No. 838,137. PATENTED DEC. 11, 1906.

G. C. PLUMMER.

AMUSEMENT APPARATUS.

APPLICATION FILED FEB. 16, 1906.

4 SHEETS—SHEET 1.

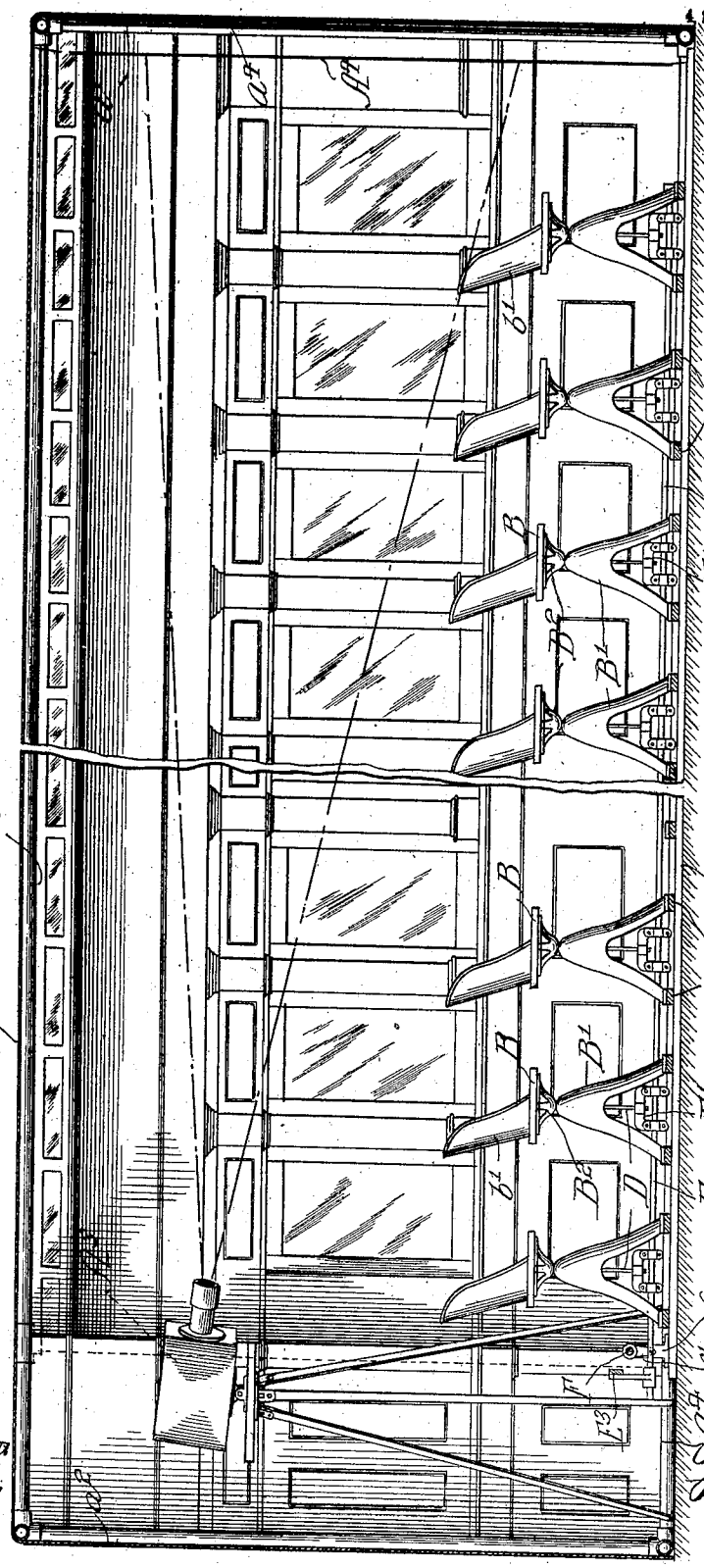

Fig. 1.

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4 SHEETS—SHEET 2.

Fig 3.

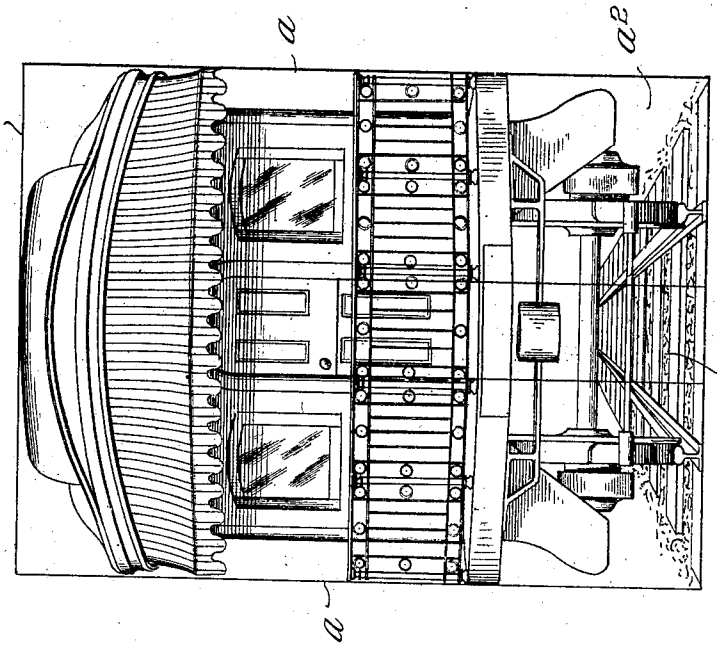
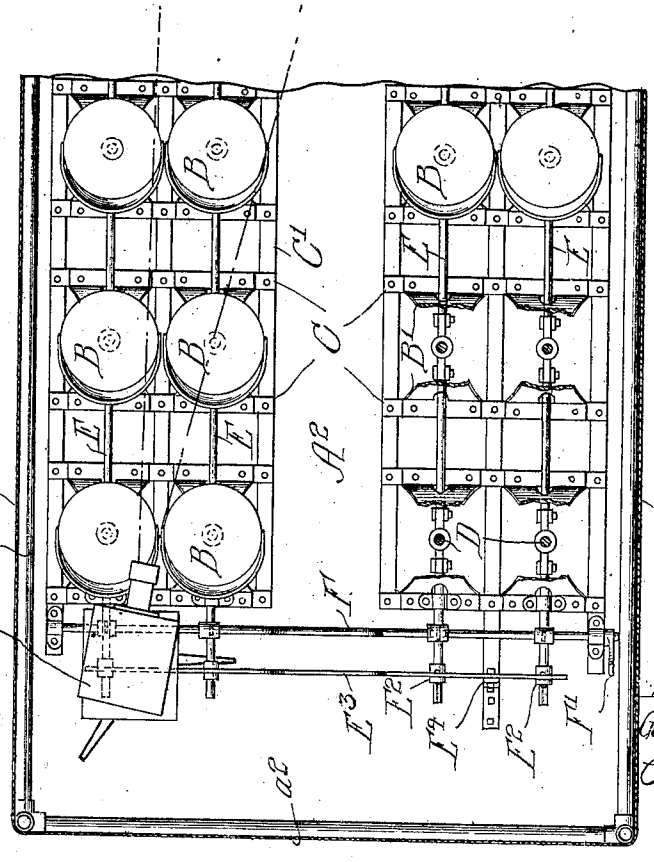


Fig 2.



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4 SHEETS—SHEET 3.

Fig 4

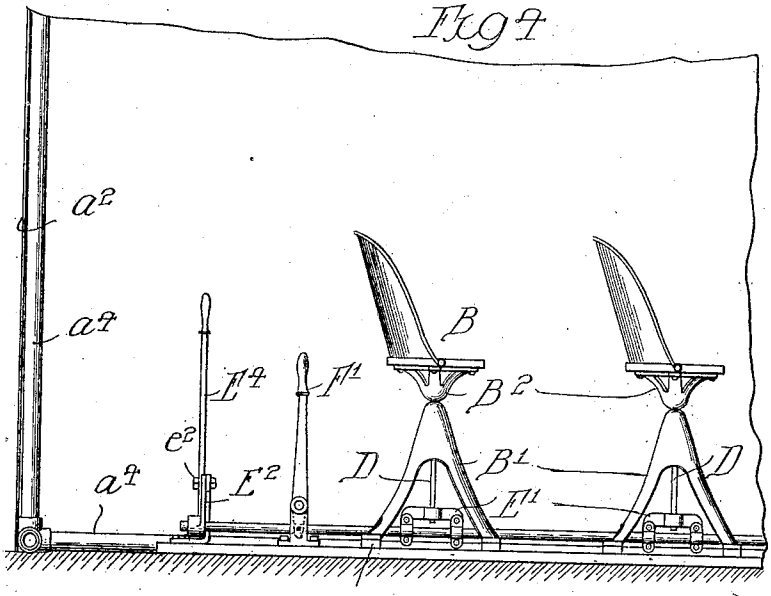


Fig 4a

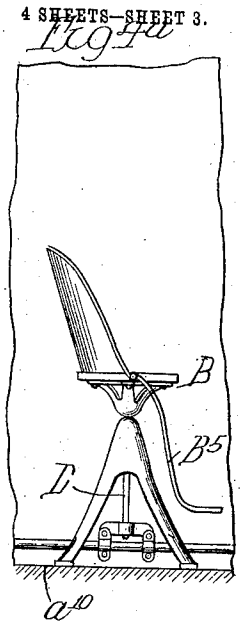


Fig 5.

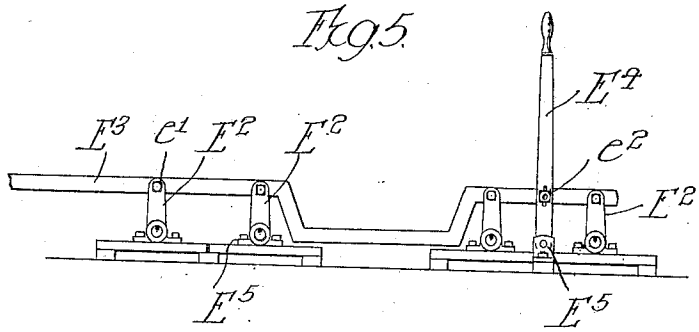
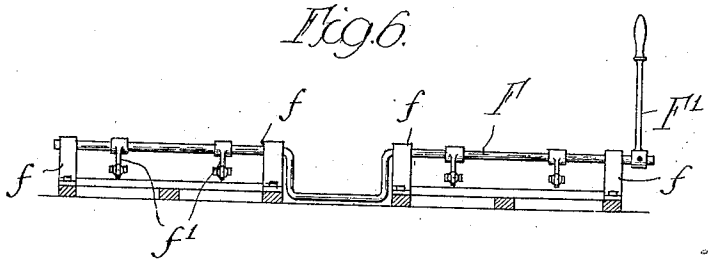


Fig 6.



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4 SHEETS—SHEET 4.

Fig. 7

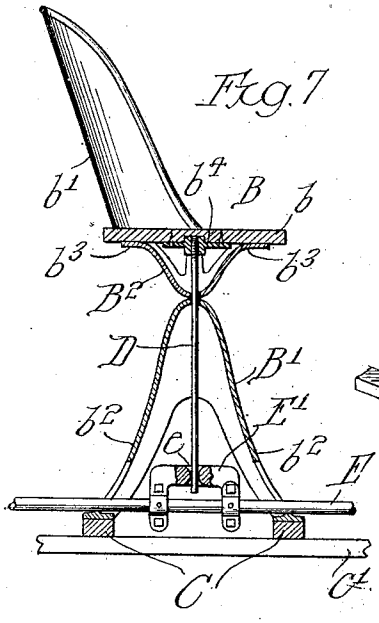


Fig. 8.

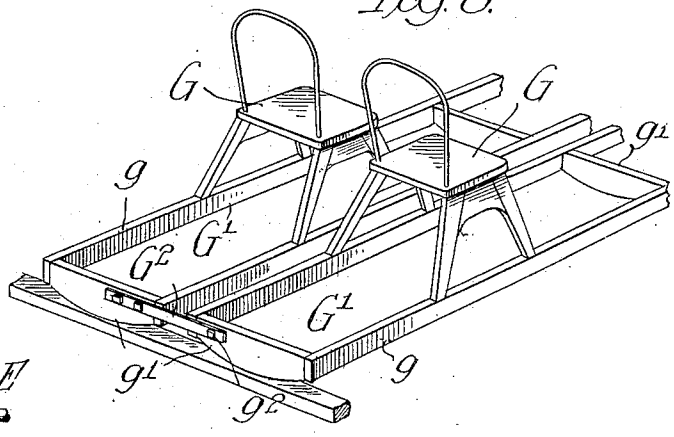


Fig. 9

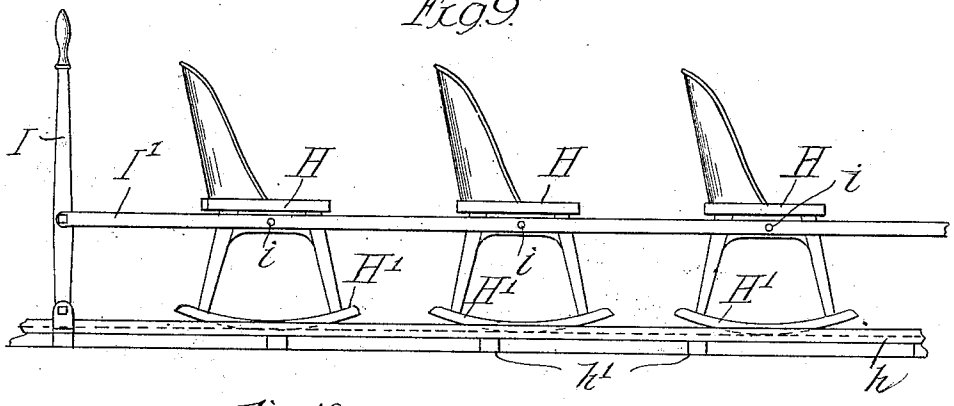
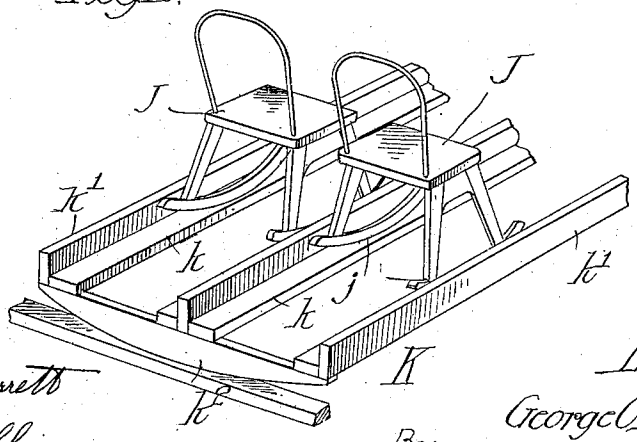


Fig. 10.



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UNITED STATES PATENT OFFICE.

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AMUSEMENT APPARATUS.

No. 838,137. Specification of Letters Patent. Patented Dec. 11, 1906.

Application filed February 16, 1906. Serial No. 301,461.

To all whom it may concern:

Be it known that I, GEORGE C. PLUMMER, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Amusement Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to a novel amusement apparatus of that class embracing a suitable inclosure provided with seats or chairs combined with a moving-picture machine and a screen, upon which the moving pictures are projected, the parts being arranged and coöperating to simulate to the occupants of the inclosure a moving conveyance—such as a railway-car, a boat, or the like—and to give to such occupants the impression of occupying such conveyance and viewing scenery along the route of travel of such conveyance.

The object of the invention is to improve apparatus of this character both with respect to the construction and the operation thereof, to simplify and economize the cost of production of such apparatus, and to render the same readily portable, so that it may be moved from place to place and erected at the place of exhibit at small expense.

The invention consists in the matters hereinafter set forth, and more particularly pointed out in the appended claims.

In the drawings, Figure 1 is a longitudinal vertical section of an apparatus embodying my invention and constructed to simulate the general appearance of a railway-car. Fig. 2 is a partial horizontal section thereof. Fig. 3 is an end view of the inclosure shown in Fig. 1. Fig. 4 is a side elevation of a number of seats or chairs, showing the manner of oscillating the same. Fig. 4^a illustrates a modified form of chair. Figs. 5 and 6 are details illustrating the oscillating mechanism for the seats. Fig. 7 is an enlarged detail of one of the seats shown in Fig. 1 and its actuating mechanism. Fig. 8 is a perspective view illustrating another form of construction by which the seats may be given a rocking or oscillating movement. Fig. 9 is a side elevation of still another form of seat-oscillating mechanism, and Fig. 10 is a perspective view illustrating a slightly-modified form of the construction illustrated in Fig. 8.

An amusement apparatus embodying my invention embraces, in general terms, a suitable inclosure provided with a plurality of seats or chairs which are adapted to be oscillated independently of the inclosure and a moving-picture machine adapted to project pictures on a suitable screen-surface at one side or end of the inclosure.

In the accompanying drawings I have shown my apparatus as embodied in an inclosure having the general form and appearance of a railway-car and will describe the same with respect to the said embodiment.

As shown herein, A designates as a whole the inclosure, having side walls a, front and rear walls a' a^2, and a top wall a^3. The car is herein shown as made up of a framework comprising connected bars or pipes a^4 and thin side, end, and top walls supported thereon, made of canvas or the like and decorated to simulate the external and internal appearance of a railway-car. Said walls of the inclosure are made of a material to exclude light. The rear end of the inclosure is provided with a door A′ to afford access to the interior thereof. When the inclosure is constructed as herein shown, the support for the seats may be the floor of the room containing the inclosure, or the inclosure may be set up on the ground and provided with special supports resting on the ground for said seats.

B B designate a plurality of seats or chairs arranged, as herein shown, in two rows on the opposite sides of a central aisle A^2. A^3 designates a moving-picture-projecting machine located a suitable distance above the level of the seats B and at the rear end of the inclosure, and A^4 designates a screen which is stretched across the opposite end of the inclosure. When convenient, the wall of the room containing said structure, if it be contained in a room, may constitute the screen, in which instance the fabric screen may be omitted.

The construction of the seats or chairs B is shown in detail in Fig 7, and comprises a seat portion proper, b, a base B′, and a back b'. The bases of said seats rest on a supporting-frame, which consists, as herein shown, of transverse boards C C, resting on and connected by longitudinal boards C′. The supporting-frames thus constructed may be con-

nected together in a manner to be readily taken apart, so as to be transported and stored in a small space, while at the same time constituting a rigid support for the chairs. The bases B′ of said chairs are provided with legs b^2 b^2, which rest on said cross-pieces C and may be bolted or otherwise secured thereto. In Fig. 4ª the seat is shown as resting directly upon a stationary supporting-surface a^{10}, which may be the floor of a room containing the apparatus. Said seat is also shown as provided with a foot-rest B^5, which is secured to the seat proper and oscillates with it.

The seat portions of said chairs are connected with the base portions thereof by means permitting the seat portions to oscillate in all directions. As herein shown, the upper ends of said base portions B′ are convexly rounded, and the seats of the chairs are provided with cast-metal supports B^2, which are correspondingly rounded on their lower ends to fit on the rounded upper ends of the base portions B′. Said supports B^2 are flared upwardly and provided with arms b^3 b^3, by which they are attached to the seats of the chairs. The upper and lower parts of the chairs are connected by means of vertical rods D D, that extend upwardly through registering apertures in the rounded ends of said base portions and seat-supports B^2 and are affixed at their upper ends to the seats of the chairs. As herein shown, the upper ends of said rods D are screw-threaded, and the seats are provided on their under faces with plates b^4, having screw-threaded apertures adapted to receive the screw-threaded ends of the rods. When the rods are held in fixed vertical positions, they serve to hold the two parts of the chairs rigidly together. It will be observed, however, that by swinging the lower ends of the rods in either direction the upper ends thereof and the seats attached thereto are swung or oscillated on the base portions B′, and the seats are thus adapted to be oscillated in all directions.

E E designate a plurality of rods or bars which extend longitudinally of the inclosure, one beneath each longitudinal row of chairs. Said rods are provided within the hollow spaces beneath the chairs with a connecting and holding member E′, rigidly fixed to the horizontal bars E and provided with upwardly-opening sockets *e*, into which the lower ends of the rods D extend. The said openings *e* of the connecting members E′ are made flaring at both their upper and lower ends, so as to permit a considerable range of angular movement of the rods D with respect thereto. With this construction it will be noted that when the bars E are moved endwise the seat portions of the chairs will be rocked or oscillated forwardly or backwardly, depending upon the direction of movement of said bars, and when said bars are rocked on their axes, the chairs of said seats will be rocked or oscillated transversely. The manner of operating said bars E to rock or oscillate the chairs simultaneously may be effected in the following manner, reference being had more specifically to Figs. 2, 5, and 6 of the drawings. Connected with the rear ends of said bars and extending upwardly therefrom are crank-arms E^2 E^2. E^3 designates a bar extending transversely across the car above the bars E and which is pivotally connected, as by means of pivot-pins *e′*, with the upper ends of said crank-arms. Said connecting-bar is reciprocated endwise through the medium of a lever E^4, that is pivoted at its lower end to a support E^5 and is loosely connected between its ends with one end of said bar, as by means of a pin e^2, extending from said bar through a slot in said lever, as shown in Fig. 5. When said lever is swung transversely, therefore, the bars E will be rocked on their axes, and thereby rock or oscillate the seat portions of the chairs transversely of the inclosure.

The means for reciprocating the rods endwise to oscillate the seats forwardly and backwardly is made as follows: F designates a rock-shaft located above the rear ends of the rods E in front of the connecting-bar E^3. Said rock-shaft is mounted in suitable standards *f f*, rising from supports C′. Said rock-shaft F is provided with downwardly-extending rigid arms *f′ f′*, which are loosely connected with the bars E in any suitable manner. The said rock-shaft F is provided with a lever F′, by which it may be rocked on its axis and when so rocked acts to reciprocate the bars E endwise, and thereby rock the seats of the chairs backwardly and forwardly. The crank-arms E^2 are connected with the bars in a manner permitting said bars to move endwise therethrough when the rods are reciprocated in the manner described. Preferably and as herein shown the actuating-levers E^4 F′ are located in the corner of the car laterally opposite to the support for the picture-projecting apparatus A^3. The connecting-bar E^3 and rock-shaft F′ are depressed between their ends at the aisle of the car, so that they will not interfere with the passage of the occupants of the car through said aisle.

In Figs. 8, 9, and 10 I have shown modifications of means for giving oscillatory or rocking movement to the chairs or seats.

In Fig. 8 the seats or chairs, which are designated by G G, are supported upon rocking frames G′ G′, consisting of straight side members *g* and curved transverse rocker members *g′*. Said seats or chairs G are shown as fixed stationary upon the rocking platforms or frames. Said frames may be rocked in any suitable manner. (Not necessary to be illustrated.) As herein shown, each row of chairs is supported on a narrow

rocking frame, and the frames are connected by bars G^2, fastened rigidly to the transverse member of one of the frames and pivoted, as by a bolt g^2, to the transverse member of the other frame.

As shown in Fig. 9, the chairs or seats H are provided with rockers H′, which rest on a stationary supporting-frame comprising longitudinal members h and cross members h'. The said chairs are rocked through the medium of a lever I, that is connected, by means of a bar I′, with all the chairs, said bar being pivotally connected, by means of pivot-bolts i, with the several chairs.

In Fig. 10 is shown a combination of the construction shown in Figs. 8 and 9. In this construction the chairs or seats J are provided with rockers j, which rest on ledges k of a rocking frame K, and comprising parallel side members k' k' and transverse rocker members k^2. As shown in this figure, two rows of chairs are supported on a single rocking member; but, if desired, the two rows of chairs may be separately supported on two connected supporting-frames like that shown in Fig. 8.

I claim as my invention—

1. In an amusement apparatus, a stationary support, a plurality of seats mounted on said support, and means for rocking or oscillating said seats relatively to said support, combined with a moving-picture-projecting apparatus.

2. In an amusement apparatus, a stationary support, a plurality of seats mounted thereon, and means for rocking or oscillating the seats relatively to said support, combined with a moving-picture-projecting apparatus and a screen on which the pictures are projected.

3. In an amusement apparatus, an inclosure, a plurality of seats mounted on a stationary support therein, and means for oscillating said seats relatively to said support, combined with a moving-picture-projecting apparatus.

4. In an amusement apparatus, an inclosure, a plurality of seats mounted on a stationary support therein and means for oscillating said seats relatively to said support, combined with a moving-picture-projecting apparatus and a screen on which the pictures are projected.

5. In an amusement apparatus, an inclosure, a plurality of seats mounted on a stationary support therein, and means for oscillating or rocking said seats in two opposite directions relatively to said support, combined with a moving-picture-projecting apparatus.

6. In an amusement apparatus, a stationary inclosure, a plurality of seats arranged in rows therein, an elongated stationary support for said seats, and means for rocking or oscillating said seats relatively to said support, combined with a moving-picture-projecting apparatus located at one end of the inclosure above the level of the seats.

7. In an amusement apparatus, a stationary inclosure, a plurality of seats arranged in rows therein, an elongated stationary support for said seats, and means for rocking or oscillating said seats relatively to said support, combined with a moving-picture-projecting apparatus located at one end of the inclosure above the level of the seats, a screen located in the opposite end thereof.

8. In an amusement apparatus, an inclosure, a plurality of seats mounted on a support therein, said seats having oscillatory movement relatively to said support, and to each other, and means for oscillating said seats, combined with a moving-picture-projecting apparatus and a screen upon which the pictures are projected.

9. In an amusement apparatus, a stationary supporting-frame, a plurality of seats mounted thereon, each including a base and an upper seat portion having oscillatory movement relatively to the base, and means for oscillating the upper portions of said seats, combined with a moving-picture-projecting apparatus, for the purpose set forth.

10. In an amusement apparatus, an inclosure, a plurality of seats mounted on a stationary support therein, foot-rests for said seats and means for oscillating said seats relatively to said support, combined with a moving-picture-projecting apparatus and a screen upon which the pictures are projected.

In testimony that I claim the foregoing as my invention I affix my signature, in presence of two witnesses, this 8th day of February, A. D. 1906.

GEORGE C. PLUMMER.

Witnesses:

W. L. HALL,

I. R. VILKINS.