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B. RIDDELL

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PLASTIC GUTTER CONSTRUCTION

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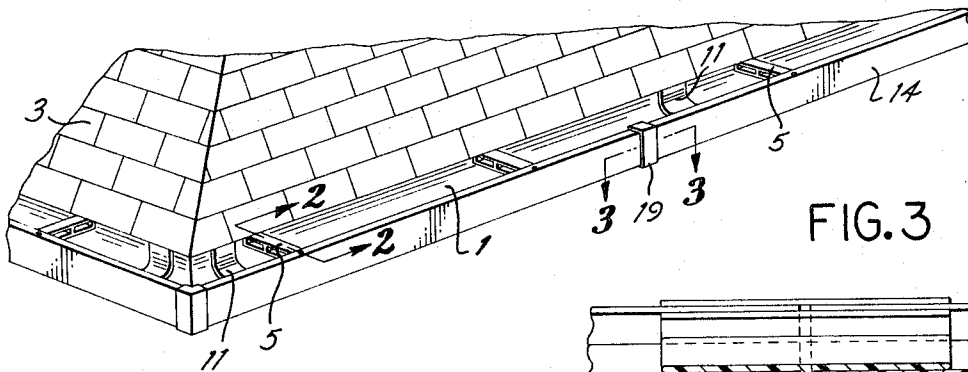


FIG. 1

FIG. 3

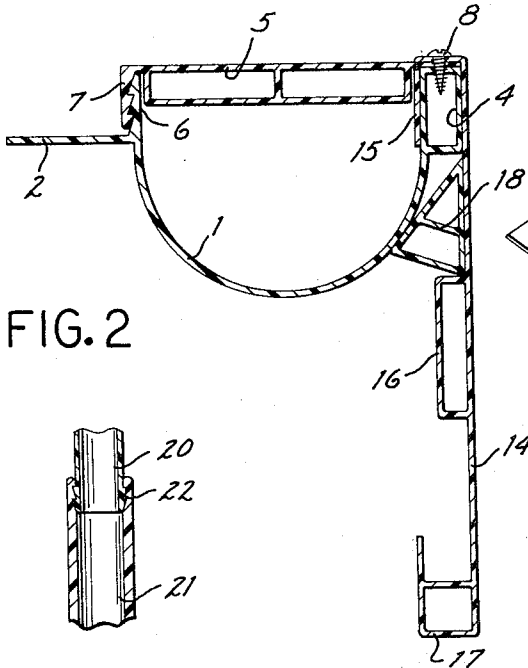
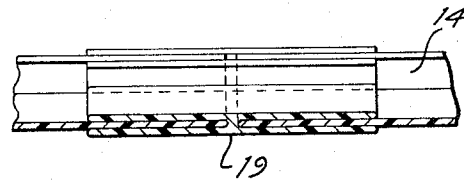


FIG. 2

FIG. 7

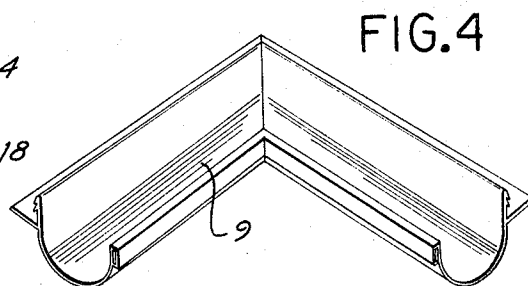


FIG. 4

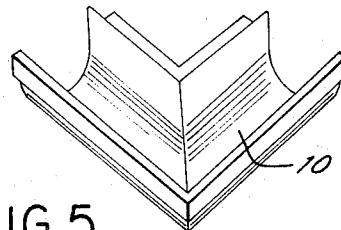


FIG. 5

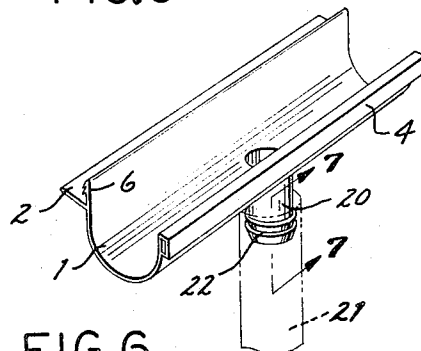


FIG. 6

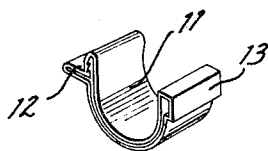


FIG. 8

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PLASTIC GUTTER CONSTRUCTION
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This invention relates to a gutter construction whereby the gutter and associated parts can all be formed of a plastic material, either by molding, extruding, or the like.

An object of my invention is to provide a gutter construction which can be formed of a moldable or extrudable plastic, and which will also support a fascia to inclose or cover the gutter.

Another object of my invention is to provide a novel gutter construction preferably formed of a plastic material, which includes a support or reinforcement of the outer edge of the gutter to support an additional weight at the outer edge of the gutter, such as a fascia.

Another object of my invention is to provide a novel gutter construction in which the various sections of the gutter can be joined at their meeting points, so that the gutter can be formed in appropriate lengths which can be readily handled by a workman.

Other objects, advantages and features of my invention may appear from the accompanying drawing, the subjoined detailed description and the appended claims.

In the drawing:

FIGURE 1 is a fragmentary perspective view of my gutter mounted on a roof.

FIGURE 2 is an enlarged vertical sectional view taken on line 2-2 of FIGURE 1.

FIGURE 3 is a fragmentary horizontal sectional view taken on line 3-3 of FIGURE 1.

FIGURE 4 is a perspective view of one type of gutter corner.

FIGURE 5 is a perspective view of another type of gutter corner.

FIGURE 6 is a perspective view of the downspout connection.

FIGURE 7 is a fragmentary sectional view taken on line 7-7 of FIGURE 6.

FIGURE 8 is a perspective view of a gutter section connector.

Referring more particularly to the drawing, the numeral 1 indicates a gutter shaped as a concave trough, and which is preferably molded or extruded of suitable plastic material. At the inner edge of the gutter 1 a lip 2 is provided, by means of which the gutter can be attached to the eaves or an appropriate underportion of the roof 3, so that the gutter will be positioned at the outer edge of the roof. A hollow reinforcing rib 4 is formed at the outer edge of the gutter 1 for the purpose of reinforcing this outer edge of the gutter, and to provide a support for the fascia which will be subsequently described. Reinforcing or tie strips 5, also formed of plastic, extend from the inner to the outer edge of the gutter 1 and at the top of this gutter as shown, for the purpose of supporting the outer edge of the gutter to permit the gutter to carry a weight at its outer edge, this weight being an attachment such as a fascia. The strip 5 is mounted in the following manner: A vertical rib 6 on the inner edge of the gutter 1 is toothed or serrated, and the strip 5 is provided with a downwardly projecting lip 7 which coacts with the rib 6 to releasably couple these parts together. This is best shown in FIGURE 2. The outer end of the reinforcement 5 is attached to the reinforcing rib 4 by means of the screw 8, or the like. It will thus be evident that the reinforcements or supports 5 can be quickly and easily mounted across the gutter 1 at intervals, as might be required. The corner sections of the gutter 1 can be

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constructed as shown at 9 in FIGURE 4, or at 10 in FIGURE 5, and otherwise the gutter construction will be the same as previously described. It will be evident that the lip 2 can be attached to the roof or house construction by means of nails, screws, or the like, and can thus be rapidly and easily mounted in the correct position. The gutter 1 is made in appropriate lengths, which can be easily handled by a single workman, and adjacent lengths of the gutter are coupled together by means of arcuate sleeves 11, which conform in cross-sectional shape to the gutter 1 and are in the form of two spaced semi-circular rings into which the ends of adjacent gutter sections can be slipped. The couplings 11 include an inwardly projecting lip section 12 to receive the lips 2, and an outer box-like reinforcing rib 13 to receive the ribs 4.

A fascia 14, also formed of a plastic material and in appropriate lengths similar to the lengths of the gutter 1, is mounted on the outer edge of the gutter 1 by means of a hook 15, which is formed on the upper edge of the fascia and which extends over the rib 4. The screw 8 also extends through this hook and into the rib 4, as best shown in FIGURE 2. The hook 15 may be cut or slotted at intervals to receive the outer end of the reinforcing strip 5 so that these parts can all be properly assembled. The fascia 14 may be provided with a box-like reinforcing rib 16 at about the mid area of the fascia, and also a box-like reinforcement 17 at its lower edge which reinforces the fascia and prevents it from bending or wrinkling unnecessarily. A wedge 18 is positioned between the gutter 1 and the fascia 14 and preferably immediately below the rib 4, for the purpose of holding the fascia in proper spaced relation to the gutter, and also to hold the fascia in true vertical position. The sections of the fascia 14 are coupled by means of short sleeve sections 19 which fit over the adjacent edges of the fascia, and which act to couple the fascia sections together in the same manner as the sleeve 11 previously described.

As shown in FIGURES 6 and 7, a downspout fitting is shown whereby a drain is provided for the gutter 1. The downspout includes a short vertical nipple projecting from one of the gutter sections 1 and the drain pipe 21 is attached to the nipple by means of appropriate threads or teeth, as shown at 22.

Having described my invention, I claim:

1. A gutter construction for buildings, comprising, a gutter formed of a nonmetallic material, a lip integrally formed on the gutter at the inner edge thereof and attachable to the building, a reinforcing rib on the outer edge of the gutter, a tie strip extending transversely across the gutter from the outer to the inner edge thereof, a vertical rib on one edge of the gutter, teeth on said rib, teeth on the tie strip engageable with the first named teeth, and means detachably securing the end of the tie strip opposite said teeth to the gutter.
2. A gutter construction for buildings, comprising, a gutter formed of a nonmetallic material, a lip integrally formed on the gutter at the inner edge thereof and attachable to the building, a reinforcing rib on the outer edge of the gutter, a tie strip extending transversely across the gutter from the outer to the inner edge thereof, a vertical rib on one edge of the gutter, teeth on said rib, teeth on the tie strip engageable with the first named teeth, means detachably securing the end of the tie strip opposite said teeth to the gutter,

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a facia extending lengthwise of the gutter at the outer edge of said gutter,

and means detachably securing the facia to the gutter.

3. A gutter construction for buildings, comprising, a gutter formed of a nonmetallic material,

a lip integrally formed on the gutter at the inner edge thereof and attachable to the building,

a reinforcing rib on the outer edge of the gutter,

a tie strip extending transversely across the gutter from the outer to the inner edge thereof,

a vertical rib on one edge of the gutter,

teeth on said rib,

teeth on the tie strip engageable with the first named teeth,

means detachably securing the end of the tie strip opposite said teeth to the gutter,

a facia extending lengthwise of the gutter at the outer edge of said gutter,

a hook integrally formed on the upper edge of the facia, said hook extending over said rib,

and screws extending through the hook and into the rib to secure the facia to the gutter.

4. A gutter construction for buildings, comprising, a gutter formed of a nonmetallic material,

a lip integrally formed on the gutter at the inner edge thereof and attachable to the building,

a reinforcing rib on the outer edge of the gutter,

a tie strip extending transversely across the gutter from the outer to the inner edge thereof,

means detachably securing the tie strip to the gutter,

a facia extending lengthwise of the gutter at the outer edge of said gutter,

means detachably securing the facia to the gutter,

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and a wedge block interposed between the gutter and the inner face of the facia.

5. A gutter construction for buildings, comprising,

a gutter formed of a nonmetallic material,

a lip integrally formed on the gutter at the inner edge thereof and attachable to the building,

a reinforcing rib on the outer edge of the gutter,

a tie strip extending transversely across the gutter from the outer to the inner edge thereof,

a vertical rib on one edge of the gutter,

teeth on said rib,

teeth on the tie strip engageable with the first named teeth,

means detachably securing the end of the tie strip opposite said teeth to the gutter,

a facia extending lengthwise of the gutter at the outer edge of said gutter,

means detachably securing the facia to the gutter,

and a wedge block interposed between the gutter and the inner face of the facia.

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