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A. B. MODINE

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COMBINED RADIATOR COVER AND SEAT

Original Filed March 25, 1927

Fig. 1.

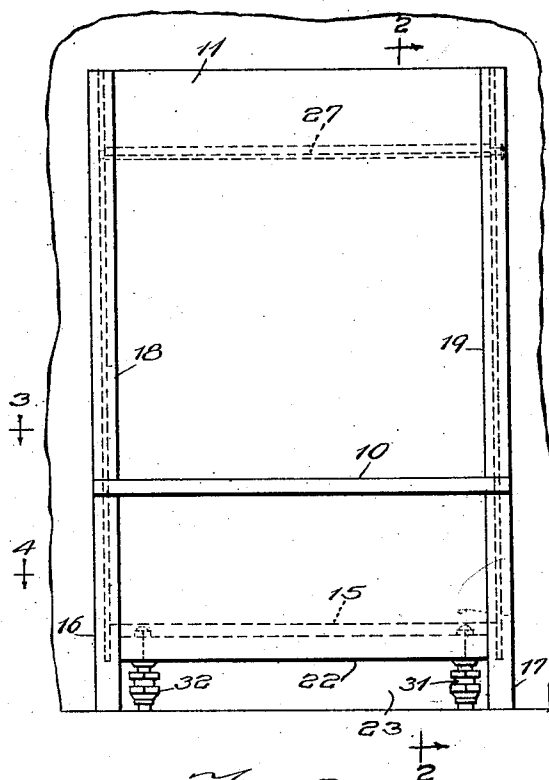


Fig. 2.

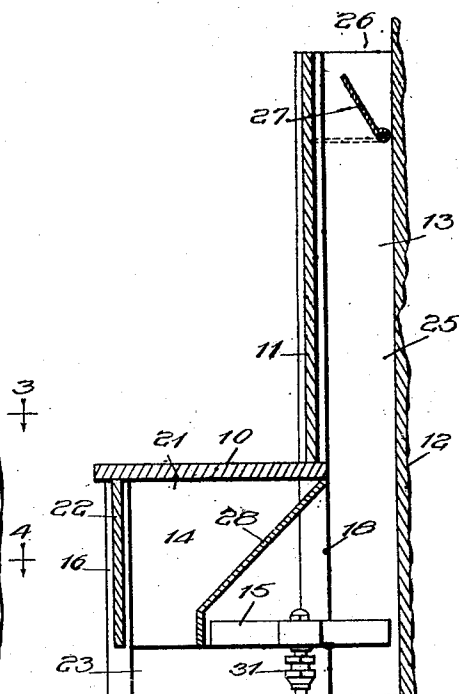


Fig. 3.

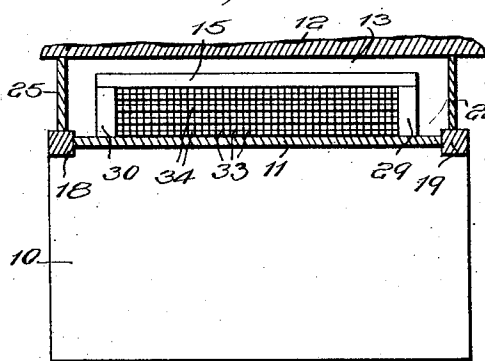
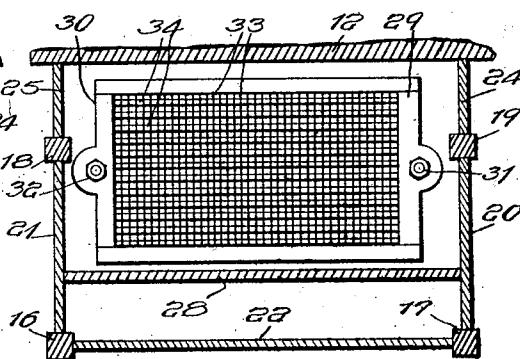


Fig. 4.



Witness:

William P. Nelson

Inventor:
Arthur B. Modine

By Hill Hill

Attorney

UNITED STATES PATENT OFFICE

ARTHUR B. MODINE, OF RACINE, WISCONSIN, ASSIGNOR TO MODINE MANUFACTURING COMPANY, OF RACINE, WISCONSIN, A CORPORATION OF WISCONSIN

COMBINED RADIATOR COVER AND SEAT

Original application filed March 25, 1927, Serial No. 178,486. Divided and this application filed May 8, 1930. Serial No. 450,728.

The invention primarily relates to heating devices and has among its principal objects the production of an air heating device which will serve the dual purpose of a heating device and a piece of furniture.

The invention has as a further object the provision of means which may be employed in the dual capacity above referred to and which will conceal the heating apparatus from view.

Another object of the invention is to construct the piece of furniture so as to provide a body supporting portion and a back, these two elements being formed so as to provide a chamber and a communicating duct, the duct being located at one side of the back so that heated air contained in the chamber may be discharged therefrom through said duct and into the room in which the article is located.

A further object of the invention is to arrange the chamber in which the heat exchange device may be located so that said chamber is arranged in spaced relation to the floor of the room in which the article is located to thereby provide means whereby the relatively cool air located in the lower portion of the room may enter the chamber, be heated and thence discharged from the device.

Another object of the invention is to construct the back of the article so that it is capable of association with the wall of the room in which the article is to be located to thereby provide a duct, one wall of which is formed by the wall of the room.

The invention has these and other objects all of which will be explained in detail and more readily understood when read in conjunction with the accompanying drawing in which one embodiment of the invention is illustrated, it being manifest that changes and modifications may be resorted to without departing from the spirit of the appended claims forming a part hereof.

In the drawing, Fig. 1 is a front elevation of a piece of furniture simulating a chair;

Fig. 2 is a section taken on line 2—2 of Fig. 1;

Fig. 3 is a section taken on line 3—3 of Fig. 1; and

Fig. 4 is a section taken on line 4—4 of Fig. 1.

This application is a division of an application Serial No. 178,486 filed by me March 25, 1927, and the present embodiment of the invention contemplates a piece of furniture having the body supporting portion or seat 10 and a back portion 11. The structure is designed to be arranged relatively to the wall 12 which is one of the walls of the room in which the device is to be located to thus provide a duct 13 which communicates with a chamber 14 located below the body supporting portion 10. This chamber 14 is provided to house or conceal a heat exchange device generally designated 15. The structure contemplates the provision of a frame which includes the legs 16 and 17 and the posts 18 and 19, the latter of which form part of the back 11. The lower portions of the posts 18 and 19 are connected with the legs 16 and 17 through the medium of plates 20 and 21 which, with the front plate 22 form the chamber generally designated 14. These plates 20, 21, and 22 extend downwardly relatively to the seat 10 a suitable distance, however, in spaced relation to the floor of the room in which the article is to be located to thereby provide an opening 23 through which relatively cool air may be introduced to the chamber, be heated by the heat exchange device 15, and thence discharged through the duct 13 into the room in which the article is located.

It will be noted that plates 24 and 25 are employed which extend in a rearwardly direction from the posts 18 and 19 and that said plates 24 and 25 extend a suitable distance in opposite directions from the seat 10 and thus form a hollow back which, when associated with the wall 12 of the room in which the article is located, provides a duct through which the heated air may travel from the chamber 14 and be discharged into the room.

It will be noted by referring to Fig. 2 that the hollow back is open at the upper end, as at 26, which will allow the heated air to be discharged into the room. A damper 27 is hingedly mounted between the side plates 24 and 25 and is provided to regulate the amount of heated air passing into the room. A

baffle plate 28 is employed and is extended from the lower face and rear edge of the body supporting portion 10 into the chamber 14 and terminates adjacent the lower termination of the plates 20, 21 and 22.

5 The heat exchange device 15 may be of any desired construction, that herein shown includes the headers 29 and 30, which headers are supplied with connections 31 and 32
10 whereby said heat exchange device may be connected with the supply and return of the heating system. The headers 29 and 30 are connected with each other through the medium of the longitudinally extending tubes
15 33 and may be provided with heating fins 34.

The heat exchange device is located in that portion of the structure provided below the baffle plate 28 and is also elevated a suitable distance from the floor of the room in which
20 the device is located so that the relatively cool air entering the space 23 is compelled to pass through the heat exchange device 15 and be heated prior to its discharge from the duct 13.

25 From the foregoing description of the construction, it is manifest that an article of furniture is produced having a body supporting portion and a back, and in which the back is formed to provide a hollow structure which, when associated with the wall
30 of the room in which the article is located, provides a duct which is open at one end to allow the heated air circulating through the duct to be discharged into the room in which the device is arranged. It is further manifest
35 that by employing the baffle plate 28 that the chamber 14 is divided so that the portion of the chamber 14 located between the body supporting portion 10 and the baffle plate is maintained in a relatively cool condition
40 which will also retain the body supporting element in a relatively cool condition, which will add to the comfort of the person using the device.

45 Having thus described the invention, what I claim and desire to cover by Letters Patent is:

1. In a combined radiator cover and seat having a body supporting portion and a hollow back, the body supporting portion being
50 arranged to provide a space below said portion, the hollow back providing a duct which communicates with said space, said duct having a portion which extends into the space below said body supporting portion and providing a radiator chamber at the mouth of
55 the duct.

2. In a combined radiator cover and seat having a body supporting portion and a back,
60 the body supporting portion being arranged to provide a space below said portion, for the reception of a heat exchange unit, the back having rearwardly extending side walls adapted to cooperate with a wall of the room
65 in which said article is located to thereby pro-

vide a duct for conveying heated air into the room.

3. In a combined radiator cover and seat having a body supporting portion and a back, the body supporting portion being arranged
70 to provide a space below said portion for the reception of a heat exchange unit, the back having rearwardly extending side walls for cooperation with a wall of the room in which said article is located, to thereby provide a
75 duct for conveying heated air into the room and a member extending downwardly relatively to said body supporting portion and into the space below said portion, said member providing means for directing heated air
80 toward said duct.

4. In a combined radiator cover and seat having a body supporting portion and a hollow back, the body supporting portion being
85 arranged to provide a space below said portion, the hollow back providing a duct which communicates with said space, the space below the body supporting portion being divided to provide separate chambers one of which communicates with said duct and provides means for the reception of a radiator,
90 the other element being located between said body supporting portion and the chamber in which said radiator is located.

5. In a combined radiator over and seat having a body supporting portion and a hollow back, a chamber located below the body
95 supporting portion and communicating with the hollow back, the back being adapted to be arranged relatively to a wall of a room to thereby provide a duct, the duct having an opening whereby air may be introduced into
100 the room in which said article is located.

6. In a combined radiator cover and seat having a body supporting portion and a hollow back, a chamber arranged below the body
105 supporting portion and communicating with the hollow back a member extending forwardly with respect to said duct and into said chamber, the chamber being arranged relatively to the floor of the room in which said
110 article is located to provide a space whereby air to be heated may pass into the chamber and into said hollow back.

7. In a combined radiator cover and seat having a body supporting portion, a hollow
115 back and a chamber below the body supporting portion which communicates with said hollow back, and said back having an opening arranged to discharge heated air in a substantially vertical direction from said
120 back, the chamber having an opening for the introduction of air to said chamber, and a radiator located above said opening in said chamber.

In witness whereof, I hereunto subscribe my name this 25th day of April, A. D. 1930.

ARTHUR B. MODINE.

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