The present invention pertains to a novel con-
necter designed for use in storage batteries, par-
ticularly of the type used on motor vehicles.

The object of the invention is to provide a
simple device of this character which clamps on
the battery post in opposite directions or in a
scissors-like manner, and which is also readily
accessible for attachment and detachment. In
the accomplishment of these objects, the device
consists of a pair of clamping plates formed each
with an over-sized aperture with respect to the
post on which the plates are to be mounted. The
plates are formed respectively with upstand-
ing bosses or knuckles which come into align-
ment when the plates are properly mounted. The
clamping pressure is initiated by a bolt
passed through the aligned knuckles and having a
tightening nut thereon. Inasmuch as the
bosses or knuckles stand up from the respec-
tive plates, the plates themselves do not inter-
fere with the accessibility of the bolt and nut.
Further, the knuckles are so mounted that a
space remains between them, exposing a por-
tion of the bolt, when the device is assembled
on the battery post. In battery practice, the
parts often become so corroded and coated that
the clamp cannot readily be removed. In re-
placing such a clamp, according to the present
invention, it is not essential to remove the nut,
invention, it is not the bolt between the
knuckles which may be cut by means of a hack saw
or bolt cutter, whereupon the clamp may readily
be removed.

The invention is fully disclosed by way of ex-
ample in the following description and in the
accompanying drawing in which—
Figure 1 is a plan view of the device applied to
a battery post, the latter being shown in
section;

Figure 2 is an elevation of the device on a
battery post;

Figure 3 is a similar elevation at right angles
to Figure 2;

Figure 4 is a perspective view of one of the
clamp plates; and

Figure 5 is a perspective view of the other
clamp plate.

Reference to these views will now be made by
use of like characters which are employed to
 designate corresponding parts throughout.

In Figure 4 is shown the clamp plate 1 which
occupies the lower position, as may be seen
by reference to Figures 2 and 3. This plate is of
substantially square formation and has a central
aperture 2 which is somewhat larger than the
battery post to be received therein, for a pur-
pose which will presently appear. At one of the
corners is formed an upstanding boss or knuckle
3 which functions as a part of the clamping
mechanism as will also presently be described. At
the diagonally opposite corner is formed an
integral lug or hook 4 projecting slightly over the
top of the plate 1 parallel to the axis of the
knuckle 3.

The upper clamp plate 5 is also of substan-
tially square formation and about the same size
as the plate 1. The plate 5 is likewise formed
with a central aperture 6 adapted to coincide
with the aperture 2 of plate 1 when the plates
are superimposed, and the aperture 6 is also 15
slightly larger than the post to be received
therein. At one of the corners of the plate 5
is formed an upstanding boss or knuckle 7 simi-
lar to the member 3 and adapted to align axially
therewith when both plates are assembled on a
battery post, as may be seen in Figures 1, 2,
and 3. From the center of the edge opposite the
member 1, projects a lug 8 formed at its outer
end with a grooved lip 9 for a purpose which
will presently be described.

Figures 2 and 3 shows a conventional battery
post having a conical portion 10 surmounted by
a cylindrical portion 11 as may also be seen in
Figure 1. The clamp plates are mounted suc-
cessively on the portion 11, first the plate 1 and
then the plate 5, as already indicated. It is to
be noted, however, that the plates are so mounted
that the knuckles 3 and 7 thereof project up-
ward and stand in alignment with each other,
as may be seen in Figures 1, 2 and 3. It has al-
ready been stated that the apertures 2 and 5 of
the plate are larger than the part of the post
which they receive, and it will be noted in this
connection that the part of the post here in-
volved is the cylindrical part 11 of uniform cir-
confumere. In the assembly in the manner de-
scribed, the lug 8 of plate 5 is received partly
beneath the hook 4 of plate 1, the hook serv-
ing as a hold-down member in this relation to
maintain the plates in mutual surface contact.

A headed bolt 12 is now passed through the
aligned knuckles 3 and 7, and the latter are
drawn together by means of a nut 13 on the
threaded end 14 of the bolt. The over-size of the
apertures 2 and 6 with relation to the post 11
affords a slight shifting of the plates 1 and 5 as
the nut 13 is tightened on the bolt 12. This
movement is in the nature of scissors action
wherein opposite edges of the apertures, respec-
tively, bite into the post 11 at substantially dia-
metrically opposite points, as shown in dotted lines in Figure 1. Finally, the usual cable is soldered in the lip 9 in the usual manner.

Due to the upstanding position of the lugs 3 and 1, the bolt and nut lie at a higher level than the plates 1 and 5. Consequently these plates do not interfere with the accessibility of the bolt and nut, and the clamp as a whole is thereby made easier than usual to apply and remove. In the event that the parts become corroded or coated, as is often the case in battery practice, to such an extent that the nut cannot readily be removed, the bolt itself may be cut at the space which remains between the knuckles 3 and 1, as indicated by the numeral 15 in Figure 1. A hack saw or bolt cutter may be used for this purpose. The various parts of the connector may be made of brass or other suitable metal dipped in tin or lead to prevent attack by the acid in the battery or the fumes issuing therefrom.

Although a specific embodiment of the invention has been illustrated and described, it will be understood that various alterations in the details of construction may be made without departing from the scope of the invention, as indicated by the appended claims.

What I claim is:

1. A battery connection comprising a pair of superimposed plates apertured to be received on a battery post, an upstanding knuckle formed on each plate and adapted for alignment with the other knuckle, a bolt passed through said knuckles for drawing the same together, a lug projecting from one edge of one of said plates, and a hook formed at the corresponding edge of the other plate and adapted to interlock with said lug for maintaining said plates in surface contact.

2. A battery connection comprising a pair of superimposed plates apertured to be received on a battery post, an upstanding knuckle formed on each plate and adapted for alignment with the other knuckle, a bolt passed through said knuckles for drawing the same together, a lug projecting from one edge of said plates, a hook formed at the corresponding edge of the other plate and adapted to interlock with said lug for maintaining said plates in surface contact, and a lip formed at the end of said lug for attachment of a cable thereto.

3. A battery connection comprising a pair of superimposed plates apertured to be received on a battery post, an upstanding knuckle formed on each plate and adapted for alignment with the other knuckle, a bolt passed through said knuckles for drawing the same together, a lug projecting from one edge of said plates, a hook formed at the corresponding edge of the outer plate and adapted to interlock with said lug for maintaining said plates in surface contact, said knuckles being spaced apart when the plates are superimposed, thereby exposing a portion of said bolts, in combination with a battery post received in the apertures of said plate and of smaller diameter than said apertures, whereby said plates exert a scissors-like action on said post when said bolt is tightened.

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