No. 860,861. PATENTED JULY 23, 1907.

E. C. FLORY.

TELEPHONE CABLE TERMINAL.

APPLICATION FILED AUG. 28, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

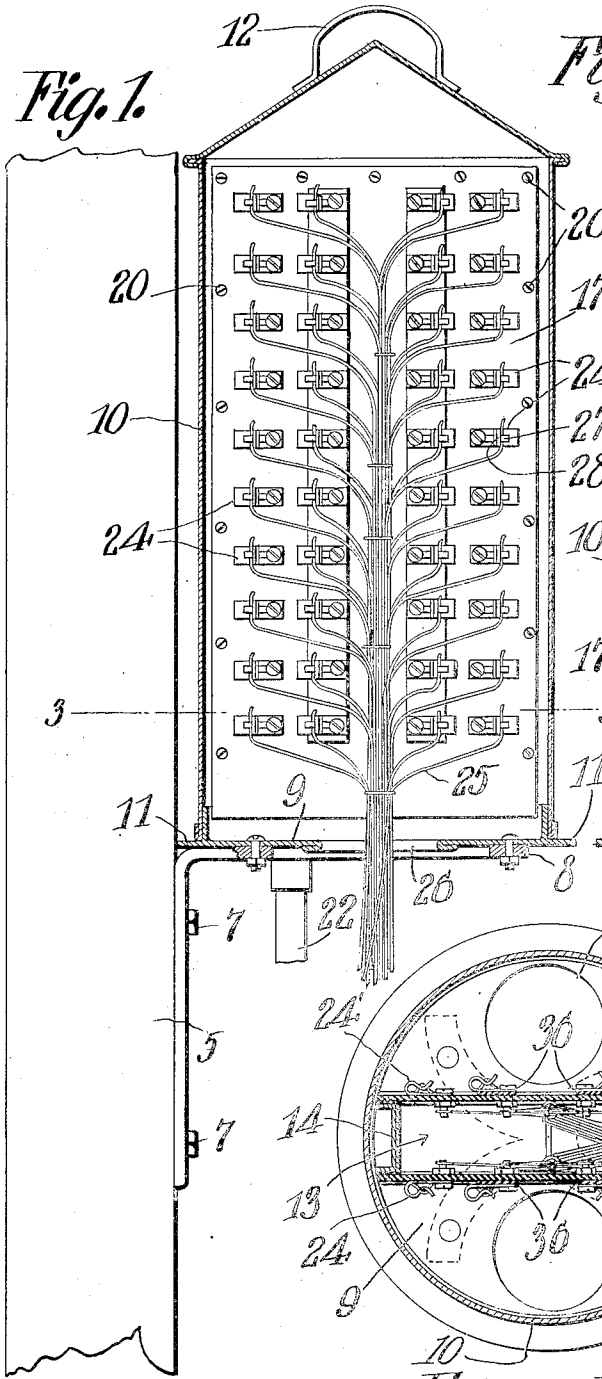


Fig. 2.

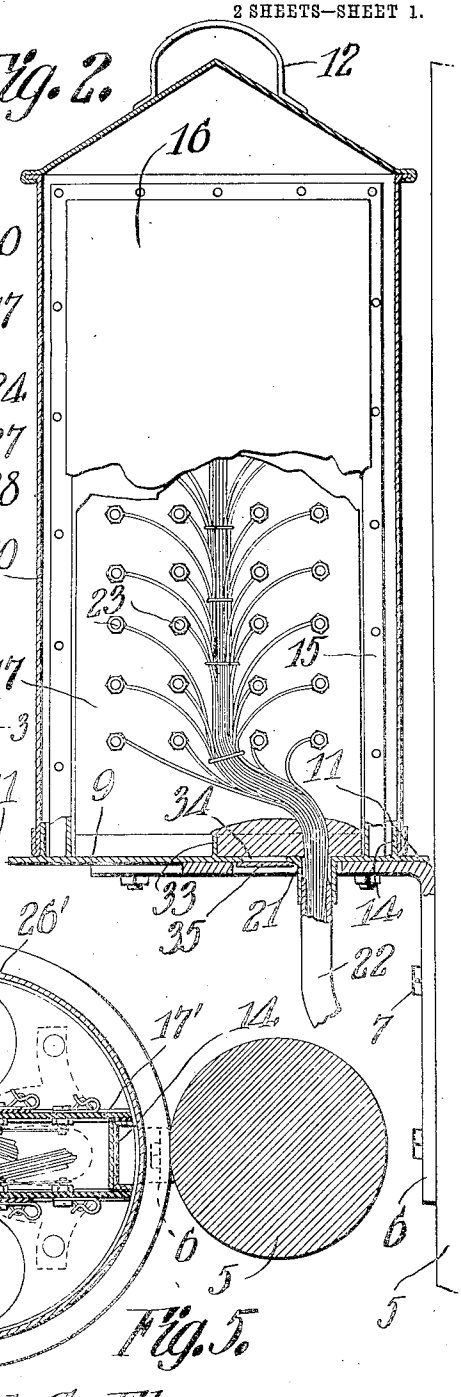


Fig. 5.

WITNESSES:

E. G. Stewart

L. T. Tucker

Edward C. Flory, INVENTOR.

By Cushman & Co.

ATTORNEYS

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2 SHEETS—SHEET 2.

Fig. 3.

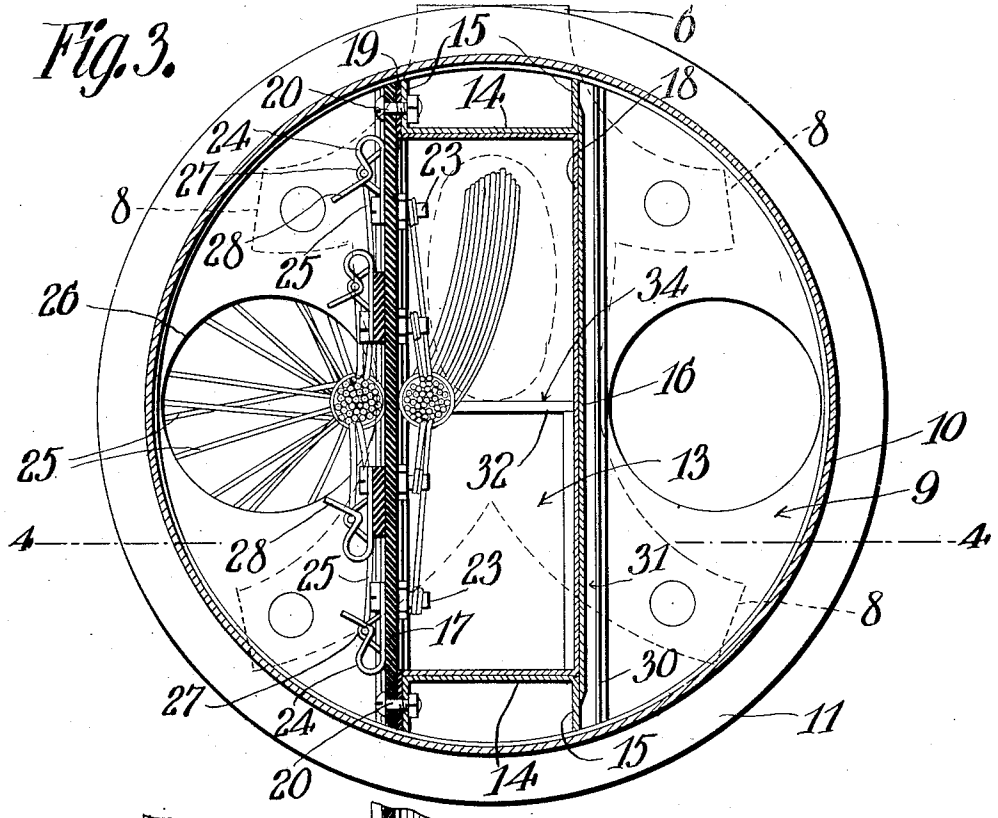
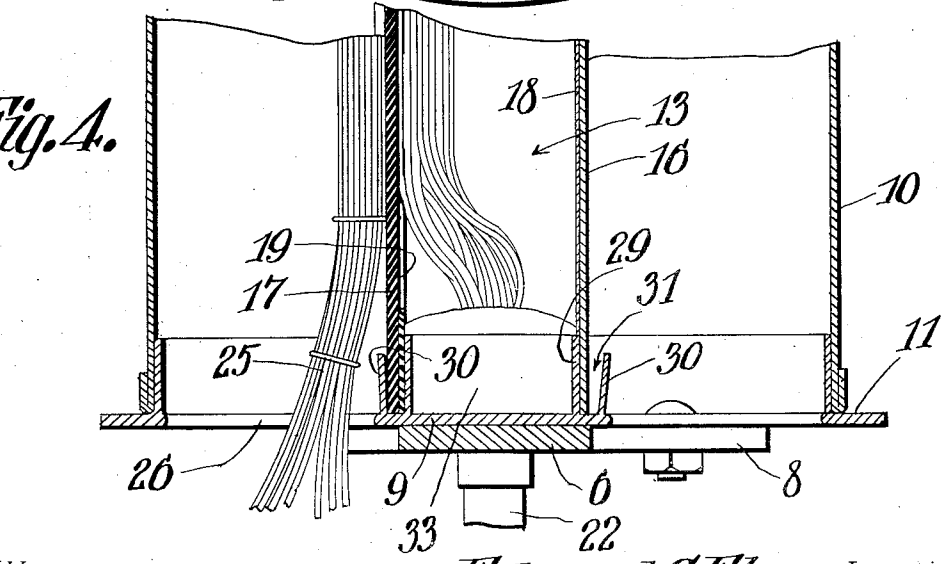


Fig. 4.



WITNESSES:

E. F. Stewart

L. A. Acker

Edward C. Flory, INVENTOR,

By C. A. Snow & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

EDWARD CHARLES FLORY, OF SANTA BARBARA, CALIFORNIA.

TELEPHONE CABLE-TERMINAL.

No. 860,861. Specification of Letters Patent. Patented July 23, 1907.

Application filed August 28, 1906. Serial No. 332,408.

To all whom it may concern:

Be it known that I, EDWARD CHARLES FLORY, a citizen of the United States, residing at Santa Barbara, in the county of Santa Barbara and State of California, have invented a new and useful Telephone Cable-Terminal, of which the following is a specification.

This invention relates to terminal cables or boxes of that general class designed for attachment to a telegraph pole or other suitable support and used for distributing overhead conductors or wires to the several telephone, telegraph or other electrical instruments at any particular station.

The object of the invention is to provide a distributing box having a moisture proof compartment for the reception of the terminals of the lead covered cable, and further to provide means for preventing the entrance of moisture at the point where the cable enters the compartment.

A further object is to form the wire-receiving compartment with a removable wall or cover whereby an additional contact or terminal plate may be placed in position on the opposite side of the compartment, thus doubling the capacity without increasing the size of the box.

A still further object of the invention is to generally improve this class of devices so as to increase their utility, durability and efficiency.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings forming a part of this specification: Figure 1 is a longitudinal sectional view of a cable distributing box constructed in accordance with my invention showing the same in position on a telegraph pole. Fig. 2 is a similar view showing a portion of the rear wall of the compartment broken away to expose the terminals of the cable wires. Fig. 3 is a transverse sectional view taken on the line 3—3 of Fig. 1. Fig. 4 is a similar view taken on the line 4—4 of Fig. 3. Fig. 5 is a transverse sectional view showing the rear wall of the compartment removed and an additional contact plate placed in position thereon.

Similar numerals of reference indicate corresponding parts in all of the figures of the drawings.

The improved distributing box or terminal head is designed for attachment to a telegraph pole or other suitable support and in the present instance is shown supported in position on a telegraph pole 5 by means of a supporting bracket 6 one end of which is bolted or otherwise rigidly secured to the pole, as indicated at 7 while its opposite end is bent at right angles thereto and provided with a plurality of laterally extending arms 8 which are riveted, bolted or otherwise rigidly secured to the base 9 of a casing or housing 10.

The casing or housing 10 is preferably cylindrical in shape, as shown, and is normally supported on a flange 11 extending laterally from the base plate 9, said casing being closed at its upper end and provided with a terminal handle 12 by means of which the casing may be conveniently positioned on or removed from the base.

Arranged within the casing or housing 10 is a water proof compartment or chamber 13 the end walls 14 of which are bolted, soldered or otherwise rigidly secured to the plate 9 and provided with laterally extending flanges 15.

Detachably secured to the flanges 15 on one side of the end walls 14 is a removable plate 16 which forms a closure for one side of the compartment 13, the opposite side of the compartment being normally closed by a plate 17 preferably formed of vulcanized fiber, rubber or other suitable insulating material, as shown.

The interior walls of the compartment 13 are lined with oil paper or other suitable water proof material 18, and interposed between the insulating plate 17 and the adjacent flanges 15 is a rubber gasket 19 retained in position by bolts or similar fastening devices 20 passing through the perforations in the flanges 15.

Extending through an opening 21 in the base 9 is a lead covered cable 22 the terminals of which are arranged within the compartment 13 and connected to the binding posts 23 of suitable contacts 24 disposed on the opposite side of the plate 17, and to which are connected the distributing wires 25. The distributing wires 25 extend downwardly through an opening 26 formed in the base plate 9 and are connected in any suitable manner to the wires or conductors leading to the several telephone, telegraph or other electrical instruments to be operated. The contacts 24 are each preferably formed of a single piece of metal having an intermediate portion struck up to form an integral hook 27 and one end thereof bent upon itself to form a spring clamping member 28 adapted to engage the terminals of the distributing wires 25 whereby the wires may be clamped in position on the plate 17 without the employment of binding screws and similar fastening devices.

Extending longitudinally of the compartment 13 at the bottom thereof and secured in any suitable manner to the plate 9 are parallel vertically disposed metal strips 29 which form rests or supports for the plates 16 and 17, respectively.

Spaced laterally from the metal strips 29 are inclined flanges 30 defining wedge shaped sockets 31 for the reception of the adjacent ends of the plate 17 thereby to assist in retaining said plate in position on the bottom of the casing.

Extending transversely across the compartment 13

and soldered or otherwise rigidly secured to the metal strips 29 is a partition 32 defining a chamber 33 for the reception of a quantity of bee's wax, paraffin wax or other suitable water proof material which surrounds the cable 22 at its point of entrance into the compartment 13 and thus prevents the entrance of moisture to said compartment.

When it is desired to increase the capacity of the cable boxes the plate 16 may be removed and an insulating plate 17′ similar in construction to the plate 17 placed in position on the adjacent flange 15, as best shown in Fig. 5 of the drawing. When two of the insulating plates are used the terminals of the auxiliary cable will extend through an opening 34 in the bottom of the plate 9 and which is normally closed by a cover 35, the distributing wires of the auxiliary cable being attached to clips 24′ similar in construction to the clips 24 and thence extended downwardly through an opening 26′ to the telephone or other electrical instruments. Attention is here called to the fact that one row of each set of contacts 24 and 24′ is mounted on a suitable insulating strip 36 secured to the adjacent plate so that some of the contacts may be off-set with respect to the others and thus permit the terminals of the distributing wires to be readily connected with said contacts.

The boxes may be used for distributing all of the pairs of wires in the cables at any particular point or for bringing them into the box and carrying the same pairs out in another cable to another distributing box so as to permit of multiple cable work. The boxes may be made in different sizes and shapes so as to accommodate any desired number of pairs of terminals and said boxes may be galvanized, japanned, plated or otherwise coated to protect the same against the action of the elements.

From the foregoing description it is thought that the construction and operation of the device will be readily understood by those skilled in the art and further description thereof is deemed unnecessary.

Having thus described the invention what is claimed is:

1. In a distributing box for cables, a casing, a moisture proof compartment arranged within the casing, flanges disposed on each side of the compartment, spaced members arranged within the casing and forming a socket a plate seated in said socket and bearing against the adjacent flanges, said plate constituting one wall of the compartment and having a plurality of contacts secured thereto for engagement with the cable wires, and distributing wires operatively connected with said contacts and extending through the walls of the casing.

2. In a distributing box for cables, a casing, a moisture proof compartment arranged within the casing and having its end walls provided with laterally extending flanges, spaced members secured to the bottom of the casing and forming sockets insulating plates constituting the side walls of the compartment seated in said sockets and each provided with a plurality of contacts, there being openings formed in the lower wall of the compartment and apertures formed in the bottom of the casing and disposed one on each side of said compartment, cable wires extending through the openings in the bottom of the compartment and arranged within said compartment for connection with the terminals of the insulating plates, and distributing wires operatively connected with the contacts and extended downwardly through the apertures in the bottom of the casing.

3. In a distributing box for cables, a casing, a water proof compartment arranged within the casing, flanges secured to the bottom of the casing and spaced laterally from the side walls of the compartment to form sockets for the reception of the adjacent ends of said side walls, one of the side walls being provided with a plurality of contacts, cable wires extending within the compartment for engagement with the contacts, and distributing wires operatively connected with the contacts and extending through the casing.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

EDWARD CHARLES FLORY.

Witnesses:
REGINALD O. THOMAS,
L. H. ROSEBERRY.