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H. E. WALKER

END SCREW TERMINAL

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Fig. 1.

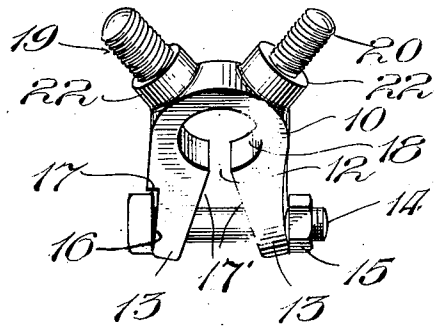
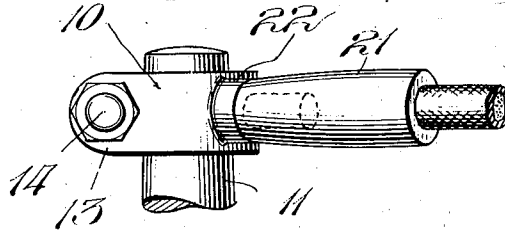


Fig. 2.



Inventor:
Herbert E. Walker
by William H. Hall
Attorney

UNITED STATES PATENT OFFICE.

HERBERT E. WALKER, OF CHICAGO, ILLINOIS.

END-SCREW TERMINAL.

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To all whom it may concern:

Be it known that I, HERBERT E. WALKER, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in End-Screw Terminals; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this specification.

This invention relates to a novel end screw terminal or connector adapted for detachable attachment to a storage battery post and provided with screw threaded means for attaching thereto terminal plugs of cables through which the battery is discharged.

The object of the invention is to provide a universal terminal or connector for attachment to a battery post in that the same device is capable for use with cable terminal plugs of different dimensions. Terminal cable plugs are axially threaded to thread over lugs or extensions of terminals or connectors, and in practice the threaded bores of these plugs vary in diameter. Therefore, when using a terminal or connector fitting which has but a single threaded lug for connection to a cable terminal plug, it is necessary to change the terminal or connector fitting when cable terminal plugs of varying screw threaded bores are used. By providing the terminal or connector fitting with a plurality of lugs of different diameters a single connector or terminal fitting can be used as a universal fitting.

Further objects of the invention are to otherwise improve and simplify storage battery terminal or connector fittings.

The invention consists in the combination and arrangement of the parts shown in the drawings, described in the specification, and is pointed out in the appended claim.

In the drawings:

Figure 1 is a perspective view of an end screw terminal or connector fitting embodying my invention.

Figure 2 is a side view thereof showing it clamped on a battery post and with one of its lugs connected to a cable terminal plug.

As shown in said drawings, 10 designates the ring-like body of the connector fitting.

It is provided with a through opening usually tapered to fit over the tapered battery post 11. The said ring is open at 12 so that it may be deformed under clamping pressure to fit with its inner face in good electrical contact with the exterior face of the post. Clamping pressure may be exerted on the ring at the sides of the split or opening 12 through the medium of arms 13, 13 and a bolt 14 which extends through openings at the ends of the arms and across the space between the arms; the head of the bolt bearing against the outer face of one of the arms and the nut 15 of the bolt bearing against the outer face of the other arm. The arm 13 against which the bolt head bears is cut away at 16 to provide a shoulder 17 for co-action with the bolt head to prevent the latter from turning when the nut is tightened on the bolt. The inner faces 17' of said arms are beveled or inclined from the outer ends of the arms to the inner face 18 of the bore of the fitting, the inner plain faces of the arms meeting the curved faces of said bore at sharp angles. This construction enables the body of the connector fitting 10 to be wrapped closely about the post 11 to afford good electrical contact between the parts.

19, 20 designate lugs which are integral with and stand outwardly from the outer curved face of the ring-like member of the fitting. Each of said lugs is threaded and adapted to enter and to engage the threaded bores of cable terminal plugs 21, as indicated in Figure 2. Both of said lugs are thickened at their inner ends to provide shoulders 22 to constitute stops against which the inner end faces of the cable terminal plugs abut when assembled with the connector fitting to further establish good electrical contact between the connector fitting and plug.

Said lugs 19, 20 are of different diameters to receive cable plugs having different diameter threaded bores. In practice, one of the lugs 19, 20 usually is $\frac{5}{16}$ " in diameter, while the other is $\frac{3}{8}$ " in diameter. Thus the arrangement constitutes a universal terminal or connector fitting which is adapted to different standard cable terminal plugs. So far as this feature of the invention is concerned, the fitting may assume different forms for connection to a battery

post or other current-carrying part without departure from the spirit of the appended claim.

I claim as my invention:

- 5 An end connector screw terminal for storage battery posts comprising a body having means to detachably fit it to a battery post and to connect it in current carrying engagement with said post, and a plurality of

outstanding terminal plug lugs permanently spaced and integral with said body and of different diameters and having standard external screw threads adapted to standard, internally threaded terminal plugs. 10

In witness whereof I claim the foregoing as my invention I hereunto append my signature this 1st day of March, 1923. 15

HERBERT E. WALKER.