June 21, 1938. A. GLADSTONE 2,121,629

BATTERY TERMINAL CLAMP

Filed April 2, 1935

Fig. 1.

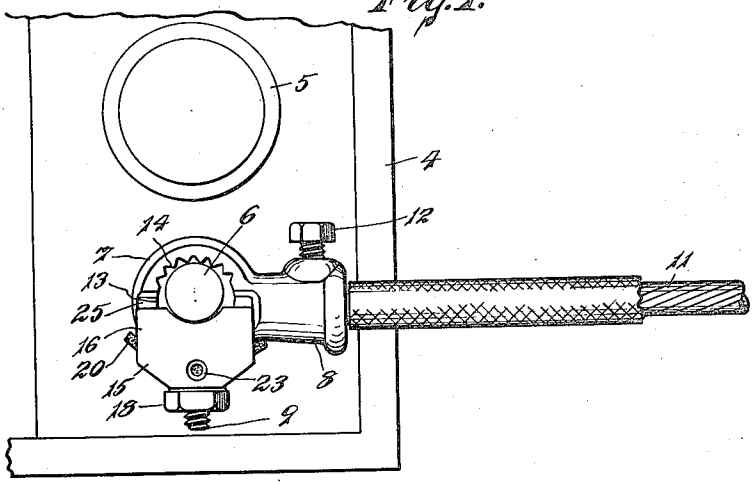


Fig. 2.

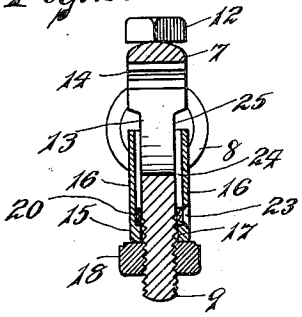


Fig. 3.

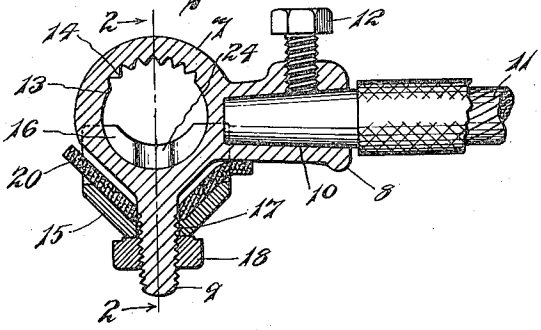


Fig. 4.

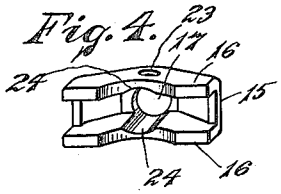
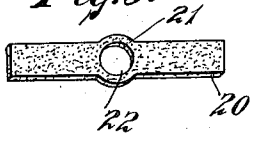


Fig. 5.



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Patented June 21, 1938 2,121,629

UNITED STATES PATENT OFFICE

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BATTERY TERMINAL CLAMP

Arthur Gladstone, Hartford, Conn., assignor to The Haw-Dee Manufacturing Corp., Hartford, Conn., a corporation of New York

Application April 2, 1935, Serial No. 14,288

1 Claim. (Cl. 173—259)

This invention relates to terminal clamps of that class commonly used for connecting the end of a cable to a battery.

It is well realized that the conventional type of connectors are objectionable, due to the fact that they are difficult to attach to, or detach from, the terminal post on the battery. When it is desired to attach or detach the conventional type of connectors, it is necessary to do so by striking the clamp a number of blows in order to either drive it onto or loosen it from the terminal post of the battery. This causes injury to the battery itself as well as to the terminal post and at the same time, makes the operation a very difficult one.

Another objection to the conventional connectors, is that they quickly become corroded on account of the acid contained in the battery.

The object of my invention among others, is to provide a connector which may be easily and quickly attached to or detached from a terminal post without the necessity of striking the connector.

Further objects are to provide; a connector which can be quickly attached to the end of a battery cable without soldering the two members together; which will universally fit any battery terminal of the conventional form; which can be positioned so that it will not interfere with the removal of the battery cover, and furthermore, to provide a battery connector which can be kept moistened with a corrosion preventative so as to minimize the effects of acid on the connection.

Further objects may be readily understood from the following description and from the accompanying drawing in which:

Figure 1 illustrates my improved connector as used for attaching the end of a cable to a battery.

Figure 2 is a view of the same, in central vertical section, on line 2—2 of Figure 3.

Figure 3 is a plan view, in section, showing the connector attached to the end of a battery cable.

Figure 4 is a perspective view of the clamping member.

Figure 5 is a perspective view of the moistening strip.

In the drawing, the numeral 4 denotes the case of a battery of common construction having the usual cover 5 and terminal post 6.

My improved connector comprises an annular body portion 7, having a shank 8, and a threaded projection 9 extending therefrom. The shank 8 has a recess 10, adapted to receive the end of a cable 11, and a bolt 12 is threaded thereto to provide means whereby the cable may be secured within the shank. This method of attaching the cable to the connector provides a means whereby an emergency connection can be made quickly and without the necessity of soldering the cable to the connector, which in some cases cannot be conveniently done. Should it be desired to make a soldered connection, it can be done when convenient and in that case the bolt 12 may be discarded.

One side of the opening 13 in the member 7 is provided with teeth 14 that are adapted to securely grip the terminal post 6. A clamping member 15 is slidably mounted to the member 7. This member 15 is constructed in the form of a cap having walls 16 which fit over one side of the clamping member 7. The member 15 has an opening 17 thru which projects the threaded extension. A nut 18 is threaded to this post whereby the clamping member 15 can be forced into engagement with the terminal post.

It is commonly known that corrosion, which is due to electrolytic action between the terminal and the battery post, takes place on the conventional forms of connectors. It is also known that this corrosion can be satisfactorily eliminated by keeping the connection between the clamp and the post well oiled or greased. In most cases, however, this condition will not last for a satisfactory length of time due to the fact that there is nothing provided for retaining the supply of oil or grease on the connection.

I provide a moistening member in the form of a strip 20 of suitable material, such as felt, which is contained within the clamping member 15 and which has a central enlargement 21 in which there is an aperture 22 adapted to fit over the threaded post.

An opening 23 is provided on the clamping member 15 to form an oil hole therein through which oil can be applied to the strip 20. This strip will retain the oil, keeping the connection continually moist and thus preventing corrosion. In order to deliver the oil directly to the connection between the terminal post and the clamping members, the clamping member 15 is provided with inner grooves 24, in which the oil will flow from the strip 20 directly to the connection.

It will be noted that, as illustrated in Figure 2 of the drawing, the connecting member 7 is comparatively flat and cut away, or thinned as at 25, to accommodate the clamping member 15 without thickening the entire connection. This provides a means whereby the connector may be applied close to the base of the terminal post and may also be poistioned on the said post in a manner

which is most convenient and best suited to prevent interference with the manipulation of the battery cover 5 as clearly illustrated in Figure 1 of the drawing.

I claim:

A battery terminal clamp comprising a ring-shaped connecting member adapted to connect an electrical conductor to the terminal post of a battery and having a threaded extension thereon, a nut on said extension, a clamping member having an opening to receive said extension and having portions overlapping the sides of said connecting member to engage said terminal post, and a strip of absorbent material positioned between said overlapping portions and having an opening to receive the said threaded extension therethrough for retaining the said strip in its position.

ARTHUR GLADSTONE.

CERTIFICATE OF CORRECTION.

Patent No. 2,121,629. June 21, 1938.

ARTHUR GLADSTONE.

It is hereby certified that the name of the assignee in the above numbered patent was erroneously written and printed as "The Haw-Dee Manufacturing Corp." whereas said name should have been written and printed as The Han-Dee Manufacturing Corp., of Hartford, Connecticut, a corporation of New York, as shown by the record of assignments in this office; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 2nd day of August, A. D. 1938.

(Seal)

Leslie Frazer,
Acting Commissioner of Patents.