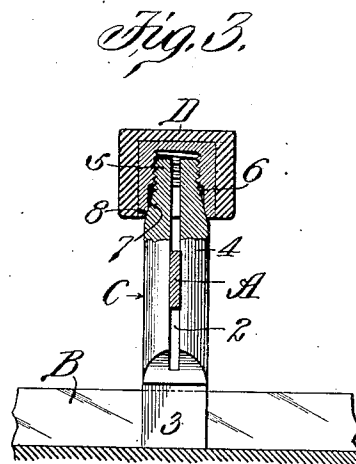
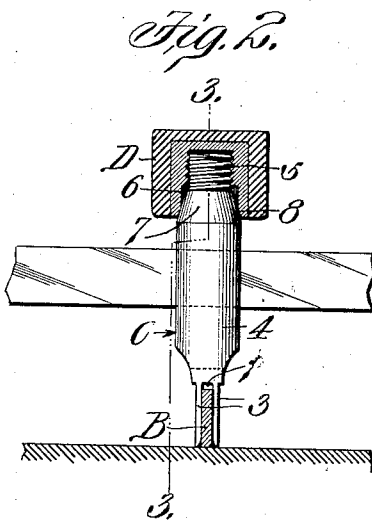
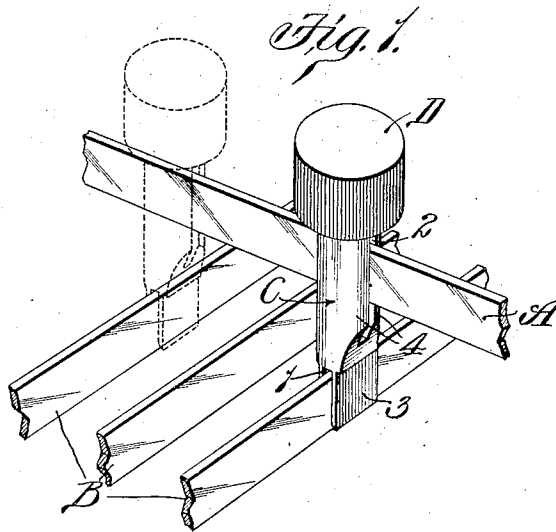


F. B. ADAM.
 BUS BAR CONNECTING DEVICE.
 APPLICATION FILED JULY 3, 1911.

1,030,798.

Patented June 25, 1912.



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UNITED STATES PATENT OFFICE.

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BUS-BAR-CONNECTING DEVICE.

1,030,798.

Specification of Letters Patent.

Patented June 25, 1912.

Application filed July 3, 1911. Serial No. 636,650.

To all whom it may concern:

Be it known that I, FREDRICK B. ADAM, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Bus-Bar-Connecting Devices, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to bus bar connecting devices such as are used for establishing electrical connection between superimposed bus bars arranged at right angles to each other.

One object of my invention is to provide a bus bar connecting device of novel construction that can be adjusted or shifted easily so as to establish electrical connection between different bus bars and which is so designed that it is not liable to become displaced or shifted accidentally.

Another object is to provide a bus bar connecting device of simple construction which can be securely clamped to one of the bus bars with which it is used.

Other objects and desirable features of my invention will be hereinafter pointed out.

Figure 1 of the drawings is a perspective view of my improved bus bar connecting device arranged in operative position; Fig. 2 is an elevational view showing the clamping member in section; and Fig. 3 is a vertical sectional view taken on the line 3—3 of Fig. 2.

Referring to the drawings which illustrate the preferred form of my invention, A designates a bus bar which extends transversely over a set of bus bars B arranged at approximately right angles to the bus bar A.

My invention consists in a device that is used for establishing electrical connection between the bus bar A and either of the bus bars B, and while I have herein shown a device that is designed for use with relatively thin bus bars which are arranged edgewise, I do not wish it to be understood that my invention is limited to a device of the exact construction herein shown for the particular cross sectional shape of the bus bars is immaterial so far as my broad idea is concerned.

Briefly described, my device consists preferably of a bar or rod of metal C having

slots or openings arranged at approximately right angles to each other for receiving the bus bar A and the bus bar B which cooperates with same, and means for pressing portions of the rod or bar C tightly against the bus bar A so as to securely clamp the device in operative position and also establish a good electrical contact between it and the bus bar A on which it is mounted. The opening 1 in the rod C which receives the bus bar B preferably consists of an open-ended slot, and the opening 2 in said bar C, through which the bus bar A passes, also consists of an open-ended slot arranged at approximately right angles to the slot 1, thereby forming a spring clip or pair of wings 3 at the lower end of the rod C which snugly embrace the bus bar B, and also a pair of wings 4 at the upper end of the rod C which embrace the bus bar A.

The means which I prefer to use for pressing portions of the device C tightly against the bus bar A, consists of a clamping nut D adjustably mounted on a reduced screw-threaded portion 5 on the upper end of the rod C and provided on its under side with a bushing having a recess or socket 6 that receives a tapered or conical-shaped portion 7 on the rod C, as shown clearly in Figs. 2 and 3. The lower edge 8 of the socket or recess in the clamping member D is preferably beveled slightly and cooperates with the tapered portion 7 of the rod C to force the two wings 4 or side portions of said rod tightly against the bus bar A when the clamping member D is screwed downwardly. The clamping member D is formed from suitable insulating material so as to permit the device to be adjusted safely. When the clamping nut D is rotated in the opposite direction or moved upwardly on the rod C the shoulder 8 on said member will travel upwardly over the tapered part 7 of the rod C and thus permit the portions 4 of said rod to spring away slightly from the bus bar A. The slot 2 in the rod C is made long enough to enable said rod to be moved upwardly far enough to carry the wings 3 on the lower end of same out of engagement with the bus bar B and thus permit the device to be shifted longitudinally of the bus bar A and thereafter moved downwardly into engagement with a different bus bar B, as shown in broken lines in Fig. 1. After the device

has been shifted or arranged in operative relation with a different bus bar, the clamping member D is screwed downwardly so as to cause the portions 4 of the rod C to be pressed tightly against the bus bar A and thus securely clamp the device in its adjusted position.

A device of the construction above-described can be manufactured cheaply because it comprises only two parts, namely, a single rod or bar of metal provided with two bifurcated portions which straddle the bus bars, and a clamping member which draws the wings or legs of one of said bifurcated portions together or forces them tightly against the bus bar on which the device is mounted. The device can be adjusted quickly and easily and securely clamped in position, and as the clamping member D closes the upper end of the slot 2 through which the bus bar A passes, said clamping member prevents the device from being disconnected from the bus bar A by a thoughtless or absent-minded person and placed in an improper position on a different parallel bus bar. That is to say, by providing the device with means which prevents it from being pulled off of the bus bar A easily a careless person will not be apt to make a wrong connection as might occur if the device could be removed easily from the bus bar A.

In installing the device the clamping member D is, of course, not mounted on the rod C until after said rod has been slipped onto the bus bar A, and after said clamping member has been arranged in operative position it is not intended to be bodily removed from the rod C unless it is desired to replace the device, the adjustments or changes in the position of the device being effected merely by loosening the clamping member D and then lifting the rod C slightly and moving it laterally into alinement with the bus bar B which it is desired to connect to the bus bar A.

Having thus described my invention,

what I claim as new and desire to secure by Letters Patent is:

1. A bus bar connecting device consisting of a rod provided with a bifurcated portion which is adapted to receive a bus bar, said bifurcated portion having a tapered or conical surface on the exterior thereof, and an adjustable member cooperating with said conical surface for causing the side wings of said bifurcated portion to be pressed tightly against the bus bar with which the device is used.

2. A bus bar connecting device consisting of a rod provided with a bifurcated portion which is adapted to receive a bus bar, a clamping member adjustably mounted on said bifurcated portion, and a shoulder on said clamping member which cooperates with an inclined surface on said bifurcated portion to force the side wings thereof toward each other when said clamping member is moved in one direction.

3. A bus bar connecting device consisting of a rod provided with bifurcated portions which are adapted to receive bus bars arranged at approximately right angles to each other, one of said bifurcated portions being so proportioned that the device can be moved into such a position that the other bifurcated portion thereon will pass out of engagement with the bus bar with which it cooperates, a clamping member of insulating material adjustably mounted on one end of said rod so as to close the end of the bifurcated portion which permits the adjustment of the device previously mentioned, a tapered or conical-shaped part on said rod, and a shoulder on said clamping member which cooperates with said tapered part.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this twenty eighth day of June 1911.

FREDRICK B. ADAM.

Witnesses:

WELLS L. CHURCH,
GEORGE BAKEWELL.