Sept. 10, 1940. C. L. BRYANT 2,214,322

AIR CONDITIONING APPARATUS

Original Filed June 26, 1937

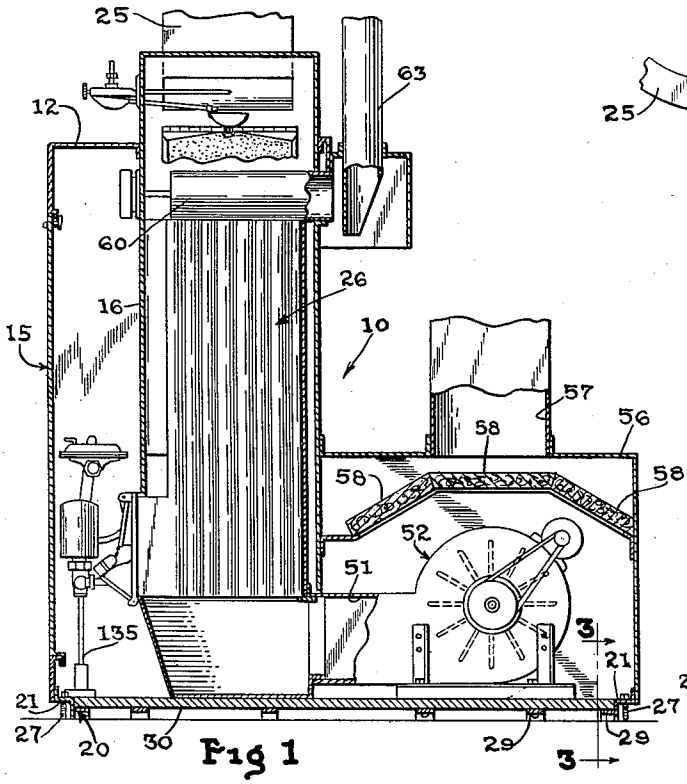

Fig 1

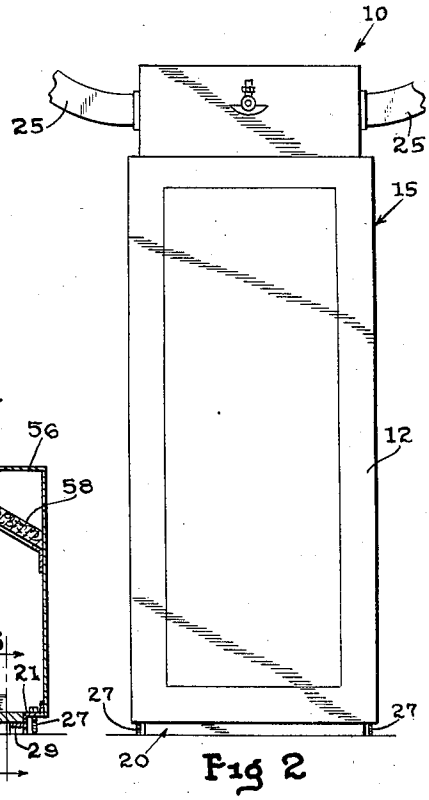

Fig 2

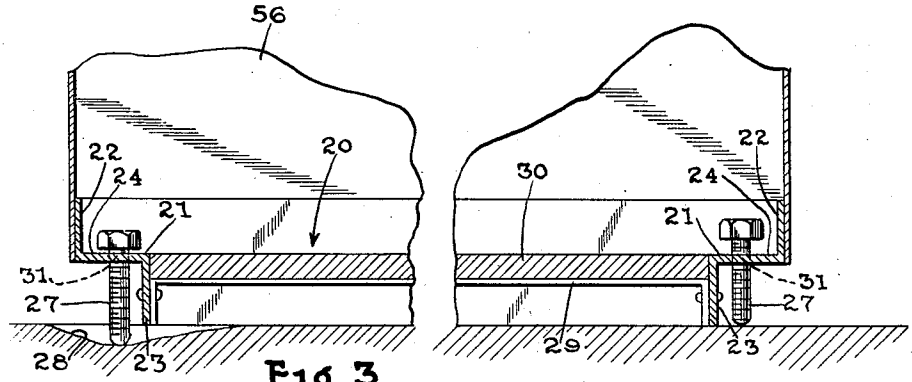

Fig 3

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AIR CONDITIONING APPARATUS

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Original application June 26, 1937, Serial No. 150,597. Divided and this application January 4, 1938, Serial No. 183,306

7 Claims. (Cl. 248—23)

This invention relates to air conditioning apparatus, more particularly to apparatus so constructed and arranged as to be adjustable with respect to a supporting surface, and the principal object of this invention is to provide new and improved apparatus of these types. This application is a division of my co-pending application Serial Number 150,597, filed June 26, 1937.

In the drawing accompanying this specification and forming a part of this application, there is shown, for purposes of illustration, one form which the invention may assume, and in this drawing:

Figure 1 is a vertical sectional view through an air conditioning apparatus, illustrating the embodiment of the invention,

Figure 2 is a front elevational view of the apparatus shown in Figure 1, and

Figure 3 is an enlarged sectional view corresponding generally to the line 3—3 of Figure 1.

Referring particularly to Figures 1 and 2, the air conditioning apparatus 10 comprises an outer casing 15, having a front portion 12, and a rear portion 56. The front portion 12 houses an interior casing 16, in which is disposed a chamber member 26, through which products of combustion from a burner (not shown) disposed within the member 26, are conducted to a flue pipe 60 at the exhaust end of the member 26, and from there out through an exhaust stack 63.

The rear portion 56, of the outer casing 15, has an air inlet 57, providing for supply of air to the inlet of a blower unit 52, the air first passing through suitable filtering means 58, such as frames of spun glass or the like. The blower unit 52 and filtering means 58 are housed within the casing 56. The outlet 51 of the blower unit 52 communicates with the open lower end of the casing 16. As shown in Figure 1, the side walls of the member 26 are longitudinally fluted, so that air may pass through the casing 16, in close contact with the walls of the member 26, to risers 25 leading to the rooms to be heated. Suitable mechanism providing for and controlling the supply of fuel to the burner is shown as generally supported by a foot 135.

The lower end of the outer casing 15 is suitably secured to a base 20, which in this case comprises a support member 21, generally rectangularly shaped in plan view. The member 21 may be formed of connected bars of angle iron, the bars preferably having a Z cross-section, as best shown in Figure 3. The end portions 22 and 23 of the Z-bar formation extend in a generally upright direction, whereas the intermediate portion 24 extends in a generally horizontal direction. Straps 29 are secured to the portions 23 of the supporting member 21, in position to span opposite sides of this member. A supporting plate 30 overlies the straps 29, and provides a supporting surface for the foot 135, chamber member 26, and blower unit 52. The end portion 23, of the Z-bar construction, is adapted to rest on the supporting surface, whereas the end portion 22 provides a flange to which may be secured the lower end of the casing 15 in any suitable manner.

Means are provided to effect adjustment of the base 20, and the air conditioning apparatus carried thereby, with respect to a supporting surface, such as a basement floor. In the embodiment here shown, the intermediate portion 24 of the Z-bar formation is provided with a threaded aperture 31 at spaced-apart places, such as the four corners of the rectangular member 21, and threaded through each of the apertures 31 is a bolt 27.

The supporting surface shown in Figure 3 is of an uneven nature, having a depression 28. In some instances, when the terminal margin of the end portion 23 of the base 20 rests directly on such an uneven surface, the air conditioning apparatus is not steadily supported, and may wobble. To prevent such wobbling, the bolts 27 may be so adjusted as to insure proper support for the base. As seen in Figure 3, the bolt 27 adjacent the recess 28, has been turned so that its end seats in the bottom of the depression 28, thereby obviating any wobbling tendency of the base which might be caused by the unevenness of the basement floor. It will be obvious that the bolts 27 also may be adjusted so as to effect levelling of the base 20, or to compensate for inclination of the supporting surface, or in some cases, to tilt the base with respect to the supporting surface.

The base 20 is of a smaller transverse outer size than the casing 15, providing a step between the base and the casing. The heads of the bolts 27 are disposed within the casing 15, whereas the threaded shanks of the bolts extend through the space formed by the step, and are substantially out of the way and out of sight.

It will be apparent to those skilled in the art that I have accomplished at least the principal object of my invention, and it also will be apparent to those skilled in the art that the embodiment herein described may be variously changed and modified, without departing from the spirit of the invention, and that the inven-

tion is capable of uses and has advantages not herein specifically described; hence it will be appreciated that the herein disclosed embodiment is illustrative only, and that my invention is not limited thereto.

I claim:

1. Adjustment means, for air conditioning apparatus enclosed by a casing, comprising: a generally rectangular base for said apparatus, formed of connected Z-bars; one end portion of the Z-bar construction being adapted to rest on a supporting surface, and the other end portion providing a flange to which said casing is secured; and a plurality of screw-threaded studs, each taking through a screw-threaded aperture formed in the intermediate portion of the Z-bar construction, and adjacent the corners of said base, one extremity of each stud being adapted to engage said supporting surface, adjustment of said studs effecting adjustment of the air conditioning apparatus with respect to said supporting surface.

2. Supporting means, for supporting an object which is at least partially enclosed by a casing, comprising: a base, of Z-bar construction, one end portion of said Z-bar construction being engageable with a supporting surface, and the other end portion providing a flange to which the casing may be secured; and a plurality of screw-threaded members, each taking through a respective one of screw-threaded apertures provided at spaced parts of the intermediate portion of said Z-bar construction, each member being capable of adjustment relative to said intermediate portion so that its lower end engages the supporting surface.

3. Base means, for supporting an object, comprising: a sheet-iron frame construction, having a first flange directed downwardly so as to be in position to engage a supporting surface, and having another flange extending angularly from said first flange and outwardly with respect to the area defined by said first flange, said flanges being relatively so arranged that said other flange is spaced from the supporting surface when said first flange is in engagement with the supporting surface; said other flange being formed with a plurality of screw-threaded apertures; and a plurality of screw-threaded members, taking through respective apertures, each being movable to a position wherein a portion thereof engages the supporting surface and supports the base means at this point, but being retractable from such position and out of engagement with the supporting surface.

4. Base means, for supporting an object, comprising: a frame formed of angle iron, having a generally upright flange, the lower end of which is adapted to engage a supporting surface, and having also a flange extending laterally from the upper end of said upright flange and outwardly with respect to the area defined by said generally upright flange, said laterally extending flange including means to which a casing may be attached; and a plurality of means carried by said laterally extending flange, each being so constructed and arranged that it is movable to a position wherein a portion thereof engages the supporting surface and supports the base means at this point, but is retractable from such position and out of engagement with the supporting surface.

5. Base means, for supporting an object, comprising: a frame formed of angle iron, having a generally upright flange, the lower end of which is adapted to engage a supporting surface, and having also a flange extending laterally from the upper end of said upright flange and outwardly with respecet to the area defined by said generally upright flange, said laterally extending flange including means to which a casing may be attached, and having also spaced-apart screw-threaded apertures; and screw-threaded members, each taking through a respective aperture, and each being movable to a position wherein a portion thereof engages the supporting surface and supports the base means at this point, but being retractable from such position and out of engagement with the supporting surface.

6. Base means, for supporting an object, comprising: a polygonally shaped frame, formed of angle iron, having a generally upright flange, the lower end of which is adapted to engage a supporting surface, and having also a flange extending laterally and outwardly from the upper end of said upright flange, said laterally extending flange having a screw-threaded aperture formed at each of the corners of said frame; and screw-threaded members, each taking through a respective aperture, and each being movable to a position wherein a portion thereof engages the supporting surface and supports the base means at this point, each screw-threaded member being retractable from such positions and out of engagement with the supporting surface.

7. Base means, for supporting an object, comprising: a first part adapted to engage a supporting surface, and when in engagement with the supporting surface having an upright margin defining an area of a certain size; a second part connected to and overlying said first part, and having a margin defining an area of a size larger than the area defined by the upright margin of said first part, so that at least portions of said second part overhang the upright margin of said first part; and a plurality of spaced-apart members, carried by said overhanging portions of said second part, and disposed in the space provided by said overhanging portions, each member being so constructed and arranged that it is movable to position wherein it engages the supporting surface and supports the base means at this point, but is retractable from such position and out of engagement with the supporting surface.

CHARLES L. BRYANT.