

No. 662,734.

Patented Nov. 27, 1900.

E. PIKHART.
INCANDESCENT MANTLE.

(Application filed Sept. 25, 1900.)

(No Model.)

Fig. 1

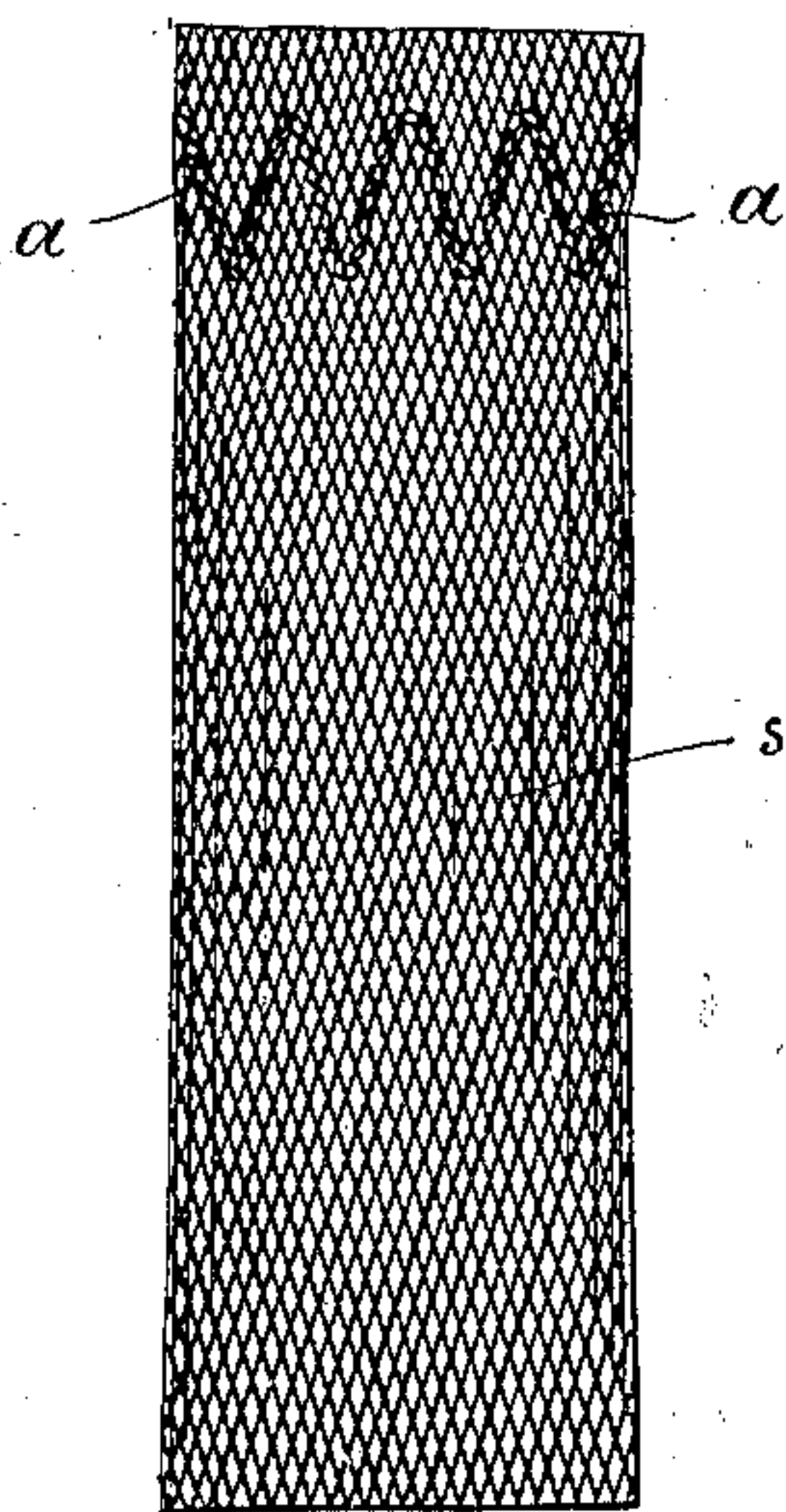


Fig. 2

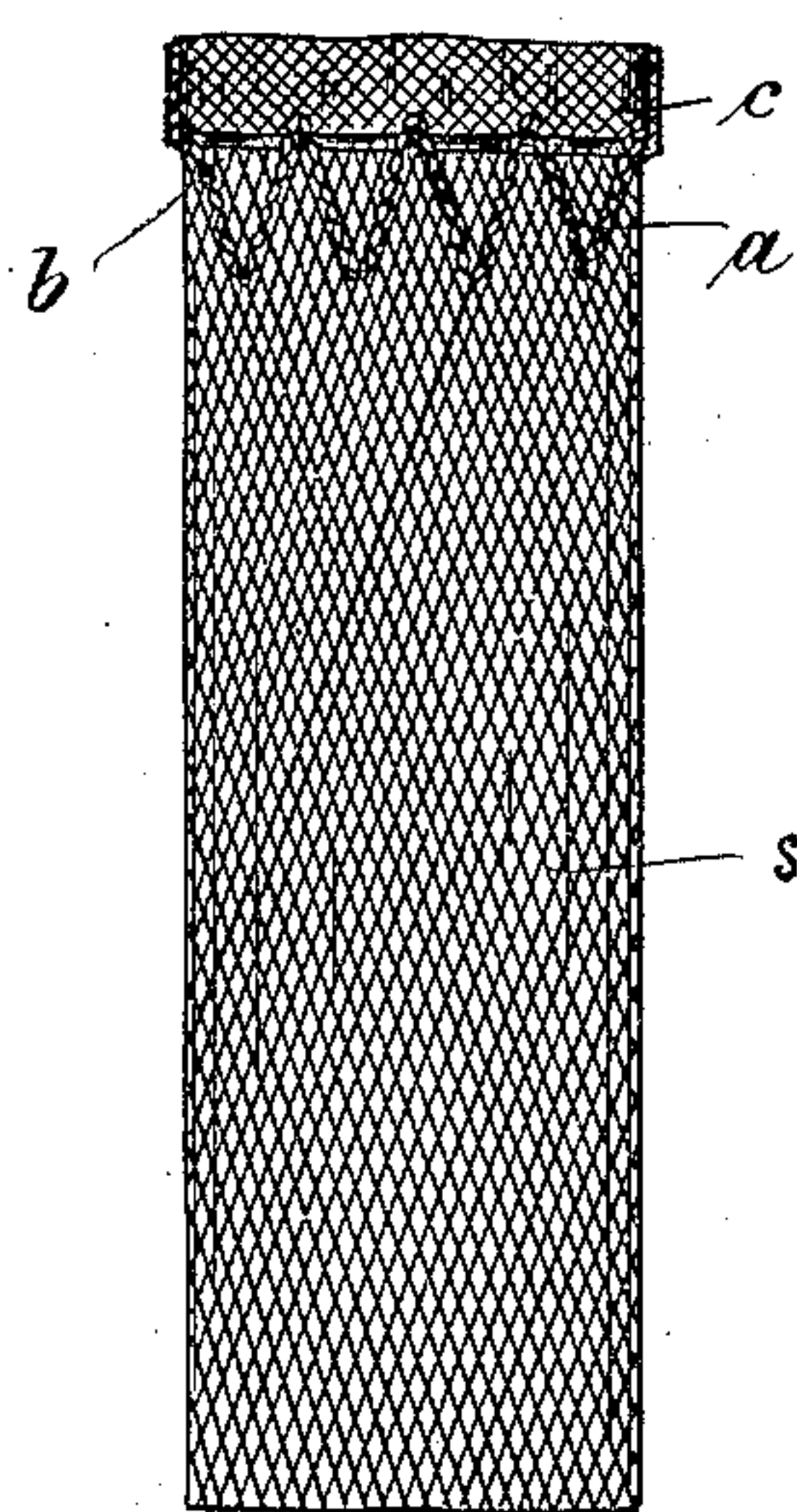


Fig. 3

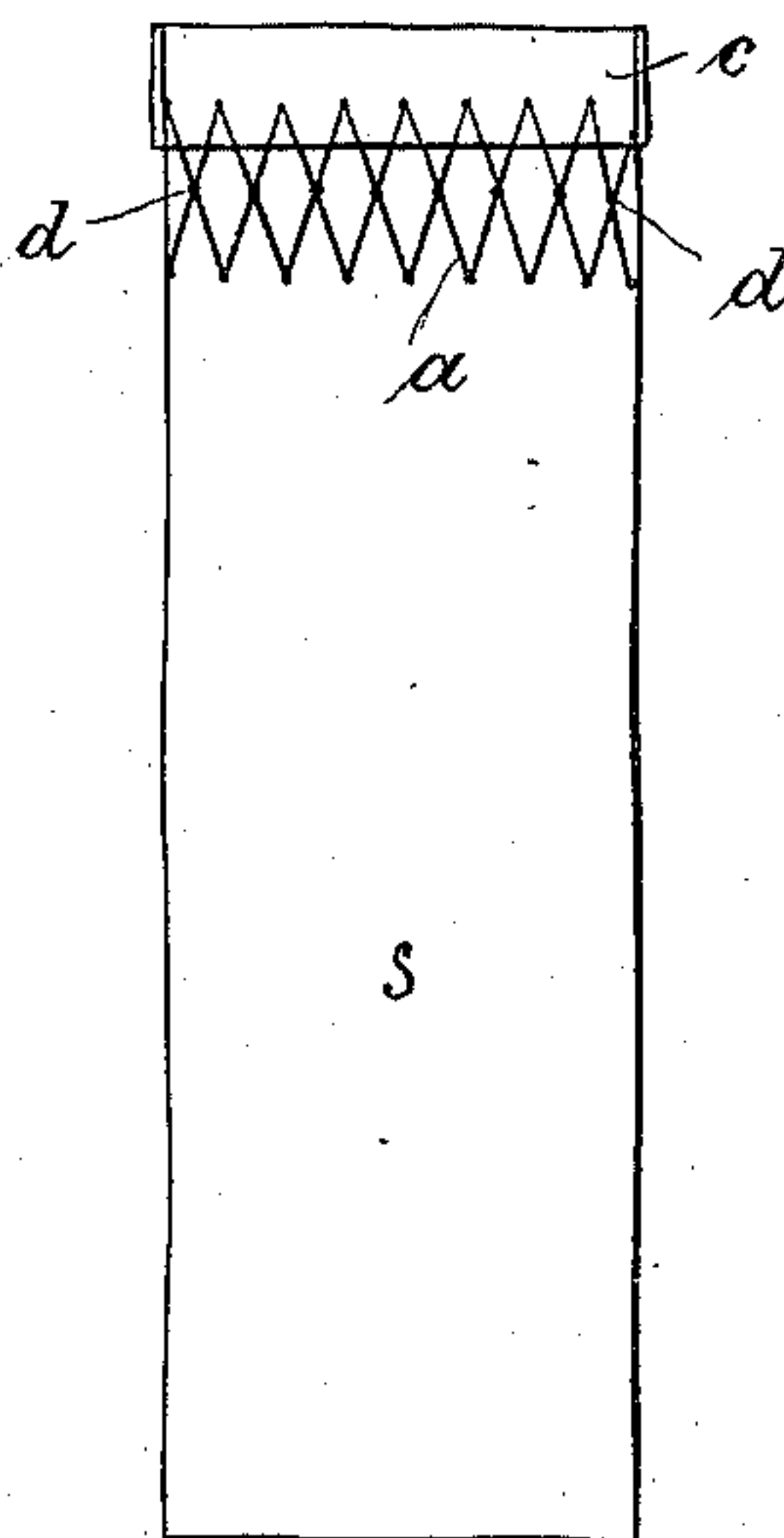


Fig. 4

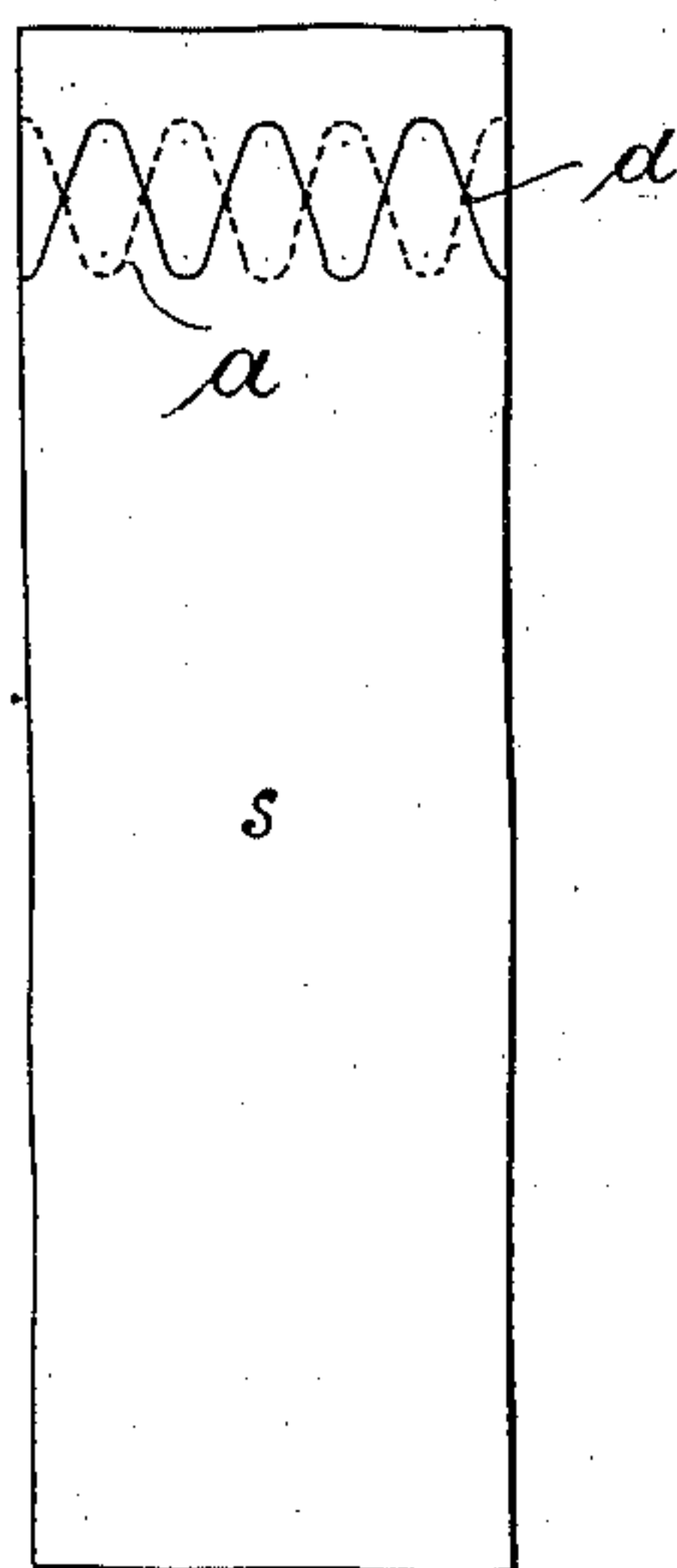
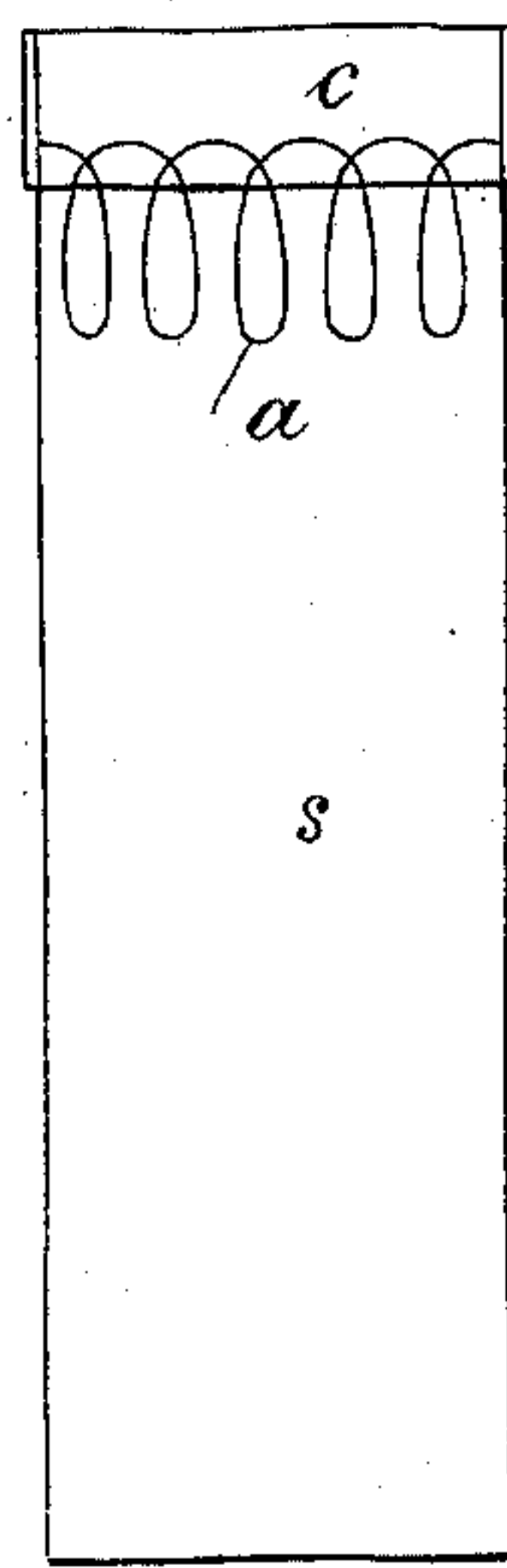


Fig. 5



Witnesses:

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UNITED STATES PATENT OFFICE.

EMANUEL PIKHART, OF VIENNA, AUSTRIA-HUNGARY.

INCANDESCENT MANTLE.

SPECIFICATION forming part of Letters Patent No. 662,734, dated November 27, 1900.

Application filed September 25, 1900. Serial No. 31,054. (No model.)

To all whom it may concern:

Be it known that I, EMANUEL PIKHART, a citizen of the Empire of Austria-Hungary, residing at Vienna, in the Empire of Austria-Hungary, have invented certain new and useful Improvements in Incandescent Mantles, of which the following is a specification.

This invention relates to incandescent mantles, and has for its object to strengthen them and to prolong their life.

Incandescent mantles as heretofore made are generally brittle and weak near their tops or heads, which are sometimes made of double thickness, with means for connecting them at the bottom of the outer thickness. Attempts have heretofore been made to correct this weakness and consequent breakage, but without entire success. By this improvement I have so strengthened the inner thickness of the mantle a little below its top that danger of breakage is reduced to a minimum.

In the accompanying drawings, Figure 1 is a side view of the improved mantle in an incomplete condition. Fig. 2 is a side view of the same complete. Figs. 3, 4, and 5 are side views of modifications.

In the drawings, *s* indicates the cylindrical mantle, made of suitable material and of suitable proportions.

a indicates a strengthening seam, as in Figs. 1, 2, and 5, or seams, as in Figs. 3 and 4. The single seam *a*, made by any suitable means, passes around the mantle in a zigzag line somewhat below the extreme upper end of the mantle. This zigzag strengthening-seam only passes through one thickness of the mantle, and that the thickness forming the inner thickness of the top or head. The mantle being thus strengthened at a zone near its top, an outer thickness *c* of mantle material is provided extending from the top of the finished mantle down to the zigzag strengthening-seam and extending partly over the same. The bottom of the outer thickness *c* of the mantle-top is connected to the inner thickness by a seam *b*, extending through both thicknesses around the mantle and below the upper part of the zigzag strengthening-seam. The outer thickness of the mantle-top is formed by doubling the upper end of the mantle-body back upon itself.

In Fig. 3 multiple crossing zigzag strengthening-seams *a* are shown. This forms a lattice-like arrangement of the seams, intersect-

ing at points *d*, common to the different seams and the mantle. This materially increases the strength of the mantle.

Fig. 4 shows multiple crossing zigzag or undulating seams, the bends being rounded instead of angular.

In Fig. 5 the strengthening-seam *a* passes around the mantle in a series of up-and-down loops, the outer thickness *c* extending below the top of this seam.

All of the strengthening-seams described strengthen a zone of sufficient width to protect the mantle from breakage below the double top. Owing to the forms of the strengthening-seams the elasticity of the mantles is not substantially impaired. This strengthening means does not prevent free escape of the gases of combustion from the top of the mantle.

I claim—

1. A mantle for incandescent burners having one or more strengthening-seams near the top and extending around the mantle, the top of the mantle having an inner and outer thickness of mantle material, and a transverse seam extending through both inner and outer thicknesses of said material and below the top of the said strengthening seam or seams in the inner thickness.

2. A mantle for incandescent burners having one or more zigzag strengthening-seams near the top and extending around the mantle, the top of the mantle having an inner and outer thickness of mantle material, and a transverse seam extending through both inner and outer thicknesses of said material and below the top of the said strengthening seam or seams in the inner thickness.

3. A mantle for incandescent burners having multiple crossing strengthening-seams near the top and extending around the mantle, the top of the mantle having an inner and outer thickness of mantle material, and a transverse seam extending through both inner and outer thicknesses of said material and below the top of the said strengthening-seams in the inner thickness.

In witness whereof I have hereunto signed my name, this 13th day of September, 1900, in the presence of two subscribing witnesses.

EMANUEL PIKHART.

Witnesses:

JOHANN LUX,
ALVESTO S. HOGUE.