

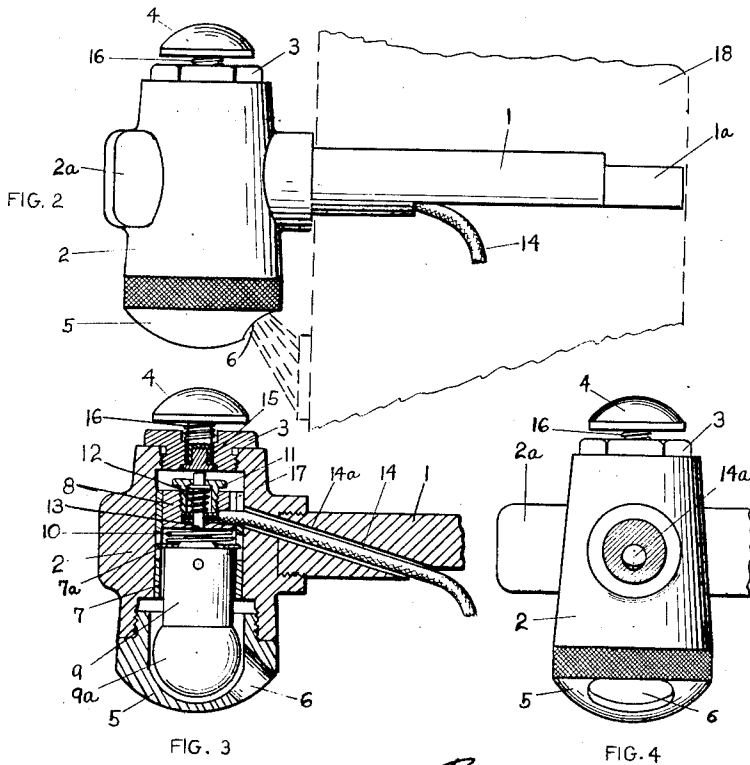
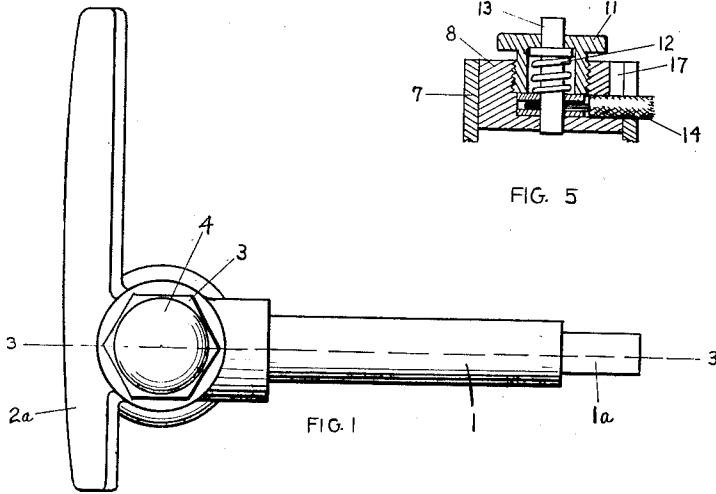
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COMBINATION DOOR HANDLE AND LOCK LIGHT

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COMBINATION DOOR HANDLE AND LOCK LIGHT.

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My invention relates to a combination door handle and electric light and the objects of my invention are:

1. To provide a simple, economically constructed combination door handle and lock light for automobiles and other doors and appliances;

2. To provide an electric light seated within and protected by a door knob.

I attain these objects by the means illustrated in the accompanying drawings in which,—

Figure 1 is a top or plan view of my device separated from the door; Fig. 2 is a front elevation of my device showing the lines of the door in dotted lines; Fig. 3 is a vertical section of my device on the line 3—3 of Fig. 1; Fig. 4 is an inside elevation of my device, but showing the lock bar in section; Fig. 5 is an enlarged detail showing the position of the contact washers and the connecting wire and contact plunger.

Similar numerals refer to similar parts throughout the several views.

My device comprises the ordinary lock bar, 1, which is preferably a round bar having its inner end, 1^a, squared to engage the latching mechanism.

The outer end of the bar, 1, is preferably threaded onto the head, 2, or may be cast integral therewith if preferred.

The head, 2, is preferably formed integral with the handle, 2^a, which may be the ordinary handle in common use in automobile doors, or the handle, 2^a, may be given any form desired to meet the circumstances of any particular case.

The head, 2, contains a central bore in which is secured by a press-fit a brass sleeve, 7, which forms the ground connection for the shank, 9, of the electric light bulb, 9^a. The electric lamp may be any of the forms in common use and may be secured in the sleeve, 7, by the ordinary bayonet lock or pin joint. In the opposite end of the sleeve, 7, I secure by a press-fit or otherwise a fiber plug, 8, which is cored out and threaded to receive a metal plug, 11, having a hexagonal head. The plug, 11, is provided with threads by which it can be secured in corresponding threads in the plug, 8.

The plug, 8, is provided with an opening, 17, large enough to receive the wire, 14, and a corresponding opening is formed in the sleeve, 7, so as to permit the sleeve, 7, to be

mounted in the head, 2, after the wire, 14, has been secured in place therein.

The washer, 7^a, is mounted within the sleeve, 7, having projecting lugs at opposite sides thereof extending into corresponding longitudinal slots in the sleeve, 7. A spring, 10, is seated upon the washer, 7^a, and bears against the fiber plug, 8.

A plunger, 13, having a shoulder at the upper edge thereof, is slidingly mounted within the plug, 11, surrounded by the spring, 12, the upper end of which bears against the shoulder on the plunger, 13, and the lower end of which bears against a copper washer which aids in securing the end of the wire, 14, in contact with the plunger, 13, and between the copper washer mentioned and a similar washer mounted around the plunger in the bottom of the bore of the plug, 8.

A shield, 5, for the electric light, is threaded into the bottom of the head, 2, and is provided with an opening, 6, by which the light from the lamp, 9^a, can pass out of the handle and shine upon the keyhole, which is preferably located directly in the side of the door directly below the head, 2.

At the opposite end of the head a brass hexagon plug, 3, is secured within the bore of the head, preferably by the ordinary screw threads. A button, 4, having a shank formed integral therewith, is mounted upon the hexagon plug, 3, with the shank extending into a central opening therein. The lower end of the shank of the button, 4, is bored out and a fiber plug 15, secured therein by a press-fit. A coiled spring, 16, is secured around the shank of the button 4, between the button and the bottom of a slight recess formed in the upper face of the plug, 3.

In assembling my device, the fiber plug, 8, is first secured in the sleeve, 7, by a press-fit, the washer, 7^a, being already secured therein, with the spring, 10, seated between the plug, 8, and the washer, 7^a. The plunger, 13, is then fitted with its spring, 12, and the end of the wire, 14, secured thereto between the contact washers. The plunger is then inserted in the plug, 8, and the screw plug, 11, screwed into the plug, 8, so as to secure the plunger, 13, therein. The wire, 14, is then led into the opening in the head, 2, and out through the conduit, 14^a, in the lockbar, and the sleeve, 7, is then pressed

into the head, 2. The lamp, 9^a, is then inserted in the usual way and the lamp shield, 5, screwed into the lower end of the head. The plug, 3, then having been assembled
 5 with the plug, 15, the spring, 16, and button, 4, is screwed into the upper end of the head, 2.

The lower side of the lock bar, 1, is preferably milled off as shown in Figure 2, to
 10 make room for the wire when the lock bar is inserted in the door.

In the operation of my device, the wire, 14, is connected with the proper battery lead wire and the head, 2, grounded through the
 15 body of the machine in the usual way. When desired to turn on the light, a slight pressure downward is made upon the button, 4, whereupon the plug, 15, presses upon
 20 the plunger, 13, and drives it downward against the center contact of the lamp plug, 9, thus causing the current to flow through the filament of the light and the light to shine out through the opening, 6, upon the keyhole of the door.

It is obvious that my device may be used
 25 when the keyhole is located below the handle or by reversing the position of the handle it may operate equally effectively with the keyhole above the handle.

It is also obvious that the position and
 30 size of the opening, 6, may be varied to any desired extent and that various modifications may be made in the form and proportions of the various parts without departing
 35 from the spirit of my invention. Thus, it may be made applicable to handles for safes, cupboards, and a multitude of other appliances.

I claim:

40 1. A combined door handle latch operat-

ing mechanism and lock light comprising a door handle having a hollow casing united thereto, a lock bar having a wire carrying
 45 conduit formed therein united to the casing, a sleeve secured within the casing and forming a socket capable of receiving an electric lamp, a plug secured in the sleeve opposite
 50 the lamp socket, a spring retained plunger slidingly mounted in the plug adapted to form a contact between the current carrying
 55 wire and one of the terminals of the lamp, a spring-retained manually-operable means mounted in the end of the casing opposite
 60 the lamp adapted to actuate the plunger secured at the end of the casing opposite the
 65 lamp.

2. A combined door handle, latch operating mechanism and lock light comprising a door handle having a hollow casing united
 60 thereto, a lock bar having a wire carrying conduit formed therein united to the casing, a sleeve secured within the casing and forming
 65 a socket capable of receiving an electric lamp, a plug secured in the sleeve opposite the lamp socket, a spring retained plunger
 70 slidingly mounted in the plug adapted to form a contact between the current carrying wire and one of the terminals of the lamp,
 75 a spring-retained manually-operable means mounted in the end of the casing opposite the lamp adapted to actuate the plunger secured
 at the end of the casing opposite the lamp and a recess formed in the insulating plug and sleeve adjacent the connecting end
 of the conduit capable of forming a seat for the electric wire during assemblage of the parts.

In testimony whereof he affixes his signature.

CARL R. CRUYS.