

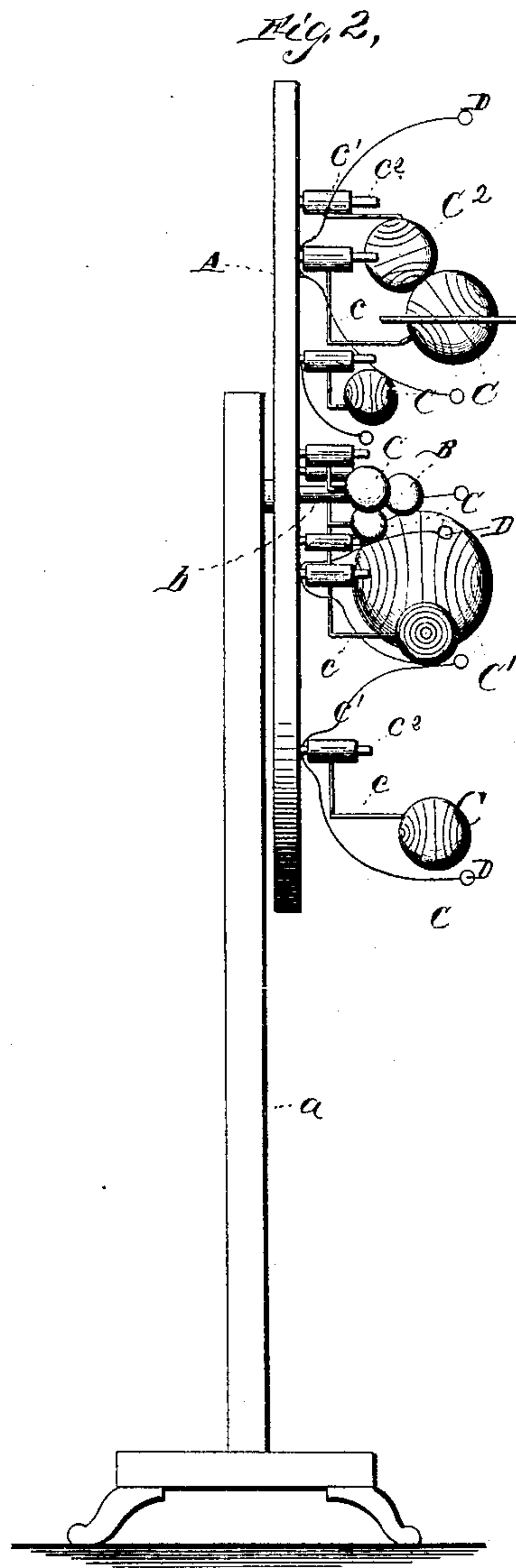
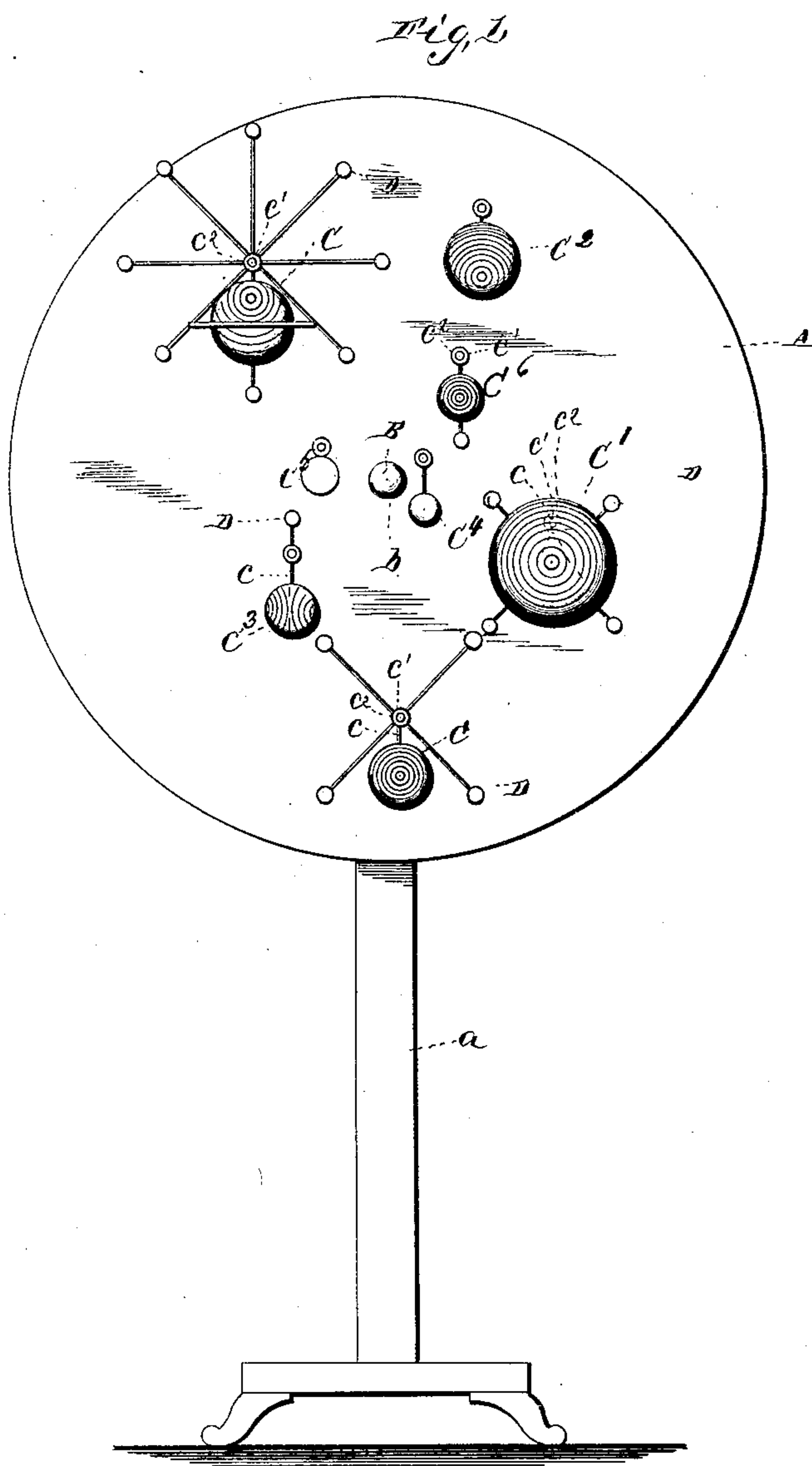
(No Model.)

D. W. RANDALL.

TELLURIAN.

No. 452,650.

Patented May 19, 1891.



WITNESSES

*Chas. L. Taylor*  
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INVENTOR

*Don W. Randall*  
*by E. W. Anderson*  
*his Attorney*

# UNITED STATES PATENT OFFICE.

DON W. RANDALL, OF WAPAKONETA, OHIO, ASSIGNOR OF ONE-HALF TO  
G. W. VICKERS, OF SAME PLACE.

## TELLURIAN.

SPECIFICATION forming part of Letters Patent No. 452,650, dated May 19, 1891.

Application filed June 21, 1890. Serial No. 356,241. (No model.)

*To all whom it may concern:*

Be it known that I, DON W. RANDALL, a citizen of the United States, and a resident at Wapakoneta, in the county of Auglaize and State of Ohio, have invented certain new and useful Improvements in Tellurians; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a front or face view, and Fig. 2 is a side view.

This invention relates to certain improvements in devices for illustrating the movement of the heavenly bodies around the sun and the relative movements of the satellites thereof; and it consists in the novel construction and parts, as will hereinafter appear.

In the drawings, A refers to a circular board or disk, which is axially hung or supported upon a post or upright *a* and rotatable upon its axis or a peg *b*, and this latter being at its center the outer end thereof is a representation of the great luminary or sun B. Moving in their orbits around a central representation of the sun are representations of heavenly bodies, eight being shown, (designated by the letters C C' C<sup>2</sup> C<sup>3</sup>, respectively,) each being represented by a spherical body or ball fixed to the outer end of a stout right-angled wire *c*, having at its inner end a collar or ring *c'*, fitting loosely on a peg or pin *c<sup>2</sup>*, projecting from the board or disk A. These pins or pegs are variously disposed upon the board or disk, according to the relative positions of the planets and their distances from the sun. It is obvious that as the disk or board is revolved the poles of the different spherical representations will all maintain the same relative positions—that is, move in curved lines around the sun corresponding with the well-known law governing the planets as relates to their orbits.

D D are the moons or satellites, represented by small spherical bodies or balls secured at the outer ends of stout radial wires D, secured at their opposite ends to the board or disk A, or by means of being coiled around the pegs or

pins *c<sup>2</sup>*. The moons are thus adapted to turn or move with the board or disk as it is revolved. Consequently the moons will at all times preserve their relative positions to the primary body as said bodies are carried in their orbits.

It will be observed that in the entire structure not a wheel or gear is employed to effect its action, thus greatly simplifying the same and rendering positive its operation.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The device for illustrating the movements of the heavenly bodies, &c., comprising the circular rotary board or disk axially hung on supports, said board carrying a central representation of the sun, and a series of pins arranged at varying points around said central representation, each pin carrying a collar or sleeve loosely fitting thereon, an angle-wire carried by said sleeve, a spherical representation of a heavenly body carried by said wire, and a series of moons or satellites arranged to move with said disk, whereby when said disk is turned the poles of said spheres will all maintain the same relative position and the satellites retain their relative positions thereto, substantially as specified.

2. The tellurian comprising the circular board or disk axially hung or supported upon a post or upright and rotatable upon its supporting-pivot, the outer end of said pivot bearing a representation of the sun, the right-angled holders or wires secured to sleeves loosely arranged upon pegs or pins projecting from said board or disk, said holders or wires bearing representations of several planets suitably arranged with reference to the central representation of the sun, and the radial wires around said planets secured to said pegs or pins and carrying at their outer ends representations of moons, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

DON W. RANDALL.

Witnesses:

R. B. ANDERSON,  
C. A. STUEVE.