

No. 822,418.

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T. S. WOODS.
GUTTER FOR BUILDINGS.
APPLICATION FILED SEPT. 17, 1904.

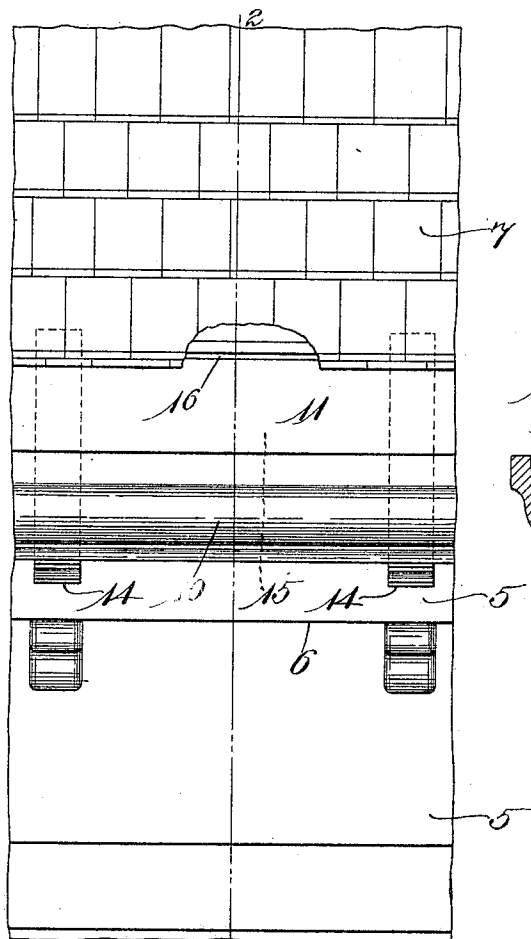


Fig. 1

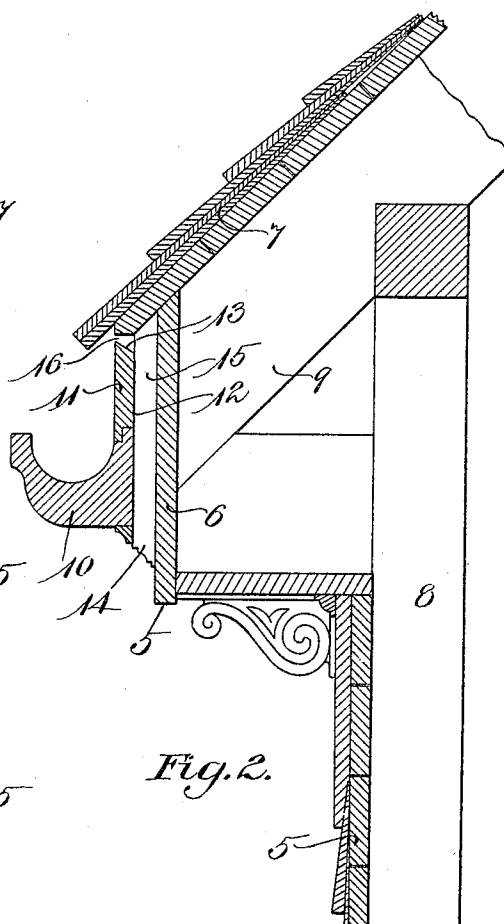


Fig. 2.

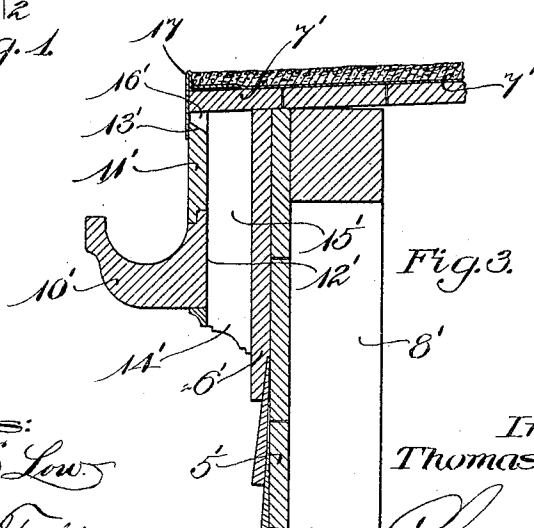


Fig. 3.

Witnesses:

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GUTTER FOR BUILDINGS.

No. 822,418.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, THOMAS S. WOODS, a citizen of the United States, residing at Somerville, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Gutters for Buildings, of which the following is a specification.

The object of this invention is to provide an improved gutter for buildings which is so constructed and attached to said buildings as to prevent water from backing up and flowing into the interior of said buildings from said gutter.

The invention consists in a building, in combination with a gutter constructed and attached to said building, as set forth in the following specification and particularly pointed out in the claim thereof.

Referring to the drawings, Figure 1 is a side elevation of a portion of the roof and outer wall of a building with my improved gutter attached thereto, said roof being the well-known form of pitch roof, partly broken away for the purpose of illustration. Fig. 2 is a section taken on line 2 2 of Fig. 1. Fig. 3 is a section similar to Fig. 3, illustrating my improved gutter attached to a building with a flat roof.

Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, (referring to Figs. 1 and 2,) 5 is the vertical outer wall of a building, a portion of said vertical outer wall being formed of a facia-board 6. 7 is the pitch roof of said building, 8 the framework, and 9 the rafters. 10 is a gutter, and 11 a gutter facia-board, the rear wall 12 of said gutter being vertical and the upper edge 13 of said rear wall being inclined downwardly from the front toward the rear wall 12. The gutter 10, together with the gutter facia-board 11, is fastened to cleats 14, and said cleats are in turn fastened to the facia-board 6, forming an open continuous chamber 15, having vertical front and rear walls extending from the top to the bottom of said gutter, there being a passage 16, which extends between the inclined upper edge of the gutter rear wall and the projecting outer edge of said roof, said passage thus extending from the upper end of said chamber into said gutter.

It will be seen that, should any ice form in the gutter 10 and the water back up inside said ice, said water would flow through the space 16 into the space 15 and downwardly to the ground without any danger of flowing into the interior of the building. The upper edge 13 of the rear wall 12 is beveled, as shown in Fig. 2, in order to prevent the water from lodging upon said upper edge, after freezing and plugging up the space 16, and the rear wall 12 of the gutter is made vertical in order to guard against any possibility of the water which flows through the spaces 16 and 15, as hereinbefore described, from freezing before it has time to drop to the ground.

In Fig. 3 a modified form of construction is illustrated in which my improved gutter is shown as attached to a building having a flat roof, and in said figure 5' is the outer wall; 6', the facia-board; 7', the roofing; 8', the frame; 10', the gutter; 11', the gutter facia-board; 12', the rear wall of the gutter and facia-board; 13', the upper edge of said rear wall; 14', the cleats to which the gutter is attached and which in turn are attached to the facia-board 6'; 15', the space between the rear wall of the gutter and the outer wall of the building, and 16' the space between the upper edge 13' and the projecting edge of the roofing 7'.

In the form of construction illustrated in Fig. 3 a metal edge strip 17 is usually employed which projects downwardly from the roof-boarding 7' in front of the gutter facia-board 11'; but in practical use the water backs up between the rear face of said metal strip and the facia-board 11' and leaks into the house, unless the same is constructed as shown in Fig. 3 of the drawings, in which case the water when it backs up from the gutter between the vertical face of the metal strip and the front face of the gutter facia-board 11' passes through the space 16' and downwardly through the space 15' to the ground without passing into the interior of the building.

The advantages secured by my improved gutter are not only that the same prevents the leaking of water into the interior of the house, but also the construction and the method of its application to the house are such that the same may be applied to any house as ordinarily constructed without

change in said construction, thus rendering the same not only a practical device for use in new buildings, but also a device which is cheap and practical to apply to buildings already constructed.

It will be noted that the facia-board 6, Fig. 2, extends above the space 16 and into close contact with the under side of the roof-board-ing, forming a tight fit, so that the hot air from the house cannot pass outwardly from the interior of the house to melt the ice and snow formed in the gutter, which is one of the chief causes of leaks which occur in the winter-time, for the reason that the hot air from the house melting the ice or snow which may be packed into the gutter causes the water to back up, and thus form a leak; but in my improved construction it will be seen that the hot air from the house cannot get out to melt said ice or snow. On the contrary, there is a draft of cold air, which passes upwardly through the spaces 15 and 16 and prevents the ice or snow in the gutter from melting: It will also be seen that the construction hereinbefore described prevents the cold air from passing into the house. Thus said facia-board 6 serves in the construction illustrated a double purpose, as hereinbefore set forth.

It will be seen that the vertical rear wall 11 extends from above the top to below the bottom of the gutter 10 and that the vertical rear wall is continued above the front wall of the gutter and up above and behind the eaves projection of the roof-covering, so that the passage 16 is protected against the drifting of snow thereinto, which would tend to ob-

struct said passage and also pack into the space or vertical passage 15 between the rear of the gutter and the facia-board 6, thus rendering the device inoperative. The projection below the bottom of the gutter also tends to prevent snow from drifting into the passage 15 and guides it downwardly away from said passage, while the dead-wall 11 has no tendency to guide the snow upwardly into the passage 16.

Having thus described my invention, what I claim, and desire by Letters Patent to secure, is—

A building having a vertical outer wall and a roof, the outer edge of which projects beyond said wall; in combination with a gutter having a vertical rear wall spaced from said outer wall, and continued above the front wall of said gutter and up above and behind the eaves projection of the roof-covering, forming an open continuous chamber having vertical front and rear walls extending from above the top to below the bottom of said gutter, there being a passage extending between the upper edge of said gutter rear wall and the projecting outer edge of said roof and leading from the inner side of said gutter into the upper end of said chamber.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

THOMAS S. WOODS.

Witnesses:

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