

[54] **LOCKED THERMOSTAT BOX**

[76] Inventors: **Charles V. Harrison**, 1894
Boulderview Dr. S.W., Atlanta, Ga.
30316; **William H. Higginbotham**,
2080 Tilson Rd., Decatur, Ga.
30032

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R

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Primary Examiner—Bernard A. Gilheany

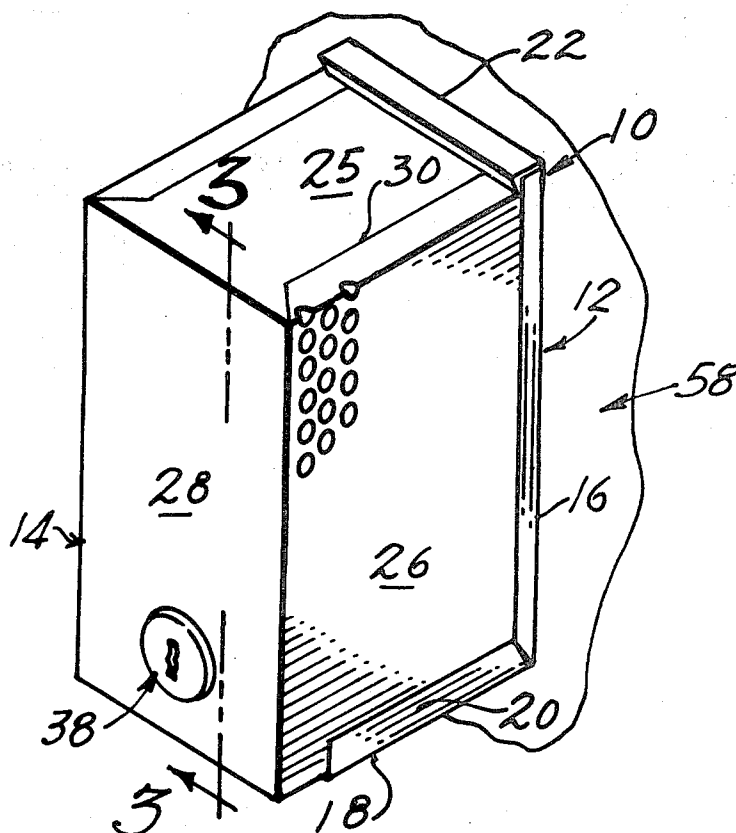
Assistant Examiner—D. A. Tone

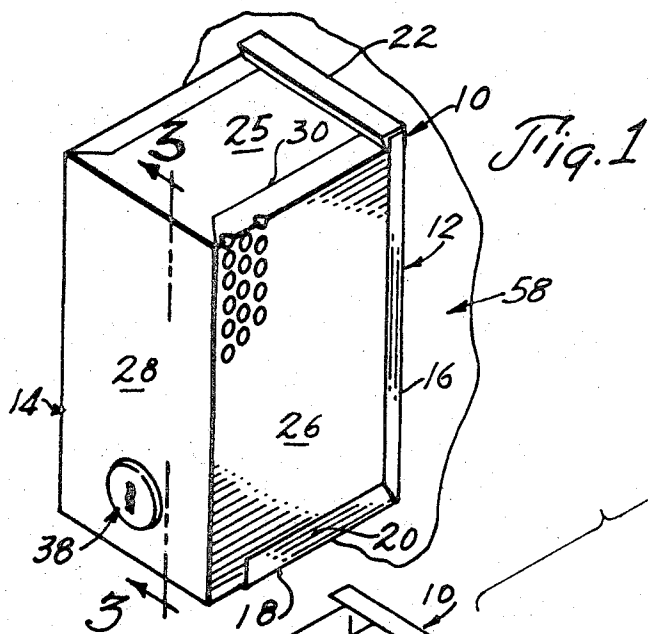
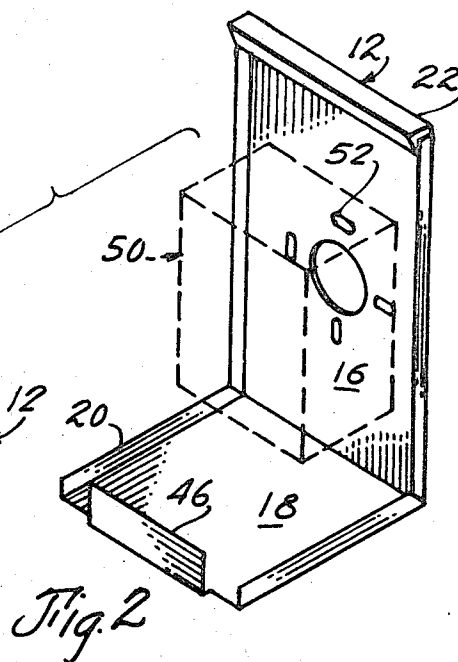
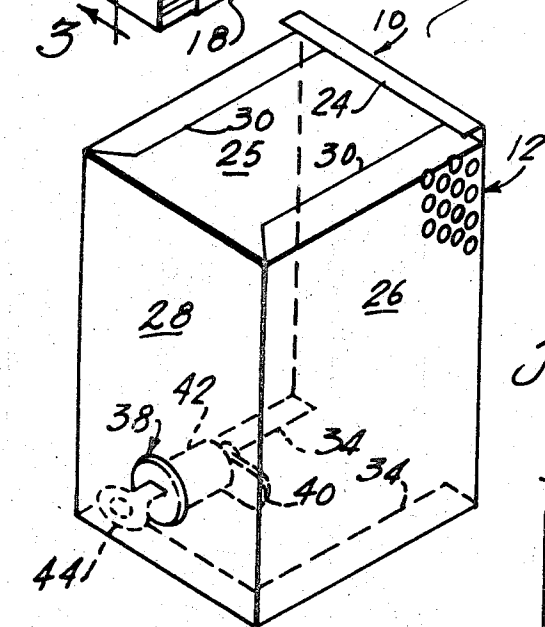
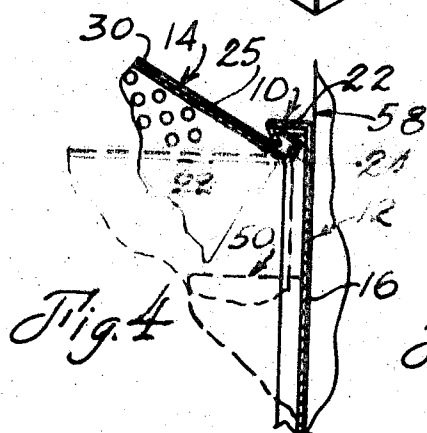
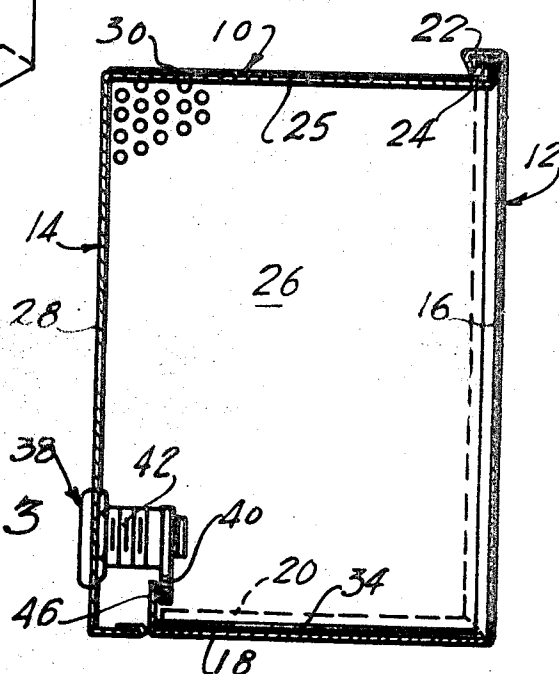
Attorney—Patrick F. Henry

[57] **ABSTRACT**

A locked thermostat box for wall mounted thermostats including a cylindrical lock which cannot be opened except by the proper key. The cover for the box is a portion of the box itself and is easily removed after unlocking with the key providing access to the thermostat for adjustment. Basically the box is in two sections, one of which is mounted with the thermostat on the wall and the other which is the cover previously mentioned. The cover includes four sides of the box which are bent from a piece of sheet metal and the wall mounted portion of the box has two sides bent from a piece of sheet metal with marginal channels formed by turning-in a small portion of the edges to receive the edges of the cover.

7 Claims, 4 Drawing Figures





LOCKED THERMOSTAT BOX

BACKGROUND OF THE INVENTION

1. Field of the Invention

Wall mounted thermostats and boxes and covers 5 therefor.

2. Description of the Prior Art

The prior art thermostat boxes include covers for the thermostats but the controls are exposed. It is possible for anyone to operate the control usually by moving a small lever from one position to another. This is undesirable because it often upsets the environmental conditions of the spaces based upon predetermined settings. Of course, the thermostat could be located in a locked closet or cabinet accessible only to the ones who have the key but this is impractical since it interferes with the use of the cabinet itself and interferes with the operation of the thermostat which must be out in a typical area in order to properly respond to the environmental conditions. At the same time, any locked thermostat must be easily accessible to those having the key and the arrangement to lock the thermostat must not be so expensive so as to make it prohibitive in cost.

SUMMARY OF THE INVENTION

The thermostat is contained within a locked box mounted on the wall. Part of the box is attached to the wall with the thermostat by screws or other fasteners and the other part of the locked box is the cover which is easily removed after the unlocking of a conventional cylindrical lock. The cover may be made from sheet metal or other material with perforations so that the thermostat receives the proper exposure and the entire device may be manufactured from sheet metal or molded from plastic.

A primary object of this invention is to provide an inexpensive locked thermostat box which is easily mounted on the wall with the thermostat.

Another object of this invention is found in the arrangement of the mounting portion of the box which includes edges that receive and confine the edges of the cover so that the cover is not easily broken away without unlocking.

Another object of this invention is to provide a locked thermostat box wherein the cover is a simple three-piece arrangement with a conventional cylindrical lock.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of the locked thermostat box in place on a wall.

FIG. 2 is a perspective view of the wall mounting plate portion of the box disassembled from the cover and illustrating the thermostat in dotted lines.

FIG. 3 is a cross-sectional view taken substantially along lines 3—3 in FIG. 1.

FIG. 4 is a cross-sectional view similar to FIG. 3 with parts omitted showing an installation.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The completed and assembled locked thermostat box is designated generally by reference numeral 10 and comprises essentially two parts — the wall mounting portion designated generally by reference numeral 12 and the cover designated generally by reference numeral 14.

The wall mounting portion may be constructed from bent sheet metal having a wall mounting plate 16 and a projecting horizontal plate 18 both having inturned marginal edge portions 20 which provide grooves or channels at the marginal edge. The top of plate 16 has a channel 22 formed therein by turning in the sheet metal at that edge and the channel 22 is adapted to receive thereunder the inturned edge 24 of the cover 14.

Cover 14 comprises a top 25, sides 26 and a back 28 all of which may be manufactured by bending and forming sheet metal turing in the top edges 30 over the top 25 and bending the front edge back to form the inturned portion 24. The inside of the sides 26 and the back 28 have been turned and bent in to form small ledges 34 which set above the bottom plate 18 making it very difficult if not impossible to remove the cover 14 after the inturned edge 24 has been locked in the channel 22.

A conventional cylindrical lock 38 has the usual rotatable locking plate 40 thereon which is actuated by the keyed lock portion 42 operated by a conventional key 44 inserted therein. The horizontal plate 18 on the wall mounting plate 12 is provided with a vertical latching plate 46 behind which the latching plate 40 of lock 38 latches in place.

The sheet metal from which the cover 14 is manufactured may be foraminous or perforated to provide whatever area of openings is desired so that the thermostat designated by the dotted lines as number 50 in FIG. 2, receives the proper exposure to the environment to provide true readings.

Back plate 12 is provided with a series of slotted openings 52 by means of which thermostat 50 may be mounted and attached to the backplate 12 or if desired back plate 12 may be attached by expandable fasteners or other screw-type fasteners and the like to the wall 58 and then the thermostat may be attached with its usual screws to back plate 16 of the mounting plate 12.

While I have shown and described a particular embodiment in this invention this is by way of illustration only and does not constitute any sort of limitation since there are various changes, alterations, eliminations, deviations, additions, omissions, departures and changes which may be made in the embodiment shown without departing from the scope of this invention as defined only by a proper interpretation of the appended claims.

What is claimed:

1. In a locked thermostat box:

- a. a thermostat box comprising a wall mounting section on which said thermostat is mounted and a removable cover section outside and over said thermostat,
- b. the wall mounting section including a normally vertically disposed mounting plate and a horizontal support plate extending therefrom and said vertical mounting plate having openings therein by means of which said mounting plate is mounted on the wall, and wires are connected to said thermostat,
- c. a small channel formed on the upper edge of said vertical mounting plate on the inside thereof and including a downwardly and inwardly extending plate member thereon,
- d. a latching plate extending substantially vertically upwardly from said horizontal plate,
- e. said removable cover section having openings therein to admit the surrounding air and comprising a top, back and sides and there being a plate ex-

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tending substantially in a direction away from the wall on the front edge of said top to be inserted under the downwardly inclined portion of said upper channel member, and
f. a lock on said cover.

2. The device in claim 1, said lock having a latching member moved from locking to nonlocking position by operation of a keyed lock having a latch member latching behind said upstanding plate on said horizontal plate.

3. The device claimed in claim 1 wherein said horizontal support plate has upwardly turned, small marginal plate members on the edges thereof and the bottom edges of the sides of said cover fit inside said inwardly turned edges.

4. The device in claim 3 wherein said cover has a lock thereon.

5. The device in claim 4 wherein said lock has a

4

latching member latching behind said upstanding plate on said horizontal plate.

6. The device in claim 5: said wall mounting section vertically disposed mounting plate having forwardly extending edges on each side,

said removable cover section having an open bottom with marginal edges extending inwardly from the front and sides of said cover section, said marginal edges being superimposed on the bottom of said horizontal support plate on said wall mounting section when said cover section is latched in place thereon.

7. The device in claim 6:

said wall mounting section having a large hole therein through which wires and the like may be attached to said thermostat and smaller holes for attaching said section to the wall.

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