Aug. 24, 1926. 1,596,950

P. F. SEMONIN

FIRE SCREEN

Original Filed May 9, 1923

Fig-1-

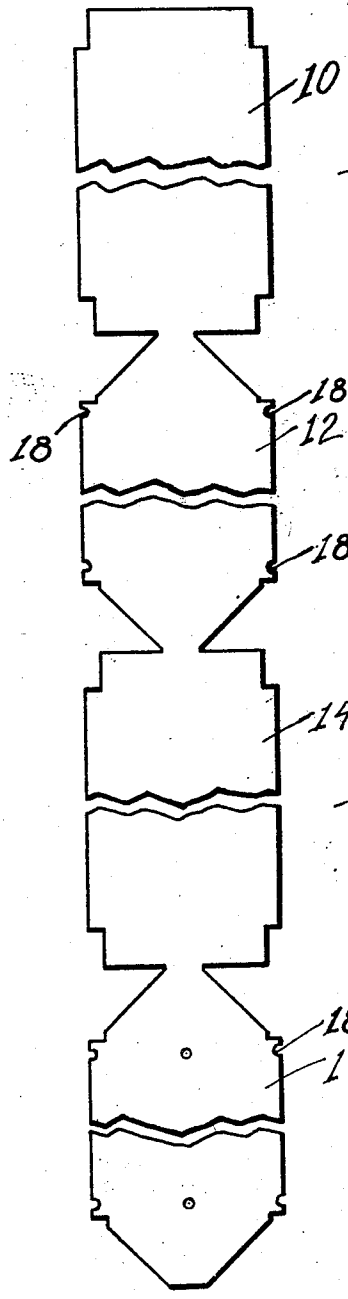


Fig-2-

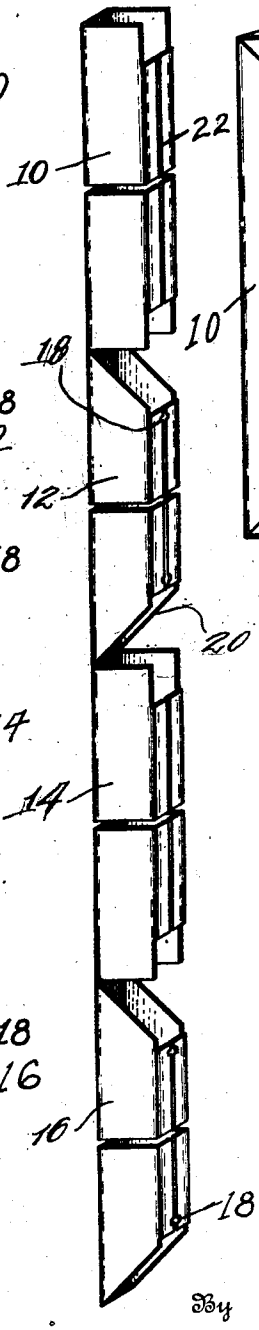


Fig-3-

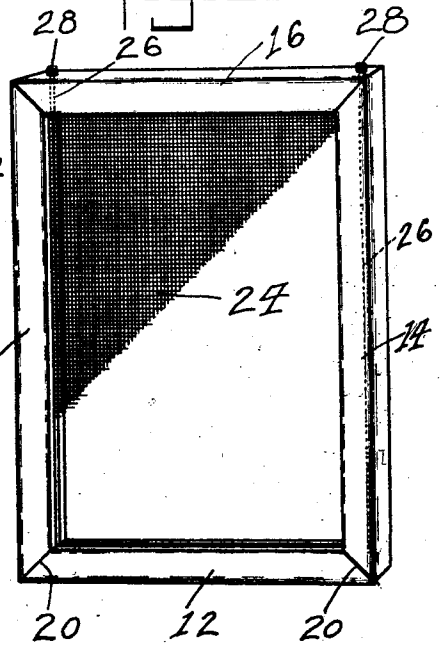
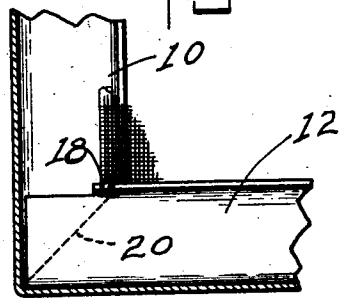


Fig-4-



Inventor

Paul F. Semonin

By Albert J. Fike

Attorney

Patented Aug. 24, 1926. 1,596,950

UNITED STATES PATENT OFFICE.

PAUL F. SEMONIN, OF LOUISVILLE, KENTUCKY.

FIRE SCREEN.

Application filed May 9, 1923, Serial No. 637,637. Renewed May 27, 1926.

This invention relates to improvements in fire screens and has for its principal object the provision of a screen adapted to be positioned before a fireplace or stove, in order to prevent the flying of sparks and the subsequent setting fire to rugs, clothing, or anything that may be before the fireplace.

One of the principal objects of this invention is the provision of a fire screen adapted to be used in front of a fireplace or the like, and which shall be composed entirely of metal, and therefore, positively non-inflammable and which shall further be constructed in such a manner that it can be readily assembled, and when assembled will be strong, durable and also ornamental.

Another important object of the invention is the provision of a metallic frame for fire screens or the like which shall be in channeled form and preferably rectangular in shape, and which shall be so constructed that a metal screen or fine wire mesh can be positioned therein in a secure manner and with a minimum of labor.

Still another important object of the invention is the provision of a metallic screen having a channeled shaped metal frame and in which a wire mesh is positioned by means of side supporting elements in the form of rods which fit inside the channeled frame.

Other and further important objects of the invention will be apparent from the disclosures in the accompanying drawings and following specifications.

The invention in a preferred form is illustrated in the drawings and hereinafter more fully described.

In the drawings:—

Figure 1 is a plan view of the metal frame of the wire screen of this invention after the same has been stamped out to shape but before any forming operation has been made thereon.

Figure 2 shows the channeled shaped frame of this invention after completion, but before being bent into final shape.

Figure 3 is a view showing the completed fire screen of this invention.

Figure 4 is a detail view showing the construction of one of the corners of the hollow frame member.

As shown in the drawings:—

The reference numerals 10, 12, 14 and 16 indicate generally the frame for the fire screen of this invention, which is stamped out of a single piece of metal and cut as illustrated in Figure 1. The sections 10, 12, 14 and 16 are each connected into one integral sheet as shown, the sections 10 and 14 being substantially rectangular in shape and designed to form the side members or uprights of the completed screen. The sections 12 and 16 are formed somewhat similar to the sections 10 and 14, but are preferably shorter, in order to constitute the end pieces of the frame shown in Figure 3, and each of these last named sections has the four corners thereof cut off at an angle approximately of forty five degrees, as best shown in Figure 1. Further, the sections 12 and 16 have notches formed in the outer edges thereof, which are semi-circular and adapted for the reception of supporting bars 26 for the screen or mesh.

As best illustrated in Figure 2, the sides of the members 10, 12, 14 and 16 are bent upwardly at right angles and then downwardly; the topmost edges are bent toward each other to form the practically closed channeled member illustrated in this figure.

The angular portions of the members 12 and 16 then form upwardly sloping ends of the closed channeled members which, when the frame is bent into final shape, constitute overhanging extension guides for the squared ends of the members 10 and 14, and present a more finished appearance for the frame in its final shape, as best illustrated at 20 in Figures 3 and 4.

The overhanging side edges of all the frame members are so bent toward each other that they do not quite contact, but present a narrow slit, as illustrated at 22, through which the wire mesh of the screen proper extends.

The notches 18 formed in the sides of the members 12 and 16 cooperate to produce substantially circular holes through which the supporting rods 26 for the wire mesh 24 are adapted to pass. These supporting rods are two in number and pass upwardly through the interior of the side members 10 and 14 of the frame and have the edges of the wire screen 24 securely clamped thereto. These rods 26 which are illustrated in the dotted lines in Figure 3, preferably are provided with screw-threaded ends, upon which knobs 28 or other suitable retaining means are adapted to be fitted. It is obvious that these rods 26 may be inserted

from either the top or the bottom of the frame before the same is completely assembled.

The method of assembly is as follows:— The wire screen 24 is first securely clamped at its side edges to the bars 26, which bars are then passed downwardly through the channeled members 10 and 14, the channeled member 16 being obviously still in an upright position. When the bars 26 are completely inserted into the channels 10 and 14, the top member 16 is bent downwardly into position, the ends of the bars 26 passing thru suitable openings in the back of the channeled member 16, after which the knobs 28 are securely screwed into position. Any other method of assembly may be used if found desirable, and if necessary, the entire channeled members can be formed in position around the screen 24. Any number of the screens may be hinged together.

I am aware that many changes may be made and numerous details of construction varied throughout a wide range without departing from the spirit of the invention, and, therefore, do not purpose limiting the patent granted hereon otherwise than as necessitated by the prior art.

I claim as my invention:

1. A screen comprising in combination a metallic channeled frame, a wire mesh in said frame, and means in the side members of the frame for maintaining said wire mesh in position, said means comprising rods having the side edges of the wire mesh fastened thereto, and retaining means for maintaining the said rods and the wire mesh in position, said means comprising openings in the channeled frame, and knobs screw-threaded on the ends of the said rods.

2. A fire screen comprising in combination a rectangular metallic channeled frame, a rectangular wire mesh supported in said frame, the frame being composed of a unitary piece of metal and supporting means inside the frame for the wire mesh, together with means in the frame adapted to maintain the said supporting means in position, said last named means comprising notches formed in the inner edges of said channeled members and openings in the backs of same.

In testimony whereof I affix my signature.

PAUL F. SEMONIN.