(No Model.) 2 Sheets—Sheet 1.

A. FEIGL.

LAMP SHADE.

No. 522,752. Patented July 10, 1894.

Fig: 1.

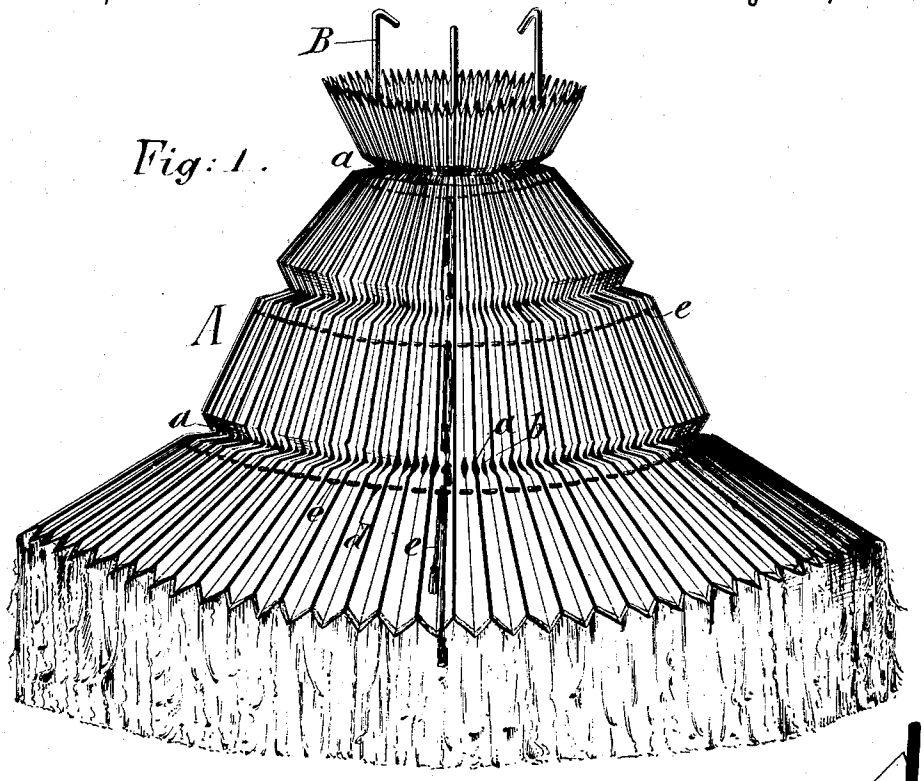


Fig: 3.

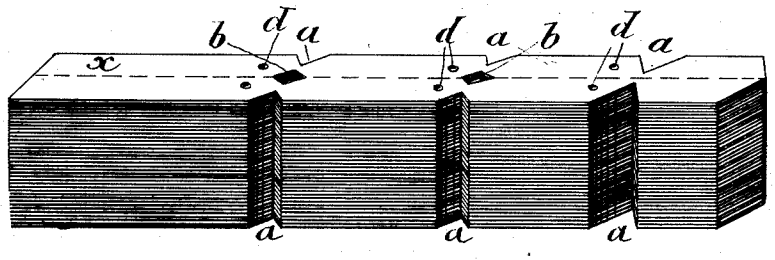
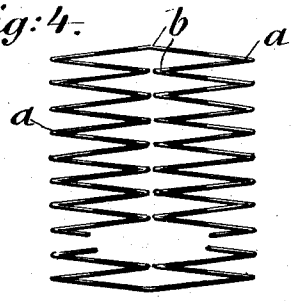


Fig: 4.



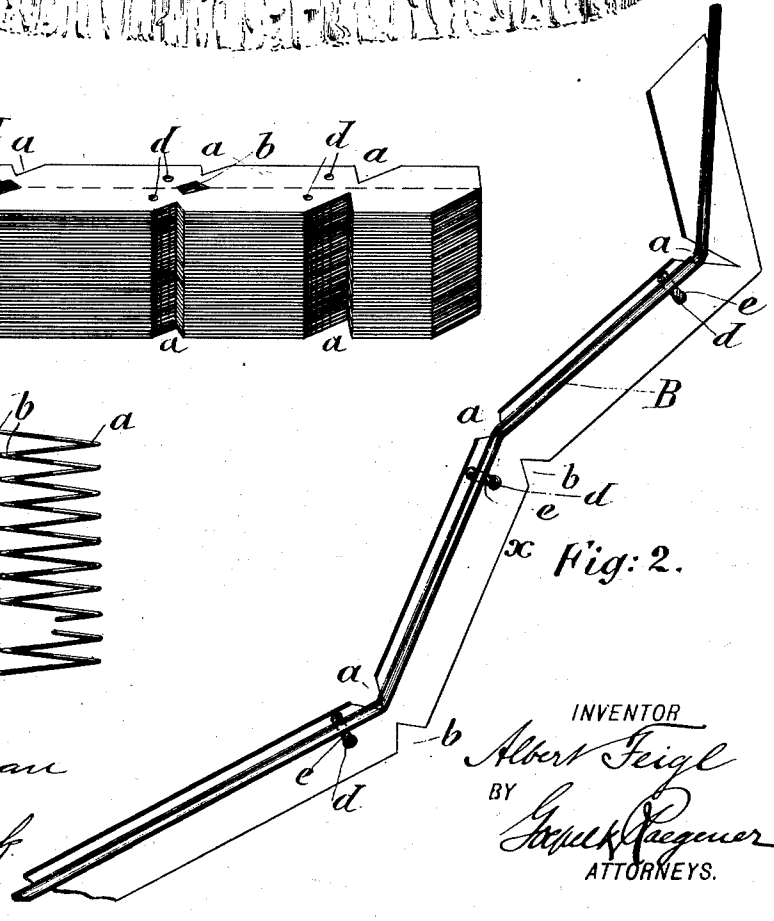


Fig: 2.

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(No Model.) 2 Sheets—Sheet 2.

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LAMP SHADE.

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Fig: 5.

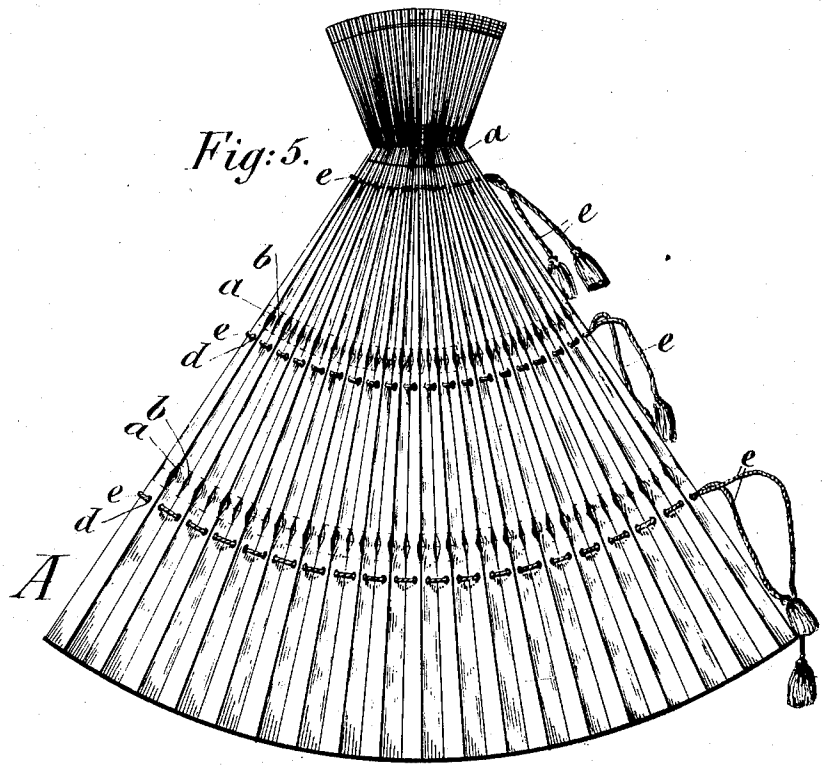
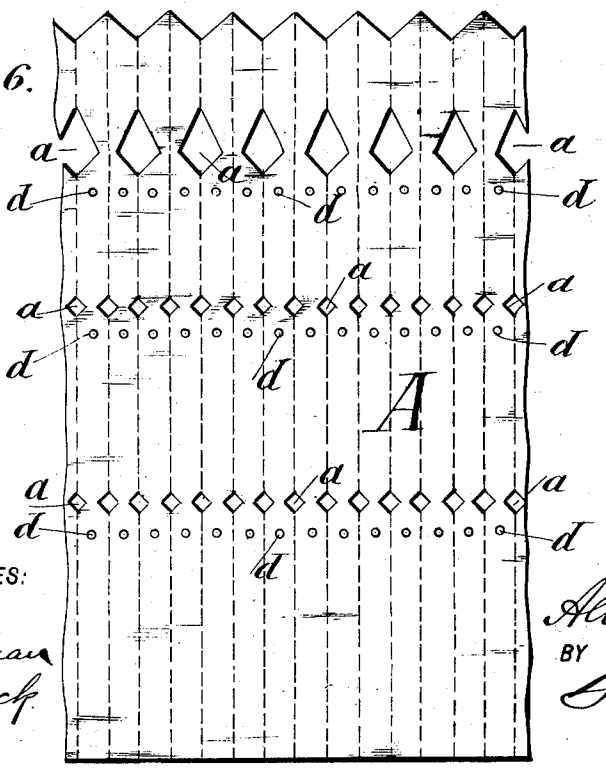


Fig: 6.



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ALBERT FEIGL, OF NEW YORK, N. Y.

LAMP-SHADE.

SPECIFICATION forming part of Letters Patent No. 522,752, dated July 10, 1894.

Application filed February 23, 1894. Serial No. 501,143. (No model.)

To all whom it may concern:

Be it known that I, ALBERT FEIGL, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Lamp-Shades, of which the following is a specification.

This invention has reference to an improved lamp-shade of that class which is made from linen or other textile fabric and provided with a number of radial folds, and adapted to be supported on a suitable wire-frame in such a manner that the different parts of the shade are supported on the frame at different angles to each other; and the invention consists of a lamp-shade, which is made of suitable textile fabric that is folded up in regular radial folds and which is provided at different points with recesses in the folds and with openings for receiving the adjusting cords, so that the contour of the shade can be readily adapted to the contour of the supporting wire-frame.

In the accompanying drawings:—Figure 1 represents a perspective view of my improved lamp-shade, shown as applied to a suitable wire-frame and hung to the chimney of a lamp. Fig. 2 is a vertical longitudinal section of one of the folds of the shade, drawn on a larger scale, and showing it supported on one of the wires of the supporting frame. Fig. 3 is a perspective view, showing the fabric from which the same is made folded in superposed folds, and after the recesses and openings for the cords are punched in the same. Fig. 4 is a vertical transverse section of the folded portion, on line 4—4, Fig. 3. Fig. 5 is an elevation showing the shade spread out into fan-shape, being the form it assumes when its opposite sides are collapsed. Fig. 6 is a plan view of a portion of the shade, showing the same flattened, the dotted lines indicating the angles of the folds.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents my improved lamp-shade which is made of an endless web of linen or other suitable fabric, of suitable size and shape that is folded in such a manner as to form a number of radial folds x that diminish gradually in width from the outer toward the inner circumference of the shade when the latter is in open using position. The folds x are formed by creasing the fabric alternately in opposite directions from edge to edge at regular intervals, as shown in dotted lines in Fig. 6, the opposite halves of the web of fabric being then drawn together, so that when the folds are compressed as shown in Figs. 3 and 4, one half of the folds will be arranged on one side and one half on the other side of the folded fabric.

For the purpose of adapting the shade to various angles of the supporting wire-frame B, and facilitate thereby the formation of a great variety of forms of shade the folded up fabric of the shade is tightly pressed together, and provided by means of suitable dies with as many side-recesses a as there are angles in the frame, on which the shade is to be supported. The side recesses a extend into contiguous sides of the folds, or in other words, each extends into the adjoining edges of two folds. The folded shade is further provided intermediately between the recesses a with central perforations b, which, when the shade is open, are located in the inner angles of the folds. Below each set of recesses a smaller perforations d are arranged in pairs, and said perforations are also located below and one on each side of the intermediate openings b, so as to serve for receiving the tightening-cords e, which pass around the shade and by which the portions of the shade are retained on the supporting wire-frame, through the holes.

By means of the cords e the different portions of the folded shade are held in shape and retained on the corresponding portion of the wire-frame B.

By means of the recesses a, b, the different portions of the shade can be readily set at various angles to each other, so as to adapt themselves to the angles of the supporting wire-frame, while a great variety of different shapes of shade can be produced. Without the side-recesses a and intermediate perforations b, the different portions of the shade could not be set at an angle to each other, as the connecting fabric would not permit the setting of the shade portions at an angle toward each other. The center openings b have

the additional advantage that the light can pass through the same, so that a prettier effect of the lamp is produced.

By cutting the side-recesses and holes by means of suitable dies, after the fabric of which the shade is formed has been arranged in superposed folds until finally a compressed block-like shape is obtained, a shade of any suitable contour can be readily produced in a cheap and effective manner, and thereby any suitable style of shade obtained, in connection with a wire-frame of corresponding shape.

Before the shade is applied to its frame, the retaining cords *e* are strung through the openings *d* of the different folds and tied together at the adjacent end folds of the shade, as shown in Fig. 1, so that a great variety of lamp shades, in which the original portions of the same can be arranged in any suitable size and at any desired angle toward each other, is obtained, and thereby the manufacture of these shades considerably cheapened and simplified. The upper part of the shade has larger recesses *a*, no additional recesses *b* being necessary.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A lamp-shade composed of a single piece of textile fabric having radial folds, said folds being provided with a series of open recesses extending around the shade intermediately of its height, and with holes for a retaining-cord, and the said retaining-cord, substantially as set forth.

2. A lamp-shade composed of suitable textile-fabric, having radial folds, said folds being provided with recesses at one or more points at the side-edges of the folds, and with intermediate openings in the inner angles of the folds between said recesses and also with holes in each fold on each side of said intermediate openings, and retaining cords passed through said holes, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

ALBERT FEIGL.

Witnesses:
PAUL GOEPEL,
K. R. BRENNAN.