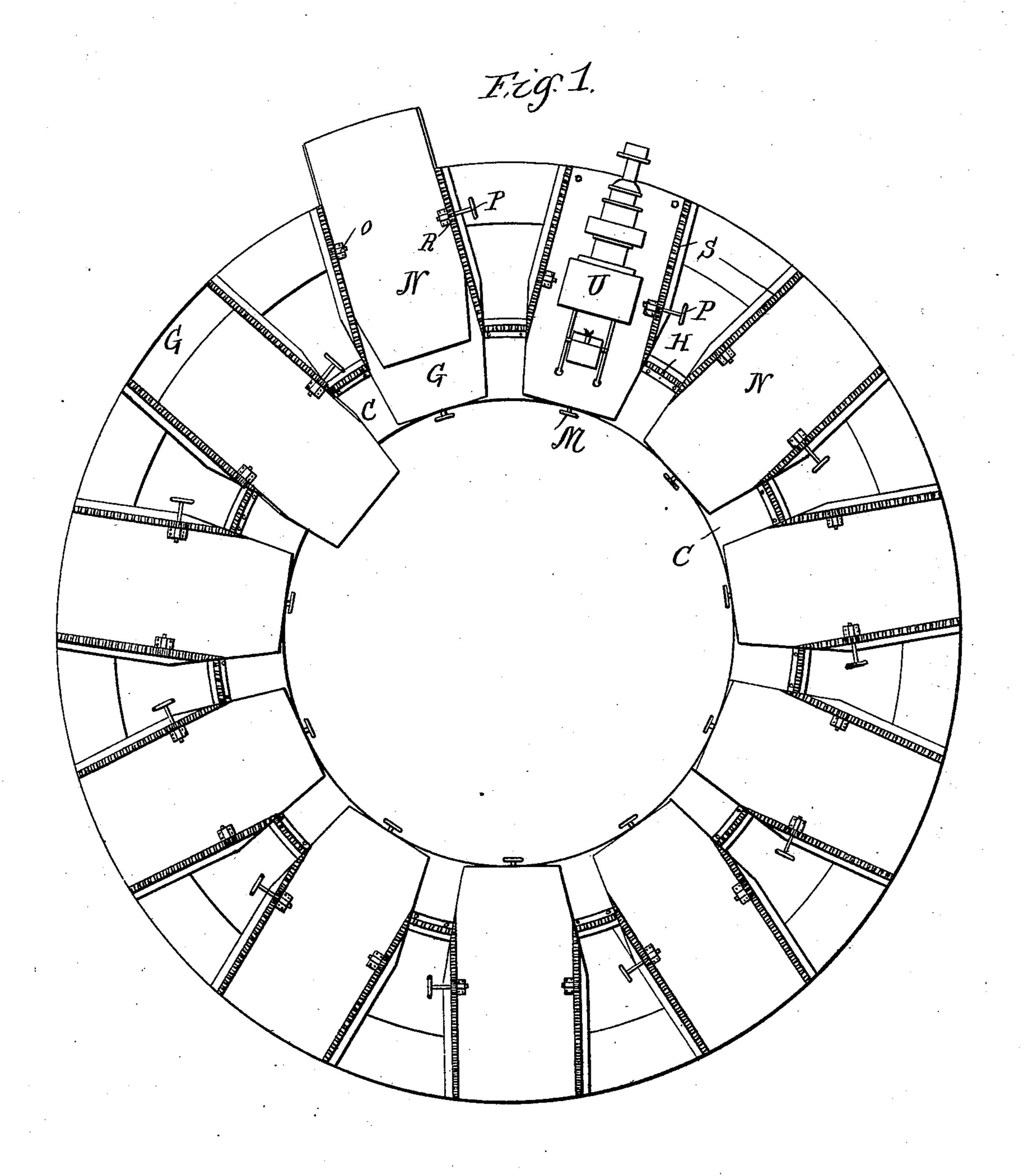
(No Model.)

## C. A. CHASE.

STEREOPTICON PANORAMA MACHINE.

No. 545,452.

Patented Sept. 3, 1895.



Witnesses.
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Harry White.

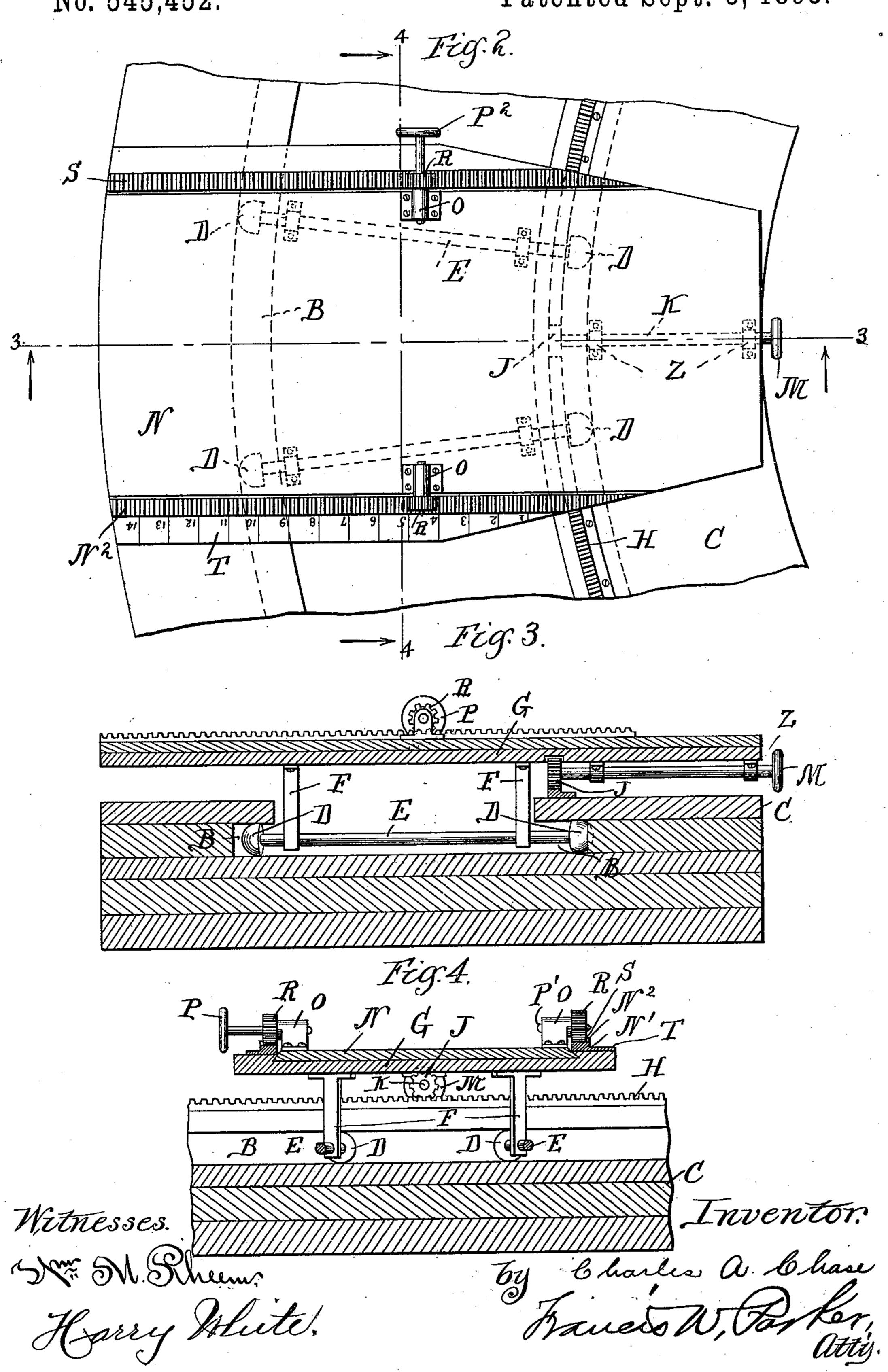
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# United States Patent Office.

CHARLES A. CHASE, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE CHASE ELECTRIC CYCLORAMA COMPANY, OF ILLINOIS.

#### STEREOPTICON PANORAMA MACHINE.

SPECIFICATION forming part of Letters Patent No. 545,452, dated September 3, 1895.

Application filed September 24, 1894. Serial No. 523,975. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. CHASE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illi-5 nois, have invented a new and useful Improvement in Stereopticon Panorama Machines, of which the following is a specification.

My invention relates to stereopticon pano-10 rama machines, and has for its object to provide convenient and simple means for the employment of a series of stereopticons for the reproduction of horizon effects. In an application of even date herewith, and serially 15 numbered 523,976, I have described a device to be associated with each stereopticon, which has for its object the blending or uniting of the different sections of the picture produced by the various stereopticons. My present ap-20 plication describes an arrangement for moving and controlling the different stereopticons. It is illustrated in the accompanying drawings, wherein—

Figure 1 is a plan view of the annular table, 25 showing a stereopticon mounted on its secondary table. Fig. 2 is a plan view showing a secondary table and its primary table more in detail and in connection with the annular table. Fig. 3 is a sectional view on line 33 30 of Fig. 2. Fig. 4 is a sectional view on the

line 4 4 of Fig. 2.

Like parts are indicated by the same letter

throughout the several views.

A is the supporting-table, preferably annu-35 lar in form, so as to provide a central space or area in which the operator can stand. This table is preferably made of a series of superimposed sections, so as to produce a compact table, not easily warped or gotten out of shape.

BB are annular groove-like recesses beneath the cap annulus C. In these grooves run the wheels DD at the end of axles or shafts E. These axles are each radial to the center of the annular table. From each rises 45 two standards F, and with each pair of axles is provided the primary table G, resting upon such standards. His an annular crown-gear rigidly secured upon the face of the table and adapted to engage the pinion J, which is on 50 the end of the shaft K, which is journaled in the boxes L on such primary table G. M is I tially as here indicated for the production of

the hand-wheel by which this shaft is rotated. On the primary table is mounted the secondary table N, preferably projecting at N' along the sides beneath the overhanging lip N<sup>2</sup> on 55 the primary table. The secondary table is provided with two boxes OO, from which project short shafts PP', which shafts carry each a pinion R to engage one of the racks SS, which racks are fixed on the primary table. 60 The rod or shaft P terminates in the handle P<sup>2</sup>. T is a scale along the side of one of the racks S. U is a stereopticon preferably screwed down upon or rigidly secured to the secondary table N.

It is evident that these parts may be somewhat altered and changed without departing from the spirit of my invention, and I do not wish to be limited to the precise construction here shown.

The use and operation of my invention are as follows: In the operation of a series of stereopticons at a central position, so as to reproduce upon the inner wall of a cylindrical or globular building, or the like, horizon effects, 75 it is, of course, necessary to focus the stereopticons properly and to position them carefully, so as to make the several sections of the pictures reproduced blend or connect. This involves means for accurately and correctly 80 shifting the position of each stereopticon along the line of its length, or a line radial to the center of the building or the center of the series of stereopticons, and it also involves means for shifting the machines circumferen- 85 tially with reference to the same center. If, now, a series of pictures be inserted in a series of stereopticons so arranged I can, by operating the handles P2, successively produce a proper relation of distance between the ste- 90 reopticons and the wall or screen. I may then, by successively operating the handles M, move the stereopticons circumferentially, so that the pictures properly join. In other words, I give to the stereopticons proper two 95 motions, one radial, the other circumferential to the center of the series of stereopticons.

I have spoken of "horizon" views. By this I mean views which include whole or part thereof. With this significance it will be seen too that the device might be employed substana portion of the horizon, say such part as would be covered by two or more instruments.

I claim—

1. A table with its central portion removed, 5 in combination with a series of primary carriages adapted to move circumferentially thereabout, and a series of secondary carriages each mounted on a primary carriage and adapted to move radially and along such 10 primary carriage, and a stereopticon mounted

upon each secondary carriage.

2. The combination of a table with an annular way therearound and having its central portion removed, undercut grooves on the op-15 posite sides of such way, a series of radially disposed axles having suitable wheels to run in such grooves and stereopticon tables supported upon such axles so as to travel circumferentially, the whole so arranged that the stereopticons may be moved separately around the opening in said table so as to vary their relative position.

3. The combination of a table with a series of primary carriages thereon, and a series of

25 secondary carriages each adapted to move ra-

dially and along the primary carriage by means of racks and pinions associated therewith, said primary carriages adapted to be moved about a common center, but entirely disconnected from such center.

4. The combination in a device for manipulating two or more stereopticons adapted to be used in projecting continuous views upon a receiving surface, of a table, a series of primary carriages supported by said table and 35 adapted to be moved around a common center, and a series of secondary carriages each mounted upon a primary carriage and adapted to be moved therealong, and a stereopticon mounted upon each of said secondary car- 40 riages whereby said stereopticons may be quickly and easily moved to a position in which the portions of the view projected by each stereopticon may be brought into the required relation.

CHAS. A. CHASE.

Witnesses: WALTER J. GUNTHORP, FRANCIS M. IRELAND.