Feb. 14, 1956 H. M. STEELE 2,734,467

GUTTER SCREEN

Filed Nov. 21, 1950

Fig. 1

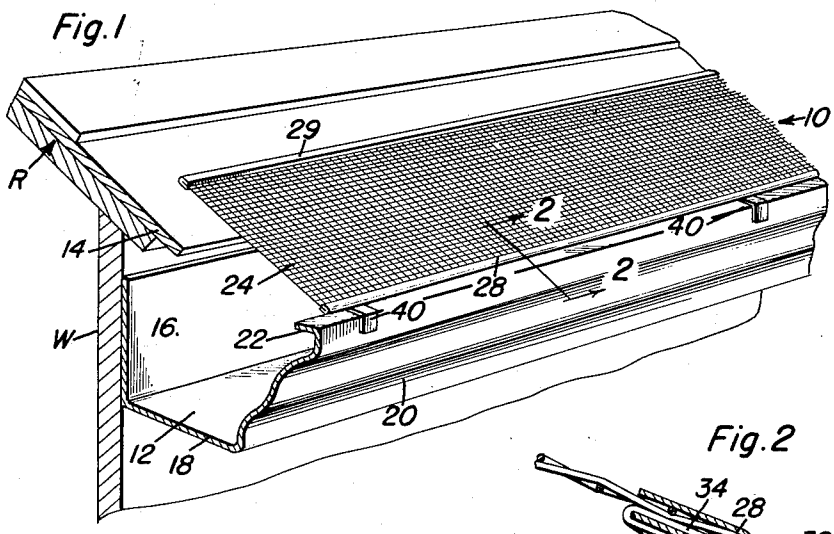


Fig. 2

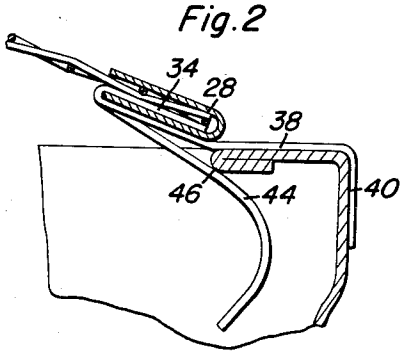


Fig. 4

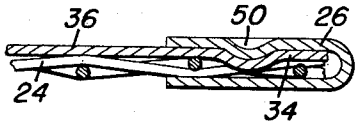


Fig. 5

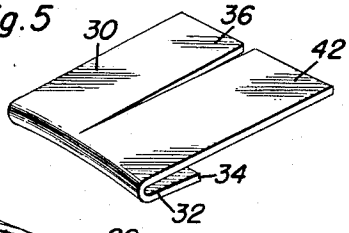


Fig. 3

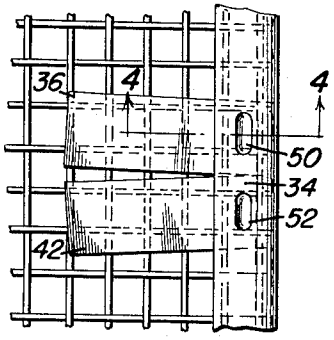


Fig. 7

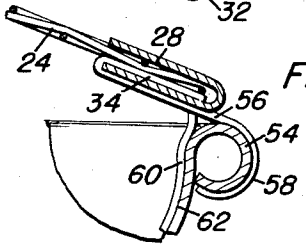
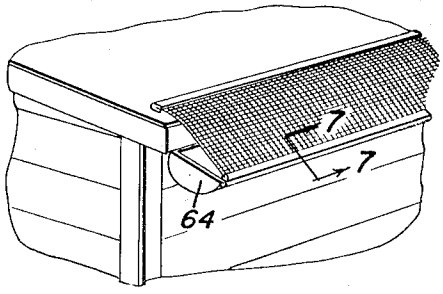


Fig. 6



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GUTTER SCREEN

Homer M. Steele, Ashland, Ky.

Application November 21, 1950, Serial No. 196,846

1 Claim. (Cl. 108—30)

The present invention relates to a gutter, and more particularly to the provision of a gutter screen for protection of the gutter from collection of foreign material therein.

An object of the present invention is to provide a gutter screen which is adapted to overlie the gutter to prevent the collecting of leaves, twigs, or the like.

A further object of the present invention is to provide an improved gutter screen which is adapted to be easily positioned on a gutter for secure positioning thereon.

Another object of the present invention resides in the provision of novel means whereby the gutter screen is flexibly secured to the outer edge of the gutter.

Still further objects of the present invention are to provide such means that are simple in construction, economical of manufacture, easily positioned on a gutter, and easily removed therefrom.

The best form in which I have contemplated applying my invention is clearly illustrated in the accompanying drawings, wherein:

Figure 1 is a perspective view with parts in section showing the gutter screen secured on a gutter;

Figure 2 is a vertical transverse sectional view taken substantially along the plane of the line 2—2 of Figure 1;

Figure 3 is a bottom plan view of a portion of the gutter screen showing the supporting element secured to the reinforcing edge means of the screen;

Figure 4 is a vertical transverse sectional view taken substantially along the plane of line 4—4 of Figure 3;

Figure 5 is a detail perspective view showing the split bracket which is to be employed in connection with the present invention for securing the gutter screen on a gutter;

Figure 6 is a perspective view similar to Figure 1 but showing a modified form of gutter with the modified form of gutter screen secured thereto; and

Figure 7 is a detail sectional view taken substantially along the plane of line 7—7 of Figure 6.

Referring more particularly to the drawings, the numeral 10 designates generally the gutter screen of the present invention which is to be employed in connection with the first form of gutter 12 which is secured beneath the overhanging portion 14 of the roof R and to the wall W of the building structure.

As seen best in Figure 1, one form of conventional gutter 12 is disclosed as including an upstanding wall 16 which is adapted to be attached to the wall W of a building structure, a bottom wall 18 being integrally formed therewith and an outer wall 20 extending substantially angularly from the bottom wall 18. The upper edge of the outer wall 20 is angulated at 22.

The gutter screen means 10 which is employed with the gutter 12 is comprised of a screen means which may be of any desired mesh screen 24. The longitudinal edges of the screen 24 are bound by reinforcing means 26

which include elongated U-shaped strips which embrace the longitudinal edges of the screen 24, as seen best in Figure 4.

The means for resiliently securing the outer reinforcing means 28 to the outer angulated edge 22 of the gutter 12 includes a flat split bracket 30. The bracket 30 is formed with a U-shaped connecting portion 32, the leg 34 of which is adapted to be received between the leg portions of the U-shaped elongated strip 28, as seen in Figure 2. One of the leg portions 36 is angulated as at 38 and 40 for embracing the outer surface of the angulated edge 22 of the gutter, while the other leg portion 42 is bent arcuately at 44 for abutment with the inner surface of the outer edge 22, at 46, whereby the entire gutter screen will be resiliently clamped to the gutter with the inner edge 29 of the screen being adapted to rest on the top of the roof R.

Figure 3 shows the details of constructing the supporting means for the gutter screen. The flat split bracket 30 is first positioned with the portion 34 received within the reinforcing strip 28 and then the pair of leg portions 36 and 42 are bent with respect to the portion 34 to provide the U-shaped portion 32. A stamping means is employed for forming the indentations 50 and 52 for each of the leg portions 36 and 42 to the reinforcing means. The leg portions may then be angulated and arcuated to the form shown in Figure 2, as hereinabove described.

In the form disclosed in Figures 6 and 7, the construction is substantially the same as that hereinabove described except for the fact that the gutter of this modification is formed with an outer longitudinal edge which is arcuated to provide a longitudinally extending rib 54. The leg portion 56 is correspondingly arcuated at 58 for complementary engagement with the outer surface of the rib 54, while the other leg portion 60 is arcuated to fit the contour of the inner surface 62 of the outer edge of the gutter 64.

From the foregoing description, it will be readily understood by one skilled in the art that the leg portions of the connecting bracket may be formed as desired to conform to the various configurations of conventional gutters whereby the gutter screen of the present invention may be adapted to the various gutters.

Having described the invention, what is claimed as new is:

In combination, an eaves trough having a generally upstanding outer wall terminating in an inwardly extending generally horizontal flange, said trough supported immediately below the edge of a roof, an elongated coarse mesh gutter screen covering the trough and forming a continuation of the roof, a channel-shaped reinforcing bead on the longitudinal inner and outer edges of the screen with the inner bead being disposed against the upper surface of the roof adjacent the edge thereof and the outer bead overlying the trough adjacent the upper surface of the flange, and a plurality of clips attached to the outer bead on the screen, each of said clips including a longitudinally split bracket forming a pair of bendable legs, a reversely bent, U-shaped connecting portion integral with the bracket, said reversely bent portion terminating in a flat leg portion inserted between the lower leg of the outer channel-shaped bead and the screen, said lower leg of the outer bead having indentations therein for retaining the flat leg portion between the lower leg of the outer bead and the screen, one of said bendable legs extending outwardly beyond the outer bead and being disposed against the undersurface of the lower leg of the outer bead and against the upper surface of the inwardly extending flange on the trough, said one bendable leg terminating in a downwardly extending free end

disposed against the outer surface of the upstanding wall of the trough adjacent the upper edge thereof, the other bendable leg extending downwardly and outwardly in diverging relation to said one leg and engaging the undersurface of the horizontal flange on the trough at the inner edge thereof thereby retaining the clip on the trough and holding the inner bead on the screen against the surface of the roof, said bendable leg clampingly engaging the horizontal flange on the trough immediately below the outer edge of the outer bead, thereby preventing upward pivotal movement of the screen in relation to the trough.

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