

Z. LITTMAN.
PROJECTING APPARATUS.
APPLICATION FILED SEPT. 16, 1911

Patented Feb. 11, 1913.

1,052,835.

4 SHEETS—SHEET 1.

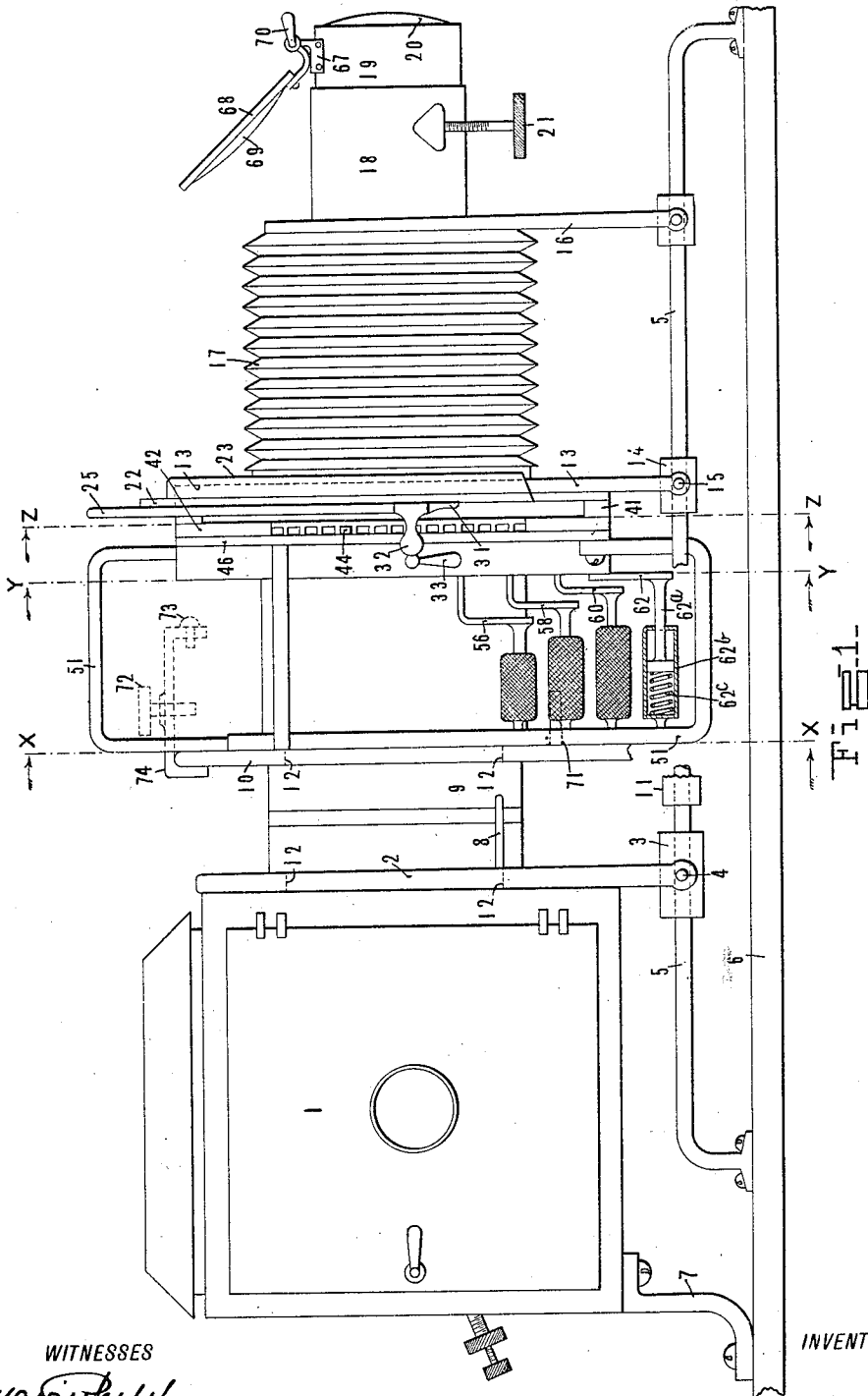


Fig. 1-

WITNESSES

August Roth

INVENTOR:

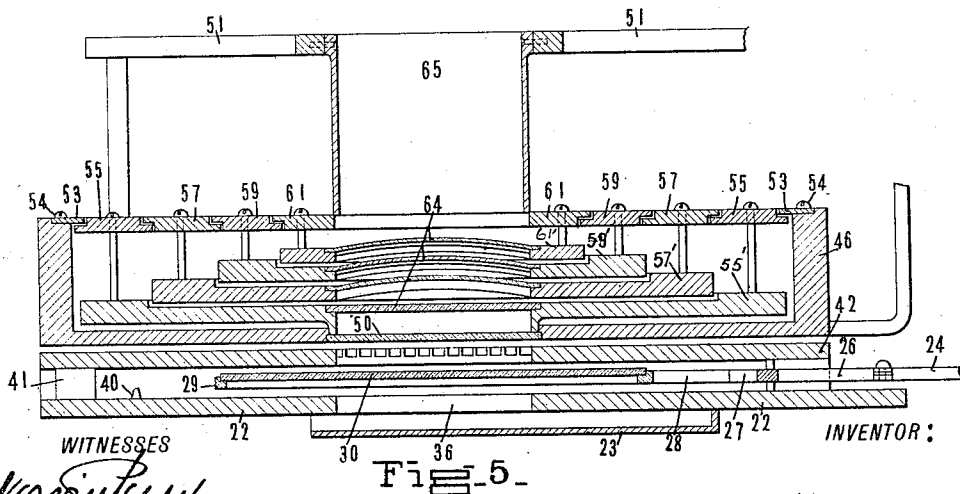
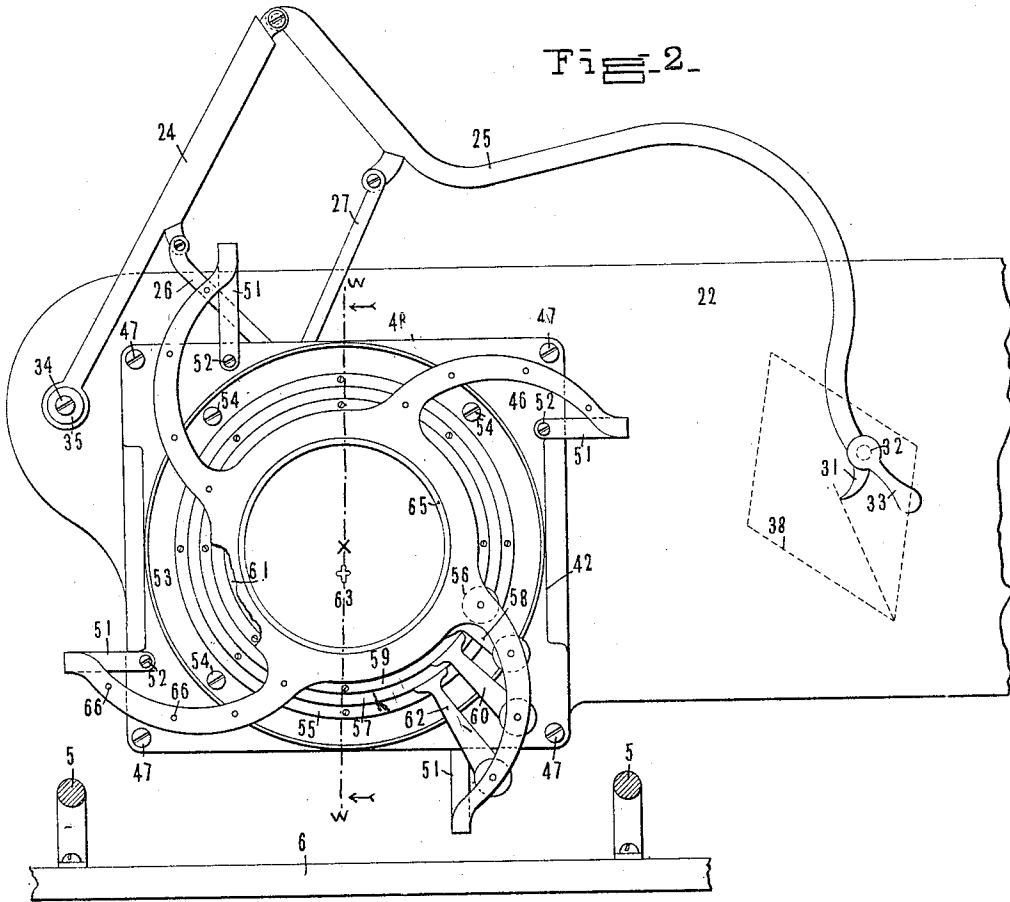
Zeus Littman

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4 SHEETS-SHEET 2.



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4 SHEETS-SHEET 3.

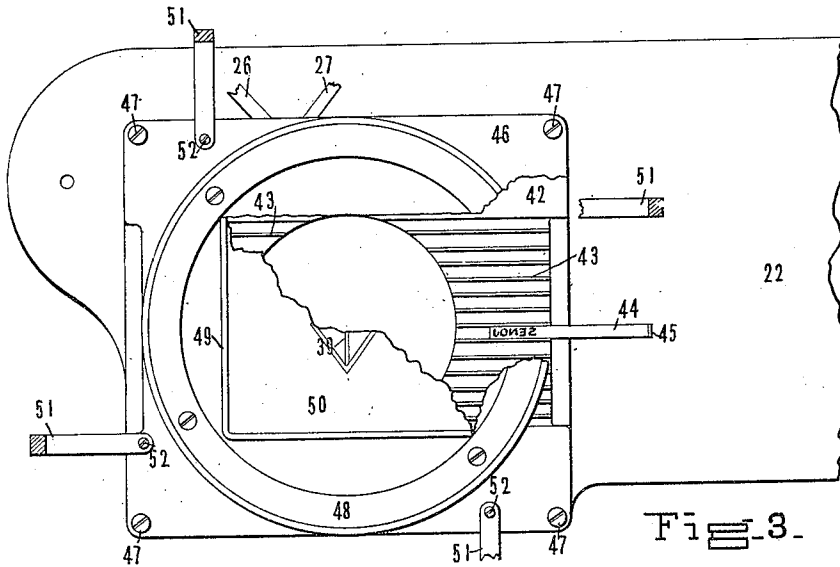


Fig. 3.

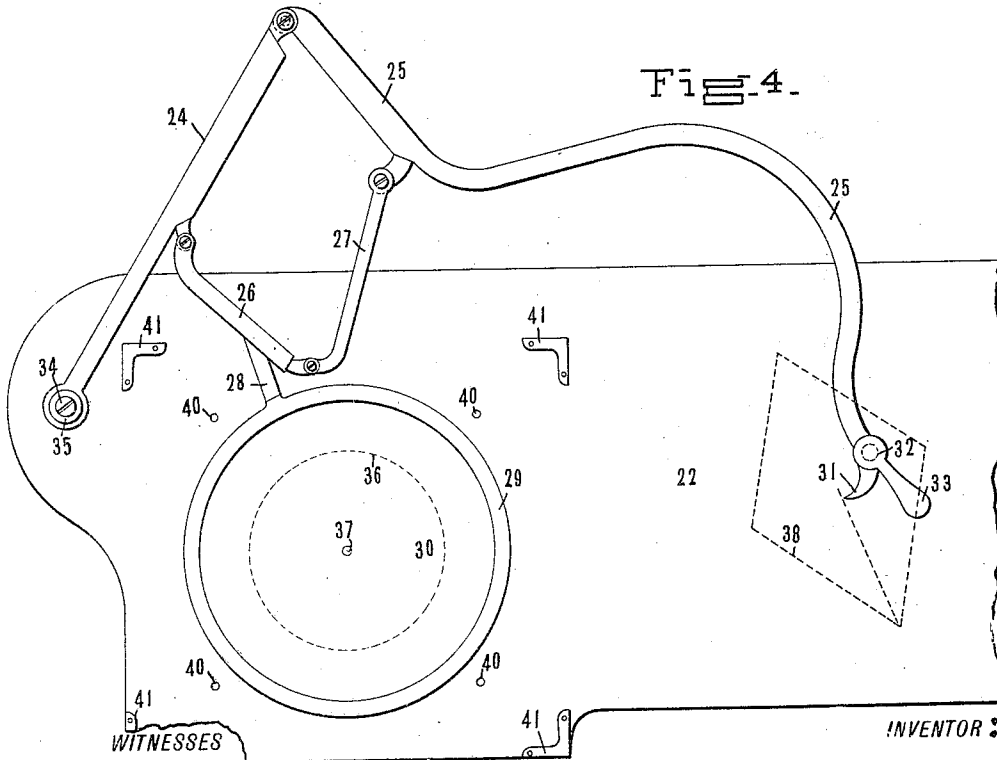


Fig. 4.

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4 SHEETS—SHEET 4.

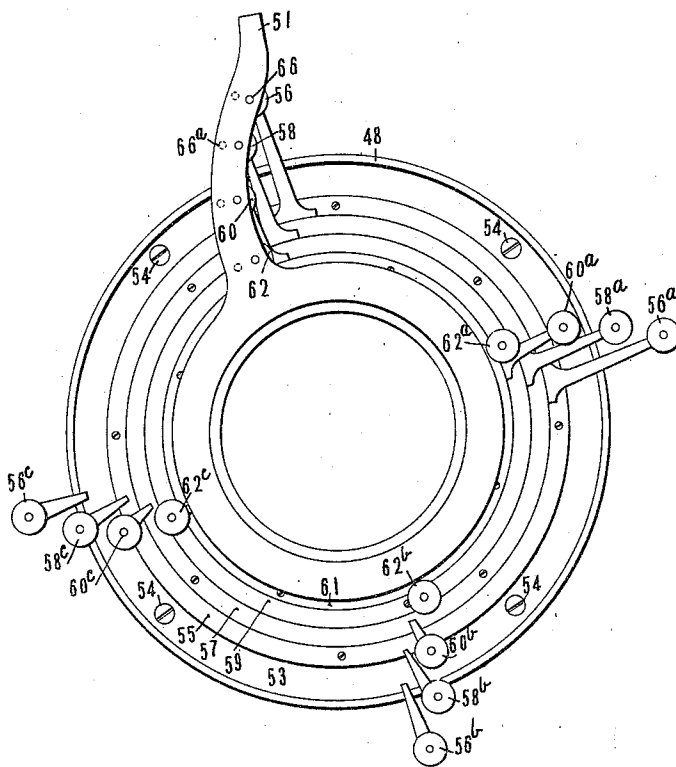


Fig. 6.

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UNITED STATES PATENT OFFICE.

ZENO LITTMAN, OF NEW YORK, N. Y., ASSIGNOR, BY MESNE ASSIGNMENTS, TO
BASEBALLEON INC., A CORPORATION OF NEW YORK.

PROJECTING APPARATUS.

1,052,835.

Specification of Letters Patent.

Patented Feb. 11, 1913.

Application filed September 16, 1911. Serial No. 649,771.

To all whom it may concern:

Be it known that I, ZENO LITTMAN, residing in New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Projecting Apparatus, of which the following is a specification.

This invention relates to projecting apparatus, and more particularly to apparatus of the magic lantern or stereopticon type, the cardinal features of this type being common in the art and comprising, broadly, a lens, a transparent or opaque image to be projected, and lighting means to accomplish such projection.

The prime object of this invention is to provide an improved apparatus for attaining the ends and objects set forth in an application for improvements in projecting apparatus, filed by Arthur G. Previn March 7, 1911, Serial Number 612,881.

One of the objects is to provide a machine wherein the mechanisms are simple, compact and easy to operate.

Another object is to provide, in embodiments wherein certain factors to be projected move in predetermined paths of travel, as in the present instance, viz., the reproduction of a game of base-ball, mechanisms for controlling the movements and positions of one or a plurality of such factors, in addition to the mechanisms for controlling the movements and positions of a ball factor.

Another object is to so group all the necessary mechanisms for the reproduction aforesaid that the same may conveniently be removed from a stereopticon of the usual type, so that the latter may conveniently and interchangeably be used for either the usual style of projection or the special projection aforesaid.

Other objects will be in part obvious and in part pointed out hereinafter.

The invention accordingly consists in the features of construction, combinations of elements, and arrangements of parts, the scope of the application of which will be indicated in the following claims.

Referring now to the accompanying drawings, wherein is shown an illustrative embodiment of this invention, Figure 1 is a side elevation of a stereopticon containing an embodiment of my invention, wherein there is also shown, in dotted lines, auxiliary devices for use when the said stereopticon is used for the old type of slide; Fig. 2

is a sectional view of certain parts of this embodiment, taken on the line $x-x$ of Fig. 1 and looking in the direction of the arrow; Fig. 3 is a sectional view, taken on the line $y-y$ of Fig. 1 and looking in the direction of the arrow; Fig. 4 is a sectional view, taken on the line $z-z$ of Fig. 1 and looking in the direction of the arrow; Fig. 5 is a sectional view, taken on the line $w-w$ of Fig. 2 and looking in the direction of the arrow; Fig. 6 is a plan view of certain parts shown in Fig. 2, illustrating a possible different construction.

Similar reference characters refer to similar parts throughout the several views of the drawings.

Referring now to the embodiment of this invention herein disclosed, 1 indicates a light-containing receptacle, of the usual type. It is here provided with a front-plate 2, terminating in sleeves 3, each carrying a set-screw 4. Slide-rods 5, fastened to base-board 6, are encircled by sleeves 3, and are firmly fixed thereon at predetermined points by means of set-screws 4. Legs 7, fastened as shown to base-board 6, in combination with sleeves 3 and slide-rods 5, constitute a firm support for light-containing receptacle 1. Pins 8 support condensers 9, which are in addition restrained by means of plate 10, the latter terminating in a sleeve 11 on said rod 5. Plates 2 and 10, as indicated by dotted lines at 12, are provided with circular openings so as to permit light from receptacle 1 to be unimpeded in passing through said condensers.

Omitting for the minute a description of the intervening parts, which in this embodiment constitute an integral machine for removal from the stereopticon, let us pass directly from plate 10 to plate 13. Plate 13 terminates in a sleeve 14, which, with its set-screw 15, is capable of being fixed at any desired point upon rod 5. Between plate 13 and plate 16, the latter equipped with sleeve and set-screw as is plate 13, is carried the bellows 17. 18 and 19 are the focusing members for the lens 20, adapted to be focused through the operation of focusing screw 21.

Referring now to the integral machine mentioned in the preceding paragraph, 22 is the main-plate thereof. Plate 22, upon the face thereof nearest bellows 17, carries a pocket 23, adapted to accommodate therein the top portion of plate 13 (as shown clearly in Fig. 1), in a manner to permit of

the rapid insertion or removal of said integral machine in its entirety from said stereopticon. Plate 22 carries upon its opposite face the parts now to be described.

5 The parts so mounted upon plate 22 will be described in the following order: first, those shown in Fig. 4, next those shown in Fig. 3, and next those shown in Fig. 2; the parts shown in plan in any or all of said
10 Figs. 4, 3 and 2 being shown in section in Fig. 5 when possible and in elevation in Fig. 1 when possible.

Referring now to Fig. 4 (in accordance with the preceding paragraph) there is
15 shown a set of levers 24, 25, 26 and 27. Lever 26 has a branch 28, carrying thereon a ring 29, wherein is set a glass 30. Lever 25, terminates in an index-point 31; said lever being further provided with an operating
20 handle, terminating in an auxiliary handle 33. The entire set of levers is mounted upon plate 22, as shown, by means of screw 34, passing through washer 35. An orifice 36 is shown in dotted lines behind
25 glass 30, and in the center of said glass and directly over the center of said orifice, is shown a symbol 37 (in this instance a base-ball). Orifice 36 is provided to leave unimpeded, as is shown more clearly in Fig.
30 5, the light-way of the rays from light-receptacle 1. The construction and design of the levers is such that symbol 37 will have corresponding and proportional movement with the movement of index 31; the
35 chart 38 in dotted lines having a direct relation to a chart projected by the machine upon the screen (*vide* chart 39, Fig. 3, hereinafter described). Pins 40 are set in plate 22 to restrain any opaque portion of ring
40 29 from coming within the light-way area. Blocks 41 are set upon plate 22, for the purpose of supporting additional parts, which are not illustrated in this figure but which will be immediately taken up in the
45 next paragraph.

Referring now to Fig. 3 (in accordance with the second preceding paragraph), plate 42 is shown mounted upon blocks 41 (Fig. 4). Transversely thereof, plate 42 is provided with a plurality of parallel slide-
50 ways 43 as shown. Each of these slide-ways is adapted to receive an indicating member 44, here shown as being of translucent material and having a name written thereon and being provided with an operating lip
55 or the like 45. These are adapted to slide back and forth, into and from the light-way area aforesaid (plate 42 being provided as shown with an orifice which registers with orifice 36 shown in Fig. 4), in order to project additional information upon the screen, such as the "score by innings," "man at bat" indications, etc. Mounted
60 upon said plate 42 is a second plate 46, as shown; screws 47 being provided to attach

plates 42 and 46 to blocks 41. Plate 46 is, as shown, provided with an integral upper cylindrical portion 48, for the accommodation of parts hereinafter to be described. Plate 46, within the base of said portion 48,
70 as shown, is provided with a substantially square opening 49 the length of one of the sides of which is substantially equal to the diameter of the circular orifices therebeneath. Within this opening 49 is provided
75 a square of translucent material 50, upon which is adapted to be marked any image which it is desired to permanently project, such as, for instance, the chart 39, hereinbefore mentioned in connection with the description of the set of levers illustrated in
80 Fig. 4. This plate or square 50 is maintained in place by means of the parts just-referred-to which are accommodated in portion 48. Members 51 are shown in their entirety in Fig. 2, and will be described when that figure is reached. These members are fastened as shown at 52, Figs. 2 and 3.

Referring now to Fig. 2 (in accordance with the third preceding paragraph), the
90 portion 48 of plate 46 is shown as accommodating the parts hereinbefore referred to. As illustrated in this figure, there is a fixed restraining ring 53, held in place by screws 54, and slip-ring 55, operable through operating handle 56, slip-ring 57, operable
95 through operating handle 58, slip-ring 59, operable through operating handle 60, and slip-ring 61, operable through operating handle 62. Fixed ring 53 and slip-rings 55, 57, 59 and 61 are more clearly illustrated in section in Fig. 5, and operating handles 56, 58, 60 and 62 are more clearly illustrated in elevation in Fig. 1. From Fig. 1
100 it will be seen that each operating handle is in this instance comprised of a fixed rod, a cylindrical member for longitudinal reciprocation therewith, said cylindrical-member being knurled or roughened on the outer surface thereof and having a pointed upper
110 portion, and an expansile spring mounted within said cylindrical portion and bearing at one end against the end of said rod. For example, operating handle 62 is drawn partly broken away, upon which 62^a is the
115 fixed rod, 62^b is the cylindrical member, and 62^c is the spring. Mounted upon plate 46, is a spider 51, having substantially U-shaped arms as shown, and being mounted upon said plate as at 52. Spider 51 has a
120 central orifice as shown, within which is mounted as shown in Figs. 2 and 5 an open-ended cylinder 65, to act as a girdle for the rays of light which will pass therethrough when the face of spider 51 is brought in contact with plate 10 as illustrated in Fig. 1.
125 The U-shaped spider arms are as shown four in number, marking off quarter-circumferences for the respective slip-rings above mentioned; and are provided with holes 66, each
130

adapted to engage an operating handle when desired.

Referring now to Fig. 5, it will be seen that slip-ring 55 is fixedly connected to a glass-holding ring 55', that slip-ring 57 is fixedly connected to a glass-holding ring 57', that slip-ring 59 is fixedly connected to a glass-holding ring 59', and that slip-ring 61 is fixedly connected to a glass-holding ring 61'. Each of said glass-holding rings, when revolving with its appropriate slip-ring, carries with it a glass 64. Referring again to Fig. 2 it will be seen that each glass 64 carries thereon a symbol 63 (in this instance supposed to represent the "base-running" factors in a game of baseball). These symbols are so placed on glasses 64 that whenever operating handles 56, 58, 60 and 62 are all in latch under any one of the arms of spider 51, then these symbols are all superposed and over some base-point of the diamond shown at 39 in Fig. 3. This is preferably accomplished by placing symbols 63 in such a manner that their distance from the center of any glass 64 (x , Fig. 2) is equal to the distance from any base-point to the center of the diamond shown at 39 in Fig. 3.

Referring now to Fig. 1, there is shown, mounted upon focusing member 19, a hinge 67, carrying a lens-holder 68, provided with a tinted lens 69. Fixedly connected to said lens-holder, as shown, is a finger or operating-bar 70. Whenever it is desired to cast a tinted glow over the matter thrown upon the screen, for the purposes of scoring or additional significance, it is merely necessary to press with the finger the bar 70, whereupon the transmitted light from lens 20 will have to pass through and be tinted by lens 69.

Having described the parts above, let us refer now to Fig. 6, wherein is shown a portion of Fig. 2, to-wit, portion 48 of plate 46, fixed ring 53, screws 54, and slip-rings 55, 57, 59 and 61, all precisely as shown in Fig. 2. Spider 51 is also shown, but with only one U-shaped arm instead of four; and this difference, as well as the provision on slip-ring 55 of operating-handles 56^a, 56^b and 56^c in addition to the operating-handle 56, on slip-ring 57 of operating-handles 58^a, 58^b and 58^c in addition to the operating-handle 58, on slip-ring 59 of the operating-handles 60^a, 60^b and 60^c in addition to the operating-handle 60, and on slip-ring 61 of the operating-handles 62^a, 62^b and 62^c in addition to the operating-handle 62, constitute a second illustrative embodiment of the feature of this invention designed to show the "base-to-base" movements and positions of certain factors in the event reproduced. The device shown in Fig. 2 for showing said factors is operable by manually grasping the knurled portions of the one or more

operating-handles, and thereby disengaging the same from the holes 66 and rotating the same or either of the same as many quarter-circumferences as desired, whereby a similar movement is given to the proper symbol or symbols 63 within the light-way area. In said device shown in Fig. 2, the symbols 63 are given movements of 90 degrees successively, by the means illustrated in Fig. 5 and hereinbefore explained; the successive movements of any symbol being attained through the engagement of its single operating-handle in the proper holes 66 of each U-shaped arm of spider 51 engaged thereby successively. In the alternative device, shown in Fig. 6, the same result is obtained with reference to the movement of a symbol 63, but here through the engagement of its four operating-handles engaging successively the proper hole 66 in the single U-shaped arm of spider 51. Other alternative devices for attaining this result could easily be provided within the scope of this invention.

Another possible feature of this device for showing the aforesaid "base-to-base" factors is shown at 66^a in Fig. 6. This is merely an extra bank of holes 66, for halting a symbol in a slightly different position with reference to any "base-point" than is afforded by the bank of holes 66; the purpose whereof being, for instance, to indicate in one position that such a factor is "safe" or "out", and in the other position the reverse thereof. This extra bank of holes 66^a, were the device shown in Fig. 2 utilized, could just as easily be applied to that structure; there being in this case four extra banks of holes 66^a, for each bank of holes 66 on each U-shaped arm of spider 51 would receive its concomitant bank of holes 66^a.

A very important feature of this invention is the provision of an integral machine for the special reproduction of an athletic event, in this case, for the purposes of illustration, a base-ball game, of such a nature that the same may be easily placed within or removed from a stereopticon of the ordinary type. Referring to Fig. 1, it will be seen that the entire device illustrated in Figs. 2, 3, 4 and 5 is supported by plate 13 of the stereopticon, due to the accommodation within pocket 23 of said integral machine of the said plate 13. In order to adapt said stereopticon for the use of ordinary slides, set screw 15 is loosened, slide 14 is slid to the right on rod 5, the said integral machine is lifted out, and set-screw 15 and sleeve 14 are then readjusted on rod 5 in order to bring plates 10 and 13 close enough together to properly accommodate the ordinary slide-holder. The latter when inserted will rest upon shelf 71 of plate 10, and the latter will be clamped into fixed place by

means of the thumb-screw 72, and the set-screw 73 in cap 74, which latter will then be placed in position. Screws 72 and 73 and cap 74 are shown in dotted lines, for they are auxiliary parts which do not constitute a part of the complete stereopticon when the integral machine above-mentioned is a part thereof.

With the stereopticon equipped with the integral machine as above described, the operation thereof should be obvious. The movement of the "ball" factor is shown with ease, as hereinbefore explained, by means of the index 31, governed by the handle 33. The "base-to-base" factors are also within easy control. The insertion or withdrawal of the indicators 44 is easily attained, as clearly shown in Fig. 3 and Fig. 1. These indicators 44 may be used for divers purposes, to indicate the "man at bat" or the "score by innings" or other features. An additional signaling device is the tinted lens 69, which may be operated to at will cast a tint over the image on the screen. Other additional signaling devices might readily be utilized.

Inasmuch as many changes could be made in the above construction, and inasmuch as many apparently widely different embodiments of my invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the language used in the following claims is intended to cover all of the generic and specific features of the invention herein described and all statements of the scope of the invention which, as a matter of language, might be said to fall therebetween.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In apparatus of the kind described, in combination, a projecting apparatus, a member carrying an indicium for projection by said apparatus and freely movable with respect to the lens area of the latter, and a second member carrying an indicium for projection by said apparatus overlying said first named member, and movable so that the indicium thereon has a fixed path of movement with respect to the lens area of the projecting apparatus.

2. In apparatus of the kind described, in combination, a projecting apparatus, a member carrying an indicium for projection by said apparatus and freely movable with respect to the lens area of the latter, another member carrying an indicium for projection by said apparatus and movable so that the indicium thereon moves in a fixed path with respect to the lens area of the project-

ing apparatus, and a third member carrying indicia for projection by said apparatus and movable into and out of the lens area of the latter, said three members being in superposed relation.

3. In apparatus of the kind described, in combination, a projecting apparatus, a member carrying an indicium for projection by said apparatus and freely movable with respect to the lens area of the latter, and a second member carrying an indicium for projection by said apparatus overlying said first named member, and movable so that the indicium thereon moves in a fixed path with respect to the lens area of the projecting apparatus, said indicium carrying members being united in a unitary structure adapted to be detachably connected to the projecting apparatus, and the projecting apparatus being formed to receive said unitary structure.

4. In apparatus of the kind described, in combination, a projecting apparatus, a member carrying an indicium for projection by said apparatus and freely movable with respect to the lens area of the latter, another member carrying an indicium for projection by said apparatus and movable to move the indicium thereon in a fixed path, a third member providing a slide-way extending into the lens area of the projecting apparatus, a member carrying indicia for projection by said apparatus and slidable in said slide-way, said members being in superposed relation and united in a unitary structure adapted to be detachably connected to the projecting apparatus, and the projecting apparatus being formed to accommodate said unitary structure.

5. In apparatus of the kind described, in combination, a projecting apparatus, a member carrying an indicium for projection by said apparatus and freely movable with respect to the lens area of the latter, and a second member carrying an indicium for projection by said apparatus overlying said first named member and movable to move the indicium thereon in a fixed path with respect to the lens area of the projecting apparatus.

6. In apparatus of the kind described, in combination, a projecting apparatus, a member carrying an indicium for projection by said apparatus and fixed with respect to the lens area of the latter, and another member carrying an indicium for projection by said apparatus and movable to move its indicium in a fixed path with respect to the lens area thereof.

7. In apparatus of the kind described, in combination, a projecting apparatus, a member carrying an indicium for projection by said apparatus and fixed with respect to the lens area of the latter, a second member carrying an indicium for projection by said ap-

paratus and freely movable with respect to the lens area of the latter, said two members being in superposed relation and united in a unitary structure adapted to be detachably connected to the projecting apparatus, the projecting apparatus being formed to accommodate said unitary structure.

8. In apparatus of the kind described, in combination, a projecting apparatus, a member carrying an indicium for projection by said apparatus and fixed with respect to the lens area thereof, and another member carrying indicia for projection by said apparatus and movable into and out of the lens area of the latter.

9. In a paratus of the kind described, in combination, a projecting apparatus, a member carrying an indicium for projection by said apparatus and fixed with respect to the lens area thereof, another member carrying indicia for projection by said apparatus and freely movable with respect to the lens area thereof, and another member carrying indicia for projection by said apparatus and movable into and out of the lens area of the latter.

10. In apparatus of the kind described, in combination, a projecting apparatus, a member carrying an indicium for projection by said apparatus and fixed with respect to the lens area thereof, another member carrying an indicium for projection by said apparatus and movable to move its indicium in a fixed path with respect to the lens area thereof, and another member carrying indicia for projection by said apparatus and movable into and out of the lens area of the latter.

11. In apparatus of the kind described, in combination, a projecting apparatus, a member carrying an indicium for projection by said apparatus and freely movable with respect to the lens area of the latter, a second member carrying an indicium for projection by said apparatus overlying said first named member and movable so that the indicium thereon has a fixed path of movement with respect to the lens area of the projecting apparatus, and means whereby and with reference to which the paths of movement of said freely movable indicium carrying member may be guided.

12. In apparatus of the kind described, in combination, a projecting apparatus, a member carrying an indicium for projection by said apparatus and freely movable with respect to the lens area of the latter, another member carrying an indicium for projection by said apparatus and movable so that the indicium thereon moves in a fixed path with respect to the lens area of the projecting apparatus, a third member carrying indicia for projecting by said apparatus and movable into and out of the lens area of the latter, said three members being

in superposed relation, and means whereby and with reference to which the paths of movement of said freely movable indicium carrying member may be guided.

13. In apparatus of the kind described, in combination, a projecting apparatus, a member carrying an indicium for projection by said apparatus and freely movable with respect to the lens area of the latter, and a second member carrying an indicium for projection by said apparatus overlying said first named member, and movable so that the indicium thereon moves in a fixed path with respect to the lens area of the projecting apparatus, said indicium carrying members being united in a unitary structure adapted to be detachably connected to the projecting apparatus, and the projecting apparatus being formed to receive said unitary structure, and means whereby and with reference to which the freely movable indicium carrying member may be guided.

14. In apparatus of the kind described, in combination, a projecting apparatus, a member carrying an indicium for projection by said apparatus and freely movable with respect to the lens area of the latter, another member carrying an indicium for projection by said apparatus and movable to move the indicium thereon in a fixed path, a third member providing a slide-way extending into the lens area of the projecting apparatus, a member carrying indicia for projection by said apparatus and slidable in said slide-way, said members being in superposed relation and united in a unitary structure adapted to be detachably connected to the projecting apparatus, and the projecting apparatus being formed to accommodate said unitary structure, and means whereby and with reference to which the paths of movement of said freely movable indicium carrying member may be guided.

15. In combination a transparent member carrying a representation of a game field, and another transparent member carrying an indicium, the said members being superposed, and the said second-named member movable to move its indicium in a fixed path with respect to the superposed field indicium.

16. In apparatus of the kind described, in combination, a projecting apparatus, a member carrying an indicium for projection by said apparatus and fixed with respect to the lens area thereof, another member carrying indicium for projection by said apparatus and freely movable with respect to the lens area thereof, another member carrying indicia for projection by said apparatus and movable into and out of the lens area of the latter, and another member carrying an indicium for projection by said apparatus and movable to move its indicium in a fixed path with respect to the lens area thereof.

17. In apparatus of the kind described, in combination, a projecting apparatus, a plurality of members each carrying an indicium for projection by said apparatus, each of said members being movable to move its indicium in a predetermined path with respect to the lens area of the apparatus.

18. In apparatus of the kind described, in combination, a projecting apparatus, a member carrying an indicium for projection by said apparatus and fixed with respect to the lens area of the latter, and a plurality of members each carrying an indicium for projection by said apparatus, each of said members being movable to move its indicium in a predetermined path with respect to the lens area of the apparatus.

19. In apparatus of the kind described, in combination, a projecting apparatus, a member carrying an indicium for projection by said apparatus and fixed with respect to the lens area of the latter, a second member carrying an indicium for projection by said apparatus and freely movable with respect to the lens area of the latter, and a plurality of members each carrying an indicium for projection by said apparatus, each of said members being movable to move its indicium in a predetermined path with respect to the lens area of the apparatus.

20. In apparatus of the kind described, in combination, a projecting apparatus, a plurality of members each carrying an indicium for projection by said apparatus, each of said members being movable to move its indicium in a fixed path alined with the paths of movement of the indicia on the other of said members.

21. In apparatus of the kind described, in combination, a projecting apparatus, a plurality of revolving members each carrying an indicium for projection by said apparatus, said members being independently and selectively movable.

22. In apparatus of the kind described, in combination, a projecting apparatus provided with an attaching portion, and a unitary structure comprising a plurality of superposed members carrying indicia for projection by said apparatus, and having a portion adapted to be detachably interchanged with said attaching portion of the projecting apparatus.

23. A unitary structure comprising a main plate having a light-way therethrough, an indicium carrying member freely movable with respect to said light-way, a second plate having a light-way alined with said first named light-way spaced from said main plate and provided with slide-ways entering said light-way, and a third plate having a circumferential flange and provided with an indicium carrying member in

alinement with said light-ways, and a plurality of concentric indicium carrying members in superposed relation to each other and to said last named indicium carrying member, and concentric slip-rings revolving one within the other and connected respectively to said last named plurality of indicium carrying members, the outermost slip-ring having engagement with said flange.

24. In apparatus of the kind described, in combination, a projecting apparatus, a member carrying an indicium for projection by said apparatus, and freely movable with respect to the lens area of the latter, another member carrying an indicium for projection by said apparatus and fixed with respect to the lens area of the latter, and a third member carrying an indicium for projection by said apparatus and movable to move its indicium in a fixed path with respect to the lens area of the projecting apparatus.

25. In apparatus of the kind described, in combination, a projecting apparatus, a member carrying an indicium for projection by said apparatus and freely movable with respect to the lens area thereof, and another member carrying an indicium for projection by said apparatus and movable into and out of the lens area of the latter.

26. In apparatus of the kind described, in combination, a projecting apparatus, a plurality of members each carrying an indicium for projection by said apparatus, each of said members being movable to move its indicium in a fixed path, means being provided so that each of said members may be held at different points in its path of movement.

27. In combination a transparent member carrying a representation of a game field or the like, and a superposed transparent member revolubly mounted and carrying an indicium so that the indicium is movable over determined points on said field representation.

28. In combination, a transparent member carrying a representation of a game field or the like, and a superposed transparent member revolubly mounted and carrying an indicium so that the indicium is movable over determined points on said field representation and a third transparent member in superposed relation to the aforesaid members, carrying a spot indicium and freely movable so that said spot indicium may move freely over the superposed field representation.

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Witnesses:

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SAMUEL L. ALPERT.