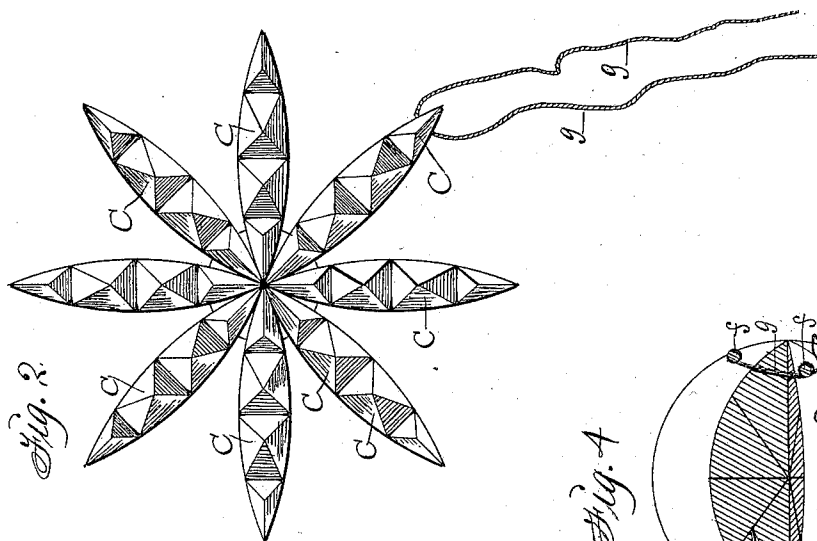
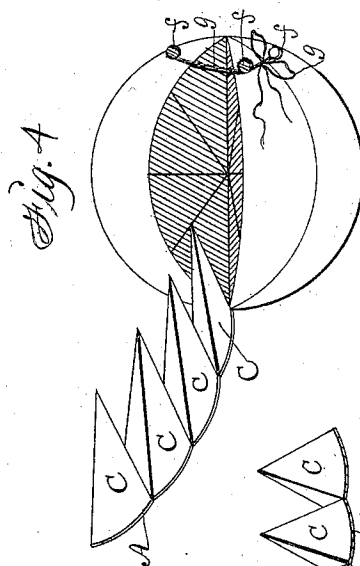
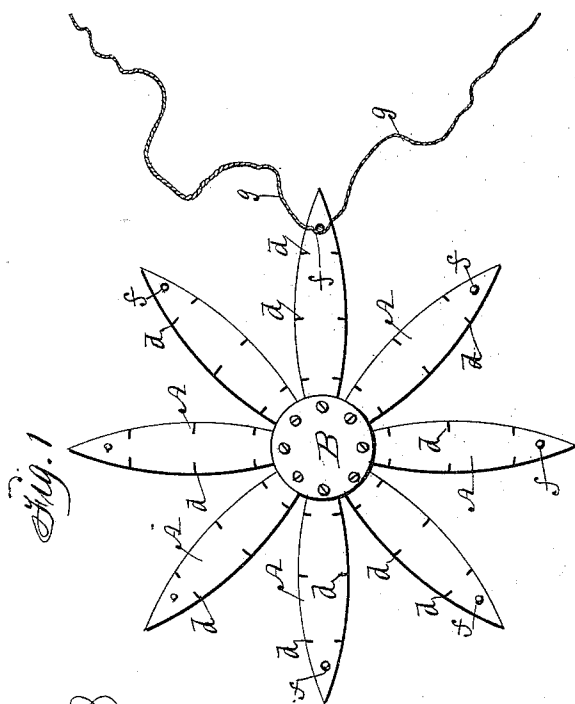
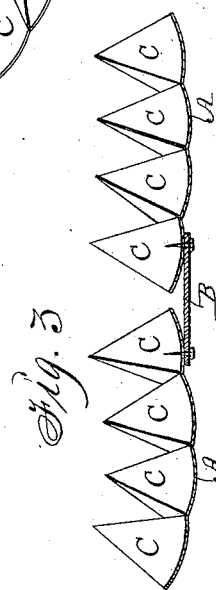


(No Model.)

A. COWLES.
GEOMETRICAL BLOCK.

No. 600,610.

Patented Mar. 15, 1898.



Witnesses:
C. F. Wilcox.
R. H. Orwig.

Inventor: Albert Cowles,
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UNITED STATES PATENT OFFICE.

ALBERT COWLES, OF DES MOINES, IOWA, ASSIGNOR TO H. A. SHANKLIN AND
J. W. LAMB, OF TOLEDO, IOWA, AND L. M. SEELEY, OF IOWA.

GEOMETRICAL BLOCK.

SPECIFICATION forming part of Letters Patent No. 600,610, dated March 15, 1898.

Application filed September 10, 1895. Renewed November 4, 1897. Serial No. 657,425. (No model.)

To all whom it may concern:

Be it known that I, ALBERT COWLES, a citizen of the United States, and a resident of Des Moines, in the county of Polk and State of Iowa, have invented an Improved Geometrically-Dissected Sphere, of which the following is a specification.

My invention relates to geometrical separable spheres composed of a multiplicity of multiform sections; and it consists in the manner of connecting and covering the sections, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows the outside surface and sectional cover of the sphere spread apart. Fig. 2 shows the inside of the sphere spread apart, so that the sections will extend radially from the center and lie flat. Fig. 3 shows two sections of the sphere and a section of the circular piece of the flexible cover that connects all the parts of the cover as required to retain them in concentric positions relative to the center of the complete cover. Fig. 4 shows the sphere and all the sections excepting one in closed position.

The letter A designates the sections of the flexible cover that are adapted to be connected by a circular central piece B to extend radially, as shown in Fig. 1. These parts of the complete cover are preferably made of good leather and may vary in size, as required, to produce spheres of different sizes and to cover the entire outside surface of the wood.

Pyramidal-shaped blocks C, preferably made of fine-grained wood and varying in form and size, and the large end of each being a segment of a sphere, have said large ends fixed to the inside faces of the cover-sections A by means of cement or in any suitable way, so that the cover-sections will produce hinged connections between the blocks. Incisions *d* at the edges of the sections A at the points where the blocks come in contact with each other at their large ends allow the

cover-sections to be practically spread out flat, as required, to present the blocks C in perpendicular position.

The inner ends of the sections A are concentrically connected with the circular section B of the cover by means of screws or nails extended through the overlying parts of the cover and into the inner blocks C, as illustrated in Fig. 3, or in any suitable way, as required, to produce flexible connections between the parts A and B.

It is obvious that a smooth outer surface may be produced by shaving the inside of the circumference or edge of the circular piece B and cementing it fast to the outside surface of the sections A and a neat, durable, fixed leather cover thus provided for the wooden blocks.

Studs *f* are fixed to the outer ends of the sections A in such a manner that when the sections of the sphere are brought together they can be readily retained in a closed position by means of a cord *g* being connected with one of the studs and passed around the outside of each stud and tied, as indicated in Fig. 4.

I claim as my invention—

1. A flexible cover consisting of sections A having incisions *d* in their edges, in combination with pyramidal blocks, and a circular flexible piece B, for the purposes stated.

2. An improved geometrical sphere consisting of a series of flexible cover-sections having incisions in their edges, a series of multiform pyramidal blocks fixed to each cover-section, and a circular flexible cover-section fixed to the series of cover-sections to connect them at one portion of the sphere, and means for retaining the sections of cover and the blocks in closed position.

ALBERT COWLES.

Witnesses:

CHARLES FOX,
S. D. CATHERWOOD.