J. PENGLASE.

CABLE BUTTON.

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965,739.

Patented July 26, 1910.

Fig. 1.

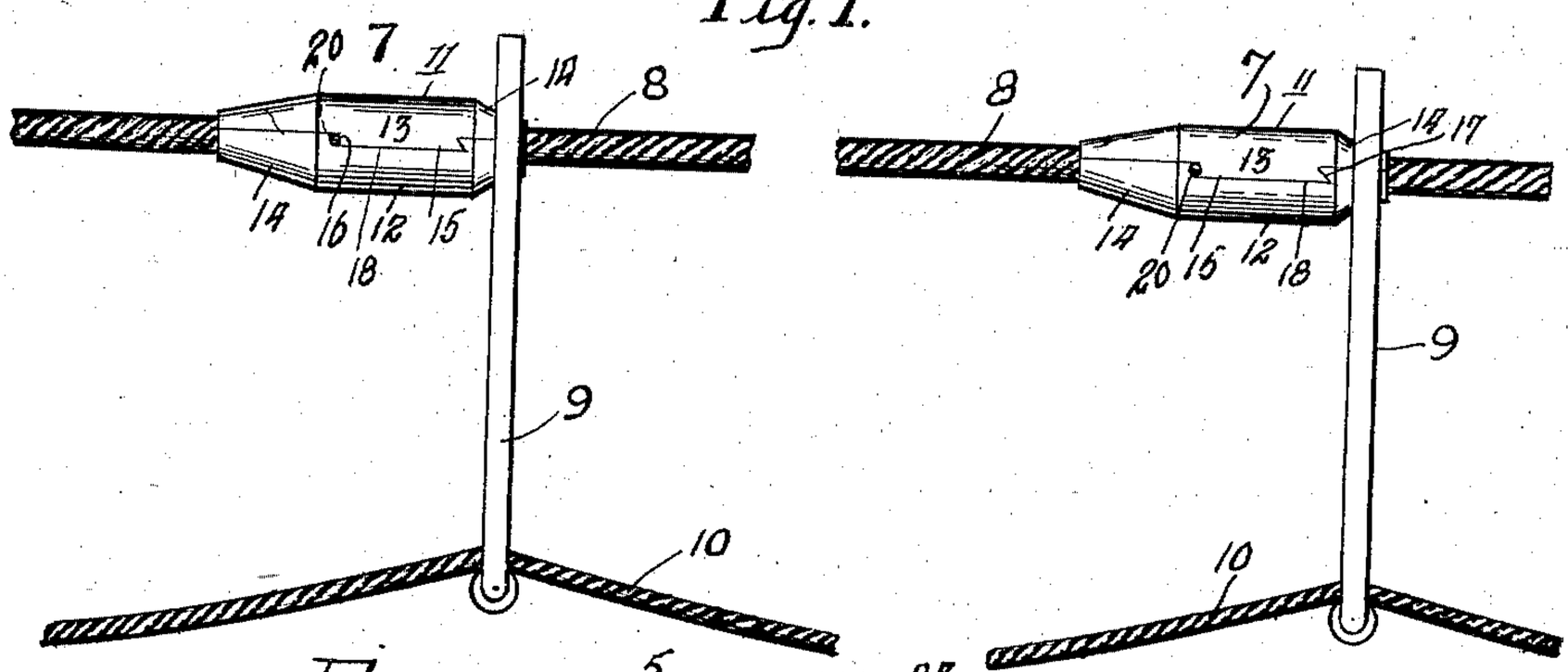


Fig. 2.

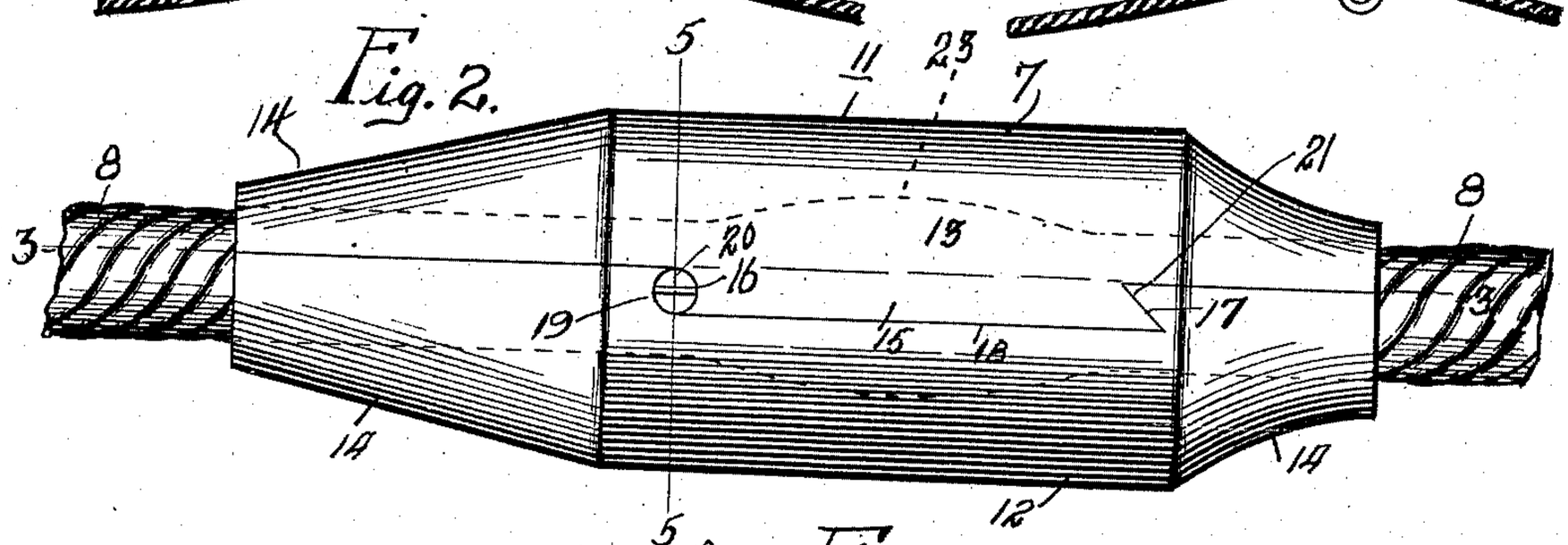


Fig. 3.

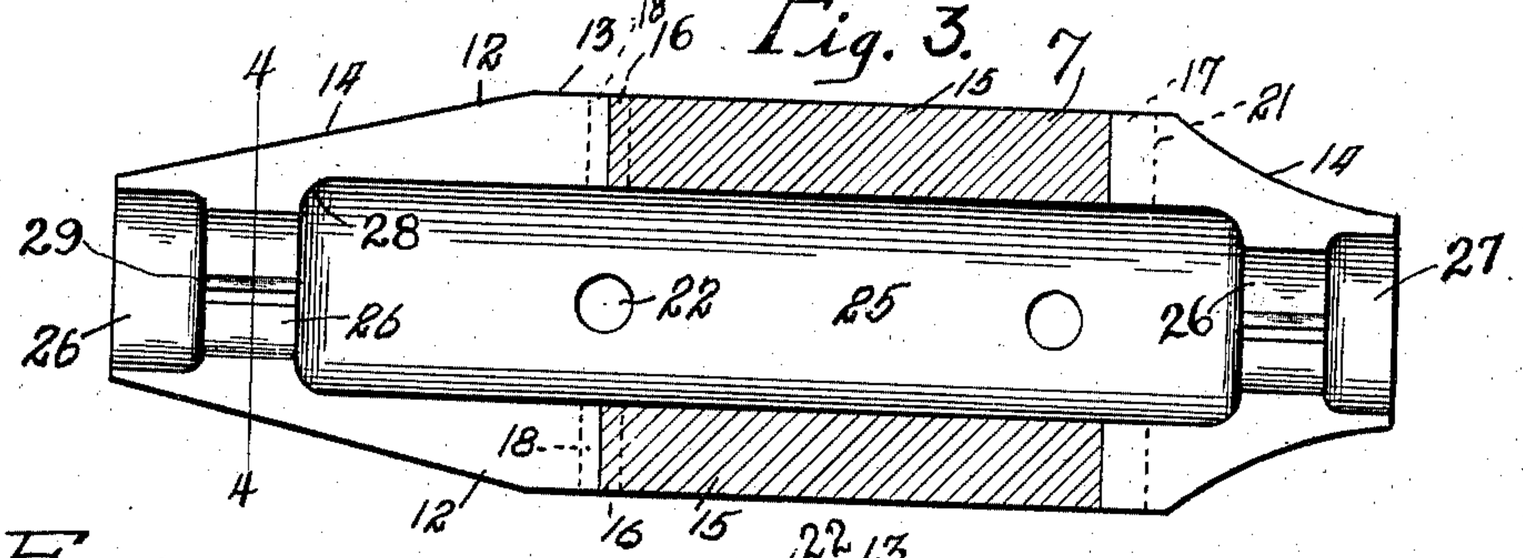


Fig. 4.

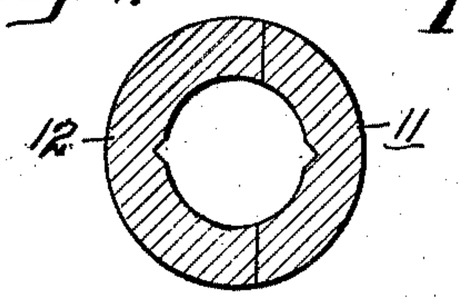


Fig. 5.

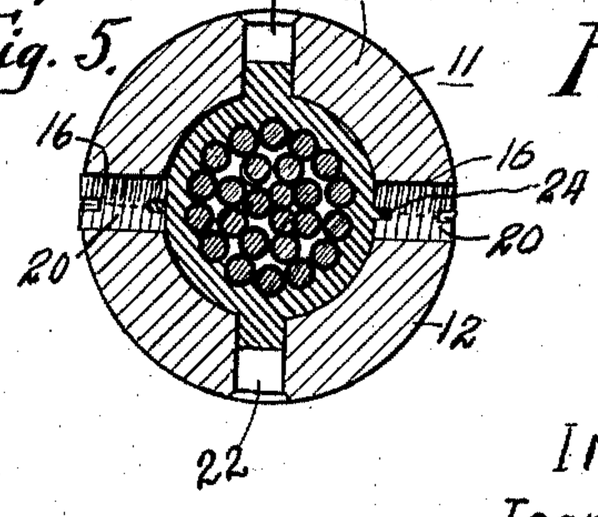
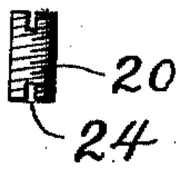


Fig. 6.



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CABLE-BUTTON.

965,739. Specification of Letters Patent. Patented July 26, 1910.

Application filed February 12, 1910. Serial No. 543,551.

To all whom it may concern:

Be it known that I, JOSEPH PENGLASE, a citizen of the United States, residing at Grosse Ile, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Cable-Buttons, of which the following is a specification.

The present invention relates to an article of manufacture known as a cable button, which is used on traveling cableways employed in excavating and other similar work to separate the carriers supporting the cable attached to the bucket.

The object of the present invention is to form a button so that in case it becomes damaged or broken, and thus rendered inoperative, it can be removed from the cable and a new one substituted therefor without the necessity of lowering the cable, severing it, and splicing it.

Further objects of the invention will be disclosed by the detailed description hereinafter set forth.

In the drawings, Figure 1 is a view showing a plurality of buttons in operative position and their relation to the carriers; Fig. 2, an enlarged elevation of one of the buttons; Fig. 3, a section on line 3—3 of Fig. 2; Fig. 4, a section on line 4—4 of Fig. 3; Fig. 5, a section on line 5—5 of Fig. 2; and Fig. 6, a detail of the locking screw.

As shown in Fig. 1, the buttons 7 are located upon a cable 8. This cable is stationary and extends between towers erected at the place where the excavating is being done. The cable 8 will vary in length according to the work being performed, and the buttons are usually spaced at a distance of about one hundred feet apart upon this cable. The buttons will vary in circumference from end to end of the cable, so that a graduated increase will be produced in the size of the buttons, the reason for which will be hereinafter explained.

In connection with the cable transmission a bucket is usually employed, the construction and operation of which has nothing to do with the present invention and is well known to any one skilled in the art. Therefore, a detailed description and illustration of this part is not deemed necessary. The bucket carries with it a plurality of hangers 9 of any ordinary and well known construction, and these hangers are carried by the bucket in such a manner that when the bucket travels outward upon the cableway, the hangers will be disengaged therefrom as they come into engagement with the buttons. In order to have but one hanger remain upon the button after contact therewith, the hangers are so formed that the last hanger only will remain upon the first button, while the balance of the hangers will pass over it; and in order to accomplish this the buttons are made of graduated sizes, so that each button will engage and retain one hanger of the set. The hangers carry a cable 10, which is used to operate the dumping mechanism on the bucket. The hangers are necessitated in order that the cable 10 may not slack while being carried outward and so render it necessary to take up this slack before any dumping action of the bucket is effected.

It frequently happens that these buttons become broken or damaged in use, distorting them to such an extent that the hangers do not properly engage thereon, and when such an accident occurs it has been necessary with buttons as heretofore constructed, to lower the cable and sever it in order to remove the button therefrom. This operation, of course, necessitates the splicing of the cable before it can again become operative, thereby consuming a great amount of time and labor, and it is principally to overcome this difficulty that the button of the present invention was constructed.

The button, as shown, is formed of two sections 11 and 12, the sections, when assembled, producing an article having a cylindrical body portion 13 tapered at both ends 14. The taper at both ends is necessary because if a hanger should slip over a button, it can be drawn back over it again without any difficulty. The section 11 is formed with transversely extending, oppositely disposed, depending portions 15, which are formed at one end with a semi-cylindrical screw-threaded recess 16, and at their opposite end with an outwardly extending protuberance 17, preferably beveled, as shown. The section 12 is formed with oppositely disposed, transversely extending recesses 18, which receive the depending portions 15. The recesses terminate at one end in a semi-cylindrical screw-threaded recess 19, and when the device is assembled the semi-cylindrical recesses 16 and 19 form a screw-threaded opening into which is entered a locking screw 20. The recess 18 terminates at its opposite end in a beveled

recess or groove 21, into which is inserted, when the device is assembled, the protuberance 17, the parts co-acting, as shown, to form a dovetail joint. The locking screw and the dovetail joint to form means for interlocking the sections together to prevent movement.

Formed on each of the sections are a plurality of openings 22, into which the molten Babbitt or other similar substance can be poured. The metal congeals around the cable lying in the interior of the button and prevents movement of the button along the cable. If desired, the cable can be formed with an enlargement, as indicated in dotted lines at 23 in Fig. 2, thus producing an additional means for preventing any movement of the button along the cable. The locking screw is preferably provided with recesses 24, into which the Babbitt metal runs and locks the screw, preventing displacement of the same through the ordinary rough usage to which it would be subjected, although, of course, the metal will be sheared off by the turning of the screw, with a suitable tool, so that this will not offer any impedance to the easy disassembling of the sections. The sections are formed with an inner chamber 25, which merges into a reduced opening 26, which in turn merges into an outer chamber 27. The juncture of the chamber 25 and the opening 26 produces shoulders 28, against which the metal surrounding the cable will rest; and the walls surrounding the openings are formed with grooves 29, into which a tool can be inserted to loosen the metal, if necessary, in order to disassemble the sections.

From the foregoing it will be seen that when it becomes necessary to remove the button from the cable and substitute a new one therefor, all that is required is to loosen the screws 20 and pry the sections apart, thus obviating the necessity of cutting the cable in order to remove the button and again splicing the cable before it can be returned to position.

I claim:

1. A device of the class described, comprising companion sections each partially surrounding the cable, the line of juncture of the sections extending upon opposite sides of the cable at a point approximate the center thereof, interlocked with one another by locking members formed integral with the sections and locking means independent of the sections, substantially as described.

2. In a device of the class described, the combination of companion sections each partially surrounding the cable, the line of juncture of the sections extending upon opposite sides of the cable at a point approximate the center thereof, locking members formed integral with the sections and locking means independent of the sections inserted at a point of juncture between the sections for locking the sections together, substantially as described.

3. In a device of the class described, the combination of companion sections, each partially surrounding the cable, the line of juncture of the sections extending upon opposite sides of the cable at a point approximate the center thereof, one section being provided with recesses, and the other section being provided with depending portions adapted to enter said recesses, and locking means entered at a point of contact between the sections and lying partially within each of the sections to lock the sections together, substantially as described.

4. In a device of the class described, the combination of companion sections, one section being provided with recesses, and the other section being provided with depending portions adapted to enter said recesses, the depending portions being formed at one end with semi-cylindrical openings adapted to register with semi-cylindrical openings in the wall surrounding the recesses, the other end of the depending portion being formed with protuberants adapted to enter inwardly extending grooves formed in the wall surrounding the openings, and locking means adapted to enter the aperture formed by the semi-cylindrical openings and locking the sections together, substantially as described.

5. In a device of the class described, the combination of companion sections, one section being provided with recesses, and the other section being provided with depending portions adapted to enter said recesses, the depending portions being formed at one end with semi-cylindrical openings adapted to register with semi-cylindrical openings in the wall surrounding the recess, the other end of the depending portion being formed with protuberants adapted to enter inwardly extending grooves formed in the wall surrounding the openings, locking means adapted to enter the aperture formed by the semi-cylindrical openings and locking the sections together, and openings formed in each of the sections for the insertion of molten metal, substantially as described.

6. In a device of the class described, the combination of a plurality of sections interlocking one another, means for locking the sections together, each section being formed on its interior with an inner chamber and an outer chamber, and a reduced opening between the chambers, the walls of the openings having grooves therein for the insertion of a tool to pry the sections apart, substantially as described.

7. In a device of the class described, the combination of a plurality of sections interlocking one another, means for locking the sections together, each section being formed

on its interior with an inner chamber and an outer chamber, a reduced opening between the chambers, the walls of the openings having grooves therein for the insertion of a tool to pry the sections apart, and openings formed in each of the sections for the insertion of molten metal, substantially as described.

8. A device of the class described, comprising a plurality of sections each partially surrounding the cable, the line of juncture of the sections extending upon opposite sides of the cable at a point approximate the center thereof, said sections being locked with one another to prevent movement between the sections in either direction, substantially as described.

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Witnesses:
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