

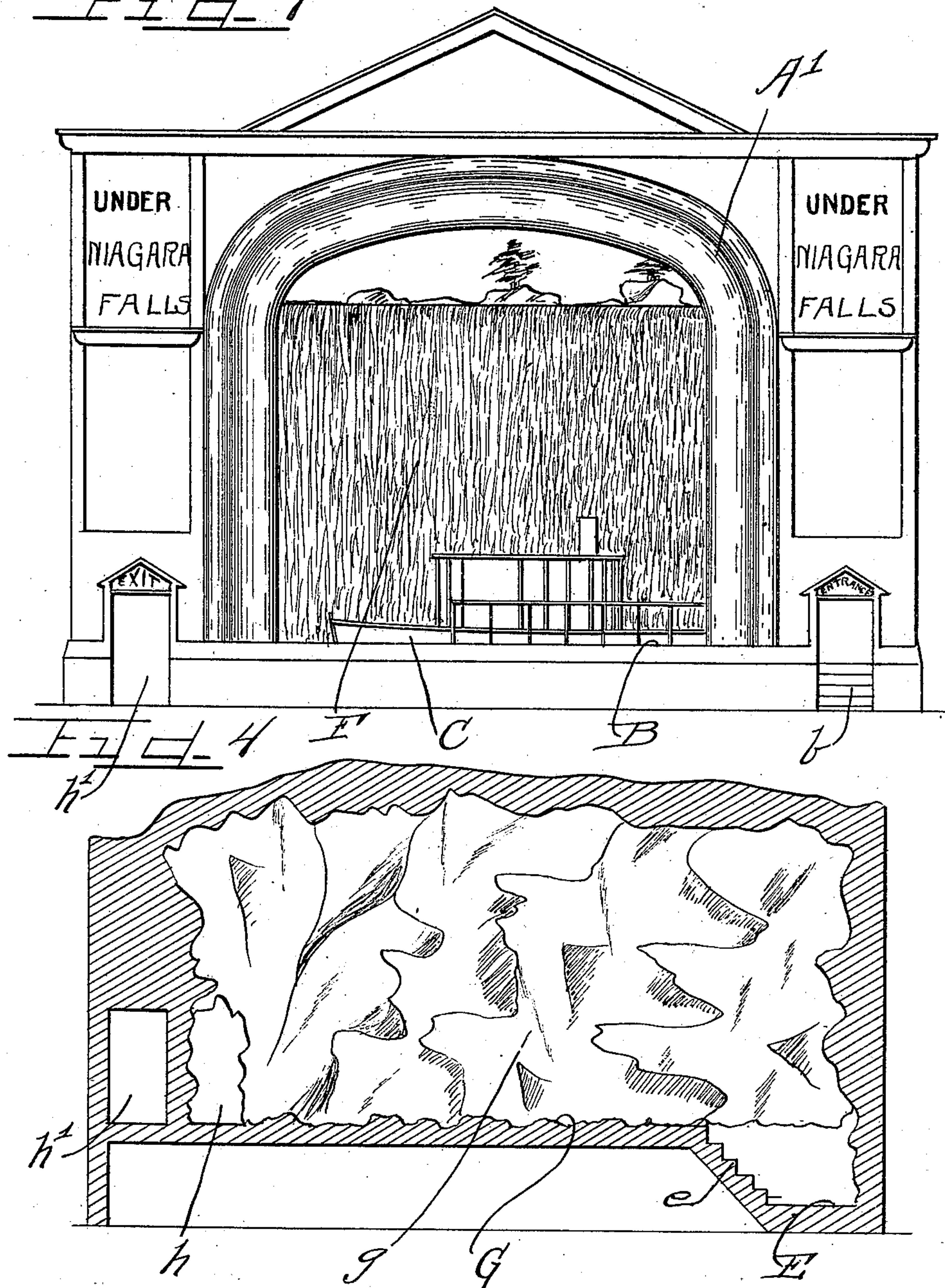
R. M. COMBS.
AMUSEMENT APPARATUS.
APPLICATION FILED FEB. 21, 1908.

987,555.

Patented Mar. 21, 1911.

3 SHEETS-SHEET 1.

Fig. 1



WITNESSES

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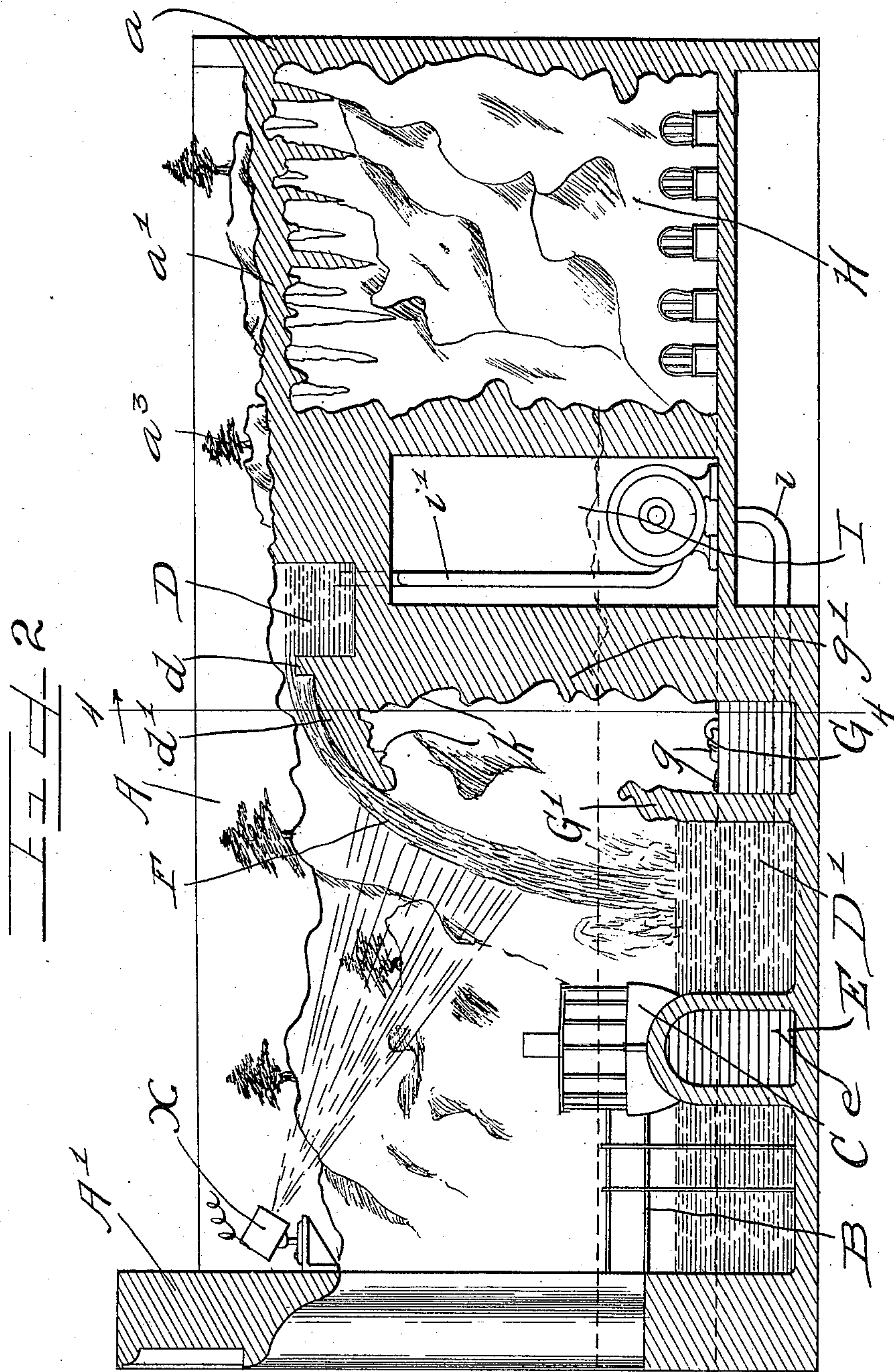
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3 SHEETS—SHEET 2.



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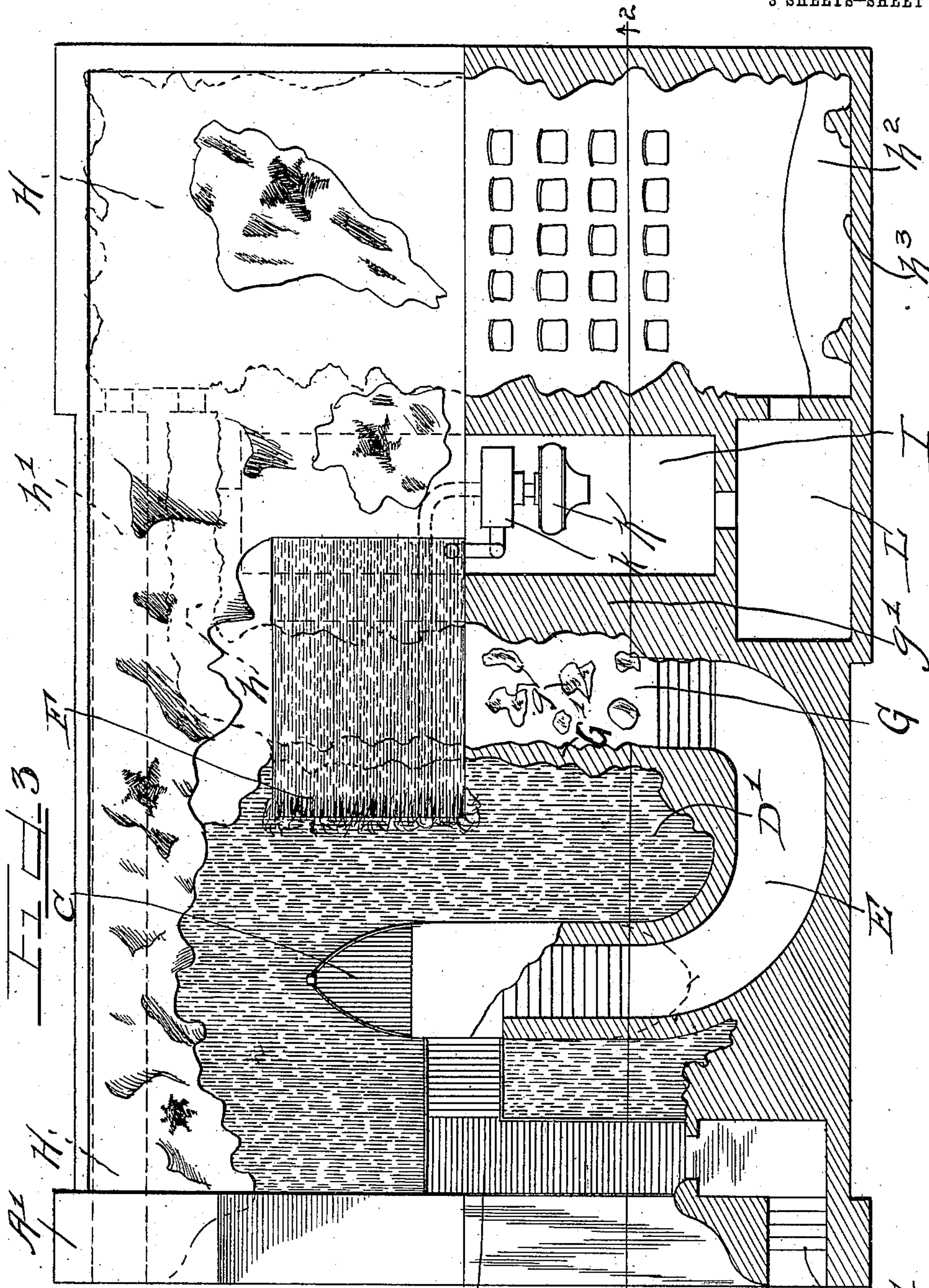
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3 SHEETS-SHEET 3.



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UNITED STATES PATENT OFFICE.

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AMUSEMENT APPARATUS.

987,555.

Specification of Letters Patent.

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Application filed February 21, 1908. Serial No. 417,043.

To all whom it may concern:

Be it known that I, ROGERS M. COMBS, a citizen of the United States, and a resident of the city of 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 of the same, 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 an amusement apparatus of that class in which various scenes and illusions are presented to those who participate therein and who walk or pass through the device.

The object of the invention is to provide an amusement apparatus in which any desired number of participators may simultaneously receive instruction or amusement or both.

It is also an object of the invention to provide a device in which natural scenery is represented especially a waterfall or cataract, and in which by the use of suitable machinery a constant and regulable flow of water is sent over the same and also to provide accessories to produce illusions therewith.

It is a further object of the invention to so construct the device as to enable the participators to walk beneath the falls and to obtain access thereto through a suitable tunnel or passageway reached by passing aboard and through a representation of a boat or vessel moored at a suitable dock, and to provide in connection with the same a grotto or cavern or other suitable chamber or room, access to which can only be had as before described, and in which is provided a stage and suitable settings on which may be projected moving pictures or views of any kind, or from which an act or acts, suitable for entertainment or instruction, may be presented.

The invention embraces many novel features and consists in the matters hereinafter described and more fully pointed out and defined in the appended claims.

In the drawings: Figure 1 is a front elevation showing the proscenium arch through which may be seen devices embodied in my invention. Fig. 2 is a longitudinal section. Fig. 3 is a view partly in top plan view and

partly in horizontal section illustrating the general arrangement of the parts. Fig. 4 is a section on line 4—4 of Fig. 2.

As shown in said drawings: said device embraces a suitable building having side walls A, a rear wall α , and the front of which affords a proscenium arch A' and which is without roof except a portion α' near the rear end thereof as shown in Figs. 2 and 3. Said roof inclines forwardly toward the proscenium arch and a water tank D is provided near the front edge of the roof which extends transversely the building for its entire width with the top thereof as shown extending approximately to the roof line. The front side of said tank or that adjacent the proscenium arch is provided with a dam d , which also extends for the width of the entire building and at a uniform level and over which and over the inclined bed d' which represents the rocky ledge at the brink of the fall, the water from said tank flows forming a water fall F for the entire width of the building and which represents any famous cataract, said water as shown falling into the tank D' at the foot of the falls. Said water fall is plainly visible through the proscenium arch A' as are also trees α^3 , and the representation of rock α^2 and other objects at the brink of the fall which are arranged to represent Niagara or any noted fall, and as shown the side walls A, are covered with scenery on canvas, metal, papier mâché, or other suitable material to represent the gorge of the falls and supported thereon in any suitable manner may be shrubs and trees to render the reproduction realistic.

Supported in the basin, or tank D' in front of the falls and at the rear of the arch is a representation of a steamboat, the hull of which is supported upon the bottom of the tank and is positioned adjacent the dock B to enable the participators to pass into the cabin of the boat as passengers, from the entrance b at one side of the proscenium arch. From said cabin of the boat a passage e leads downwardly through a tunnel E and through and under the tank D' then upwardly to a walk G which may be stepping stones g under the falls or between the fall and the rear wall g' constructed to represent the cliff at the back of the fall. A screen wall G' of sufficient height to prevent spectators seeing those through the water

who are passing under the falls is provided at the outer side of the walk. At the opposite end of said passage or walk from the tunnel is a passage h which leads into the auditorium or theater. This as shown comprises a room H, beneath the roofed portion of the building, and may be of any suitable size or shape. The walls of said auditorium preferably may be constructed of papier mâché, staff, metal or any suitable material to represent a rock cavern, more or less irregular in outline at one end of which is provided a stage h^2 and suitable settings upon which any act or acts may be presented to the spectators or audience. At the rear of said stage a screen or curtain h^3 is provided upon which may be projected moving pictures or other views.

Between the rock wall at the back of the fall, and the front wall of the theater is a pump room I, in which suitable machinery is installed for operating lights and producing the flow of water. Any suitable pump h or motor K may be installed therein for this purpose. The pump shown as a centrifugal pump is connected with the tank D' by the suction pipe i , and with the upper tank D by means of a discharge pipe i' , whereby the water is kept in constant flow. As shown also a dynamo or other source of electric energy may be provided to enable the grotto under or beneath the falls to be illuminated preferably with greenish colored electric lights, any suitable number of which may be used, and also to afford illumination for the theater or auditorium and such other portions of the apparatus including the boat as may be required or deemed desirable.

As shown a dressing room L, is provided adjacent the stage and opening thereto and any convenient or desirable stage accesses may of course be employed. Leading from the theater is a passage h' which opens through the proscenium arch on the side thereof opposite the entrance. If desired suitable projecting apparatus X may be provided above and behind the proscenium arch to project an image upon the water fall using the same as a curtain.

The operation is as follows: The fall which may be constructed to represent Niagara or other famous cataracts, is plainly seen through the proscenium arch which aids the perspective, and the trees, rocks, and other objects in the gorge and at the head of the fall are so disposed as to correctly represent a front view of the fall and its gorge. The boat C apparently lies at its dock at about the middle and just back of the proscenium arch and appears to be about to begin the trip to the foot of the falls. Passing into the cabin of the boat the participants pass downwardly into the tunnel leading through and beneath the water tank D' and thence upwardly into the grotto at the rear of the

fall and between the screen wall, and the back wall of the grotto, both of which are constructed and painted to represent a natural rock grotto with the falling water forming one side. The effect of course is greatly heightened by the use of greenish electric lights and if desired this passage may be floored to represent stepping stones between which the water flows. Passing into the theater through the passage h the participators are in position to most effectively view the stage and the representations or acts shown thereon and at the close of the performance pass outwardly through the opposite side of the proscenium arch by means of the passage h' .

Of course where water is conveniently available at a head higher than the roof a' , the pumping machinery may be dispensed with though ordinarily suitable means must be provided to continuously pump the water from the lower to the upper tank in order to obtain a continuous flow over the dam d . Usually from four to five inches in thickness or in depth over the dam is required. The projecting apparatus X at the back of the arch adds greatly to the beauty of the display and the projection upon the fall is easily accomplished.

Of course many details of construction may be varied and if desired the boat may be so constructed as to move to indicate either the action of the current or any other movement that may be desired. If preferred windows may be provided in the tunnel wall through which fish in the tank D' may be seen. Any accessories may be provided to aid in the illusions and very many details of construction may be varied without departing from the principles of this invention.

I claim as my invention:

1. An amusement apparatus, comprising a reservoir, a representation of a boat therein, a passageway leading from the bottom of said boat through said reservoir, a representation of a gorge leading along the sides of the reservoir, and a cataract at the rear of said gorge.

2. An amusement apparatus, comprising a reservoir, a representation of a boat therein, a passageway leading from the bottom of said boat through said reservoir, a representation of a gorge leading along the sides of the reservoir, a cataract at the rear of said gorge, a theater at the rear of said cataract, and a passage communicating with the reservoir passageway and connecting the gorge and theater.

3. An amusement apparatus, comprising a reservoir, a representation of a boat therein, a passageway leading from the bottom of said boat through said reservoir, a representation of a gorge leading along the sides of said reservoir, a cataract at the rear of

said gorge, a transverse passageway beneath
said cataract communicating with said res-
ervoir passageway, a screen wall at the front
of said passageway, a theater at the rear of
5 said cataract, and a passage communicating
with said cataract passageway and leading
to said theater.

In testimony whereof I have hereunto sub-
scribed my name in the presence of two sub-
scribing witnesses.

ROGERS M. COMBS.

Witnesses:

C. W. HILLS,
K. E. HANNAH.

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