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Webster

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[54] **BUILDING CONSTRUCTION**

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[52] **U.S. Cl.** **52/11,** 52/60, 52/95, 248/482

[51] **Int. Cl.** **F04d 13/00**

[58] **Field of Search** 52/11, 94, 58, 60, 95, 52/403; 248/48.1, 48.2

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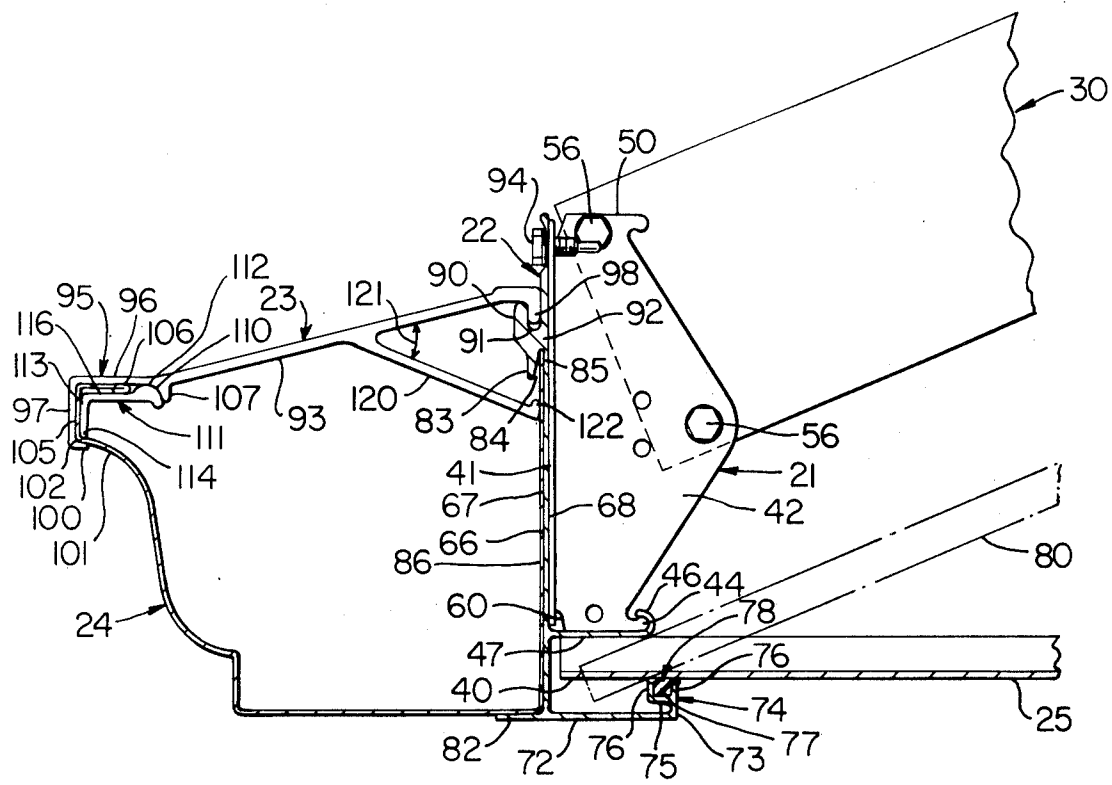
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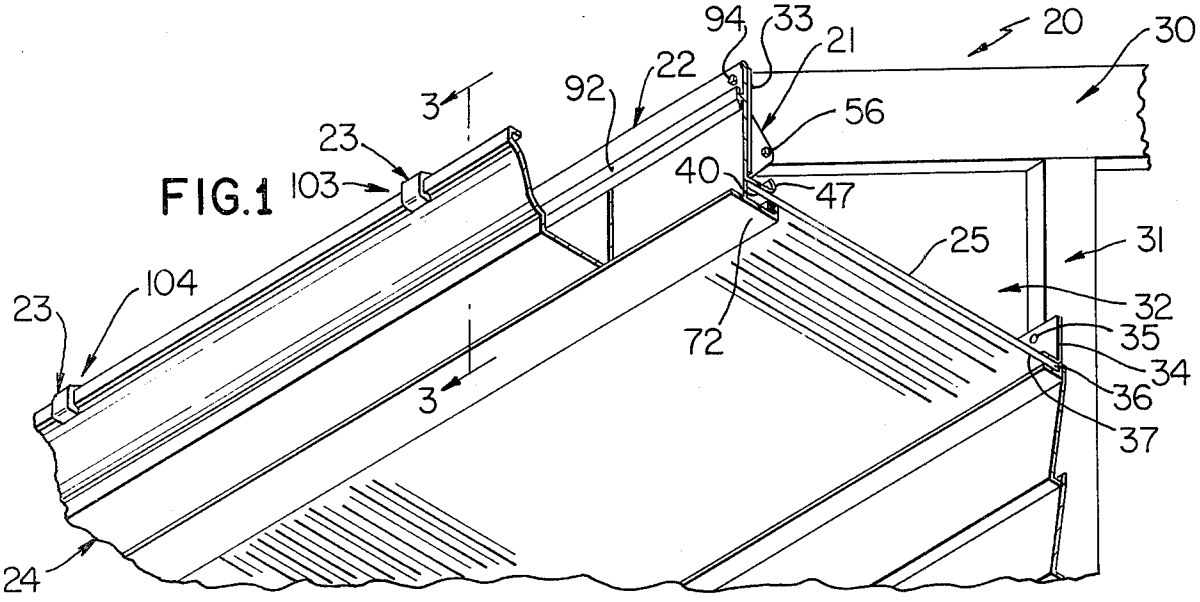
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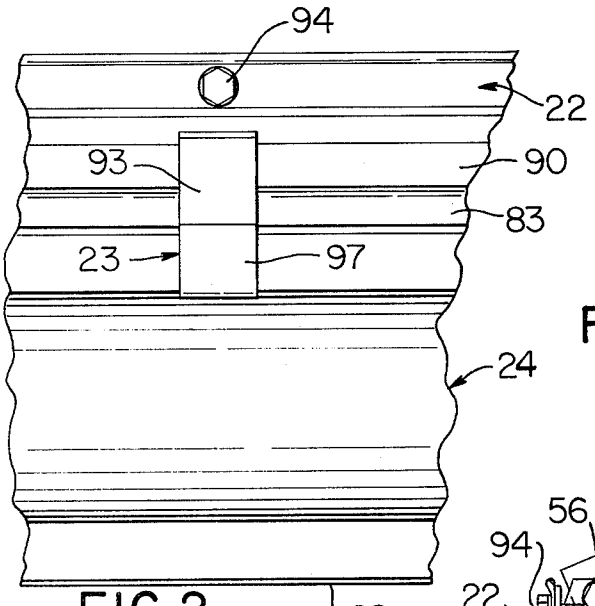
[57] **ABSTRACT**

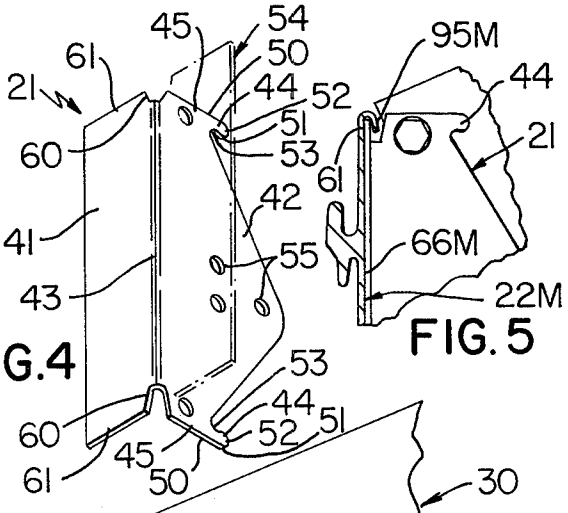
A building construction having an improved fascia, fascia fastener, and gutter hanger wherein such components are of simple and economical construction and readily installed in position and the building construction has optimum structural integrity and esthetic appeal.

5 Claims, 5 Drawing Figures

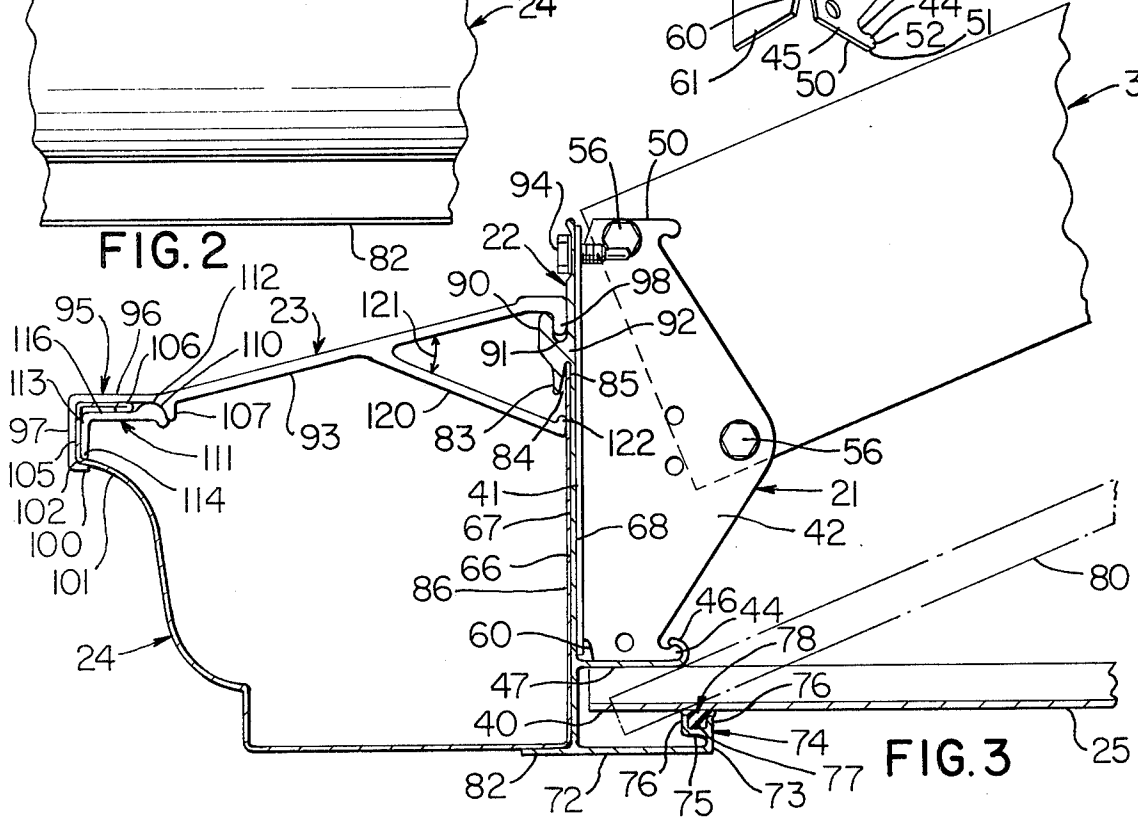



94
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FIG.1
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FIG.2


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FIG.4
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FIG.5


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100
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44
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74
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82
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FIG.3

BUILDING CONSTRUCTION

BACKGROUND OF THE INVENTION

There are numerous residential, commercial, and industrial buildings which have a roof structure which overhangs a wall structure and it is a common practice to provide a fascia strip or fascia at the terminal edge of the overhanging roof and to attach a gutter to the fascia. It is also common practice to provide a fascia which has flanges for receiving a soffit strip therebetween whereby the fascia holds one edge portion of the soffit strip and a frieze runner is provided on the wall structure and receives the opposite edge portion of the soffit strip whereby the soffit strip is supported between the fascia and the frieze strip.

However, previously proposed building constructions employing the above-mentioned components usually require additional parts to install components such as the fascia, soffit, gutter, and the like; and, comparatively more labor is required for installation. Therefore, with the additional parts and added labor the previously proposed building constructions are still deficient in terms of cost, structural integrity, and esthetic appeal.

SUMMARY

This invention provides an improved building construction having an improved fascia, fascia fastener, and gutter hanger wherein such components are of simple and economical construction and readily installed in position with minimum labor and the building construction has optimum structural integrity and esthetic appeal.

Other details, uses, and advantages of this invention will be readily apparent from the embodiments thereof presented in the following specification, claims, and drawing.

BRIEF DESCRIPTION OF THE DRAWING

The accompanying drawing shows present preferred embodiments of this invention, in which

FIG. **1** is a view with parts in cross section, parts in elevation, and parts broken away particularly illustrating improved building oenstruction of this invention which utilizes improved fascia, fascia fastener, and gutter supporting means;

FIG. **2** is an enlarged fragmentary view looking normally toward the vertical main body of the fascia of FIG. **1**;

FIG. **3** is an enlarged fragmentary view taken essentially on the line **3—3** of FIG. **1**;

FIG. **4** is a perspective view of a fascia fastener of this invention also illustrating by dotted lines that the fastener is reversible; and

FIG. **5** is a fragmentary view similar to an upper portion of FIG. **3** particularly illustrating a modification of the fascia of FIG. **3** which allows such fascia to be supported in position simply by a hanging action.

DESCRIPTION OF ILLUSTRATED EMBODIMENTS

Reference is now made to FIG. **1** of the drawing which illustrates one exemplary embodiment of the improved building construction of this invention which is designated generally by the reference numeral **20** and such building construction utilizes unique components of this invention including a fascia fastener **21** which

has a fascia strip **22** (which will be referred to hereinafter simply as a fascia **22**) fastened thereto and a gutter hanger **23** which cooperates with suitable means, to be subsequently described, provided on the fascia **22** to support a gutter **24** in position on the fascia **22.** The fascia **22** also has suitable means for supporting a soffit material or soffit strip **25** (which may also be referred to hereinafter simply as soffit **25**) in a manner which will be described in detail subsequently.

The building construction **20** has a roof construction or structure **30** which is supported on a suitable wall structure or wall **31** so that the roof structure **30** overhangs the wall **31** in the manner illustrated at **32.** The roof structure **30** has a terminal end edge **33** and a fascia **22** is suitably detachably fastened against the terminal edge **33** utilizing the fascia fasteners **21** and as will be described in more detail later. The substantially vertical wall structure **31** also has a frieze runner or frieze strip **34** attached by fasteners **35** against the wall **31** and the frieze strip **34** has a pair of parallel flanges defining a channel **36** which is adapted to receive one end portion **37** of the soffit material or strip **25** with an opposite end portion **40** of such soffit material being supported by the fascia **22.**

As seen particularly in FIG. **4** of the drawing the fascia fastener **21** which will be referred to hereinafter simply as clip **21,** comprises a first portion **41** which is adapted to have the fascia **22** held flatly thereagainst and a second portion **42** which is foldably connected substantially perpendicular to the portion **41** along a rectilinear bend or fold **43** whereby the clip **21** has a roughly right angle shape or L-shaped configuration. The portion **42** of the clip **21** has a pair of substantially identical projections **44** extending in the same direction and in substantially parallel relation from opposite end portions **45** of portion **42** and each of the projections **44** is adapted to have a hooking end portion **46,** see FIG. **3,** of a flange **47** comprising the fascia **22** hooked therearound in a manner to be subsequently described.

The projections **44** have parallel outer edges **50** and arcuate end portions **51** when viewed normal or perpendicular to portion **42** of the clip **21.** Each arcuate end portion has a substantially semicircular outer head portion **52** and a neck portion **53** arranged inwardly thereof with the neck portion **53** having a reduced width.

The portion **42** of clip **21** is constructed so that it is substantially symmetrical about an axis parallel to and arranged midway between outer edges **50** whereby the clip **21** is a reversible clip, i.e., the clip may be reversed so that portion **41** is arranged essentially as shown in the dotted line position at **54** in FIG. **4,** and such clip may be employed at the opposite end (not shown) of the roof structure **30** and fascia **22** illustrated in FIG. **1.** Further, to facilitate attachment of the clip **21** against associated structures, such as roof structure **30,** a plurality of openings **55** may be provided for receiving associated fastening devices **56** therethrough and each fastening device **56** may be in the form of a nail, screw, bolt or the like, with it being understood that the clip **21** may be fastened to metal structures, wood structures, or structures made of any other suitable material.

The clip **21** has a cutout **60** in each end of each of its portions **41** and **42.** Each cutout **60** is so positioned with respect to the bend or fold **43** that it removes clip material from each portion **41** and **42** at each end of

the clip **21**. Each cutout **60** defines a flange **61** in portion **41** at opposed ends of the clip and the flange **61** is adapted to have an associated fascia hooked thereabout in a manner to be subsequently described.

The fascia **22** is a single piece unitary construction having integral gutter and soffit supports and such fascia will now be described with particular reference to FIG. **3**. The fascia **22** has a body portion or main body **66** which has opposed surfaces shown as a front surface **67** and a rear surface **68**. The fascia **22** also has a pair of soffit supports in the form of a lower flange **72** and the previously mentioned flange **47** which is an upper flange and such supports or flanges have inner portions which adjoin the rear surface **68** and are arranged in parallel relation.

The supports or flanges **47** and **72** are adapted to receive the soffit **25** therebetween and it will be seen that such flanges **47** and **72** extend transverse and in one direction, i.e., rearwardly, from the rear surface **68** of the body portion **66**. As previously mentioned, the flange **47** has a hooking end portion **46** and portion **46** hooks away from the lower flange **72** and toward the surface **68** and the hooking end portion **46** is adapted to be hooked around an associated supporting projection and in particular the supporting projection **44** of an associated fascia fastening clip **21**.

The flange **72** has an outer portion **73** which is arranged perpendicular to its inner portion and the flange **72** has a roughly channel-shaped terminal end portion which is in the form of a substantially U-shaped portion which is designated generally by the reference numeral **74**. The U-shaped portion has a bight **75** and a pair of substantially parallel legs **76** extending from opposite ends of the bight **75** with the parallel legs **76** being arranged substantially parallel to the body portion **66** and the outer leg **76** being arranged substantially vertically above and in an alignment with portion **73**. The U-shaped portion defines a channel **78** which is particularly adapted to receive a resilient compressible material or member **77** therein and such member is such that the end portion **40** of the soffit material **25** is held tightly compressed against the flange **47** in a tight nonrattling manner; and, the opposite end portion **37** of the soffit material **25** is also suitably held tightly in position by the frieze strip **34**.

The resilient compressible member **77** and the construction and arrangement of the U-shaped portion **74** and portion **73** relative to the remainder of the flange **72** is such that the soffit material **25** may be moved from the horizontal solid line position illustrated in FIG. **3** to an inclined position, such as the dotted line position illustrated at **80**, while still holding the end portion **40** of the soffit **25** firmly in position in a nonrattling manner.

The fascia **22** has a gutter support **82** which extends from the front surface **67** of the body portion **66** in a direction opposite from the direction in which the flanges **47** and **72** extend. In particular, the gutter support **82** extends forwardly from the front surface **67**; and, as seen in FIG. **3**, the flange **72** and gutter support **82** are arranged so that when viewed in cross section or from an end they are arranged in aligned relation and have substantially coplanar outside surfaces.

The fascia **22** has a projection **83** arranged in vertically spaced relation from the gutter support **82** and the projection **83** defines a groove **84** which is adapted to receive the upper portion **85** of the inside wall **86** of the gutter **24** therewithin. The projection **83** holds such upper portion **85** against the front surface **67**.

The fascia **22** also has another projection **90** extending from the front surface **67** of the body **66** and is adapted to support the gutter fastener or hanger **23** in a manner to be subsequently described in detail. The projection **90** defines a groove **91** which is adapted to receive an associated hook-like portion of the hanger **23** therewithin.

As previously mentioned, the fascia **22** is a single piece unitary construction whereby its body portion **66**, supports or flanges **47** and **72**, and projections **83** and **90** are made as a single piece construction. The projections **83** and **90** extend in opposite directions from a common base portion **92** whereby when viewed in cross section the base portion **92** may be considered broadly as being in the form of a leg of a T-shaped construction having arms or projections **83** and **90**.

As previously indicated the fascia fastener or clip **21** is suitably fixed in position utilizing fastening devices **56** on the associated roof structure **30** and the fascia **22** is simply fastened in position by hooking the hooking portion **46** of the flange **47** around the lower projection **44** of associated clips. Once the lower portion of the fascia **22** is fastened in position suitable fasteners which may be in the form of self-tapping screws **94** may be used to fasten the fascia to associated clips **21** and the screws **94** are fastened in position using techniques which are well known in the art.

It will also be appreciated that instead of using self-tapping screws **94** to fasten the upper portion of a particular fascia into position, the fascia of this invention may be modified as shown in FIG. **5** and such modified fascia is designated generally by the reference numeral **22M**. The fascia **22M** has an upper downwardly hooking end portion designated generally by the reference numeral **95M**. The hooking end portion **95M** of the body portion **66M** allows the fascia **22M** to be hooked into position and held by the flange portion **61** and the projection **44** of each associated clip **21** without the need for self-tapping screws **94** or the like. Only a fragmentary portion of the fascia **22M** is illustrated at FIG. **5**; however, it will be appreciated that such fascia is identical to the fascia **22** with the exception of the downwardly hooking portion **95M**.

Thus, once a single fascia **22** or a plurality of rectilinearly aligned fascia members **22** are suitably fixed in position on an associated structure of a building construction utilizing fascia fasteners or clips **21**, a gutter **24** may be simply fastened in position by sliding such gutter along the fascia **22** with the upper edge portion **85** of the gutter held in position by the projection **83** and its lower inside corner supported by the flange **82**. The gutter **24** may also be installed in position by tilting such gutter so that the outermost edge thereof, as viewed in FIG. **3**, is at a location somewhere between the illustrated location and a location above and to the right of the illustrated location allowing the upper portion **85** of the gutter back wall **86** to be slipped behind the projection **83** whereupon the gutter **24** is then rotated counterclockwise, as viewed in FIG. **3**, so that its bottom inside corner rests on the flange **82**.

To assure that the gutter **24** is held firmly in position the gutter fastener or hanger **23** made in accordance with the teachings of this invention is provided and such hanger will now be described in detail making particular reference to FIG. **3**. The hanger **23** has a main

body portion or body **93** which has opposed end portions with one of such end portions being in the form of a first substantially L-shaped hook **98** which is adapted to be hooked around an associated support therefor and in this example is adapted to be received within the groove **91** of the fascia **22** and supported by supporting projection **90** of such fascia.

The hanger **23** has a second hook **95** which defines the opposite end portion of the body **93** and the hook **95** has a substantially L-shaped configuration including a first leg **96** which is arranged substantially in alignment with the main body **93** and a transverse leg **97** which extends substantially perpendicular to the leg **96** with the transverse leg **97** having an extension **100** extending therefrom substantially parallel to the leg **96.** The L-shaped hook **95** is adapted to be hooked around an outer portion **101** of the gutter **24** with the extension **100** arranged beneath a corner **102** of such outer portion **101** whereby the hanger **23** supports the top outer portion of the gutter **24** firmly in position. It will be appreciated that a plurality of such hangers **23** are provided along the length of the gutter **24** as illustrated at **103** and **104** in FIG. **1.** The hanger **23** is particularly adapted to be used with a gutter **24** in which the top part of its outer portion is substantially L-shaped and defined by a vertically extending leg **105** and a horizontal leg **106** which is directed toward the back gutter wall **86.**

The leg **96** of the L-shaped hook **95** has a retaining shoulder **107** provided with a concave arcuate surface **110.** The hanger **23** also includes a detachable substantially L-shaped locking member **111** and the locking member has a convex arcuate surface **112** which is adapted to be received within the concave arcuate surface **110.** After the main part of the hanger **23** is fastened around the gutter **24** in the manner illustrated in FIG. **3,** the locking member **111** is placed with its arcuate surface **112** into engagement with the surface **110** and its transverse leg **113** arranged therebeneath. The member **111** is then rotated clockwise so that the terminal end edge **114** of its leg **113** is wedged into position against the inside surface of the gutter corner **102** essentially in a snap-fitted relation or manner. With the locking member **111** snap fitted in position, which is the position illustrated in FIG. **3,** it will be seen that the leg **113** thereof is arranged vertically and sandwiches gutter portion **105** firmly against leg **97** of hanger **23.** The locking member **111** has another leg **116** which sandwiches portion **106** of the gutter **24** against leg portion **96** of the L-shaped hook.

The hanger **23** has a brace **120** which extends from and beneath the main body portion **93** at an acute angle **121** so that the brace **120** and the main body portion **93** define a roughly Y-shaped configuration. The brace **120** has a larger area terminal bearing surface **122** which is particularly adapted to engage the gutter wall **86** and compress such wall firmly against the main body portion **66** of the fascia **22.**

Thus, it is seen that the building construction **20** utilizes a unique dual-purpose fascia **22** which has integral means for supporting both the frieze material **25** and the gutter **24.** Further, it will be seen that an improved reversible clip **21** and hanger **23** are provided with the gutter hanger **23** having a locking member **111** for locking the hanger into position against an associated outer portion of a gutter **24.**

Each fascia **22** or **22M** is particularly adapted to be used with a gutter which may be made of a comparatively thin material; yet, optimum support is provided for such gutter by the fascia and the gutter hangers of this invention.

The hanger **23,** clip **21,** and fascia **22** may be made by any suitable process and using any suitable material. Further, the fascia **22** is made preferably by extrusion process and of a suitable metallic material such a metallic material containing aluminum. Further, it has been found that these described components cooperate to support an associated gutter and a frieze material in a high strength and esthetically attractive manner for an extended service life.

While present exemplary embodiments of this invention, and methods of practicing the same, have been illustrated and described, it will be recognized that this invention may be otherwise variously embodied and practiced within the scope of the following claims.

What is claimed is:

1. A fascia having integral gutter and soffit supports comprising, a body portion having opposed surfaces and a top edge, a pair of rigid soffit supports each adjoining and extending transverse and in one direction from one of said surfaces, a gutter support extending from the other of said surfaces in a direction opposite from said one direction, and a T-shaped portion arranged in spaced relation from said gutter support at a location beneath said top edge, said T-shaped portion having a leg portion adjoining and extending from said other surface and having a pair of projections extending from the outer end of said leg portion in opposite directions, one of said projections extending toward said gutter support and being adapted to hold an upper portion of said gutter against said other surface and the other of said projections extending away from said gutter support and being adapted to support a hanger for said gutter, said pair of soffit supports being defined as an upper and a lower flange having inner portions arranged in parallel relation and being adapted to receive a soffit therebetween, said lower flange having a roughly channel-shaped terminal end portion which is adapted to receive a resilient compressible member therewithin and said lower flange having an outer portion arranged substantially perpendicular to its inner portion with said channel-shaped portion adjoining said outer portion.

2. A reversible fastener for fastening a fascia on an associated structure, said fastener comprising, a first portion adapted to have an associated fascia held thereagainst and a second portion arranged transverse said first portion, said second portion having a pair of substantially identical projections extending in the same direction and in substantially parallel relation from opposite end portions of said second portion, said second portion being substantially symmetrical about on axis parallel to and arranged midway between outer edges of said projections enabling said fastener to be reversed and used to fasten either end of said fascia on said associated structure, each of said projections being adapted to have a hooking end portion of a flange comprising said fascia hooked therearound, said first and second portions being foldably connected substantially perpendicular to each other along a rectilinear fold as a single piece construction and further comprising a cutout in at least one of said portions at each end of said

rectilinear fold defining a flange which is adapted to have a portion of said fascia hooked therearound.

3. A gutter hanger comprising a main body having opposed end portions, a first hook defining one of said opposed end portions with said first hook being adapted to be hooked around an associated support, a second hook defining the other of said opposed end portions, said second hook having a substantially L-shaped configuration including a first leg and a transverse leg which extends substantially perpendicular to the first leg of said L-shaped hook, and an extension extending from said transverse leg and substantially parallel to said first leg, said second hook being adapted to be hooked around a corner part of a gutter with said extension arranged beneath said corner part, said first leg having a retaining shoulder extending therefrom generally toward said extension and said hanger further comprising a detachable locking member which is adapted to be snap-fitted between said shoulder and said extension with an L-shaped portion of said gutter sandwiched between said locking member and L-shaped second hook.

4. A hanger as set forth in claim 3 in which said detachable locking member comprises a roughly L-shaped member having an arcuate surface which is adapted to engage a corresponding arcuate surface defining the outside surface of said retaining shoulder.

5. A gutter hanger comprising a main body having opposed end portions, a first hook defining one of said opposed end portions with said first hook being adapted to be hooked around an associated support, a second hook defining the other of said opposed end portions, said second hook having a substantially L-shaped configuration including a first leg and a transverse leg which extends substantially perpendicular to the first leg of said L-shaped hook, an extension extending from said transverse leg and substantially parallel to said first leg, said second hook being adapted to be hooked around a corner part of a gutter with said extension arranged beneath said corner part, and a brace extending from the central portion of said main body at an acute angle between said main body and brace to define a substantially Y-shaped configuration, said brace being arranged beneath said main body with said hanger fastened in position, said brace having a solid terminal bearing surface which is particularly adapted to engage a wall of said gutter and compress said wall against a structure associated with said gutter.

* * * * *