C. FELDMANN & J. HERZOG.

MEANS OF OBVIATING THE DELETERIOUS EFFECTS OF OSCILLATIONS.

APPLICATION FILED JAN. 30, 1907.

898,858. Patented Sept. 15, 1908.

Fig. 1.

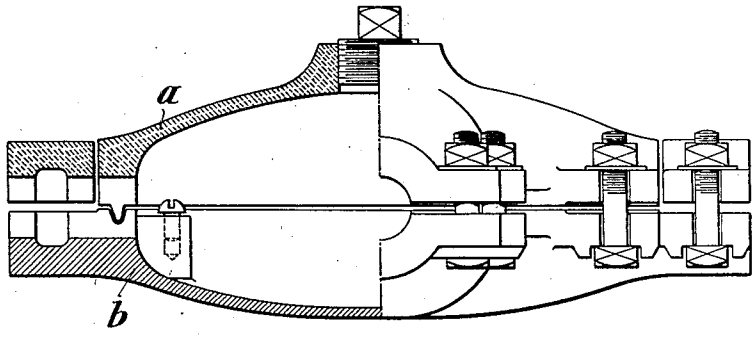
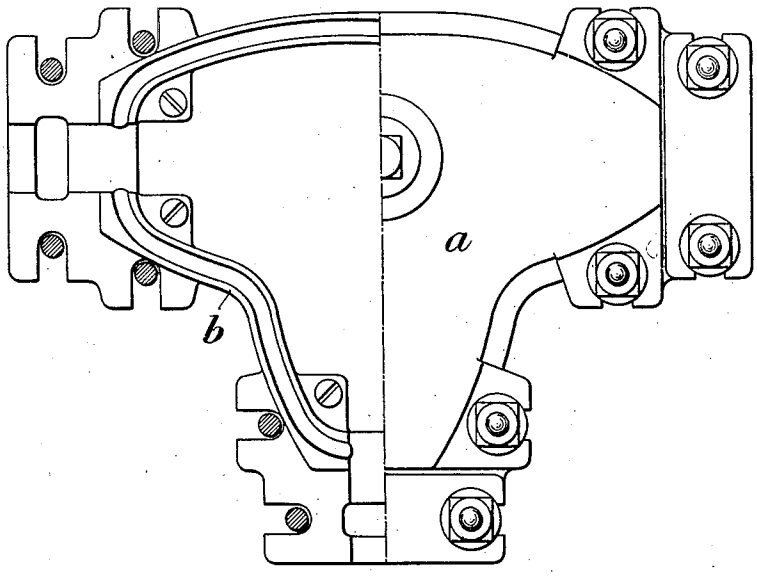


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

CLARENCE FELDMANN, OF DELFT, NETHERLANDS, AND JOSEF HERZOG, OF BUDAPEST, AUSTRIA-HUNGARY.

MEANS OF OBVIATING THE DELETERIOUS EFFECTS OF OSCILLATIONS.

No. 898,858. Specification of Letters Patent. Patented Sept. 15, 1908.

Application filed January 30, 1907. Serial No. 354,890.

To all whom it may concern:

Be it known that we, CLARENCE FELDMANN, professor, residing at Delft, Netherlands, and JOSEF HERZOG, chief engineer, residing in Budapest, Austria-Hungary, have invented certain new and useful Improvements Relating to Improved Methods of Obviating the Deleterious Effects of Oscillations, of which the following is a full, clear, and exact description.

The object of the invention is to do away with or weaken the injurious operation of oscillations occurring in the iron sheathed cable systems. To this end the armor parts, such as sleeves, etc. are made of an unmagnetic material. According to the invention the entire sleeve, etc. may be made of such material, or the sleeve may be partly of unmagnetic and partly of magnetic material. The preferred material is an unmagnetic metal. Such armor parts so constructed cause not only a considerable reduction of the inductance but also have the great advantage of mechanical rigidity and compactness which is important in underground systems and others.

In the drawing wherein we have shown as an example of the invention a distribution sleeve such as is commonly used for the laying of electric wires, Figure 1 is a side view of the sleeve partly in section; Fig. 2 is a plan of the same with one-half of the upper part removed.

In the example shown the upper *a* of the sleeve is made of unmagnetic material, while the lower part *b* consists of iron or the like. The unmagnetic material may be bronze, brass, nickel, steel mixture, or any other unmagnetic alloy. Of course, the entire sleeve may be made of unmagnetic material if desired. By use of a sleeve or similar armor the magnetic circuit around the cable is less well closed, so that the inductance is reduced. The employment of such unmagnetic cable sleeves and boxes, by reducing the increase of tension during a short circuit or other cable defect, greatly increases the security of use and length of life of the cable. We have found that by such use many dangers can be avoided which were formerly ascribed to defects in manufacture or to other causes.

What we claim as our invention, and desire to secure by Patent is:

1. An iron-sheathed cable system having its fittings constructed with non-magnetic metal.

2. An iron-sheathed cable system having its fittings constructed with their upper parts of non-magnetic metal.

In witness whereof, we have hereunto signed our names in the presence of two subscribing witnesses.

CLARENCE FELDMANN.
JOSEF HERZOG.

Witnesses:
AUGUST F. MCCOUCH,
GROCHEN MOUWER.