Sept. 30, 1969 R. E. WRIGHT 3,469,570

FIREPLACE SCREEN WITH REMOVABLE DECORATIVE TRIM MEMBERS

Filed Dec. 28, 1967 2 Sheets-Sheet 1

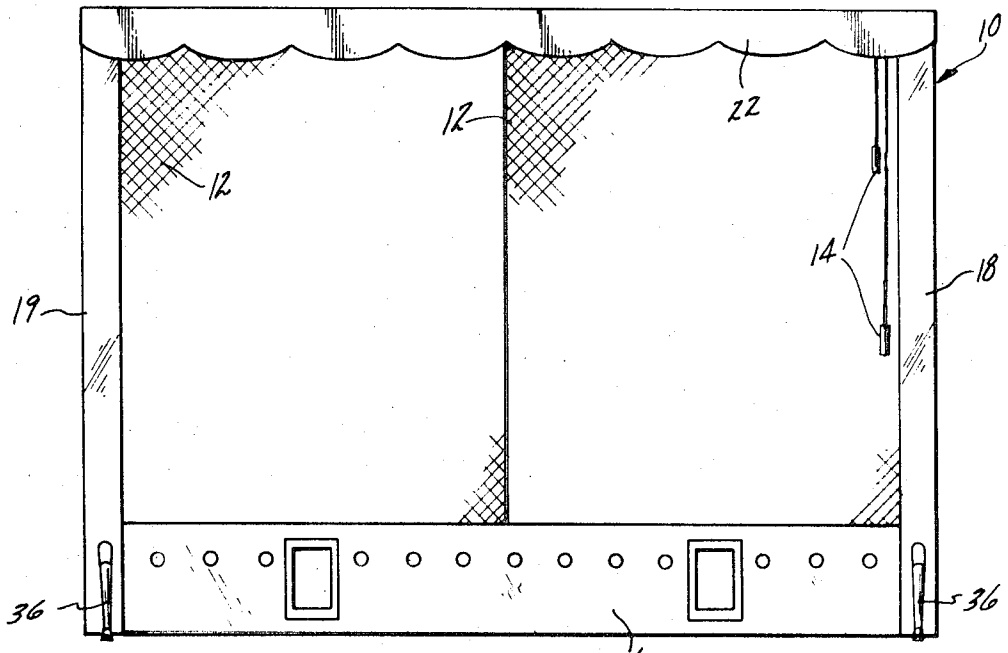


FIG-1

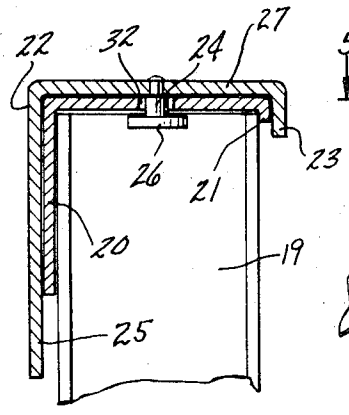


FIG-4

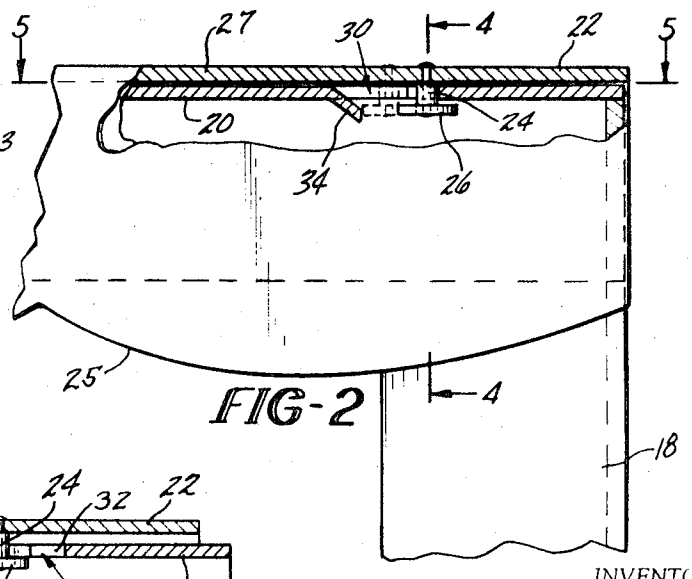


FIG-2

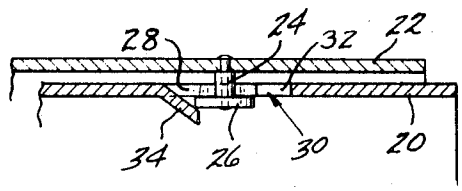


FIG-3

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Sept. 30, 1969 R. E. WRIGHT 3,469,570

FIREPLACE SCREEN WITH REMOVABLE DECORATIVE TRIM MEMBERS

Filed Dec. 28, 1967 2 Sheets-Sheet 2

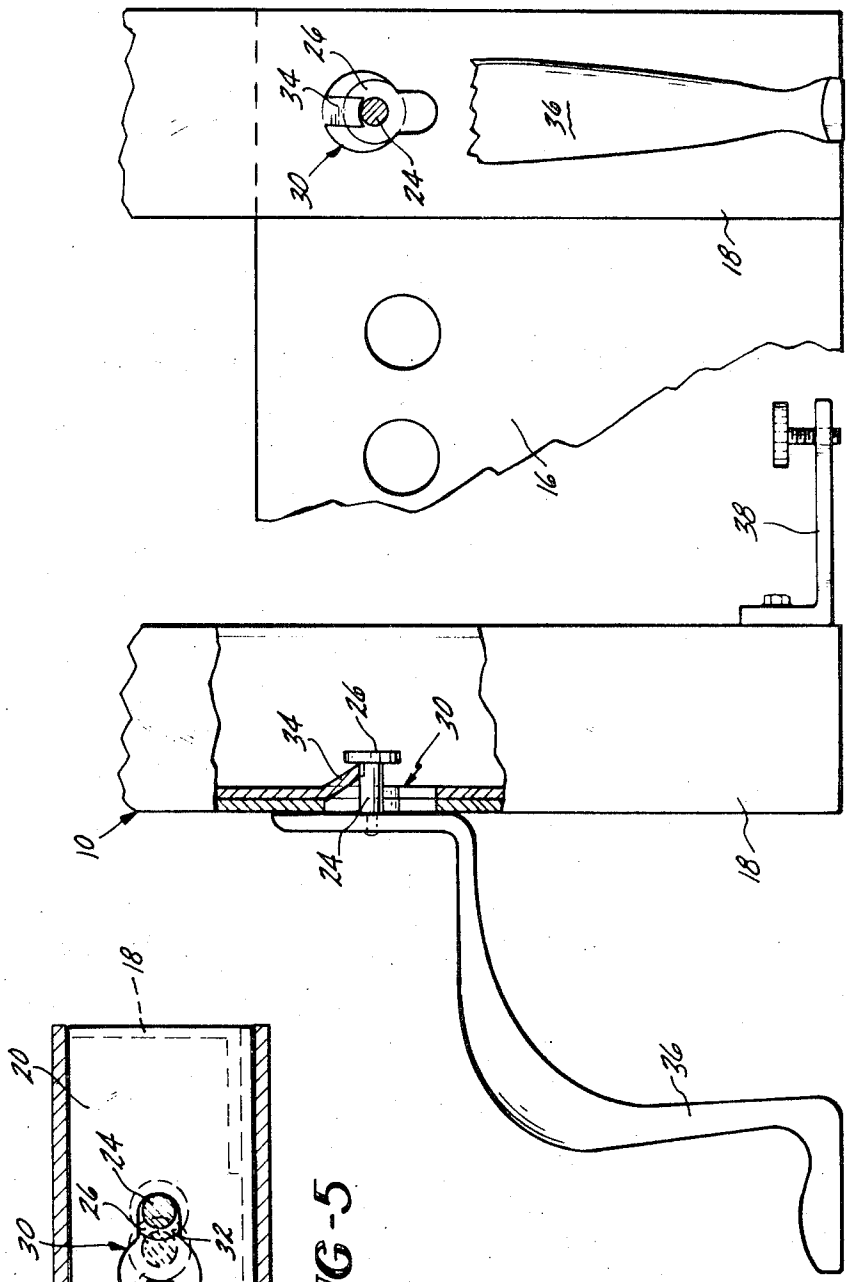


FIG-7

FIG-6

FIG-5

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United States Patent Office 3,469,570 Patented Sept. 30, 1969

3,469,570

FIREPLACE SCREEN WITH REMOVABLE DECORATIVE TRIM MEMBERS

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Filed Dec. 28, 1967, Ser. No. 694,296
Int. Cl. F24c 15/36, 15/10
U.S. Cl. 126—202 5 Claims

ABSTRACT OF THE DISCLOSURE

A fireplace screen having means for making various ornamental portions, including the valance piece across the top, removable so that valances of different design and/or finishes can be selected at will in the retail store. A pair of mounting lugs are provided on the valance for engagement in key-hole slots in a frame member of the screen. A locking tab is provided within each of the key-hole slots to prevent the mounting lugs from accidentally becoming disengaged. The locking tab is positioned so that it does not interfere with the insertion and removal of the lug from the key-hole slot, but it prevents accidental removal thereof by blocking the mounting lug until it is maneuvered in the correct way to release it from the key-hole slot.

This invention relates to fireplace screens and it relates more particularly to means for detachably securing decorative pieces and parts to the frame of a fireplace screen so that any of various ornamental portions of the screen, or combinations thereof, may be selected to suit the taste of the customer when shopping for such an item.

A difficulty of considerable proportions in the merchandising of fireplace furnishings, and especially of screens, is the tremendous inventory which the retail store must carry in order to provide its customers with a suitable selection, not only of different sizes and styles, but also of a multitude of different ornamentations and decorative designs, many of which are applied to the same basic structure. Heretofore, it has been practical for most stores to carry only one or two decorative styles, and the shopper therefore has had to go from store to store to find the styling that suited him. Only in the largest retail outlets specializing in fireplace screens and furnishings has it been possible for the shopper to have a reasonably wide selection of designs.

It is a general object of the present invention to make it feasible for a store to provide its customers with an almost unlimited selection of decorative trim for a fireplace screen without the need for carrying a large, costly inventory of such products.

One of the most popular and fastest selling type of fireplace screens today is the wire-mesh drape type with chain-pulls for drawing curtain-like screens across the fireplace opening. These screens are constructed basically of a base member from which two upright side members project with a top cross bar extending between the upper ends of the side members. The wire-mesh curtains are supported from the top cross bar, within which is provided the chain-pull mechanism for opening and closing the screen curtains. The screen as a whole is prevented from tipping forward or back by feet or legs, which engage the floor and which are usually fastened to the base member on both the front and back sides thereof.

It is common practice to decorate the top cross bar, the front faces of the base member, the side members and the front supporting feet, so that the screen is attractive and has a pleasing appearance to match the decor of the room in which the fireplace is located. The problem has been in providing the customer with a wide selection of screens with different decorative designs.

The present invention solves this problem very nicely by making some or all of the decorative facing pieces or trim of the screen demountably attachable to the basic frame for the screen. These trim pieces can be of any desired finish and have a decorative design of an almost limitless variety. They can be packaged and stored easily, are not bulky and can be readily displayed in the store for the convenience of the customer. Since the same basic frame may be used, only enough frames need be kept in stock to meet the contemplated demand, which is fairly predictable. Thus, a customer can select a virtually custom-designed fireplace screen from the available trim pieces, including supporting feet, which are displayed in the store on a handy rack. The retailer on the other hand does not have to purchase and store a large quantity of screens and can supply customers with a vastly greater selection of different styles with a much smaller and less expensive inventory of screens.

A further and more specific object of the present invention is to provide a way of attaching the decorative pieces to the frame so that they can be readily mounted thereon and removed while the customer is deciding what trim he wants; yet once he has made his decision the trim pieces must be fastened securely enough so that they do not come off accidentally. Such attachment is most desirably quickly and easily made by those who are not particularly mechanically deft. At the same time it must not be flimsy and insecure.

The means for fastening the decorative pieces to the frame consists primarily of the familiar key-hole slot, through the enlarged portion of which the head of a lug may pass so that when the lug is slid into the narrow portion of the slot its head can not be withdrawn from the slot. Such an attaching device alone, however, is not suitable for most purposes because the lug can be readily displaced in the slot to a position in which its head is aligned with the enlarged portion of the slot where the lug can then be inadvertently withdrawn through the slot, disconnecting the decorative piece to which the lug is fixed from the frame. Accordingly, a locking tab is formed in the enlarged portion of the keyhole slot which prevents the head of the lug from passing directly through the hole but which is so proportioned with respect to the thickness of the head of the lug that it allows the lug to be moved axially of itself until the inner edge of the head is clear of the inner surface of the frame in which the slot is formed, thereby permitting the lug to move into the narrow portion of the slot. After sufficient movement of the lug into the slot such that the head is no longer in registry with the enlarged portion of the slot, the head escapes the locking tab in the slot so that the lug can move axially further through the slot at the same time that it is being moved to the end of the narrow portion thereof. If the lug is moved back toward the enlarged portion of the slot without at the same time moving it axially as if to withdraw it from the slot, the head of the lug engages the locking tab which prevents it from becoming aligned with the enlarged end of the slot and from becoming dislodged. However, if the lug is purposely moved axially as if to withdraw it and then longitudinally of the slot, the head of the lug can slide far enough over the locking tab to position it in substantial alignment with the enlarged portion of the slot where it is free to be withdrawn from engagement with the slot.

This attaching means provides a simple, inexpensive and highly satisfactory way of fastening not only the top, so-called valance panel for fireplace screens, but also other ornamental parts such as the base panel and feet, each of which may differ in design and shape and may have distinctive artistic characteristics.

Specific examples of how the invention may be carried out are illustrated in the accompanying drawings, wherein,

FIG. 1 is a front elevation, partially broken away, of a fireplace screen typifying the type of unit in which the invention may be employed to advantage;

FIG. 2 is a detail view on an enlarged scale of the upper corner of the screen shown in FIG. 1, portions of the decorative valance piece being broken away and in section;

FIG. 3 is a detail view similar to FIG. 2 but of only the fastening means for the valance piece and illustrating how the valance piece is removed or replaced on the frame;

FIG. 4 is a vertical section taken on the line 4—4 of FIG. 2;

FIG. 5 is a horizontal section taken on the line 5—5 of FIG. 2 and showing one of the keyhole slots in the frame by which the valance piece is fastened to the frame;

FIG. 6 is a side elevational view of the lower portion of the screen shown in FIG. 1, illustrating how the supporting feet may be mounted in a similar manner as the valance piece; and

FIG. 7 is a front view of the portion of the screen shown in FIG. 6, with part of the supporting foot broken away.

A typical fireplace screen of the kind in which the present invention may be employed consists of a frame **10** which supports a pair of wire-mesh curtains **12**, **12** that slide inward from an open position at each side of the frame and meet at the center when pulled closed by means of pull chains **14**. The frame **10** has a base member **16**, to which a pair of side uprights **18**, **19** are rigidly fastened by suitable means (not shown). Ordinarily a top cross piece or decorative valance piece is rigidly secured to the upper ends of the uprights **18**, **19** completing the frame structure.

In the present case, however, a purely functional top cross bar **20** is bolted or otherwise fastened to the uprights **18**, **19** in order to complete the rigid frame **10** of the screen, and a removable valance piece **22** is demountably fastened outside the cross bar so that it can be readily changed for valances of different design or finish in accordance with the tastes of the customers. As will be seen in FIGS. 4 and 5, the uprights **18**, **19**, cross-bar **20**, and valance piece **22** may be made from suitable lengths of metal angle or channel members, and in this case the uprights are desirably finished on their outer surfaces with brass or other permanent decorative finishes. In order to provide a stronger and more rigid construction the cross bar **20** and valance piece **22** are formed with flanges **21** and **23**, respectively, along the rear edges of their horizontal web or wall portions. The front panel **25**, horizontal web **27** and rear flange **23** of the valance piece **22** encompass and hide from view, at least from the front and top, the corresponding sides of the cross bar **20**. It will also be noted that the valance piece is confined to movement longitudinally of the cross bar by its panel **25** and flange **23**.

In order to make the valance piece **22** readily removable yet securely enough fastened to the frame of the screen so that it can not drop off accidentally, a fastener lug **24** is rigidly mounted in its horizontal web **27** near each end thereof. Each lug **24** has an enlarged head **26** which fits through the enlarged portion **28** of one of a pair of key-hole slots **30** in the horizontal web or wall of cross bar **20**. Slots **30** are spaced the same distance apart as the lugs **24** so that the lugs can engage both slots simultaneously when the valance piece **22** is placed on cross bar **20**.

As can be seen in FIGS. 4 and 5, the shank of each lug **24** fits within the narrow portion **32** of each key-hole slot **30**, but the head **26** of lug **24** does not. After the heads **26** of both lugs have been inserted through

the enlarged portions **28** of slots **30**, the valance piece can be shifted bodily parallel to cross bar **20** until lugs **24** are located at the end of the narrow portions **32**. Thus positioned, the lugs **24** can not be withdrawn outward through slots **30**, and the valance piece **22** is therefore fastened to the frame so long as it is not moved longitudinally back to the position where the lug heads **26** align with the enlarged portions **28** of slots **30**.

It will be noted that key-hole slots **30** must be disposed with their narrow portions **32** extending in the same direction from the portions **28**. Furthermore the lugs **24** must engage the ends of the narrow portions **32** of the keyhole slots when the ends of valance piece **22** align with the outer edges of the uprights **18**, **19**, so that the valance piece is centered on the frame **10** when assembled, as shown in FIGS. 1 and 2.

While the fastener means for the removable valance as described so far is satisfactory if the screen is not carried or moved to any great extent, it may nevertheless permit the valance to slip off accidentally when the screen is transported unless some means is provided for preventing, or at least inhibiting, it from shifting back to the position at which the heads **26** of fastener lugs **24** align with the enlarged portions **28** of the key-hole slots. To this end, each of the key-hole slots is provided with a locking tab **34**, which extends part way across the enlarged portion **28**. Tab **34** may conveniently be formed at the same time that the slot **30** is punched out and in that event is an integral part of the cross bar **20**, being bent downward so that its free end is offset below the lower surface of cross bar **20**.

As best shown in FIGS. 2, 3 and 5, locking tab **34** prevents the valance piece **22** from shifting lengthwise of cross bar **20** to a position where the heads **26** of lugs **24** align with the enlarged portion of key-hole slot **30** unless the valance piece is first lifted vertically to the position shown in FIG. 3. Thus, unless the valance piece **20** is lifted until the heads **26** of the lugs engage the under side of the cross bar **20** when shifted to the left as viewed in the drawings, they will engage the ends of tabs **34** and remain partially confined within the narrow slots **32**, so that they can not be removed (see broken line position of lug head **26** in FIGS. 2 and 5). However, since heads **26** are spaced below the under side of cross bar **20**, they can be lifted above the abutments formed by the ends of the locking tabs, permitting them to ride over the locking tabs **34** as shown in FIG. 3 when the valance piece is first lifted upward and then to the left as viewed in the drawings so that the heads **26** come into alignment with the enlarged portions **28** of key-hole slots **30**. Thereupon the lugs **24** are free to be lifted out of the slots and the valance piece **22** can be removed.

It will be noted that the locking tab **34** must extend far enough across the enlarged portion **28** to prevent the head of lug **24** from aligning with the portion **28**. At the same time, tab **34** must be bent or shaped so that when the lugs **24** are lifted above the end of tabs **34**, they can be shifted out of retaining engagement with the narrow portions **32** of the slots. It will also be noted that both of the lugs **24** must be lifted simultaneously in order to shift the valance piece into the release position, because if either one engages the end of one of the locking lugs, neither can be moved into alignment with the enlarged portion of its key-hole slot. Consequently, only by manipulating the valance piece with some precision can it be disassembled from the frame. This ensures that the valance will remain attached to the frame at all times except when it is desired to remove it intentionally.

The relationship of the size of the head **26** of lug **24** to the size of the enlargement **28** in key-hole slot **30** and of the length and shape of locking tab **34** are important in ensuring against accidental removal of the valance from the assembly. It is also important that the head **26** be spaced inwardly of the inner surface of the frame member in which the key-hole slot is formed so that the lug

can be moved perpendicular to the frame member in order to free it from the locking tab for movement of the head into alignment with the enlarged opening of the slot. If desired, the heads **26** may extend below or inwardly of the end of the locking lugs as illustrated in the arrangement shown in FIGS. 6 and 7, so that when the lugs **24** are shifted back, before being moved outward, the heads **26** catch on tabs **34**, thereby locking them in place. This latter arrangement has particular application in removably attaching pieces to the frame assembly along vertical surfaces thereof, as for example in attaching the outer feet **36, 36**, which prevent the screen from tilting forward. In this case, the weight of the screen retains the lug **24** fixed to the back of each foot in locking engagement with the tab **34**, which fits around the shank of lug **24** and in back of the head **26** as shown in FIG. 6. This provides a sufficiently secure way of removably attaching the feet **36, 36** to the frame so that they can be readily changed as in the case of the valance piece **22**. Adjustable supports **38** of conventional design are mounted on the back of the frame to prevent the unit from tilting backward so that it can stand alone. It will be apparent that other decorative portions of the screen, such as the base member **16** and side uprights **18, 19**, can be provided with decorative facings which are demountable and interchangeably detachable by employing similar fastening means.

What is claimed is:

1. In a fireplace screen having a frame including a base member, a pair of side members each rigidly connected to opposite ends of said base member and extending upwardly therefrom, and a top cross-bar member fixed to the upper ends of said side members, the combination therewith comprising a decorative outer piece detachably mounted to at least one of said frame members and means for releasably fastening said decorative piece to such frame member, a lug fixed to said decorative piece, a key-hole shaped slot in at least one of said frame members, said lug having an enlarged head, said key-hole slot having an enlarged portion through which said head will pass and a narrow portion to receive said lug but through which said head will not pass, and a locking tab projecting inwardly of said enlarged portion from a point opposite said narrow portion, the inner end of said locking tab being offset perpendicularly of the plane of said slot in the direction through which said lug passes when it is inserted, whereby the head of said lug can be inserted through said enlarged portion of said key-hole slot and moved laterally into said narrow portion, said enlarged lug head being spaced a distance from the inner side of said member at least substantially equal to that of the end of said locking tab such that upon shifting said lug back toward said enlarged portion of said key-hole slot, the end of said lug engages said locking tab preventing accidental removal of said lug through said enlarged portion of said key-hole slot.

2. The combination defined in claim **1** wherein said decorative piece comprises an elongated valance piece superimposed along said top cross-bar member and encompassing the same along at least the front and top surfaces thereof and said fastening means comprises a pair of said lugs disposed at a predetermined distance apart along said valance piece, together with a pair of said key-hole slots correspondingly spaced along said cross-bar member for receiving said lugs, said narrow portions of said key-hole slots extending in the same direction from their respective enlarged portions, so that said lugs can be moved simultaneously with said valance piece as a unit laterally into the narrow portions of said key-hole slots.

3. The combination defined in claim **2** wherein said valance piece is formed with walls which at least partially encompass three sides of said top cross bar such that it can be shifted only longitudinally thereof when assembled thereon, said key-hole slots being disposed longitudinally of said cross bar with their enlarged and narrow portions aligned longitudinally of said cross bar.

4. The combination defined in claim **3**, wherein the enlarged heads of said lugs are disposed for abutment with the ends of said locking tabs when said valance piece and lugs are fully engaged with said cross bar member and shifted longitudinally outwardly of the arrow portions of said key-hole slots, thereby blocking said heads from moving into alignment with said enlarged portions of said key-hole slots, said heads being spaced from the inner side of said cross bar member when thus fully engaged therewith such that said heads can be moved perpendicularly to said cross bar member in order to move them out of said abutting relation with said locking lugs so that said enlarged heads can be shifted into alignment with said enlarged portions of said key-hole slots.

5. The combination defined in claim **1**, wherein said decorative piece comprises a foot piece detachably mounted adjacent each point of connection of said side members and said base member, said enlarged head of said lug being spaced farther from the inner side of said member than the end of said locking tab such that said head may become trapped behind said locking tab upon shifting said lug back toward said enlarged portion of said key-hole slot.

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U.S. Cl. X.R.

126—140