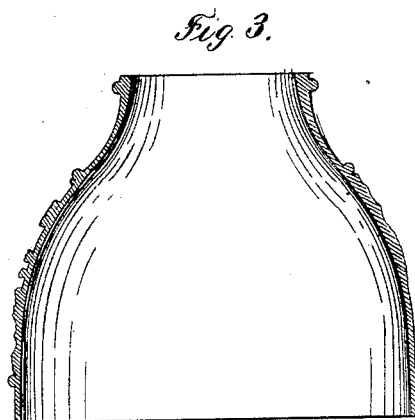
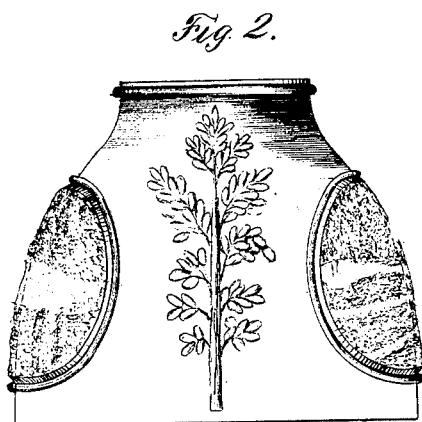
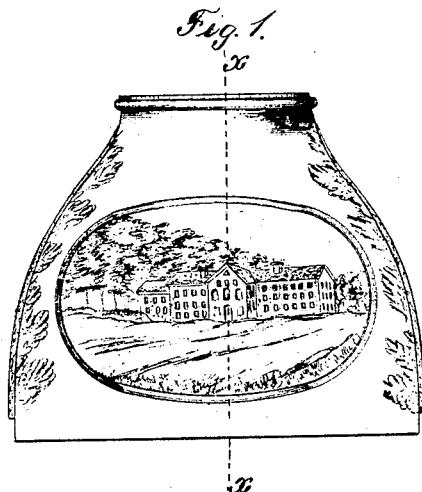


J. H. HOBBS, C. W. BROCKEMIER & W. LEIGHTON, Jr.  
MANUFACTURE OF LAMP SHADES.

No. 114,140.

Patented Apr. 25, 1871.



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# United States Patent Office.

JOHN H. HOBBS, CHARLES W. BROCKEMIER, AND WILLIAM LEIGHTON, JR.  
OF WHEELING, WEST VIRGINIA.

Letters Patent No. 114,140, dated April 25, 1871.

## IMPROVEMENT IN MANUFACTURE OF LAMP-SHADES.

The Schedule referred to in these Letters Patent and making part of the same.

### *To all whom it may concern:*

Be it known that we, JOHN H. HOBBS, CHARLES W. BROCKEMIER, and WILLIAM LEIGHTON, JR., all of Wheeling, in the county of Ohio and State of West Virginia, have invented certain Improvements in Shades for Lamps and other Lights; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing making part of this specification, in which—

Figure 1 is an elevation of our improved shade, showing a landscape encircled by a border and portions of a branch of a tree or of a vine.

Figure 2 is also an elevation, showing a portion of two landscapes and the branch in elevation.

Figure 3 is a transverse section on line *z z* of fig. 1, showing some of the differences in the thickness of the different parts of the views.

This invention relates to shades for lamps, gas-lights, and other lights; and

It consists in forming upon the surfaces of such shades, when made of hot-pressed porcelain or other semi-opaque and semi-liquid or vitreous substances, landscapes, vines, branches of trees, flowers, and other figures, by causing portions thereof to be of greater thickness than are other portions of the same figures, in order that, when the light is caused to shine through the shades or the figures formed upon them, it shall be allowed to pass more freely at some points than at others, and thus gives the figure somewhat the appearance of a painting, the thicker portions appearing much darker than the thinner portions when viewed from the side which is opposite to the one upon which the light is shining.

We are aware that figures have been formed upon plates of porcelain, which figures, when presented to the light, would produce an appearance similar to ours, and that this appearance is caused by the fact that the material of which they are made is semi-opaque and of different thicknesses; and we are further aware that those plates have been set in frames and used for shades for lamps and other lights. But we are not aware that such plates, or any other forms of shades having the peculiar properties for transmitting rays of light which ours has, have ever been formed by pressing the porcelain or other material into molds while it is hot or in a semi-liquid condition, such molds being provided with the inequalities upon their

inner surfaces necessary to give to the article pressed different thickness in the different parts thereof.

The state of the art as above described being admitted, it follows that the feature of novelty in this case consists in making shades for lights out of the materials named by pressing them into molds while such materials are in a highly-heated and vitrified condition, such molds being so constructed upon their inner surfaces as to give such a form to the article pressed as to produce the effect above described.

To enable those skilled in the art to make and use our invention, we will proceed to describe it with reference to the accompanying drawing.

Each of the figures represents a shade for lamps or other lights, which has formed upon it figures representing landscapes, and upon two of them is shown a branch of a tree. It is apparent, however, that other figures or forms of ornamentation may be formed upon the molds in which the shades are made, the only requisite being that the construction of the interior of the mold should be such as to give the required thickness to the different parts of the figure or ornamentation, such difference in thickness amounting to one-eighth of an inch, more or less.

When the molds have been prepared the material, while in a semi-liquid or highly-heated state, is introduced therein, and the requisite amount of pressure is brought to bear upon it to force it into the depressions formed upon its interior surface; and after it has become sufficiently cooled it is removed from said mold, when, by placing it upon or over a light, it will be found to give the appearance above described.

What we claim as our invention, and desire to secure by Letters Patent, is—

The manufacture of ornamental shades or globes for lamps or other lights by pressing the above-described material in molds while it is in a semi-fluid condition, the molds being so constructed as to give to the shades irregular thicknesses substantially as and for the purpose set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

JOHN H. HOBBS.  
CHAS. W. BROCKEMIER.  
WILLIAM LEIGHTON, JR.

Witnesses:  
CHAS. N. BRADY,  
BERNHARD LEWODAG.