Dec. 5, 1933. M. E. TVERDAK 1,937,732

STRAINER ROOF LEADER OR LIGHT DRAIN TUBE

Filed Feb. 23, 1933

Fig. 1.

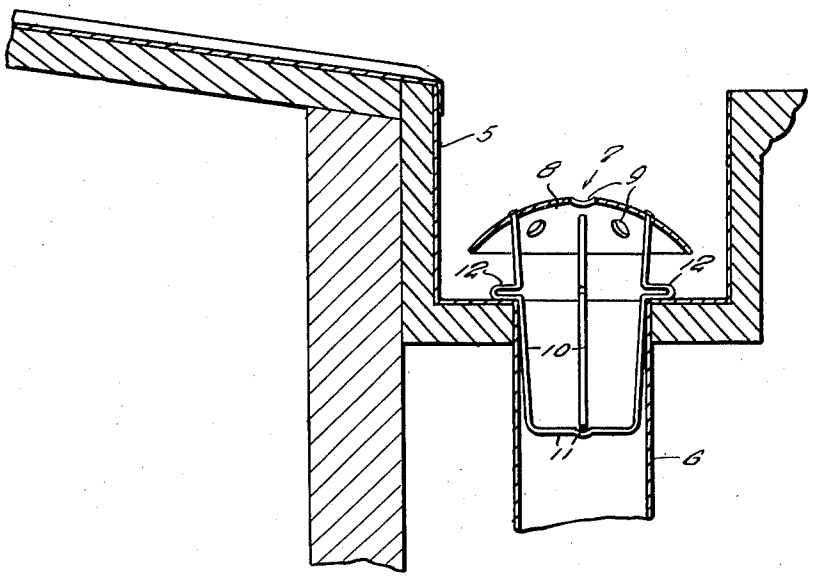
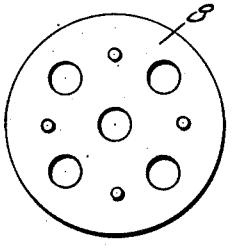


Fig. 3.



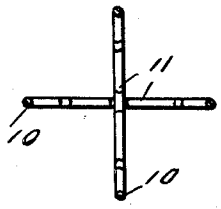


Fig. 2.

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Patented Dec. 5, 1933 1,937,732

UNITED STATES PATENT OFFICE

1,937,732

STRAINER ROOF LEADER OR LIGHT DRAIN TUBE

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Application February 23, 1933. Serial No. 658,179

2 Claims. (Cl. 210—170)

This invention relates to strainer devices of the type employed for gutters or eaves-troughs to be used at the upper end of a roof leader or like drain tube and it consists in the provision of a device which will effectively prevent substances such as twigs, and the like from entering the leader or drain tube; and which will also prevent the accumulation of snow and ice at the inlet end of the tube, thereby permitting a free and uninterrupted flow of drippings into and down the drain tube or leader.

The invention together with its numerous objects and advantages will be best understood from a study of the following description, taken in connection with the accompanying drawing wherein:

Figure 1 is a sectional view through a portion of an eaves-trough or gutter illustrating an application of the invention.

Figure 2 is a transverse sectional view through the strainer and

Figure 3 is a top plan view thereof.

Referring to the drawing by reference numerals it will be seen that 5 designates generally the eaves trough or gutter while 6 indicates a vertically disposed leader or drain tube. The strainer embodying the features of the present invention is indicated generally by the reference numeral 7. The strainer 7 includes a filter 8 which in the present instance consists of a circular concavo-convex disk of metal provided with perforations 9.

Two lengths of spring wire are provided and these wire rods are bent into substantial U-form. At the open end of the U's the rods are suitably secured to the filter 8, and with the U-shaped rods disposed at right angles so that they cross one another at the closed ends of the U's to provide spring fingers10. At the closed ends thereof the U-shaped rods provide what may be termed a spider 11 that is spaced downwardly from the filter 8 and serve to catch such large objects as may pass between the spring fingers 10.

The spring fingers 10 adjacent their upper ends are bent laterally to provide outwardly projecting shoulders 12, which, when the fingers are inserted downwardly into the upper end of the drain tube 6, will engage the bottom of the trough or gutter 5 to thereby suspend the device at the upper end of the tube 6 with the filter 8 supported above and in spaced relation to the bottom of the trough or gutter 5.

In use, and as will be clear from a study of Figure 1 the spring fingers 10 are inserted in the drain tube at the open end thereof, the fingers being forced inwardly toward each other to permit movement of the inserted end portion thereof along the drain tube. When the shoulders 12 are brought into engagement with the bottom of the trough 5 the inward movement of the device will be stopped, and the device thus suspended with the spider formed by the horizontal portions of the fingers disposed a considerable distance inwardly from the upper end of the tube 6 and the filter 8 supported a material distance above the bottom of the trough 5. Because of their inherent resiliency, the spring fingers 10 will spring into contact with the inner wall of the drain tube 6 to bind thereagainst and to hold the device in proper position.

With the strainer properly positioned it will be evident that twigs and other large substances will be positively prevented from passing into the tube 6, and that also the strainer will be held against displacement because of pressure applied thereagainst when leaves or other debris lodge against the strainer and the water from the trough rushes against the matter which may accumulate about the strainer.

Even though I have herein shown and described the preferred embodiment of the invention, it is to be understood that the same is susceptible of further changes, modifications and improvements coming within the scope of the appended claims.

Having thus described my invention, what I claim as new is:

1. The combination, with an eaves trough and a drain tube therefore, of a strainer comprising a pair of spring rods each bent into the form of a U having parallel sides and a connecting member at one end of said sides, said U-shaped rods being arranged with their connecting members crossing one another, and a concavo-convex disk secured to the sides of the rods at the free ends thereof.

2. The combination, with an eaves trough and a drain tube therefore, of a strainer comprising a pair of spring rods each bent into the form of a U having parallel sides and a connecting member at one end of said sides, said U-shaped rods being arranged with their connecting members crossing one another, and a concavo-convex disk secured to the sides of the rods at the free ends thereof, and the sides of the rods adjacent their free ends having portions bent outwardly to provide stop shoulders engageable with the bottom of the trough at the upper end of the drain tube for removably suspending the strainer at the upper end of the tube.

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