

No. 626,592.

Patented June 6, 1899.

J. A. CARPENTER & C. F. TONN.
INSULATOR.

(Application filed Nov. 15, 1898.)

(No Model.)

Fig. 1.

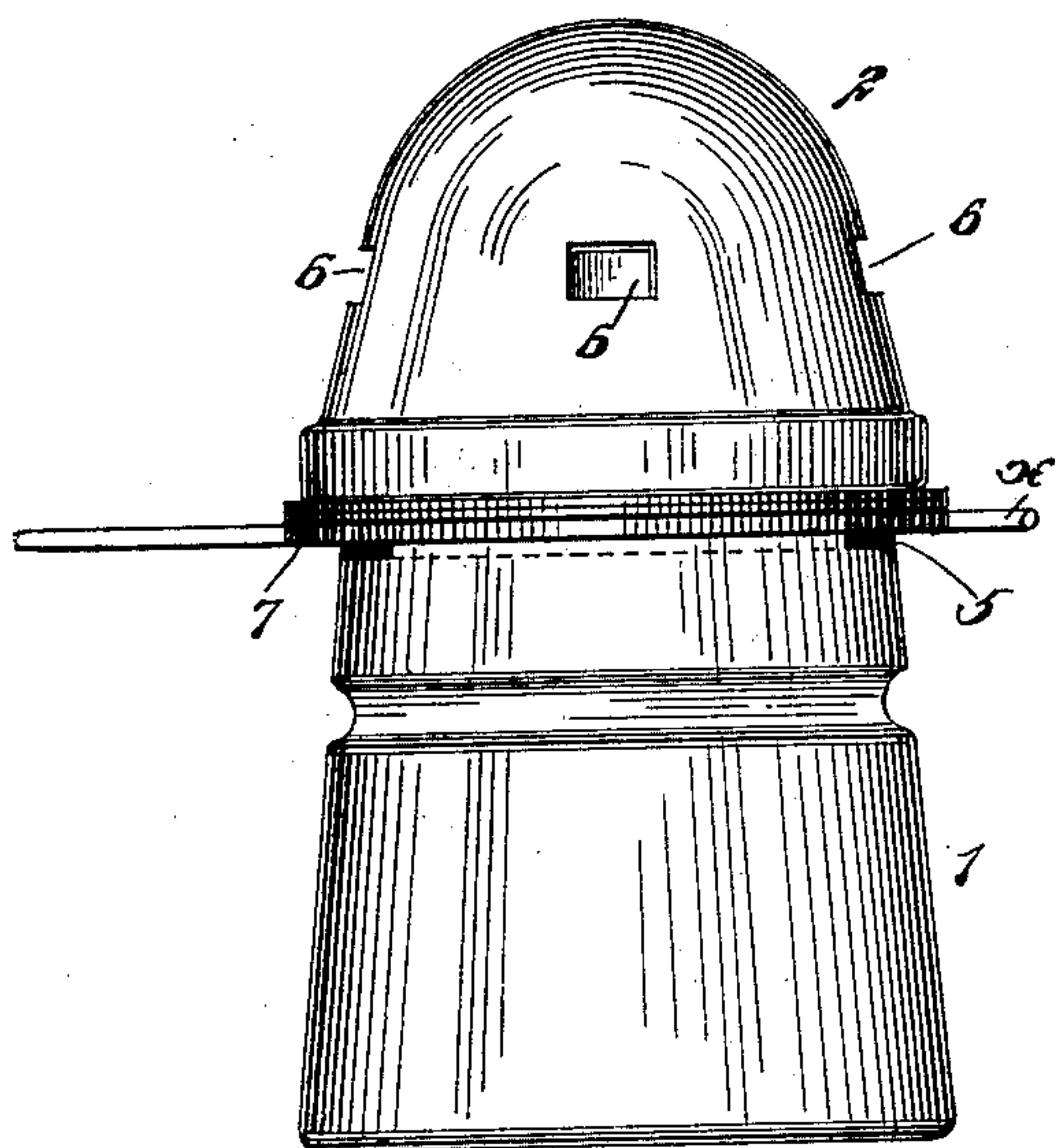


Fig. 2.

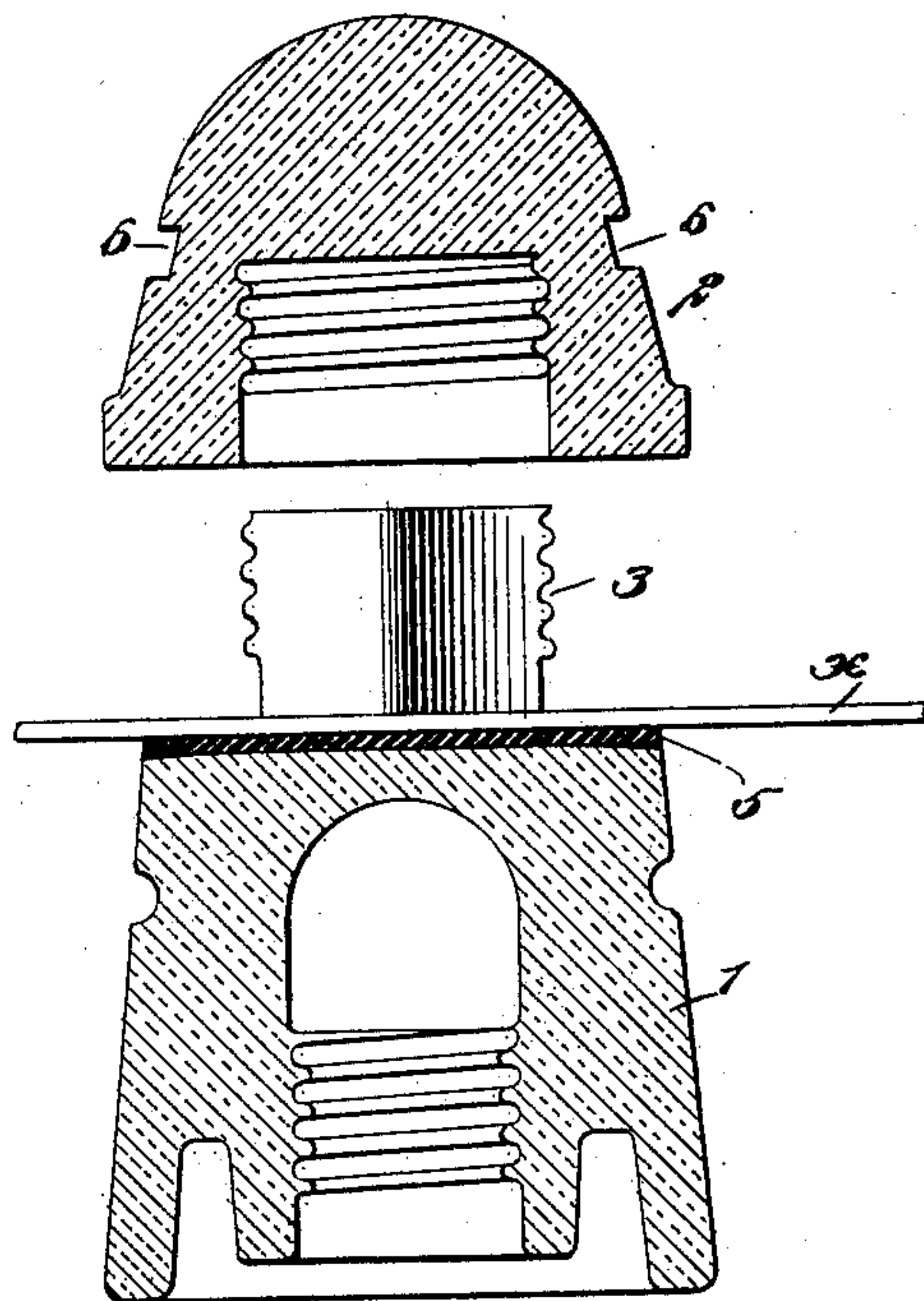


Fig. 3.

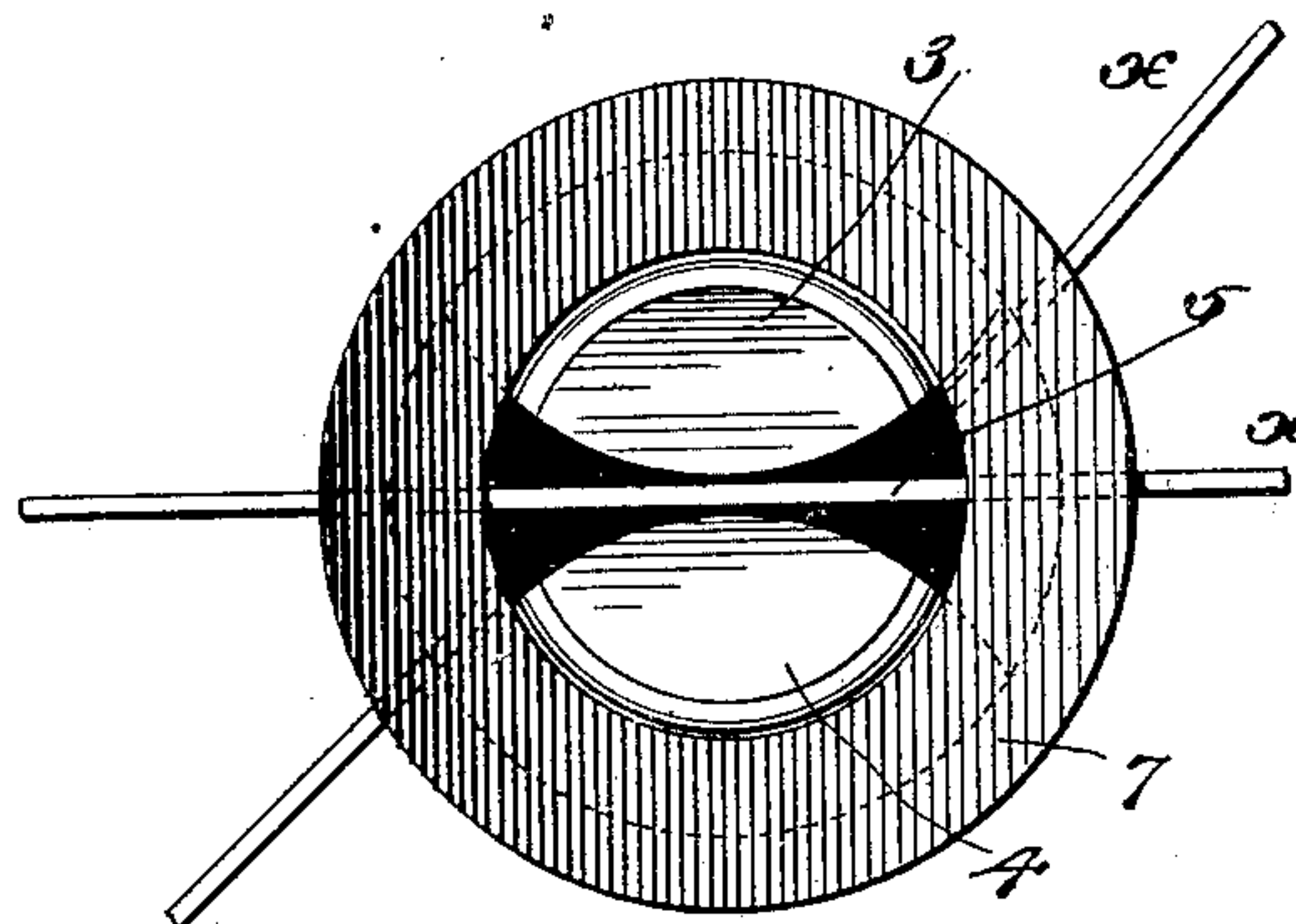
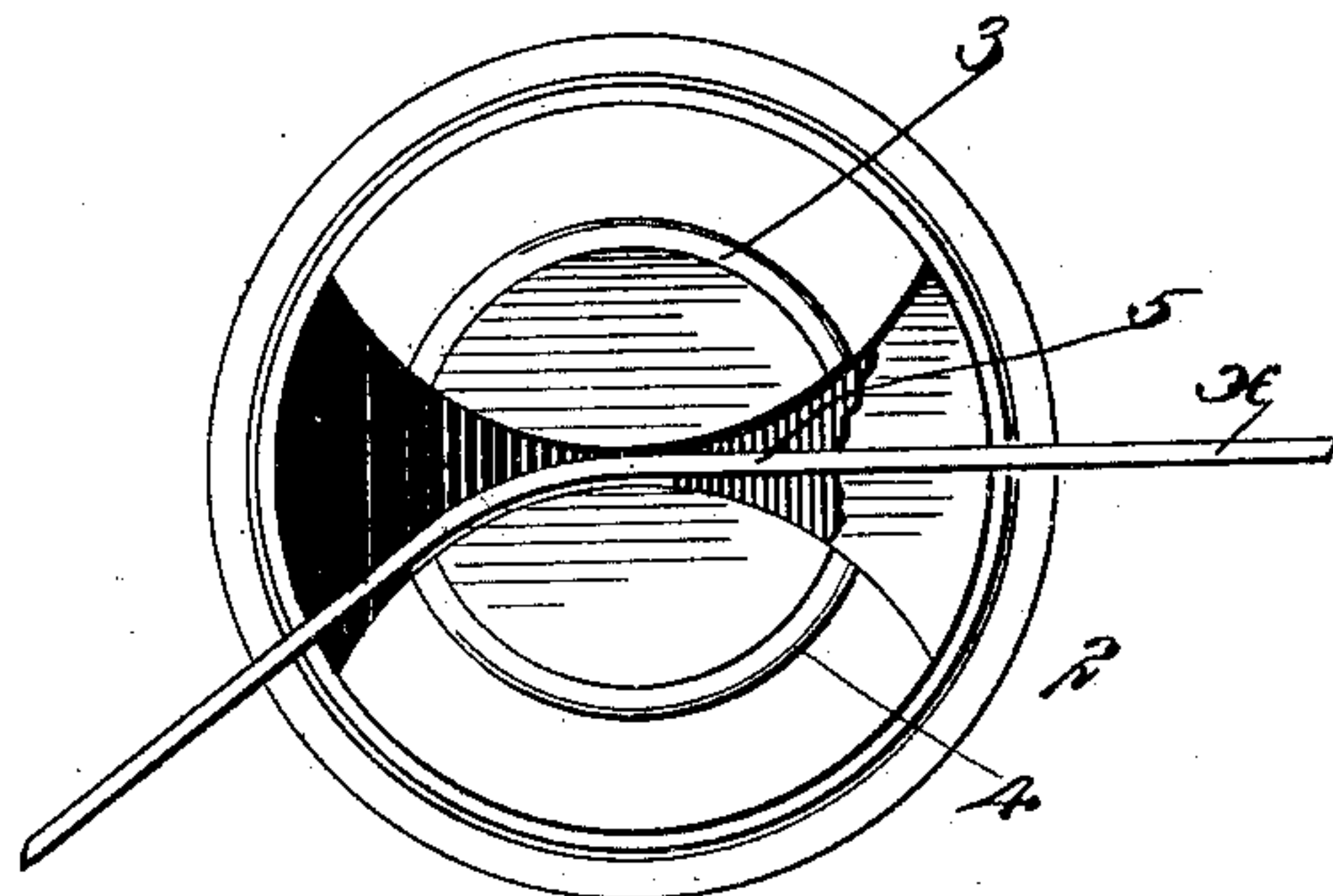


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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OF BLUFFS, ILLINOIS.

INSULATOR.

SPECIFICATION forming part of Letters Patent No. 626,592, dated June 6, 1899.

Application filed November 15, 1898. Serial No. 696,567. (No model.)

To all whom it may concern:

Be it known that we, JOHN AUSTIN CARPENTER, of Oxville, and CHARLES FREDRICK TONN, of Bluffs, in the county of Scott and State of Illinois, have invented a new and Improved Insulator, of which the following is a full, clear, and exact description.

This invention relates to improvements in insulators for electric wires for telegraph, telephone, electric-light, and all other appliances where the wires require insulation from poles or other supports.

The insulator is designed to obviate the use of tie-wires and the necessary labor usually required of battery power in charging such tie-wires.

Another object is to provide an insulator in which the line-wire may have a little play or movement during contraction or expansion, thus preventing the breaking of the wire or the line-wire coming off of insulators, and a still further object is to so construct the insulator that the line-wire will adjust itself at any desired angle.

We will describe an insulator embodying our invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of an insulator embodying our invention. Fig. 2 is a vertical section showing the two sections of the insulator as separated. Fig. 3 is a top plan view of the lower section, showing the gasket of rubber or other suitable material in place; and Fig. 4 is a similar plan, but with the gasket removed.

The insulator comprises two sections 1 2 of any suitable material. The lower section is designed to be secured to a pole, cross-tree, bracket, or other support, and extended upward from its upper end are two lugs 3 4, which are spaced apart, so that a line-wire x may be placed between them and rest upon the upper end of the section 1, or rather upon a bed 5, of rubber or other suitable material, placed thereon. The inner or adjacent faces of the lugs 3 4 are transversely curved, so that the space between them increases from

the center outward in opposite directions. By this construction a line-wire may be extended straight across the section 1, or it may be turned at any desired angle at either or both sides of the insulator, as indicated in Figs. 3 and 4. The upper section 2 is made in the form of a cap, and it has an interior screw-thread to engage an exterior screw-thread on the lugs 3 4, so that the two sections may be quickly and easily secured together and a wire clamped in place by screwing down the upper section. For convenience in turning the upper section it is provided with exterior recesses 6, in which a suitable tool may be placed. After placing a wire between the lugs a gasket 7, of rubber or similar yielding material, is to be arranged on the upper side of the wire and around the lugs 3 4, after which the upper section 2 is to be screwed down. The gasket or washer 7, in connection with the bed 5, of rubber or other suitable material, admits of tightly clamping a wire or leaving it slightly loose, so that it may have a slight movement through the insulator upon contracting or expanding, thus preventing the possible breaking of a wire from such contraction. It will be noted that the central portion of the bed 5, of rubber or other suitable material, is slightly raised above its ends. This will aid somewhat in clamping a wire; but such construction is not wholly essential.

Obviously by employing an insulator made in conformity with our invention there will be a great saving of time and labor in stringing wires, and as tie-wires are dispensed with the expense will be very much reduced.

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

1. An insulator comprising two sections, lugs extended from one of the sections and adapted to be secured to the other section, the said lugs being spaced apart and having their adjacent faces curved, and a yielding material between the lugs, substantially as specified.

2. An insulator, comprising two sections, lugs extended from one of the sections and adapted for screw-thread engagement with the other section, the said lugs being spaced

apart and having their adjacent faces transversely curved, the narrower space between the lugs being at the center, and a bed of yielding material between the lugs, substantially as specified.

5 3. An insulator, comprising a lower and an upper section, lugs extended from the lower section and threaded on the exterior to engage a thread in the upper section, a bed of

flexible material on the lower section, between the lugs, and a gasket of yielding material between the sections, substantially as specified.

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Witnesses:

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