## Patented Jan. 29, 1901. No. 666,683. O. A. MYGATT. LAMP SHADE. . -(Application filed Jan. 31, 1900.) (No Model.) Jeb. R Fig.



1 11111 -----772.22 Jzs.3. Inventor O. a. Mygatt

Witnesses-

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# - UNITED STATES PATENT OFFICE.

### OTIS A. MYGATT, OF NEW YORK, N. Y.

### LAMP-SHADE.

SPECIFICATION forming part of Letters Patent No. 666,683, dated January 29, 1901.

Application filed January 31, 1900. Serial No. 3,449. (No model.)

To all whom it may concern:

Be it known that I, OTIS A. MYGATT, a citizen of the United States, residing at NewYork, in the county of New York and State of New 5 York, have invented certain new and useful Improvements in Lamp-Shades, of which the following is a specification, reference being had therein to the accompanying drawings. The invention relates to lamp-shades.

The object of the invention is to produce a 10 shade made in layers with smooth outer and inner surfaces which may be readily cleaned and having prismatic interior ribs arranged in different directions to both refract and dif-15 fuse rays of light which pass through the shade.

Figure 1 is a vertical section of a portion of a lamp-shade of frusto-conical form having horizontal ribs. Fig. 2 is a plan of same. Fig. 20 3 is a plan of a frusto-conical shade ribbed vertically. Fig. 4 is a vertical section of a frustoconical lamp-shade made of two portions, one ribbed vertically and the other horizontally and united, the outer and inner surfaces being 25 smooth. Fig. 5 is an outer view of the same shade, illustrating, as may be, by line-drawing the ribs as they appear through the transparent glass. I form a pressed or molded glass conic frus-30 tum, segment of sphere, pyramid, or what not with horizontal ribs on its external surface and smooth inner surface. A frustum of a cone is shown at A and can be produced by a skilled glassworker by molding or pressing. 35 A second shade, vessel, or article B of a little larger size is formed in a mold, the internal ribs on this larger piece being vertical and the outer surface smooth. When the two pieces are removed from the mold, and preferably while still hot, they may be placed together, 40 and, if desirable, the joint between them at the edges C C is closed by wiping or compressing the still plastic glass together, or if not sufficiently plastic the edges may be heated and 45 then joined, or a sealing compound may be

used, or other means to secure a tight and closed joint to prevent the entrance of dust between the two portions.

The effect of the vertical and horizontal ribs is to deflect and diffuse light passing 50 through the glass and in direction determined by the planes and angles of the ribs. The outer and inner smooth surfaces can be kept clean as easily as ordinary glass. The plane or smooth outer surfaces secure an ease of 55 cleaning which is not known in any externallyribbed glass.

While it is apparent that the compound glass shades and hollow articles constructed as described are somewhat heavier than single 60 glass with the ribs external thereto, for certain purposes the advantage of the smooth external surfaces more than compensates for this increase in weight.

What I claim is— 65 1. A compound article of glass, having external smooth faces and internal ribs running in transverse directions, substantially as described. 2. A glass lamp-shade composed of two hol- 70 low components one inclosing the other, the adjacent faces of the components being ribbed in different directions and the joints sealed, so that the outer and inner surfaces of the completed shade are smooth, and the ribs in-75 closed and secured against dust, substantially as described. 3. A lamp-shade composed of a smaller frustum having external horizontal ribs and a larger frustum having inner vertical ribs, 80 joined together as described so that the ribs are proximate, and the outer and the inner faces of the completed shade are smooth, substantially as described. In testimony whereof I affix my signature 85 in presence of two witnesses. OTIS A. MYGATT.

Witnesses:

WM. B. OSGOOD FIELD, F. M. CLARK.