May 10, 1949. F. C. SCHOCH 2,469,898

SPACE HEATING DEVICE

Filed Jan. 26, 1946

Fig. 2.

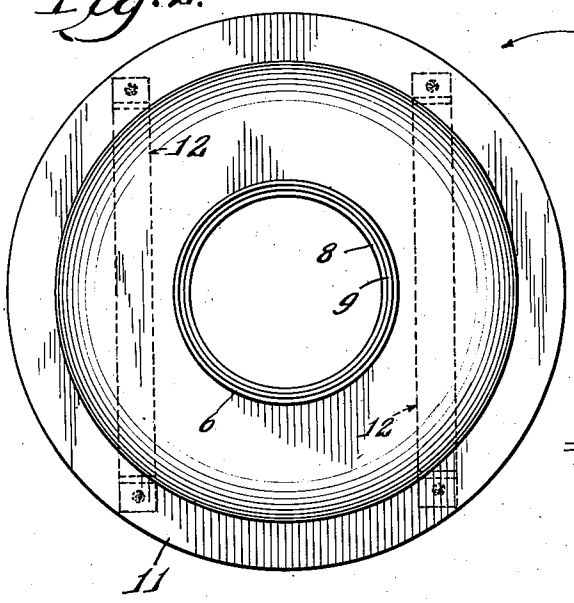


Fig. 1.

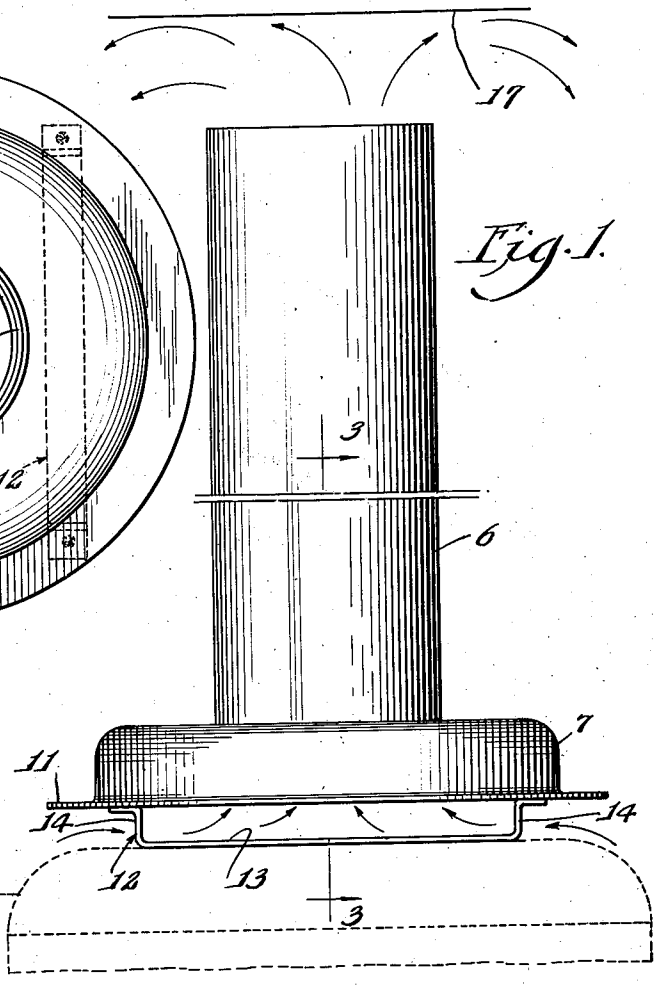
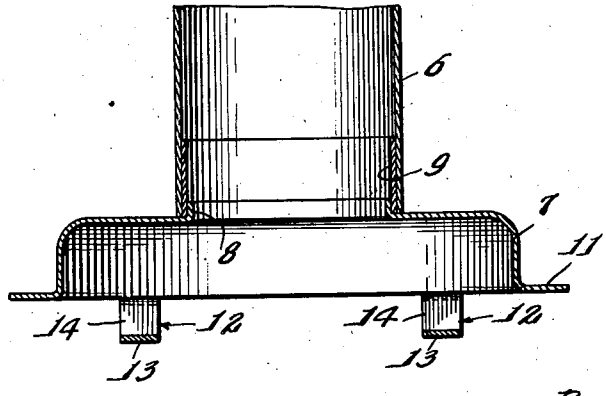


Fig. 3.



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SPACE HEATING DEVICE

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1 Claim. (Cl. 126—67)

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This invention relates to a space heating device and has for an object the provision of a device of this type adapted for use with stoves for directing heated air throughout the interior of a room. It is well known that the use of stoves for heating relatively large rooms are not satisfactory due to the fact that the heat is not radiated a sufficient distance from the stove, therefore, the stove is only useful in heating the area of a room immediately adjacent thereto.

It is an object of the present invention to provide a device adapted to be mounted upon a stove for directing a stream of heated air throughout the entire interior of a room. Devices heretofore employed for accomplishing this purpose have usually consisted of a heating unit and electric fan for directing heated air outwardly from the heating unit.

The present invention contemplates the provision of a tubular stack disposed in an upright position above a stove for the passage of heated air therethrough. When the air within the tubular stack is heated, it produces an upwardly flowing hot air stream having sufficient velocity to direct heated air a relatively long distance from the stove.

It is a further object of this invention to provide a space heating device which is relatively inexpensive in construction, simple in operation, and which will not readily get out of order.

This invention embodies other novel features, details of construction and arrangement of parts which are hereinafter set forth in the specification and claim and illustrated in the accompanying drawing wherein:

Fig. 1 is a side elevational view showing a space heating device embodying features of this invention.

Fig. 2 is a plan view of same.

Fig. 3 is a sectional view taken along the line 3—3 of Fig. 1.

Referring now to the drawing for a better understanding of this invention, the space heating device is shown as comprising a tubular stack 6 provided with an enlarged air inlet portion 7. As illustrated more clearly in Fig. 3, the enlarged air inlet portion is preferably provided with an upturned annular flange 8 to receive a tubular ring 9. The tubular ring 9 is adapted to be riveted or otherwise secured to the annular flange 8 to receive the lower end of the tubular stack 6. The tubular stack 6 is preferably detachably mounted upon the annular ring 9. Therefore, it is desirable that the annular ring 9 extend upwardly within the stack 6 a sufficient distance to

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prevent accidental displacement of the stack from the ring. The air inlet portion 7 is also provided with an annular flange portion 11. Secured to the face of the flange 11 is provided a pair of supporting members 12 which are preferably formed of strip material having their ends welded to the flange 11 and their intermediate portions 13 disposed in predetermined parallel spaced relation to the face of the flange 11 by means of vertical portions 14.

In the operation of a space heating device of the type shown and described, the air inlet portion 7 is positioned upon the top of a stove 16 with the stack 6 mounted in position upon the annular ring 9. Heat from the upper surface of the stove is radiated to the air contained within the interior of the air inlet portion 7 and stack 6, thus causing the air within the stack 6 to rise upwardly at a relatively high velocity. During the rise of heated air within the stack 6, unheated or partially heated air is drawn inwardly through the space defined by the annular flange 11 and the top of the stove. When the upper end of the stack 6 is positioned in spaced relation to a ceiling 17, as illustrated in Fig. 1, the rapidly moving stream of heated air passing upwardly within the stack 6 is directed against the ceiling and thence laterally and/or downwardly for heating portions of the room remote from the stove 16. It has been found during the operation of this device that the heated air stream flows a considerable distance from the stove and in the form of a whirl and thus conveys heat to various portions of a room. In heating the interior of a room by means of a stove and space heating device of the type shown and described, it will be noted that the continuous circulation of air through the stack 6 will eventually cause all the air contained within a room to be heated due to the fact that the relatively cold air is drawn inwardly from adjacent the floor and directed outwardly at relatively high velocity from the stack 6. Thus, if the stove 16 is of sufficient size, all of the air within a room will be directed through the stack within a relatively short period of time to provide a desired room temperature.

While this invention has ben shown in but one form, it is obvious to those skilled in the art that it is not so limited but is susceptible of various changes and modifications without departing from the spirit and scope of the claimed invention.

I claim as my invention:

In a space heating device for conducting heated air from adjacent the top surface of a stove to

a remote part of a room, a portable tubular stack, said stack having an enlarged air inlet end substantially equal to the area of a stove top, means adapted to support said stack in an upright position upon and in spaced relation to the top surface of a stove, whereby heat radiated from the top of a stove acts to draw unheated air laterally across the top of a stove and upwardly through the stack, the outlet end of said stack being disposed at a higher elevation than said inlet end and adapted to open into a room and disperse heated air in same, said stack supporting means comprising a pair of U-shape supporting legs having their ends secured to the inlet end of said stack.

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