

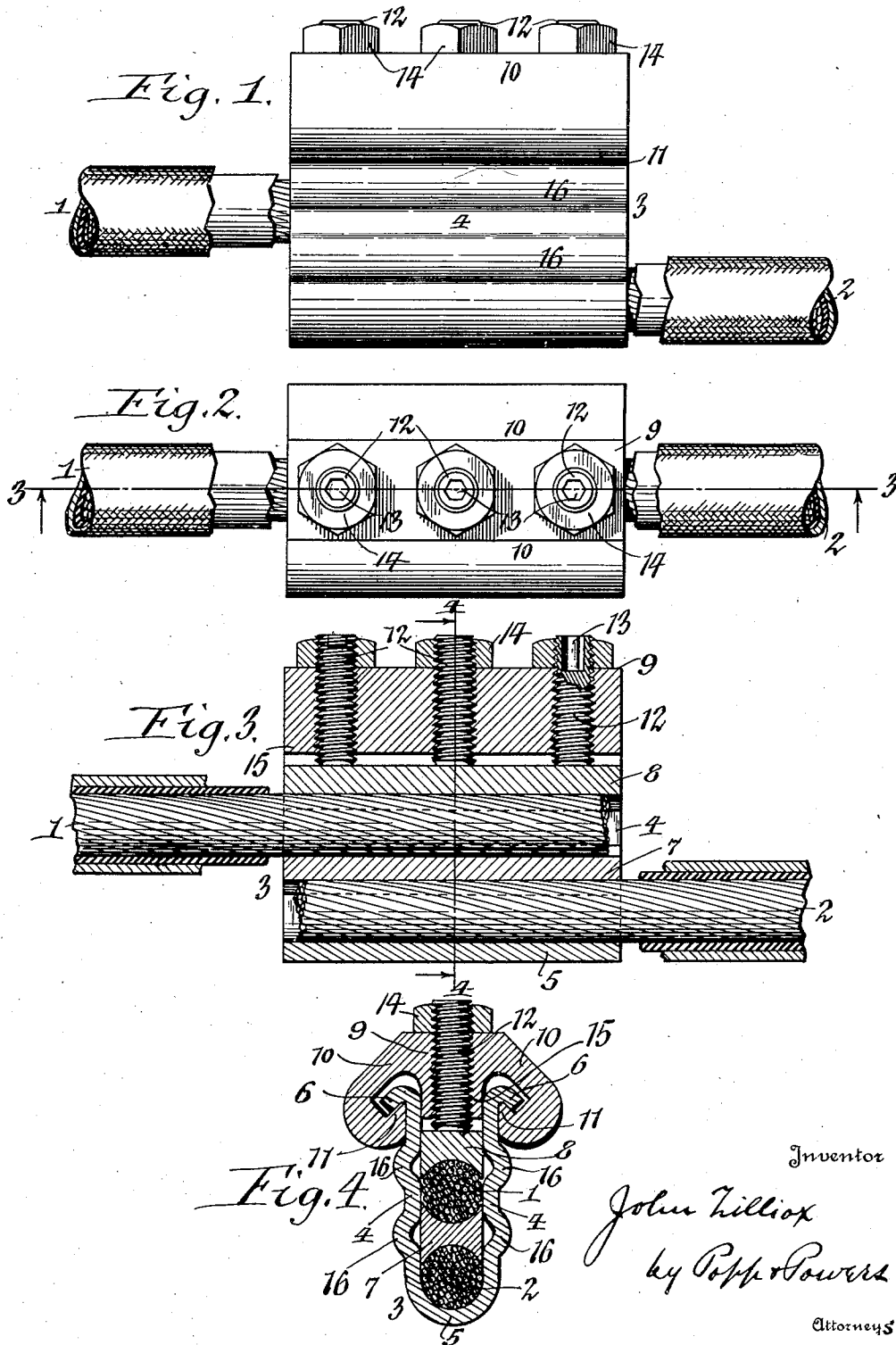
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CLAMP FOR ELECTRICAL CABLES

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CLAMP FOR ELECTRICAL CABLES

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This invention relates to a clamp which is more particularly designed for coupling two cables forming part of an electric current conductor, but which may also be used for other purposes.

It is the object of this invention to provide a clamp for this purpose which engages with said cables over a wide area and thus forms a good electrical connection between the same, which is strong and durable and not liable to get out of order, which can be conveniently and quickly applied to the cables, and which will automatically adjust itself to variations in temperature and still maintain a good connection between the cables.

In the accompanying drawings:

Fig. 1 is a side elevation of the clamp embodying my improvements and showing the same applied to two cables for connecting the same.

Fig. 2 is a top plan view thereof.

Fig. 3 is a vertical longitudinal section of the same, taken on line 3—3 of Fig. 2.

Fig. 4 is a cross section, taken on line 4—4 of Fig. 3.

In the following description similar characters of reference indicate like parts in the several figures of the drawings:—

Although this clamp may be used for securing one or more cables, rods or lines of various kinds and for different purposes the same, as an example of one of its uses, is shown in the drawings for connecting two cables 1 and 2 which form part of an electric conductor.

The clamp comprises a casing 3 which is preferably made of copper in U-shape, the walls 4, 4 of which are upright and parallel and connected at their lower ends by a curved seat 5 and the upper ends of which are provided with laterally projecting longitudinal inclined hooks 6, 6 which diverge downwardly.

One of the cables is placed in the casing so as to rest on the seat 5 at the bottom thereof and the other cable is placed in the casing above the first mentioned cable but separated therefrom by a spacing block 7, and the upper side of the upper cable is engaged by a presser

block 8 arranged in the upper part of the casing.

Extending across the mouth or open end at the top of the casing is a cross piece 9 which is detachably connected with the casing. This cross-piece is preferably equal in length to the casing and provided on its opposite lateral sides with longitudinal flanges 10, the lower edges of which are provided with inwardly and upwardly projecting inclined hooks 11, 11 which converge upwardly.

The hooks of the cross-piece engage under the hooks of the casing and upon drawing the cross-piece upwardly the same is thereby not only coupled with the casing, but the wedging engagement of the cooperating inclined hooks on these members prevents the cross-piece from pulling off from the casing when subjecting the cross-piece to a strong upward pull.

This upward pull on the cross-piece is preferably obtained by one or more clamping screws 12, three being shown in the present case, which screws are arranged vertically in threaded openings in the central part of the cross-piece and bear at their lower ends against the top of the presser block.

After the cables and blocks have been placed in the casing the cross-piece is said lengthwise with its hooks along the hooks of the casing for assembling these members and then the screws 12 are tightened by means of a wrench inserted in sockets 13 formed in the upper ends thereof. Loosening of these clamping screws after tightening is prevented by means of jamb nuts 14 applied to these screws and engaging with the top of the cross-piece. On its underside the cross-piece is provided with a longitudinal tongue or rib 15 which projects downwardly between the upper free edges of the casing walls and thus acts as a core, whereby upon drawing upwardly on the cross-piece the upper edges of the casing walls are prevented from springing inwardly under the pull on the cooperating hooks of the casing and cross-piece, thereby enabling a heavy pressure to be brought against the cables for producing a reliable electric connection therebetween without li-

ability of the casing and cross-piece being pulled apart.

When the parts are thus assembled a connection is effected between the cables which engages therewith over a wide area thereby insuring good conductivity of an electric current over these cables.

Moreover this coupling is simple and compact and not liable to interfere with other objects when being handled. It is also very strong and durable and capable of withstanding the severest strain to which the same may be subjected while in use.

The side walls of the casing are each provided with one or more longitudinal corrugations or crimps 16 whereby the same are rendered resilient and enable the casing to automatically expand and contract due to changes in temperature without liability of the clamp becoming loose and reducing the effectiveness of the connection between the cables.

I claim as my invention:—

A clamp for cables and the like, comprising a U-shaped casing adapted to receive a cable; and means for holding said cable in said casing including a cross-piece extending across the mouth of said casing; downwardly diverging hooks arranged externally on the upper edges of the casing; laterally projecting flanges arranged on opposite sides of the cross-piece and having upwardly converging hooks engaging under the hooks of the casing; and a clamping screw mounted on the cross-piece and adapted to press against the cable in the casing and to draw the hooks of the casing and cross-piece together, the side walls of said casing being provided with longitudinal corrugations, and said cross-piece being provided on its under-side with a tongue, which is arranged between the upper free ends of the walls of said casing.

In testimony whereof I hereby affix my signature.

JOHN ZILLIOX.