

(No Model.)

F. A. & N. VON ALIMONDA.
ELEMENTS OF GALVANIC BATTERIES.

No. 542,953.

Patented July 16, 1895.

Fig. 1.

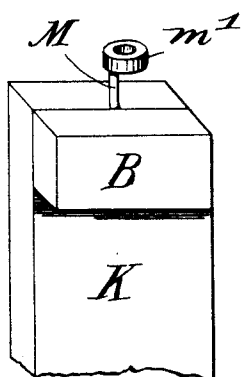
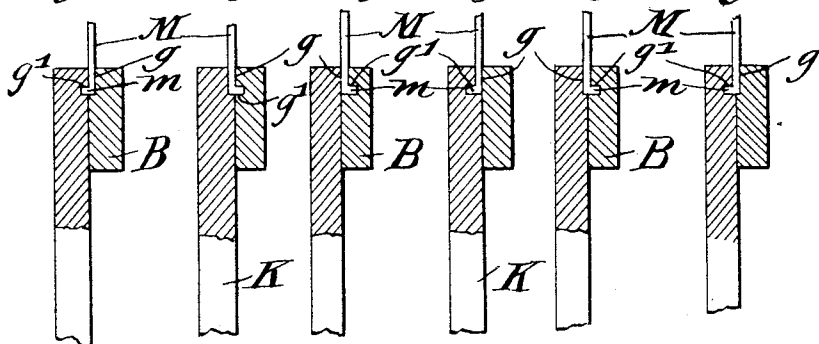


Fig. 2. Fig. 3. Fig. 4. Fig. 5. Fig. 6. Fig. 7.



Inventors.

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By Henry Ott Atty.

Witnesses.

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ELEMENTS OF GALVANIC BATTERIES.

SPECIFICATION forming part of Letters Patent No. 542,953, dated July 16, 1895.

Application filed October 30, 1894. Serial No. 527,473. (No model.)

To all whom it may concern:

Be it known that we, FRANZ AUGUST VON ALIMONDA and NINO VON ALIMONDA, subjects of the Emperor of Austria-Hungary, residing at Castello Alimonda, near Sagrado, in the district of Göritz and Gradiska, in the Empire of Austria-Hungary, have invented certain new and useful Improvements in the Elements of Galvanic Batteries; and we 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention has relation to connections for the electrodes of galvanic and other batteries, and particularly for the carbon electrodes; and it has for its object the provision of means whereby the leading-in wire may be readily secured to such electrodes, as will now be fully described, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a portion of a carbon electrode provided with our improved connecting device. Figs. 2 to 7, inclusive, are sectional views illustrating various modes of securing the connecting-wire to the electrode.

In the figures, K indicates the electrode, and M the leading-in wire bent at right angles at one end to form an anchor *m*. The wire M may be anchored to the carbon electrode in various ways, either by forming a groove *g* in a plate or block B and a recess or socket *g'* in the carbon for the reception of said wire and its bent end or anchor *m*, as shown in Fig. 2, or this arrangement may be reversed, as shown in Fig. 3, or both groove and recess or socket may be formed either in plate B, Fig. 4, or in electrode, Fig. 5, or said groove may be formed partly in the electrode and partly in plate B, with the socket in one or the other, as desired, and as shown in Figs. 6 and 7. In either construction the wire M will be held against vertical, lateral, and rotary displacement, as will be readily understood.

The plate B should of course be of some material other than metal and may be secured

to the electrode in any desired manner—as by cementing or gluing, as by means of marine glue or other suitable adhesive.

In practice we preferably employ a carbon plate B and embed the wire between said plate and the electrode while the material is in a plastic condition or during the molding of the electrode, said wire being embedded between the electrode and retaining-plate during the casting of the same, the said plate forming an integral part of the electrode.

It will be seen that the mode of rigidly connecting the leading-in wire is a very simple and a very efficient one. The wire is held against displacement in any direction, hence admits of a ready connection or disconnection with a conductor when the latter is, for instance, provided with a plug and the leading-in wire M with a plate *m'*, Fig. 1, having formed therein a bearing for the reception of such plug. By means of this arrangement a series of conductors—as, for instance, such as serve to connect a series of elements of a galvanic or other battery to a line-wire—may be simultaneously connected or disconnected, provided the conductors are sufficiently rigid. On the other hand, the described mode of connecting the leading-in wire to the carbon electrodes admits of the use of comparatively short wires, while the expensive binding-posts and the means for securing the same to the electrode are dispensed with.

It will of course be understood that the described means for connecting leading-in wires to electrodes is also applicable to metallic electrodes—as, for instance, zinc electrodes; but

What we claim is—

1. The combination of a carbon electrode, a retaining plate of the same material as and forming practically an integral part of the electrode, and a leading in wire having its end bent at right angles to form an anchor, said wire anchored in the material between the electrode and retaining plate, for the purpose set forth.

2. The combination with a carbon electrode provided with a semi-cylindrical groove *g* and a retaining plate of the same material as and forming practically an integral part of the

electrode, said plate having a corresponding groove and a recess g' at the lower end thereof at right angles thereto, of a leading in wire having one end bent at right angles, said wire
5 seated in the aforesaid grooves with its bent end projecting into the said recess, for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

FRANZ AUGUST VON ALIMONDA.
NINO VON ALIMONDA.

Witnesses:

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