Dec. 12, 1961 M. WASSERMAN 3,012,375

COMBINATION SKY LIGHT AND CEILING LIGHT DOME

Filed Oct. 22, 1954 2 Sheets-Sheet 1

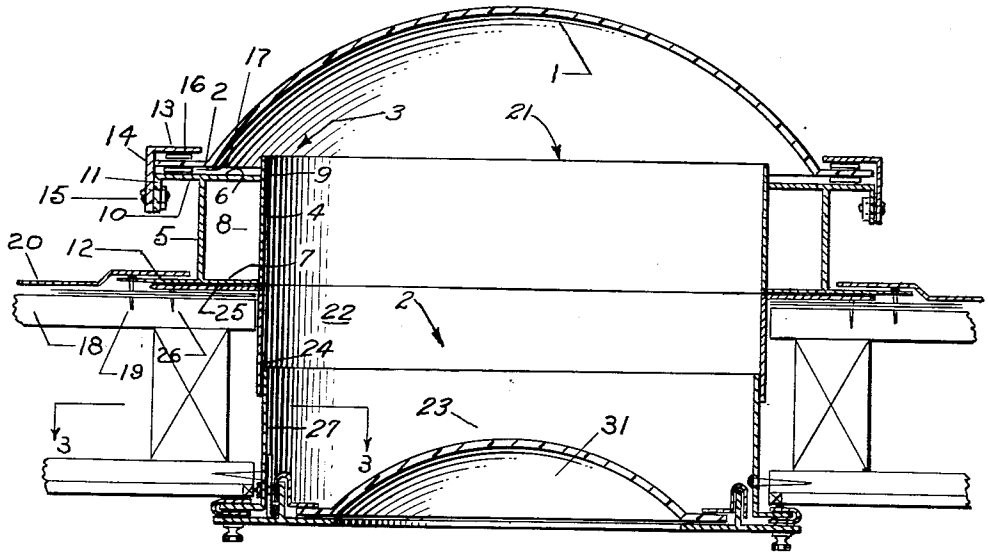


FIG. 1

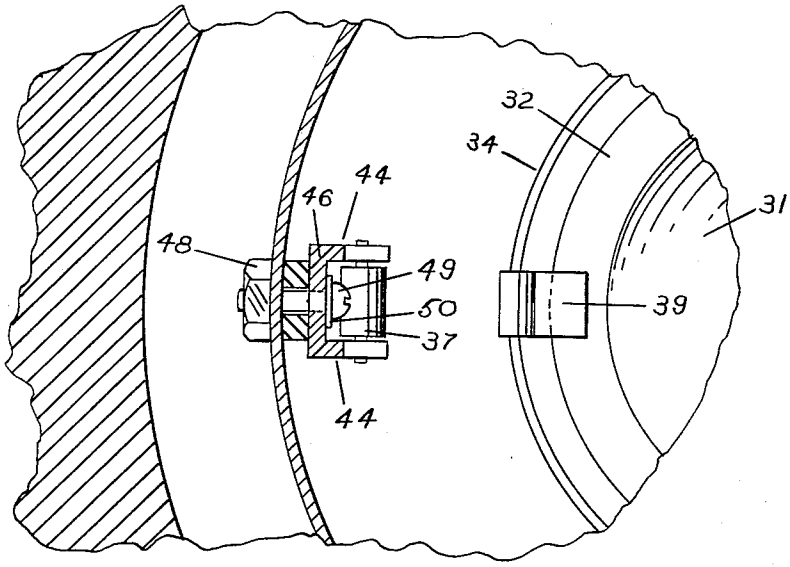


FIG. 3

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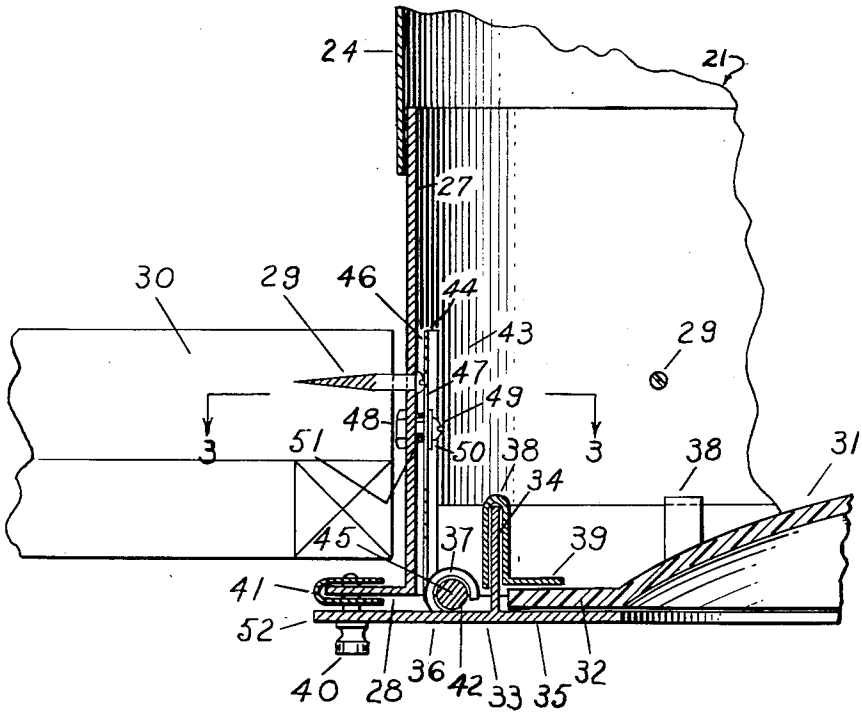


FIG. 2

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COMBINATION SKYLIGHT AND CEILING LIGHT DOME

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3 Claims. (Cl. 50—17)

The present invention relates to a skylight and ceiling light combination, and more particularly to a novel structure for securing a pair of plastic domes in position as skylight and ceiling light elements.

It is an object of the present invention to provide a structure of improved design in which a ceiling dome member in a combination ceiling dome and skylight dome construction may readily be removed for cleaning or other similar purposes. It is also an object of the present invention to provide a combination ceiling and skylight structure of inexpensive and utilitarian design in which the structure may readily be positioned in a skylight opening with a minimum of expense and constructional modification of the skylight opening.

These and other objects of the present invention will be more clearly understood when considered in connection with the accompanying drawings in which:

FIGURE 1 is a sectional elevation of the invention.

FIGURE 2 is a fragmentary enlargement of a portion of the drawing of FIGURE 1.

FIGURE 3 is an enlarged view taken along the line 3—3 of FIGURE 1.

A plastic dome 1, having peripheral outwardly extending flanges 2, is supported upon a supporting frame or structure generally designated 3 and acts as a skylight dome. The supporting structure 3 comprises a preferably rectangular shaped cross sectioned insulated member having an inner wall 4, an outer wall 5, a top wall 6 and a bottom wall 7 with preferably fiber glass insulation 8, enclosed thereby. This member may be rectangular in overall plan view or circular. The design shown generally by the drawings is circular. The inner wall 4, extends upwardly beyond the top wall 6 forming an upwardly extending gutter flange 9. The top wall 6 extends beyond the outer wall 5 forming an outwardly extending wall 10 which terminates in a downwardly extending lip 11. The bottom wall 7 also extends beyond the outer wall 5 forming a bottom outwardly extending wall 12. The plastic dome 1, is secured in position by an apron member having an inverted L-shaped cross section with legs 13 and 14, with the leg 13 laying over the peripheral flange 2, and the leg 14 extending downwardly in face to face relation with the downwardly extending lip 11. This downwardly extending leg 14 is secured by a bolt 15 or by other suitable means passing through the downwardly extending flange 14 and the downwardly extending lip 11, securing them together. A pair of gaskets 16 and 17 may be provided one above and one below the peripheral flange 2 of the plastic dome. If such gaskets are used drainage slots should be provided at intermittent positions to allow water to pass through. Drainage holes should also be provided either in the downwardly extending leg 14 of the apron or in the outwardly extending flange 10. This structure is secured on the roof deck 18 by nails 19 passing through the outwardly extending lower flange 12. This outwardly extending flange 12 may be covered with a series of felt strips 20. Positioned beneath this supporting structure 3 is a well liner generally designated 21 comprising an upper section 22 and a lower section 23. The upper section 22 has a downwardly extending leg 24 and an outwardly extending leg 25. The outwardly extending leg 25 is positioned underneath the lower side 7

of the curb member and is secured to the roof deck by nails 26 or other suitable means passing through the leg 25 to the roof deck. The wall 24 is aligned with the wall 4 of the curbing frame section. Positioned below the wall 24 with a portion overlapping it is the lower wall 27. This wall 27 has at its lower edge an outwardly extending apron 28 which extends beyond the inner edge of the ceiling opening. This wall 27 is secured to the ceiling by screws 29 passing through the wall into the ceiling beams 30. At the lower end of this wall opening is the plastic ceiling dome 31 having an outwardly extending peripheral flange 32. This plastic dome 31 is somewhat smaller than the skylight dome 1, but is concentric with it. The outwardly extending peripheral flange 32 rests on a frame generaly designated 33. This frame 33 comprises an upwardly extending flange 34, an inwardly extending flange 35 and an outwardly extending flange 36, with a portion of the outwardly extending flange 36 formed into a rolled hinged member 37. The outwardly extending flange 32 rests on and is supported by a flange 35 and is secured in position by a series of lock fasteners 38 which fit down over the upwardly extending flange 34 and hold the plastic dome in position by the lip element 39. The frame 33 is secured to the outwardly extending wall 28 by a series of thumb screws 40, which pass through the flange 36 and the flange 28 and are held in position by speed nuts 41 fitting over the flange 28. The frame 33 is also secured to the wall 27 by the hinge construction in which the curve hinge element 37 pivots about the shaft 42. This shaft 42 is secured at its end to extensions 45 from the lower end of the elongated vertically positioned channel member 43. This channel member 43 has side walls 44 and a rear wall 46 with an elongated slot 47 centrally located in the rear wall 46. A bolt 49 with its head on the inner side of the channel 43 passes through the slot 47 and secures the member 43 to the wall 27 with a nut 48 securing the other end of the bolt 49.

A washer 50 and 51 may be provided on either side of the channel member 43. This bolt arrangement secures the channel member 43 to the wall 27 in a vertical position.

Thus in operating this ceiling dome, the dome may be opened by first removing the thumb screws 40 and then sliding the channel member downwardly on the bolt until the section designated 52 of the frame 35 has been lowered sufficiently below the flange member 28 to permit it to pivot about the shaft 42 without binding. In this manner, the ceiling dome may be opened for cleaning, repairs, or other purposes. In replacing it, the dome is merely raised to a horizontal level with the flange 36 in face to face relationship with the flange 28 and then the thumb screws 40 are replaced. The bolt 49 should be tightened only to the point where the head of the bolt 49 and the gasket 50 act as guides in the channel member 43. It should not be tightened so much as to prevent the free vertical movement of the channel 43.

Having now described my invention, I claim:

1. In a combination skylight and ceiling light construction, a well liner having a vertical section bordering the inside of a skylight well and an outwardly extending apron formed at the lower edge of said vertical section, a frame having a portion substantially coextensive with said apron and a continuation extending inwardly therefrom, a plastic dome having a peripheral outwardly extending flange secured in face to face relation with said continuation of the frame, a hinge member having two arms with one arm secured to said frame and vertically slidable means securing the other arm to said vertical section whereby said dome and frame may be lowered and opened and means for securing said frame to said well liner.

2. In a combination skylight and ceiling light construc-

tion, a well liner having a vertical section bordering the inside of a skylight well and an outwardly extending apron formed at the lower edge of said vertical section, a frame having a portion substantially coextensive wtih said apron and a continuation extending inwardly therefrom, a plastic ceiling dome having a peripheral outwardly extending flange secured in face to face relation with said continuation of the frame, removable means securing said frame in face to face relation with said apron, and a hinge having two arms with one arm secured to the frame and the other vertically slideably secured to said vertical section whereby said ceiling dome may be lowered and opened.

3. In a combination skylight and ceiling light construction, a well liner having a vertical section bordering the inside of a skylight well, and an outwardly extending apron formed at the lower edge of said vertical section, a frame having a portion substantially coextensive with said apron and a continuation extending inwardly therefrom, a plastic dome having a peripheral outwardly extending flange secured in face to face relation with said continuation of the frame, means supporting said ceiling dome comprising a plurality of thumbscrews removably securing said frame to said apron and means for pivoting open

said ceiling dome comprising a hinging member having two pivotable arms with one arm secured to the upper side of said frame and the other secured to said vertical section with means for vertically sliding the position of said last mentioned arm.

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