United States Patent [19]

Dugan

[11] **3,834,091**

[45] **Sept. 10, 1974**

[54] **HINGED GUTTER COVER**

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[22] Filed: **June 14, 1973**

[21] Appl. No.: **369,933**

[52] **U.S. Cl.** **52/12**
[51] **Int. Cl.** **E04d 13/00**
[58] **Field of Search** 52/12; 210/474

[56] **References Cited**

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Attorney, Agent, or Firm—Clarence A. O'Brien; Harvey B. Jacobson

[57] **ABSTRACT**

An elongated gutter overlying mesh cover hingedly mounted on the outer edge of the gutter by clip means. The cover includes an outwardly projecting handle portion selectively engaged by the double-hooked end of a tool for first raising and dumping the cover and then positively repositioning the cover.

1 Claim, 5 Drawing Figures

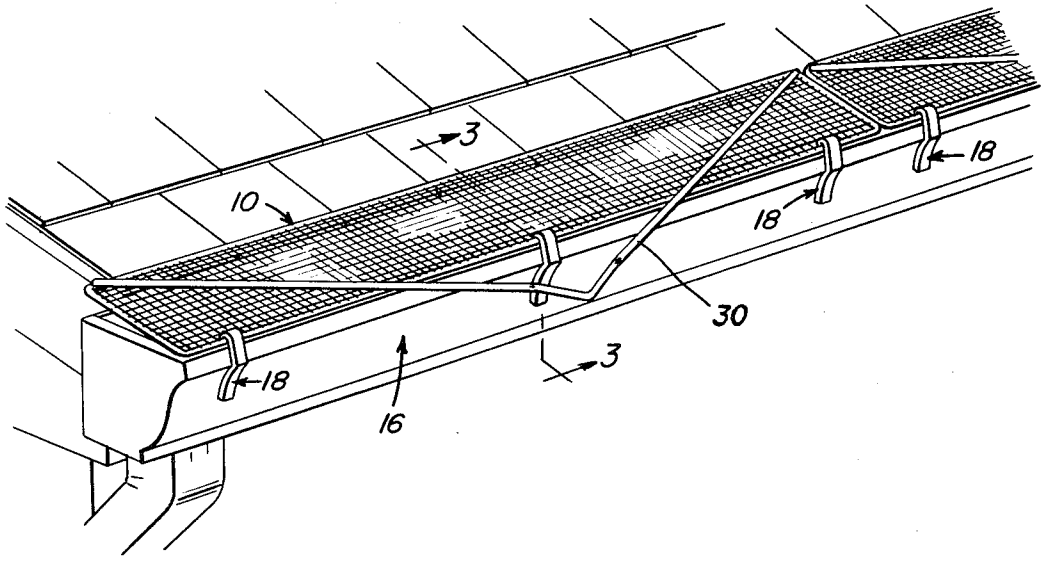


Fig. 1

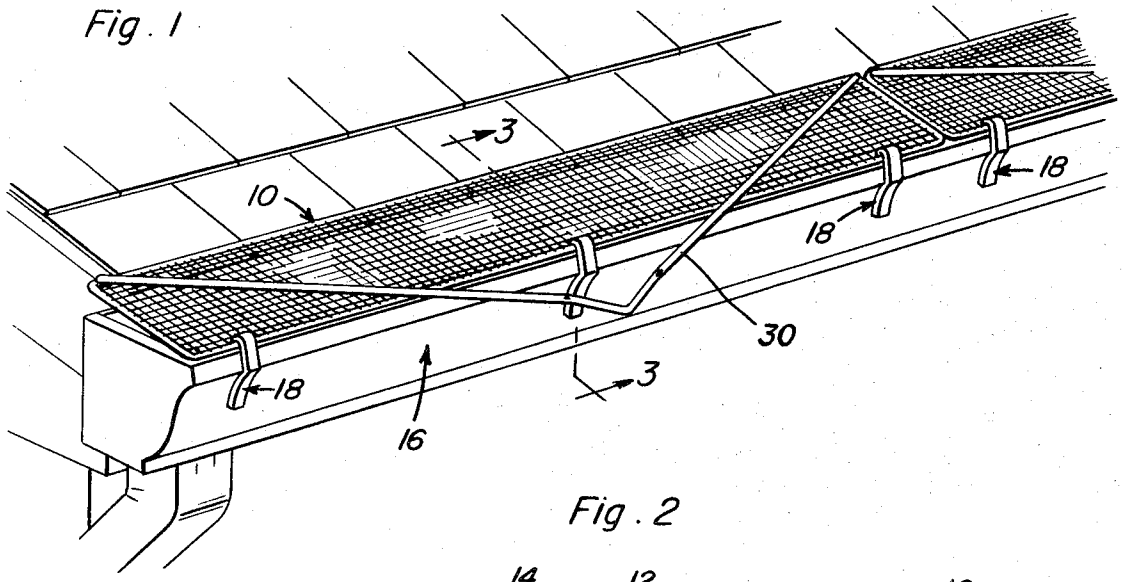


Fig. 2

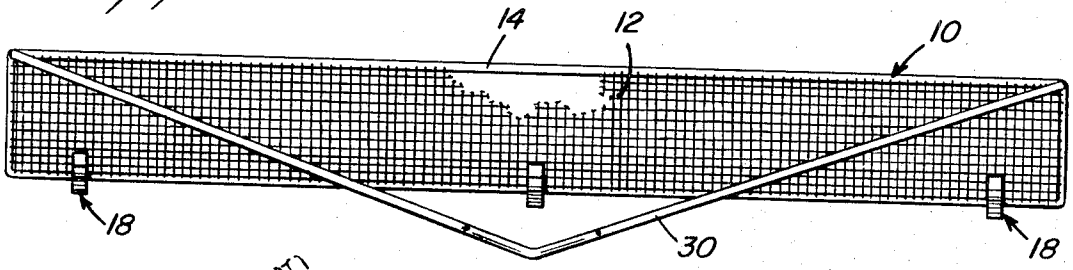


Fig. 3

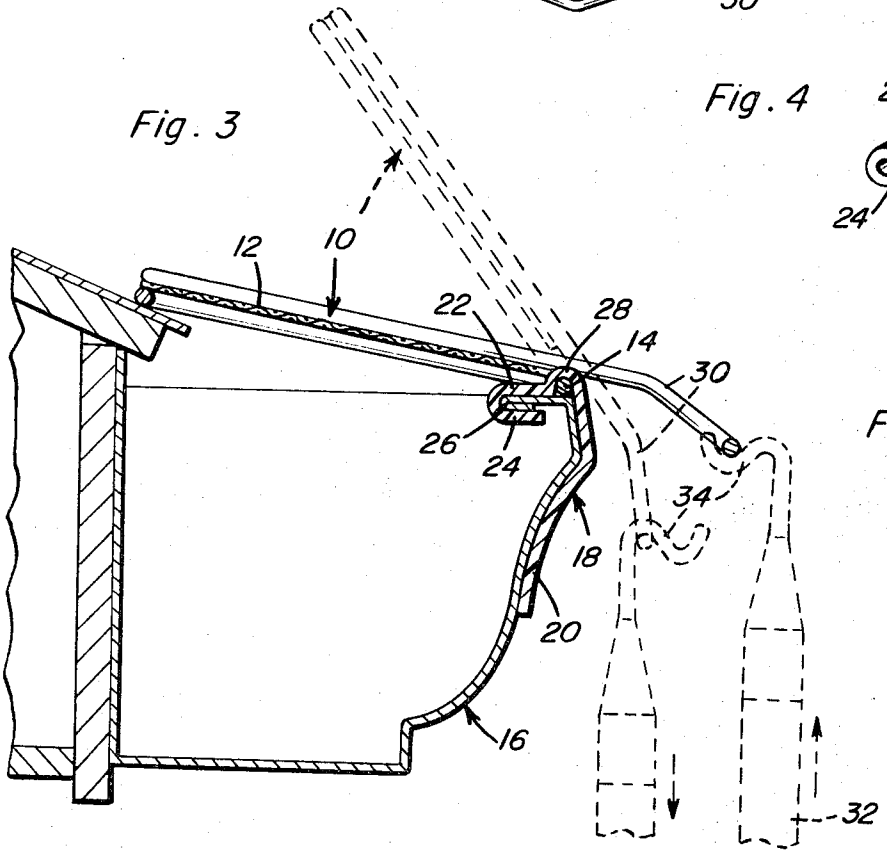


Fig. 4

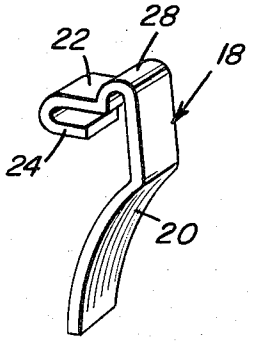
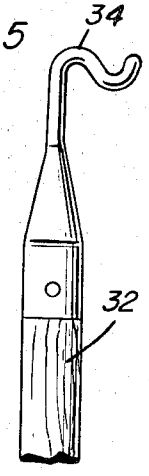


Fig. 5



HINGED GUTTER COVER

The present invention generally relates to rain gutters, and is more particularly concerned with a uniquely constructed mesh cover for such gutters which can be easily swung outward for a dumping of leaves and other debris therefrom.

It is well known to provide gutter guards or gutter covers in the nature of elongated screened sections which overlie the open gutters and, while allowing for the entry thereto of the roof draining water, exclude leaves and other debris so as to maintain the gutters free running. However, the guards themselves eventually tend to clog due to the accumulation of the various matter thereon. This in turn gives rise to the necessity of climbing up to the gutters and manually removing the trash.

It is the primary object of the instant invention to provide a unique system whereby the gutter covers can be periodically cleaned without requiring the homeowner to actually climb to the gutters. More particularly, the invention is concerned with the provision of a unique gutter guard which is pivotally mounted on the outer edge of the gutter and controllable from the ground or a lower level through an elongated tool having a hooked upper end which engages an outwardly projecting handle on the cover for an upward and outward swinging thereof in a manner so as to outwardly discharge any debris accumulated thereon. Once the debris is discharged, the gutter guard is easily repositioned with the tool.

The gutter guard is of a simple although highly unique construction readily adapted to conventional gutters, easily manipulated and capable of many years of trouble-free use.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout.

FIG. **1** is a perspective view illustrating the gutter guard or cover of the instant invention mounted in operative position on a housing gutter;

FIG. **2** is a top plan view of the gutter guard with a portion broken away for purposes of illustration;

FIG. **3** is an enlarged cross-sectional detail taken substantially on a plane passing along line **3—3** in FIG. **1** and illustrating the manipulations associated with the opening and closing of the cover;

FIG. **4** is a perspective view of one of the cover mounting clips; and

FIG. **5** is a view of the operating end of the gutter manipulating or handling tool.

Referring now more specifically to the drawings, reference numeral **10** is used to generally designate the gutter guard or cover of the invention.

The guard, preferably rectangular and formed in three foot lengths for ease of handling, is formed of wire mesh **12** welded to a peripheral rigid rod frame **14.** The mesh **12** will be such so as to allow for free passage of water therethrough while effectively excluding leaves and other debris.

The cover **10** rests over the open top of a gutter **16** with the outer edge of the guard overlying the outer edge portion of the gutter **16** and with the inner edge of the cover normally overlying the adjacent roof edge whereby an effective excluding of debris from the gutter **16** will be effected.

In order to clean the cover **10** itself in accordance with the invention, the cover is to pivot upwardly about the outer edge of the gutter **16** as suggested in FIG. **3.** Accordingly, in order to allow for the pivoting or swinging of the cover **10,** and at the same time provide for a secure mounting of the cover on the gutter, a plurality of hinge clips **18,** made of an appropriate non-rusting material such as fiber glass, are utilized. Each clip **18** includes a vertical leg **20** configured to conform to the outer face of the gutter **16** which, in the illustrated form, is of a generally ogee shape. The clip **18** also includes an upper inwardly extending horizontal leg **22** terminating in a downward reverse bend or hook portion **24** which snugly engages over the normally provided inwardly extending lip **26** on the upper outer edge of the gutter **16.** The horizontal leg **22** of the clip **18,** at approximately the point of intersection with the upper portion of the vertical leg **20,** includes an upwardly bulged or configured portion **28** which rotatably receives the outer portion of the rod frame **14** of the guard or cover **10.** In order to accommodate the clip **18,** it will be appreciated that a small portion of the wire mesh screen **12** in the immediate vicinity of each of the clips **18** is cut away. In mounting the clip, the hook portion **24** is first engaged with the lip and then the clip swung downward and outward snapping the gutter conforming outer leg **20** into position. When mounted in this manner, normally three clips **18** being utilized for each guard **10,** the guard **10** is, while free to pivot in the manner suggested in FIG. **3,** positively retained in operative position over the gutter **16.**

A dumping handle **30** is provided on the cover **10** and consists of an elongated rigid rod bent at an angle with the bight or angle portion being located in outwardly spaced relation to the center of the outer edge of the guard **10.** The two legs of the handle **30** overlie the guard and extend to the opposite rear corners thereof, being welded to the rod frame at each of the points of engagement therewith so as to both rigidify the frame and form a rigid centrally located extension thereof. Noting FIG. **3** in particular, it will be appreciated that the outwardly projecting portion of the handle **30** is downwardly bent for more convenient access thereto.

The actual manipulation of the cover **10,** as suggested in FIG. **3,** is effected by a tool comprising an elongated pole **32** having a horizontally orientated S-shaped head **34** on the upper end thereof forming a downwardly directed hook portion which engages the handle **30** for a downward swinging of the outer end of the handle and corresponding upward swinging of the cover **10,** and an upwardly directed hook portion which engages beneath the projecting portion of the handle for a pivoting of the cover **10** back into gutter covering position. It will be appreciated that the outwardly projecting portion of the handle **30** will also act as a stop limiting the outward pivoting movement of the cover **10,** enabling a forward swinging of the cover sufficient so as to effect a complete discharge of the debris therefrom while retaining it in a convenient position to be again positioned over the gutter by the upwardly directed hook portion of the pole tool. The length of the pole **32** will of course be sufficient so as to accommodate the height of the particular gutters involved with

the user of the pole standing on the ground or on a convenient lower level.

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 invention.

What is claimed as new is as follows:

1. A gutter guard comprising an elongated gutter overlying mesh cover, said cover having inner and outer edges and opposed ends with a rigid peripheral frame thereabout, said outer edge being positionable in overlying relation to the outer edge of a gutter, clip means engaging said cover frame along the outer edge in a manner whereby said cover can pivot relative thereto, said clip means comprising a plurality of clips, each clip having a vertical outer leg configured to conform to the outer face of the gutter, and a horizontal inwardly extending upper leg terminating in a reversely bent inner and engageable about an inturned gutter lip, said upper leg, adjacent the outer leg, having a configured portion pivotally receiving the outer edge frame of the cover, and handle means fixed to and overlying said cover and projecting laterally outward from the outer edge of the cover beyond the clip means whereby a downward movement of the outer portion of the handle means will effect a corresponding upward pivoting of the cover, said handle means comprising an elongated rod bent at an angle and forming a central portion laterally outward of the outer edge of the cover centrally thereof and a pair of rearwardly diverging legs overlying and extending to the opposite ends of the inner rear edge of the cover, each leg being fixed to the frame at both the outer and inner edges.

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UNITED STATES PATENT OFFICE

CERTIFICATE OF CORRECTION

Patent No. 3,834,091 Dated September 10, 1974

Inventor(s) John Dugan

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

On the Title page, item 76, "Box 515104 Irvin St., Kankakee, Ill." should read -- Box 515-104 Irvine St., Aroma Park, Ill. --.

Signed and sealed this 31st day of December 1974.

(SEAL)
Attest:

McCOY M. GIBSON JR.
Attesting Officer

C. MARSHALL DANN
Commissioner of Patents

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