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BATTERY POST TERMINAL CLAMP

Filed Sept. 7, 1927

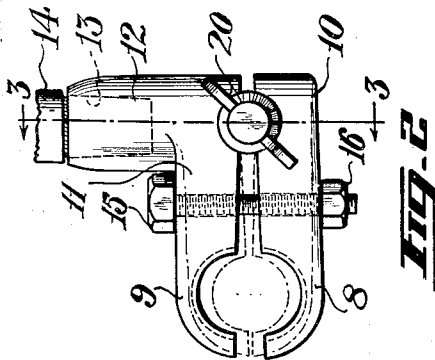


Fig. 2

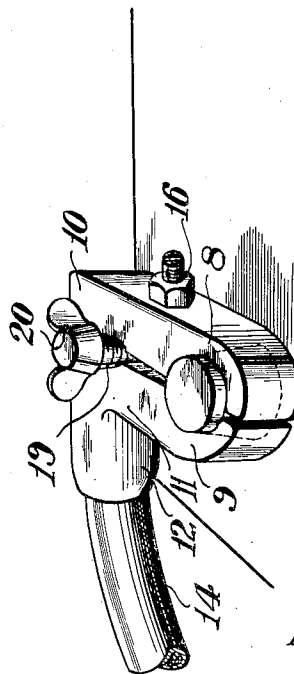


Fig. 1

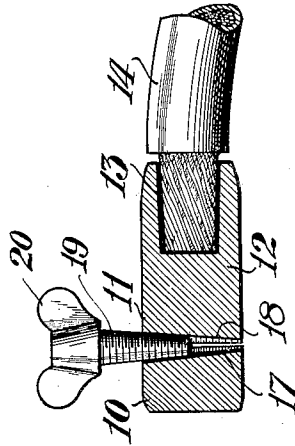


Fig. 3

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BATTERY-POST TERMINAL CLAMP

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This present invention relates to improvements in a battery post terminal clamp and appertains particularly to a novel means for adjustably closing the jaw members thereof to engage the battery post.

An object is to provide a clamp for the particular purpose described and for analogous uses that comprehends a variable fulcrum for the jaws with an added clamping set screw providing a compound leverage on the jaws resulting in a more powerful grip on the material or element to be held and affording a more rapid and accurate adjustment of the jaws.

A further object of the invention is the provision of a clamp of the nature and for the purposes described, that is characterized by structural simplicity and positive action, is readily adjustable, composed of few parts and capable of production at a reasonable figure, being thereby rendered commercially desirable.

To the accomplishment of these and related objects, as shall become apparent as the description proceeds, my invention resides in the construction, combination and arrangement of parts as shall be hereinafter more fully described, illustrated in the accompanying drawings and pointed out in the claim hereunto appended.

The invention will be best understood and can be more clearly described when reference is had to the drawings forming a part of this disclosure, wherein like characters indicate like parts throughout the several views.

In the drawings:—

Figure 1 is a perspective of a battery with my improved battery post terminal clamp attached;

Figure 2 is a detail plan view of the clamp; and

Figure 3 is a section thereof taken on the line 3—3 of Figure 2.

Though this clamp is shown and hereinafter described as a battery post terminal clamp and has been particularly fashioned for that purpose and possesses many singular advantages when so used, it is obvious and is to be clearly understood that

a clamp, involving the principles here disclosed, with minor changes adapting it to the work for which its employment is intended, could be designed for use in many and diverse fields.

The clamp that is illustrated and now described in detail comprises a pair of semi-circular or arcuate jaws 8 and 9, each with a shank part 10 and 11, respectively. These shanks are of substantially equal length but differ from one another in that the latter shank 11 terminates in a shoulder 12, disposed at substantially right angles to the shank proper, that is terminally recessed, as at 13, to receive the wire or cable 14 secured therein in any conventional or approved manner.

A transverse connecting bolt 15 with a co-operating nut 16 on its outer end passes through the jaw shanks 10 and 11 near the jaws, the bolt head or the nut being optionally held against rotation by seating to laterally engage the inner side of the shoulder 12. This bolt 15, it will be observed, is disposed parallel with and in the same plane as the cable receiving recess 13.

The jaw shanks 10 and 11 between the bolt 15 and the ends thereof remote from the jaws 8 and 9 are thread-cut on confronting sides with a tapered tap, as at 17 and 18, to receive therebetween a wedge screw 19 with a wing nut head 20 adapted to be screwed down therebetween with its axis perpendicular to the horizontal plane of the jaws and at right angles to the axis of the bolt 15. Thus by adroit yet simple manipulation or adjustment of the bolt and nut 15 and 16 and the wing screw 19, the jaws 8 and 9 can be advanced toward or away from one another and brought to lie at different relative angles so that the work or material or element to be held may be engaged by jaws parallel to one another or at an angle and the tightness of the grip of the jaws thereon can be adjusted minutely and the strength of the bite is excessive. It is an additional feature of this invention that the regulation of the jaws of my improved clamp is accomplished by adjustments operated on in different planes thus especially adapting it for the use on battery posts where

the major or original adjustment is made by the setting of the transversely disposed nut and bolt, lying in a horizontal plane, and with a wrench or spanner while the minute and
5 final clamping of the jaws on the battery post is subsequently accomplished by a few quick turns of the ever readily accessible wing screw that is vertically disposed and most convenient.

10 Just as the positioning of the tapered wedge screw in the jaw shanks to the rear of the transverse connecting bolt closes the jaws on being screwed down, so the forcing in of the same wedge screw at a point between the jaws
15 and the bolt, the latter acting as a fulcrum, would tend to spread the jaws and would afford an easy way to open the clamp if the jaws thereof inclined to resist spreading or were adhered to the material engaged there-
20 between.

From the foregoing description taken in connection with the accompanying drawings, it will be manifest that a battery post terminal clamp is provided that will fulfil all the
25 necessary requirements of such a device, but as many changes could be made in the above description and many apparently widely different embodiments of my invention constructed within the scope of the appended
30 claim without departing from the spirit or scope thereof, it is intended that all matters contained in the said accompanying specification and drawings, shall be interpreted as illustrative and not in a limited sense.

35 Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:—

As a new article of manufacture, a battery post clamp including a pair of shanks having
40 opposed semi-circular or arcuate jaws in their complementary faces adjacent one end of said shanks; a shoulder extended at right angles from one of said shanks at the other end thereof and provided with a terminal recess to receive a wire or cable; a transverse connecting
45 bolt extended through the centre of said shanks in a line parallel to the axis of said shoulder; said shanks having complementary opposed arcuate and tapered threaded sockets
50 in their complementary faces opposite said shoulder; and a wedge screw operable in said sockets in a line at right angles to the axis of said shoulder to fulcrum said shanks on said bolt and tighten the jaws of said clamp on
55 said battery post.

In testimony whereof I hereunto affix my signature.

HENRY A. RENNHACK. [L. S.]