

No. 702,661.

Patented June 17, 1902.

F. M. LOCKE.

INSULATOR AND PROCESS OF MANUFACTURING SAME.

(Application filed Apr. 19, 1902.)

(No Model.)

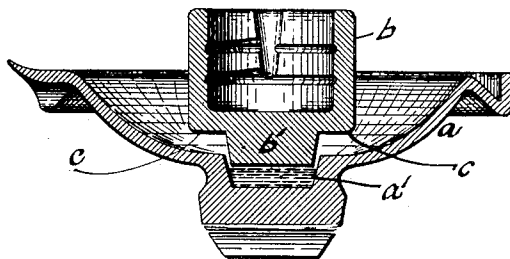


Fig. 1

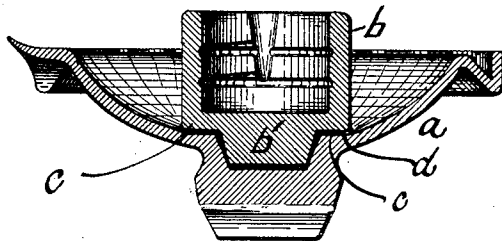


Fig. 2

WITNESSES:

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FRED M. LOCKE, OF VICTOR, NEW YORK.

INSULATOR AND PROCESS OF MANUFACTURING SAME.

SPECIFICATION forming part of Letters Patent No. 702,661, dated June 17, 1902.

Application filed April 19, 1902. Serial No. 103,733. (No specimens.)

To all whom it may concern:

Be it known that I, FRED M. LOCKE, of Victor, in the county of Ontario, in the State of New York, have invented new and useful Improvements in Insulators and Processes of Manufacturing Same, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

10 This invention relates to the art of manufacturing insulators constructed of two or more cup or bowl shaped pieces of porcelain or porcelain and glass or other vitreous material and which pieces are adapted to be secured together so as to make the insulator mechanically strong.

15 My object is to produce a new method of securing together two or more parts forming the insulator without the necessity of firing the parts after they are assembled.

20 I have found that by firing the separate shells or parts which comprise the insulator separately that each part may be more thoroughly vitrified than when fired in their assembled state, forming a complete insulator. I have also found that the material which unites the parts together does not materially add to the insulating qualities of an insulator, but that the desired end to be obtained is the securing of the several shells together, so as to make the insulator mechanically stronger.

25 To that end my invention consists in the several new and novel steps comprising the art or process hereinafter described, and specifically set forth in the claims hereunto annexed.

30 In the drawings I have shown in Figure 1 the two parts of an insulator about to be assembled, the recess in the outer shell being partially filled with molten glaze, glass, or similar material, which when it becomes dry or cooled will unite the parts together. Fig. 2 shows a view in which the parts have been assembled, the heavy dark line showing the seam of glass or glaze which unites the parts together.

35 In the drawings, *a* represents the outer shell of a two-part insulator constructed in the ordinary way and having a central recess *a'*.

40 *b* is the inner shell, having one end *b'* adapted to rest within the recess *a'* and may or may not have shoulders *c*, which are adapted to

rest upon the inner face of the outer shell or in juxtaposition.

To carry out my process, I first take the 55 shells which have been previously vitrified in the kiln in the ordinary way and pour into the outer shell liquid glaze or glass or similar material in its fused or semifused state. I then force the inner shell into the outer shell until 60 the liquid glaze or glass takes the position shown in the black line *d* in Fig. 2, then allow the parts to cool. It will also be observed that I may pour into the outer shell a portion of the liquid glaze, and then after inserting 65 the inner shell pour more of this liquid glass or glaze in its heated condition until a substantial joint is formed to secure the parts together.

It will be observed that an insulator of any 70 number of parts or shells may be built up by this process. It will also be observed that by this process the parts of the insulators can be secured together, whether of the same or different materials.

75 Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The herein-described process of securing together two or more shells or parts of an insulator consisting in first firing the shells or parts in a kiln, then nesting them together and pouring in liquid glaze or glass or similar material in its molten or semimolten state and then allowing the parts to cool. 85

2. The herein-described method of forming an insulator consisting in first molding the parts separately, firing them in a kiln, then pouring in liquid glass or glaze or similar material in its molten or semimolten state and 90 inserting the inner shell into the outer shell and allowing the parts to cool.

3. The herein - described method of constructing an insulator consisting in first molding the parts separately, then supplying liquid 95 glass, glaze or similar material in the molten or semimolten state between the joints and allowing the parts to cool.

In witness whereof I have hereunto set my hand this 14th day of April, 1902.

FRED M. LOCKE.

Witnesses:

M. W. BURKE,
W. C. DRYER.