E. GERHARDT, JR.

ELECTRIC TERMINAL.

APPLICATION FILED OCT. 15, 1908.

967,631. Patented Aug. 16, 1910.

Fig. 1.

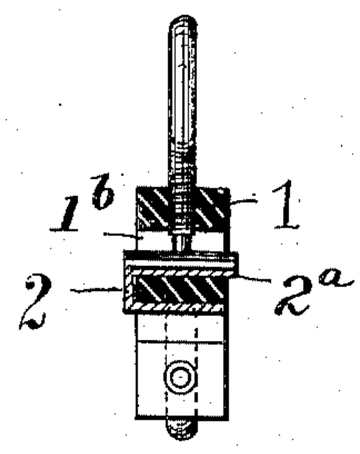


Fig. 3a

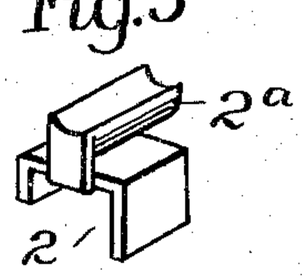


Fig. 2.

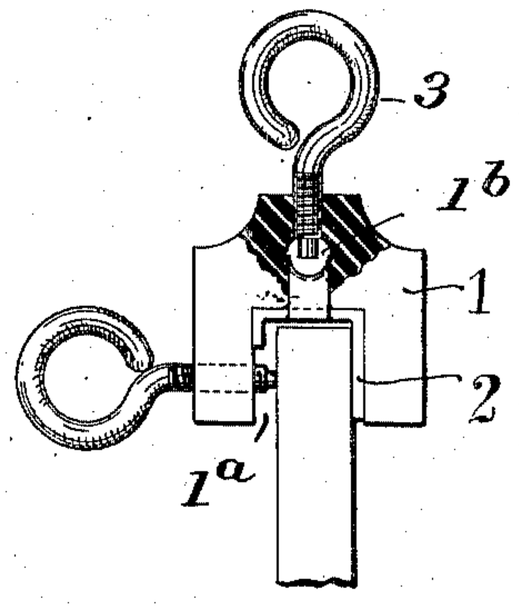


Fig. 3.

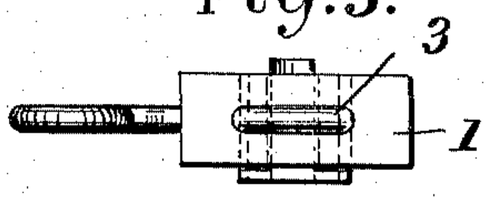


Fig. 4.

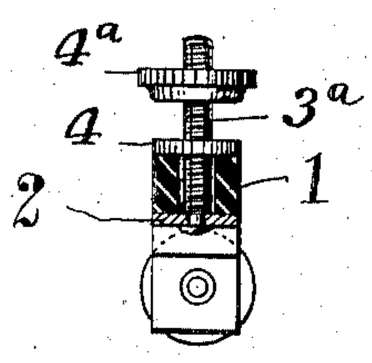


Fig. 5.

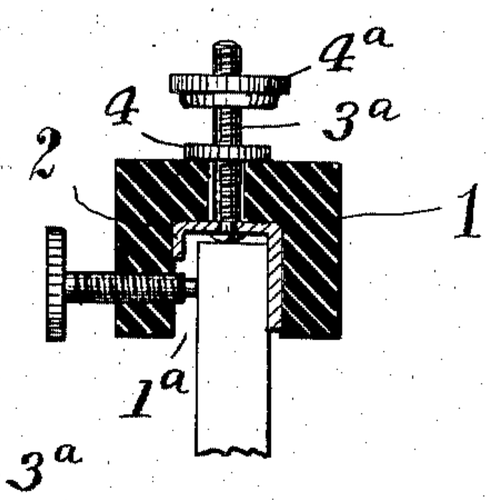
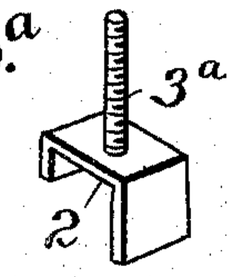


Fig. 5a



Witnesses:
B C Rust
J. J. McCarthy

Inventor:
Edward Gerhardt Jr
by Foster Freeman Watson & Coit
Attorneys.

UNITED STATES PATENT OFFICE.

EDUARD GERHARDT, JR., OF MAUER, NEAR VIENNA, AUSTRIA-HUNGARY.

ELECTRIC TERMINAL.

967,631. Specification of Letters Patent. Patented Aug. 16, 1910.

Application filed October 15, 1908. Serial No. 457,892.

To all whom it may concern:

Be it known that I, EDUARD GERHARDT, Jr., of 38 Wienerstrasse, Mauer, near Vienna, in the Empire of Austria-Hungary, engineer, have invented Improvements in Electric Terminals; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The subject-matter of the present invention is an improved electric terminal.

Terminals are already well-known which consist of insulating material provided with an electrically conducting insertion.

The present invention relates to a terminal of this kind and consists in the electrically conducting insertion being formed by a bow which can be pushed into the body of the terminal and which, if desired, can directly carry the terminal screw.

Terminal screws customary heretofore and consisting entirely of metal have, as is known, the serious defect that they are corroded by verdigris, or their conducting surfaces are made inoperative on account of deposits on them.

In accordance with the present invention the electrically conducting parts are formed of a readily exchangeable bow which is pushed into the body of the terminal and held in its position for use in consequence of its elasticity. According to the shape of the body of the terminal in each instance this bow is either provided with a resilient hook-shaped lug which engages in the hole into which the conductor is inserted and holds the insertion immovable in its position for use, or the insertion carries the terminal screw directly and is held in its position by a nut screwed on the same supported against the body of the terminal.

In order that the invention may be clearly understood reference will be had to the accompanying drawing in which two embodiments are represented by way of example, and in which like characters of reference indicate corresponding parts in all the views.

Figures 1, 2 and 3 are vertical section, side elevation and plan respectively of one form of terminal, whereas Fig. 3ª is a perspective view of a member of the terminal detached. Figs. 4 and 5 are end elevation, partly in section, and side elevation, partly in section, respectively of another form. Fig. 5ª is a perspective detail of a member of the terminal shown in Figs. 4 and 5.

Referring to the drawing, the body 1 of the terminal is formed of insulating material having in one face a socket or recess adapted to receive a battery terminal or other electrical conductor.

2 designates a contact member, the body of which is substantially U-shaped in cross section, providing two yielding or spring-like arms connected by a transverse member or head. The member 2 is of such size that it is adapted to fit within the recess 1ª of the insulating body 1 and will be held in position therein by the action of its spring-like arms in bearing against opposite walls of such recess. Preferably as shown, the arms of the member 2 are of different lengths, one providing a relatively long contact surface against which the battery terminal or conductor can be pressed.

In the embodiment of the invention illustrated in Figs. 1 to 3ª the member is provided with an auxiliary support comprising a hook 2ª which may be formed integral with the top or connecting member of the contact and extends through a passage 1ᵇ in the block 1. This hook-like member furnishes the surface against which another conductor may be pressed by the screw 3.

In Figs. 4, 5 and 5ª the contact member 2 is provided with a screw 3ª which is connected with the head of the contact member and extends outwardly through a suitable passage in the body 1. A nut 4 engaging said screw and bearing against the body 1, acts to securely hold the member 2 within the socket in the body 1. By means of a second nut 4ª, a line wire or conductor can be clamped against the nut 4 and thereby held in electrical connection with the contact member 2.

It is clear that the insertion according to the present invention can be employed not only with battery terminals as represented, but also in the case of all, variously shaped electrical terminals for conductors, and owing to the part of the terminal which is electrically conducting being able to be readily exchanged, the well-known defect that the terminal becomes unusable in consequence of verdigris on it is avoided, since, by exchanging the defective part, the termi-

nal can be made usable again, as only the electrically conducting insertion can be attacked by verdigris.

What I claim as my invention and desire to secure by Letters Patent is:

1. The combination with a body of insulating material having formed therein two passages both adapted to receive conductors, of an electric terminal having two arms or members engaging opposite walls of one of said passages, and a third member extending from one edge of the connection between said arms into the other of said passages.

2. The combination with a body of insulating material having a socket opening through one face and adapted to receive a conductor, of a terminal substantially U-shaped in cross section fitted within said socket and having its arms bearing against opposite walls thereof, said arms being entirely within the socket and one adapted to contact with a conductor inserted in the socket of said insulating body, and means extending from the terminal between said arms and adapted to be engaged with a conductor.

3. The combination with a body of insulating material having in one face a socket, adapted to receive a conductor, and at one side of said socket a passage which is separated from the socket by the insulating body, of an electric terminal having a portion in said socket, adapted to contact with a conductor extending therein, and a lateral projection extending into the aforesaid passage in the body of insulating material.

4. The combination with a body of insulating material having in one face a socket, adapted to receive a conductor, and at one side of said socket a passage, of an electric terminal having a portion in said socket, adapted to contact with a battery element or conductor extending therein, and a lateral projection extending into the aforesaid passage in the body of insulating material, and a screw extending into said passage and adapted to hold a conductor inserted therein in contact with said projection on the terminal.

5. The combination with an insulating support having therein an opening adapted to receive a conductor, of a terminal having a body adapted to engage opposite walls of said opening, and bear against a conductor therein, and a projection that extends beyond said opening and has its free end bent into engagement with the insulating support to assist in holding the terminal in the support and providing a contact for a second conductor.

6. The combination with an insulating support having therein an opening adapted to receive a conductor, of a terminal having a body adapted to engage opposite walls of said opening, and bear against a conductor therein, and an integral projection that extends beyond said opening and into engagement with the insulating support whereby it assists in holding the terminal in the support and provides a contact for a second conductor.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDUARD GERHARDT, Jr.

Witnesses:

Albin Schiller,

August Fuzzer.