Aug. 20, 1957 S. J. CHAPLA 2,803,241

ROLLER FIREPLACE SCREEN

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Fig. 1

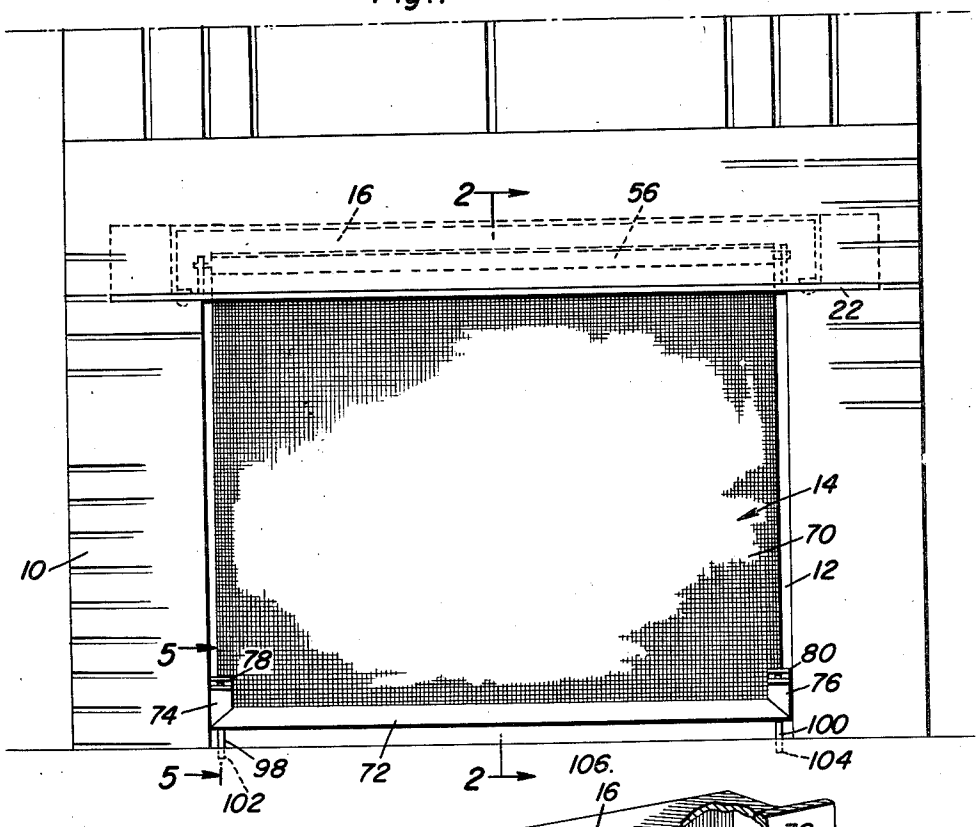

Fig. 6

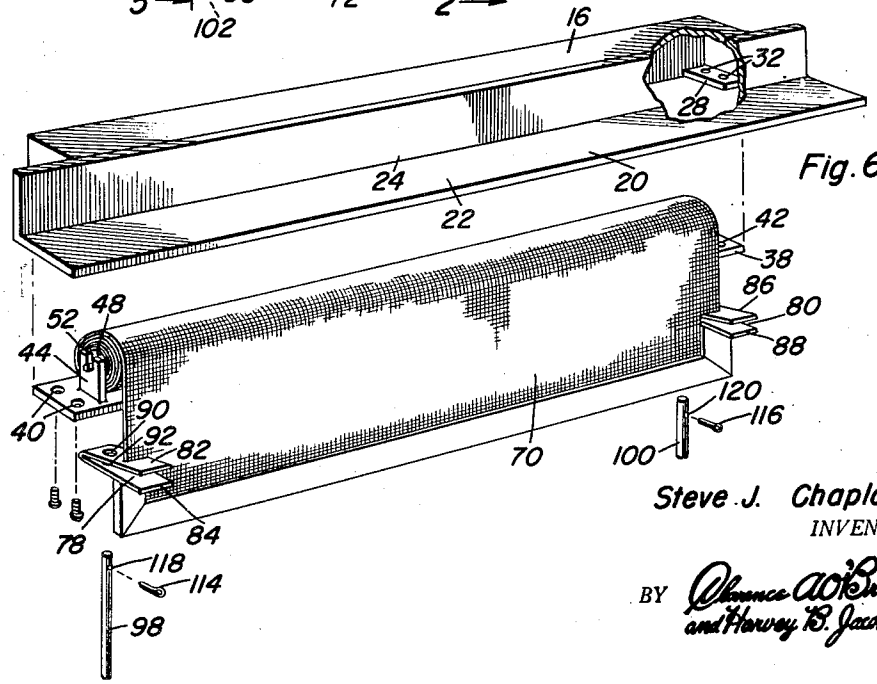

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Fig. 3

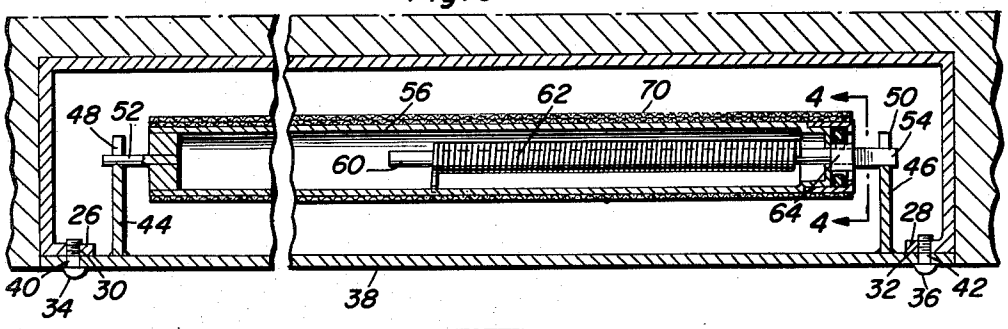


Fig. 2

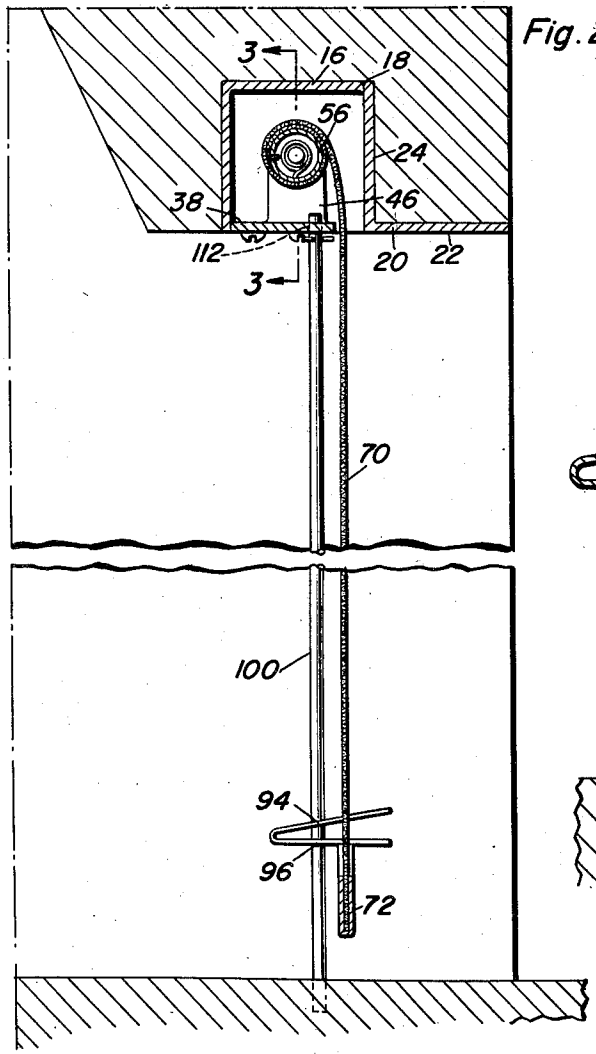
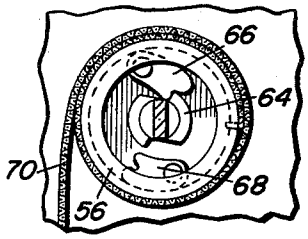


Fig. 4



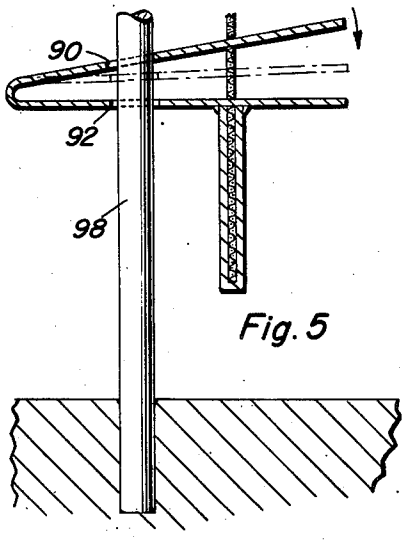


Fig. 5

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ROLLER FIREPLACE SCREEN

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1 Claim. (Cl. 126—202)

This invention relates generally to fireplace construction and more particularly to a novel installation of a fireplace screen.

The primary object of the present invention resides in the provision of a fireplace screen which is adapted to be secured in suitable position in a fireplace wall with a portion of the housing thereof serving as a lintel and which is adapted to provide means for shielding the fireplace from sparks or the like.

Another of the important objects of the invention reside in the provision of a fireplace screen that will eliminate the necessity of a conventional movable or portable screen which is generally unsightly and unhandy and which fireplace screen may be rolled into a housing concealed in the fireplace wall so that the fireplace screen comprising the present invention will be substantially invisible.

Still another object of the invention resides in the provision of a roller screen for a fireplace which can be used in connection with any suitable type of open fireplace for the purpose of preventing sparks from flying out of the fireplace yet which can be permanently installed when the fireplace is being constructed and the parts of which can be removed and replaced as necessary for repair and maintenance.

Still further objects and features of this invention reside in the provision of a fireplace roller screen that is strong and durable, simple in construction and manufacture, and which is relatively inexpensive to produce and install thereby enabling wide use and distribution.

These, together with the various ancillary objects and features of the invention which will become apparent as the following description proceeds, are attained by this roller fireplace screen, a preferred embodiment of which has been illustrated in the accompanying drawings, by way of example only, wherein:

Figure 1 is a front elevational view of a fireplace having the roller fireplace screen comprising the present invention installed therein;

Figure 2 is an enlarged vertical sectional view of the fireplace screen as installed, as taken along the plane of line 2—2 in Figure 1;

Figure 3 is an enlarged vertical sectional view as taken along the plane of line 3—3 in Figure 2 and illustrating the construction of the roller in detail;

Figure 4 is an enlarged vertical sectional detail view as taken along the plane of line 4—4 in Figure 3 and illustrating the ratchet means utilized in the roller;

Figure 5 is an enlarged sectional detail view as taken along the plane of line 5—5 of Figure 1, illustrating in particular the construction of the clip used for resiliently engaging the vertically extending rods for holding the screen in its vertically adjusted position; and

Figure 6 is an exploded perspective view of important elements of this invention.

With continuing reference to the accompanying drawings wherein like reference numerals designate similar parts throughout the various views, reference numeral 10 is used to generally designate a fireplace having an opening as at 12 in which the fireplace screen generally designated by reference numeral 14 and comprising the present invention is adapted to be installed. When the fireplace is being erected, the housing 16 of the fireplace screen 14 is permanently installed and has attached thereto as by welding at 18 a suitable angle-shaped bar 20 which forms by means of the horizontal flange plate 22 thereof, the housing and plate constituting a lintel, the vertical flange 24 forming a portion of the housing and extending beyond the ends of the housing 16 so as to form means for more securely holding the lintel 22 in position.

The housing 16 includes two lower flanges 26 and 28 which have internally threaded sets of apertures 30 and 32 for reception of screws 34 and 36 or other fasteners used for attaching a mounting plate 38 to the housing 16. The screws 34 and 36 extend through apertures 40 and 42 in the mounting plate 38. The mounting plate 38 has a pair of ears 44 and 46 extending upwardly therefrom which are slotted as at 48 and 50 for reception of the ends 52 and 54 of a roller 56 constructed very similar to that of a conventional windowshade and having a shaft 60 mounted inside which is spring thrust as at 62 and provided with a pawl and ratchet detent arrangement as at 64, 66 and 68, and pawls being designated by reference numerals 66 and 68 while the ratchet is indicated by reference numeral 64. The end 52 is square in shape so as to prevent its rotation while inserted in the squared slot 48 thus retaining tension on the spring 62.

The flexible mesh screen 70 of suitable material such as copper, brass, iron, steel or the like is secured on the roller 56. The screen 70 has a suitable edging member 72 attached at the lower edge thereof and attached to the edging member and thus to the screen 70 at the upper vertically extending portions 74 and 76 of the edging member 72 are clips 78 and 80 each of which are substantially similar in construction. These clips 78 and 80 are substantially V-shaped and have legs 82, 84 and 86, 88, respectively, which are suitably apertured as at 90, 92 and 94, 96, which apertures are somewhat larger than vertically extending rods 98 and 100 which extend therethrough. The rods 98 and 100 are adapted to seat in recesses 102 and 104 formed in the hearth 106 of the fireplace 10 and to extend through suitable apertures 112 in the mounting plate 38. Cotter keys 114 and 116 extend through apertures 118 and 120 in the rods 98 and 100 and thus hold the rods 98 and 100 in position with the upper ends thereof being held by the cotter keys 114 and 116 above the mounting plate 38, the cotter 114 and 116 resting on the mounting plate 38.

In use, when it is desired to lower the fireplace screen it is merely necessary to depress the legs 82 and 86 of the clips 78 and 80 and pull down upon the screen 70 until it is in the desired elevated position. This is an important feature of the invention inasmuch as the screen 70 can be adjusted to any particular height thereby permitting the entrance of a poker or other fireplace implement, yet preventing the sparks from flying out at a portion above the allowed entrance of the poker. When it is desired to raise the screen 70, it is merely necessary to depress the clips 78 and 80 again, at which time the limbs 82 and 86 will become disengaged from the rods 98 and 100 which have held the clips in their adjusted position and which will then allow the screen to be pulled upwardly by the tension on the spring 62 to a concealed position with the entire screen within the housing 16. Then, if desired, the rods 98 and 100 may be lifted out of their recesses 102 and 104 after the cotter keys 114 and 116 have been removed and then the rods may be removed and either stored in any other separate location

or positioned in the housing **16** in any suitable manner.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claim.

What is claimed as new is as follows:

A screen assembly for a fireplace having a lintel spaced above a hearth and said hearth having recesses therein, comprising a housing adapted to be secured in said fireplace and including a lintel plate of the fireplace forming a part of said lintel, a mounting plate detachably secured to said housing, a pair of ears on said mounting plate, a spring pressed roller mounted on said ears, said lintel plate extending from the housing and adapted to extend to the front face of the fireplace opening, said roller extending into said housing and having a screen attached thereto, a pair of rods detachably carried by said mounting plate, and clips resiliently adjustably engaging

said rods, said clips being secured to said screen, said clips being formed of a resilient material and being of substantially V-shape having upper and lower portions joined by connection portions, said upper and lower portions having apertures therethrough, said rods extending through said apertures, said mounting plate having apertures therethrough, said rods extending through said apertures in said mounting plate, the lower ends of said rods being adapted to be removably received in said recesses and fastening means holding said rods in said apertures in the mounting plate.

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