No. 846,400. PATENTED MAR. 5, 1907.

W. R. COX.

CLAMP FOR GROUND WIRE ELECTRICAL CONNECTIONS.

APPLICATION FILED FEB. 19, 1906.

Fig. 1

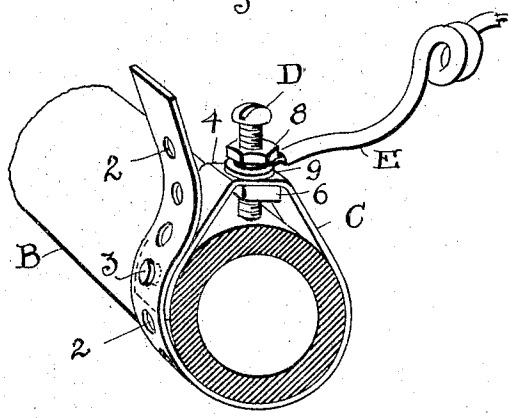


Fig. 2.

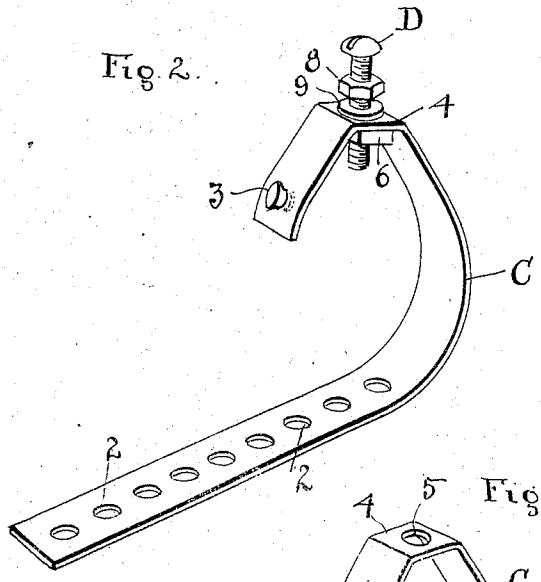


Fig. 3.

ATTEST.

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CLAMP FOR GROUND-WIRE ELECTRICAL CONNECTIONS.

No. 846,400. Specification of Letters Patent. Patented March 5, 1907.

Application filed February 19, 1906. Serial No. 301,802.

To all whom it may concern:

Be it known that I, WARREN R. COX, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Clamps for Ground-Wire Electrical Connections; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to clamps for ground-wire electrical connections; and the invention consists in the construction and combination of parts substantially as shown and described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of the clamp and a section of tubing engaged thereby. Fig. 2 is a perspective view of clamping-band open. Fig. 3 shows a section of the band modified in its hook-engaging portion, as hereinafter fully described.

This invention is designed to make ground connections from a telephone or other electrical devices about a building and wherein grounding of the current is desirable under certain or dangerous conditions to avoid accidents. To this end I have devised a new and improved clamp comprising a metallic band or strap C of flexible metal and which is constructed to be engaged upon and removed from a pipe B or other metallic conductor having a ground setting or terminal in itself, so that said pipe will become a fre transmitter of the current switched thereinto through said clamp when engaged thereon. Among the important features of a clamp for this purpose is a construction which can be readily attached to and removed from a pipe, as B, independently of the binding and locking screw D therein, so that said screw may be permanently inserted in the band or strap C and not removed therefrom when engagement is made or broken and which is employed for tightening and loosening the clamp and fastening the wire connection E therewith and as a conductor of the current through its point with the pipe. To these ends I construct said band or strap with a series of holes 2 at one end and a lug or hook 3 on the other end adapted to engage in one or the other of said holes, according to the size of the pipe B. The lug end of the said band is bent to something like V shape back from said lug or catch, except that between the sides of its bent portion there is a flat surface 4, which is perforated or provided at its center with a hole 5 for the binding and fastening screw or post D. A nut 6 beneath said flat surface or portion 4 engages screw D and becomes the medium through which clamping is effected when the screw is turned, the point of the screw being adapted to bear against or upon pipe B to get the requisite pressure or tension. Then as the clamp is brought to a pipe it is simply bent around the same and its free perforated end is engaged on catch or hook 3, Figs. 1 and 2, or hook 7, modification Fig. 3, whereupon said screw is tightened and the work is done. Any suitable shape may be given to the catch or hook 3 to make effectual engagement therewith, and in Figs. 1 and 2 it is shown as a separate portion set in the band or strap, while in Fig. 3 it is struck up from strap C.

A binder-nut 8 and washer 9 are shown on screw-post D to fasten the electrical wire E therewith, and all the parts taken together except said wire constitute an article of manufacture and sale. Of course the wire E could be wound about screw D and the nut and washer 8 and 9 omitted; but they are preferred.

By using the screw D as shown herein it becomes not only a means of fastening the strap on the pipe, but itself performs the office of a conductor directly in contact with the pipe, and when turned forms a fresh metallic contact in the pipe. From this point of view the strap becomes more especially a support for the screw through which the current flows.

What I claim is—

1. A clamp for ground-wire electrical connections having a series of holes in one end and a flat portion near its other end having a perforation through the same and a catch on the extremity of the said end adapted to make engagement with said holes in the opposite end, and a tightening-screw through said flat portion engaging a nut on the under side of the strap.

2. A clamp for ground-wire connections having one end bent to approximately V shape with a flat portion between the sides of said bend and a screw through said flat portion and a nut on said screw, and a series of holes in one end of said clamp and a catch on the extremity of the other end adapted to engage in one or another of said holes, and a wire-engaging nut on said screw over said clamp.

In testimony whereof I sign this specification in the presence of two witnesses.

WARREN R. COX.

Witnesses:
R. B. MOSER,
C. A. SELL.