Feb. 28, 1950 P. PAOLELLA 2,499,156

FIREPLACE

Filed April 11, 1946

Fig. 1.

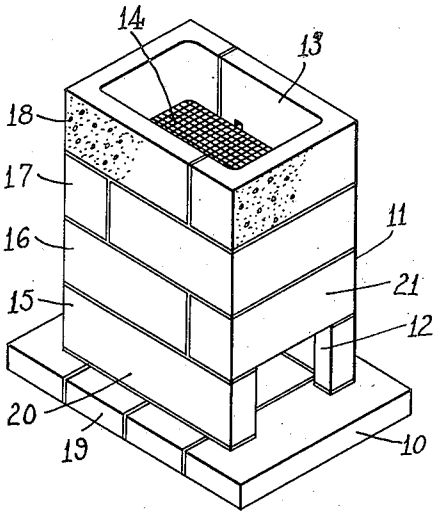


Fig. 3.

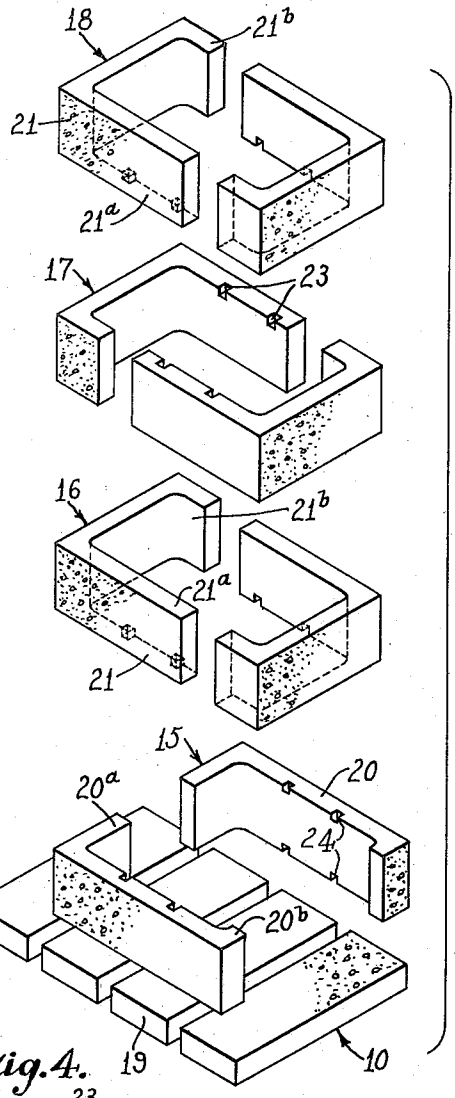


Fig. 2.

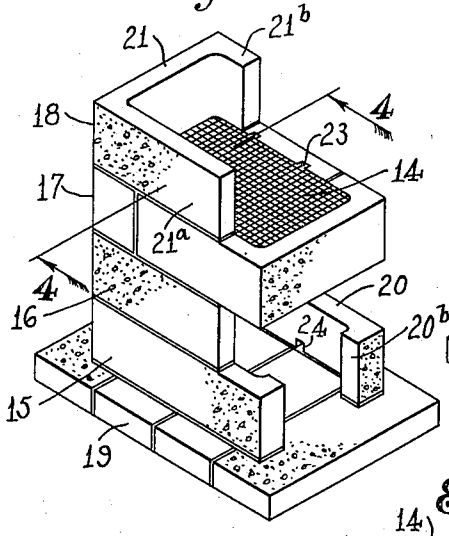


Fig. 4.

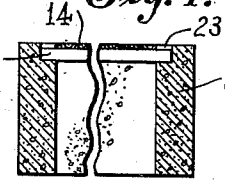
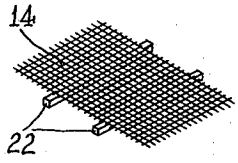


Fig. 5.



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FIREPLACE

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4 Claims. (Cl. 126—9)

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This invention relates to fireplaces, and more particularly to those intended for outdoor use and constructed of blocks of suitable material such as concrete.

One object of the invention is to provide a fireplace structure that can be set up very readily and will serve satisfactorily either as a grill or as an incinerator.

Another object is to provide a fireplace that can be set up very quickly and conveniently, no special skill being required.

Another object is to provide an improved form and arrangement of blocks in fireplaces.

In the accompanying drawings:

Fig. 1 is a perspective view of a fireplace embodying the invention;

Fig. 2 is a perspective view similar to Fig. 1, with certain of the blocks removed;

Fig. 3 is an exploded view in perspective, showing all parts of the fireplace with the exception of the screen;

Fig. 4 is a detail section on line 4—4 of Fig. 2; and

Fig. 5 is a detail perspective view of the screen or grate.

In the form of fireplace selected for illustration, the structure is one in which blocks or elements of suitable material, such as concrete, are assembled in a predetermined arrangement without requiring the use of mortar or cement. Mortar or cement may, of course, be used if desired, but ordinarily the weight of the elements is sufficient to hold them against dislocation. In general character the structure is that of a short rectangular chimney or flue that is open at the top and closed at the bottom except for a draft opening at the lower front portion. A screen or grate element may be set within the body of the fireplace, as hereinafter described, the screen being particularly useful when the structure is used as an outdoor grill or as a trash incinerator. The body of the structure, having the character previously mentioned, is preferably set on a suitable base or foundation. In the form shown, the base is made up of a number of tiles or bricks furnished as a part of the fireplace, said tiles or bricks being set on the ground side by side without the use of mortar, and the remaining structure of the unit being erected upon the base by laying the blocks in prescribed positions and inserting the screen.

In the drawings, the base is indicated at 10, the fireplace body at 11, the lower front draft opening at 12, the open top portion at 13, and the screen at 14. The body consists of a block layer

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or course 15, set upon the base 10, upon which block layer are set additional layers 16, 17 and 18. In the particular form shown, the screen 14 is set in the upper open end portion of the layer 17. In this particular case, the layer 15 is made up of two blocks of special angular formation, and the layer 16 is made up of two blocks of another and different angular form. The layers 17 and 18 are made up of elements similar to those used in layer 16.

The base 10 shown in the drawings consists of four relatively shallow bricks or tiles 19, the same being arranged side by side and in crosswise fashion with respect to the body 11, and being of a length somewhat greater than the width of the body 11.

The layer 15 is made up of two elements or blocks 20, best shown in Fig. 3, the two being identical and of a structure such that when set together they close the lower part of the body 11 except for the draft opening 12, which draft opening is created between opposing portions of the blocks.

In the particular form shown, the body 11 is 17½ inches wide and 24 inches long, the opening 12 being in one of the shorter faces. The courses 15, 16, 17 and 18 are each of a height of 8 inches. The block elements in these layers all have a wall thickness of substantially 2 inches. These dimensions and those hereafter mentioned are referred to by way of example only, and it is understood that I do not limit myself to any particular dimensions.

The course 16 is made up of two blocks 21, these blocks being identical. Similar blocks 21 are used in the upper two courses, the arrangement being clear from Fig. 3. Both the blocks 20 and the blocks 21 are of angular form, as will be apparent from the drawings, each of the same having a main portion or body extending along a face of the fireplace through out the length of said face and also having angularly set terminals, the terminals being of unequal length. The blocks 20 have their body portions extending longitudinally of the fireplace body and have long terminals 20^a at the rear and short terminals 20^b at the front. The blocks 21 on the other hand have their body portions disposed at the front and rear faces of the fireplace, and each of said blocks has a long terminal 21^a at one side of the structure and a short terminal 21^b at the other side.

Referring to Fig. 3, it will be noted that the right-hand block 20 is identical with the left-hand block, but is in inverted relationship. Similarly it will be noted that in the course next above

(Fig. 3) the right-hand block 21 is identical with the left-hand block, but is in laterally reversed relationship. It will also be noted that in the course 17 the open joints between the blocks 21 are staggered with respect to those of the courses 16 and 18.

As the blocks 20 extend the full length of the fireplace, the length of the body of the block in this particular case is 24 inches. The terminals 20^a have a length at the outer side of 8¾ inches (measuring to the outer corner), and the terminals 20^b have a length of 3½ inches at the outside (measuring to the outer corner). Thus in the case illustrated the draft opening 12 has a width of approximately 10½ inches. The terminals 21^a have a length of 17½ inches in this particular case (measuring to the outside corners of the block), and this dimension, as will be noted, is the same or approximately the same as the outer face dimension of the body of block 21. The terminals 21^b have a length, measuring to the outside corners, of 6½ inches.

The screen 14 in the case illustrated is made up of a sheet of wire screen material attached to and supported by two underlying metal rods 22. In the case shown these rods have end portions which are extended beyond the sheet and are received in seats or notches provided in the blocks of the course 17 adjacent the upper edges of those blocks. In this case the upper edge of each of the two blocks 21 is cut away to provide notches 23 that receive the ends of the rods 22. Therefore the screen may be set detachably in the blocks in the manner indicated in Fig. 4.

It will be noted from Fig. 3, that, in the form shown, only two notches 23 are provided in each block 21, these being in the longer leg or terminal and being associated with one lateral edge of the leg or terminal. As the two blocks of the next to the top course are reversed with respect to each other in a lateral direction, this brings the four notches into a horizontal plane adjacent the upper edge of the course. In the assembly shown in Fig. 1, the notches 23 provided in the top course and in the third course from the top are not used for screen positioning purposes, but obviously they can be so used if this is desired. Moreover, the illustrated construction permits a screen to be used in association with the upper edge of the bottom course, for which purpose the blocks 20 are provided in their bodies with notches 24 similar to the notches 23. In the assembled position shown, the notches 24 are in line with the notches 23 of the upper courses. Moreover, each of the blocks 20 is provided with two notches at the lower edge as well as two notches at the upper edge, as shown in Fig. 3, so that a block 20 can have a screen seated therein whether the block be in the left-hand position of Fig. 3 or the right-hand position. Thus it is possible to shift the screen from the position shown in Fig. 1 to a position in which it is located in or adjacent the upper portion of the bottom course. Manifestly other arrangements of the screen will also be possible so that a variety of conditions can be met.

It will be seen from the previous description that I have provided a fireplace structure that will serve satisfactorily as an outdoor grill or as an incinerator, various arrangements of the blocks being possible to meet different conditions of use. The structure can be set up very readily and conveniently, no cementing of the joints being required, and it can be moved readily from one place to another as convenience may dictate. The fireplace is also quite inexpensive. In making the fireplaces in quantity it is merely necessary to provide, in addition to the screen having the positioning rods or lugs, blocks of concrete or like material. There are relatively few forms or patterns of blocks required, one being adapted for use in the base or foundation, one being used in the bottom course, and a third form or pattern being used in the upper courses. Each course is made up of two blocks only, the two being identical. Manufacture is, therefore, considerably simplified. No particular skill is required in arranging the blocks in a given course or in arranging the courses with respect to each other, and the fireplace can be erected by the casual purchaser in a very quick and easy manner. Manifestly also it is not always necessary to have four courses in the body of the fireplace.

The described construction is by way of example only, and it will be evident that various changes may be made without departing from the principles of the invention or the scope of the claims.

What I claim is:

1. A fireplace structure comprising a base, a body and a grate-like member, the body being substantially rectangular and having an open top and a lower draft opening in one of the shorter sides, the base being wider than the body and comprising a number of elements arranged crosswise with respect to the body and disposed side by side, the body comprising four layers or courses of blocks of angular formation and the grate-like element being arranged adjacent the juncture of the top course and the next underlying course and within a flue provided by the blocks, the lowermost course comprising two identical angular blocks providing a portion of the flue and providing between them the aforesaid draft opening, said draft opening being between opposing angularly set terminal portions of said blocks, the course next above being comprised of two identical angular blocks each having a body portion extending throughout the width of the body of the fireplace and provided with angularly set terminals of unequal length, said terminals being located at the longer sides of the fireplace body, and the remaining courses of the body comprising blocks identical with those of the second-mentioned course, the second, third and fourth courses having their blocks arranged so that the meeting edges of the terminals are in staggered relation.

2. A fire place structure adapted to be set up without mortar and moved from place to place, comprising a body and a grate-like member, the body being substantially rectangular and having a flue communicating with an open top and a lower draft opening in one of the sides, the body having a lowermost course of two angular blocks that provide the aforesaid draft opening and close in the flue at the remaining sides, the body also comprising upper courses of angular blocks having terminals of unequal length and arranged in staggered relation in successive vertical courses providing the remainder of the flue, all of the blocks of the body being free of connection with each other and maintaining their assemblage by their weight, the grate-like member being removably set within the structure between two adjacent courses and held in place by the weight of the blocks, said grate-like member when set in between the lowermost course and the next course providing above it a flue portion or chamber of

considerable depth and when placed between higher courses providing a shallower chamber.

3. A fireplace structure intended for outdoor use and for erection by the casual purchaser at the place of use without the employment of mortar or cement, comprising a body of rectangular shape having a flue communicating with an open top and a lower draft opening in one of the shorter sides, said body having a lowermost course formed of two identical angular blocks providing a portion of the flue and providing between them the aforesaid draft opening, the body also comprising upper courses each formed of two identical angular blocks, the last-named blocks having body portions extending across the width of the body and also having angularly set terminals of unequal length and being in staggered relationship in said upper courses, the terminals being in abutting relation at the longer sides of the body so as to close the flue along the longer sides, all of the blocks being free of connection with each other and maintaining their assemblage by their weight.

4. A fireplace structure comprising a lower course of two blocks each having an elongated body and angularly set terminals of unequal length, the bodies of said blocks closing in a flue at two sides, the terminals which are shorter being arranged to provide a draft opening between them at a third side of the flue, and the terminals which are longer being arranged to close the flue at the side opposite said draft opening, and superposed courses of two blocks each, set on the first blocks and providing a flue portion closed in on all sides but open at the top, the blocks of said superposed courses each having a body portion extending throughout the width of the fireplace body and having terminals of unequal length, and the terminals of one block meeting those of the other at the edges of the terminals, and the meeting edges being in staggered relationship in said superposed courses, the blocks of the structure being free of connection with each other and being held in position by their own weight, the structure also including a screen member adapted to be held in position between any two courses by the weight of the blocks.

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