June 13, 1950 M. C. LUMLEY 2,511,277

METAL WALL CABINET

Filed Feb. 8, 1947

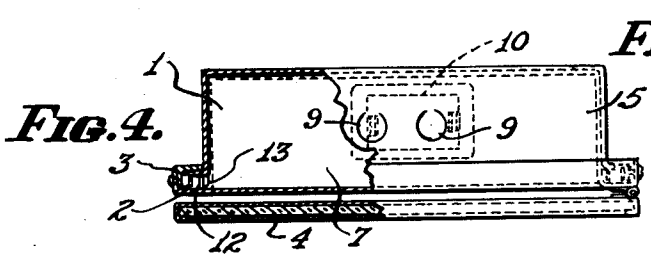


FIG. 4.

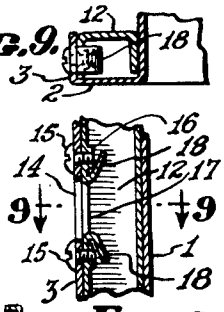


FIG. 9.

FIG. 8.

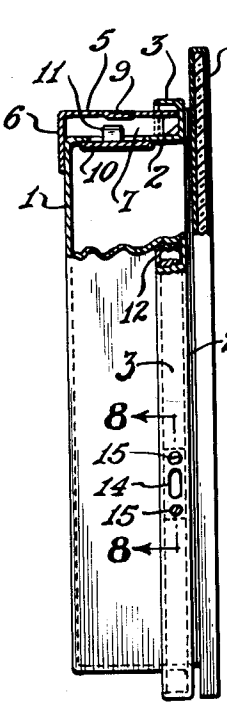


FIG. 2.

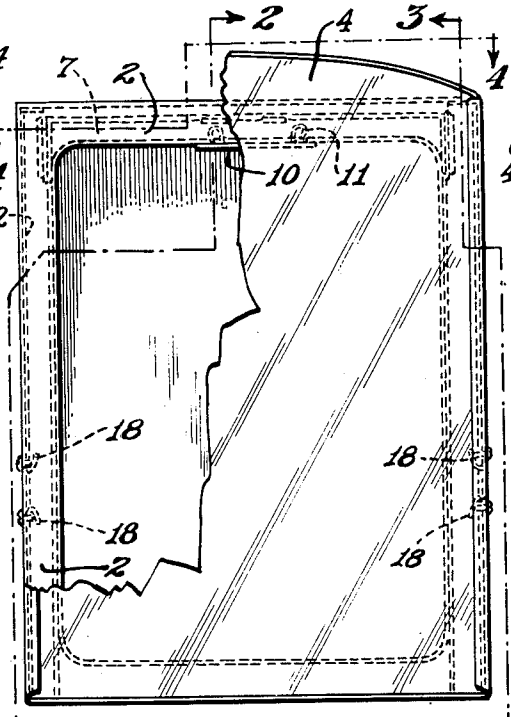


FIG. 1.

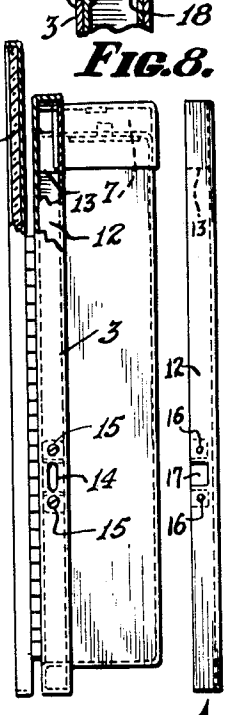


FIG. 3.

FIG. 10.

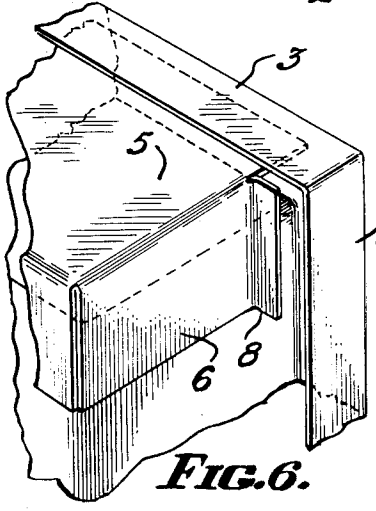


FIG. 6.

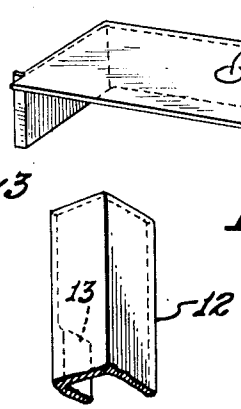


FIG. 7.

FIG. 5.

INVENTOR.
MAURICE C. LUMLEY.
BY Allen & Allen
ATTORNEYS.

Patented June 13, 1950

2,511,277

UNITED STATES PATENT OFFICE

2,511,277

METAL WALL CABINET

Maurice C. Lumley, Cincinnati, Ohio, assignor to The F. H. Lawson Company, Cincinnati, Ohio, a corporation of Ohio

Application February 8, 1947, Serial No. 727,336

6 Claims. (Cl. 312—112)

1

My invention relates to metal cabinets such as are placed in or in some way mounted on a wall, such as for bathrooms and the like. In these cabinets it has become a familiar feature to provide for light brackets on the sides of the cabinet for illumination of the user thereof, the front of the cabinet being closed by a mirror door.

Where the cabinet is one in which the structure is one formed up from sheet metal with a depressed portion for the body of the cabinet, a front flange around this portion for mounting the mirror door and to serve as the outer face of the cabinet, and a return flange around the outside of the base flange, the light brackets are mounted on the return flange so as not to interfere with the operation of the mirror door.

The problem is then presented of introducing the electrical conductor cables or wires into the space between the body of the cabinet and the flange, leaving access to this wiring although the body of the cabinet be set into a wall with the return flange engaging the face of the wall. The problem is also presented of providing for adequate support for the lamp brackets, and avoiding cutting the insulation on the conductor wires, in the act of screwing the brackets into place.

My invention relates to a novel and simple mode of providing a solution for these problems.

I have illustrated in the drawings a preferred structure which accomplishes these objects, and will describe it in detail. The novelty shown by the structure together with modifications which will be equivalent to that described, will be set forth in the claims that follow.

In the drawings:

Figure 1 is a front elevation of the cabinet.

Figure 2 is a sectional elevation on the line 2—2 of Figure 1.

Figure 3 is a section elevation on the line 3—3 of Figure 1.

Figure 4 is a section on the line 4—4 of Figure 1.

Figure 5 is a perspective of the wire conduit housing member.

Figure 6 is a perspective view of the upper left hand corner of the cabinet of Figure 1 showing the channel insert for the side flange removed.

Figure 7 is a perspective of the upper end of this channel insert.

Figure 8 is a detail section on the line 8—8 of Figure 2.

Figure 9 is a detail section on the line 9—9 of Figure 8.

Figure 10 is an elevation of the channel insert.

2

The cabinet here shown has a recessed body portion 1 surrounded by a flange 2, which flange 2 is surrounded by a return flange 3. The result of this structure is to leave a channel surrounding the cabinet body at the forward portion thereof. Normally the body is inserted and built into a wall, with the return flange 3 engaging the face of the wall.

Hinged to the cabinet along one front face thereof is a mirror door 4, which, in the particular model illustrated overlies the flange 2 when it is closed, giving the impression to the eye, if the cabinet body is set into a wall, of merely a mirror. This is regular construction in such cabinets, but other types of doors could be used, if desired.

A sheet metal piece (see Fig. 5), having a top plate 5 and flanges 6 around three sides is spot welded in place to the cabinet body and the top portion of flange 3, with the result of forming a chamber or wire conduit 7 (Fig. 2). The side portions of flange 6 are slit and turned back at 8 so as to leave an opening from this conduit to the channel-like spaces formed by flanges 2 and 3 at the two sides of the cabinet. Discs 9 are almost completely cut out in the top plate 5, so that they can be punched out when it is desired to wire the cabinet.

The top wall of the body of the cabinet is provided with an opening into which is placed a removable closure plate 10 which has friction spring tongues 11 thereon which snap over the sides of the opening. This opening is for access to the wires, and the noteworthy feature is that the access door snaps into place instead of screwing into place so that there is no danger of cutting through the wires when mounting the access door into place after the wiring is done.

There is provided for the channel-like spaces along the two sides of the cabinet, certain reenforcing channels which push frictionally into place. Thus I have shown channels 12, cut away at the portion 13 (Fig. 7 and Fig. 4), these channels being forced into the channel-like spaces defined by the cabinet body and the flanges 2 and 3 at the sides of the cabinet, and resting on the bottom return flange portion 3.

These channels are pushed into place with their open side toward the front of the cabinet. Each channel has the portion 13 so located that an opening is left at the top which communicates with the lateral openings at lips 8 already noted, in the conduit element at the top of the cabinet.

The flanges 3 at the two sides of the cabinet are formed with holes 14, through which wires may

be passed to attach to the terminals in light brackets to be secured about said holes. Along sides of each holes are screw holes 15, 15, through which pass the screws which are used to mount the light brackets on the flanges 3, 3. Screws have been shown in place, which are removed and replaced when mounting the brackets or light fixtures.

The insert channels 12, are formed with holes 17 which, when the channels are inserted into place will register with the holes 14. The metal displaced in forming these holes 17 is turned back, top and bottom as indicated at 18, 18, the turned back tongues or lips underlying the threaded portions 16 into which the bracket screws will pass. The portions 16 are formed preferably by punching holes in the channel walls, and forming short sockets which are subsequently tapped with threads.

The result of this turned back tongue construction is to form a rounded edge for the holes 17, thus presenting no sharp edges to fray or cut a wire when mounting and connecting the brackets. They also, by underlying the screw holes, prevent the conductor wires from being so located as to be engaged and frayed or broken in the act of inserting the bracket screws.

In setting up the cabinets the conductor wires are brought into the top conduit through the punched out holes therein, and threaded around and down through the channel pieces 12, to be fished out through the holes 17 and 14. The wires can then be connected up to the terminals of the lamp in the light bracket, and the light bracket mounted in place.

The result of mounting the brackets is also to pull the channel firmly into place against the inner face of the flanges 3 at the sides of the cabinet. The structure at the sides is reenforced very considerably by the inserted channels, which are very easily assembled, as already noted, and which can be readily formed with the screw receiving and wire protecting portions now described.

The structure could be arranged for more than one set of wire holes 14 and 17, and it will be recognized that I have described my invention as applied to a sheet metal stamping structure, because its adaptability to that inexpensive mode of construction is a point of the invention. However, equivalent structural parts can be substituted and it is not desired to exclude equivalents because only one adaptation of the invention has been described.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a wall cabinet, a body portion having a lateral face flange and return flange at right angles thereto, thus forming a channel space at the side of the body portion, conduit means for electrical wiring formed by a channel member inserted into the said channel space, and closing said space, the return flange and inserted channel member having matching holes for conductor wires, and means for mounting a light bracket on said return flange.

2. In a wall cabinet, a body portion having a lateral face flange and return flange at right angles thereto, thus forming a channel space at the side of the body portion, conduit means for electrical wiring formed by a channel member inserted into the said channel space, and closing said space, the return flange and inserted channel member having matching holes for conductor wires, and means for mounting a light bracket on said return flange, said means comprising screws passing through the said flange and having threaded sockets in a wall of the inserted channel to receive them.

3. The combination of claim 1 in which the hole in the channel member has the metal thereof turned back to form a protecting tongue at the top at least of the hole, thereby avoiding a sharp edge for engagement by the conductor wires when entering the hole.

4. The combination of claim 2 in which the hole in the channel member has the metal thereof turned back to form a protecting tongue at the top at least of the hole thereby avoiding a sharp edge for engagement by the conductor wire, said tongue overlying a threaded socket to prevent contact of a mounting screw with the conductor wire.

5. In a sheet metal wall cabinet, a body portion having a face flange and a return right angle flange, a conduit element for wires mounted on the top of the body portion, said member having a top plate with holes therein for conductor wires and side flanges engaging the body portion, leaving a conduit space above the top wall of the body portion, and an access door in the top wall of the body portion opening into said conduit space, said door having snap tongues to retain it in place, thus avoiding screws and possible destruction of insulation on the wires in said conduit.

6. In a sheet metal wall cabinet, a body portion having a face flange and a return right angle flange, a conduit element for wires mounted on the top of the body portion, said member having a top plate with holes therein for conductor wires and side flanges engaging the body portion, leaving a conduit space above the top wall of the body portion, the face flange and return flange providing a channel-like space at least at one side of the cabinet, which channel-like space communicates with said conduit space, and an insert reenforcing channel mounted in said channel-like space, and having a wall thereof cut away so as not to obstruct the said communication.

MAURICE C. LUMLEY.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,651,669	Carpmael	Dec. 6, 1927
1,773,684	Kolber	Aug. 19, 1930
1,907,679	Smith	May 9, 1933
1,941,126	Blackman	Dec. 26, 1933