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M. E. POLING

FIREPLACE FRONT

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Fig. 1.

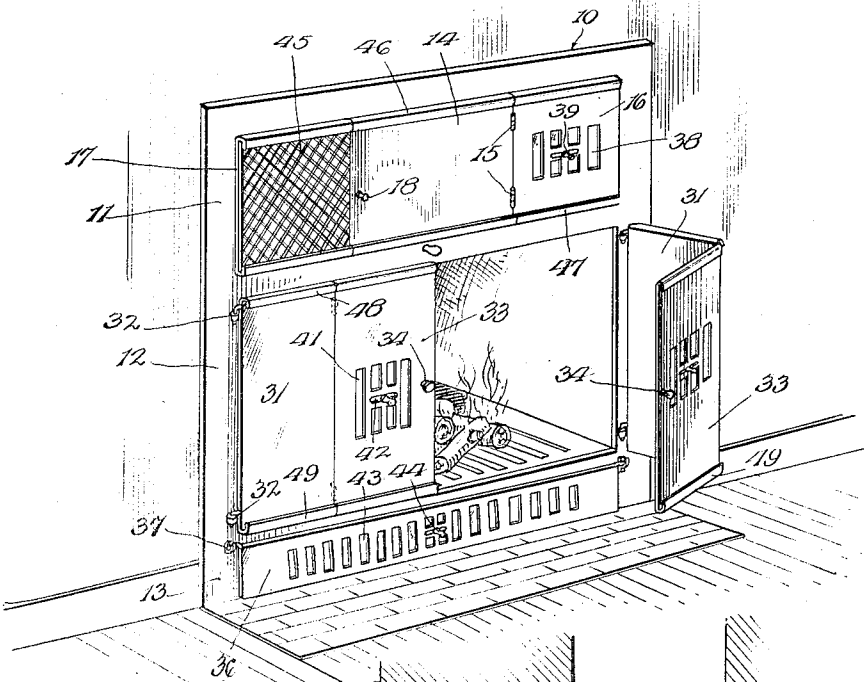
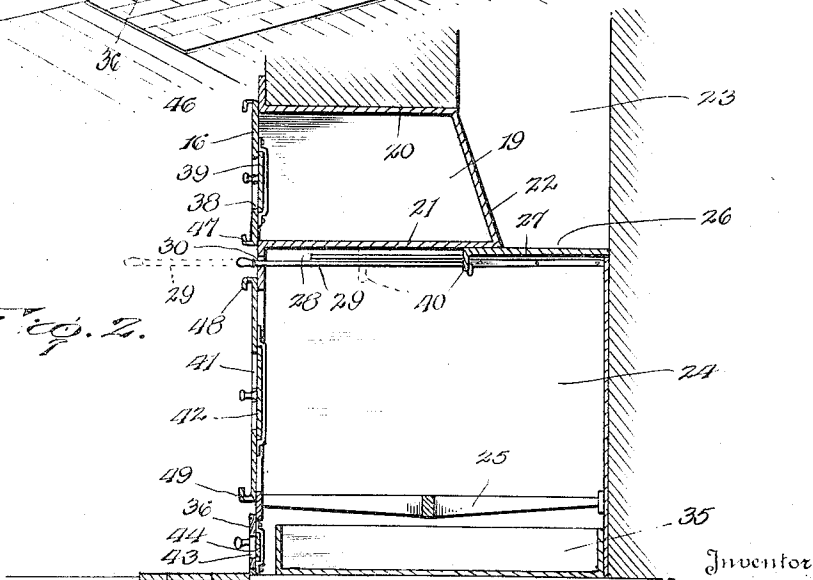


Fig. 2.



Inventor

M. E. Poling.

By

Larry Harry,

Attorney.

UNITED STATES PATENT OFFICE.

MAY E. POLING, OF PHOENIX, ARIZONA.

FIREPLACE FRONT.

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To all whom it may concern:

Be it known that I, MAY E. POLING, a citizen of the United States, residing at Phoenix, in the county of Maricopa and State of Arizona, have invented certain new and useful Improvements in Fireplace Fronts, of which the following is a specification.

The present invention relates to open fire places in offices, or dwellings, and has for its main object to provide an ornamental front for the fire place forming a removable attachment therefor and having substantially the appearance of a radiator when closed.

Another object of the invention is to construct this front in such a manner that it also has its practical uses, as, for instance, as a baking oven or chamber for warming and heating prepared dishes.

Another object of this invention is to provide a safety appliance against fire as the front, when its doors are closed, will prevent hot ashes, cinders or glowing coal from falling out into the room and in this manner guard against danger of fire.

One advantage of the present invention resides in the fact that when the fire place is not in use, this front will provide a screen for keeping dust and ashes from blowing into the room as long as the doors of the front are closed.

In the accompanying drawing one embodiment of the invention is illustrated, and Figure 1 is a perspective view of the device, and

Fig. 2 is a vertical section through the fire place and the installed front.

The device consists of a frame 10 which is divided into an upper section 11, a middle section 12 and a bottom section 13. These sections are each provided with hinged doors and the top section 11 is shown with a central door 14 hinged along one side as at 15 to the side plate 16. The other side plate 17 is adapted to abut the free edge of the central door which is provided with a handle 18 for conveniently swinging the door sideways to open. Both plates 16 and 17 are fixed in the upper section 11 of the frame and the handle 18 may control a latch for holding the door in closed position in a well known manner.

The upper section 11 comprises an oven 19 having a roof 20 and a bottom 21 and is, in Fig. 2, shown with a slanting back 22, which, however, may be perpendicular. The

back 22 reaches into the flue 23 of the fire place and the bottom 21 is exposed to the heat from the fire in the middle section 12.

Beneath the oven 19 is the fire box 24 having a grate 25 at its bottom and communicating, as at 26, with the flue 23 behind the back 22 of the oven. The opening 26 is adapted to be closed by a damper 27 which is mounted to slide on guides 28 beneath the oven. The forward end of the damper 27 has a downwardly projecting lug 40, which is adapted to be engaged by the rod 29 which may be inserted through the small opening 30 in the frame 10 for this purpose. The rod 29 which is detachable may also be used for engaging with the handles on the different doors when the heat is so excessive that the handles cannot be conveniently gripped by hand.

The doors 31 for the middle section 12 comprising the fire box 24 are preferably hinged, as at 32, along the sides of the frame 10, so as to swing outwardly to open. As the width of the fire box is generally very great, the doors 31 are preferably each provided with a hinged leaf 33, on which a small handle 34 is secured near the inner edge. This has the double advantage that the doors do not take so much room in swinging out as with a larger door, and that the heat radiation from the fire box may also be moderated by the use of the leaves, which preferably fold inwardly as seen to the right of Fig. 1.

Beneath the grate 25 is arranged an ash pan 35 occupying the entire space of the bottom section so as to be able to receive the ashes and cinders dropping down from the grate 25. The opening of the bottom section 13 is closed by a door 36, which is preferably hinged at its upper edge, as at 37, and carried in open hinges so as to be removable when necessary.

The side plate 16 of the upper section 11, is shown provided with a number of perpendicular slits 38, which may be covered by similarly slitted shutters 39 mounted to slide on the back of the plate, and it will be understood that the plate 17 is constructed in the same manner and equipped with similar shutters. Likewise the folding leaves 33 for the middle section 12 or fire box are furnished with slits 41 and sliding shutters 42. Such slits 43 with shutter 44 are also to be found on the ash pit door 36. By means of these slits and shutters, the draft

from the ash pit through the fire box may be regulated. At times it may also be desirable to see the fire without opening the doors when the shutters 42 in the folding leaves 33 may be pushed aside or in case part of the heat in the oven were desired to enter the room without opening the door 14, the shutters 39 would then have to be opened.

10 In order to facilitate the heat radiation and also to give the structure the appearance of an ordinary radiator, latticed screens such as shown at 45 may be provided. These screens are removably attached to the doors and side plates, which for this purpose are preferably provided with grooved ledges 46, 47, 48 and 49, respectively, between which the screens fit to slide in or out of position. The grooved ledges may be obtained by simply flanging the edges of the doors and plates, which is easily accomplished, as they are made of sheet metal. With the screens brightly polished, bronzed or covered with gilt, they would stand out prominently against the dark background of the elements upon which they are mounted and in this manner provide a very attractive and artistic looking construction.

30 The use of the device is as follows: As will be noted the frame 10 surrounds the entire opening of the fire box and the construction of the device is such that it can be inserted, including the oven, the ash pit and the fire box sections into any existing open fire place. To start the fire after it is laid, the doors 31 should be partly or entirely closed and the damper 27 drawn out into the dotted line position indicated in Fig. 2, while the shutter 44 stands open. When the fire is burning the central doors 31 may be closed and the bottom door 36 partly or fully opened. The damper may now be partly closed until no flames emit from the burning coal, when the damper may be closed entirely, thereby compelling the heat to penetrate into the oven 19 which will now be ready for baking or warming dishes or the heat may be permitted to enter the room by opening the doors 14 or the shutters 39 and 42.

It will be noted that with this device installed in an open fire place, a saving of fuel will be made. In this manner the fire place will be more economical than those of the old construction. As has already been mentioned it also provides safety against fire in the house as the doors 31 and 33 constitute screens when closed thereby prevent-

ing contents of the fire place from falling out in the room.

Having thus described the invention, what is claimed is new is:

1. An open fire place attachment comprising a frame constructed to fit into the fire place and having a fire box and an oven above the fire box, the back wall of the oven being spaced from the back wall of the fire place and the bottom of the oven forming the top of the forward portion of the fire box, the top of the fire box in rear of the oven communicating directly with the smoke flue of the fire place, a damper slidably mounted below the oven and adapted to close the top of the fire box in rear of the oven to cut off communication with the smoke flue, closures for the front of the oven and the fire box, and means on said closures for controlling circulation.

2. An open fire place attachment comprising a frame conforming to the opening of the fire place and divided into fire box and oven sections, and individual doors for said sections permitting the partial or complete opening of each section separately, said doors being provided with screen-receiving guides on their outer sides.

3. An open fire place attachment comprising a frame conforming to the opening of the fire place and divided into fire box and oven sections, individual doors for said sections permitting the partial or complete opening of each section separately, said doors being provided with slits and shutters on the doors for closing the slits, and having screen-receiving guides on their front sides at their upper and lower ends.

4. An open fire place attachment comprising a frame conforming to the opening of the fire place and divided into top, central and bottom sections, individual doors for top and central sections, permitting the partial or complete opening of each section separately, said top section including a closed chamber adjacent the flue of the fire place, said central section having a grate and communicating with said flue, a damper for said flue slidably supported under said closed chamber, an ash pan in said bottom section beneath said grate, said doors being provided with slits and shutters on the doors for closing the slits, and being further provided with grooved screen-receiving ledges on their front sides at their upper and lower ends.

In testimony whereof I affix my signature.

MAY E. POLING. [L. s.]