Aug. 8, 1950 C. A. GUSTAFSON ET AL 2,518,005

AUXILIARY SPARK-ARRESTING SCREEN FOR FIREPLACES

Filed Oct. 28, 1947

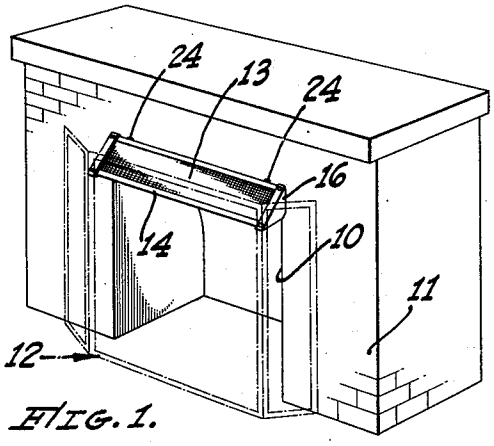


FIG. 1.

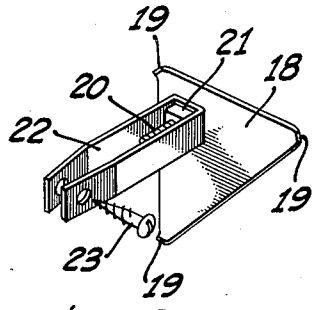


FIG. 6.

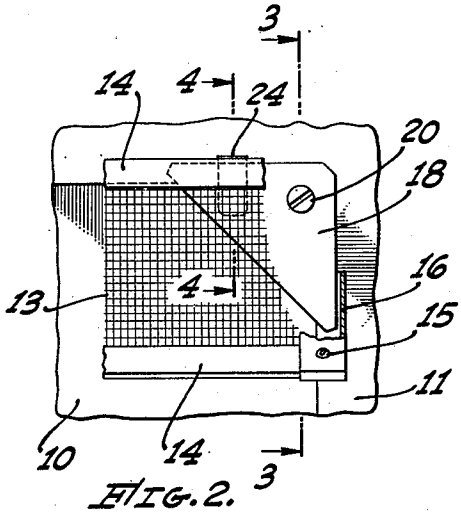


FIG. 2.

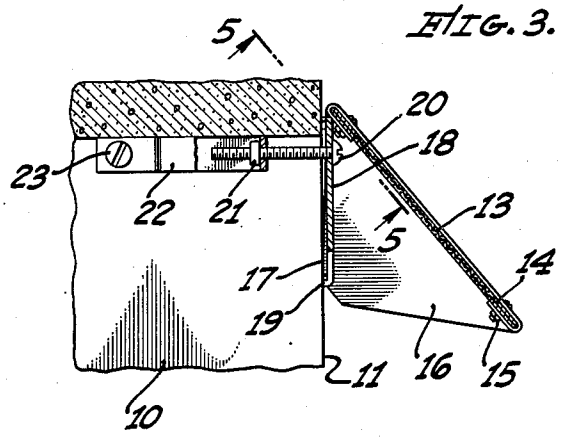


FIG. 3.

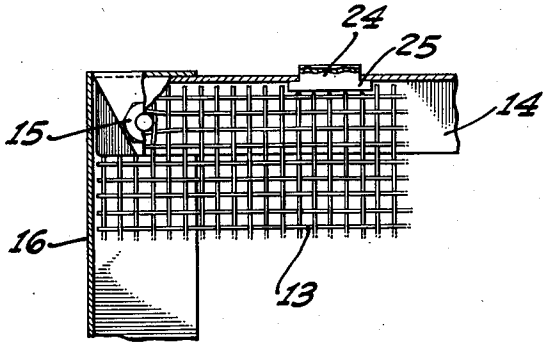


FIG. 5.

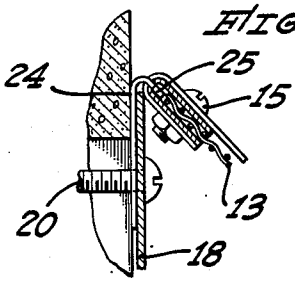


FIG. 4.

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AUXILIARY SPARK-ARRESTING SCREEN FOR FIREPLACES

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4 Claims. (Cl. 126—202)

1

This invention relates to an auxiliary spark-arresting screen for fireplaces.

An object of the invention is to provide an auxiliary screen and a means for mounting the same across the top of a fireplace opening in such a position that the auxiliary screen may effectively cooperate with the conventional fireplace screen to prevent the escape of sparks forwardly through the fireplace opening.

The conventional fireplace screen consists of three hingedly connected screen panels and is usually positioned some distance forwardly of the fireplace opening. While such a screen serves to effectively confine those sparks which fly out of the fireplace opening in a more or less horizontal direction, due to the spacing of the top of the screen from the top of the fireplace opening there is opportunity for sparks to escape in this direction. The improved auxiliary screen is designed to confine such sparks.

Another object of the invention is to provide an auxiliary spark-arresting screen consisting essentially of a framed screen panel or section of wire cloth having end members extending downwardly from the ends of the panel adapted to abut the walls of the fireplace around the fireplace opening to support the screen in a downwardly and forwardly inclined position and to effectively confine sparks against escape beneath the ends of the screen and to provide a means for easily and detachably mounting the screen on a conventional fireplace.

With the foregoing and other objects in view, which will be made manifest in the following detailed description and specifically pointed out in the appended claims, reference is had to the accompanying drawings for an illustrative embodiment of the invention wherein:

Figure 1 is a perspective view of a fireplace illustrating the auxiliary screen embodying the present invention as having been applied thereto and illustrating a conventional fireplace screen in phantom lines;

Fig. 2 is a partial view in front elevation, parts being broken away and shown in section, illustrating details of the mounting means by which the screen may be mounted;

Fig. 3 is a sectional view taken substantially upon the line 3—3 upon Fig. 2 in the direction indicated;

Fig. 4 is a vertical section taken substantially upon the line 4—4 upon Fig. 2 in the direction indicated;

Fig. 5 is a partial view in section taken substantially upon the line 5—5 upon Fig. 3 in the direction indicated; and

2

Fig. 6 is a perspective view of parts of the mounting means for the screen.

Referring to the accompanying drawings wherein similar reference characters designate similar parts throughout, there is illustrated in Fig. 1 a conventional form of fireplace wherein the fire box or hearth indicated at 10 is formed in walls indicated at 11. A conventional form of fireplace screen is illustrated in applied position thereto at 12.

The auxiliary screen consists of a section of wire fabric or wire cloth 13 which is of suitable width to effectively expand from the walls 11 above the fireplace opening downwardly and forwardly to a position in reasonably close proximity to the top of the fireplace screen 12. Any equivalent material may be utilized in lieu of the wire fabric or wire cloth 13. The length of the section is such as to be slightly greater than the width of the fireplace opening. The section 13 is suitably framed such as in sheet metal channels 14 which may be bolted together or otherwise secured together as at 15 at the corners so that the framed screen panel is relatively stiff and rigid. Triangularly shaped end members 16 are secured to the ends of the frame in any suitable manner or they may be integral therewith and the rear edges 17 of these end members are designed to abut against the faces of the walls 11 adjacent the upper corners of the fireplace opening.

Means is provided for detachably mounting the screen across the top of the fireplace opening. This consists of two triangularly shaped plates, one of which is illustrated at 18. These plates are usually in the form of a right angle triangle and have their corners bent rearwardly as indicated at 19. These plates are designed to be positioned at the upper corners of the fireplace opening with the rearwardly bent portions 19 bearing against the faces of the walls 11 so as to slightly space the bodies of these plates from the faces of the walls. Bolts 20 extend through these plates adjacent the right angled corners thereof and are equipped with nuts 21 disposed within U-shaped brackets 22. The sides of these brackets are preferably so spaced with relation to the nuts 21 that the nuts cannot turn within the brackets. The rear ends of the brackets are apertured to receive anchoring screws 23 which are designed to be driven preferably into the mortar or grouting between the bricks of the fire box. When these screws have been driven into position through the brackets 22 the plates 18 may then be positioned against the face of the wall 11 and the bolts 20 tightened such as by a

screw driver to draw the plates 18 into firm engagement with the face of the wall 11. The bolts 20 are adequately long so as to provide adequate adjustment regardless of the spacing of the anchoring screws 23 from the face of wall 11. In this manner the anchoring screws 23 can be driven into the mortar or grouting between the bricks and the bolts 20 provide whatever adjustment is necessary to tighten the plates 18 in position bearing against the wall 11 across the upper corners of the fireplace opening.

Hangers 24 have heads 25 that are disposed within the upper channel of the frame of the auxiliary screen. These hangers are preferably formed of sheet metal and are sufficiently thin so that they may slide downwardly between the body portion of the plate 18 and the face of wall 11, it being recalled that the rearwardly bent portions 19 slightly space the body of each plate 18 from the face of the wall. These hangers merely serve to hold the screen in elevated position across the top of the fireplace opening while the end members 17 which bear against the face of the wall 11 hold the screen in its inclined position.

When the screen is in position over the fireplace opening it will be appreciated that it can effectively cooperate with the conventional screen 12 to confine sparks within the fire box. If at any time it is desired to remove the screen this can be easily accomplished by merely lifting the screen, sliding the hangers 24 upwardly from behind the body portions of the plates 18. The plates 18 and their anchoring means provided by 20, 21, 22 and 23 need not be disturbed.

It will be appreciated from the above described construction that the improved auxiliary screen can be easily and economically manufactured and can be readily installed in any conventional form of fireplace. It presents a neat and attractive appearance and can be easily removed whenever desired.

Various changes may be made in the details of construction without departing from the spirit and scope of the invention as defined by the appended claims.

We claim:

1. An auxiliary fire screen for fireplaces comprising supporting means adapted to be tightened against the face of a wall about a fireplace opening adjacent the upper corners thereof, means adapted to be anchored within the fireplace for tightening said means against said face, said supporting means having portions disposed in spaced relation to the face of the wall, a framed screen adapted to assume a position extending across the top of the fireplace opening, hangers on the screen receivable between said portions and the face of the wall to support the screen therefrom, and end members secured to the ends of the screen, said end members having rear edges engageable with the face of the wall to position the framed screen outwardly of said supporting means.

2. An auxiliary fire screen for fireplaces comprising corner members applicable across the upper corners of a fireplace opening, said corner members having the corners thereof bent rearwardly to space the body portions of the corner members from the face of the wall, anchoring screws adapted to be driven into the walls of the fire box of a fireplace, adjustable means connecting the anchoring screws to the corner members for tightening the corner members against the face of the wall about the fireplace opening, a framed screen carrying hangers receivable between the body portions of the corner members and said face of the wall, and end members on the ends of the screen extending downwardly and engageable with the face of the wall and serving to support the screen away from the wall in a downwardly and forwardly inclined position across the top of the fireplace opening.

3. An auxiliary fire screen for fireplaces comprising a substantially flat framed screen of generally rectangular shape having a length to span the fireplace opening, corner members adapted to be positioned at the upper corners of a fireplace opening, means adapted to be anchored within the fireplace for tightening the corner members against the face of the walls about the fireplace, means along the upper edge of the framed screen for detachably connecting the framed screen to the corner members, and means extending downwardly from the side edges of the framed screen for bearing against the face of the walls about the fireplace to position the framed screen in a downwardly and forwardly inclined position from the top of the fireplace opening.

4. An auxiliary fire screen for fireplaces comprising a substantially flat rigid framed screen having a length to span the fireplace opening, corner members adapted to be positioned at the upper corners of a fireplace opening, means for tightening the corner members against the face of the walls about the fireplace, the corner members having lugs thereon so as to space portions of the corner members away from the walls about the fireplace, hangers secured along the upper edges of the framed screen receivable between said portions of the corner members and the walls about the fireplace to support the screen therefrom, and means on the under side of the framed screen adapted to bear against the face of the walls about the fireplace to position the framed screen in a downwardly and forwardly inclined position from the top of the fireplace opening.

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