(No Model.)

B. F. NYE.

EAVES TROUGH.

No. 603,611. Patented May 3, 1898.

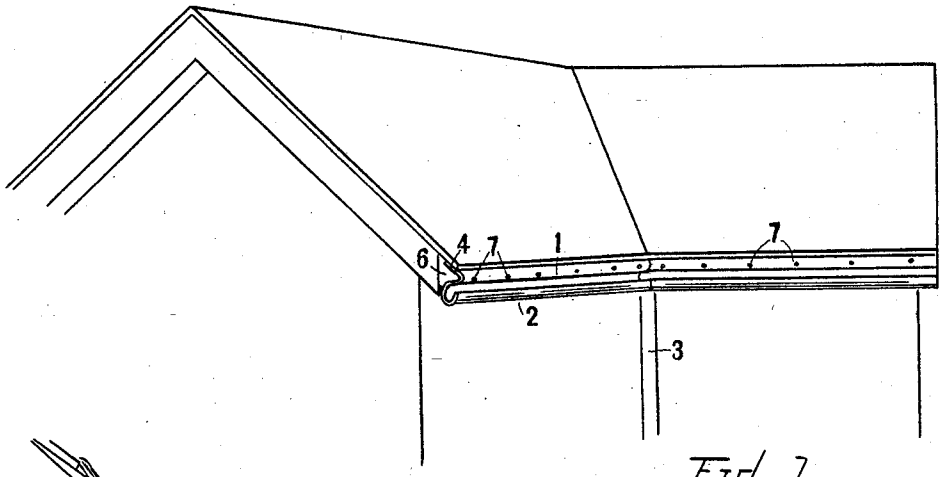


Fig. 1.

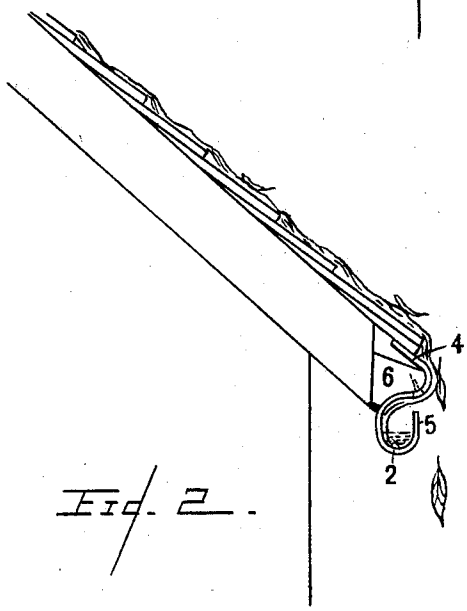


Fig. 2.

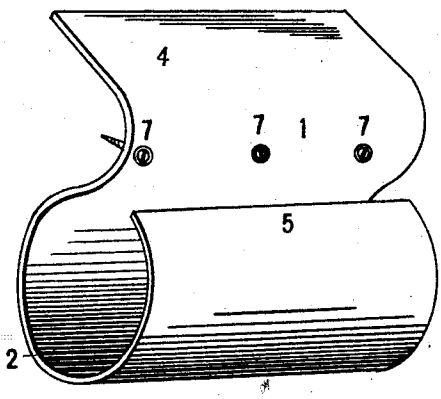


Fig. 3.

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UNITED STATES PATENT OFFICE.

BENJAMIN F. NYE, OF QUINCY, MICHIGAN.

EAVES-TROUGH.

SPECIFICATION forming part of Letters Patent No. 603,611, dated May 3, 1898.

Application filed June 20, 1896. Serial No. 596,249. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. NYE, a citizen of the United States, residing at Quincy, in the county of Branch and State of Michigan, have invented certain new and useful Improvements in Eaves-Troughs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to new and useful improvements in eaves-troughs; and it consists in the construction and formation of trough, as hereinafter fully set forth, and pointed out particularly in the claim.

The object of the invention is to provide a trough for eaves capable of conducting the water falling upon the roof of a building to which it is attached to a conductor leading to a cistern or reservoir, at the same time preventing leaves, sticks, or other accumulation from following such water into said trough, conductor, or cistern, thereby rendering the water saved by means of this trough clean and wholesome, the arrangement and formation being such that leaves or other refuse matter cannot lodge in the trough, thereby overcoming the objection incident to the common trough—viz., the accumulation of dampness and the effects of rotten leaves, which are always detrimental to such trough and roof as well as the health of occupants of such buildings—and overcoming the contamination and putrefaction of cistern-water after such rotted matter has been carried into it by a subsequent train, which object is attained by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a portion of a house, showing the application of my improved eaves-trough thereto. Fig. 2 is an enlarged end elevation of a portion of a roof, showing more plainly the location of the trough and the manner of separating the leaves from the water, the end of the trough being removed to more clearly show the course of the flowing water. Fig. 3 is an enlarged perspective view of a portion of the trough removed from the eaves.

Referring to the figures of reference, 1 designates a reversely-curved strip of metal, said strip being of any suitable gage to give it stiffness and provided with a lip 4, extending along one of its longitudinal edges, by means of which said trough may be secured to the eaves of a building, as clearly shown in Fig. 2. The trough will be hung with one low end, or the curved gutter 2 may be reduced in diameter at one end and gradually enlarged as it approaches the conductor-pipe 3, which not only increases in size as the volume of water increases, but as said curve is expanded it would lower the bed of the trough, causing the water therein to flow downward or in the direction of the conductor 3, said conductor being such as is commonly employed in connection with the ordinary trough of this character.

6 designates a strip or molding which is secured along the facia, said molding having one of its faces curved to fit a portion of the curvature of the trough, as clearly shown in Fig. 2. It is intended that the trough shall be fastened to this molding by means of screws or other suitable fastening devices 7, passing through said trough, as clearly shown in Fig. 3, so that the lip 4 thereof will hang flush with the under face of the lower row of shingles, (see Figs. 1 and 2,) so that the water running down the roof will leave said lower row and flow on down over the curved wall 5 into the gutter 2. After the water has been started down into said gutter the continual weight and capillary attraction of the flowing liquid into such gutter will cause the water to flow without cessation over the course clearly shown in Fig. 2—namely, over the lip 4 and into the gutter 2—as long as there is a supply.

It will be seen by reference to Fig. 2 that should any leaves or sticks fall upon the roof of the building to which this improved eaves-trough is attached they will be carried down with the water over the lip 4 of said trough, and by reason of their gravity and non-flexibility they will drop from the edge 5 of the gutter and fall to the ground, allowing only clean water to enter the gutter 2.

It will thus be seen that by the employment of the eaves-trough herein shown and described the roof of a building may be kept free from anything tending to obstruct the

ready flow of the water and affording at the same time an effectual separator to divide the dirt and accumulation from the cistern-water and preventing a lodgment for leaves, moss, &c., and birds.

Having thus fully set forth my invention, what I claim as new, and desire to secure by Letters Patent, is—

An eaves-trough, having its inner wall carried upward above said trough, thence outward over said trough, and backward to the line of attachment of the roof, all in gentle curves, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

BENJAMIN F. NYE.

Witnesses:
M. M. BROWN,
M. H. HORTON.