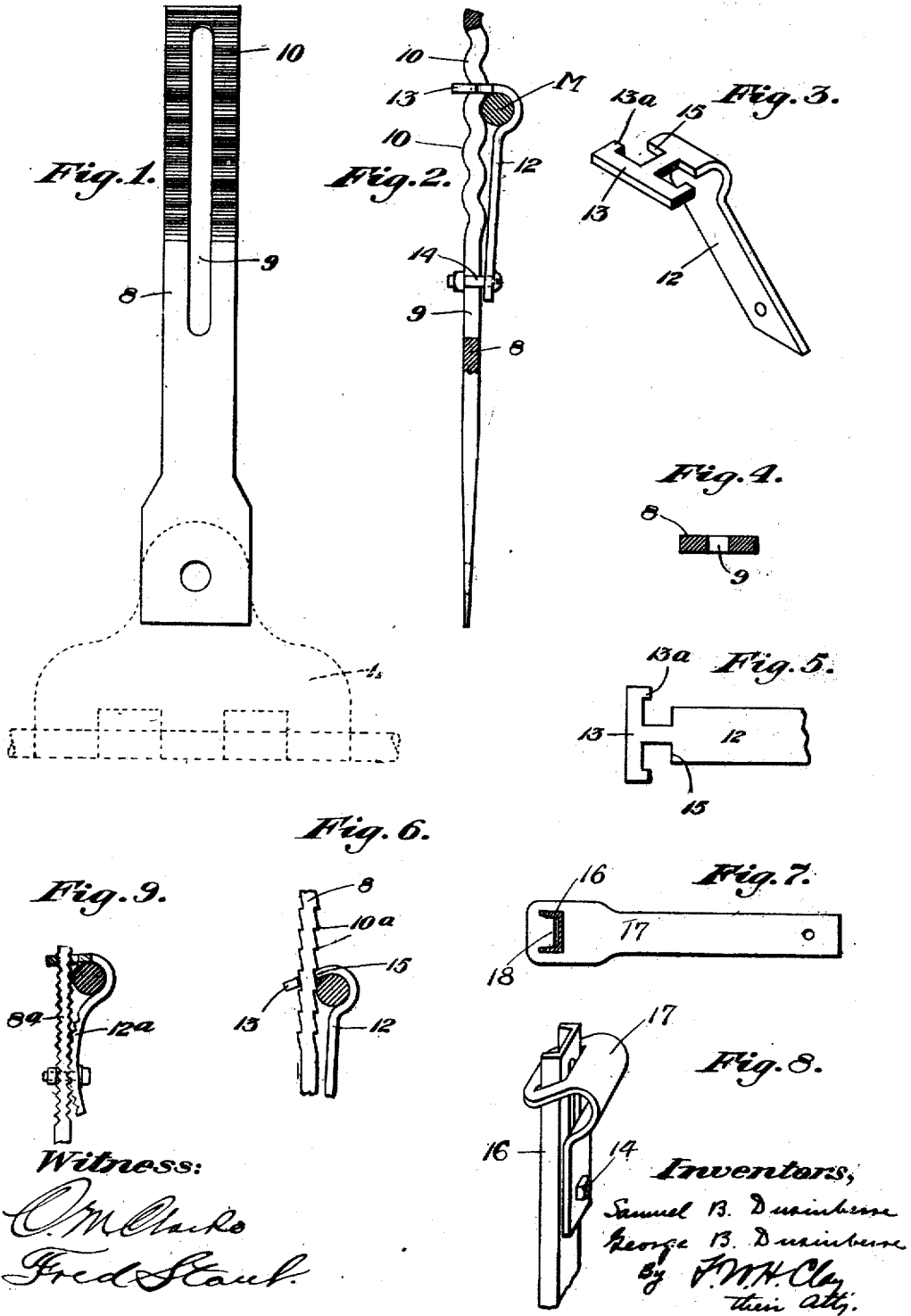


S. B. & G. B. DUSINBERRE.
CABLE HANGER CLAMP.
APPLICATION FILED DEC. 9, 1907.

931,399.

Patented Aug. 17, 1909.



UNITED STATES PATENT OFFICE.

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CABLE-HANGER CLAMP.

No. 931,399.

Specification of Letters Patent.

Patented Aug. 17, 1909.

Application filed December 9, 1907. Serial No. 405,726.

To all whom it may concern:

Be it known that we, SAMUEL B. DUSINBERRE and GEORGE B. DUSINBERRE, citizens of the United States, residing, respectively, at Pittsburg, in the State of Pennsylvania, and at Cleveland, in the State of Ohio, have invented a certain new and useful Cable-Hanger Clamp, of which the following is a specification.

Our invention relates especially to hangers for trolley wires and other similar cable supports and its primary object is to provide an adjustable connection between the messenger wire or cable and the trolley wire clamp.

In the accompanying drawing, Figure 1 is a side elevation of a hanger bar with the clamping element removed, and Fig. 2 is an edge view partially in vertical section showing the hanger and clamp attached to a messenger wire. Fig. 3 is a perspective view of the movable element of this form of clamp, Fig. 4 is a cross-section of the hanger bar, and Fig. 5 is a plan view of a portion of the blank from which the movable part of the clamp is made. Fig. 6 illustrates a modified construction having teeth instead of corrugations. Fig. 7 shows a blank, and Fig. 8 is a perspective view of another form of our invention. Fig. 9 is a further modification.

While the invention is of course applicable to many other uses, it is here shown, for illustration, as especially adapted to the hanging of an electric trolley wire from a messenger wire or cable in the catenary type of construction. Heretofore, for catenary structures, hangers have been either of fixed length or else the adjustment of length has been dependent upon screws and nuts or similar devices, whereas we employ an adjustable leverage member which is positively locked in place upon the main bar of the hanger by means of the structural features of the said parts. Thus, in the form shown in Fig. 1, the main hanger bar 8 is provided with a slot 9 and the surface of its upper portion is roughened on its front and rear faces, as by corrugations 10. The bottom of the hanger is provided with any desired means for attaching it to a trolley wire clamp 11, as will be understood. To attach the bar 8 to the messenger wire M, we here employ a lever clamp 12 which is looped, as shown,

and has a notched head 13 which may be passed through the slot 9 of the bar 8 to secure the wire to the bar when the lever clamp is turned down into a substantially vertical position. The tail end of the clamp 12 is provided with any convenient means for holding it against the bar 8, after it has been looped over the messenger wire M, the means here illustrated being a screw or bolt 14. Preferably, we provide the head 13 of the lever clamp 12 with backward projections 13' which may hook over the outside edges of the bar 8 and thus prevent the slot 9 from spreading open. It will be seen that the bar 8 is clamped between the head 13 and the shoulders 15, which respectively engage the front and rear faces of the bar and, by properly designing the inclination of the head 13, the clamp may be made secure even upon a straight bar having smooth faces. However, we prefer to use a roughened bar for this form, either as illustrated in Fig. 6, which shows teeth 10' upon the bar 8, or else by corrugating the bars, as first described. In some cases, it is preferable to make the corrugations large enough to receive the messenger wire M, as shown in Fig. 2.

In the form shown in Figs. 7 and 8, we employ a hanger bar 16 of channel form and the clamp member 17 has an opening to receive the bar 16 and a tongue 18 which projects, as a wedge, between the flanges of the bar. The tongue 18 is bent downward slightly to insure a strong lever and wedge action as the tail of the member is drawn down.

It will be seen that, in each of the constructions shown, the downward stress upon the bar 8 does not come upon the fastening 14 but is taken directly by the head of the clamping member 12, 17, which is prevented from slipping on the bar 8 by reason of its engagement with the corrugations 10 of Figs. 1 and 2 or the teeth 10' of Fig. 6, or by reason of the action of the wedge 18 of Figs. 7 and 8. By reason of the resiliency of the tail of the member 12, wires of different sizes may be clamped, and the resilient pull upon the bolt 14 prevents it from rattling or becoming loose.

It will, of course, be evident that the position of the clamping member and the messenger wire with respect to the trolley wire may be readily adjusted.

Various other advantages will readily occur to those familiar with the art.

We claim as our invention:

1. A hanger clamp comprising a suspension bar and a clamping lever provided with a head having two shoulders thereon which are adapted, respectively, to engage the front and the rear face of the bar with a leverage clamping action, and means for holding the tail of the clamping lever against the suspension bar.

2. A clamp comprising a bar having a longitudinal slot, a lever member having a neck located in said slot and a head and shoulders in respective engagement with the front and the rear face of the bar, and means for holding down the tail of said lever member.

3. A clamp comprising a roughened bar having a longitudinal slot, and a gripping lever having a neck located in said slot and a head and shoulders which respectively engage the front and the rear face of the bar to positively clamp the lever against longitudinal movement when its free end is held down.

4. A clamp comprising a bar having a longitudinal slot, and a leverage member having

a neck located in said slot, and a head provided with means for preventing enlargement of the slot.

5. The combination of a cable-supporting bar and a clamping lever adapted to engage both the front and the rear face of the bar to be locked at different positions thereon, and means for holding down the tail of the lever.

6. A clamp comprising a bar, and a lever which engages both the front and the rear face of the bar with a lever action, and means for holding down the tail of the lever.

7. A hanger comprising a bar and an adjustable clamping lever one end of which engages both the front and the rear face of said bar and the other end of which is deflected toward and clamped to said bar.

In witness whereof we have hereunto signed our names in the presence of the two subscribed witnesses.

SAMUEL B. DUSINBERRE.
GEORGE B. DUSINBERRE.

Witnesses:

S. L. BURRIDGE,
T. W. TRECH.