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1,489,835

H. KIETZ

BINDING CLAMP FOR BRANCHING OFF

Original Filed Nov. 4, 1919

Fig. 1.

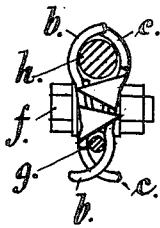


Fig. 2.

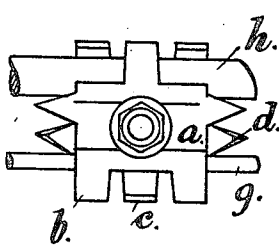


Fig. 3.

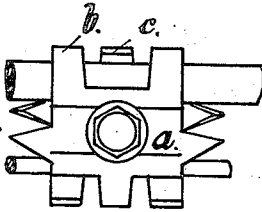


Fig. 4.

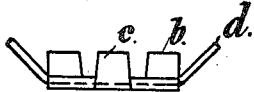


Fig. 5.

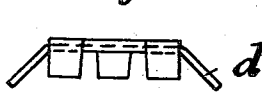


Fig. 6.

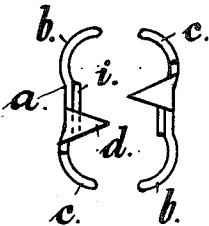


Fig. 7.

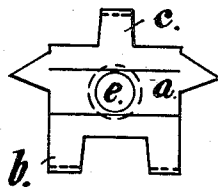
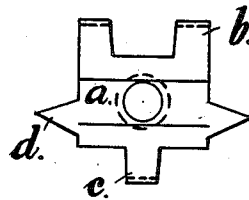


Fig. 8.



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UNITED STATES PATENT OFFICE.

HEINRICH KIETZ, OF MAGDEBURG, GERMANY.

BINDING CLAMP FOR BRANCHING-OFF.

Application filed November 4, 1919, Serial No. 335,770. Renewed January 10, 1924.

(GRANTED UNDER THE PROVISIONS OF THE ACT OF MARCH 3, 1921, 41 STAT. L., 1313.)

To all whom it may concern:

Be it known that I, HEINRICH KIETZ, a citizen of the German Republic, residing at Magdeburg, Germany, have invented certain new and useful Improvements in Binding Clamps for Branching Off (for which I have filed applications in Switzerland, Oct. 18, 1918, Patent No. 80,461; Holland, Oct. 25, 1918, Patent No. 10,736; Denmark, Oct. 25, 1918; Sweden, Oct. 27, 1918; and Norway, Oct. 26, 1918), of which the following is a specification.

This invention relates to a binding-clamp for branching-off from electric circuits to be clamped upon the main conductor in the manner known from the binding-clamps of known types, the branch conductor being securely fixed in said clamp by the tightening of one or more screws. Binding-clamps of the type and of known construction as well as the well known wedge-clamps have the inconveniency that the clamping action fails with thin branching-off wires and this the more the thicker the main wire is as the clamping-angle becomes so great that no clamping action is exerted upon the branch-wire.

This invention has for its purpose to improve the construction of the binding-clamps so that a secure binding of the branch-wire with the main-wire is obtained whatever may be the diameter of the main-wire or of the branch wire. Owing to the peculiar bent and arrangement of the clamping surfaces and claws the advantage is obtained that one and the same part can be used as plate or counter-plate, lateral guiding teeth being provided for pushing the thin branch wire between the claws so that it is submitted to the full clamping action.

In the accompanying drawings the improved binding-clamp is shown by way of example:

Fig. 1 is an end view of the binding-clamp, the main wire being shown in section.

Figs. 2 and 3 are side views of Fig. 1 seen from the left and from the right respectively.

Figs. 4 and 5 are side views of the two parts of the binding clamp.

Fig. 6 is an end view of the two parts ready for being put in position.

Figs. 7 and 8 are front views of the two parts.

The improved binding-clamp which preferably is composed of two similar parts, is made from sheet metal. Each plate *a* has at one end four or six claws *b* and at the other end three or five claws *c* which are arranged so that the claws at the one end stand in line with the spaces between the claws at the other end. The claws are slightly bent outward at the foot and they bent inwards so as to form a wide claw like finger. The plates *a* have at their other two edges wedge-shaped teeth *d* projecting from near the edge where the claws are, said teeth being slightly bent inwards. Each plate *a* has at the middle a screw hole *e* so that the two plates of a binding-clamp can be securely fixed together by a screw bolt *f*. If the improved binding-clamp is used for branching-off, the wires *h* and *g* (main-wire and branch-wire) get between the claws *b* and *c* of the two plates placed the one opposite the other, the teeth, *d* pushing said wires against the inner surfaces of the claws. It is thus prevented that the thin branch wire *g* can be pushed into the angle formed between the two plates in consequence of the thickness of the main-wire. The secure binding of the two wires is therefore assured if the improved binding-clamp is used.

I claim:—

An improved binding clamp for electric conducting wires comprising in combination an upper clamping plate and a lower clamping plate having each a central threaded hole, an upwardly bent single claw at one side of the lower plate, an upwardly bent double claw at the opposite side of said lower plate and two tooth-shaped drivers slightly bent upwardly and projecting one from each of the remaining two sides of the lower plate, a downwardly inclined double claw at the side of the upper plate

which corresponds with the side of the lower plate which has a single claw, a downwardly bent single claw at the opposite side of the upper plate and two tooth-shaped drivers slightly bent downwards and projecting one from each of the remaining two sides of the upper plate, and a screw and nut for pressing said plates tightly the one upon the other, whereby said drivers will catch and press the wires into the claws of the superposed plates. 10

In testimony whereof I affix my signature.

HEINRICH KIETZ.