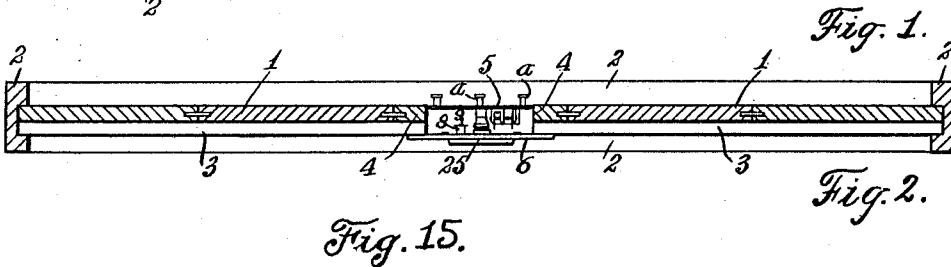
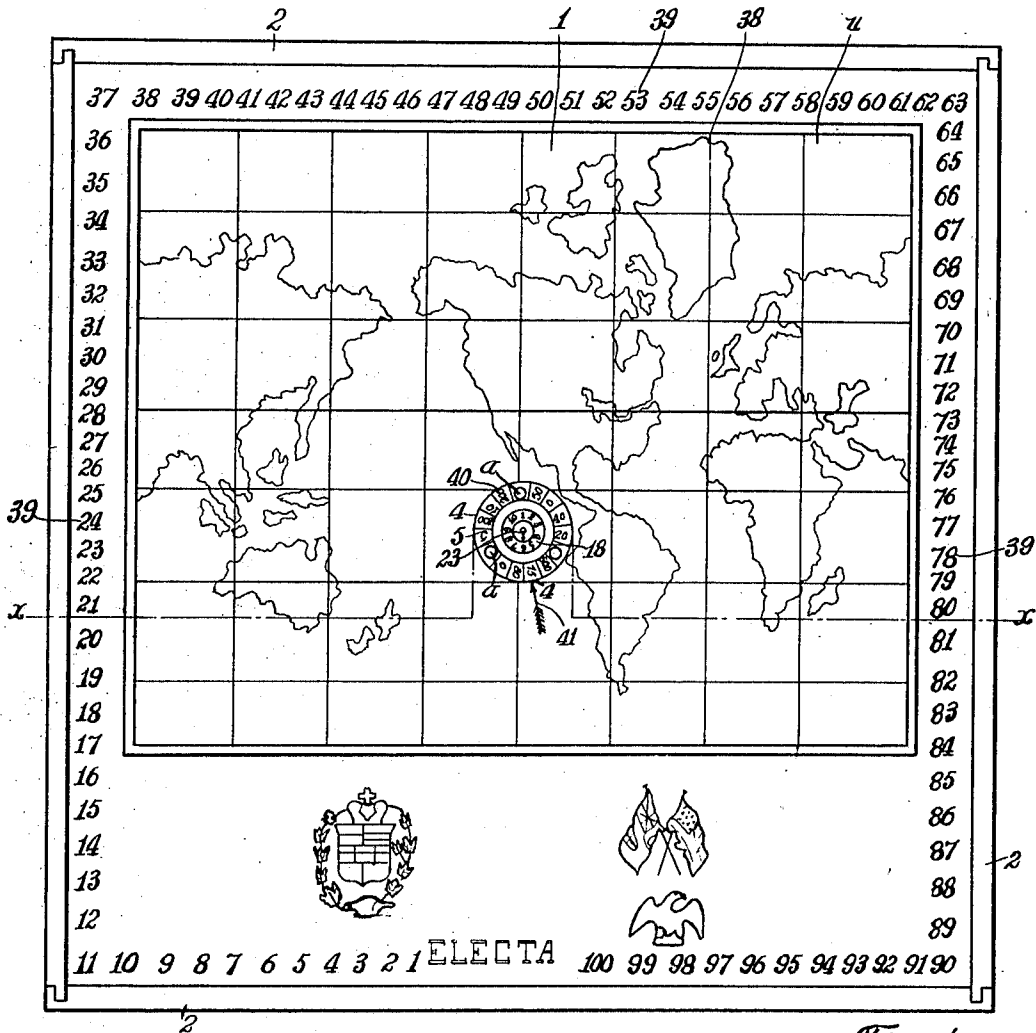


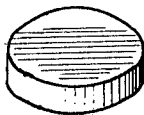
1,020,215.

Patented Mar. 12, 1912.

2 SHEETS—SHEET 1.



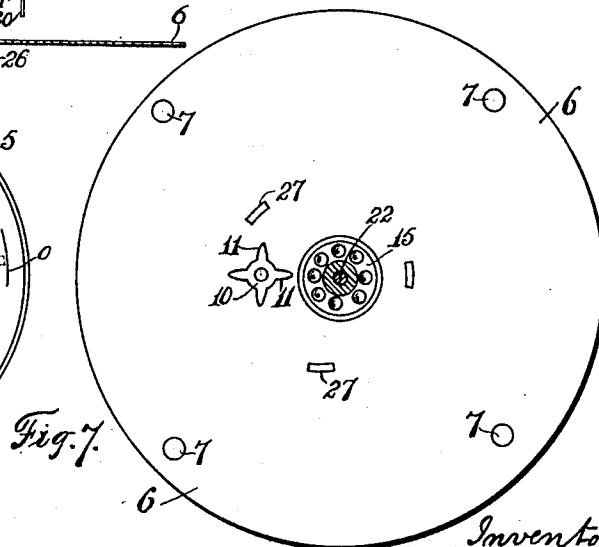
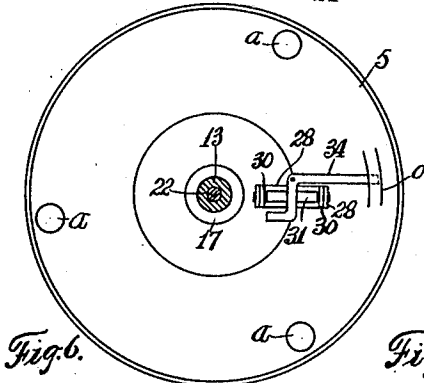
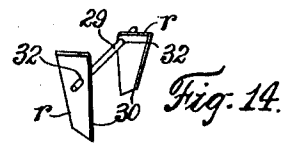
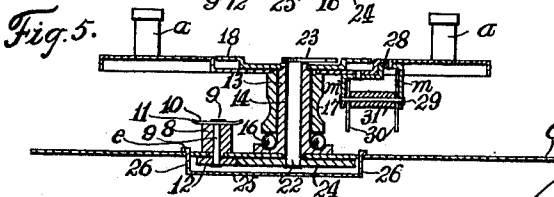
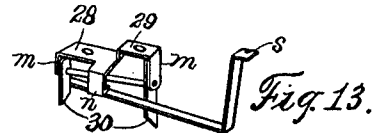
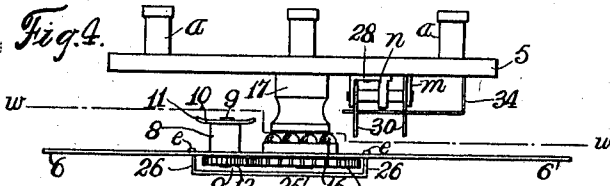
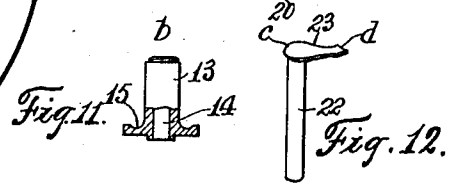
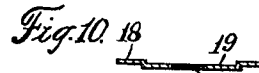
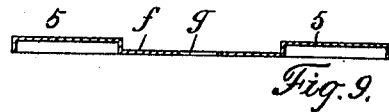
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1,020,215.

2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

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GAME APPARATUS.

1,020,215.

Specification of Letters Patent.

Patented Mar. 12, 1912.

Application filed April 20, 1910. Serial No. 556,521.

To all whom it may concern:

Be it known that I, HERBERT J. MILLER, a subject of the King of Great Britain, and a resident of the city of London, in the county of Middlesex, in the Province of Ontario, Canada, have invented a new and useful Game Apparatus, of which the following is a specification.

This invention relates to a contest for recreation or amusement to be won by chance or skill or both combined. And it consists of the improved construction and novel combination of parts of the same as will be hereinafter first fully set forth and described and then pointed out in the claims. Reference being had to the accompanying drawings forming part of this specification wherein;—

Figure 1 is a plan view of a game board with maps thereon and embodying my invention. Fig. 2 is a sectional view of same on the line *x, x*, of Fig. 1. Fig. 3 is an enlarged detail plan view of the revolving and stationary disks. Fig. 4 is a side view of Fig. 3. Fig. 5 is a central cross sectional view of Fig. 3. Fig. 6 is an under side view of the revolving disk, looking at it from the line *w, w*, in Fig. 4. Fig. 7 is a view of the stationary disk looking at it from the line *w, w*, in Fig. 4. Fig. 8 is a side view of one of the pawls. Fig. 9 is a detail central cross sectional view of the revolving disk. Fig. 10 is a detail cross sectional view of the stationary dial plate. Fig. 11 is a side elevation of the central post, partly in section. Fig. 12 is a perspective view of the indicator and arbor or spindle. Fig. 13 is a perspective view of the supplemental frame, pawls and the lever which throws said pawls out of operation. Fig. 14 is a perspective view showing the two pawls reversed on the shaft 29. Fig. 15 is a perspective view of a game disk.

In the accompanying drawings, the numeral 1 designates a game board, 2 a frame rigidly secured around said board and 3 a central cross bar extending across and rigidly secured to and on the underside of said board, 1, and 4 a hole formed in said board 1 and said cross bar 3 as shown in Fig. 2. 5 designates a revolving disk which extends up into said hole 4 until the upper face of said revolving disk 5 is on a level with the upper plane or surface of the game board 1. *a*, indicate rubber covered pins which are secured to the revolving disk 5

to facilitate the operation of the latter. This revolving disk 5 may also be enameled, nickeled or otherwise formed on the upper surface, and said revolving disk 5 is also provided with a surrounding flange projecting downward from the periphery thereof, to give this revolving disk 5 added firmness and strength. This revolving disk 5 has a depression, *f*, at the center, to receive the stationary dial 18, and this revolving disk 5 also has a central opening, *g*. 6 indicates a stationary disk secured to the bottom of said central cross bar 3, under said hole 4 by screws or other securing devices inserted through the holes 7 in the stationary disk 6 and into the cross bar 3, the said hole 7 being shown in Figs. 3 and 7. Mounted on and rigidly secured to this stationary disk 6 is a hollow pillar 8, and 9 is an arbor or spindle which extends through this pillar 8 through the revolving wheel 10 provided with arms 11, and through the revolving pinion 12, and said arbor or spindle 9 is held in place by being riveted or otherwise secured above said wheel 10 and below said pinion 12.

13 indicates a post provided with a hollow central portion 14 and this post is provided with a ball race 15 in which the balls 16 revolve and are held in place, and this post 13 is also provided with an external screw thread, *b*, around the upper end. The lower end of this post 13 extends through the stationary disk 6, and is riveted or otherwise rigidly secured thereto. 17 indicates a hub riveted or otherwise secured to the revolving disk 5, and when placed in position over said post 13 the lower end of said hub 17 rests on the balls 16.

18 indicates a stationary dial plate on which the numerals from one to ten or any other characters are enameled, stamped or otherwise formed. This stationary dial plate 18 is provided with a depression near the center, and is also provided with a central threaded portion which is fitted to and engages with the screw thread, *b*, on the outer upper end of the post 13. 21 indicate holes formed in the depressed portion 19 of said stationary dial plate 18, in which a key, not shown, may be inserted, to facilitate the attachment or removal of said dial plate 18 from said post 13.

22 indicates an arbor or spindle to the top of which the indicator or pointer 23 is rigidly secured, and said arbor or spindle 22

extends through the opening 14 in the post 13 and revolves therein, and said arbor or spindle 22 extends through the toothed wheel 24 and it is riveted or otherwise secured thereto; and said toothed wheel 24 engages with said toothed pinion 12. And the portion, *c*, of the indicator 23 secured to the arbor or spindle 22 rests on the depressed portion 19 of the dial 18, while the outer portion or pointer, *d*, just slightly clears the upper surface of the depressed portion 19, at the same time the upper surface of said indicator 23 will be slightly below the face of the game board 1.

25 is a protecting cover which extends over and around the toothed wheel 24, pinion 12 and gearing below the stationary disk 6, and said cover 25 is secured to said disk 6 by lugs 26 inserted through slots 27 and turning down the lugs 26 at, *e*, on stationary disk 6 as shown in Fig. 5.

28 designates a supplemental frame riveted or otherwise secured to the revolving disk 5.

In the depending ends, *m*, of the supplemental frame 28 the shaft 29 is secured, and 30 are the pawls pivoted on said shaft 29 between the depending ends, *m*, and the ends of the sleeve 31 as shown in Fig. 5. These pawls 30 are put on the shaft 29 in a reversed position to one another for the purpose which will be hereinafter described, and are pivotally secured one near each end to the shaft 29 by the latter passing through a hole 32 at one corner of each of said pawls, as shown in Fig. 8.

n, indicates a portion depending from the supplemental frame 28 on which portion the lever 34 is pivoted. This lever 34 engages with both of the pawls 30, as shown in Fig. 13, to throw them out of operation when required, and to facilitate this, one end of the lever 34 projects through the depressed portion, *o*, of the revolving disk 5 as shown in Fig. 3.

In assembling the central revolving metal portion of this game board, the tubular post 13 is secured to the stationary disk 6 and the balls 16 are placed in the ball race 15, encircling the base thereof as shown in Figs. 4, 5 and 11. The hub 17 and the supplemental frame 28 are then secured to said revolving disk 5 and when placed in position, the lower end of the hub 17 rests on the balls 16. This supplemental frame 28 is provided with the depending ends, *m*, in which the shaft 29 is mounted, and on this shaft 29 the pawls 30 are pivotally held in place, and said pawls 30 are reversed on said shaft 29 as shown in Fig. 14, that is, the corner, *r*, of one pawl 30 is longer and on one side of the shaft 29, and the similar or corresponding long corner, *r*, of the other pawl 30 is on the other side of the same shaft, as shown. This prevents the pawls 30 from

rising pivotally in one direction, because said long corner, *r*, of said pawls engage with the upper portion of said supplemental frame 28. And said pawls 30 both rise pivotally in opposite directions, because the pawls 30 have round, short corners on one side and the latter permit this rising of the pawls. The sleeve 31 is mounted on the shaft 29 between the pawls 30 so that the latter will be held at the ends of the shaft 29, between said sleeve 31 and the depending ends, *m*, of said supplemental frame 28.

When constructed as described and the revolving disk 5 is turned in the direction indicated by the arrow 36, the inner pawl 30 engages with the arm 11 of the wheel 10 and turns the latter one quarter of its circumference, there being four arms 11 on this wheel 10, and as this wheel 10 is revolved the arbor or spindle 9 and the toothed pinion 12, secured thereto are also revolved, as well as the toothed wheel 24 which engages therewith, and said toothed wheel 24 is regulated to turn one tenth of its circumference while the pinion 12 turns one quarter of its circumference. And the arbor or spindle 22 being secured to this toothed wheel 24 the latter as well as the indicator 23 is turned one tenth of the circumference of the dial plate 18. And at the same time the outer pawl 30 rides over the outer arm 11 of the wheel 10, because it is reversed on the shaft 29 as before described. Again when the revolving disk 5, is turned in the direction indicated by the arrow 37, the outer pawl 30 engages with one of the arms 11 of the wheel 10, and revolves the latter one quarter of its circumference, this revolves the arbor or spindle 9 and the rest of this mechanism as before described, in this case the inner pawl 30 rides over the inner arm 11 of said wheel 10, as before described. So that the instant that one pawl 30 engages with one of the arms 11 of the wheel 10 the other pawl will ride over the opposite arm, there will therefore be no lost motion on this account, and the indicator 23 will always stop opposite the character on the dial plate 18, it will also make no difference in which direction the revolving disk 5 is turned, the indicator 23 will always move in the one direction only, on the dial plate 18.

The lever 34 is pivoted on the depending portion, *n*, of the supplemental frame 28 for the purpose of acting on both of the pawls 30 to throw them up simultaneously so that they will not come in contact with the arms 11 of the wheel 10. In this case the indicator 23 is not operated, but the arrow 35 upon the revolving disk 5 comes into operation for indicating different plays in games that are played, for instance in making an imaginary journey, the successive countries upon the map 38 as indicated by the pointing of the arrow 35 thereto are em-

played to determine the line of travel and the successive stopping points throughout the journey. The pawls 30 are thrown out of operation by means of the lever 34 as before described in order that other games with a greater number of stops than is indicated on the dial 18, may be played on this game board. And to facilitate the operation of said lever 34, the end, *s*, of the latter projects into the depressed slot or portion, *o*, of the revolving disk 5, and within easy reach of the operator. In this case where a greater number of characters are used than those indicated on the dial plate, 18, these additional characters may be placed on the face of and around the revolving disk 5, as shown at 40, and the arrow 41 or any other sign used may be placed on the map around said disk 5 and indicate the number on said revolving disk, or said arrow or any suitable sign may be formed on the revolving disk 5 and the characters 40 formed on the map around said disk.

In Fig. 1 maps 38 are shown, but other picture plates may be employed, in which event the latter may be placed over said maps 38, and may not be perforated or they may be perforated if required, to show the revolving disk 5, so that said revolving disk 5 will show through said perforation. The figures or characters 39 around the maps 38 on the game board 1 are for use in a game played by means of this revolving disk 5, dial 18 and indicator 23. In another game played on this game board, the revolving disk 5 is operated by forcibly impelling small disks 50 against the rubber covered pins, *a*, so that these pins, *a*, as well as the disk 5 attached thereto are revolved, which revolves the rest of the mechanism as hereinbefore described, so that in one case the pins, *a*, are operated by hand, and in the other case by means of said small disks.

The playing of the various games on this game board, provides means which may be readily, instantly and easily manipulated by operators for instruction, recreation and amusement, and at the same time will provide a contest where skill and experience is required.

Having thus described my invention, I claim;

1. A game apparatus comprising a board member having a central circular perforation therethrough, a cross bar secured beneath said board, a stationary disk secured to the bottom of said cross bar and positioned beneath said perforation, a post centrally mounted upon said disk having a longitudinal bore therethrough, a ball race provided around the bottom of said post, a revolving disk positioned within said perforation and lying flush with the upper sur-

face of said board, rubber covered pins positioned upon said disk, a hub secured to said revolving disk and surrounding said post, anti-friction members positioned in said ball race and said hub mounted thereon, said revolving disk provided with a depression, a stationary dial positioned within said depression and mounted upon said post, a spindle extending through said post, a pointer secured to the top of said spindle, and means for rotating said pointer relatively to the dial upon the turning of the revolving disk.

2. A game apparatus comprising a board member having a central circular perforation therethrough, a cross bar secured beneath said board, a stationary disk secured to the bottom of said cross bar and positioned beneath said perforation, a hollow pillar mounted upon said disk, a post centrally mounted upon said disk having a longitudinal bore therethrough, a ball race provided around the bottom of said post, a revolving disk positioned within said perforation and lying flush with the upper surface of said board, rubber covered pins positioned upon said disk, a hub secured to said revolving disk and surrounding said post, anti-friction members positioned in said ball race and said hub mounted thereon, said revolving disk provided with a depression, a stationary dial positioned within said depression and mounted upon said post, a spindle extending through said post, a pointer secured to the top of said spindle, a toothed gear secured to the lower end of said spindle, an arbor extending through said hollow pillar, a pinion secured to the lower end of said arbor and said pinion in mesh with said gear, and means for turning said arbor and pointer upon a turning of the revolving disk.

3. A game apparatus comprising a board member having a central circular perforation therethrough, a cross bar secured beneath said board, a stationary disk secured to the bottom of said cross bar and positioned beneath said perforation, a hollow pillar mounted upon said disk, a post centrally mounted upon said disk having a longitudinal bore therethrough, a ball race provided around the bottom of said post, a revolving disk positioned within said perforation and lying flush with the upper surface of said board, rubber covered pins positioned upon said disk, a hub secured to said revolving disk and surrounding said post, anti-friction members positioned in said ball race and said hub mounted thereon, said revolving disk provided with a depression, a stationary dial positioned within said depression and mounted upon said post, a spindle extending through said post, a pointer secured to the top of said spindle, a toothed gear secured to the lower end of

said spindle, an arbor extending through said hollow pillar, a pinion secured to the lower end of said arbor and said pinion in mesh with said gear, a wheel secured to the upper end of said arbor, arms provided upon said wheel, and means positioned upon said revolving disk adapted to be positioned for engagement with said arms upon the rotation of said disk for moving said pointer.

4. A game apparatus comprising a board member having a central circular perforation therethrough, a cross bar secured beneath said board, a stationary disk secured to the bottom of said cross bar and positioned beneath said perforation, a hollow pillar mounted upon said disk, a post centrally mounted upon said disk having a longitudinal bore therethrough, a ball race provided around the bottom of said post, a revolving disk positioned within said perforation and lying flush with the upper surface of said board, rubber covered pins positioned upon said disk, a hub secured to said revolving disk and surrounding said post, anti-friction members positioned in said ball race and said hub mounted thereon, said revolving disk provided with a de-

pression, a stationary dial positioned within said depression and mounted upon said post, a spindle extending through said post, a pointer secured to the top of said spindle, a toothed gear secured to the lower end of said spindle, an arbor extending through said hollow pillar, a pinion secured to the lower end of said arbor and said pinion in mesh with said gear, a wheel secured to the upper end of said arbor, arms provided upon said wheel, means positioned upon said revolving disk adapted to be positioned for engagement with said arms upon the rotation of said disk for moving said pointer, a plurality of numerals positioned around the outer edge of said dial plate, and a lever projecting through said revolving disk for positioning said engaging means either in or out of contact with said arms.

In testimony whereof, I have signed in the presence of the two undersigned witnesses.

HERBERT JOHN MILLER.

Witnesses:

P. J. EDMUNDS,
S. HARDY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."