F. E. MAYNARD.

AMUSEMENT APPARATUS.

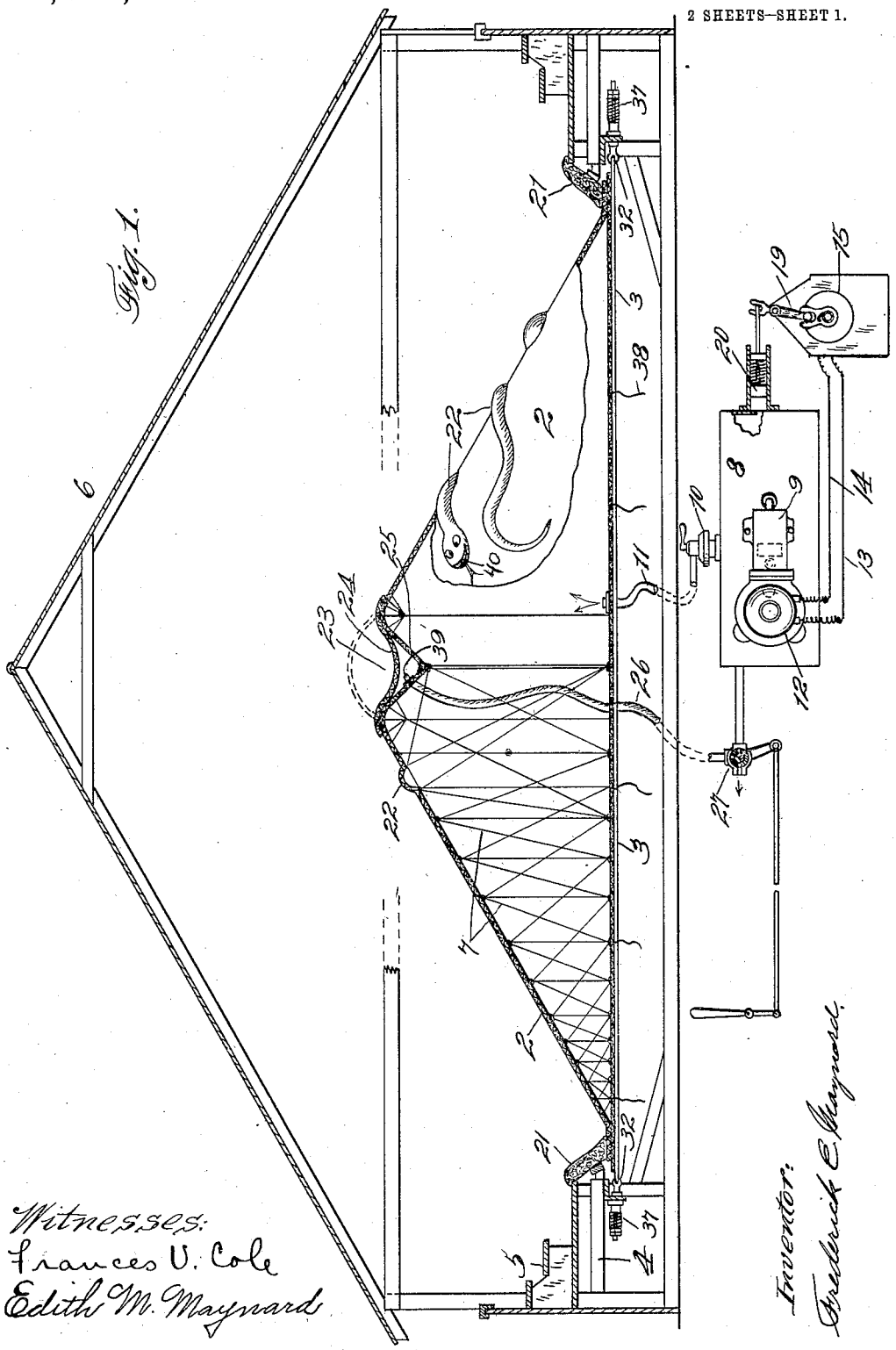
APPLICATION FILED JUNE 1, 1911.

1,082,699.

Patented Dec. 30, 1913.

2 SHEETS—SHEET 1.

Fig. 1.



COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

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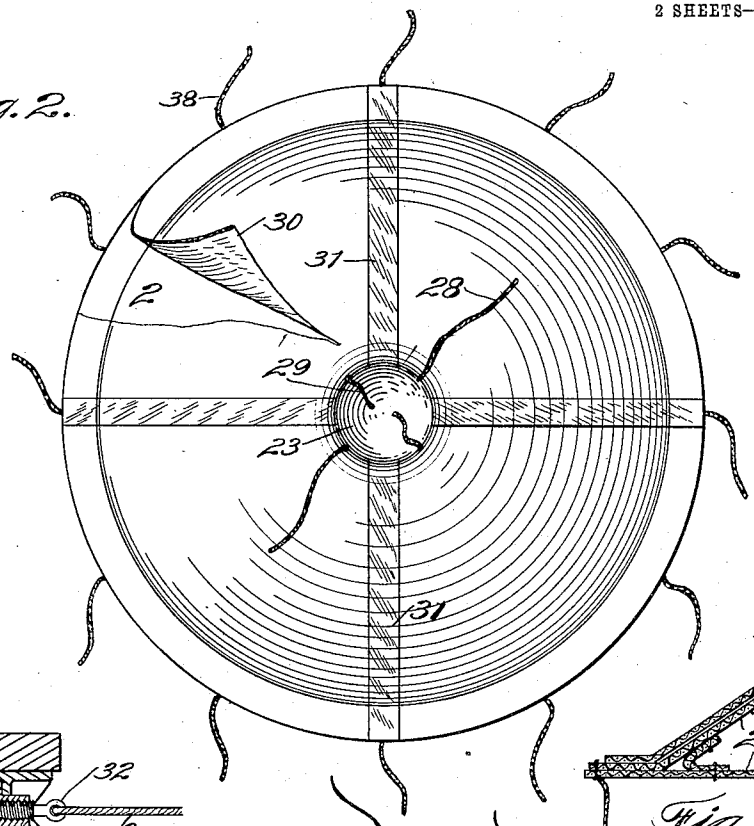
2 SHEETS—SHEET 2.

Fig. 2.



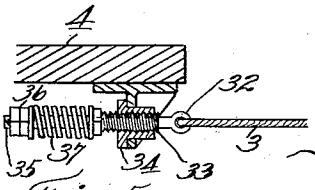


Fig. 5.

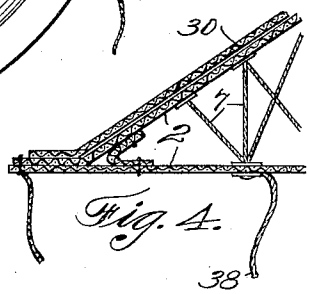


Fig. 4.

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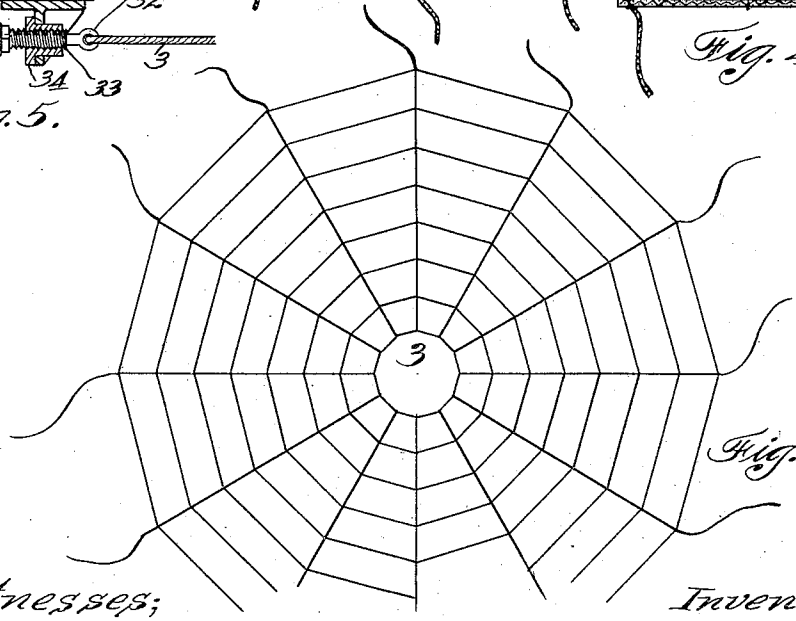

Fig. 3.

Witnesses;
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Edith M. Maynard

Inventor:
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COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FREDERICK E. MAYNARD, OF BERKELEY, CALIFORNIA.

AMUSEMENT APPARATUS.

1,082,699. Specification of Letters Patent. Patented Dec. 30, 1913.

Application filed June 1, 1911. Serial No. 630,612.

To all whom it may concern:

Be it known that I, FREDERICK E. MAYNARD, citizen of the United States, residing at Berkeley, in the county of Alameda and State of California, have invented new and useful Improvements in Amusement Apparatus, of which the following is a specification.

This invention relates to amusement apparatus.

The object of the invention is to provide an apparatus for the innocent amusement of people which will be safe and attractive; to provide an amusement device susceptible of a great variety of artistic, scenic and ludicrous effects; and which may be designed with educational features.

Another purpose of the invention is to provide an amusement structure of such character that it may be very easily and quickly erected and dismantled, is light and inexpensive and collapsible so that it may be transported in light vehicles for short hauls as from town to town in sparsely settled country.

An important function of the invention is to evolve a mirth provoking apparatus or device comprising a resilient, suitably shaped platform upon which persons may attempt to climb or walk, and which may be designed with obstacles impeding progress and may have portions facilitating the pedestrian in his movements over the platform.

A further office of the conception is to afford a platform rendered elastic and safe by air, with suitable means for sustaining the desired pressure, instrumentalities being provided to make the operation of said means automatic.

A primary object of my invention is to produce a structure which while affording great amusement to a large number of onlookers and exercise to participants at the same time will be so supported and constructed as to eliminate, to the greatest possible extent, danger or injury to pleasure seekers.

Purposes designed for edification and special features will be made manifest.

The invention consists of the whole; the construction; the combination of parts, and in details of construction.

Figure 1 is a central, vertical section of the apparatus. Fig. 2 is a plan view of the platform. Fig. 3 is a plan view of the base. Fig. 4 is a detail of the platform. Fig. 5 is a detail of a cushion.

The illustrated conception of my invention embodies a platform —2— having a surface the whole or parts of which are rendered resilient and over which persons may move in an attempt to reach a certain portion or to pass from place to place. The word platform is used in this specification to designate that portion of the apparatus upon which persons may move. The platform —2— may be erected upon any appropriate base and in the embodiment the base is indicated as a flexible, resilient floor or structure —3— which may be appropriately attached to a mount, frame, or suitable support —4—. The frame —4— may be supplied with seats or benches —5— and may have a form of cover or roof —6— to protect the platform —2— and which will shelter the merrymakers.

The merriment of players and onlookers may be enhanced by giving the platform grotesque, ludicrous or fanciful shapes, and the platform may be made of educational interest and value by shaping it in geologic, geometric or animal form. For the purpose of making movements of persons comical and tedious I prefer to make the platform of a pliable material which may be substantially air-tight and to build it so that it can be inflated.

In Fig. 1, is shown a hollow platform having an upper conical surface and a lower substantially flat surface or bottom which may be supported on the base —3—. For the reason that all flexible, hollow bodies, when inflated or subjected to internal pressure, tend to assume a spherical shape, I design the material, of which the expansible platform is made, to produce a shape approximate the particular form desired and define the shape by limiting the expansibility spherically. This is accomplished by attaching tension members —7— of suitable design at numerous places within the platform and extending them from surface to surface so that when the hollow platform —2— is inflated and distended the tension members —7— become taut and limit the distention of the expanded platform. Manifestly the tension members may be omitted and the material forming the platform so cut and joined as to produce divers forms.

The expansible platform —2— may be in-

flated by fluid, as air, under pressure from a suitable source here indicated as a receptacle —8— into which air may be charged at a suitable pressure by a compressor —9—. The degree of pressure in the resilient cushion or platform —2— is controlled by a reducing valve —10— mounted in a supply conductor —11— connecting the receptacle —8— to the platform —2—.

An operator or attendant may be made unnecessary by providing a suitable mechanism for automatically charging the receptacle —8— and this can be accomplished by a motor —12— operatively connected to the compressor —9—.

If an electric motor be used current may be delivered thereto by electric leads —13— and —14—. A suitable switch —15— is connected to one of the leads and when the switch is closed the motor is energized.

In order to close the switch —15— when the air in the receptacle —8— falls below a given pressure the switch is connected to a suitable operating device. The switch —15— is actuated by a connection —19— with a device or plunger —20— sensitive to variations of pressure in the reservoir —8— and when pressure in the latter falls to a given degree the switch —15— will be operated to close the motor circuit. When the reservoir is again brought to pressure desired the switch is automatically thrown out.

From the foregoing it will be seen that when the platform is pneumatically inflated to a desired pressure a person may move over its upper surface with ease or difficulty determined by the conformation, the nature of material of which the platform is made and the agility and expertness of the climber. The resiliency of the flexible or pliable platform will cause a constant bobbing up and down at each step, sometimes throwing one down in which event he will roll or tumble down the side of the soft platform to its edge around which may be formed or laid a bedding or soft buffer as —21— against which he will stop without injury. The hilarity caused by such ludicrous positions and surprising antics is greatly increased by forming, at suitable places on the platform, protuberances or obstructions as —22— and when the platform is mountainous in outline a depression as —23— may be formed representative of a crater.

Any person succeeding in scaling the slopes will then be able to rest upon the rim of the crater or if wishing may enter it. The climax of the amusement is obtained by suddenly admitting a volume of air into a space between a false bottom —24— of the crater and a real bottom —25— so that the false bottom will rise from the depression —23— and erupt such persons as may have entered. The eruption of the crater is accomplished by conducting to the real bottom a tube —26— through which the passage of air may be controlled by a suitable valve —27—. The tube —26— being connected to a source of supply as reservoir —8—, when a person enters the crater —23— an operator may suddenly move the valve to permit air, under pressure, to flow into the crater structure and the false bottom —24— will expand to a convex shape above the crater rim dislodging the occupants. The operator then turns the valve to cut off pressure and allow the crater bottom —24— to settle again. If wished there may be attached around the crater rim a number of help ropes —28—, to which climbers may cling and escape ropes —29— may lie in the crater. The platform may be covered with renewable, wearing material, as —30—, and may also have radial strips —31— of some material designed to offer friction or foot-hold so that persons may be pitted against each other in races up the slope.

A very important feature of the present invention is the provision of some safety appliance to insure against injury to persons in the event that the pneumatic platform should be punctured thus allowing the persons to be precipitated to the plane of the base or support upon which the platform may be erected. This safety appliance comprises a yieldable connection between the lower edge of the platform or the base —3— and the frame —4—. In the illustrated embodiment the base —3— is attached by links —32— to the supporting means or frame —4—. The links —32— extend through sleeves —33— threaded and movable in bushings —34— mounted at appropriate places in the frame —4—. The outer ends of the links —32— are threaded as at —35— to receive nuts —36— between which and the adjacent ends of the sleeves —33— are placed cushioning devices, as springs —37—. The deflated platform is placed in position upon a support such as the ground or, as shown, upon the base —3— which may be in the form of a net, Fig. —3— attached to the supporting frame —4—. The net base is arranged somewhat above any solid or hard level so that when the platform is inflated and subjected to a load the net base may spring or yield. Should the platform collapse the occupants would fall to the stretched base —3— which could give or yield by reason of its cushion like connection with the supporting frame —4—.

The structure is a safe, unique, inexpensive, easily assembled and ported apparatus; can be operated at small cost and requires no skilful attendant.

The platform —2— may be provided with suitable means for detachably securing it to its supporting base, this means comprising in the present instance lengths of rope or lashings —38—.

When desired any devices for the creation of rumbling, low-toned or other suitable sound may be connected, as convenient, to the apparatus, a whistle being indicated at —39—.

The drawing shows that a device as —39— may be connected in pipe —26— so that sounds may be produced by air passing, and another appropriate sound-producing device —40— may be placed in the serpent's mouth in the structure, the device being designed to simulate sounds made by the object that the adjacent formation of the structure may represent.

It is understood that the platform may be made of any appropriate material coated or made to be sufficiently tight to sustain the desired pressure; may be decorated, shaped, illuminated or mounted as circumstances and desire permit, and any alterations, variations, substitutions, modifications in whole or in part may be made within the scope of the claims.

What I claim is:

1. An amusement apparatus comprising a platform having a portion deflatable and distensible independently of the main body, and means for inflating said portion to dislodge occupants thereon.

2. An amusement apparatus comprising a suitably shaped, yieldable platform, and an eruptive floor thereon.

3. An amusement apparatus comprising a suitably shaped yieldable platform, and help-ropes attached thereto.

4. An amusement apparatus comprising a suitably shaped inflatable platform, and help-ropes attached thereto.

5. An amusement apparatus comprising a cushion having various configurations in its surface, and escape ropes attached to the cushion.

6. An amusement apparatus comprising a platform having various configurations in its surface, and escape-ropes and help-ropes attached thereto.

7. An amusement apparatus comprising a platform having an inclined surface a part of which is adapted to be projected relative to the other.

8. A mountain-shaped platform having a crater-like depression and an eruptive floor in the depression.

9. A suitably shaped platform, paths upon the surface thereof, and an eruptive area on the platform.

10. As an amusement apparatus, a suspended, pneumatic platform adapted to support persons.

11. An amusement apparatus including a pneumatic cushion, charging mechanism therefor and means for suspending it in an elevated position.

12. In an amusement apparatus, the combination with a stationary support, of an elevated base thereon, and a flexible, resilient platform on said base, said platform having an eruptive area.

13. The combination in an amusement apparatus, of an elevated base, and an inflatable platform thereon, and inflating means therefor.

14. An amusement device comprising a substantially air-tight, inflatable cushion having a conical shape.

15. The combination in an amusement apparatus, of an elevated, resilient base, and an inflatable cushion thereon, and means for temporarily securing the same together.

16. The combination in an amusement apparatus, of an elevated, flexible base, and an inflatable cushion removably attached thereto.

17. The combination in an amusement apparatus, of an elevated, flexible base, and an inflatable platform thereon, said base forming a life-guard to which the platform is detachably secured.

18. Amusement apparatus comprising collapsible, inflatable structure having a suitable surface with areas of various configurations, and appropriate supports for said structure.

19. An amusement apparatus comprising a platform, the exterior surface of which is adapted to be distended by pneumatic pressure.

20. An amusement apparatus comprising a platform pneumatically distended and having a portion deflatable and distensible independently of the main body.

21. An amusement apparatus including in inflatable platform, means for inflating said platform, and connections therebetween.

22. An amusement apparatus including an inflatable platform, means for inflating said platform, and instrumentalities for automatically starting the operation of said means.

23. An amusement apparatus including a platform pneumatically distended and having a portion deflatable and distensible independently of the main body, and means for controlling the distention and deflation of the main body.

24. An amusement apparatus including a platform pneumatically distended and having a portion deflatable and distensible independently of the main body, means for controlling the distention and deflation of said portion, and a charging mechanism.

25. An amusement apparatus including a platform pneumatically inflatable and having a portion deflatable and distensible independently of the main body, means for controlling the distention and deflation of the platform, and charging mechanism automatically operative when pressure falls below a certain degree.

26. An amusement apparatus including

an expansible cushion, an air compressor, and a conduit connecting said air compressor with the expansible cushion.

27. An amusement device including an expansible cushion, an air compressor, and pressure controlling connections therebetween.

28. An amusement device including an expansible cushion, a resilient base therefor, and compressed air mechanism connected to the cushion.

29. An amusement device including an expansible cushion, a resilient base therefor, compressed air mechanism, and means for controlling the flow of air from said mechanism to the cushion.

30. An amusement device including an expansible cushion, a resilient base therefor, compressed air mechanism, means controlling the flow of air from said mechanism to the cushion, and air compressing apparatus connected to said mechanism.

31. An amusement device including an expansible cushion, a compressed air mechanism, means controlling the flow of air from said mechanism to the cushion, and a starting apparatus for said mechanism.

32. An amusement device comprising a pliable platform having a bearing surface and a plurality of separate chambers.

33. An amusement device comprising a pliable platform having a plurality of chambers adapted to be pneumatically inflated.

34. An amusement device comprising a pliable platform, and means to restrain the distention and define the shape of the platform when inflated.

35. An amusement device comprising a pneumatic platform having an irregular bearing surface, and a false cover.

36. An inflatable, collapsible amusement apparatus of suitable form, decorations on the surface thereof, and an appropriate support therefor.

37. A suitably shaped platform, paths thereon, help ropes attached thereto, and an eruptive flooring on the platform.

38. A suitably shaped platform, paths thereon, help ropes attached thereto, an eruptive flooring on the platform, and escape ropes.

39. An inflatable apparatus of configuration representative of various objects, sound-producing devices arranged in the apparatus to produce representative sounds, and an appropriate support for the apparatus.

40. An amusement apparatus including an inflatable, collapsible cushion having inclined areas, a base for the same, and a buffer.

41. A collapsible, demountable, portable apparatus adapted to be inflated and having parts of representative shape, a supporting structure therefor, and means for inflating the apparatus.

42. An amusement apparatus comprising a platform, an inflatable floor, and a sound-producing device adapted to emit sounds as the floor is inflated.

43. An amusement apparatus comprising an inflatable platform, sound-producing devices, and means for inflating said platform and operating said devices.

44. An amusement apparatus comprising an inflatable platform, sound producing means, mechanism for inflating said platform and operating said means, a floor portion of the platform capable of being independently inflated, and sound producing means operable when said portion is inflated.

45. An amusement device comprising an inflatable structure having an appropriate surface with variously shaped projecting areas.

46. An amusement device comprising an inflatable structure having an appropriate surface, and a buffer at its base.

47. An amusement structure comprising an observation stand, and a resilient cushioning platform supported thereby.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

FREDERICK E. MAYNARD.

Witnesses:
JOHN H. HERRING,
ZETA HASTINGS.