

(No Model.)

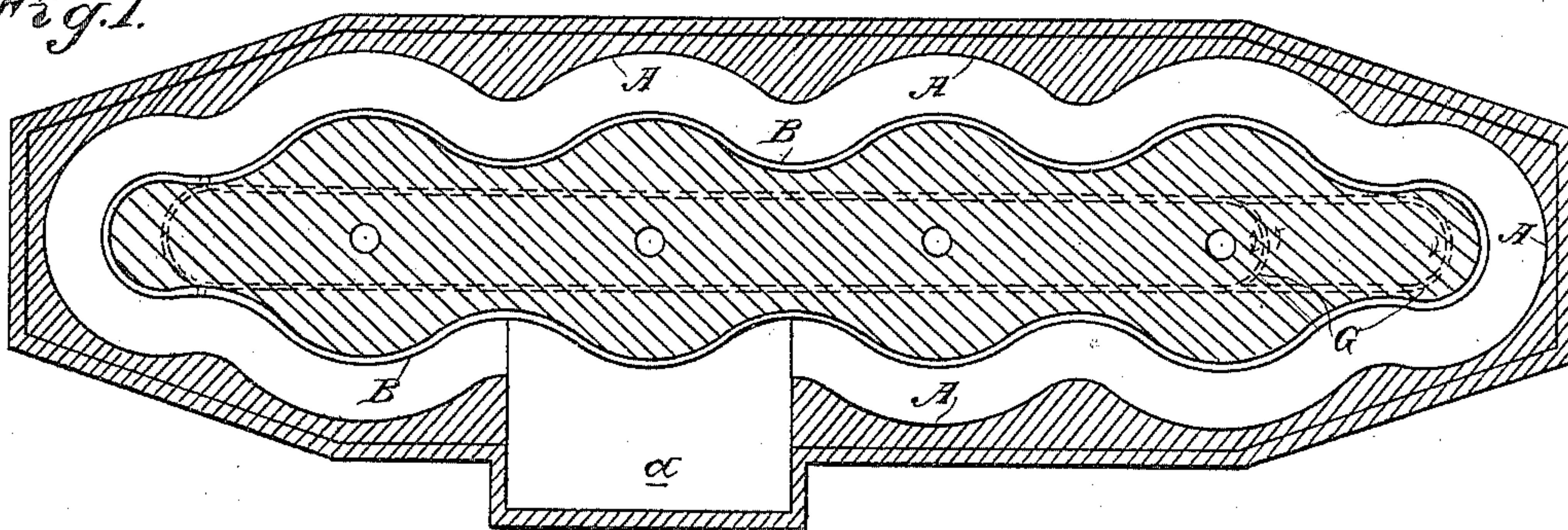
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E. W. KEELER.  
PANORAMIC DEVICE.

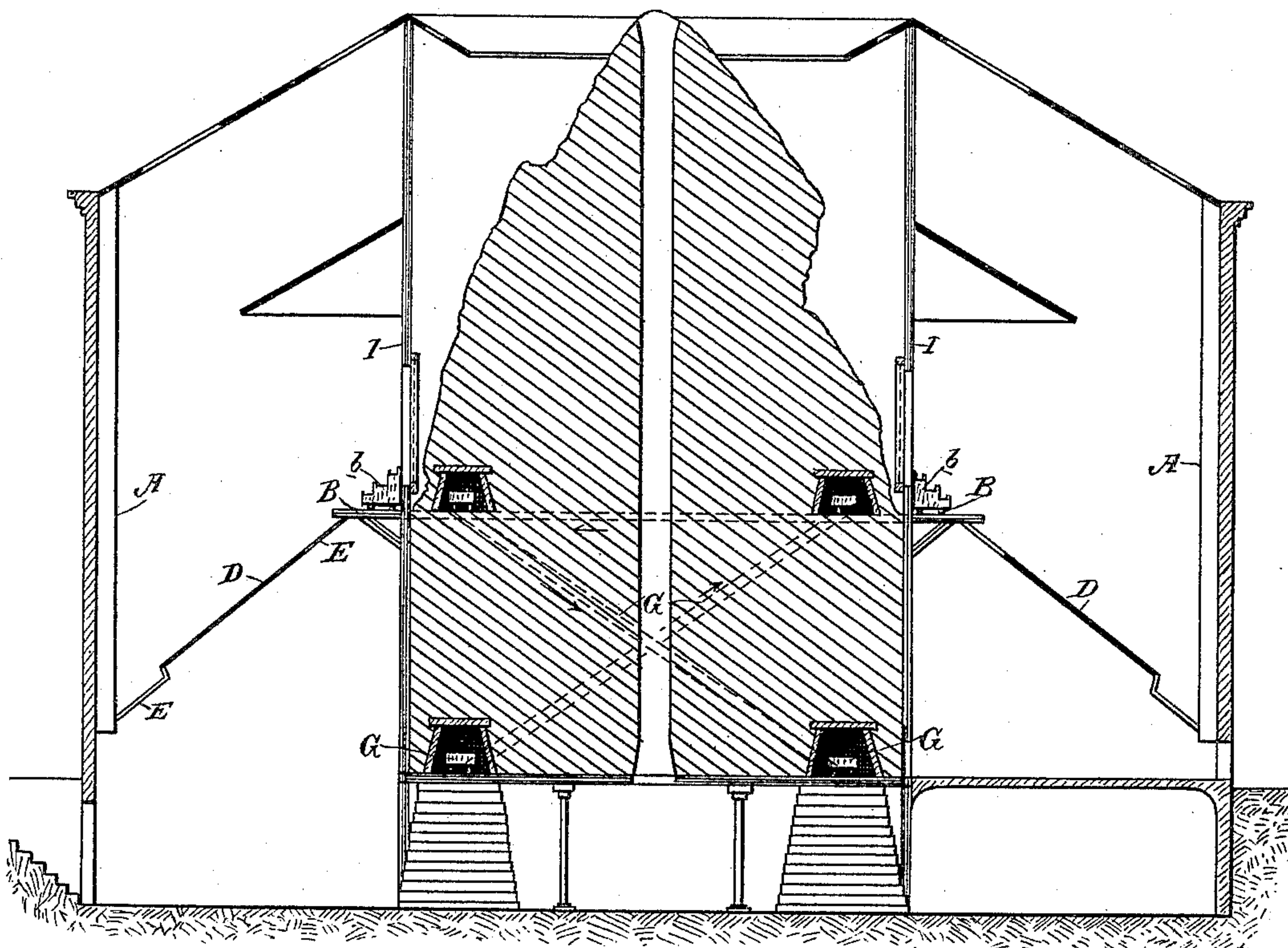
No. 446,524.

Patented Feb. 17, 1891.

*Fig. 1.*



*Fig. 2.*



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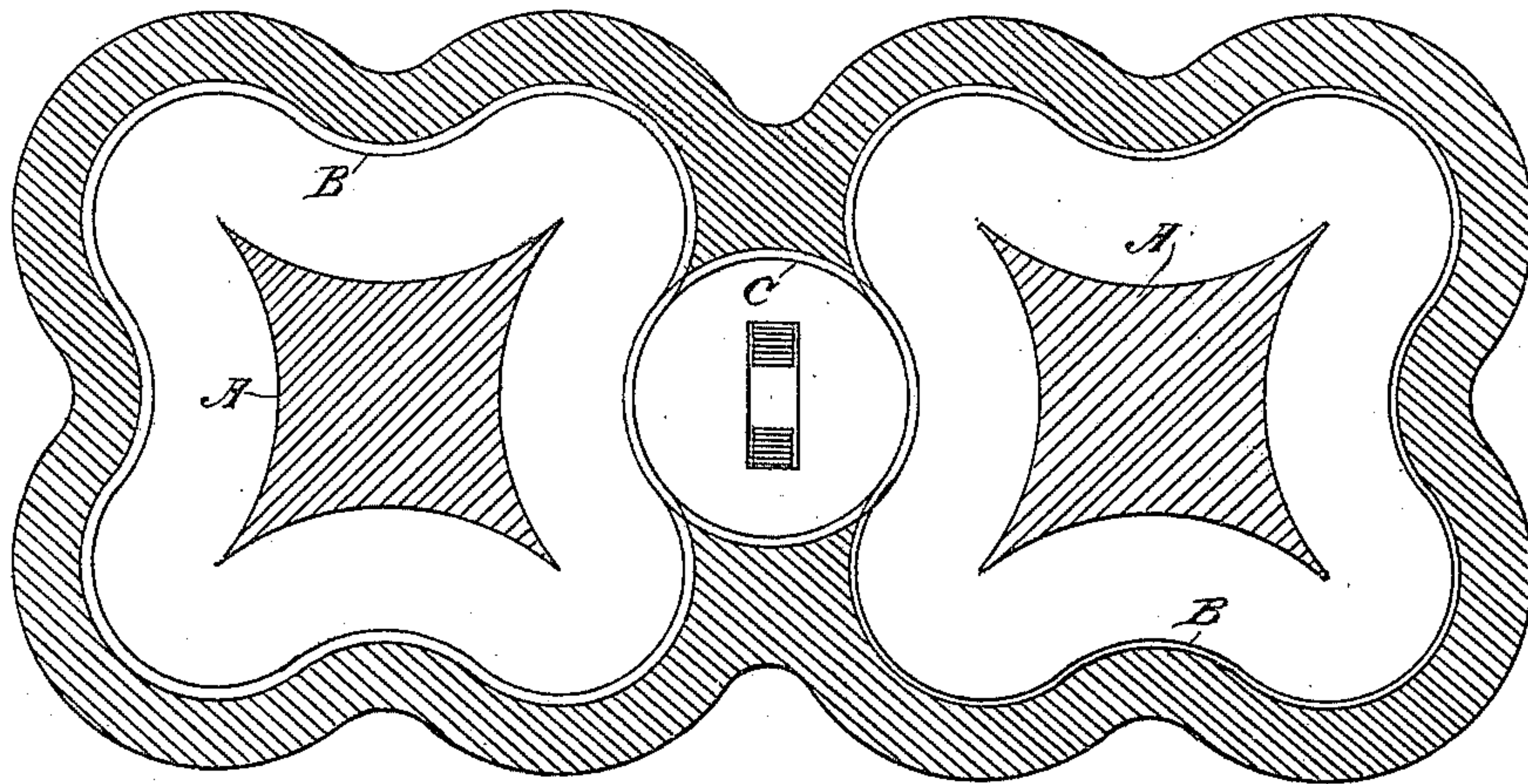
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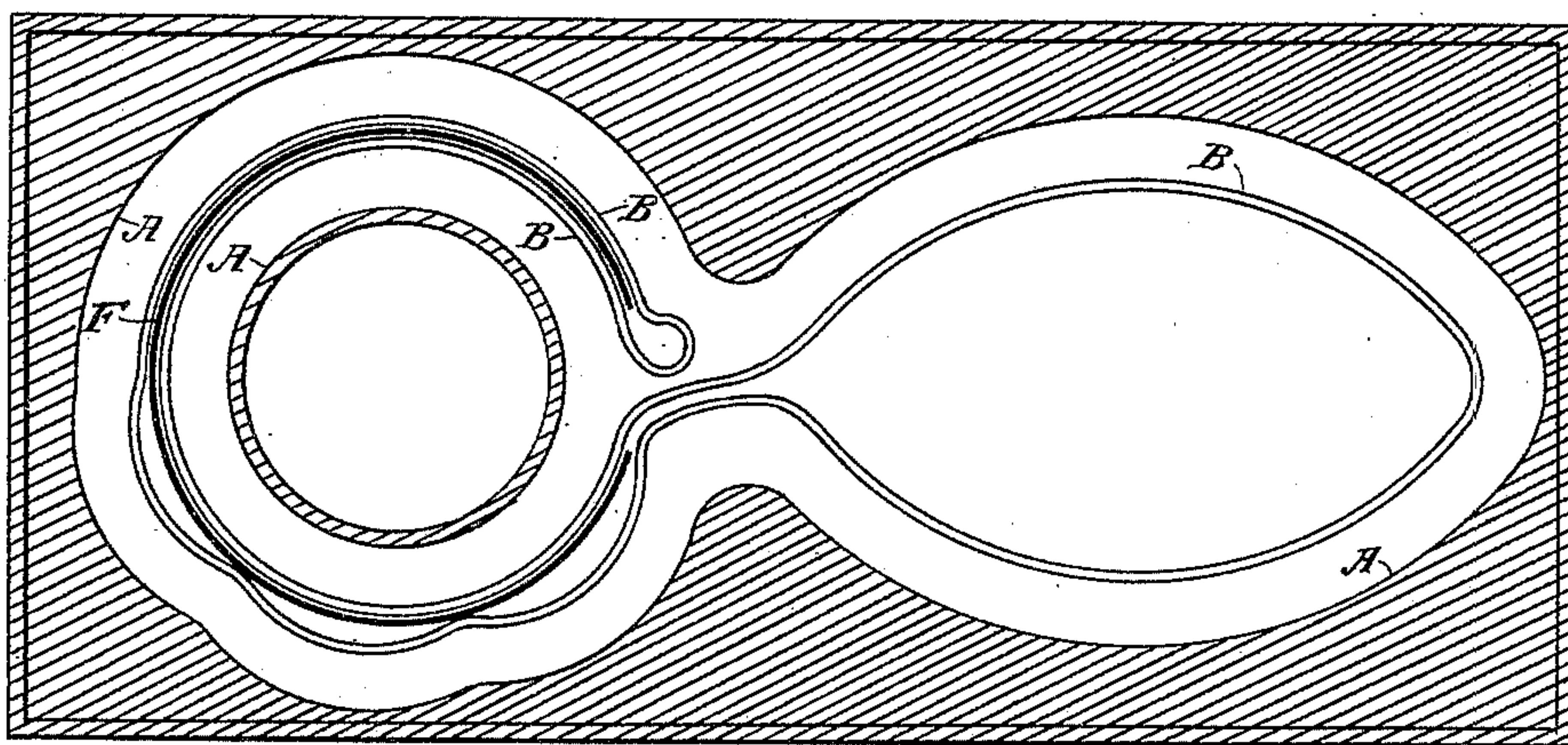
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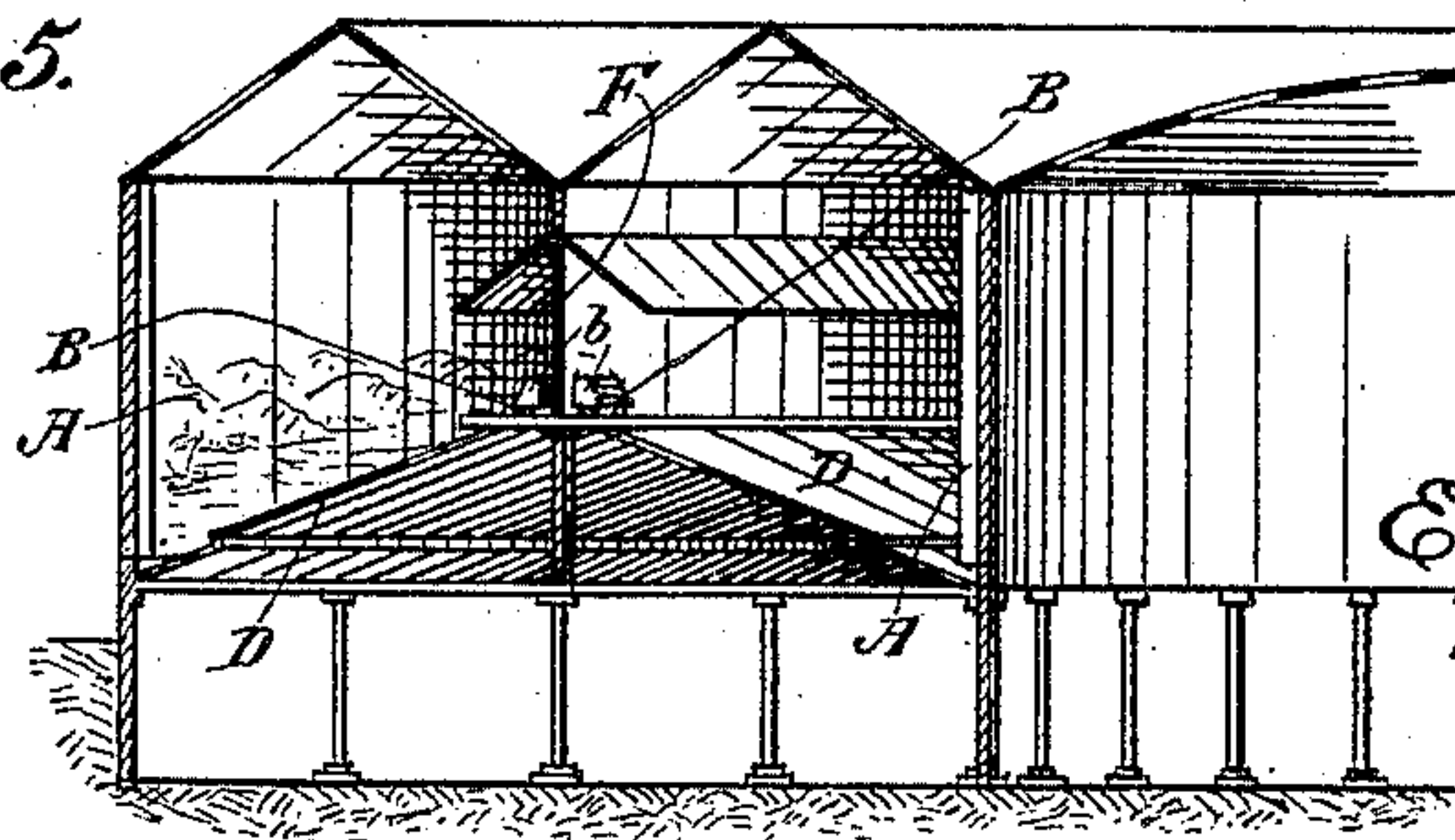
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



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# UNITED STATES PATENT OFFICE.

EZRA W. KEELER, OF SAN FRANCISCO, CALIFORNIA.

## PANORAMIC DEVICE.

SPECIFICATION forming part of Letters Patent No. 446,524, dated February 17, 1891.

Application filed June 18, 1890. Serial No. 355,892. (No model.)

*To all whom it may concern:*

Be it known that I, EZRA W. KEELER, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Panoramic Devices; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a novel arrangement for panoramic or other views, which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a plan view of my device. Fig. 2 shows the same in cross-section. Fig. 3 is a modification of my device. Fig. 4 shows my device with a double track and partition. Fig. 5 is a partial cross-section of Fig. 4.

My arrangement is designed to give a continuous and constantly-changing vista through an indefinite number of arcs of circles so constructed that they may form parts of various figures, such as octagons, figures of eight, or other irregular forms for maintaining the same angle of light upon the picture and an exact visual distance from the beholder at all angles, and in connection with this device I employ a series of cars, platforms, floats, or movable supports peculiarly constructed to contain the beholders and to be propelled by any suitable mechanical device, together with other mechanical effects.

In Fig. 1 I have shown the arcs for the support of the different views as arranged in series A around the interior of the walls of the building or structure within or upon which the pictures are designed to be shown. Interior to these arcs, corresponding with them in curvature and at a sufficient distance from the surfaces to give the proper visual angle, is arranged a railway B, upon which suitably-arranged cars or moving platforms are designed to travel. These cars are made to contain any desired number of individuals, and for convenience the seats may be arranged in tiers one above the other, so that two or three or more tiers can be arranged upon each car and give all the spectators an uninterrupted view. These cars are propelled by cable, electric, or other power, and may be moved at any given rate of speed, so that each car in the series will be successively transported from one

of the views to another, and so on until the entire circuit has been made.

It will be manifest that the arrangement of these arcs may be varied. Fig. 3 shows an arrangement where the pictures are exposed upon the concave interior walls, while the railway B passes around outside of the pictures, instead of interior to them, as shown in Fig. 1. Two or more of these sets of pictures may be arranged continuously, and the railway may pass around the curve or figure, as shown at C, so as to transfer the cars from one section to the next. In Fig. 4 I have shown one series of pictures arranged upon the inside of the outer wall, either in a regular or a series of curves, and a second series upon the convex surface of an interior wall. In this case two lines of track—one for each view—are separated by a partition F, and by returning the track upon itself, as shown, the two sets of views may be seen successively. The design of the device is to have the arcs of such a curvature that each scene will be measurably separated from the adjacent ones, while at the same time all the scenes are in a manner continuous, so that sections of a country or other views may be shown one after the other and conveniently inspected by passengers in the cars without fatigue. This will insure also the transportation of a great number of people through the building without any unnecessary delay or crowding.

The building may be arranged with a basement, a first floor or hall, and a second floor, within which the pictures will be arranged.

Beneath the platform upon which the railway travels is arranged an inclined wall, as shown at D, Fig. 2, and this wall has as many series of lighting and ventilating windows E as may be found desirable, so that the large first floor-space is well lighted and may be employed for any purposes, as an audience-hall or for exhibitions of various sorts, which may take place in connection with the pictorial exhibition shown above.

Entrance to the building may be obtained by stairs leading into the basement and from the basement up to the other floors, or in any other suitable manner.

The space interior to the line of the railway-track B, as shown in Figs. 1 and 2, is



built up so as to represent a mountain or other elevation, and this elevation is made as realistic as desirable by the use of earth, rocks, trees, &c.; or, if desired, the building itself may be made to conform to irregularities in the surface upon which it may be built and take advantage of natural irregularities of surface.

A line of railway G may be made to commence in the basement or near the entrance, and passing up at a gradual incline from one end to the other, either outside or through tunnels in the mountain, it is made to return upon itself as many times as found desirable or convenient to reach the altitude of the exhibition-floor. Within these tunnels are exhibited illustrations of coal or silver mining, the catacombs of Paris or other cities, or the interior of the pyramids of Egypt, or any underground passages which may be of interest to visitors to the exhibition.

It will be manifest that various arrangements and modifications of this device may be made to suit different exhibitions; but the object is to exhibit a large number of scenes to a great number of people without fatigue, without crowding or unnecessary delay, and at the same time parties of any desired size can be made up to occupy one or more cars, conversation may go on in each of the cars without interfering with those in the other cars, and the whole series of views may be enjoyed without parties becoming fatigued.

The arrangement of the mountain is further made interesting by locating wayside houses or chalets where refreshments may be obtained, so that, if desired, parties may leave the car at any point to obtain refreshments or a longer view of any particular scene than could be obtained in the ordinary travel of the cars. If it is desirable to interrupt the continuity of the views at any point, the intervening space may be utilized as a room or inclosure of any desired size or shape, as shown at *a*, Fig. 1.

In place of cars with seats, floats or movable platforms can be substituted to suit convenience.

The spaces occupied by the pictures and that above the cars and track will preferably be roofed and protected from the weather, as shown in Fig. 2, and the interior central space which is occupied by the mountain may be left open.

Between the mountain and the line of the track is a vertical partition I with glazed and sliding windows, which may be thrown open when the weather is fair and to give access to and views of the mountain, but which may be closed in inclement weather.

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

1. A panoramic device consisting of a series of curved arcs with pictorial representa-

tions displayed thereon, a track corresponding in curvature with the arcs, and cars or platforms movable upon said track, so as to pass the views successively, substantially as herein described.

2. A panoramic device consisting of a series of arcs forming continuous and independent surfaces with pictorial representations displayed thereon, a track fixed upon interior or exterior lines with relation to the views and having a curvature concentric with that of the arcs, so as to maintain a constant distance therefrom, and cars or platforms movable upon said track, so that a proper visual angle to the pictures is obtained, substantially as herein described.

3. A panoramic device consisting of a series of curved arcs forming continuous and independent surfaces with pictorial representations displayed thereon, a track corresponding in curvature and concentric with said arcs, cars or platforms movable upon said track, and a protecting hood or roof supported above the pictures and the line of the track, substantially as herein described.

4. A panoramic device consisting of walls forming a series of independent concave arcs with pictorial representations displayed thereon, a central or interior structure in form of a mountain with rocks and trees, an intermediate track skirting said mountain with curves concentric with the pictorial surfaces, and cars or platforms movable upon said track and adapted to convey spectators, substantially as herein described.

5. A panoramic device consisting of walls forming a series of independent concave arcs with pictorial representations displayed thereon, a central interior structure in form of a mountain with rocks and trees thereon, a tunnel or tunnels traversing the interior of said structure, with tracks and cars for the transportation of passengers, a track skirting the outer sides of the mountain in curves concentric with those of the pictorial surfaces, and cars or platforms adapted to convey passengers and movable upon said tracks, substantially as herein described.

6. The exterior walls having pictures suspended upon them, a central mountainous structure, a line of tracks intermediate between the central structure and the outer walls, and a roof or roofs covering the space above the tracks and the room containing the pictures, in combination with movable walls or partitions extending from the roof between the track and the interior structure and constructed to be opened or closed, substantially as herein described.

In witness whereof I have hereunto set my hand.

EZRA W. KEELER.

Witnesses:

GEO. H. STRONG,  
S. H. NOURSE.