N. J. A. WAHLBERG.

CLAMPING DEVICE.

APPLICATION FILED NOV. 3, 1917.

1,303,424. Patented May 13, 1919.

Fig. 1

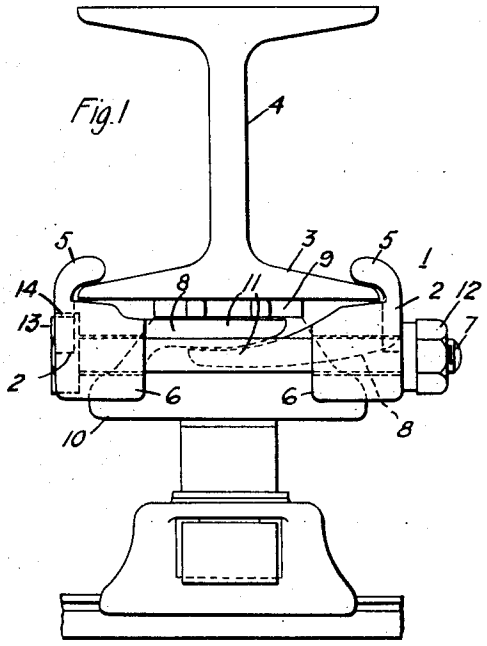


Fig. 3

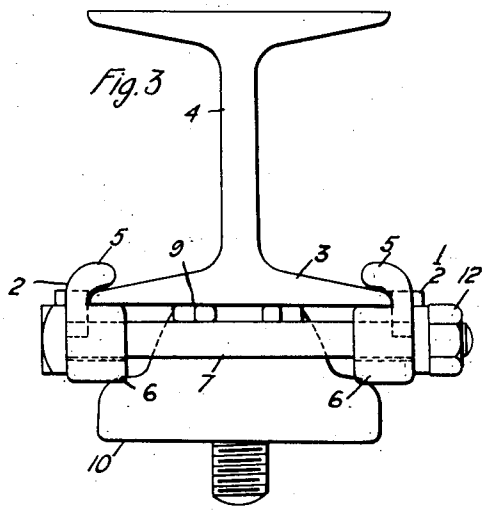


Fig. 2

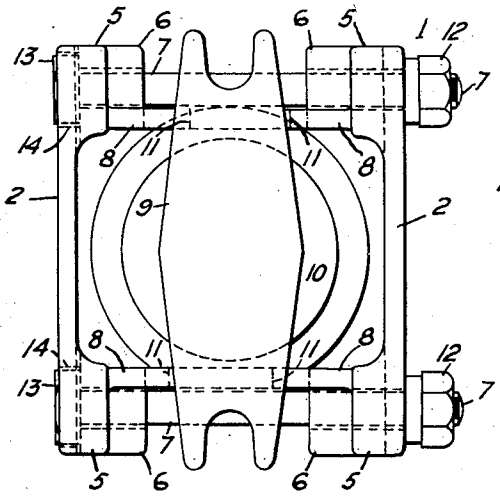
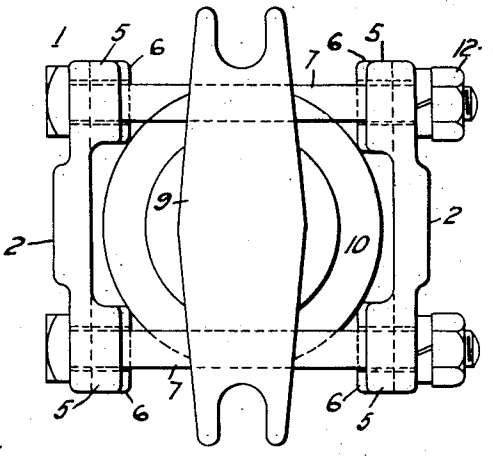


Fig. 4



WITNESSES:

J. T. Wurmb.

Fred H. Muller

INVENTOR

Nils J. A. Wahlberg.

BY

Merle G. Barr

ATTORNEY

UNITED STATES PATENT OFFICE.

NILS J. A. WAHLBERG, OF PITTSBURGH, PENNSYLVANIA, ASSIGNOR TO WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, A CORPORATION OF PENNSYLVANIA.

CLAMPING DEVICE.

1,303,424. Specification of Letters Patent. Patented May 13, 1919.

Application filed November 3, 1917. Serial No. 200,046.

To all whom it may concern:

Be it known that I, NILS J. A. WAHLBERG, a citizen of the United States, and a resident of Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Clamping Devices, of which the following is a specification.

My invention relates to clamping devices and particularly to such devices as are adapted for securing insulators to I-beams or other similar structures.

The object of my invention is to provide an effective and inexpensive device of the above character that comprises simple clamping members and standard bolts, and that is adapted for securing a standard stock insulator, which is primarily designed for mounting on a wood beam to a steel I beam, or other similar structure.

In mines, or other places where the overhead structure is chiefly of wood, a great many insulators may be required. Furthermore, at isolated points and in place of the wood, it may be necessary to use steel supporting structures, such as I-beams, thereby presenting the alternative of obtaining special clamps or of using drills or other tools to adapt the stock insulators for mounting on the steel structure.

By my invention, I obviate the necessity for performing either of the above expensive operations and provide simple and inexpensive devices for rigidly mounting stock insulators on I-beams or other similar metal structures.

In practising my invention, I provide, on the underside of an I-beam, a rigid structure comprising members that are disposed rigidly with, and parallel to, the beam, and are provided with transverse overlapping projections which support the insulator.

Figure 1 is an end elevational view of the clamping device embodying my invention, showing its application to a standard I-beam. Fig. 2 is a top plan view of the structure shown in Fig. 1, with the I-beam removed, and Figs. 3 and 4 are an end elevational and a top plan view, respectively, of a modified form of clamping device embodying my invention.

In Figs. 1 and 2, a clamping device 1 comprises two simple body members 2 that are disposed along the opposite edges of the base 3, of an I-beam 4. Each of the body members 2 is provided, at its ends, with notched lugs 5 that embrace the edges of the base 3. Recessed projections 6, disposed adjacent the lugs 5, are adapted for the reception of bolts 7 that extend between the body members 2 below the I-beam. A laterally projecting portion 8, on each end of each of the body members 2, is adapted to hold the supporting plate 9 of an insulator 10 against the underside of the base 3. Ends 11 of the portions 8 overlap and, when the body members 2 are drawn toward the base 3, by means of the bolts 7 and the nuts 12, act as lever arms with the fulcrums thereof at the points where the edges of the base 3 engage the notched lugs 5. The plate 9 is thereby firmly pressed against the beam 4. The bolts 7 are prevented from turning during adjustment of the nuts 12 by the relation of the heads 13 of the bolts to recesses 14 in one of the body members 2.

The modification of my device shown in Figs. 3 and 4 is substantially the same as the forms shown in Figs. 1 and 2 with the exception that the portions 8 are omitted, the supporting plate 9 being held in its relation to the I-beam 4 by the bolts 7.

While I have shown and described particular forms of my invention, it is to be understood that changes may be made therein without departing from the spirit and scope of the same, as set forth in the appended claims.

I claim as my invention:

1. A clamping device for securing an insulator, having a supporting plate thereon, to an I-beam, comprising bolts, similar body members, each body member having lugs for engaging the edges of the I-beam base, and recessed projections adjacent the lugs for the reception of said bolts that extend below the I-beam and coöperate with the recessed projections of the other body member to force the supporting plate against the I-beam.

2. A clamping device for securing an insulator, having a supporting plate thereon, to an I-beam, comprising bolts, similar longitudinal body members disposed along opposite edges of the flanges of the I-beam, each body member having, at its ends, a notched lug for gripping the I-beam, a recessed projection for the reception of one of said bolts adapted to coöperate with the corresponding projection of the other body

member to bind the same in rigid relation to the I-beam and to force the supporting plate against the body of the I-beam.

3. A clamping device for securing an insulator, having a supporting plate thereon, to an I-beam, comprising bolts, similar longitudinal body members disposed along opposite edges of the base of the I-beam, each body member having at its ends a forked lug for embracing the edge of the I-beam base, a recessed projection for the reception of one of said bolts to maintain the body members in engagement with the I-beam and a laterally extending projecting portion to engage a similar portion of the other body member.

4. A clamping device for securing an insulator, having a supporting plate thereon, to an I-beam, comprising bolts, similar longitudinal body members disposed along opposite edges of the base of the I-beam, each body member having, at its ends, a forked lug for embracing the edge of the I-beam base, a recessed projection for the reception of one of said bolts to hold the supporting plate in engagement with the I-beam, and a laterally-projecting portion adapted to turn about the point of engagement of the lug and base to press the supporting plate against the I-beam.

5. A clamping device for securing an insulator, having a supporting plate thereon, to an I-beam, comprising bolts, similar longitudinal body members disposed along opposite edges of the base of the I-beam, each body member having, at its ends, a forked lug for embracing the edge of the I-beam base, a recessed projection for the reception of one of said bolts to hold the supporting plate in engagement with the I-beam, and a laterally projecting portion adapted to overlap the corresponding portion on the other body member to effect a wedging action between the laterally-projecting portions and the I-beam.

In testimony whereof, I have hereunto subscribed my name this 22nd day of Oct., 1917.

NILS J. A. WAHLBERG.