Feb. 23, 1932. G. W. WALKER 1,846,536

CONDUCTOR WIRE REEL BOX

Filed Jan. 21, 1930 2 Sheets-Sheet 1

FIG. 1

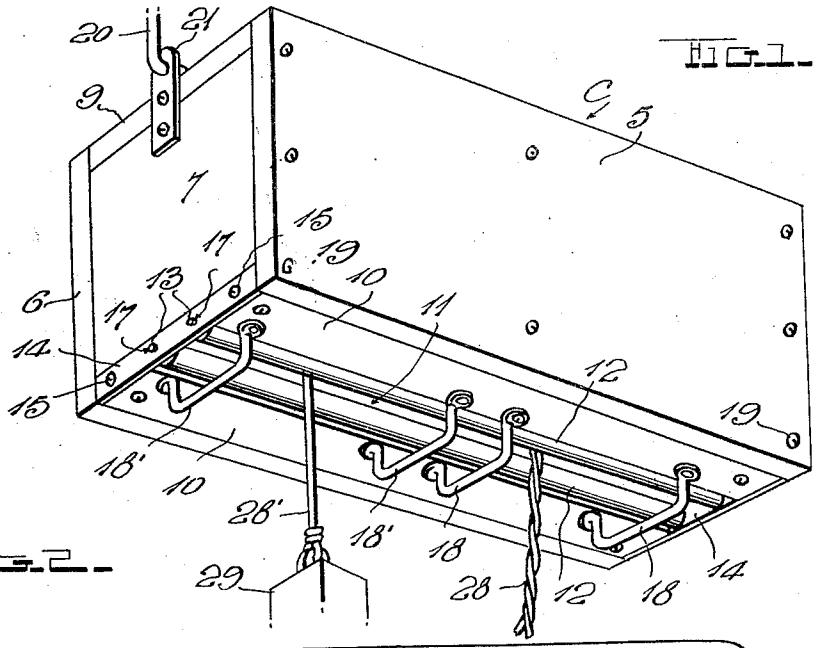
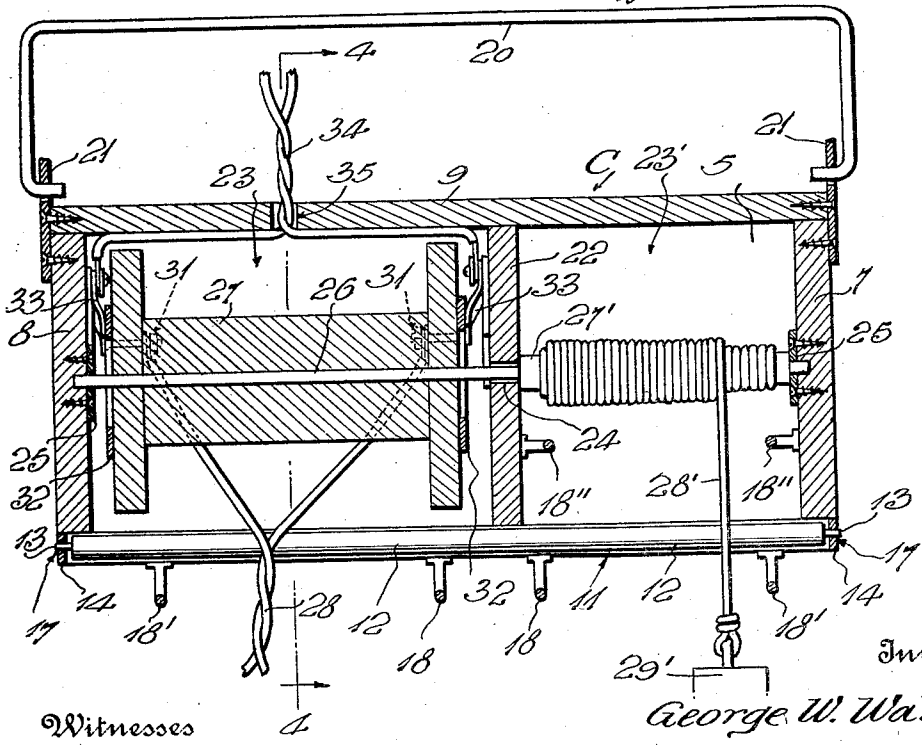


FIG. 2



Witnesses
H. Woodard

Inventor
George W. Walker

By H. B. Williamson & Co
Attorneys

Feb. 23, 1932. G. W. WALKER 1,846,536

CONDUCTOR WIRE REEL BOX

Filed Jan. 21, 1930 2 Sheets-Sheet 2

Fig. 3.

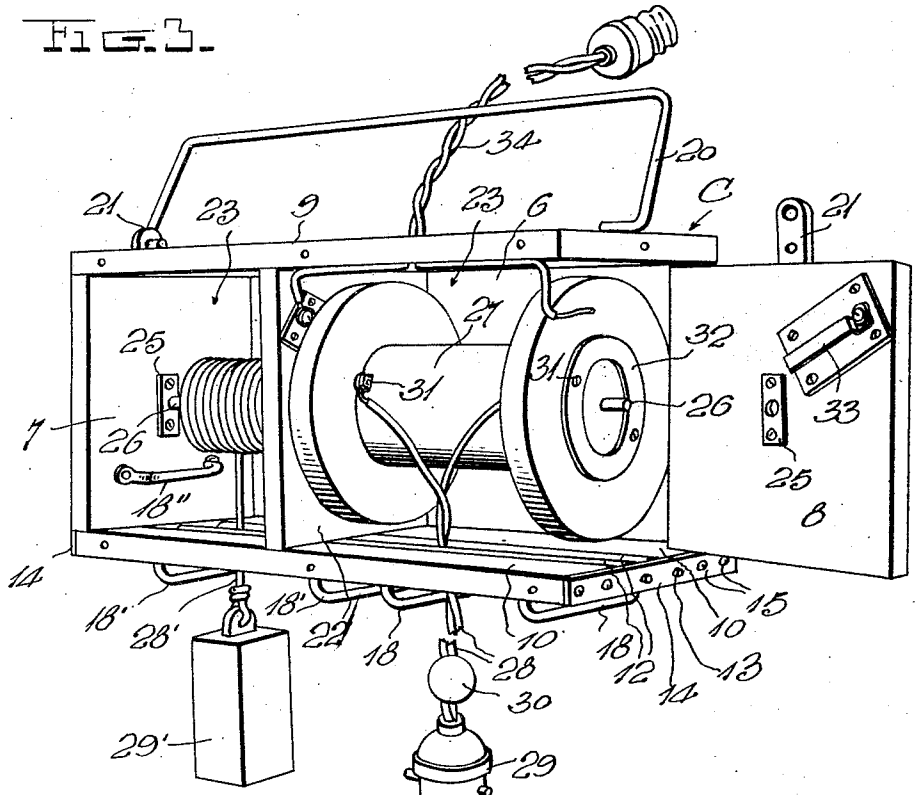
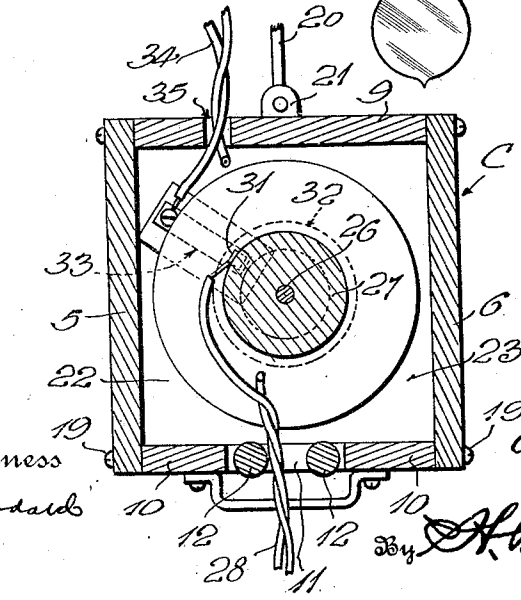


Fig. 4.



Inventor

George W. Walker

Witness

H. Woodard

By H. B. Williamson & Co

Attorneys

Patented Feb. 23, 1932

1,846,536

UNITED STATES PATENT OFFICE

GEORGE WALTER WALKER, OF WEST LOS ANGELES, CALIFORNIA

CONDUCTOR WIRE REEL BOX

Application filed January 21, 1930. Serial No. 422,383.

The invention relates to improvements in devices embodying a reel upon which the conventional twin conductor wires for electric lights and other electrical contrivances, may be wound to a greater or lesser degree, according to the length of wire necessary at any particular time.

It is the object of the invention to provide a rather simple and inexpensive device of the class set forth, yet one which will be compact and in every way desirable.

With the foregoing in view, the invention resides in the novel subject matter hereinafter described and claimed, description being accomplished by reference to the accompanying drawings.

Fig. 1 is a perspective view.

Fig. 2 is a central vertical longitudinal section.

Fig. 3 is a perspective view showing the front side and one end wall removed.

Fig. 4 is a vertical transverse sectional view on line 4—4 of Fig. 2.

The drawings above briefly described illustrate the preferred form of construction, and while this construction will be herein specifically explained, it is to be understood that within the scope of the invention as claimed, variations may be made.

A casing C is shown embodying front and back walls 5—6, end walls 7—8, a top 9, and a bottom whose specific details will be described below.

The casing bottom includes two spaced parallel strips 10, the space between said strips constituting a slot 11, along whose longitudinal edges, rollers 12 are disposed, said rollers having pintles 13 at their ends. Two flat metal bars 14 which are disposed on edge in vertical planes, are secured by screws 15 or other desired fasteners, to the ends of the strips 10, said bars having openings 17 in which the pintles 13 are rotatably mounted. Two pairs of longitudinally spaced, transverse guard members are secured to the lower sides of the strips 10 and span the slot 11, one pair of said guard members being given the reference number 18, while 18′ designates the other pair of guard members. All of these guard members and the bars 14, serve to hold the strips 10 in fixed relation with each other, providing a slotted, guard-and-roller-equipped bottom for the casing C. Screws 19 are shown securing this bottom to the front and back walls 5—6 of the casing C, and additional screws or the like are employed for securing the parts 5, 6, 7, 8 and 9 together.

A bail or the like 20 is provided for suspending the casing C, the ends of said bail being pivotally connected with upstanding plate 21 which are suitably secured to the casing ends. Between its ends, the casing is divided by a vertical transverse partition 22, into two compartments 23 and 23′ respectively, said partition being provided with a central opening 24 alined with bearings 25 carried by the end walls 7 and 8. A shaft 26 passes through the opening 24 and has its ends rotatably mounted in the bearings 25, said shaft being provided with a relatively large conductor reel 27 disposed in the compartment 23, and with a comparatively small cable reel 27′ within the compartment 23′. Twin conductor wires 28 are wound on the reel 27, and a cable 28′ is wound upon the reel 27′. The free ends of the wires 28 carry a socket 29 for an electric light bulb or a plug, and the free end of the cable 28′ is provided with a weight 29′. Ordinarily, this weight acts by gravity to unitarily rotate both reels 27 and 27′ in such direction as to wind the wires 28 upon the reel 27, to the extent permitted by a resilient stop 30 with which said wires are provided, said stop being adapted to strike the rollers 12. The wires 28 pass through the slot 11, between the rollers 12 and between the guards 18. Similarly, the cable 28′ passes through the slot 11, between the rollers 12 and between the guards 18 and 18′. These guards serve to limit movement of the wires 28 and cable 28′ longitudinally between the rollers 12, confining the movements of said wires and cable to segregated portions of the slot 11. Hence, the wires and cable are prevented from becoming entangled and it is insured that whenever they form a complete wrapping upon their respective reels, the next wrapping shall start back in the other direction. To facilitate this in connection

with the reel 27′, which reel may well be constructed without end members, additional guards 18″ are preferably provided in the compartment 23′, said guards being secured to the partition 22 and the end wall 8 respectively.

The upper ends of the wires 28 are secured to binding posts 31 carried by the ends of the reel 27, and these binding posts having electrical connection with two contact rings 32 which are secured to the ends of said reel 27. These contact rings are in engagement with brushes 33 which are secured to the partition 22 and the end wall 8 respectively, and suitable current supply wires 34 pass through an opening 35 in the casing top 9 and are electrically connected with said brushes. Thus, regardless of the extent to which the wires 28 be pulled from the casing C, current will be uninterruptedly fed to said wires.

The device may be supported at any desired elevated point and the wires 28 will be normally completely wound upon the reel 27, due to the action of the weight 29′ and the cable 28′, and whenever necessary, said wires may be pulled outwardly to any desired extent.

It will be seen from the foregoing that the invention is of rather simple and inexpensive construction, yet that it will be efficient and very desirable. The details disclosed are preferably followed as above stated, but within the scope of the invention as claimed, variations may be made.

I claim:—

1. In a device of the class described, a horizontally elongated casing having a longitudinal slot in its bottom and rollers at opposite longitudinal edges of said slot, a conductor reel mounted in one end portion of said casing, a cable reel mounted in the other end portion of said casing, the two reels being unitarily connected for simultaneous rotation, longitudinally spaced transverse guard members secured to said bottom of the casing and spanning said slot, a conductor passing through said slot between said rollers and wound on said conductor reel, and a weight-carrying cable passing between said rollers and oppositely wound on said cable reel, said conductor and cable being confined by said transverse guards to operation within segregated portions of said slot.

2. In a device of the class described, a reel casing having a bottom composed of two parallel strips spaced apart to provide a longitudinal conductor-and-cable-receiving slot, two rollers extending longitudinally of the opposite edges of said slot and having trunnions, two metal bars secured to the ends of said strips and extending across the ends of said slot, said bars having openings receiving said trunnions, and longitudinally spaced transverse guard members secured at their ends to said strips and spanning said slot, said bars and guard members securing said strips in fixed relation, said guard members serving to limit movement of the cable and conductor longitudinally of said rollers.

3. In a device of the class described, a horizontally elongated casing having a longitudinal slot in its bottom, a transverse partition in said casing dividing it into two compartments, said partition having an opening, bearings carried by end walls of said casing in alinement with said opening, a shaft passing through said opening and having its ends mounted in said bearings, a conductor reel on said shaft in one of said compartments, a cable reel on said shaft in the other of said compartments, a conductor and a cable connected with said reels respectively and passing through said slot, a weight on said cable for rotating said reels in conductor-winding direction, and guards secured respectively on the inner side of one end of the cable compartment and on the adjacent side of the partition to facilitate the starting of the cable back and forth at the completion of each successive wrapping of the same on the cable reel.

In testimony whereof I have hereunto affixed my signature.

GEORGE WALTER WALKER.