No. 877,242. PATENTED JAN. 21, 1908.

D. V. SNAPP & C. W. FRAHER.

INSULATOR PIN.

APPLICATION FILED JUNE 21, 1907.

Fig. 1.

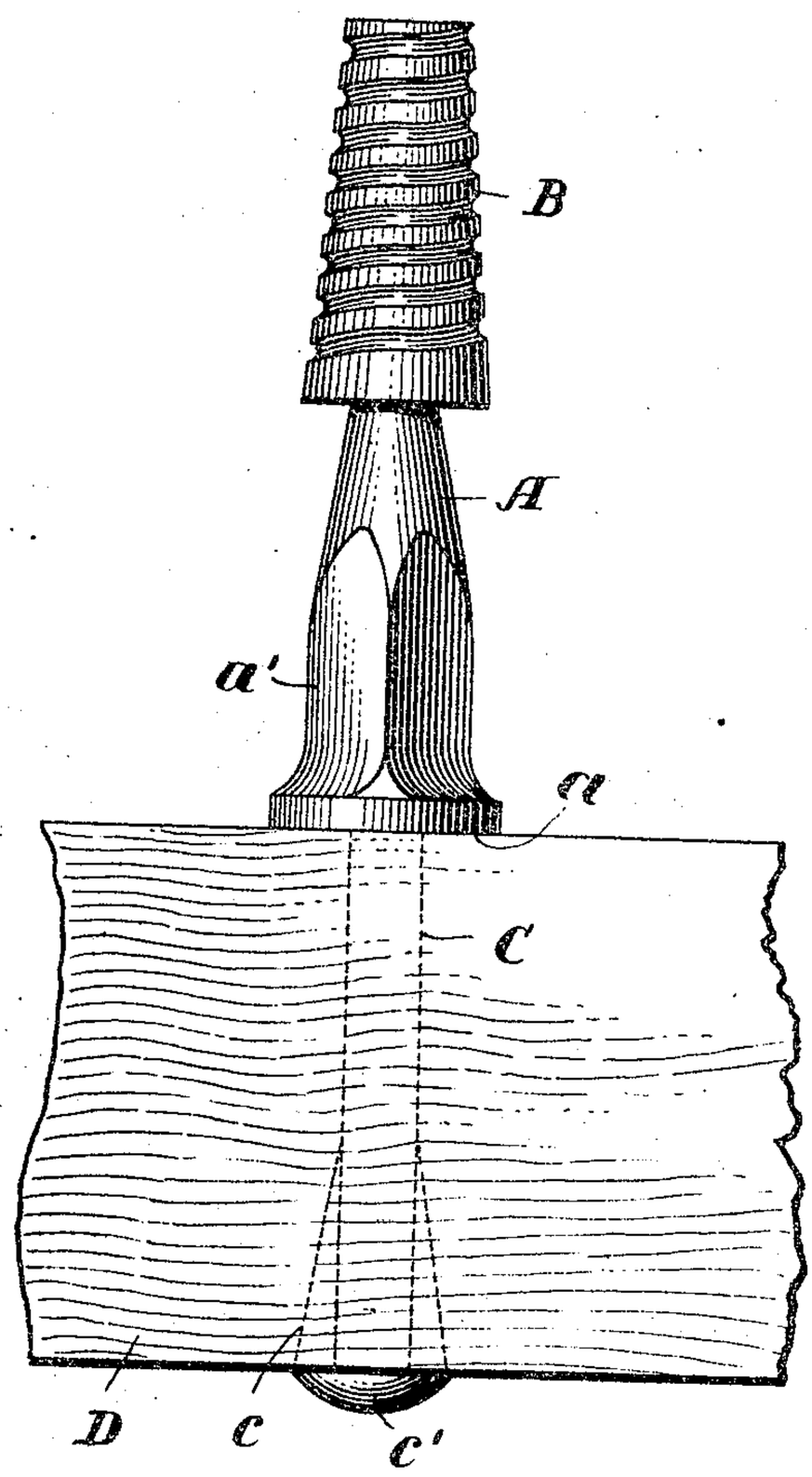


Fig. 2.

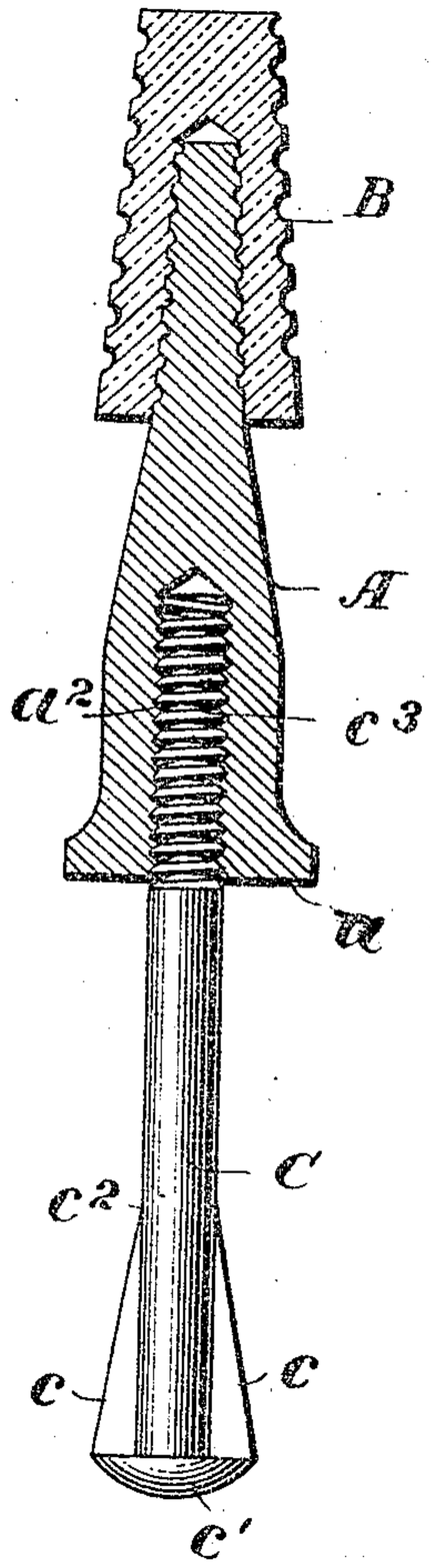
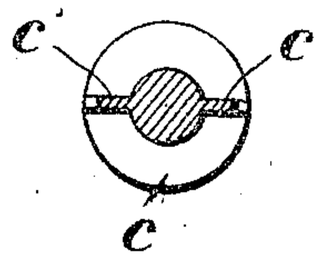


Fig. 3.



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UNITED STATES PATENT OFFICE.

DELOS V. SNAPP, OF HOLDREGE, AND CHARLES W. FRAHER, OF LINCOLN, NEBRASKA.

INSULATOR-PIN.

No. 877,242. Specification of Letters Patent. Patented Jan. 21, 1908.

Application filed June 21, 1907. Serial No. 380,165.

To all whom it may concern:

Be it known that we, DELOS V. SNAPP and CHARLES W. FRAHER citizens of the United States, residing at Holdrege, Phelps county, and Lincoln, in the county of Lancaster and State of Nebraska, respectively, have invented certain new and useful Improvements in Insulator-Pins, of which the following is a specification.

Our invention relates to insulator pins employed to support telephone, telegraph, and other electric wires upon cross-arms.

One of the principal difficulties encountered in maintaining telegraph and telephone lines is due to the fact that the continual vibration of the wires causes the working loose of the nut which secures the insulator bolt in place. This results in wire trouble and is a source of heavy expense.

The principal object of our invention is to obviate this difficulty and provide a self-locking, nutless insulator supporting pin adapted to hold the insulator of telegraph, telephone, and other electric wire securely upon the cross-arm without working loose.

A further object is to provide an insulator supporting pin having an enlarged flaring base adapted to be seated firmly upon a cross-arm, and a bolt adapted to engage the body of the pin directly.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a view in side elevation showing the improved pin mounted upon a cross-arm; Fig. 2 is a vertical section of the same; and Fig. 3 is a transverse section taken on line 3—3 of Fig. 1.

Referring to the drawings, A is the body-portion of the pin, made preferably of wrought or cast iron or other suitable metal and formed with a broad flaring base a, preferably circular in outline. The body-portion is formed with flat surfaces a', or any other suitable means, for engagement of a turning device, and is provided with a threaded socket a^2 in the base a. The body-portion is tapered towards its upper end to such a size as to permit the formation of threads to receive the usual part B, upon which the insulator is screwed or otherwise fastened.

The bolt C is formed with projecting means, preferably wings or ridges c tapering from the bolt head c' and merging into the shank of the bolt at c^2, to prevent the bolt from turning when the body-portion A is screwed down on threaded end c^3 and the head c' is drawn up against the under surface of the cross-bar D as shown in Fig. 1.

The use of our improved pin will be readily apparent from the foregoing. The bolt C is put through the cross-arm and the body-portion A is screwed on to the threaded end c^3 thereof, the wings or ridges c being forced into the wood of the cross-arm The bolt is thus self-locking, and when the wire is fastened to the insulator no vibration or pull of any kind can work the bolt loose.

It will be observed that the flared substantial base makes the mounting very firm, and that all work of attaching the pin can be done on top of the arm instead of below. Moreover, there is no necessity for lock-nuts, cotters, nails, battered threads or any of the divers ways to keep the usual nut from working loose, and the appearance of the cross-arm is much improved.

We are aware that various changes may be made in the details of construction of the device herein disclosed without departing from the spirit of our invention, and these, we wish it understood, fall strictly within the scope and purview thereof.

Havings described our invention, what we claim as new and desire to secure by Letters Patent of the United States, is—

1. An insulator pin comprising a body-portion provided with means for mounting an insulator thereon, said body-portion being formed for engagement of a turning device and provided with a threaded socket in its base, and a bolt formed with projecting means to prevent turning in a cross-arm and threaded to engage said body-portion, substantially as described.

2. An insulator pin comprising a body-portion provided with means for mounting an insulator thereon, said body-portion being formed for engagement of a turning device and provided with a threaded socket in its base, and a bolt threaded to engage said body-portion, formed with wings or ridges tapering from the bolt head and merging into the shank, substantially as described.

3. An insulator pin comprising a body-portion provided with means for mounting an insulator thereon and having a flaring base, said body-portion being formed for en-

gagement of a turning device and provided with a threaded socket in said base, and a bolt formed with projecting means to prevent turning in a cross-arm and threaded to engage said body-portion, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

DELOS V. SNAPP.
CHARLES W. FRAHER.

Witnesses:
H. C. MOORE,
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