

No. 728,567.

PATENTED MAY 19, 1903.

J. M. GULENTZ.  
APPARATUS FOR APPLYING TERMINAL WIRES TO  
ELECTRIC LAMP GLOWERS.

APPLICATION FILED APR. 10, 1902.

NO MODEL.

Fig. 1.

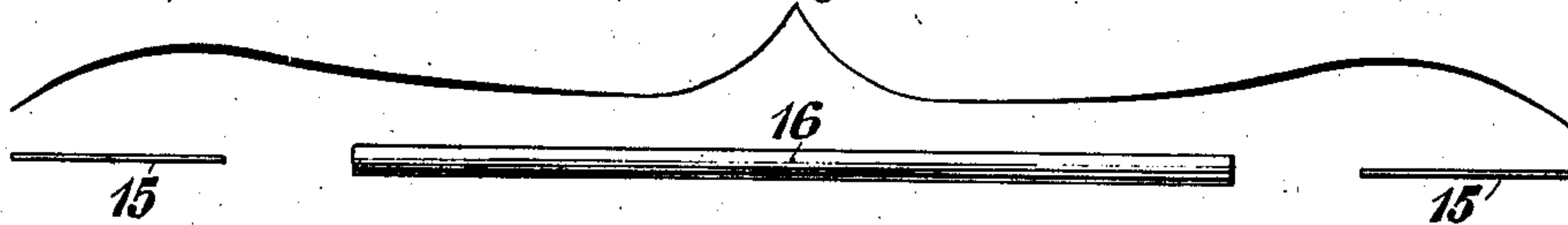


Fig. 2.

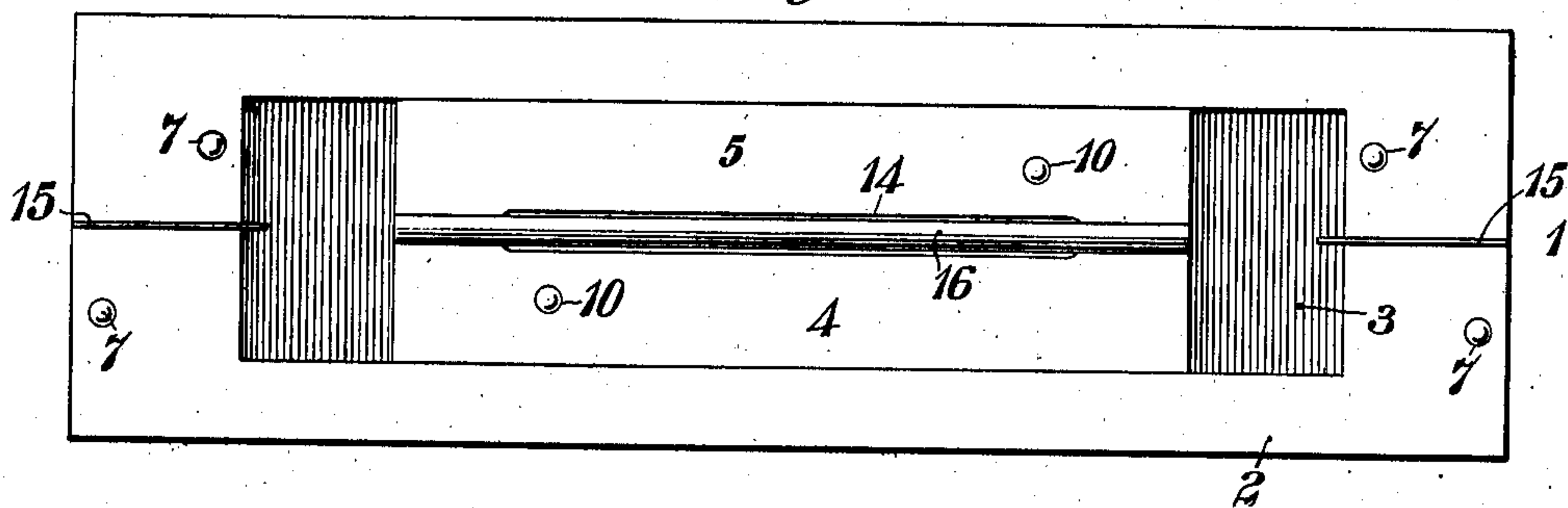


Fig. 3.

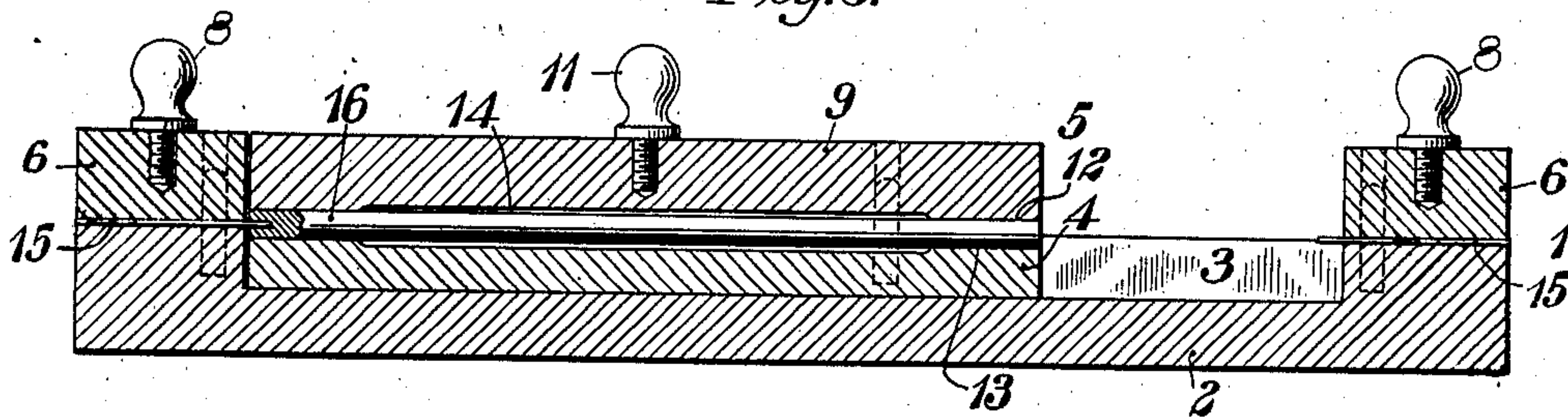
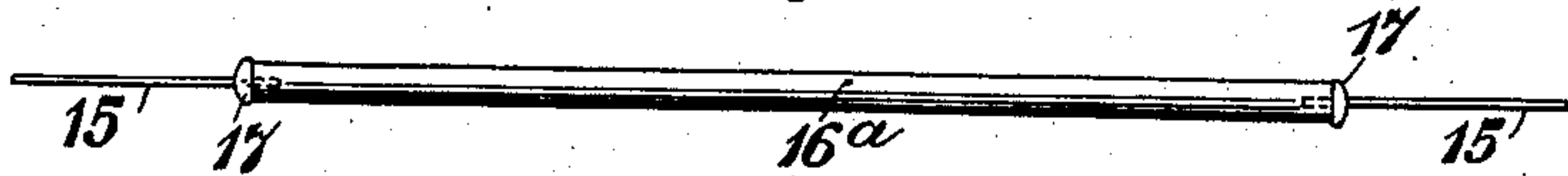


Fig. 4.



Fig. 5.



WITNESSES:

C. L. Belcher  
B. B. Hines

INVENTOR  
Joseph M. Gulentz  
BY  
Wesley E. Carr  
ATTORNEY



# UNITED STATES PATENT OFFICE.

JOSEPH M. GULENTZ, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO  
GEORGE WESTINGHOUSE, OF PITTSBURG, PENNSYLVANIA.

APPARATUS FOR APPLYING TERMINAL WIRES TO ELECTRIC-LAMP GLOWERS.

SPECIFICATION forming part of Letters Patent No. 728,567, dated May 19, 1903.

Application filed April 10, 1902. Serial No. 102,309. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH M. GULENTZ, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Apparatus for Applying Terminal Wires to Electric-Lamp Glow-  
5  
ers, (Case No. 1,047,) of which the following is a specification.

10 My invention relates to the manufacture of electric-lamp glowers which are conductors only when heated to comparatively high temperatures.

The object of my invention is to provide a  
15 means for attaching terminal wires to glowers in a simple, inexpensive, and expeditious manner and so as to insure satisfactory electrical and mechanical union between said parts.

20 In the accompanying drawings, illustrating my invention, Figure 1 is a side elevation of a glower-blank and the two terminal wires before attachment to the blank. Fig. 2 is a plan view of a portion of the apparatus employed by me and showing a glower-blank and two terminal wires in position thereon.  
25 Fig. 3 is a longitudinal vertical section through the apparatus, a portion of which is shown in Fig. 2, the glower-blank and terminal wires being shown in position on the apparatus. Fig. 4 is a side elevation of a glower-blank with the terminal wires affixed thereto, and Fig. 5 is a view similar to Fig. 4, but showing a completed glower.

35 The apparatus embodying my invention, as illustrated, comprises a rectangular frame 1, the base portion 2 of which is provided with an oblong rectangular recess or guideway 3, and in this recess is mounted the bottom portion 4 of a two-part block 5, this block  
40 being of less length than the recess or guideway 3, but of substantially the same width, it being fitted, however, so as to slide easily therein. The frame 1 comprises a clamping block or piece 6 at each end, which is suitably fastened to the base portion 2, the means here shown being dowel-pins 7, which project upward from the base and fit into corresponding holes in the pieces 6. These pieces  
45 6 are also provided with handles 8, by means of which they may be placed in and removed

from their operative positions in the apparatus. The top part 9 of the block 5 is fastened to the bottom part 4 by dowel-pins 10, projecting upward from the lower part and  
55 fitted into corresponding holes in the upper part. This part 9 is also provided with a handle 11, by means of which it may be placed in and removed from its operative position. The two ends of the parts 4 and 9 are provided  
60 with registering semicylindrical recesses 12 and 13 of the right dimensions to receive a glower-blank. The parts are also hollowed out to form an enlarged semicylindrical recess 14. The parts 2 and 6 are also preferably provided with small registering grooves  
65 to receive the terminal wires 15, the grooves being of such dimensions that the wires may be clamped firmly in position, so that the amount of terminal-wire end which it is desired to insert into the glower-blank shall  
70 project within the recess 3 at the upper side thereof.

In applying the terminal wires 15 I place an unbaked and comparatively soft glower-blank 16 in the clamping-block 5 and place  
75 the terminal wires 15 in the ends of the frame 1, so that they shall be clamped in position by means of the pieces 6. I then move the block 5 longitudinally in the one direction or  
80 the other—for example, to the position indicated in Fig. 3—which will serve to force the end of the terminal wire into the end of the blank. The piece 6 at that end may then be raised slightly or entirely removed to release  
85 the wire 15 and the block be then moved in the guideway to the other end thereof, thus forcing the end of the right-hand terminal wire into the corresponding end of the glower-blank. The glower-blank and its terminal  
90 wires, which present the appearance indicated in Fig. 4, may then be removed from the apparatus and a suitable paste 17 applied to the ends of the blank. The device may be then baked or otherwise subjected to any  
95 treatment which may be necessary or desirable to put it in condition for service, the resulting glower 16<sup>a</sup> being then ready for use, except for attachment of additional lengths of lead-wires to the terminal wires 15, it being the usual practice to employ platinum  
100 for the terminal wires 15 and to fuse addi-



tional lengths of wire of less expensive material to the ends of these terminal wires.

Since the application of a high degree of heat to a glower-blank serves to effect a shrinkage of the material, the terminal wires which are applied in accordance with my invention are securely anchored in position by such shrinkage.

I desire it to be understood that my invention is not to be restricted to the specific apparatus shown and described, except in so far as limitations may be imposed by the prior art and expressly set forth in the appended claims.

I claim as my invention--

1. The combination with a frame provided at its respective ends with clamps for terminal wires, of a two-part block mounted to slide in said frame and adapted to hold an unbaked glower in alinement with the terminal wires which are held in and project from said clamps.

2. A device for attaching terminal wires to glowers comprising a frame having terminal-

wire clamps at its ends and a clamping glower-holder mounted in said frame and movable longitudinally therein to force the ends of the respective terminal wires into the corresponding ends of the glowers.

3. An apparatus for attaching terminal wires to glowers comprising a frame having a guideway and terminal-wire clamps at the respective ends of said guideway and a glower-holder mounted in said guideway and movable longitudinally to force the projecting ends of the terminal wires into the ends of the glowers.

4. The combination with a frame having a guideway and provided at its ends with clamps for terminal wires, of a glower-holder mounted to move along said guideway against or into close proximity to said clamps.

In testimony whereof I have hereunto subscribed my name this 4th day of April, 1902.

JOS. M. GULENTZ.

Witnesses:

E. R. ROBERTS,

H. A. CROOKS.