Sept. 26, 1939. F. G. BOYTER 2,174,435

FIREPLACE

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Fig. 1.

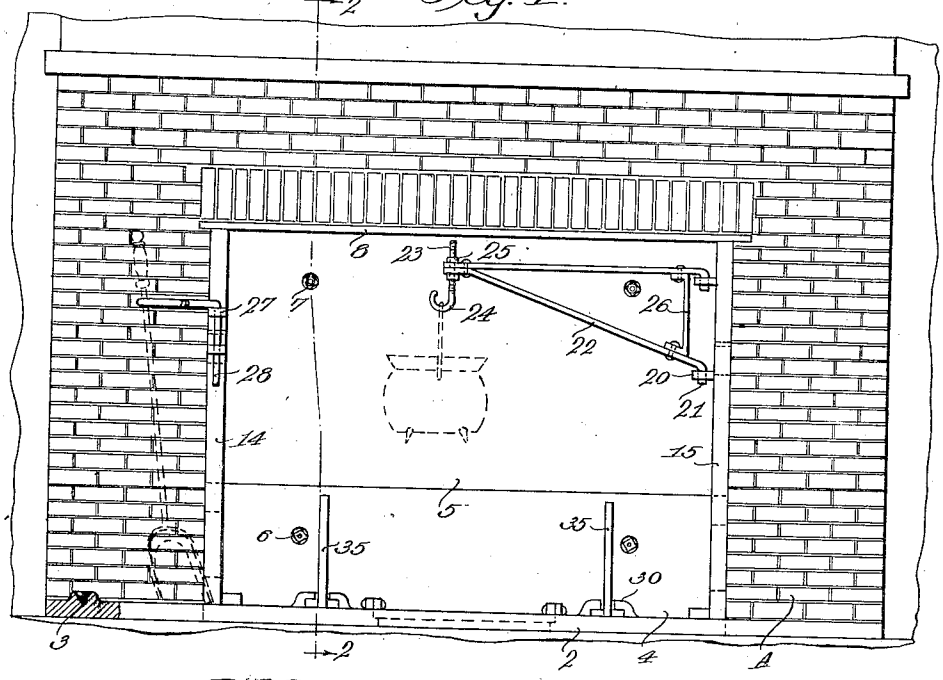
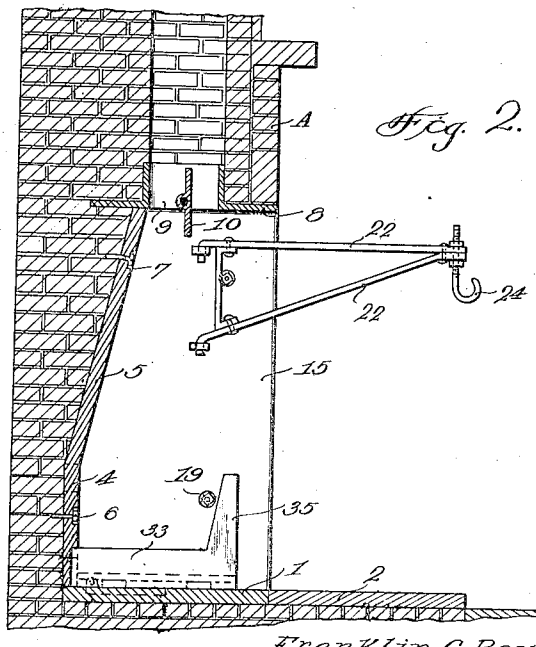


Fig. 2.



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Fig. 4.

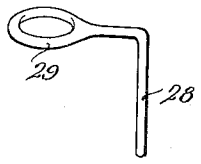


Fig. 5.

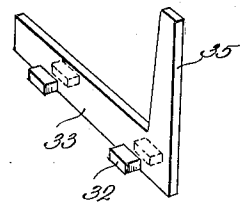
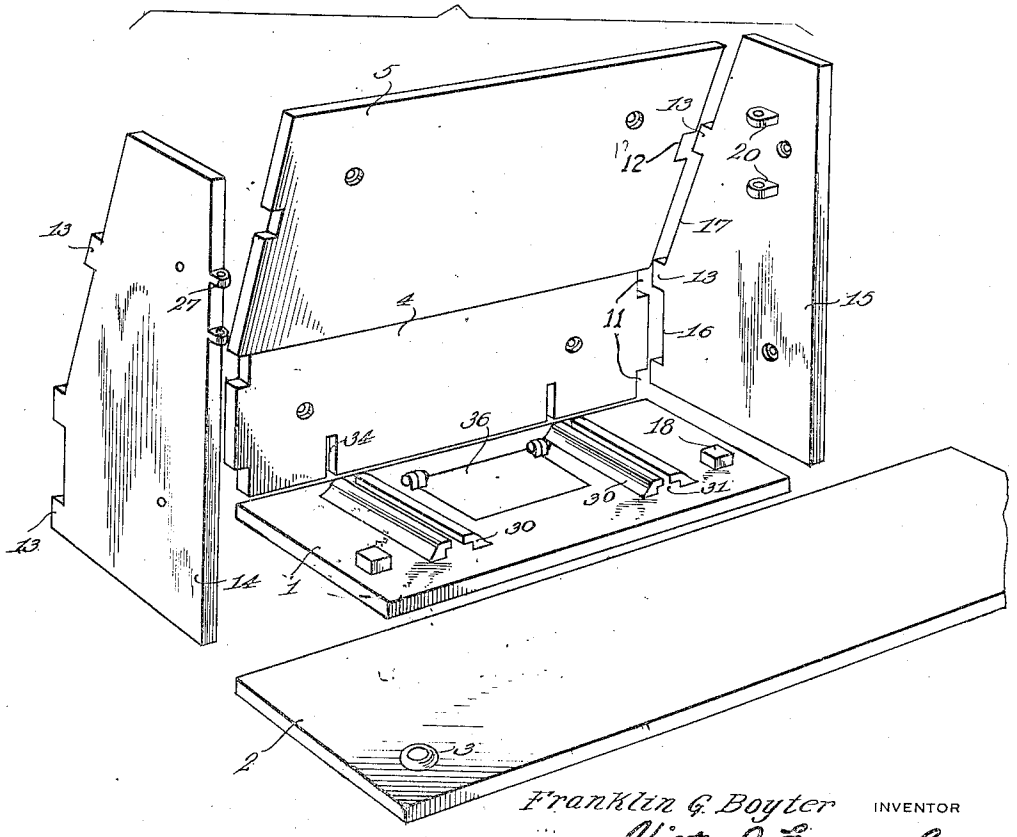


Fig. 3



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FIREPLACE

Franklin G. Boyter, Cramerton, N. C.

Application March 6, 1939, Serial No. 260,182

4 Claims. (Cl. 126—120)

This invention relates to fireplaces, and its general object is to provide a metallic lining preferably of cast iron, shaped for fitting engagement with a fireplace opening to cover the walls or faces thereof, as a cast iron lining not only reflects more heat within a room than the usual brick or stone faced fireplace, but holds the material from which the fireplace is built, such as bricks, stones or the like in place, thus eliminating the expense of replacing such material that becomes loose, deteriorates or crumbles under the action of heat.

A further object is to provide a fireplace lining that can be made into interfitting wall sections or plates, to facilitate the installation of the lining, and certain of the plates are provided with means for slidably receiving and supporting andirons, whereby the latter can be readily applied and removed, but casual removal or displacement is practically impossible.

A still further object is to provide a fireplace lining that is simple in construction, inexpensive to manufacture, easy to install, and extremely efficient in use and service.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claims.

In describing the invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:

Figure 1 is a front view illustrating a brick fireplace with my lining installed therein.

Figure 2 is a sectional view taken approximately on line 2—2 of Figure 1, looking in the direction of the arrows.

Figure 3 is a perspective view illustrating the respective sections of my sectional lining.

Figure 4 is a perspective view of a tool receiving bracket and holder to be used with my lining.

Figure 5 is a perspective view of one of the andirons to be used with my lining.

Referring to the drawings in detail, the letter A indicates a fireplace of the usual mantle type, that is made essentially of brick, and while I have illustrated my lining as being installed in a brick fireplace, it will be understood that it can be installed in a fireplace made from any material, as well as in new and old fireplaces.

While my lining can be made into a single unit, it is shown as being made into wall sections in the form of separable associated plates, there being an ash receiving inner hearth or base plate 1 of rectangular shape to fit and to be set within the opening of the fireplace for disposal upon the bottom thereof and an outer hearth plate 2 of elongated rectangular shape, preferably of a length co-extensive with the entire width of the fireplace, to extend beyond the opposite sides of the opening thereof, as best shown in Figure 1. The hearth plate 2 is set upon the outer hearth of the fireplace for disposal flush with the ash receiving or base plate 1 and suitable anchoring means such as bolts or the like may be provided for the plate 2, but due to the weight thereof, it will remain in place against casual displacement, especially if set in plastic material. Formed on or otherwise secured to the hearth plate 2 preferably adjacent one end thereof is a boss 3, providing means to facilitate cracking of nuts, and the boss has a concavity therein providing a seat for receiving a nut.

It will be obvious that the plates 1 and 2 provide the bottom or hearth wall for my lining and the rear wall thereof in the form as shown, is made up of a lower rear plate 4 and an upper rear plate 5, the latter being seated upon the upper edge of the lower rear plate, and the meeting edges of the plates 4 and 5 are preferably beveled for fitting engagement with each other. The plates 4 and 5 are also of rectangular shape, and the plate 4 is anchored by bolts 6 to the lower vertical face of the rear wall of the opening of the fireplace, while the plate 5 which acts as a baffle or reflector is anchored by bolts 7 to the forwardly inclined heat reflecting face of the fireplace, as best shown in Figure 2, the bolts being of the usual headed type, with their heads countersunk within the plates, while the shanks are embedded within the bricks or between the same, as likewise shown in Figure 2.

The upper rear plate is of a height to extend to the upper wall of the fireplace for engagement with the rear portion of a top plate 8, the latter having a throat collar 9 formed thereon and extending into the throat of the flue. Pivotally mounted in the collar is a disk damper 10 shaped to fit the collar for closing the flue, as well as for controlling the draft to the fireplace, as will be apparent, and the top plate 8 has its rear portion embedded within the bricks in the usual manner, while the front portion of the top plate terminates flush with the forward edge of the top wall of the fireplace opening.

The lower plate 4 rests upon the upper surface of the base plate 1 along the rear longitudinal edge thereof, and the upper and lower corners

of the plate 4 are provided with recesses 11, while the plate 5 is provided with recesses 12 preferably midway between the upper and lower ends thereof, as best shown in Figure 3. The recesses 11 and 12 provide seats for lugs 13 formed on and extending rearwardly from the rear edges of the side plates 14 and 15, the rear edges being shaped to fit the plates 4 and 5 and for that purpose the lower portions 16 of the rear edges are vertical while the remaining portions 17 are forwardly inclined, as best shown in Figure 3. The side plates are of a height to extend between the base plate 1 and the top plate 8 for engagement therewith, and of a width so that the forward edges thereof are flush with the front wall of the fireplace. I preferably provide abutment blocks 18 formed on the base plate 1, for the side plates, and the side plates are anchored to the side faces of the opening of the fireplace by bolts 19 similar to the bolts 6 and 7, the bolts 19 extending through openings in the side plates with their heads countersunk therein.

Formed on and extending inwardly from the side plate 15 is a pair of superimposed apertured ears 20 for the purpose of receiving the downturned trunnions 21 formed on the remote ends of the arms 22 of a substantially triangular shaped bracket which has the apex ends of its arms secured together in contacting engagement with an opening therein for receiving the shank 23 of a hook 24 the latter being adjustably mounted within the opening of the bracket and held accordingly by lock nuts 25 and the hook is adapted for receiving pots and the like, as best shown in Figure 1. The bracket is reinforced by a cross member 26 secured to and bridging the arms thereof.

Formed on and extending from the forward edge of the side plate 14 is a pair of superimposed apertured ears 27 for swingingly receiving the vertical portion 28 of the shank of a ring bracket 29, the shank being bent at right angles upon itself to provide the vertical portion and the horizontal portion thereof, the latter resting upon the upper apertured ear 27, and the ring portion is for the purpose of receiving the handles of tools or the like, generally used about fireplaces, such as a shovel, as shown in Figure 1.

The base plate 1 has formed thereon and extending transversely thereof pairs of companion guide strips 30, the strips of each pair being spaced from each other throughout their length with their confronting faces undercut to provide with the base plate, channel grooves 31 for slidably receiving lugs 32 formed on and extending laterally from the opposite faces of the base members 33 of flat andirons of right angle formation, as best shown in Figure 5, the base members extending through the space between the strips, and have their rear ends seated within recesses 34 disposed in the plate 4 for cooperation with the lugs 32 for supporting the andirons with their vertical portions 35 in an upright position, as best shown in Figure 2. The rear ends of the guide strips are disposed in abutting relation with the rear plate 4 and the forward ends preferably terminate inwardly from the front edge of the base plate, as best shown in Figure 3.

The base plate 1 also preferably has an opening arranged centrally therein for receiving ashes and the opening is closed by a door 36 hingedly secured to the base plate and seated upon a shoulder about the edge of the opening when in closed position. It will be obvious that the ash receiving opening is adapted to register with an ash passageway leading to the basement, as such is a usual feature of fireplaces.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

What I claim is:

1. In a fireplace, a cast iron lining for the opening of the fireplace and including base means, andirons mounted on the base means, and supporting and guiding means formed on the base means for the andirons and detachably and slidably receiving the same therein.

2. In a fireplace, a cast iron lining for the opening of the fireplace and including base means and rear means for fitting engagement with the bottom and rear faces respectively of the fireplace opening, andirons mounted on the base means, supporting and guiding means formed on the base means for the andirons and detachably and slidably receiving the same therein, and said rear means having recesses therein for receiving the rear ends of the andirons therein for cooperation with the supporting and guiding means for holding the andirons in place.

3. In a fireplace, a cast iron lining for the opening of the fireplace and including base means, andirons including base members mounted on the base means, uprights formed on the base members, strips arranged in companion pairs and formed on said base means with the strips of each pair spaced in parallelism with each other and being undercut to provide channel grooves, and lugs extending laterally from the base members of the andirons and slidably mounted in the grooves for supporting and detachably securing the andirons with respect to the base means.

4. In a fireplace, a cast iron lining for the opening of the fireplace and including base means and rear means for fitting engagement with the bottom and rear faces respectively of the fireplace opening, andirons including base members mounted on the base means, uprights formed on the base members, strips arranged in companion pairs and formed on said base means with the strips of each pair spaced in parallelism with each other and being undercut to provide channel grooves, lugs extending laterally from the base members of the andirons and slidably mounted in the grooves for supporting and detachably securing the andirons with respect to the base means, said rear means having recesses therein arranged in the path of the rear ends of the andirons for detachably receiving the same for cooperation with the strips for holding the andirons in place.

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