

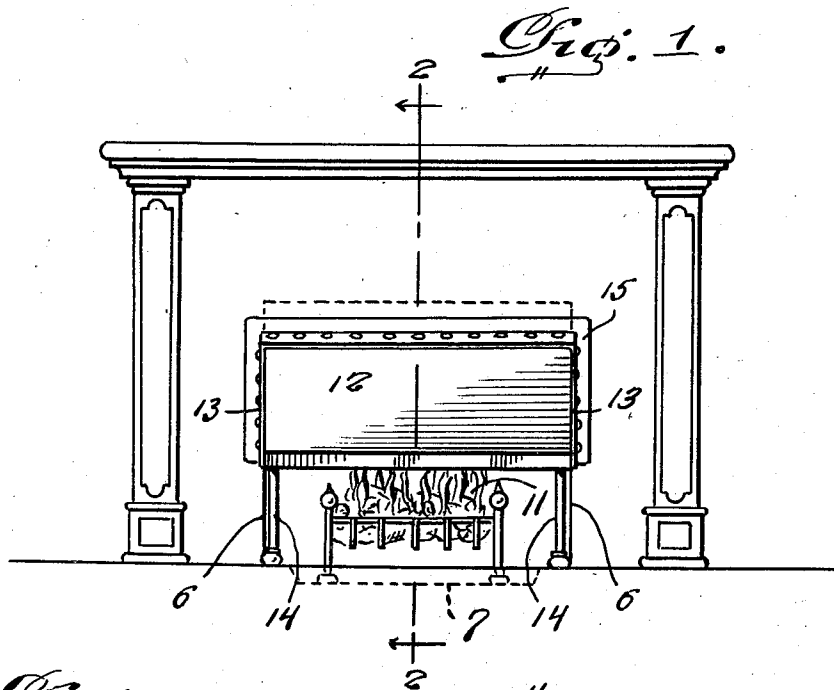
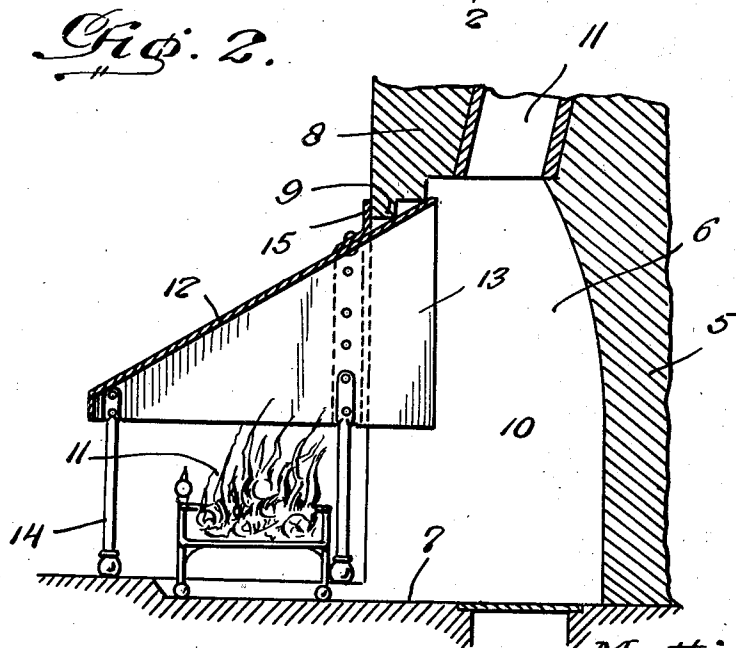
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FIREPLACE CONSTRUCTION

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FIREPLACE CONSTRUCTION

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1 Claim. (Cl. 126—142)

This invention relates to fireplace constructions, and has more particular reference to a fireplace wherein provision is made for arranging the fire or source of heat exteriorly and directly in front of the usual fire space or open front recess of the fireplace, in combination with a heat radiating hood extending forwardly from the upper portion of said usual fire space or open front recess over the fire or source of heat, whereby the hood effectively radiates the heat of the fire directly into the room for more efficient heating.

More particularly, the present invention contemplates a fireplace construction of the above character wherein the heat radiating hood is of a form to effectively conduct the smoke and products of combustion from the fire or source of heat rearwardly into the upper portion of the usual fire space or open front recess for passage to and outwardly through the chimney at the top of said usual fire space or open front recess.

In a preferred embodiment of the present invention, the heat radiating device or hood consists of a forwardly and downwardly inclined top wall and vertically disposed side plates depending from the side edges of said top wall and forming a tapered inverted channel-shaped structure adapted to fit in the upper portion of the front opening of the usual fire space. The heat radiating hood is formed of sheet metal which will effectively radiate the heat, and means are provided to support the hood in proper position as well as to properly limit the insertion of the larger end of the hood in the front opening of the fireplace.

The present invention will be clearly understood from the following description when considered in connection with the accompanying drawing, wherein:

Figure 1 is a front elevational view of a fireplace construction embodying a heat radiating hood constructed and disposed in accordance with the present invention; and

Figure 2 is a vertical section on line 2—2 of Figure 1.

Referring in detail to the drawing, the fireplace structure proper may be constructed of bricks or the like and includes a rear wall 5, side walls 6, a bottom wall 7, a top 8, and a partial front wall 9 depending for a short distance from the top 8, so as to form the usual fire space or open front recess 10 communicating at its top with the lower end of a vertical chimney 11. The lower portion of the rear wall 5 has the usual vertical front surface, while the upper portion of

said rear wall has a front surface which extends upwardly and forwardly in the usual way as clearly shown in Figure 2.

In ordinary fireplace constructions, the fire or source of heat is usually arranged within the recess or space 10 so that much of the heat escapes through the chimney 11 together with the smoke and products of combustion. In accordance with the present invention, the bottom 7 of the fireplace is extended a material distance outwardly of the usual fire space or recess 10 in front of the latter as shown clearly in Figure 2, and the fire or source of heat 11 is positioned exteriorly of the recess 10 directly in front of the latter, so as to really be out within the room provided with the fireplace. In order to make practical the positioning of the fire or source of heat exteriorly of the recess or fire space 10, in this way, I provide a heat radiating hood which will radiate the heat of the fire or source of heat directly into the room and at the same time effectively conduct the smoke and products of combustion from the fire or source of heat rearwardly into the upper portion of the recess or space 10 for passage out of the chimney 11. As shown, this heat radiating hood is in the form of a sheet metal tapered inverted channel adapted to extend and fit into the upper portion of the recess 10 at its larger end and comprising a flat top wall or plate 12 inclined outwardly or forwardly and downwardly and having side plates or walls 13 depending from the opposite side edges thereof. The heat radiating hood extends forwardly over and beyond the fire or source of heat 11 so that all of the smoke and products of combustion are effectively conducted rearwardly into the space 10 for passage out of the chimney 11. At the same time, the walls of the hood are directly heated by the fire or source of heat so that the heat is effectively radiated into the room. The heat radiating hood may be suitably supported in operative position by means of supporting legs 14 or the like, such legs being illustrated by way of example and shown as carried by and depending from the side plates or walls 13 and adapted to rest upon the floor at opposite sides of the fireplace.

In order that the hood may be readily positioned, an external flange is provided thereon as at 15 extending upwardly on the side walls 13 and across the top wall 12 adjacent but spaced from the rear edge of the hood or the larger end of the latter and arranged to contact the front of the fireplace in surrounding relation to the upper portion of the front opening of recess 10. Thus, 55

when the hood is inserted in the opening of recess 10 its inward or rearward movement is limited by the flange 12 to a point where the hood is properly positioned over the fire or source of heat 11.

5 This flange also provides a neat finish and aids to some extent in preventing escape of smoke or products of combustion into the room between the larger end of the hood and the adjacent wall portions of the front opening of recess 10. Effective combustion is insured because the hood is

10 supported at an elevation with the walls thereof spaced above the floor and terminating above the fire 11, so that air may readily enter from the sides and front under the hood for passage to

15 the fire or source of heat and thereby promoting combustion.

The heat radiating hood of the present invention may be conveniently and cheaply made of polished sheet metal of high heat conductivity, and the bottom of the fireplace may be readily

20 extended in front of the usual fire space or recess either in new fireplace construction or in modifying existing fireplace constructions in accordance with the present invention. The invention

25 materially improves the heating capacity of the fireplace by utilizing much of the heat which is ordinarily wasted.

What I claim as new is:

In combination with a fireplace proper having the usual open front fire space with the bottom thereof extending forwardly beyond the front of said fire space, a source of heat disposed upon 5 said bottom exteriorly of and in front of said fire space, a heat radiating hood fitted into the upper portion of the front opening of said fire space and extending outwardly over said source of heat, said hood including a piece of sheet 10 metal bent to provide a flat forwardly and downwardly inclined top wall for conducting the products of combustion from the source of heat upwardly and rearwardly into the upper portion of said recess, and flat opposed side walls depending 15 from the side edges of said top wall, legs depending from said side walls for supporting the hood in spaced relation to and above the bottom of the fireplace, and a flange secured on the exterior of the top and side walls of said hood and 20 arranged to contact the front of the fireplace at the top and sides of said fire space to limit insertion of the hood into the latter.

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