(No Model.)

E. F. GENNERT.

ROTARY DISPLAY BODY.

No. 352,646. Patented Nov. 16, 1886.

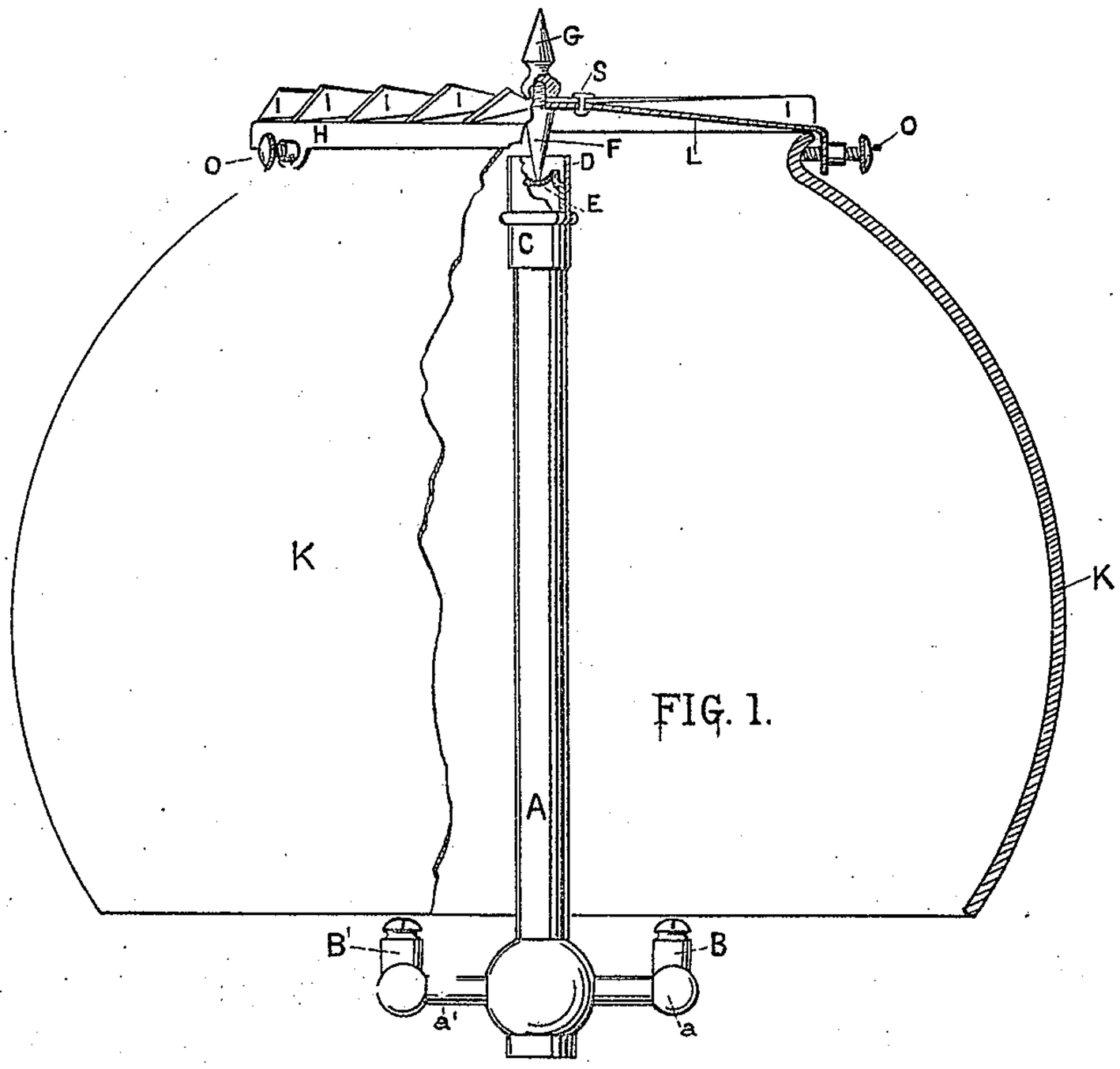

FIG. 1.

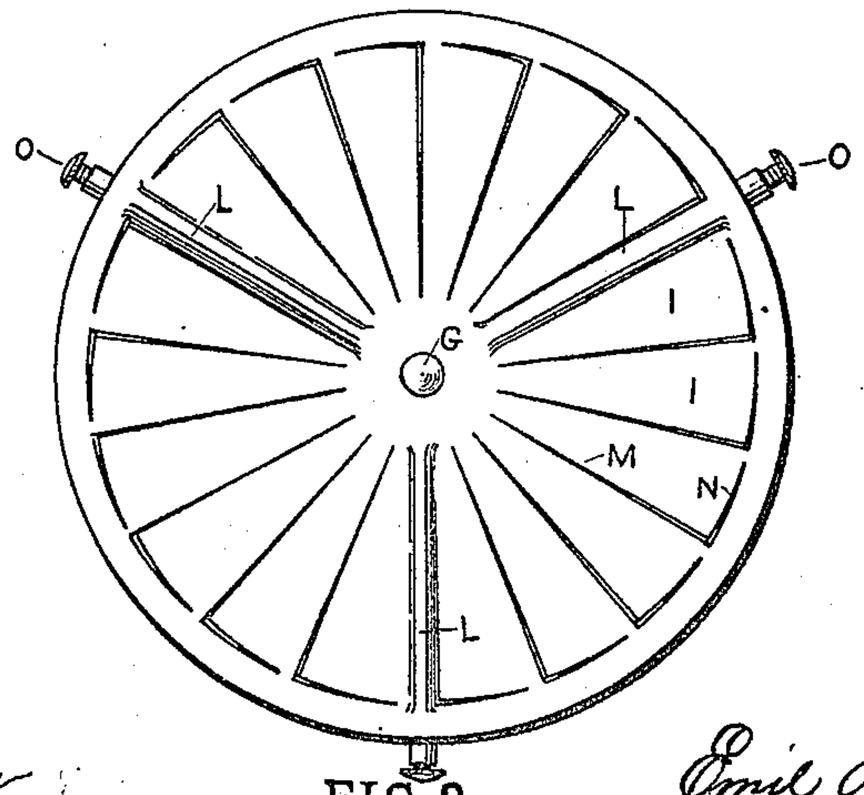

FIG. 2.

WITNESSES:

C. F. Kelly

M. Farquhar

INVENTOR

Emil F. Gennert

BY

ATTORNEY

UNITED STATES PATENT OFFICE.

EMIL F. GENNERT, OF BROOKLYN, NEW YORK.

ROTARY DISPLAY-BODY.

SPECIFICATION forming part of Letters Patent No. 352,646, dated November 16, 1886.

Application filed June 9, 1886. Serial No. 204,559. (No model.)

To all whom it may concern:

Be it known that I, EMIL F. GENNERT, a citizen of the United States, and a resident of Brooklyn, county of Kings, and State of New York, have invented a new and useful Improvement in Rotating Display-Bodies, of which the following is a specification.

My invention relates to mechanism for holding and supporting display-bodies—such as globes, shades, signs, &c.—and which is adapted to be rotated by the heated currents of air which rise from an illuminating-flame, and has for its object a mode of construction which will produce at low cost a simple and efficient mechanism; and it consists in the construction and combination of parts, devised with reference to simplicity and ease of manufacture, and the employment and positioning of material, so that the heat of the flame will not be detrimental, as will more fully appear, reference being had to the accompanying drawings, in which Figure 1 is a vertical view, partly in section; and Fig. 2, a horizontal top view of the bucket-wheel.

A, Fig. 1, shows a vertical standard of suitable length, which, it will be obvious, may be firmly secured at its lower end, either to a stationary support or to a movable supporting-base, such as an ordinary gas-bracket or an Argand gas or kerosene lamp. As shown in Fig. 1, it is secured to a gas-bracket by means of a central socket midway between two arms, *a a'*, having tips or jets B B. At its upper end a socket or step, E, of "lava," (so called,) is secured by any suitable means. I prefer to use a cap, as shown at C, which I countersink from its upper face to form a seat, into which I set the lava step and secure it there by spinning over its edge the edge or rim of the cap. This cap C is made to screw onto the upper end of the standard, and, if desired, it may also be made to serve as the central support for a globe or shade holder, as it may sometimes be desirable to use a stationary globe or shade inside of the rotating display-body. The lava step is concaved in its upper side, so as to form a socket-bearing for the pivot F of the rotating parts of the mechanism. The pivot F, I prefer to make of iron, its lower end terminating in a small rounded point and the upper end terminating in a tang, which is threaded to receive the nut or acorn G, by means of which it is firmly secured to the bucket-wheel I and center of holder H. This pivot F and nut G may be employed as a means of securing the bucket-wheel I and holder H together when they are made in separable pieces; but I prefer to secure them together with rivets, as shown at S. In ordinary cases, however, I make the bucket-wheel I and holder H of one piece or disk of sheet metal. I do this by severing the disk of sheet metal in radial and tangent lines, as shown by M and N, Fig. 2, then bending the free angles to a suitable incline to form vanes or buckets. These, it will be observed, may be bent at any desired incline, and thus be adjusted to produce the desired speed of rotation.

In forming a combined bucket-wheel of but one piece of sheet metal I prefer to sever or cut it in such way that three or more of the buckets are made sufficiently wide to admit of having a corrugated rib formed along their fixed sides, as is shown at L, Fig. 2, thus forming rigid supporting-arms for the rim or holder H, which is made in this case by turning down a flange, so as to form a vertical band or rim, H, which is provided with three or more set-screws, O, by means of which the display-body K is properly secured in position.

The display-body K may be of any transparent or semi-lucent material and of any suitable form required. Its upper portion, however, should be provided with a flange or flaring lugs adapted to engage with the set-screws, as shown. It is obvious that great scope and variety of form and device may be employed. Its lower end may be made widely open, so that the light-rays will fall upon goods placed beneath, and the inside may be made to intensify these rays by giving it more or less reflecting-surface.

In making a combined bucket-wheel and holder of separate pieces I sever a disk sheet of metal in a number of equidistant radial lines from the circumference to near the center, which latter part is pierced centrally to receive the tang of the pivot F, and also pierced in several places a short distance from the center for rivets S. The holder H is made with a corresponding central plate, which is pierced with holes to match. From this central plate three or more radial arms extend to a vertical band or rim, H, which is provided with the prop

set-screws. This holder and bucket-wheel are then riveted together, as shown at S, and the vanes or buckets I twisted to an inclination with the plane of rotation without giving either an upward or downward curve, and with one of their angles free, so that they may be changed to a different inclination at any time, and thus adjusted to the required speed of rotation.

Sleeve D is set over and extends above cap C, so as to act as a guide when putting display-body holder and pivot in its place on the lava step E, and forms a safety-rim to keep the pivot in its position if the display-body is accidentally pushed sidewise. The lava is a material which is hardened in a kiln after it has been shaped, and therefore the heat or gas does not affect it in any manner. The baking renders the material extremely hard, and therefore is well adapted for the purpose intended.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a mechanism for rotating display-bodies, a combined bucket-wheel and body-holder, as I and H, provided with a concentric pivot on its under side, in combination with a standard, as A, having burners B B, said standard surmounted with a step or socket adapted to receive the said pivot and permit its free rotation, substantially as and for the purpose set forth.

2. In a mechanism for rotating display-bodies, a pivot forming the central point of rotation having a threaded tang, with a nut adapted to screw thereon, and a combined bucket-wheel and holder, such as described, in combination with a standard, as A, having burners B B, and step, as E, arranged in the manner and for the purpose substantially as described.

3. In combination, a combined bucket-wheel and holder, as I and H, a pivot-center and nut, as F and G, a straight standard, as A, having burner or burners B B, said standard being surmounted with a step, as E, arranged substantially in the manner as shown, the whole comprising a mechanism for rotating display-bodies, as set forth and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 4th day of June, 1886.

EMIL F. GENNERT.

Witnesses:
C. F. KELLEY,
N. FARQUHAR.