F. MORE.

ELECTRIC WIRE CONNECTOR.

APPLICATION FILED FEB. 25, 1908.

922,309. **Patented May 18, 1909.**

Fig. 1.

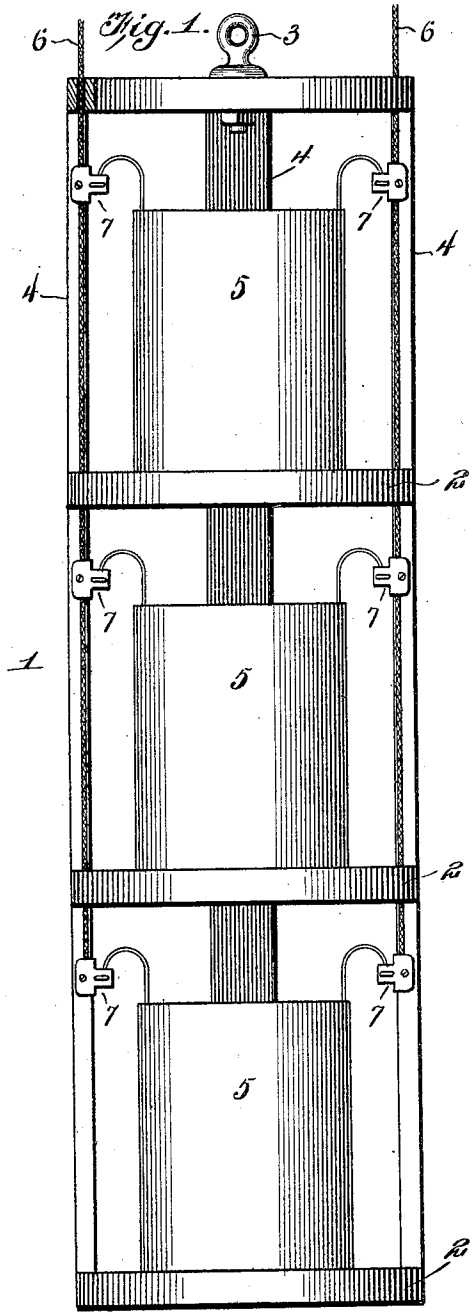


Fig. 2.

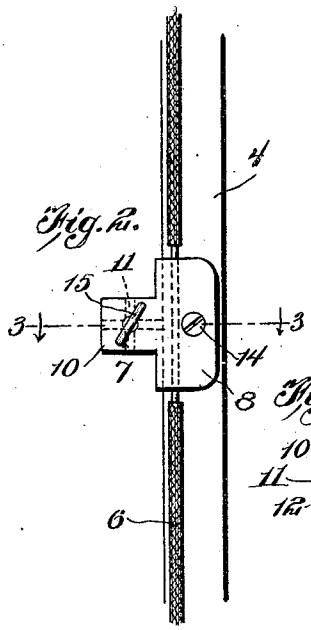


Fig. 3.

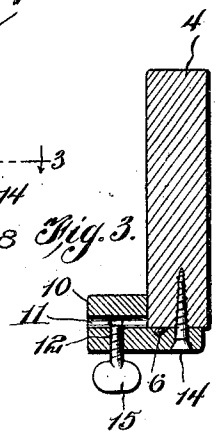


Fig. 4.

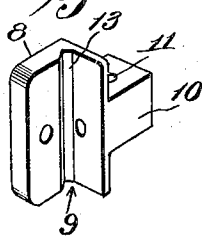
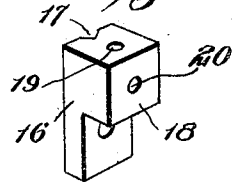


Fig. 5.



Witnesses

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ELECTRIC-WIRE CONNECTOR.

No. 922,309. Specification of Letters Patent. Patented May 18, 1909.

Application filed February 25, 1908. Serial No. 417,645.

To all whom it may concern:

Be it known that I, FRED MORE, a citizen of the United States, residing at Kingston, in the county of Ulster and State of New York, have invented new and useful Improvements in Electric-Wire Connectors, of which the following is a specification.

This invention relates to electric wire connectors, and the object of the invention is to produce a device of this character primarily intended for disposing of branch wires for connecting the cells of an electric battery chute to the main wires which are used for supplying track currents on electric automatic signaling devices, which is so constructed and arranged as to entirely obviate the liability of short circuit from the wires of the cells contacting with each other or contacting with the walls of the chute, which is usually constructed of cast iron.

Another object of the invention is to provide an electric wire connector for battery cells, which will dispense with the necessity of splicing the wire connections and with the usual binding posts employed upon the zincs the cells contain.

A still further object of the invention is to secure the wires stationary to the battery chute elevator, with a connector by means of a threaded element.

With these and other objects in view the invention resides in the novel construction of electric wire connectors hereinafter fully described and claimed.

In the drawings, Figure 1 is a side elevation of a battery chute elevator, illustrating a series of cells connected with the main wires by my improvement. Fig. 2 is an enlarged partial elevation of one of the arms of the elevator illustrating the application of my invention. Fig. 3 is a horizontal section upon the line 3—3 of Fig. 2. Fig. 4 is a detail perspective view of my improvement. Fig. 5 is a similar view of a slight modification.

In the drawings the numeral 1 designates a battery chute elevator, having a series of compartments provided with floors 2. The elevator employed in the present construction is constructed of wood or some other suitable non-conducting material, and the top of the elevator is provided with a suitable eye 3, by which the device is attached to a flexible element whereby it may be elevated or lowered within a well if desired. The depending walls or arms 4 of the elevator are preferably three in number, so as to provide an opening in one of the faces of the device, whereby a series of cells 5, may be readily positioned upon the floors of the structure. The rear wall 4 may be of any suitable thickness, but the side walls are composed of comparatively thin strips centrally positioned upon the top and floors of the structure. The top of the structure is provided with openings adjacent one of the sides of side walls of the structure, and these openings are adapted for the reception of main wires 6, adapted for the conducting of electricity to the signals.

Positioned upon the side walls 4, and in line with the vertically extending wires 6 are a series of connectors 7. These connectors comprise a body portion 8, having an L-shaped cut away portion 9, and, an extending portion. This extending portion 10 is provided with a longitudinal opening or bore extending the entire length of the projection and communicating with the inner face of the connector to which the projection 10 is attached. The projection 10 is also provided with a vertical opening 11 extending vertically through the projection and communicating with the longitudinal opening. A threaded aperture 12 is provided upon one face of the extension, and adapted to extend transversely thereto and communicate with the vertical and transverse openings of the extension 10. The inner face of the L-shaped cut away portion 9 is provided, adjacent the point of meeting of the L-shaped arms or walls, with a vertical channel 13, and the body portion of the connector is also provided with openings adapted for the reception of suitable elements, by which the connector may be secured upon the side arms 4 of the chute. The main wires 6, are adapted to be provided with a suitable insulation, but at their point of contact with the connectors 8, this insulation is removed so that the wire will have free contact with the connector and be securely retained within the vertical channel 13 by the threaded retaining elements 14, which are adapted to secure the connector to the chute. When the wires 6 are positioned upon the connectors, the wires of the cells are inserted either within the vertical or transverse opening

provided within the extension 10 of the connector, and are secured in positive connection by a suitable thumb screw 15, engaging the transverse threaded aperture and the wires of the cells.

In Fig. 5 I have illustrated a slightly modified form of connectors. In this figure the inner face of the body portion 16 is provided with a vertical channel 17, adapted for the reception of the main wire, the body is also provided with suitable openings, adapted for the reception of securing elements by which it is attached and with an enlarged portion 18, provided with a vertical opening 19 adapted for the reception of the wires, and a transverse threaded opening 20, adapted for the reception of a suitable thumb screw whereby the wire is securely retained in contact with the connector.

From the above description it will be noted that I have provided a simple, cheap and effective device for connecting electric cells with main wires, one which entirely obviates the liability of short circuiting by contacting with the iron walls of any ordinary battery chute.

Having thus fully described the invention what is claimed as new is:

1. An electric connector provided with right angular walls, the inner face of one of the walls being provided with a channel and having suitable openings for retaining elements, the opposite wall having an extension provided with intersecting angular openings, one face of the projection being provided with a threaded opening connecting with the right angular openings at their point of intersection, and a threaded element for the threaded opening.

2. A connector having a channel, an enlargement upon the connector, the enlargement being provided with openings upon its side faces and having a threaded opening upon its top face communicating with the openings upon the side faces, and a threaded element for the threaded opening.

In testimony whereof I affix my signature in presence of two witnesses.

FRED MORE.

Witnesses:

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HUMPHREY EVERETT.