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H. W. TILTON

COMBINATION WALL BRACKET AND EXTENSION CORD ELECTRIC LIGHT FIXTURE

Filed Dec. 21, 1923

Fig: 1

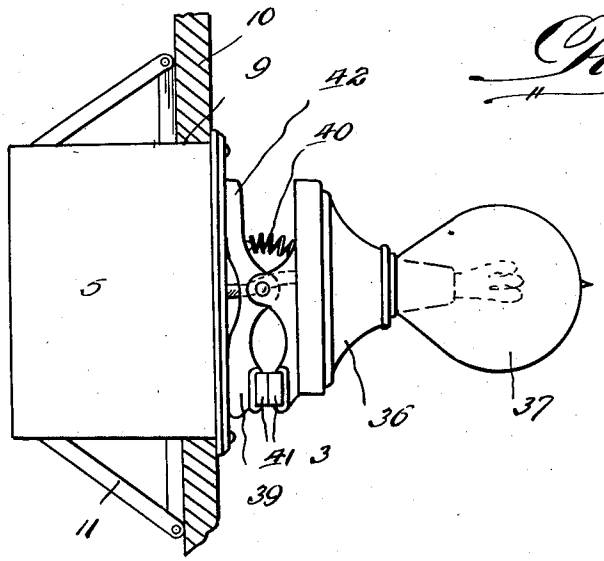


Fig: 2.

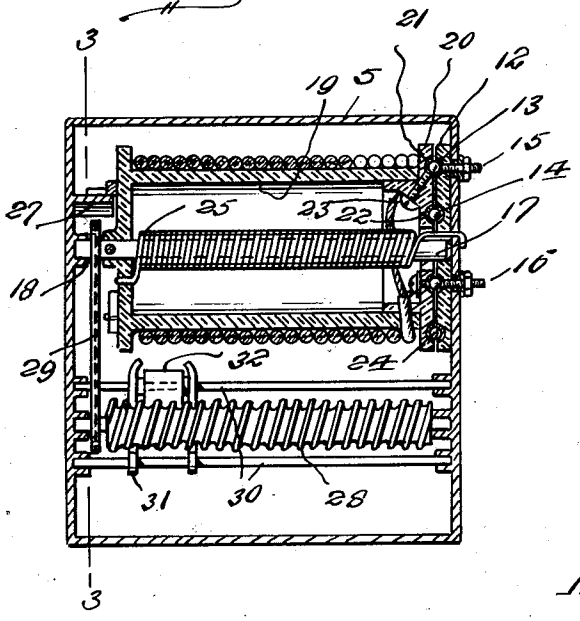
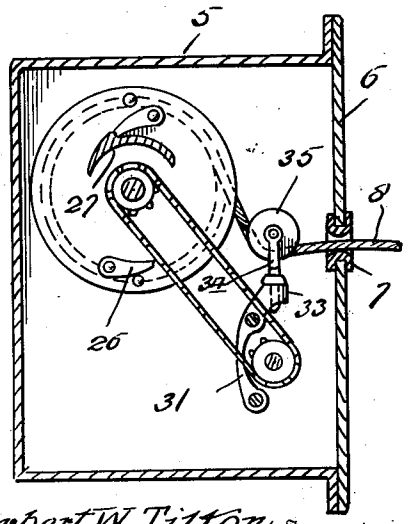


Fig: 3.



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UNITED STATES PATENT OFFICE.

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COMBINATION WALL BRACKET AND EXTENSION-CORD ELECTRIC-LIGHT FIXTURE.

Application filed December 21, 1923. Serial No. 682,128.

To all whom it may concern:

Be it known that I, HERBERT W. TILTON, citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Combination Wall Bracket and Extension-Cord Electric-Light Fixtures, of which the following is a specification.

This invention relates to electric light supports and has particular reference to an improved combined wall bracket and extension cord electric light fixture.

The primary object of the invention is to provide a device of the above kind, embodying an electric lamp socket having means for removably clamping the same to an article of furniture and carried by an extension cord whereby the same may be extended to such article of furniture, the opposite end of the cord being operatively connected to a winding mechanism mounted within a wall box or receptacle and adapted to maintain the lamp socket in juxtaposition to such wall box or receptacle, so as to serve the purpose of a bracket fixture, when the extension cord is retracted.

Still another object of the invention is to provide a device of the above kind having the above characteristics and embracing the desired qualities of simplicity and durability of construction as well as efficiency in operation.

Another object of the invention is to provide a combined wall bracket and extension cord electric light fixture that may be easily applied or installed, as well as expeditiously manipulated for permitting the lamp of the socket to be employed as a desk or chair lamp or the like, or a wall bracket lamp at will.

Further objects will appear as the nature of the invention is better understood, and the same consists in the novel form, combination, and arrangement of parts hereinafter more fully described, shown in the accompanying drawing and claimed.

In the drawing wherein like reference characters indicate corresponding parts throughout the several views:

Figure 1 is a view showing a combined wall bracket and extension cord fixture constructed in accordance with the present invention, and illustrating the same in side elevation as well as applied to a wall.

Figure 2 is a transverse vertical sectional view of the device shown in Figure 1, taken through the casing of the winding mechanism, and

Figure 3 is a longitudinal sectional view thereof, taken substantially upon the line 3—3 of Figure 2.

The present invention comprises a wall box or receptacle 5, the open front of which is provided with a removable face plate 6 that is provided with a central opening in which is mounted an insulating bushing 7 through which the extension cord 8 is passed. This receptacle is adapted to be snugly fitted within an opening as at 9 provided in the wall 10 of a building so that the face plate 6 is substantially flush with the outer surface of the wall as shown in Figure 1, to thereby have a neat appearance, and this receptacle may be anchored in place by any suitable means such as expansible arms or anchoring elements 11 carried by the top and bottom walls of the casing. However, this means is merely diagrammatically illustrated and may be replaced by any well known or preferred means of different form.

Secured against the inner surface of one of the side walls of the casing 5 is a disc 12 of insulating material in the inner surface of which are suitably secured and embedded the concentric conducting rings 13 and 14 that are provided with binding posts 15 and 16 respectively that project outwardly through the casing to facilitate connection of the rings 13 and 14 with the wires of the house wiring system. The disc 12 is mounted near the top of the casing 5 as shown in Figure 2 and has a central opening in which is journalled one end of a shaft 17, the other end of which is suitably journalled as at 18 in a bearing carried at the other side wall of the casing 5. Secured upon the shaft 17 is a drum 19 having a removable flange or head 20 at the end thereof adjacent the disc 12. This head 20 is provided in its outer surface with concentric conducting rings 21 and 22 that are respectively opposed to the rings 13 and 14 and that have inwardly extending screws or binding posts 23 to which the ends of the wires of the extension cord 8 are respectively fastened as shown clearly in Figure 3, the inner end of the cord 8 being extended through an opening in the drum 19 for this purpose. The rings 13, 14, 21 and 22 are of concaved from so as to be of substantially semi-circular form in cross section as shown

in Figure 2 and a circular series of ball bearings 24 are disposed between each pair of the rings so as to provide constant electrical connections between the same and therefore between the wires of the extension cord 8 and the binding posts 15 and 16 which are connected to the feed wires of the house wiring system. These ball bearings also limit friction between the head 20 and the disc 12 so that the drum 19 may freely rotate and rotation of the drum 19 and the shaft 17 which carries the same is effected in the proper direction for winding the extension cord 8 upon said drum by means of a spring 25, one end of which is anchored to a stationary part of the device, and the other end of which is anchored to the rotatable drum as shown in Figure 2. Rotation of the drum 19 is normally prevented in the direction necessary to unwind the cord 8 therefrom, by means of gravity pawls 26 that are pivoted upon the remaining flange or head of the drum 19 and cooperate with a rigid stop lug 27 fixed to the adjacent side wall of the casing, it being understood that these pawls are released by centrifugal force in the manner practiced in the construction of well known spring shade rollers.

Suitably journalled within the casing parallel with and beneath the drum 19 is a feed screw 28 whose shaft is operatively connected to the shaft 17 by means of a sprocket gearing generally indicated at 29 and disposed adjacent the side of the casing opposite that at which the disc 12 is mounted. Suitably fixed in a horizontal position above and below the feed screw 28 are guide rods 30, upon which is slidably mounted a frame 31 that is movable from end to end of the drum 19. This frame 31 carries a nut segment 32, the thread sections of which are engaged with the thread of the feed screw 28, so that the frame 31 will be moved along the rods 30 when the screw 28 is rotated under the influence of the gearing 29 upon rotation of the drum 19. Swivelled upon a vertical axis as at 33 in the top of the frame 31 is the mounting 34 of a vertical guide pulley 35, under which the extension cord 8 will pass from the bushing 7 to the drum 19.

Attached to the outer end of the extension cord 8 is a suitable fixture 36 of ornamental form and embodying a lamp socket for removable reception of an ordinary incandescent lamp bulb 37, the terminals of the lamp sockets of the fixture 36 being suitably connected to the wires of the cord 8 in a manner that is conventional and therefore not shown.

Attached to the back of the fixture 36 is a clamp by means of which the fixture 36 may be effectively supported upon a table, desk, or other article of furniture or the like, and while this clamp may vary in form, it is herein shown as embodying a rigid jaw 38 fixed to the back of the fixture 36 and having a second jaw 39 pivoted thereto, the jaws 38 and 39 being pressed toward each other by means of a spring 40 interposed between the opposite ends of the jaws. The jaws 38 and 39 may be equipped with spaced members 41 of some suitable material, such as felt or rubber, which will prevent marring of the article of furniture to which the device is attached, and in order to facilitate release of the jaws, the pivoted jaw member 39 is provided with a finger piece as at 42, which may be pressed toward the base of the fixture 36 against the action of the spring 40.

The spring 25 normally rotates the roller 19 in a direction to wind the extension cord 8 thereon so as to maintain the jaw 39 and its finger piece 42 against the outer surface of the base plate 6 with the fixture 36 held in front of the base plate in a horizontal position so that the device will present the appearance and serve the purpose of a wall fixture. When it is desired to extend the fixture 36 to a point remote from the wall 10 so as to serve as a desk lamp or the like, it is simply necessary to exert a pull upon the extension cord 8 for causing rotation of the drum 19 against the action of the spring 25, and thereby unwinding the extension cord from said drum 19. When the desired length of the extension cord has been drawn out of the casing, and the drum 19 ceases to rotate, the pawls 26 positioned at the top of the device will swing inwardly as shown at Figure 3 into engagement with the stop 27 so as to prevent the spring 25 from winding the extension cord onto the drum and thereby relieve the extension cord of strain. The jaws 38 and 39 are then engaged with the article of furniture or other support remote from the wall for effectively supporting the fixture 36 in the place desired. When it is desired to again return the parts to the position shown in Figure 1, so as to provide a wall bracket fixture, it is simply necessary to exert a pull upon the extension cord, so as to cause release of the pawls 25 from the stop lug 27, whereupon the extension cord 8 is immediately released for permitting the spring 25 to rotate the drum and thereby wind the extension cord onto said drum. As the extension cord 8 moves into or out of the casing, the same is effectively guided by the roller 35 and is caused to be evenly coiled onto the drum 19 by the traversing movement of the frame 31 under the influence of the feed screw 28 and nut segment 32, which movement is imparted to the frame 31 that supports the pulley 35 upon rotation of the drum 19 in either direction. It is noted that the pulley mount 34 is swivelled as at 33 so as to allow the pulley 35 to assume the exact angle between the bushing 7 and the point

where the extension cord is being unwrapped from the drum. It is further noted that the anti-friction bearing between the head 20 of the drum 19 and the disc 12 serves to provide constant electrical connection between the binding posts 15 and 16 and the respective wires of the extension cord.

From the foregoing description, it is believed that the construction and operation as well as the advantages of the present invention will be readily understood and appreciated by those skilled in the art.

What I claim as new is:

1. A fixture of the class described including a box, a winding mechanism in the box comprising a drum having an extension cord attached thereto, a feed screw journaled in the box and disposed in parallel relation with the drum, means rotatably connecting the feed screw and the drum, a pair of rods mounted in the box adjacent the feed screw and disposed parallel therewith, a frame slidable on the rods and comprising a nut segment engaging the feed screw, and a mounting swivelled thereon, a pulley in the mounting, said box provided with a central opening, and a bushing in said opening.

2. A fixture of the class described including a cabinet having an opening arranged centrally in one side thereof, a drum having an extension cord attached thereto, said drum being rotatably mounted in the box, means operable with the drum for guiding the extension cord so that the same will wind and unwind evenly thereon, a pulley swivelly mounted on said means and over which said extension cord is trained and then extended through the opening.

In testimony whereof I affix my signature.

HERBERT W. TILTON.