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STEREOPTICON SLIDE

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2 Sheets-Sheet 1

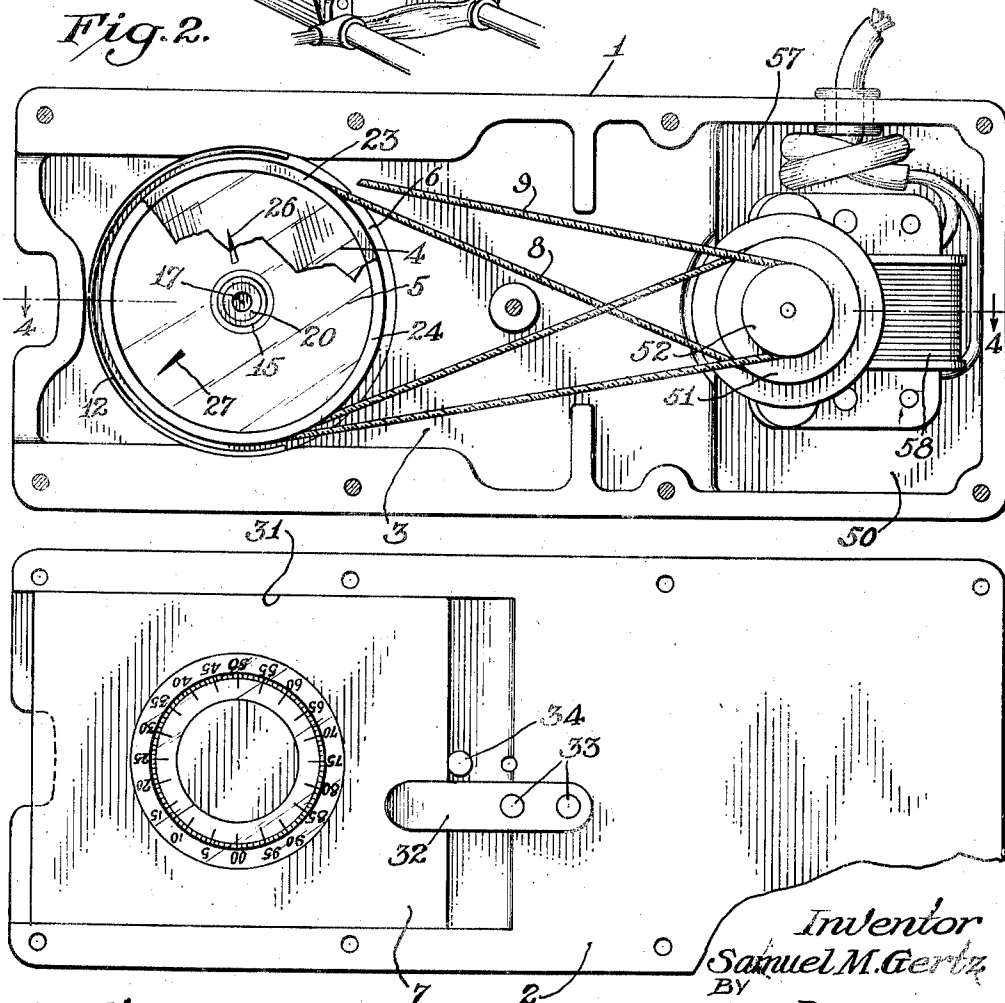
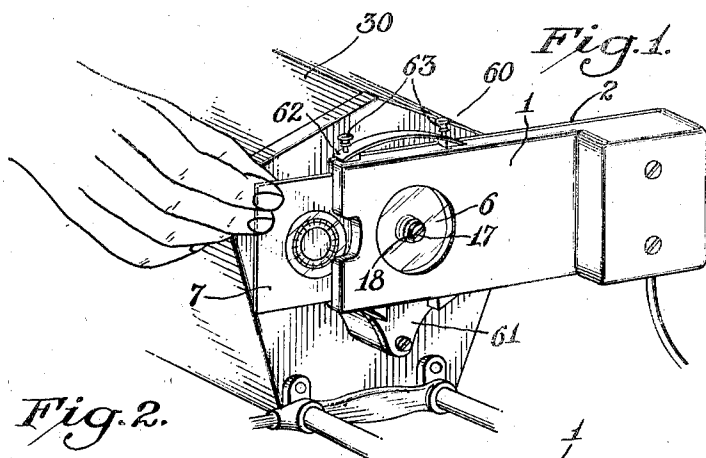


*Fig. 3.*

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2 Sheets-Sheet 2

*Fig. 4.*

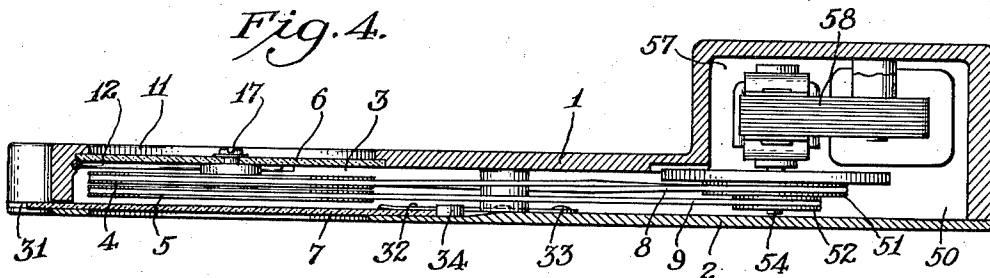


*Fig. 5.*

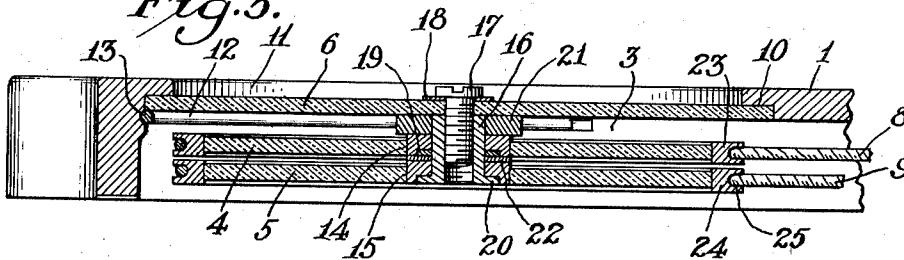


*Fig. 6.*

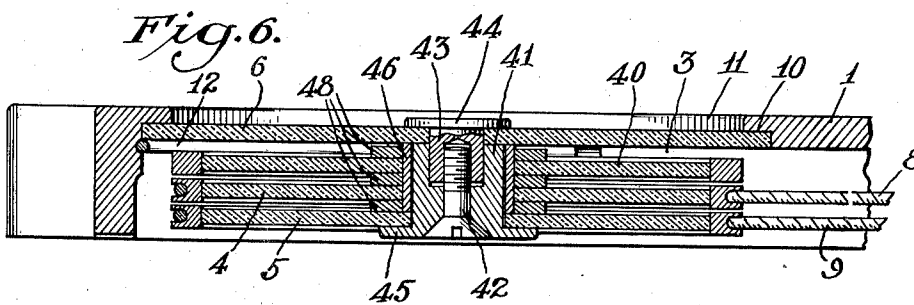
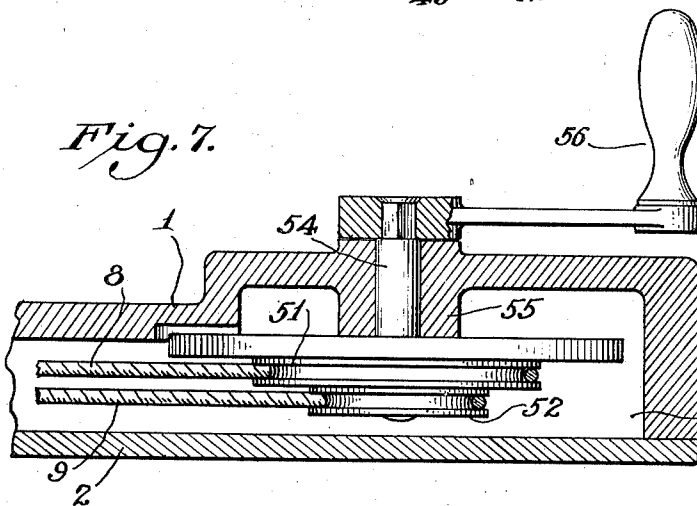


*Fig. 7.*



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## UNITED STATES PATENT OFFICE

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## STEREOPTICON SLIDE

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9 Claims. (Cl. 273-142)

This invention relates to stereopticon slide carriers having one or more movable members with markings thereon adapted to be projected upon a screen in conjunction with markings on game slides for the purpose of playing numerous games.

Stereopticon game slides as heretofore constructed have been limited to the playing of a single game. Inability to change the games has caused these devices to lose their popularity, and therefore, their value as amusement devices. I have found that devices of the prior art have been constructed in a manner preventing rearrangement or substitution of parts to secure new operating combinations due to structural limitations resulting from the form of drive employed.

An object of the invention is to provide a stereopticon game slide carrier of new design whereby a simple and efficient form of structure is obtained that is readily capable of permitting the playing of a great number of interesting games.

A further object of the invention is to provide a mechanical drive for the rotating members whereby they may be arranged to readily cooperate with changeable slide members to furnish many different types and kinds of games that will be interesting and amusing to the participants.

A still further object of the invention is to provide a new and novel drive for the rotating members whereby independent whirling impulses may be provided, not only in different directions but also at different rates of speed.

A still further object of the invention is to provide a new and novel mounting for the rotatable members.

A still further object of the invention is to provide a novel unitary mounting for the rotating members that will permit said independent movement or whirling impulses and also allow movement of one of the rotating members in a reverse direction.

Another object of the invention is to provide, in the device disclosed, a new and novel type of replaceable slide member capable of changing the type and kind of game played without removing the device from its mounting on the stereopticon machine.

Other objects and advantages of the invention will be apparent from the following detail specification when taken in connection with the accompanying drawings which form a part hereof.

In the drawings:

Figure 1 is a perspective view of a stereopticon machine illustrating a device embodying the in-

vention mounted thereon in its position of operation;

Fig. 2 is an elevational view of the interior of the device with its cover removed;

Fig. 3 is a view of the inside face of the cover;

Fig. 4 is a longitudinal sectional view of the device taken on line 4-4 of Fig. 2;

Fig. 5 is an enlarged detail sectional view through the mounting of the rotating members;

Fig. 6 is a similar view of an alternative embodiment of the invention illustrating a rotating member adapted to be operated through the rotation of the other rotating members and adapted to continue its rotation at a different rate of speed upon cessation of operation of the driving force; and

Fig. 7 is a detail view of another form of drive that may be used.

Essentially, the device comprises a housing 1, a cover 2, a chamber 3, a pair of rotating members 4 and 5 in chamber 3, a transparent glass window 6 providing a mounting for rotating members 4 and 5, a replaceable slide 7 carried in cover 2, and any suitable mechanical drive extending out of and to the right of chamber 3, such as flexible belts 8 and 9.

Window 6 is removably carried in a recess 10 on the inside face of housing 1. It is centrally disposed with respect to window opening 11 and held in removable relation by means of a wire spring 12 seated in a groove 13, cut in housing 1 partially about recess 10. Each rotatable member 4 and 5 is adapted to be centrally bored to receive collars 14 and 15 which are of a thickness slightly greater than the thickness of rotating members 4 and 5. Collars 14 and 15 are centered in the central bore of these rotating members so that they will be flush with one face of each rotating member but will project slightly beyond the opposite face. These collars may be fixedly secured to rotating members 4 and 5 and are adapted to be mounted upon a bushing sleeve 16 carried upon front window 6 by a bolt 17 threaded into bushing sleeve 16, a washer 18 being interposed between the head of bolt 17 and the outside face of window 6. Each collar 14 and 15 is recessed in one of its faces. Collar 14 is adapted to receive a washer 19 seated therein, while collar 15 is adapted to receive a shoulder 20 of corresponding depth disposed at the end of sleeve 16 whereby to hold these collars and their rotating members 4 and 5 in position upon window 6 when bolt 17 is threaded into sleeve 16. A suitable spacing collar 21 is provided between window 6 and rotating member 4. A washer 22 may be interposed between collars 14

and 15. Washer 22, together with the projecting portion of collar 15, provides suitable spacing means to keep rotating members 4 and 5 in spaced relation and at the same time provide a mounting for these members creating minimum friction when rotated. In fact, these parts create an antifriction mounting that permits exceptionally free rotation of members 4 and 5.

Each rotating member may be made of glass or other transparent material suitable for the purpose for which they are intended. They are provided with peripheral rings 23 and 24, each having a groove 25 to receive the flexible driving members 8 and 9. Rotatable members 4 and 5 may be made of a diameter larger than the diameter of window opening 11 so that rings 23 and 24 will not interfere with the light rays projected through the rotating members 4 and 5 and window 11. Members 4 and 5 may have markings 26 and 27, respectively, adapted for chance registration with symbols or markings on slide 7 when these rotating members come to rest after a whirling impulse through the driving relation of flexible members 8 and 9.

To determine the game to be played, transparent slide 7 carried in cover 2 is provided in a manner permitting ready replacement so as to change the kind of game at will, and, if so desired, while housing 1 remains mounted upon the stereopticon machine 30. Fig. 1 illustrates how slide 7 may be readily removed and replaced by a similar slide that will change the kind of game being played. Slide 7 may be carried within housing 1 in any suitable way, but, for purposes of illustration, it may be slidably carried in a recess 31 provided in cover 2 and held in position by a spring finger 32 secured to cover 2 at 33. A stop pin 34 assures central positioning of slide 7 with respect to rotating members 4 and 5 and window 11.

It will be apparent that the markings upon slide 7 will determine the game to be played and that the winner will be determined by the chance registration of either or both markings 26 and 27 cooperating with some marking on slide 7 when the rotating members 4 and 5 come to rest after a whirling impulse. The use of two rotating members 4 and 5 with their markings 26 and 27 increases the number of games that may be played. It is also contemplated that either marking may individually cooperate with markings on slide 7 and that certain combinations of registration of both markings with markings on slide 7 may be used to determine the winner. Many different games may thus be played to furnish appropriate entertainment in the home.

Rotating members 4 and 5 are removably carried as a unit upon window 6. Window 6 may be readily removed from its recess 10 by the release of wire spring 12 from its recess 13. Hence, window 6 carrying rotating members 4 and 5 may be removed as a unit so that either one or both of these members may be replaced by others, if so desired. The form of mounting of rotating members 4 and 5 upon window 6 is extremely simple. The parts are arranged to place a minimum strain upon window 6 so as to prevent cracking thereof, yet the mounting allows free and easy rotation of rotating members 4 and 5 and a continued whirling action after cessation of the drive.

Moreover, the type of mounting above described for rotating members 4 and 5 advantageously provides means for carrying and rotating a third member 40 in the form of a transparent disk

shown in Fig. 6, having thereon a marking similar to markings 26 and 27 to increase the fascination attached to this type of device when a chance registration of a third marking is required in connection with the chance registrations of two other markings in order for a winner to score. This fascination is particularly obtainable in the present instance by the free whirling action of the disk 40 when members 4 and 5 cease to be driven. When belts 8 and 9 cease to drive members 4 and 5, the latter will continue for a time to rotate freely but in opposite directions. However, during the period belt 8 drives member 4, disk 40 will rotate in unison therewith. When belt 8 ceases to drive member 4, the friction drive created between member 4 and disk 40 will no longer exist, whereupon disk 40 sets up a whirling action at a speed independent of member 4 and the marking thereon then begins to rotate at a different rate than marking 26 on member 4. As soon as this independent rotation of the marking on disk 40 starts, a new element of a chance winning is set into action so as to arouse an added interest in the finish of the play.

The device shown in Fig. 6 is substantially the same as shown in Fig. 5. An enlarged bushing 41 is tapped to receive a bolt 42 that is adapted to thread in a stud 43 having an enlarged integrally formed disk 44. Bushing 41 is likewise provided with a collar 45 at one end. At the other end, it is cored to receive stud 43 therein. Member 5 may ride directly upon bushing 41 while a sleeve 46 may be interposed to carry members 4 and 40 due to their rotation in the same direction. Spacing collars 48 may be disposed between these rotating members and also between member 40 and window 6.

The devices above described are mechanically simple and inexpensive to construct and operate. They afford the playing of games not heretofore possible and have unlimited use.

As stated, pulley collars 23 and 24 on members 4 and 5 are mechanically driven by belts 8 and 9. The latter extend to the right in housing 1 and encircle about a combination pulley 50 having grooves 51 and 52. By virtue of this construction, grooves 51 or 52 may be of different diameters to differentiate the rate of speed of members 4 and 5 rotating in opposite directions, which feature likewise increases the interest in the finishing operation of the games that may be played, and which I believe I am the first to suggest in a structure of this type.

Pulley 50 may be carried upon a stud shaft 54 mounted in a bearing 55 formed upon housing 1 and operated by a hand crank 56 as shown in Fig. 7, or by other suitable mechanical means. One such means may be a small motor 58 disposed in an enlargement on housing 1, which forms a chamber 57 in which the motor may be mounted. Shaft 54 may then be connected to this motor 58. However, I believe that I am also the first to provide, in a device of this type, a unitary construction in which a single housing may so compactly carry the rotating members, their driving connections and a rotary electric motor for the same, that this housing may be easily mounted upon the front of and carried by a stereopticon machine without resulting in the provision of a cumbersome structure.

As shown in Fig. 1, a bracket 60 having a bottom piece 61 and a top 62 comprises the mounting for housing 1 upon the front of the stereopticon ma-

chine 30. Screws 63 may be used to clamp housing 1 firmly in position.

In a stereopticon game slide, I believe I am the first to provide rotatable elements, broadly, that have markings thereon which will rotate at different speeds, and even in different directions, so as to enliven the interest in the game as it continues to approach the finish of the play whereby to increase the interests of the participants in the winning score. I believe that I am also the first to provide a stereopticon slide carrier having, in combination with one or more rotating elements, a game slide that may be replaced at will to change the game being played without requiring the removal of the device from its mounting upon the stereopticon machine. Accordingly, I shall claim these features broadly, and do not intend to be limited to the exact structure disclosed herein, which has been illustrated merely as a preferred embodiment thereof.

Without further elaboration, the foregoing will so fully explain the gist of my invention that others may, by applying current knowledge, readily adopt the same for use under varying conditions of service, without eliminating certain features, which may properly be said to constitute the essential items of novelty involved, which items are intended to be defined and secured to me by the following claims.

I claim:

1. A stereopticon slide of the type described comprising a marginal frame formed with a central chamber, a slidably removable transparent plate carried by said frame having a series of annular symbols or markings thereon, a pair of transparent disks, means for rotatably and coaxially supporting said disks in said housing on the projection axis of said transparent plate to provide for chance registration of symbols or markings on said disks with said symbols or markings on said slidably removable plate, said disks being supported in said housing independently of said slidably removable plate, and a drive for said disks, said drive including means for imparting whirling impulses to said disks at different speeds and in opposite directions.

2. A stereopticon slide of the type described comprising a marginal frame formed with a central chamber, said frame having a slot therein, a transparent plate removably carried in said slot having symbols or markings thereon, and a game device in said chamber and opposite said transparent plate comprising a pair of transparent disks provided with symbols or markings thereon adapted to cooperate with said symbols or markings on said transparent plate, means for supporting said disks centrally in said chamber for rotatable movement opposite said transparent plate, and means for imparting whirling impulses to said disks at different speeds.

3. A stereopticon slide of the type described comprising a marginal frame formed with a central chamber, said frame having a slot therein, a transparent plate removably carried in said slot having symbols or markings thereon and a game device in said chamber and opposite said transparent plate comprising a pair of transparent disks provided with symbols or markings thereon adapted to cooperate with said symbols or markings on said transparent plate, means for supporting said disks centrally in said chamber for rotatable movement opposite said transparent plate, and means for imparting whirling impulses to said disks in opposite directions.

4. A stereopticon slide of the type described

comprising a frame, a pair of spaced transparent plates carried by said frame, a disk between said plates, means for rotatably supporting said disk on the projection axis of said plates, said disk having symbols or markings thereon adapted for chance registrations with symbols or markings on one of said transparent plates, said supporting means being carried by the other plate, means for imparting whirling impulses to said disk, and means on said frame for removably carrying said symbol-bearing plate independently of said disk carried by said other plate.

5. A stereopticon slide of the type described comprising a frame, a pair of transparent plates carried by said frame, a pair of rotatable disks between said plates having symbols or markings thereon adapted for chance registration with symbols or markings on one of said plates, means carried by the other plate for coaxially supporting said disks in independent rotatable relation with respect to each other and on the projection axis of said plate, means for imparting whirling impulses of different speeds to said disks, and means for removably carrying said symbol-bearing plate upon said frame independently of said supporting means for said disks.

6. A stereopticon slide of the type described comprising a frame, a slidably removable transparent plate, a pair of rotatable disks having symbols or markings thereon adapted for chance registration with symbols or markings on said plate, means carried upon said frame for coaxially supporting said disks in independent rotatable relation with respect to each other and on the projection axis of said plate, and means for imparting whirling impulses to said disks, said disks being carried by their said supporting means independent of said slidably removable transparent plate.

7. A stereopticon slide of the type described comprising a pair of transparent plates, a frame for holding said plates in spaced relation, said frame having slot-like means for removably carrying one of said plates to permit replacement thereof by another but similar plate having different symbols or markings thereon than the symbols or markings on the plate removed, a game device disposed between said pair of plates comprising a pair of independently rotatable disks, means for rotatably and coaxially supporting said disks on the projection axis of said plate, said disks having symbols or markings thereon for cooperation with the symbols or markings on said removable plate, there being pulley grooves in the peripheries of said disks, and a belt for each groove for imparting independent whirling impulses to said disks.

8. A stereopticon slide of the type described comprising a pair of transparent plates, a frame for holding said plates in spaced relation, one of said plates having symbols or markings thereon, said frame having slot-like means for removably carrying said plate, a game device comprising peripherally grooved rotatable disks, means for rotatably and coaxially supporting said disks on the projection axis of said plates, said disks having symbols or markings thereon for cooperation with the symbols or markings on said removable plate, a pulley with a plurality of grooves therein supported upon said frame, a belt for each peripheral disk groove for engagement in the grooves of said pulley, and means for driving said pulley to impart independent whirling impulses to said disks.

9. A stereopticon slide carrier comprising in combination a housing and a game device carried

thereby, said game device comprising rotating means disposed in said housing having symbols or markings thereon, and a removable slide carried by said housing on the projection axis of said rotating means and having symbols or markings thereon adapted to cooperate with the symbols or

markings on said rotating means, said housing having a slot-like means for removably carrying said slide or a like slide having the same or different symbols or markings thereon.

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