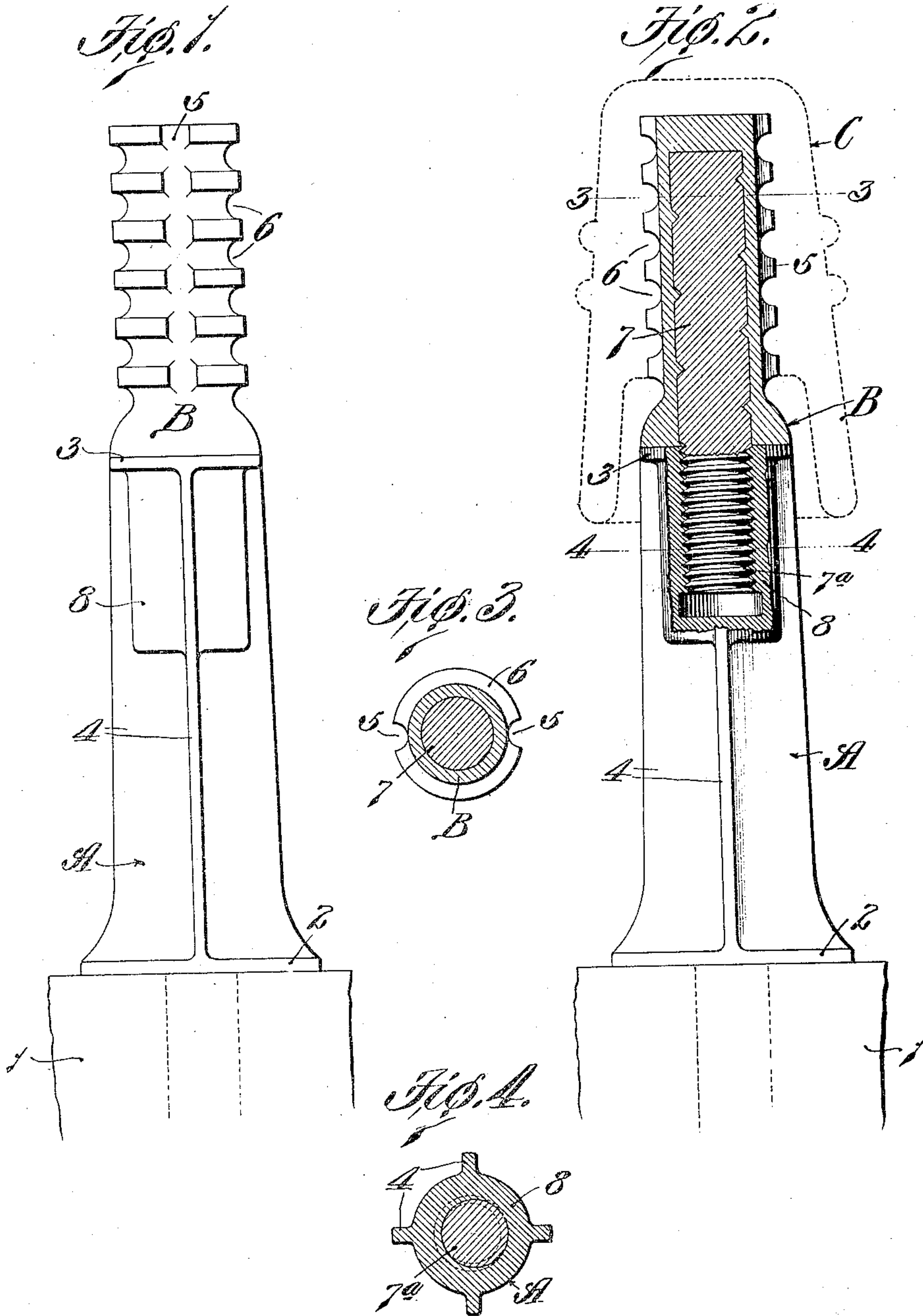


C. G. ETTE.  
INSULATOR PIN.  
APPLICATION FILED AUG. 31, 1910.

Patented June 13, 1911.

995,123.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

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## INSULATOR-PIN.

995,123.

Specification of Letters Patent. Patented June 13, 1911.

Application filed August 31, 1910. Serial No. 579,940.

*To all whom it may concern:*

Be it known that I, CHARLES G. ETTE, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Insulator-Pins, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to insulator pins of that type which comprises a shank or body portion that is adapted to be connected to the cross arm or support which carries the pin, and a removable head which is adapted to be cemented or otherwise permanently connected to an insulator, thereby enabling the insulator and the head of the pin to be removed from the shank without disconnecting said shank from the support which carries same.

The object of my invention is to provide an insulator pin of the type referred to that is strong and serviceable and which can be manufactured at a low cost.

Figure 1 of the drawings is an elevational view of an insulator pin constructed in accordance with my invention; Fig. 2 is an elevational view of said pin partly in vertical section; and Figs. 3 and 4 are cross sectional views taken on the lines 3—3 and 4—4, respectively, of Fig. 2.

Referring to the drawings which illustrate the preferred form of my invention, A designates the shank or body portion of the pin, and B designates the removable head which is adapted to be cemented or otherwise permanently connected to an insulator C, shown in broken lines in Fig. 2. The shank A may be of any preferred design and may be connected to the cross arm or support 1 which carries the pin in any suitable way. I prefer, however, to form the shank A of cast metal, preferably malleable iron, and make it substantially cruciform-shape in cross section so as to produce a strong and light structure that can be annealed perfectly, said shank being provided at its lower end with a flat flange 2 that bears upon the support 1 and at its upper end with a flat flange 3 against which the removable head B bears, the vertical wings or legs 4 of the shank A being cast integral with said flanges 2 and 3. The removable head B is also formed of cast metal, preferably gray iron, and the outer surface of same is serrated or roughened so

as to provide interstices or crevices for the cement which is used to secure the insulator to the head. In the preferred form of my invention, as herein shown, the outer surface of the head is provided with intersecting grooves 5 and 6 that extend longitudinally and transversely of the head, and the lower end of the head is so shaped that it conforms accurately to the top face of the flange 3 at the upper end of the shank or body portion A of the pin.

The shank A and head B are connected together by means of a screw-threaded device permanently embedded in one of said parts and projecting into a screw-threaded socket in the other part. In the form of my invention herein shown, a steel or wrought iron rod 7 is permanently embedded in the head B during the operation of casting said head, and the shank A is provided at its upper end with a screw-threaded socket for receiving a screw-threaded portion 7<sup>a</sup> on the rod 7 that projects below the lower end of the head B. Said screw-threaded socket is formed in a thickened portion 8 of the shank A, and to insure the proper annealing of said thickened portion I make it substantially cylindrical-shape, as shown in Figs. 1 and 2, so as to produce an internally screw-threaded tubular-shaped wall which is of practically the same thickness as the flanges 2 and 3 and wings 4 of the body portion of the pin.

An insulator pin of the construction above described can be manufactured at a low cost owing to the fact that the shank and body portion are formed of cast metal, and the device which detachably connects said members together is permanently embedded in one of them during the operation of casting same. Furthermore, such an insulator pin is exceptionally strong and is not liable to bend when in use because it comprises a steel or wrought iron rod 7 that extends approximately the entire length of the removable head and which also projects quite a distance into the shank or body portion of the pin.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. An insulator pin comprising a shank or body portion that is adapted to be connected to a support, a removable head that is adapted to be permanently connected to



an insulator, and a separate screw-threaded device permanently embedded in one of said parts and detachably connected to the other part.

- 5 2. An insulator pin comprising a cast metal shank that is adapted to be connected to a support, a removable cast metal head that is adapted to be permanently connected to an insulator, and a screw-threaded device projecting into a threaded opening in one of said parts and having the other part cast around the opposite end of same.
- 10 3. An insulator pin comprising a cast metal shank that is adapted to be connected to a support, a removable head formed of cast metal and adapted to be permanently connected to an insulator, and a hard metal rod permanently embedded in said head and having a screw-threaded portion which fits in a threaded socket in the shank of the pin.
- 15 4. An insulator pin comprising a shank that is adapted to be connected to a support, a removable head which is adapted to be cemented or otherwise permanently connected to an insulator, said head and shank being formed of cast metal, a separate reinforcing device permanently embedded in said head and extending approximately the entire length thereof, and a screw-threaded socket in the upper end of said shank for receiving the screw-threaded portion on said reinforcing device.
- 20 5. An insulator pin comprising a cast metal shank or body portion of approximately cruciform-shape in cross section and provided at its upper end with an internally
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threaded tubular-shaped part, a removable cast metal head that is adapted to be permanently connected to an insulator, and a separate iron rod permanently embedded in said head and provided with a screw-threaded portion which projects into the internally screw-threaded part of the shank.

6. An insulator pin having a cast metal shank or body portion that is composed of longitudinally extending wings and transversely extending flanges which are of approximately the same thickness and integrally connected together, a removable head formed of cast metal and mounted upon said shank, a metal rod embedded in said head and provided with a screw-threaded portion, and an internally threaded tubular-shaped part on said shank for receiving the threaded portion of said rod.

7. An insulator pin comprising a cast metal shank or body portion of substantially cruciform-shape in cross section, said shank having an internally threaded tubular-shaped part at its upper end, a removable head formed of cast metal and provided with a serrated outer surface, and a metal rod embedded in said head and having a threaded portion that projects into the tubular-shaped part of said shank.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this twenty fifth day of August 1910.

CHARLES G. ETTE.

Witnesses:

WALTER C. RAITHIEL,  
EDWARD SCHWIDDE.