

J. H. UMPLEBY.

CLAMP.

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936,195.

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Fig. 1.

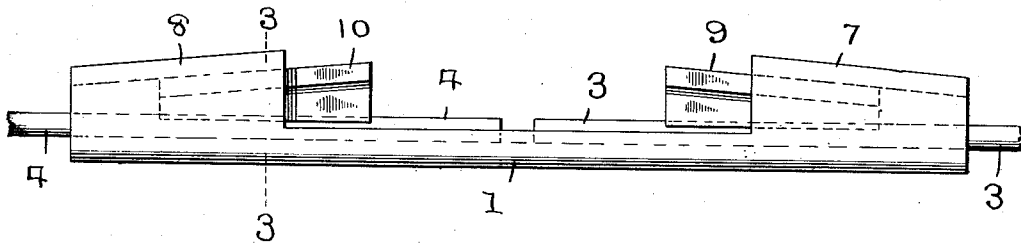
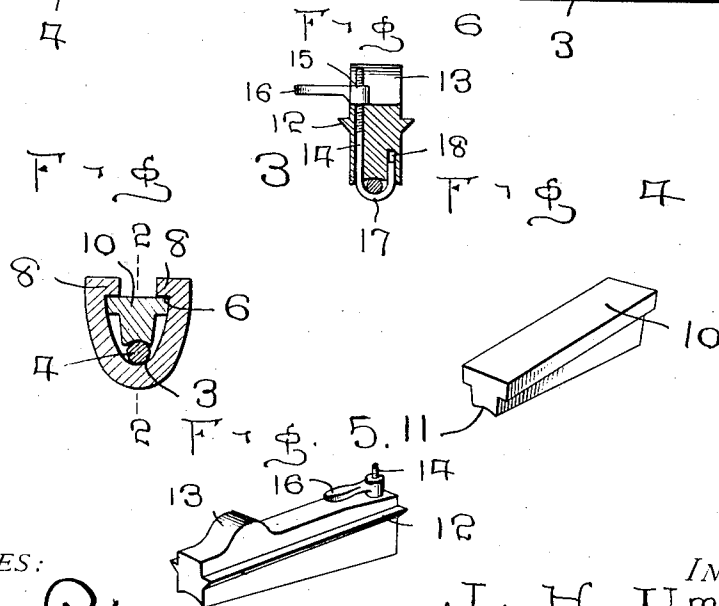
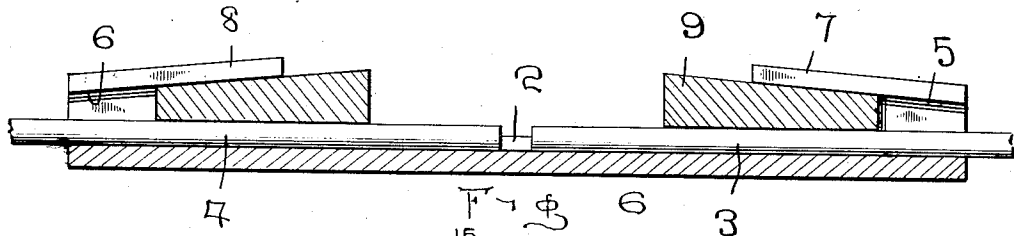


Fig. 2.



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CLAMP.

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To all whom it may concern:

Be it known that I, JAMES H. UMPLEBY, a citizen of the United States, residing at Friendly, in the county of Tyler and State of West Virginia, have invented certain new and useful Improvements in Clamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to new and useful improvements in clamps or splice bars and my object is to provide a device of this class which may be made in various sizes to be used for heavy or light work.

A further object is to provide means for engaging the ends of wires such as stay wires, guy wires, bridge cables and the like and form a splice between the two sections and a still further object is to so arrange the gripping parts of the device that the strain exerted thereon will tend to tighten the gripping device.

Other objects and advantages will be hereinafter referred to and more particularly pointed out in the claims.

In the accompanying drawings which are made a part of this application, Figure 1 is a side elevation of my improved clamping device, showing the same applied to use. Fig. 2 is a vertical, central, longitudinal sectional view through the clamp, as seen on line 2—2, Fig. 3. Fig. 3 is a transverse sectional view as seen on line 3—3, Fig. 1. Fig. 4 is a perspective view of one of the gripping devices removed from the clamp. Fig. 5 is a perspective view of a slightly modified form of clamp, and, Fig. 6 is a transverse sectional view thereof.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 indicates the body of my improved clamp, which is preferably curved in cross section to form a gutter 2, in which are adapted to rest the ends of the wires 3 and 4, when said wires are to be engaged by the clamp and in order to securely lock the ends of the wires to the body, said body adjacent its ends, is provided with upwardly extending flanges 5 and 6, the upper edges of said flanges having inwardly extending ledges 7 and 8, respectively, with which are adapted to engage locking wedges 9 and 10, respectively.

The ledges 7 and 8 are inclined downwardly from their inner to their outer ends and the upper surfaces of the locking wedges 9 and 10 are likewise inclined, whereby the wedges will be forced into positive engagement with the wires in the body.

The lower faces of the wedges 9 and 10 are curved to form seats 11, said seats being adapted to engage the wires and conform to the curvature thereof, thereby affording a better gripping surface for the wedges.

In Fig. 5 of the drawings I have shown a slightly modified form of locking device, in which the width of the locking wedge is such as to snugly fit the spaces between the inwardly extending ledges 7 and 8, the longitudinal edges of the wedge being provided with ribs 12, which extend below the ledges 7 and 8 and cause the wedge to grip the wires and to provide means for readily introducing or removing the wedge from engagement with the holding device, a projection 13 is extended upwardly from the forward portion of the wedge against which the thumb may be placed to enter or remove the wedge or a blow may be delivered thereon to loosen the wedge.

In some instances it may be desired to anchor the wires to the wedge, in which instance a bolt 14 is introduced through the inner end of the wedge and at one side of the longitudinal center thereof, the upper end of the bolt extending through the wedge and being engaged by a nut 15, said nut having a handle 16 thereon, whereby the nut may be readily turned, while the lower end of the bolt is provided with a hook 17 adapted to extend around the wire and have its free end seated in a recess 18 formed in the lower face of the wedge and when the wire is introduced through the hook 17 and the nut 15 turned onto the bolt, the wire will be positively clamped in engagement with the wedge, whereby the weight of the wire will pull the wedges outwardly and seat the same before their respective ledges.

In practice, the wires 3 and 4 are introduced between the flanges at the ends of the body and the ends of the wires brought substantially to the longitudinal center of the body, when the wedges 9 and 10 are introduced over the wires and forced into engagement with their respective ledges on the upwardly extending flanges and in view of the inclination of the ledges and upper edges

of the locking wedges, the seats on the wedges will be positively forced into engagement with the wires, thereby preventing the wires from leaving the body.

5 This form of clamp may be used for various purposes, such as splicing broken wires, holding wires for temporary bridge work or for holding line wires while being spliced and for many other purposes and it will be
10 fully understood that said clamp may be made in various sizes for heavy and light work.

It will likewise be seen that in view of the simplicity of the device, it can be very
15 cheaply constructed and at the same time provide a very durable construction and by arranging the wedges and latches in the manner shown, the outward pull of the wires will tend to force the wedges more firmly
20 into engagement with the wires.

What I claim is:

1. A clamping device of the class described, comprising a body curved to form a gutter, upwardly extending flanges at each
25 end of the body having inwardly extending ledges at their upper edges and spaced apart and keys adapted to enter below said ledges and secure the ends of wires to the body said keys having projections thereon adapted to
30 enter the space between the ledges.

2. In a clamping device of the class described, the combination with a body having a gutter throughout its length, upwardly extending flanges at the ends of the body, said
35 flanges having inwardly extending ledges said ledges being spaced apart inclined downwardly from their inner ends; of locking wedges adapted to enter below said

ledges and securely hold wires in engagement with the body, the upper faces of said
40 wedges being inclined and the lower faces thereof provided with curved seats said wedges having projections thereon adapted to enter the space between the ledges.

3. A clamping device of the class described, having upwardly extending flanges
45 at its ends, said flanges having inwardly extending inclined ledges; of locking wedges adapted to enter below said ledges and hold wires in engagement with the body, a pro-
50 jection adjacent one end of said wedges, a bolt adjacent the opposite end of said wedges, said bolts having hooks at one end and means to clamp the hook portion of the
55 bolts in engagement with wires engaged by the wedges.

4. A clamping device of the class described, having upwardly extending flanges at its ends, said flanges having inwardly extending inclined edges; of locking wedges
60 adapted to enter below said ledges and hold the wires in engagement with the body, a bolt adjacent one end of the wedges, said bolt having a hook at one end and a nut adapted to take onto the upper end of the
65 bolt and clamp the hook portion of the bolt into engagement with the wires engaged by the wedges.

In testimony whereof I have signed my name to this specification in the presence of
70 two subscribing witnesses.

JAMES H. UMPLEBY.

Witnesses:

H. L. FORD,
JNO. W. McCAY.