

(No Model.)

S. A. TWIST.  
EAVES TROUGH STRAINER.

No. 571,711.

Patented Nov. 17, 1896.

Fig. 1.

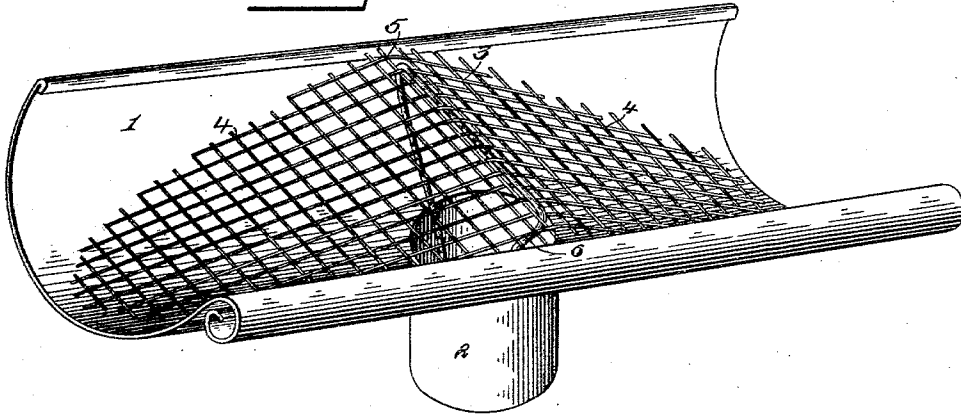


Fig. 2.

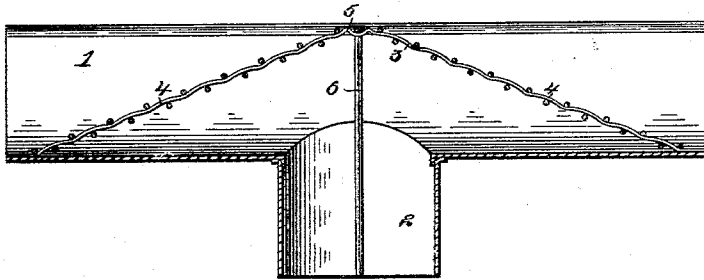
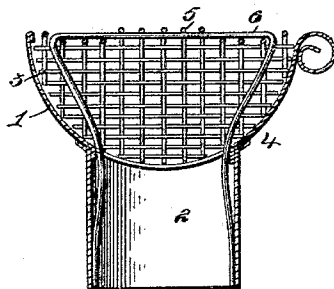


Fig. 3.



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Witnesses

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# UNITED STATES PATENT OFFICE.

SYLVESTER A. TWIST, OF COLDWATER, MICHIGAN.

## EAVES-TROUGH STRAINER.

SPECIFICATION forming part of Letters Patent No. 571,711, dated November 17, 1896.

Application filed April 7, 1896. Serial No. 586,577. (No model.)

*To all whom it may concern:*

Be it known that I, SYLVESTER A. TWIST, a citizen of the United States, residing at Coldwater, in the county of Branch and State of Michigan, have invented a new and useful Eaves-Trough Strainer, of which the following is a specification.

This invention relates to eaves-trough strainers; and the object in view is to provide an improved strainer which may be applied over the down-spout and which will be equally effective whether such down-spout communicate with the eaves-trough at one end of the latter or at a point intermediate the ends thereof, the said strainer being adapted to prevent leaves, twigs, &c., from entering the down-spout and to conduct said refuse to the level of the top edges of the trough, whereby the refuse may be carried by the force of the water over the edge of the trough, thus rendering the trough self-clearing.

With the above objects in view the invention consists in certain novel features and details of construction, as hereinafter fully described, illustrated in the drawings, and finally embodied in the claims hereto appended.

In the accompanying drawings, Figure 1 is a perspective view of a portion of an eaves-trough and down-spout, showing the improved strainer applied thereto. Fig. 2 is a longitudinal section through the same. Fig. 3 is a transverse sectional view thereof.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

Referring to the accompanying drawings, 1 designates an eaves-trough, and 2 the down-spout thereof, the said parts being constructed in any usual manner.

The strainer (indicated at 3) is composed of meshed fabric or wire-netting and is of anti-clinal form, that is, it comprises oppositely-dipping or downwardly-sloping portions 4, which at the center form a crest or ridge 5, which is equal in length to the transverse extent of the eaves-trough 1. In other words, the crest or ridge portion of the strainer is located in the proximal plane of the top of the eaves-trough and extends from the rear to the front edge thereof, as clearly shown in Fig.

1. From this central point the strainer slopes downward in opposite directions and extends a considerable distance longitudinally of the trough on each side of the down-spout until the ends of the strainer rest in contact with the base of the trough. The opposite side edges of the strainer are trimmed off in segmental form, so that they will conform to the curvature of the trough 1 and make a close joint for preventing refuse matter from passing beneath said edges.

The strainer is held in place by means of a spring-wire loop 6, the central portion of which is interwoven with the strands of the strainer at the crest or ridge portion, as shown in the transverse section. The loop 6 thus moves with the strainer and its terminal portions form spring-arms which extend downward a sufficient distance in the down-spout to obtain the necessary hold for retaining the strainer securely in place in the trough.

By the construction above described the strainer may be placed over the down-spout whether the latter be at the end of the trough or at a point intermediate the ends of the trough. By reason of the particular construction or form of the strainer and the location of its crest or ridge upon a level with the top of the trough the leaves, twigs, and other refuse which get into the trough are carried by the current of water against and upon the strainer, and as such matter is crowded by accumulation to the crest or ridge of the strainer it will meet with other matter coming from the opposite direction and as a result will be crowded laterally from the edge of the trough. The strainer attachment thus renders the eaves-trough self-clearing and has the advantage of being instantly applicable to any trough.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new is—

1. The combination with the strainer constructed as described, of a spring-wire loop having its central portion interwoven with the longitudinal strands of the strainer, the terminal portions of said loop constituting

spring-arms which are adapted to enter and engage the down-spout, substantially as described.

2. A strainer for caves-troughs, comprising  
5 reversely-inclining portions meeting at a medial point in a transverse crest or ridge of a length corresponding to the transverse measurement of the trough in the proximal plane of its top, in combination with a spring-wire  
10 loop having its central portion interwoven with the longitudinal strands of the strainer,

the terminal portions of said loop constituting spring-arms which are adapted to enter and engage the down-spout, substantially as described.

In testimony that I claim the foregoing as  
my own I have hereto affixed my signature in  
the presence of two witnesses.

SYLVESTER A. TWIST.

Witnesses:

ENOS A. GREENAMYER,

ROSE B. CARPENTER.