(No Model.) 2 Sheets—Sheet 1.

R. SCHOMBURG.

FIXING ELECTRIC CONDUCTING WIRES TO INSULATORS SUPPORTING SAME.

No. 515,448. Patented Feb. 27, 1894.

Fig: 1.

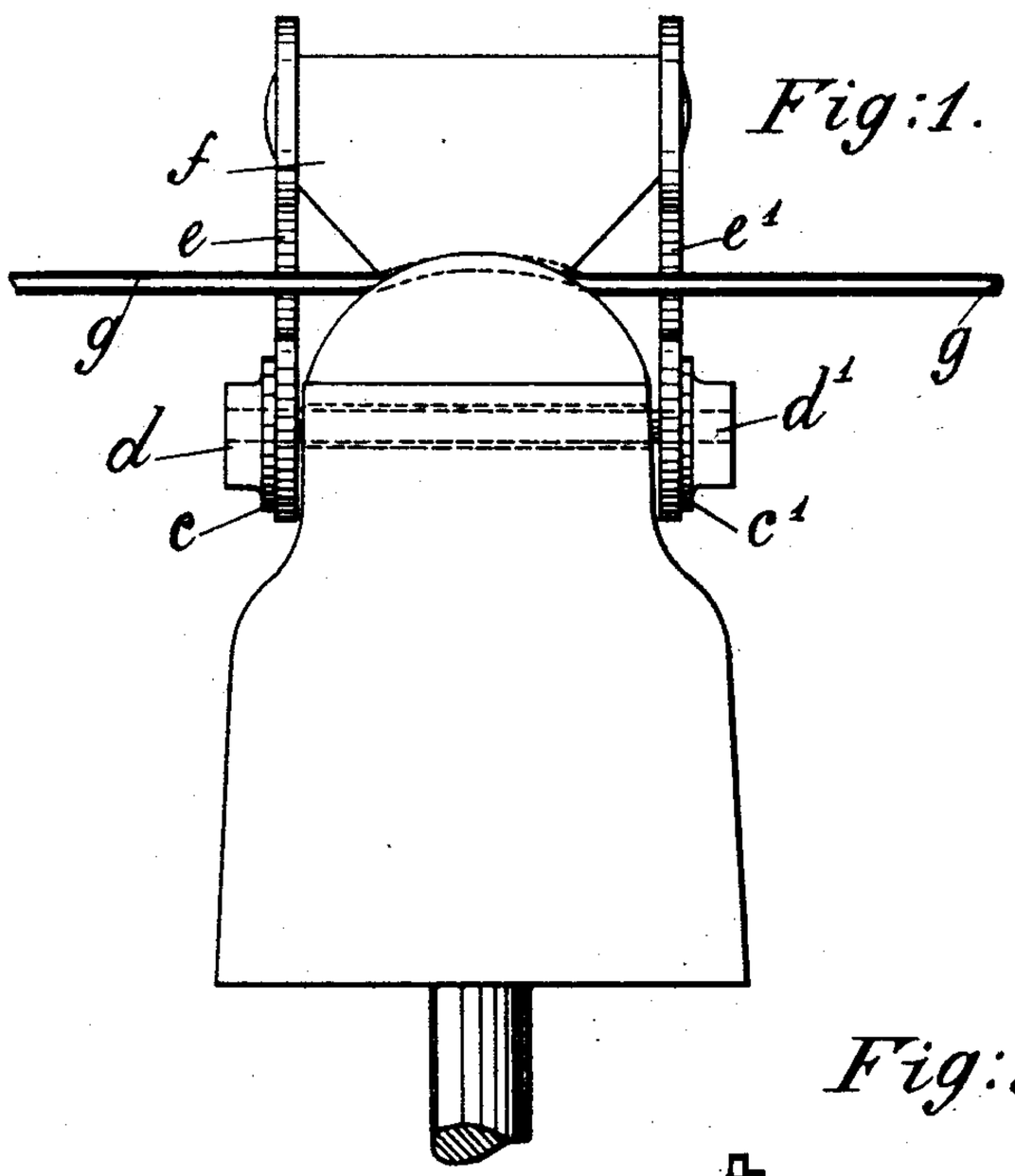


Fig: 3.

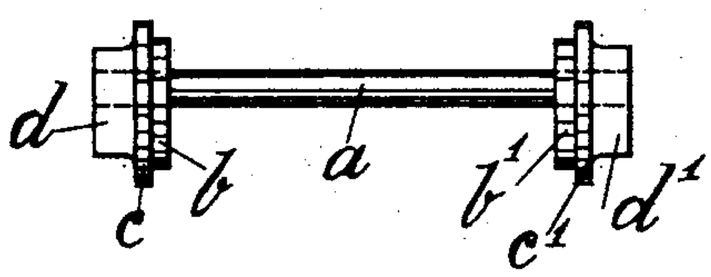
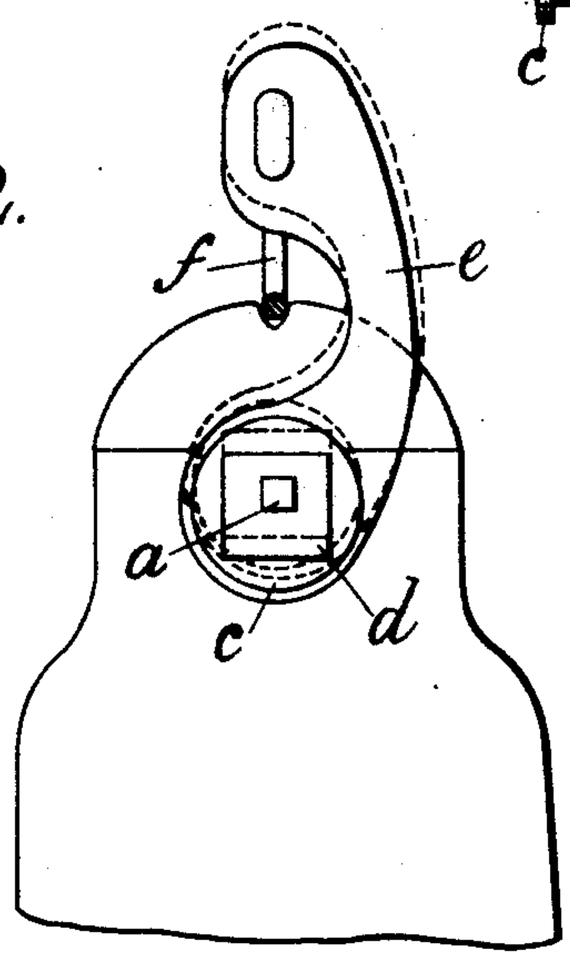


Fig: 2.



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THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

(No Model.) 2 Sheets—Sheet 2.

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No. 515,448. Patented Feb. 27, 1894.

Fig: 4.

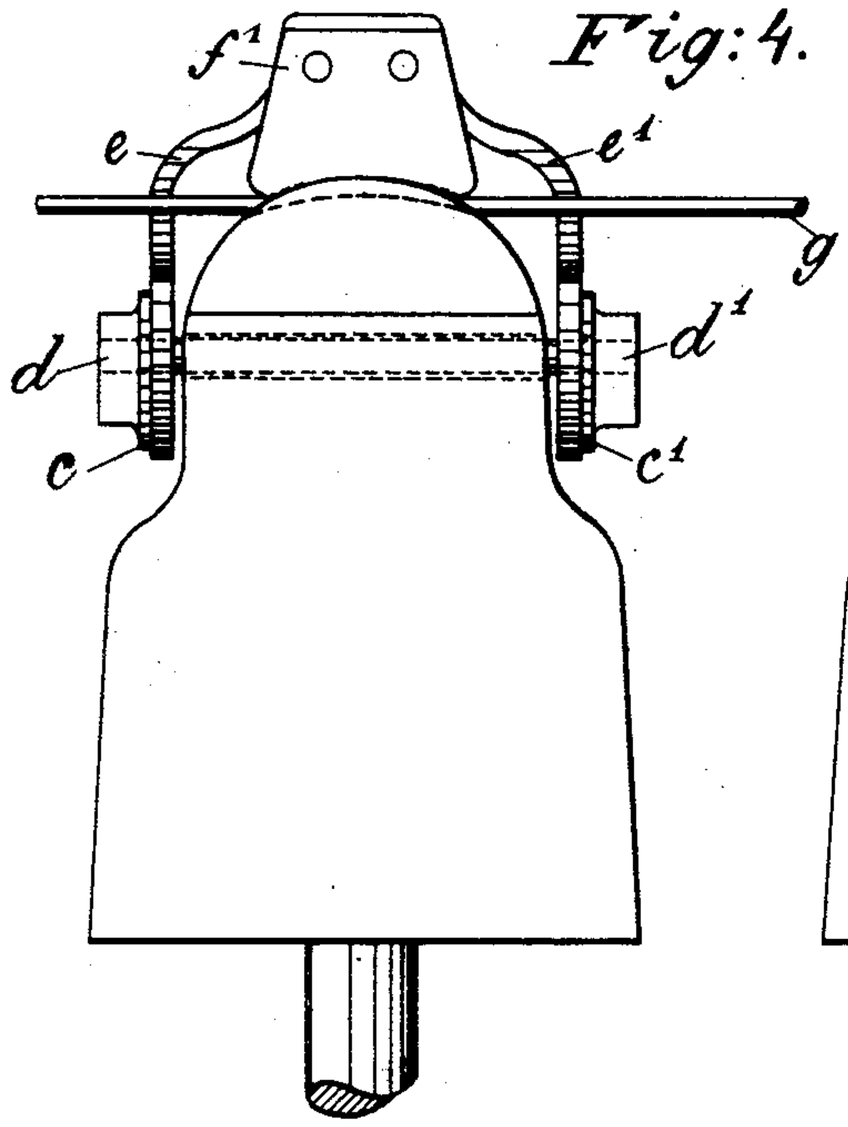


Fig: 5.

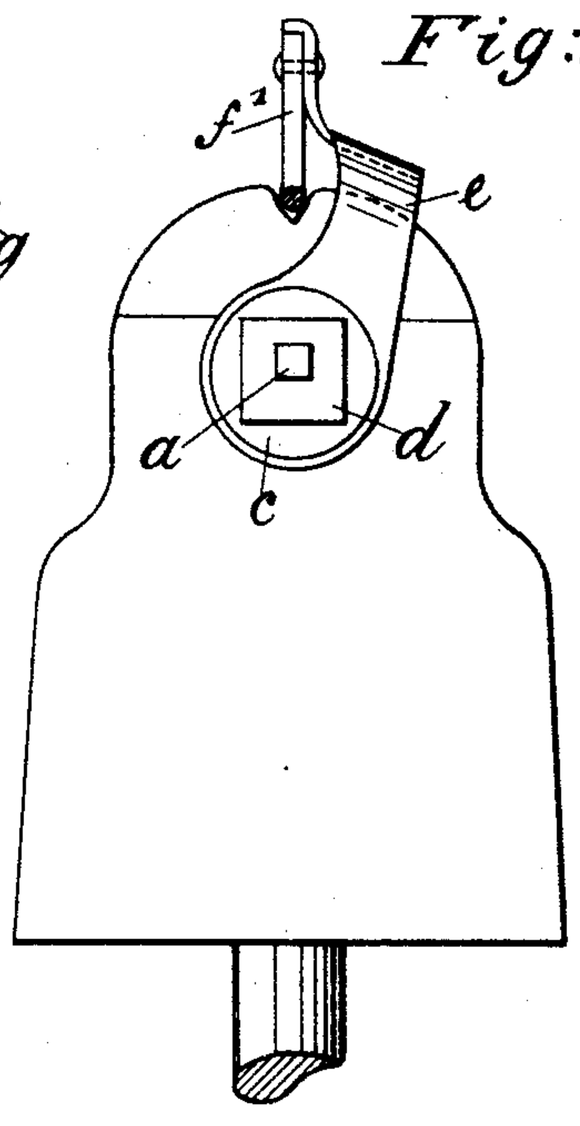


Fig: 6

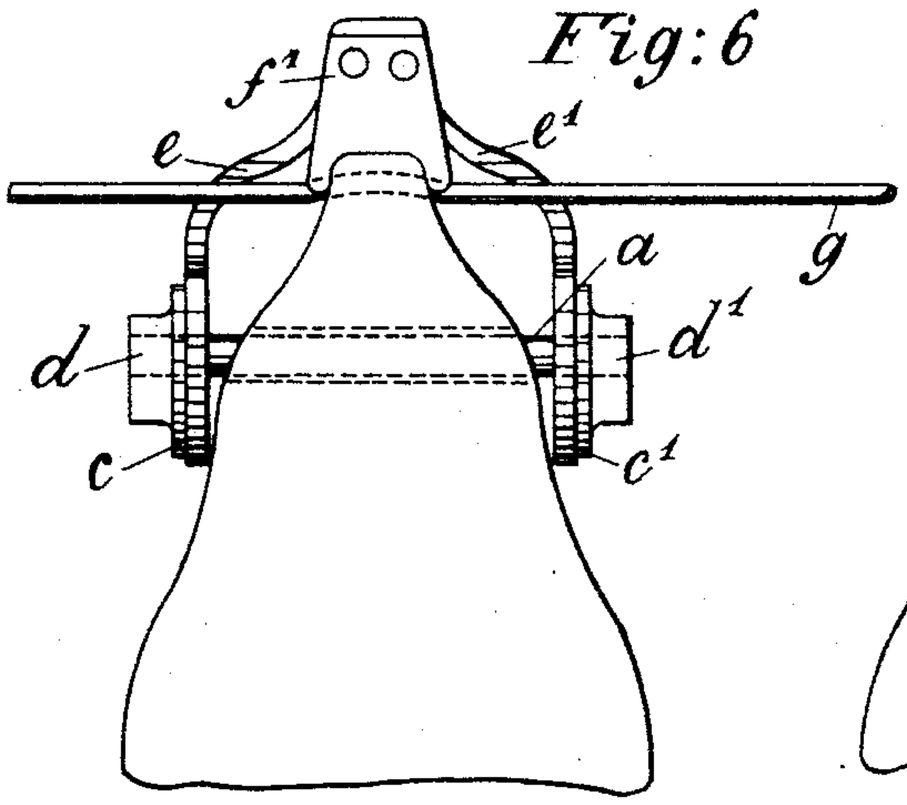
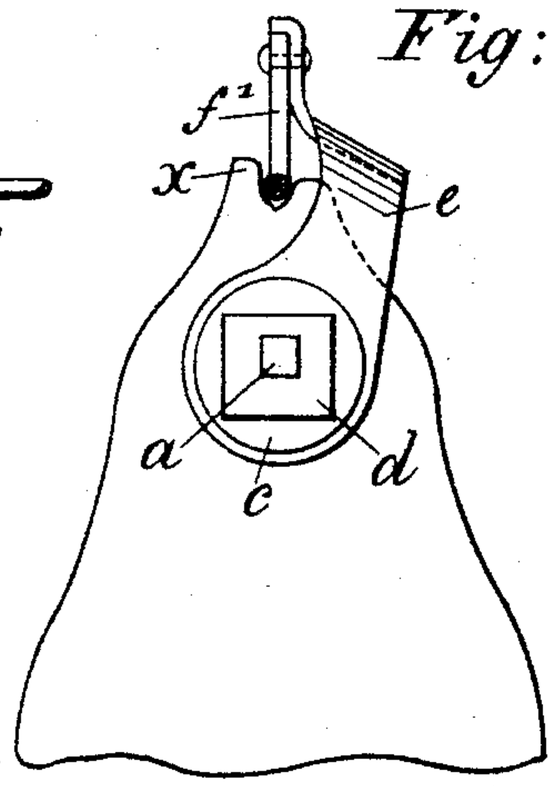


Fig: 7.



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UNITED STATES PATENT OFFICE.

RUDOLF SCHOMBURG, OF BERLIN, GERMANY.

FIXING ELECTRIC CONDUCTING-WIRES TO INSULATORS SUPPORTING SAME.

SPECIFICATION forming part of Letters Patent No. 515,448, dated February 27, 1894.

Application filed March 29, 1893. Serial No. 468,174. (No model.) Patented in Austria-Hungary January 30, 1893, No. 1,582 and No. 1,570 and No. 7,079 and No. 16,019; in France February 2, 1893, No. 227,607; in Belgium February 2, 1893, No. 103,242; in Italy February 10, 1893, No. 30,502/463; in England February 13, 1893, No. 3,200, and in Germany June 25, 1893, No. 70,199.

To all whom it may concern:

Be it known that I, RUDOLF SCHOMBURG, factory owner, a subject of the Emperor of Germany, and a resident of No. 21 Alt-Moabit, Berlin, in the Empire of Germany, have invented certain new and useful Improvements in Fixing Electric Conducting-Wires to the Insulators Supporting Same, of which the following is a specification.

This invention has been patented in Germany, No. 70,199, dated June 25, 1893; in Austria-Hungary January 30, 1893, No. 1,582 and No. 1,570 and No. 7,079 and No. 16,019; in France February 2, 1893, No. 227,607; in Belgium, No. 103,242, dated February 2, 1893; in Italy February 10, 1893, Nos. 30,502/463, and in Great Britain February 13, 1893, No. 3,200.

This invention relates to insulators (such as are now used on telegraph posts and the like) for electrical conducting wires, and consists in means for mounting and fixing such wires to their insulators, so that the stretched conductor can be fastened to the insulator without binding wires, and in such a simple and effectual manner that same can be done even by unskilled labor.

Referring to the drawings which form a part of this specification, Figure 1 is a front elevation of an insulator with the electric wire attached thereto according to my present invention. Fig. 2 is a side view of Fig. 1. Fig. 3 is a detail view of the bolt which carries the fastening device, and passes through the head of the insulator—as hereinafter explained. Figs. 4 and 5 are respectively a front and side elevation of a slightly modified construction of the fastening device. Figs. 6 and 7 illustrate (in corresponding views to Figs. 4 and 5) the same arrangement applied to an insulator, whose head is shaped to enable the line wire *g* to be carried at an angle.

The insulator (which is otherwise constructed of the usual forms, such as are commonly used for telegraph posts) is formed directly under the head portion, with a transverse hole or passage serving for the reception of a pin or bolt *a*, provided at its ends with disks *b*, *b'* which are eccentric to the said bolt *a*, and against which the collars or shoulders *c c'* lie respectively, and act as washers to the square portions or heads *d d'*. The suitably cut out ends of parts *e e'* forming the clip, are mounted on said eccentric disks *b b'* respectively, said parts *e e'* being connected at their upper ends by a cross piece *f*. The lower edge of the said cross piece *f* is shaped to correspond to the form of the head of the insulator, and is advantageously provided with a recess or groove to securely hold the line wire *g*. The fastening of the said line wire *g* to the insulator by means of the cross piece *f*, is effected by suitably rotating the bolt *a*, with the eccentric disks *b b'*, so as to move the cross piece *f*, together with the clip portions *e e'*, in a vertical direction, as indicated by the dotted lines in Fig. 2. This rotation of the bolt *a* is effected by any suitable means, for instance, by a suitable key or spanner to fit the square parts *d* and *d'*. On rotating in one direction, the cross piece *f* with the clips *e e'* is depressed, and the line *g* is gripped and secured thereby. But on rotating in the other direction, the cross piece is raised and the line *g* is released.

In the modification shown in Figs. 4 and 5, the clips *e e'* are in one piece, and the part *f'*, which acts as a pressing part, is riveted on to a projecting portion of said clip.

The modification shown in Figs. 6 and 7 differs only by reason of the modified form of the head of the insulator, which is provided with a projection or raised portion *x* on one side of the slot that receives the line wire *g*. This particular construction is employed to advantage, especially in cases where the line, after being fastened to the insulator, is to be carried at an angle with the insulator.

The hereinbefore described fastening device is made advantageously of a suitable metal, such as, for example, galvanized iron, &c. For the cross piece *f* or *f'*, it is advisable to employ an alloy (such as, for example, silicious bronze) which is not affected by the weather, and the current passing along the line *g*. However, the employment of particular metals, &c., is not essential to the invention, and any suitable metal or materials may be employed in making the several parts.

The hereinbefore described fastening device has, over previous fastening devices, the very important advantage that a simple turn of the hand suffices to either fasten the line wire or to unfasten it for any purpose.

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

1. The hereinbefore described means for fastening and securing — without binding wire—electrical conducting wires to the insulators supporting them, consisting of a suitable pin or bolt, which passes through the head of the insulator, carrying eccentrically arranged circular disks such as *b b'* thereon which operate in clip-like parts or arms such as *e e'*, which latter carry a cross piece such as *f*, so that by rotating the said bolt and eccentrics thereon, the cross piece is thereby raised or depressed for the purpose of releasing or fastening the electric wire to the insulator, substantially as described and shown.

2. In combination with the insulator adapted to receive and support the line wire, the clamp device also carried by the insulator and movable toward and from the same and the operating means carried by the insulator and connected to the clamping device, said operating means consisting of the bolt passing through the insulator and having eccentric disks at its ends, substantially as described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

RUDOLF SCHOMBURG.

Witnesses:
ARTHUR BAERMANN,
W. HAUPT.