different time from that

of the disc 2, the operator is less likely to know in advance what the indication given on the disc 2 will be than in the case where the member 3 has a more simple connection with the disc 2, as for example where it is mounted directly over a non-rotary dial as is commonly done in devices of the prior art.

The annular element 6, of V-shaped cross section projecting from the lower side of the disc 2, and supporting the disk, insures that the disc 2 will at all times be maintained properly spaced from the base 1, thereby preventing the disc 2 from wobbling and being prematurely retarded in its rotation by striking the base 1, or the member 3. A further advantage is gained by reason of the contact between the disc 2 and the base 1 being at a constant radial distance from the pin 7 thereby avoiding variation in friction and the possible stopping of the disc before it has spun a sufficient number of rotations.

The raised portion 5 of the base 1 is of value in keeping the surface upon which disk 2 bears, free from dust which might cause undesirable or variable friction.

I am aware that the particular embodiment of my invention above described, and illustrated in the accompanying drawings is susceptible of considerable variation without departing from the spirit thereof, and therefore I desire to claim my invention broadly as well as specifically as indicated by the appended claims.

I claim as my invention:

1. In a game device, a plurality of members normally independently rotatable but having surfaces to frictionally lock in contact with each other, supporting means therefor, and a cushion between one of said members and said means.

2. In a game device, a plurality of members normally independently rotatable but having surfaces to frictionally lock in contact with each other, supporting means therefor, and a cushion secured to one of said members between said member and said means.

3. In a game device, a plurality of members one above the other, normally independently rotatable but having surfaces to frictionally lock in contact with each other, supporting means therefor, and a cushion interposed between the uppermost member and said means.

4. In a game device, a plurality of rotary members, means including a cushion for supporting one of said members, a portion of said means pivoting another of said members, and a base supporting said other member and said means.

5. In a game device two rotary members, means including a cushion at one end for supporting one of said members, a portion

of said means pivoting the other of said members, and a base supporting said other member and said means.

6. In a game device, two rotary members, means including a cushion at the upper end for supporting one of said members, a portion of said means pivoting the other of said members, and a base supporting said other member and said means.

7. In a game device, two rotary members having surfaces to frictionally lock in contact with each other, means including a portion pivotally supporting one of said members, and a cushion portion normally supporting the other member out of contact with said first named member.

8. In a game device, two rotary members in proximity to each other on a common axis, supporting means therefor including a cushion, one of said members having a contact element to lock in frictional contact with the other of said members, said cushion normally maintaining said members out of contact with each other and yieldable to permit said members to be brought into contact with each other.

9. In a game device, a base, a rotary member vertically pivoted on said base and having a depending V-shaped annular bearing supported on said base at the vertex of the V.

10. In a game device, a base, a rotary member vertically pivoted on said base and having a depending annular bearing supported by said base, a second rotary member resiliently supported by said base to accelerate said first member said members each bearing indicia to indicate their relative angular displacement.

11. In a game indicator, a base having a recess in the upper surface thereof, a pin arising from the center of said recess, a cushion supported on said pin, a first disk carrying a knob supported on said pin but separated therefrom by said cushion, a second disk separated from said first disk and surrounding said pin between said first disk and said base and supported upon said base, said cushion yielding when said first disk is depressed into contact with said second disk and expanding when said first disk is released to separate said disks.

12. In a game indicator, two rotary members cooperating to give an indication, a base supporting both of said members, one of the members being positioned above the other, a pivot connection between said base and members, one of the members contacting with said base and having one value of frictional resistance to rotation and the other member contacting with the pivot connection and having another value of frictional resistance to rotation.

13. In a game indicator, a base, a plurality of rotary members mounted thereon,

and co-operating to produce an indication by the relative angular displacement of said members, a support there- 10
by the relative rotation of said members, the difference in the coefficients of friction for, including means retarding one member
between one of said members and its bearing, and another of said members and its behind another at a constant rate while
5 bearing being substantially constant. the members are rotating.

In testimony whereof, I affix my signature.

14. In a game indicator, a plurality of rotary members cooperating to produce an

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