

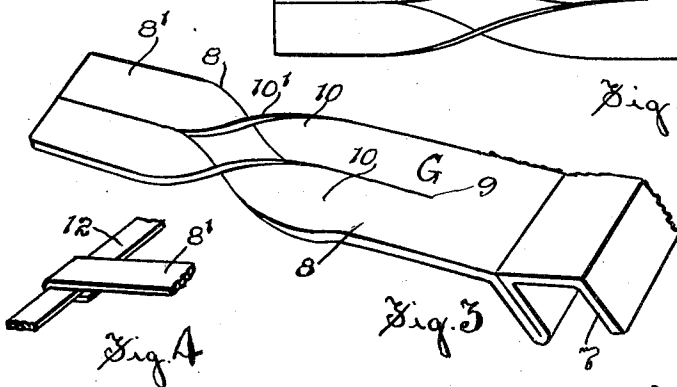
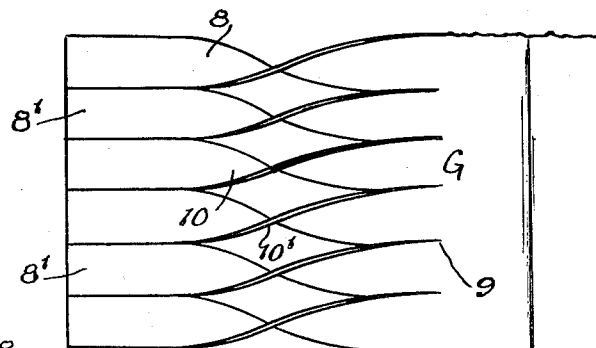
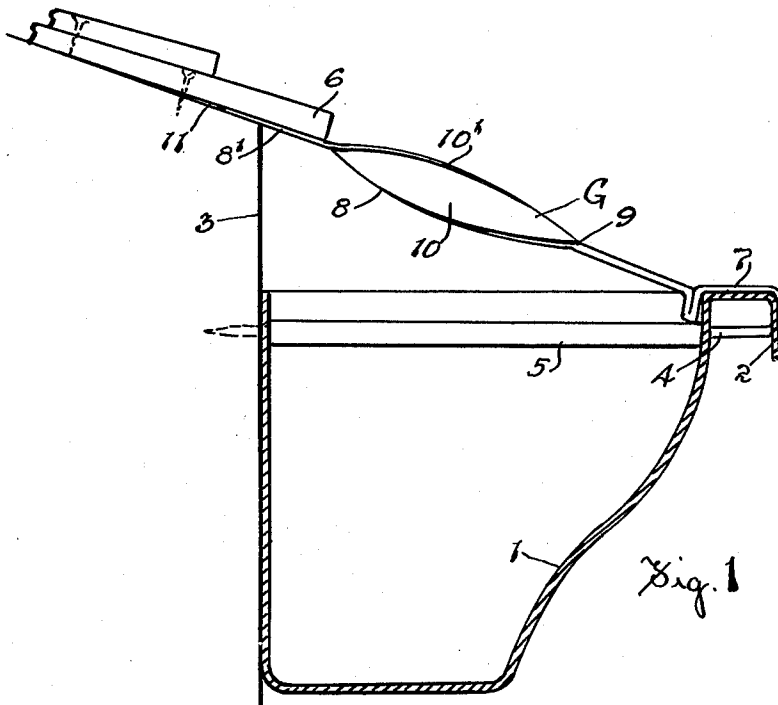
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B. MATTHEWS ET AL

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EAVE TROUGH GUARDS

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Inventors
B. Matthews
A. L. Littleford
By: G. B. Foxhugh
Their City

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EAVE TROUGH GUARDS

Blake Matthews, Edmonton, Alberta, and Alfred L. Littleford, Winnipeg, Manitoba, Canada

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1 Claim. (Cl. 108—30)

The invention relates to eaves trough guards and a general object of the invention is to provide a guard which can be placed over the open top of a trough throughout the length thereof and which will permit drain water to pass freely through into the trough and will arrest leaves and such like trash from entering the trough, such arrangement maintaining the trough free of undesirable deposit.

A further object is to provide a guard which can be manufactured at relatively low cost, can be installed by a layman, can be readily removed if required, will positively direct the rain or drain waters into the trough, presents a narrow grid like edge to catch and support leaves and like trash and off which the leaves upon drying will be readily blown and finally a guard which can be fabricated in desired lengths from a single blank of sheet metal.

With the above objects in view the invention consists essentially in the arrangement and construction of parts hereinafter set forth, reference being had to the accompanying drawing in which:

Fig. 1 is a vertical sectional view through a conventional or standard eaves trough attached to a building and showing our guard in end elevation and in operating position.

Fig. 2 is a plan view of a short length of guard.

Fig. 3 is a perspective view of a short length of guard.

Fig. 4 is a perspective view of the free end of one of the fingers and showing the same bent over a reinforcing strip serving, if found desirable, to align all fingers of the guard.

In the drawing like characters of reference indicate corresponding parts in the several figures.

Eaves troughs, now marketed, are more or less of standard shape and dimensions, and the conventional eaves trough 1, such as shown in Fig. 1, is provided at its outer edge with an inverted reinforcing channel 2 and is secured to a building 3 by spikes or nails 4 placed at intervals and passing through spacer tubes 5 inserted on the spikes between the side walls of the trough.

The inner side of the trough is located under the lower course of roof shingles 6 which usually have their lower edges projecting a short distance beyond the edge of the roof. The shingles are nailed to the roof in a location somewhat back from the edge thereof so that it is an easy matter to slightly raise the butt ends of the last course of shingles to provide a lengthwise crack between them and the roof. This is explained so that the ease of installation of our guard will be apparent from the description hereinafter appearing.

The guard, indicated generally by the reference letter G is formed from a single strip of sheet metal, the length being that of the trough to be guarded and the width depending on fixed trough and roof factors.

In forming the guard from a rectangular strip of sheet metal, an inverted channel 7 is made at the outer edge of the strip and which is adapted to fit over the channel

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2. The body of the strip is cut transversely to provide similar equal length and width fingers 8 the bases of which terminate at 9 a short distance from the channel 7. Fingers having each a width of say three-eighths of an inch and a length of about three inches, will effectively serve their purpose. After the fingers have been formed they are all given a half turn or twist, care being taken that a portion of the finger 8' at the tip or free end and say for about three quarters of an inch is maintained flat or in the same plane as the uncut portion of the strip adjacent the channel 7. Between the reserved flat tips and their other ends, the fingers are spiralled, as shown at 10.

When the guard is to be placed in position over the trough, the aligned, flat lying ends of the fingers are inserted in a lengthwise extending crack 11 formed by lightly forcing the butt ends of the lower course of shingles away from the roof as hereinbefore referred to and when the guard is properly placed the channel 7 fits over that 2, the whole set up being then as shown in Fig. 1. In this figure it will be seen that the body of the guard is in the same inclined plane as the roof and that the spiralling portions of the fingers overlie the eaves trough and extend from approximately the butt ends of the shingles to a point say about an inch away from the outer edge of the trough.

With the guard mounted as shown it will be apparent that rain water will drip from the shingles onto the guard and by virtue of the spirals will be quickly directed into the trough without any possibility of spilling over the outer edge of the trough and that leaves and such trash carried down by the rain waters will be swept onto the grid like upper edges 10' of the spirals and prevented from entering the trough. These edges are narrow (only the thickness of the sheet) so that they have but little arresting effect for leaves, many of which may be carried over and cleared from the outer edge of the guard during a rainstorm. Those remaining will quickly dry out and become blown away by the wind. Further the narrow edges insure that no rain water will be carried over to spill over the outer edge of the trough.

If it be found desirable the channel 7 can be fastened by bolts or screws to that 2 and such can be placed well apart so that little work will be entailed if it becomes necessary to remove the guard. Further if it be found, in practice, that in storage, shipping or installing there is the possibility of the fingertips becoming misaligned, such can be overcome and avoided by turning the tips of the fingers around a narrow, lengthwise extending, aligning strip 12 such as shown in Fig. 4. The insertion of such a strip does not make the tips too thick for ready insertion in the crack 11.

While we have given a detailed explanation of how the device is installed, it will be understood that the most important feature of the invention lies in the spiralling fingers which direct all rain water quickly into the trough and serve also to trap all leaves and such like trash.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

As a new article of manufacture, an eaves trough guard formed from a rectangular strip of sheet metal of selected length and having one longitudinal edge shaped to present a downwardly opening, supporting channel and the body part thereof transversely cut inwardly from the other longitudinal edge to a point spaced from the formed channel to provide a succession of relatively narrow width fingers and said fingers being all individually and similarly spiralled from a point back from the latter longitudinal edge to a point terminating at the inner ends of the respective cuts thereby presenting raised

side edges of said fingers above the plane of the body
part thereof and drain openings between the said fingers.

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