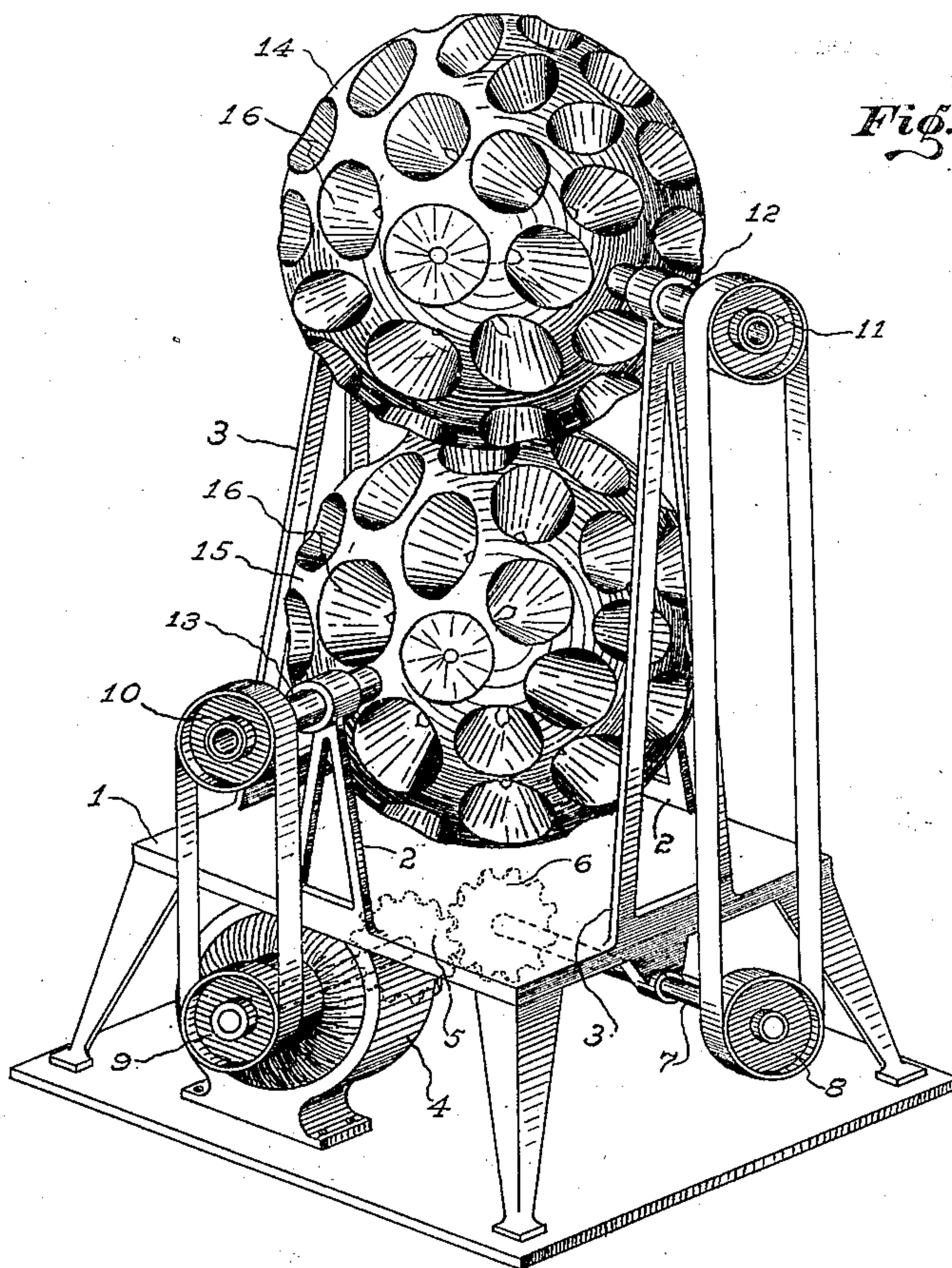


C. A. ROBINSON.
ILLUMINATING DEVICE.
APPLICATION FILED JUNE 20, 1908.

917,137.

Patented Apr. 6, 1909.
2 SHEETS—SHEET 1.



Witnesses.

C. M. Walker

Geo. L. Walker

Inventor.

Charles Alfred Robinson

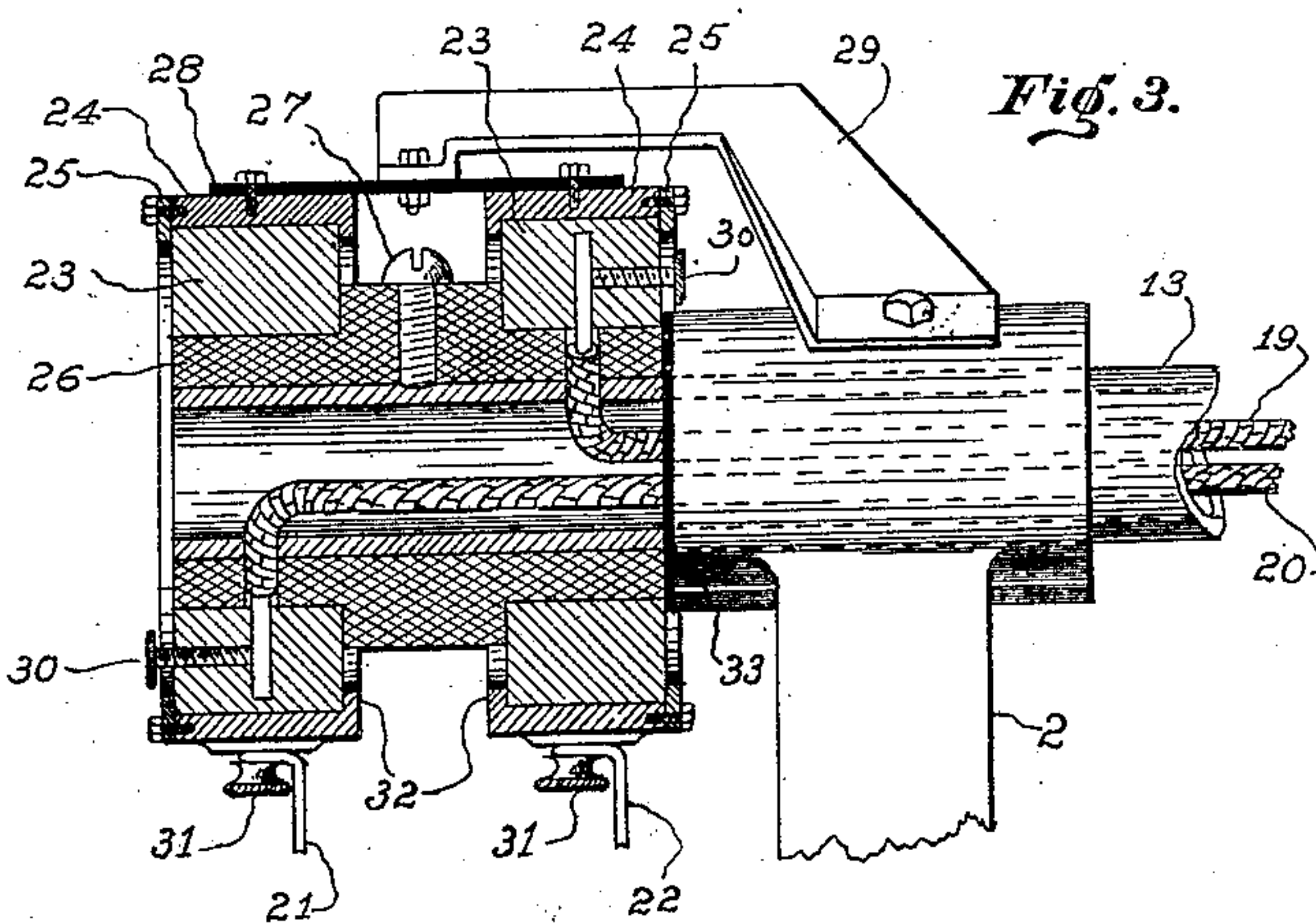
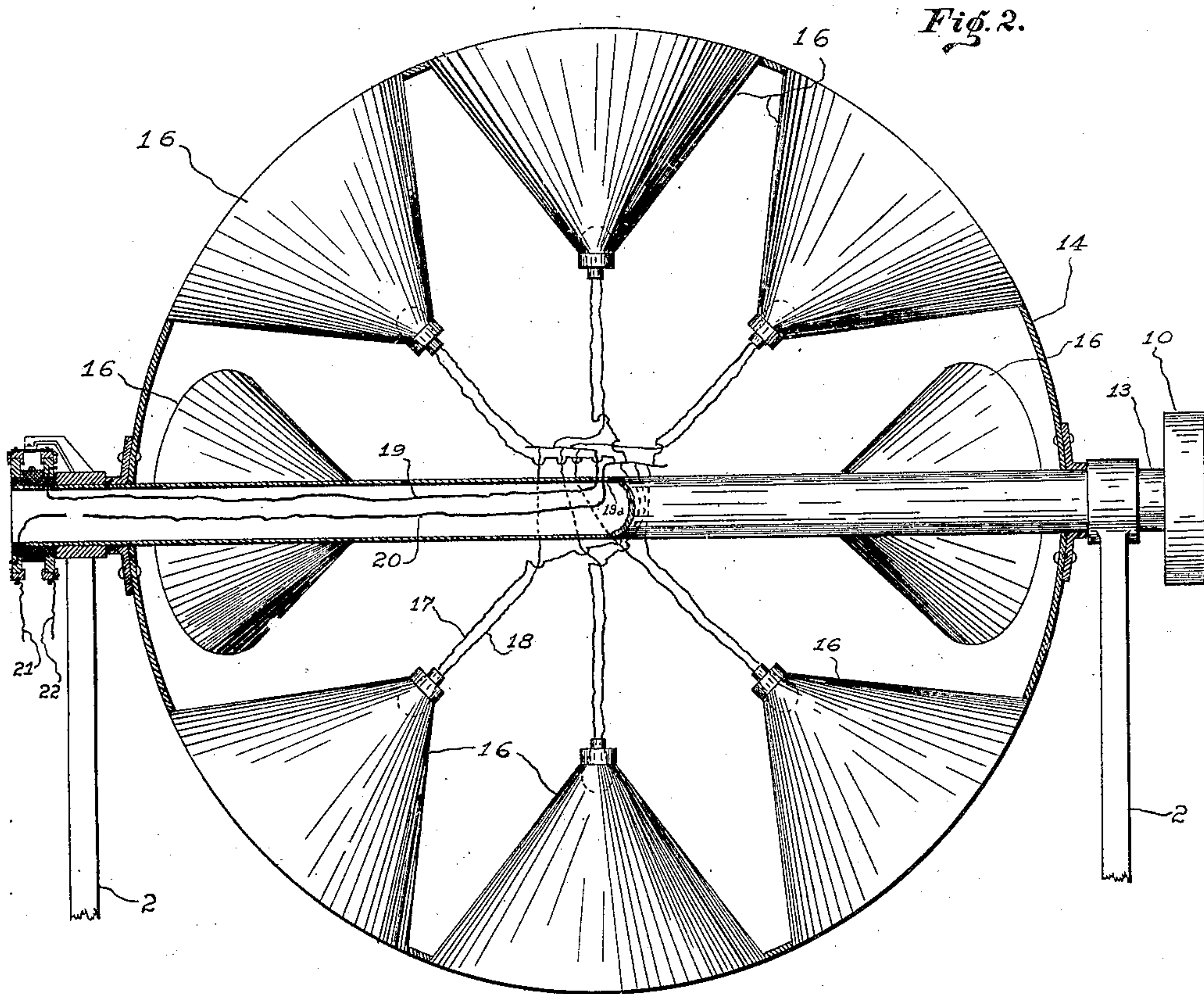
By Lyman Henry

Attorney.

C. A. ROBINSON.
ILLUMINATING DEVICE.
APPLICATION FILED JUNE 20, 1908.

917,137.

Patented Apr. 6, 1909.
2 SHEETS—SHEET 2.



Witnesses.

C. M. Walker
Geo. L. Walker

Inventor.

Charles Alfred Robinson
By *Lyman J. Henry*
Attorney.

UNITED STATES PATENT OFFICE.

CHARLES ALFRED ROBINSON, OF SITTON, COLORADO.

ILLUMINATING DEVICE.

No. 917,137.

Specification of Letters Patent.

Patented April 6, 1909.

Application filed June 20, 1908. Serial No. 439,579.

To all whom it may concern:

Be it known that I, CHARLES ALFRED ROBINSON, a citizen of the United States, and resident of Sitton, in the county of Pueblo and State of Colorado, have invented a new and useful Improvement in Illuminating Devices, of which the following is a specification.

My improvement relates to illuminating devices in which two hollow spheres, carrying cone shaped reflectors, in each of which is secured an electric light, are arranged one above the other on transverse axles that are placed at right angles to each other and each axle is supplied with a pulley that is belted to a pulley on a motor that serves to rotate the spheres carrying the reflectors.

The object of my improvement is to provide a means of assembling large numbers of electric lights in clusters each light having a reflector and the whole being revolved rapidly to cause the rays of light from the several reflectors to blend together. I attain this object by the mechanisms illustrated in the accompanying drawings in which,—

Figure 1 is a perspective view of my device set up ready for use; Fig. 2 is a cross sectional elevation through the middle of one of the spheres showing the manner of connecting the electric wires to the lights and to the main feed wires; and, Fig. 3 is an enlarged cross sectional view of the mechanism used to form the connection from the main feed wires to the wires within the revolving axle of the sphere.

Similar numerals refer to similar parts in the several views.

My invention when set up as illustrated in Fig. 1 is composed of a stand 1 that carries bearing pedestals 2 and 3 each of which carries a hollow shaft 12 and 13 on which are secured spherical forms 14 and 15 that carry cone shaped reflectors 16. The reflectors are arranged in staggered relation to each other and each reflector is provided with an incandescent electric light. A motor 4 carrying on one end of its shaft a pulley 9 and on the other end a gear 5 drives pulley 10 of the lower sphere shaft 13 by a belt. The gear 5 meshes with gear 6 on one end of shaft 7 the other end of which carries pulley 8, the latter driving pulley 11 on sphere shaft 12 which is above and at right angles to shaft 13 of the lower sphere.

When the lights are connected in a man-

ner hereinafter described, the spheres are revolved by means of the motor, pulleys, and belts at right angles to each other. The revolution of the spheres gives the effect of uniform illumination. The manner of connecting the lights in the reflectors of the spheres to the main feed wires is shown in Fig. 2 which is a cross sectional view of the lower sphere shown in Fig. 1 with shaft 13 in broken section. Wires 19 and 20 are main feed wires that are placed within the hollow shaft 13 and pass through a hole 19^a, near the middle of the shaft, into the interior of the sphere. Wire 19 is connected to wires 18 that are attached to the sockets secured to the reflector in which the light bulbs are screwed from the outside. Wire 20 joins wires 17 that are attached to the light sockets in a similar manner; wires 17, 18, 19 and 20 all rotate with the shaft and sphere and receive their electricity from outside feed wires 21 and 22, Fig. 3, that are held in binding posts 31 on collars 24 which are rigidly secured by bolts to an insulator 28 that is attached by a bolt to bracket 29 which is secured to one of bearings 2. Collars 24 are provided with lips 32 and rings 25 are secured to them by bolts in such manner that they are held in proper relation to rings 23 that revolve with shaft 13, which collars 24 are held rigidly by bracket 29. Rings 23 fit tightly around insulator 26 which is held on the shaft by set screw 27. A washer 33 of insulating material is provided to prevent rings 23 from coming into contact with bearings 2. Wires 19 and 20 pass through holes in shaft 13 and insulator 26 and enter holes in rings 23 where they are securely held by set screws 30.

From the foregoing it may be seen that proper electric contact may be had with wires 21 and 22 and wires 19 and 20 that convey, through wires 17 and 18, the lighting current to the lights in the reflectors; and that the axles 12 and 13 may revolve and carry with them rings 23 and insulators 26 while collars 24 are held rigidly by brackets 29.

I claim;

In an illuminating device of the character described, comprising, spheres adjacent and revoluble at right angles to each other; each of said spheres irregularly studded on the periphery with reflectors carrying electric lamps connected with wires; a hollow axle with each of said spheres mounted

thereon with means provided for conducting
wires through said axle to said lamps; cog
and pulley means of connections with motor
driving said axles; insulated interior collars
5 attached to turning shafts carrying wires
for said lamps said collars connecting with
exterior stationary collars that receive wires

conveying electric current, all substantially
as set forth.

CHARLES ALFRED ROBINSON.

Witnesses:

C. M. WALKER,
GEO. L. WALKER.