No. 773,733. PATENTED NOV. 1, 1904.

L. W. GREENE.

INSULATOR.

APPLICATION FILED NOV. 10, 1903.

NO MODEL.

Fig. 1.

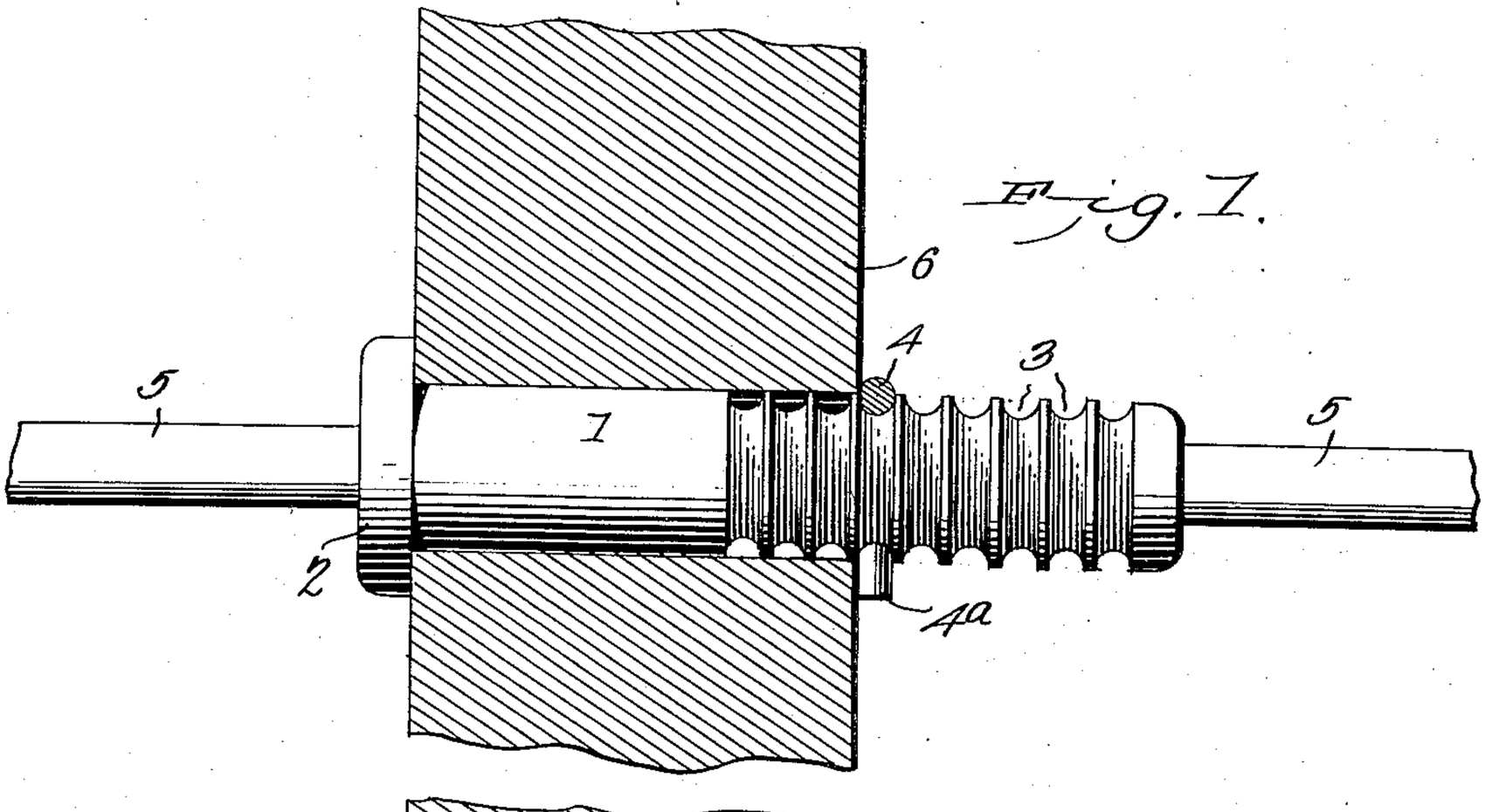


Fig. 2.

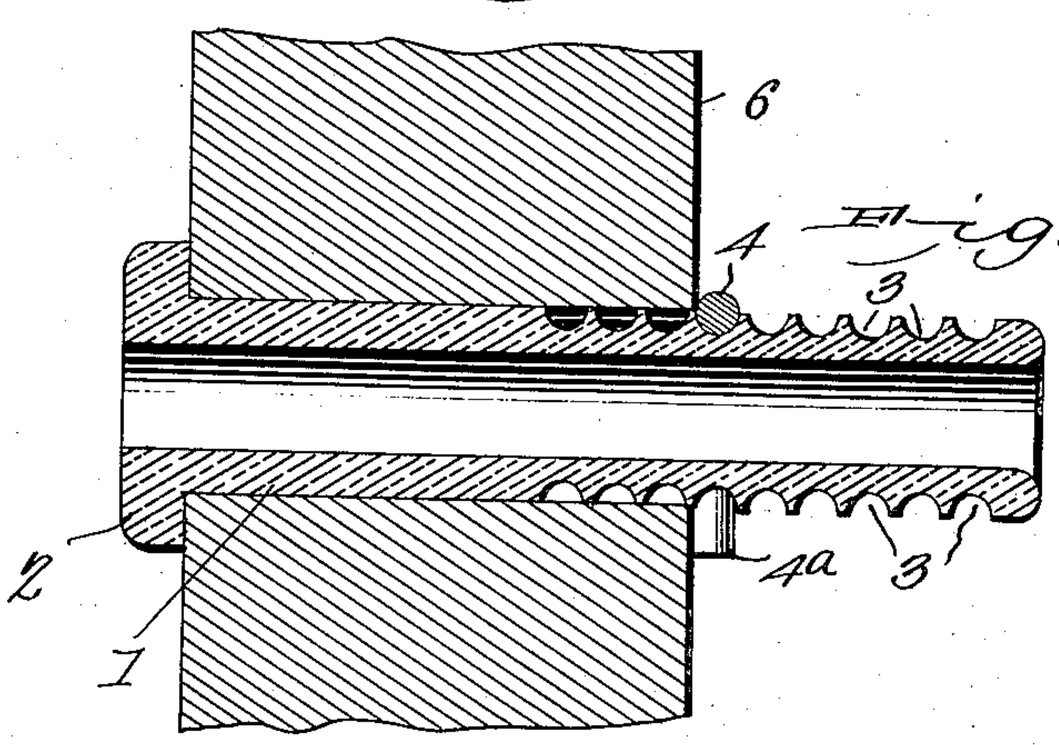
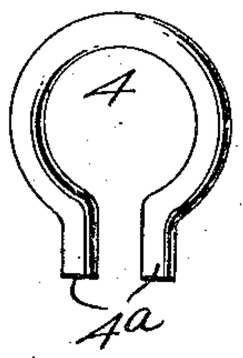


Fig. 3.



Witnesses
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No. 773,733. Patented November 1, 1904.

UNITED STATES PATENT OFFICE.

LEON W. GREENE, OF BROOKLYN, MICHIGAN.

INSULATOR.

SPECIFICATION forming part of Letters Patent No. 773,733, dated November 1, 1904.

Application filed November 10, 1903. Serial No. 180,520. (No model.)

To all whom it may concern:

Be it known that I, LEON W. GREENE, a citizen of the United States, residing at Brooklyn, in the county of Jackson and State of Michigan, have invented a new and useful Insulator, of which the following is a specification.

This invention relates to insulators for electric conductors, but more particularly to that class of insulators employed in connection with wires or cables to prevent contact with the beams through which they pass. These insulators are usually formed of rubber, porcelain, or a similar material, the properties of which are such that difficulty is experienced in retaining the insulators in place upon the beams.

It is the primary object of this invention to provide an inexpensive and efficient retainer which can be readily applied to and removed from the insulator.

Another object is to provide a retainer which will be capable of expanding and contracting with the insulator and at all times remain in engagement therewith.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims, it being understood that I do not limit myself to the precise form shown, but reserve the right to make such slight changes and alterations as would properly come within the scope of the appended claims.

In the drawings, Figure 1 is a sectional view through a beam, the insulator applied thereto being shown in elevation. Fig. 2 is vertical longitudinal sectional view through the insulator applied to a beam, and Fig. 3 is a plan view of the retainer for the insulator.

In the preferred form of my invention as illustrated in the drawings, 1 designates a tubular insulating member, at one end of which is a head 2. The member 1 is formed with a plurality of exterior corrugations or grooves 3, which constitute seats for the expansible retainer 4, which is adapted to be sprung into any one of the seats or removed therefrom by spreading the terminal projections 4^a thereof.

In actual practice it is intended to form the insulator of glass, porcelain, or similar material, so that it can be readily threaded on a conductor 5 and inserted through an opening in a beam or other support 6. The retainer or clamping member is preferably formed of spring metal and consists of a split ring of approximately the contour of the seats 3, so that when the terminal projections 4^a are sprung apart the retainer may be seated at any point on the insulator to hold the head 2 in contact with the beam, whereby a transverse movement of the insulator will be prevented. Any type of expanding-tool may be employed for the purpose of springing the terminals apart, so as to remove the retainer.

I claim—

1. An insulator provided with a plurality of circumferential grooves or seats and a resilient clamping member independently adjustable in any one of said seats and contractible and expansible with the insulator.

2. An insulator provided at one end with an enlarged head and at the other with a plurality of circumferential grooves or seats, and a resilient clamping member independently adjustable in any one of said seats and contractible and expansible with the insulator.

3. An insulator provided with a plurality of circumferential grooves or seats and a resilient split ring independently adjustable in any one of said seats and contractible and expansible with the insulator.

4. An insulator provided with a plurality of circumferential grooves or seats, and a clamping member consisting of a single piece of spring metal bent to conform to the shape of the insulator and adapted to engage said seats.

5. An insulator provided with a plurality of circumferential grooves or seats, and a clamping member formed of a single piece of metal bent to form a pair of spring-arms adapted to engage said seats, said clamping member being held in engagement with the seats by the inherent spring tendency of said arms.

6. The combination with a support having an opening formed therein, of a tubular insulator mounted in said opening and provided at one end with an enlarged head and at the

other with a plurality of circumferential grooves or seats, and a clamping member formed of a single piece of metal bent to form a pair of curved spring-arms adapted to engage the seats and having terminal projections for engagement with the support.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

LEON W. GREENE.

Witnesses:
CHAS. E. STUART,
A. ROY KNEPP.