

1,363,417.

C. T. HUNT.
EXTENSIBLE LIGHT CONTAINER.
APPLICATION FILED MAY 1, 1919.

Patented Dec. 28, 1920.
2 SHEETS—SHEET 1.

Fig. 1.

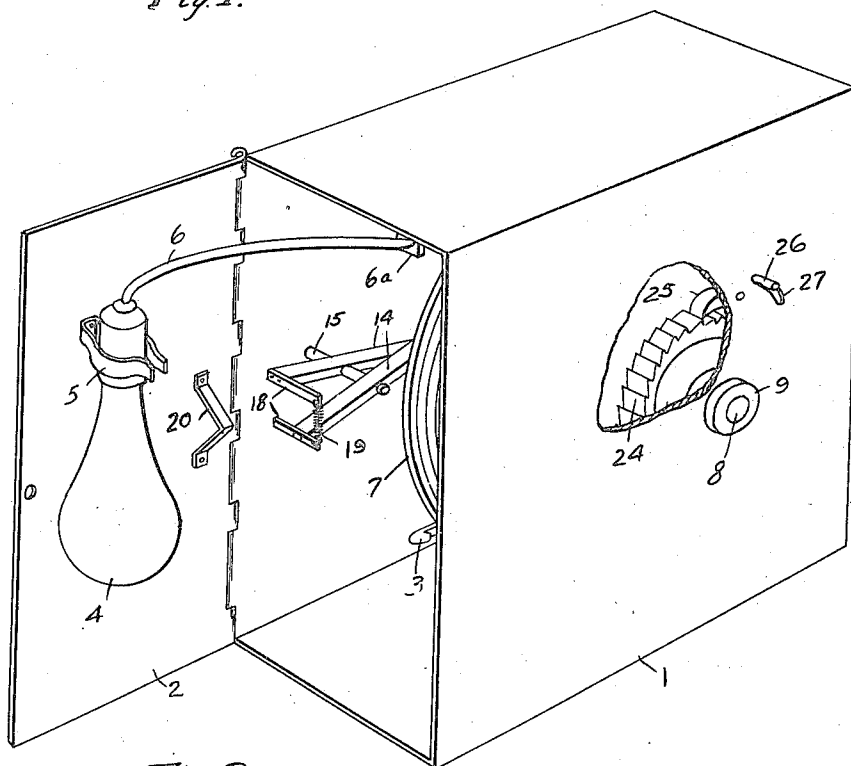
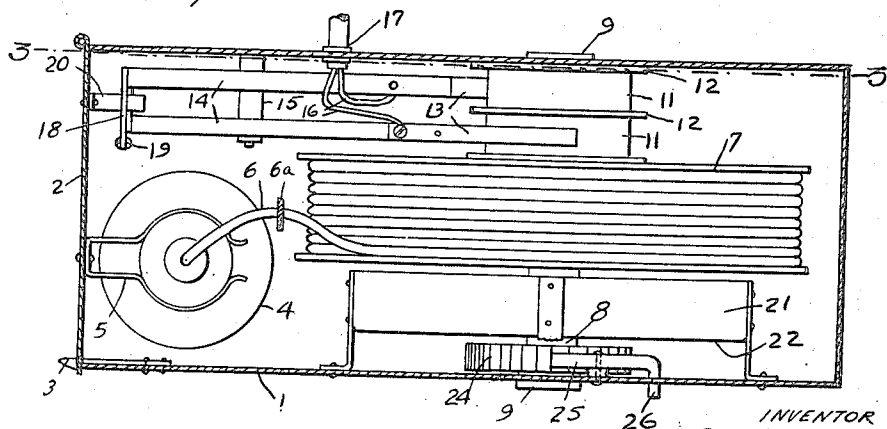


Fig. 2



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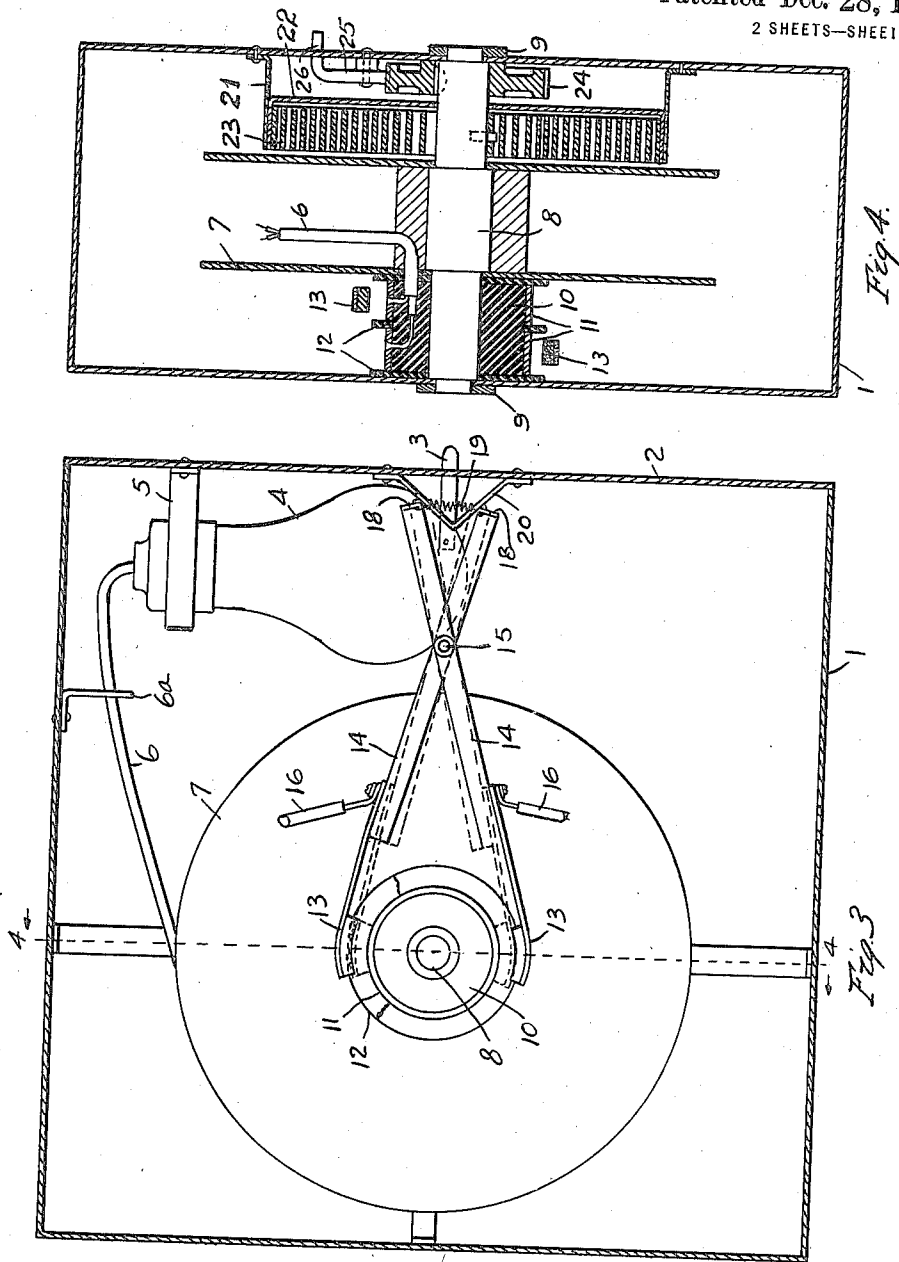
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UNITED STATES PATENT OFFICE.

CHARLES T. HUNT, OF LIMA, OHIO, ASSIGNOR TO THE HUNT TROUBLE LIGHT COMPANY, OF LIMA, OHIO, A CORPORATION OF OHIO.

EXTENSIBLE-LIGHT CONTAINER.

1,363,417.

Specification of Letters Patent.

Patented Dec. 28, 1920.

Application filed May 1, 1919. Serial No. 294,125.

To all whom it may concern:

Be it known that I, CHARLES T. HUNT, a citizen of the United States, residing at Lima, in the county of Allen and State of Ohio, have invented a new and useful Extensible-Light Container, of which the following is a specification.

This invention relates to containers for electric extension cords, such as are used in connection with lights, sad irons and various other electrical appliances.

Among the objects of the invention are to provide a container for an electrical appliance and an extension cord therefor, and to arrange for making and breaking the circuit according as the door of the container is opened or closed; to provide within the container a reel for the extension cord, a spring for turning said reel to wind the cord thereupon, and a manually releasable detent for holding the reel with the cord variously extended; and to maintain the circuit from the current supply leads to the cord upon the reel, despite the rotation of the latter, whenever said switch is closed.

In attaining these objects the invention contemplates rotatably mounting within a casing a reel for an extension cord, a spring for actuating said reel to rewind the cord, a ratchet wheel, and a pair of contact rings having connection with the respective conductors of said cord, the ratchet wheel being engaged by a detent manually releasable from the casing exterior, and said rings being respectively engaged by brushes connected to current supply leads and normally engaging said rings, the casing being provided with a door and the latter having a provision for disengaging said brushes from the rings when closed.

A preferred embodiment of the invention is illustrated in the accompanying drawings, wherein,

Figure 1 is a perspective view of the container, the door thereof being opened, and a portion of the wall being broken away to disclose an interior feature.

Fig. 2 is a horizontal sectional view of the same, the door being closed and the interior parts shown in elevation.

Fig. 3 is a vertical section, the section being taken on line 3—3 of Fig. 2.

Fig. 4 is a vertical section taken on line 4—4 of Fig. 3.

In these views the reference character 1

designates the casing which is preferably rectangular and formed of sheet metal. A vertically hinged door 2 forms one of the end walls of said casing and is maintained normally closed by the spring latch 3. An electric lamp 4 is adapted to be interiorly mounted upon said door, through engagement with a bracket 5 comprising a pair of spring clips, said bracket permitting quick detachable engagement of the lamp therewith. By virtue of thus mounting the lamp upon the door, it is introduced into the casing 1 or withdrawn therefrom according as the door is closed or opened. An extension cord 6 is connected to said lamp and after passing through a guide bracket 6^a depending from the top of the casing is adapted to be wound upon a reel or drum 7 fast upon a shaft 8 extending transversely of the casing and journaled at its end in bearings 9 which may be formed by washers exteriorly secured to the casing. Said reel and shaft are situated sufficiently rearward from the door 2 to afford an ample space to accommodate the light 4 when the door is closed. At one side of the reel 7 there is mounted upon the shaft 8 an insulator collar 10, carrying the two-slip rings 11 formed of copper or some other good conductor. As is best disclosed in Fig. 4, the cord 6 passes through the hub of the reel 7 into the collar 10 and has its conductors respectively in permanent electrical connection with the slip rings 11. Said rings are insulated from each other and from the reel and casing by suitable non-conducting washers 12. The slip rings 11 are respectively engageable by brushes 13 disposed respectively above and below the collar 10 and mounted upon a pair of insulator arms 14 projecting toward the door 2 and immediately pivoted upon the post 15 projecting from one of the side walls of the casing. Said brushes are respectively connected to the lead wires 16 of a current supply circuit, said lead wires passing out through the casing wall as is indicated at 17. The forward ends of the arms 14 are provided with parallel cross bars 18 connected at their free ends by a coiled spring 19 tending to maintain the brushes 13 in contact with the rings 11. Upon the door 2 there is mounted a bracket 20 formed by a bar bent to an angular form, adapting it to enter wedge fashion between the cross bars 18 as the door 2 is

shut so as to increase the normal angle of intersection of the arms 14 and thereby raise the brushes 13 out of contact with the rings 11. Upon the opposite side of the reel 7 from the switch mechanism just described, there is secured to the casing a cylindrical housing 21 concentric with the shaft 8, which passes therethrough. Said casing is divided by a partition 22 into two compartments respectively adjacent the reel 7 and the wall of the casing. The former compartment receives a spiral spring 23 which has its ends respectively secured to the circumferential wall of the housing 21 and to the shaft 8 so as to actuate said shaft to rewind the cord 6 upon the reel after said cord has been extended. In the other compartment said shaft carries a ratchet wheel 24 which is normally engaged by a retaining pawl or detent 25, said pawl and ratchet preventing the cord from being immediately rewound upon the reel 7 after having been extended to the desired extent. When the user of the apparatus has finished with the light 4 and is ready to return the same with its cord to the casing 1, the pawl 25 may be manually disengaged from the ratchet wheel 24 by means of a handle 26 projecting from the pawl through a slot 27 in the side wall of the casing.

From the foregoing description and explanation the operation of the device is evident. It is to be noted, however, that the invention involves the conception not merely of controlling the circuit of a light through opening and closing of a door, which is of course not new, but of so arranging the light (or some other appliance) that its withdrawal from the casing and the closing of its circuit are both accomplished through opening of the door, while upon closing of the door the return of the light into the casing and the breaking of its circuit are effected.

Also it is to be observed that the mecha-

nism through which the door 2 acts to make and break the light circuit functions not merely as a switch but also as a brush and ring device for establishing electrical connection between the stationary and rotating portions of the circuit.

The invention is not limited in its application to an electric light but has an adaptability to sad-irons, soldering irons, and various other electrical appliances.

When the light is an element of the invention, it may be used without removal from its mounting upon the door 2 or may be withdrawn from the casing any distance permitted by the length of the cord 6. The invention may be found to have a considerable utility upon a motor vehicle where the casing 1 may be installed in any desired location and the cord may be proportioned in length to permit use of the light adjacent any part of the vehicle. In making repairs upon a motor vehicle, changing tires, and under numerous other conditions, the invention, when installed as just mentioned, will be of advantage.

What I claim is:

In a device of the character described, the combination with a casing having a door, of an electrical appliance normally housed within said casing and removable therefrom, a cord supplying current to said appliance, a reel within the casing upon which said cord is normally wound, a pair of rings co-axially rotatable with said reel, brushes engageable with the respective rings at opposite sides thereof, a pair of intermediately pivoted arms carrying said brushes at corresponding ends, and a wedge member upon the door engageable between the other ends of said arms as the door is closed to disengage the brushes from the rings.

In testimony whereof I sign this specification.

CHARLES T. HUNT.