

R. J. BELL.
ELECTRICALLY CONNECTING DEVICE.
APPLICATION FILED JULY 19, 1913.

1,090,190.

Patented Mar. 17, 1914.

Fig. 1

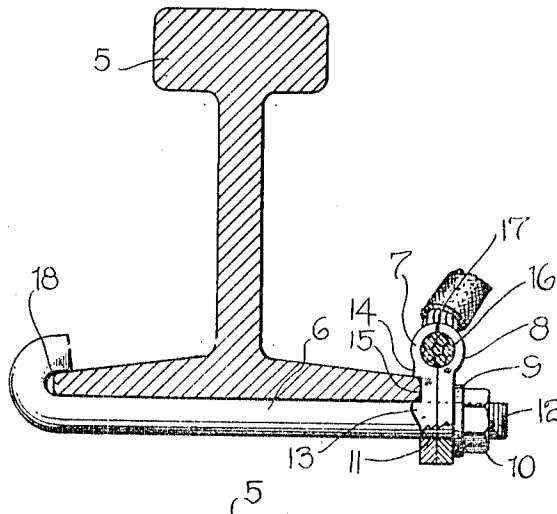
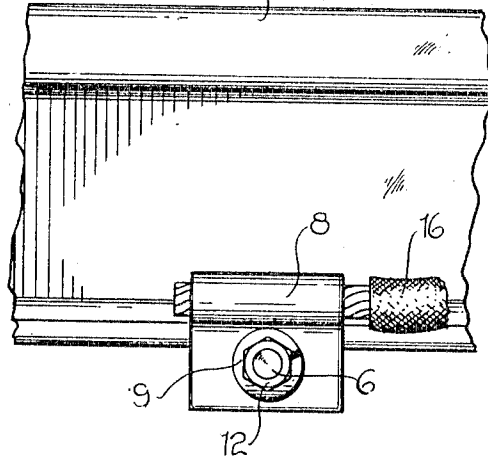


Fig. 2



Witnesses
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UNITED STATES PATENT OFFICE.

ROBERT JAMES BELL, OF HARVEY, ILLINOIS.

ELECTRICALLY-CONNECTING DEVICE.

1,090,190.

Specification of Letters Patent.

Patented Mar. 17, 1914.

Application filed July 19, 1913. Serial No. 779,992.

To all whom it may concern:

Be it known that I, ROBERT JAMES BELL, a citizen of the United States, residing at Harvey, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Electrically-Connecting Devices, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to electrically connecting devices, and it more particularly relates to an improved device for clamping an electric conductor, cable, etc., to a railway rail.

The principal objects of this invention are to provide a simple and comparatively inexpensive device of this character for quickly and easily clamping a wire or cable on to the base flange of a railway rail; to provide a device of this character which is comparatively inexpensive, which may be easily applied by an inexperienced person, and to provide a device of this character which is thoroughly practical and efficient.

In the accompanying drawings, which supplement this specification, Figure 1 illustrates a vertical section through a railway rail and a side elevation view of my improved connecting device clamped on the rail; and Fig. 2 is a side elevation view of the rail with the device clamped thereon.

In these drawings, in which similar reference characters correspond with similar parts throughout the several views, an ordinary railway rail is designated by the numeral 5; while the device which constitutes my invention comprises a hooked-bolt 6, a contact plate 7, a clamping plate 8, a lock washer 9 and a nut 10, the plates 7 and 8 are apertured at 11 for the reception of the bolt 6, the latter being provided with a threaded end 12. The plate 7 is provided with spaced lugs or ribs 13 and 14, between which is located a groove 15 which is of sufficient width to accommodate the edge portion of the rail flange.

The cable or conductor member 16 is clamped between the upper ends of the plates 7 and 8, which are provided with semi-cylindrical grooves or clamping surfaces 17 which are in registry with each other when the apertures 11 are in registry.

The hooked end of the bolt 6 is provided with a recess 18 adapted to receive an edge of the rail flange, as illustrated.

The several parts of this device may be made of any suitable conducting material, or it may be made, in part or in whole, of non-conducting material if found desirable. It is obvious that these devices may be made adjustable by extending the threads 12 in either direction, and it is also obvious that the several parts may be made of any suitable and desirable dimensions, so as to fit rails and cables of different sizes.

This device is especially applicable in connecting the ground wires of lightning arresters and railway light circuits to the track rails and for electrically connecting the adjoining ends of rails, in lieu of the more expensive and less efficient means heretofore employed for this purpose; but it is to be understood that the device is susceptible of use with rails and beams other than railway rails, and is susceptible of many uses other than those specified herein.

It will be seen that I have provided a device of this character which is fully capable of attaining the foregoing objects in a thoroughly practical manner.

I claim:

1. In combination with a rail, a wire connecting device therefor comprising an elongated contact plate intersecting the flange of the rail and being provided with a recess intermediate its length to accommodate a marginal portion of such flange, a clamping plate coacting with the contact plate, such contact plate and clamping plate being provided with registering apertures at a point below the flange of the rail when in operative position, said contact plate and clamping plate being adapted to have extended therebetween a conductor, an elongated member having one end formed into a hook to engage the opposite flange of the rail while the opposite extremity of such member is freely insertible through the registering openings of the plates, and a retaining member endwise adjustable on such member and adapted to bear against the clamping plate and serving to hold the contact plate and the clamping plate against displacement from the flange and maintaining such plates in proper engagement with the conductor.

2. As a new article of manufacture, a wire connecting device comprising an elongated member having one extremity formed to produce a hook, while the other extremity thereof is threaded, plates loosely mounted

on such member and capable of movement
lengthwise thereof, the adjacent faces of
such plates being provided with registering
grooves, the free face of the innermost plate
5 being provided with a transverse groove ex-
tending entirely thereacross and in close
proximity to the elongated member when
applied thereon, and a clamping member en-
gageable with the threaded extremity of the

elongated member and adapted to coact with 10
the plates.

In testimony whereof I hereunto affix my
signature in the presence of two witnesses.

ROBERT JAMES BELL.

Witnesses:

BERT A. IRELAND,
EUGENE D. YOUNG.