Sept. 26, 1950 H. W. JONES 2,523,435

TRASH AGITATING ATTACHMENT FOR EAVE TROUGHS

Filed Oct. 17, 1947

Fig. 1.

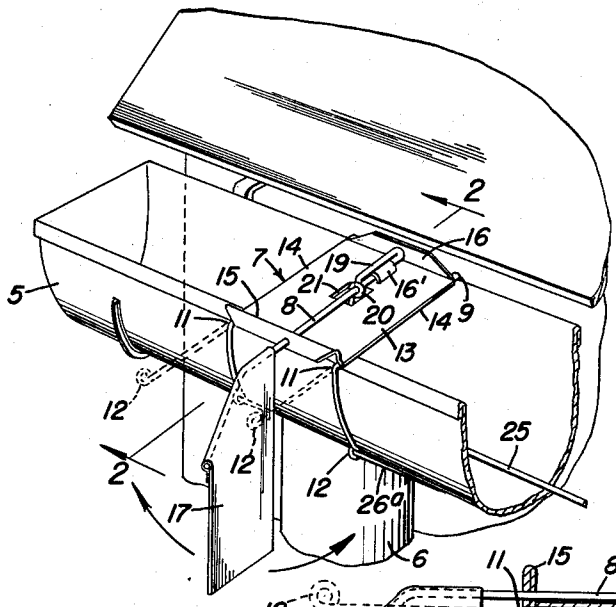



Fig. 2.

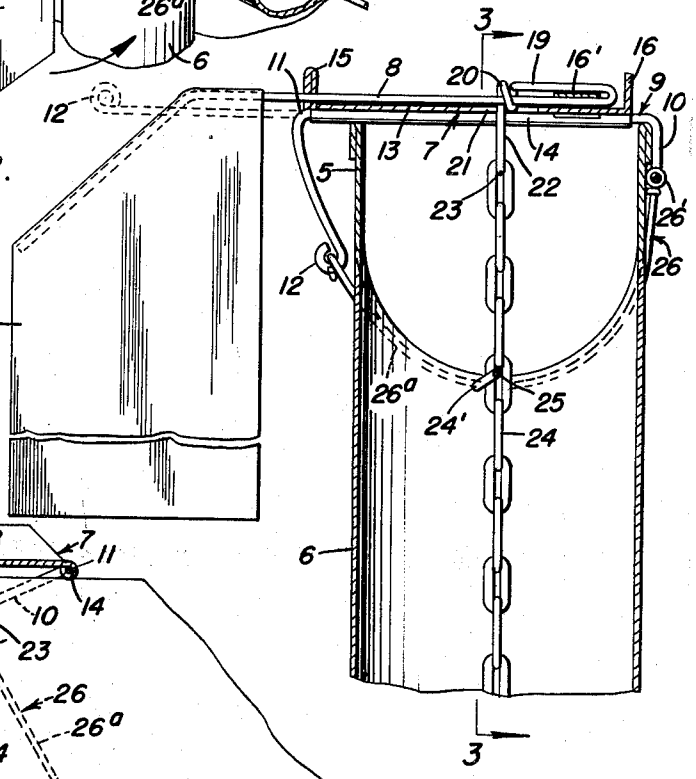
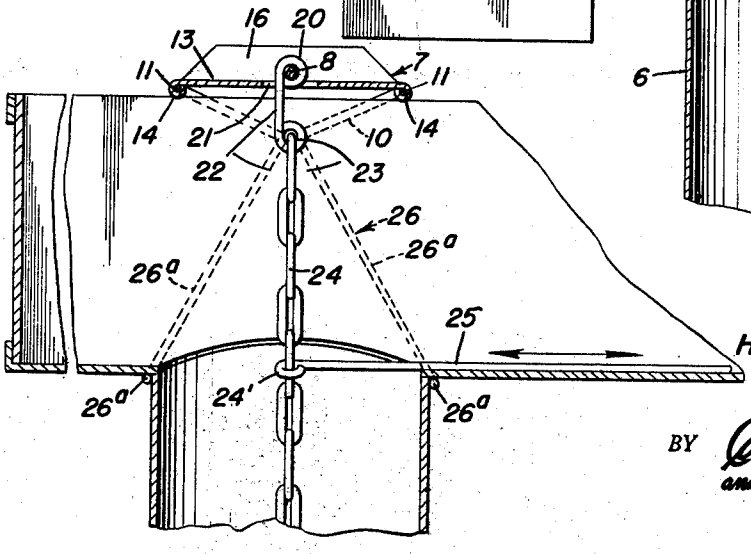



Fig. 3.




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## TRASH AGITATING ATTACHMENT FOR EAVE TROUGHS

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6 Claims. (Cl. 108—28)

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This invention relates to a device adapted for attachment to an eave trough and operated by the action of the wind for agitating and loosening dirt and trash which may fall in or accumulate within the eave trough and/or its down-spout, so that such dirt and trash will be readily carried from the eave trough and to and through the down-spout by water from rainfalls, etc.

An object of the present invention is to provide a device of the above kind which may be readily and effectively installed upon eave troughs of different sizes, and which may be readily adjusted for effective operation regardless of the form of the eave trough or the size and location of the down-spout relative thereto.

Another object of the invention is to provide a device of the above kind which is simple and durable in construction and efficient in operation.

The exact nature of the present invention, as well as other objects and features thereof, will become apparent from the following description when considered in connection with the accompanying drawing, in which:

Figure 1 is a fragmentary perspective view of an eave trough annd down-spout having an attachment applied thereto which is constructed in accordance with the present invention.

Figure 2 is an enlarged vertical section taken on line 2—2 of Figure 1.

Figure 3 is a vertical section taken on line 3—3 of Figure 1, and partly broken away.

Referring in detail to the drawing, 5 indicates a conventional eave trough having an ordinary down-spout 6. The present attachment includes a support 7 for a rock shaft 8 adapted to extend across the eave trough 5 over the down-spout 6 and to be rigidly secured thereon. As shown, the support 7 consists of a horizontal U-shaped wire frame member 9 having a down-turned intermediate portion 10 and parallel legs 11 formed at their free ends with eyes 12, and a flat plate 13 spanning and slidably mounted on the legs 11 and having the rock shaft 8 journalled thereon intermediate and parallel with the legs 11. The side edges of the plate 13 are rolled snugly about the legs 11 as at 14 to slidably mount said plate thereon so as to require some force in adjusting said plate longitudinally of said legs. The plate 13 is provided with upturned end reinforcing flanges 15 and 16, the front flange 15 being folded upon itself. The rock shaft 8 is journalled in the flange 15 and in a bearing 16' provided on the rear portion of plate 13, and the front portion of said rock shaft projects forwardly of said flange 15 and has a depending wind vane 17 se-

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cured on the projecting portion thereof. The rear end of rock shaft 8 has an extension which is return bent to form a loop 19 adapted to coact with the plate 13 to limit rocking movement of rock shaft 8, and this return bent extension is twisted about rock shaft 8 as at 20 and then directed downwardly through an opening 21 in plate 13 to form a crank arm 22 which terminates at its lower end in an eye 23. A flexible agitating element or chain 24 is suspended from the crank arm 22 by having an end link thereof engaged in the eye 23, and this element or chain is adapted to depend through the eave trough 5 into the down-spout 6 when the device is installed for use, as shown. Pivotally or loosely attached at one end to the element or chain 24, as at 24', is a lateral agitating rod 25. The rod 25 is attached at a point on the element 24 so that it will extend longitudinally in and adjacent the bottom of the eave trough. A wire 26 is centrally attached as at 26' to the intermediate portion 10 of frame member 9, and has two strands 26a adapted to be brought under the eave trough at opposite sides of the down-spout and connected to the eyes 12 of frame member 9, to secure the support 9 upon said eave trough. The free end portions of the legs 11 are bent downwardly toward and adjacent the front or outer side of the eave trough as shown, the portion 10 being engaged behind the inner side of the eave trough. By adjusting the plate 13 longitudinally of legs 11, the element or chain 24 may be centered relative to the down-spout, regardless of the size and location of the latter relative to the eave trough.

In operation, the rock shaft 8 is oscillated by the action of the wind on the vane 17, thereby swinging the element or chain 24 back and forth in the down-spout and reciprocating the rod 25 in the eave trough adjacent the down-spout. In this way, dirt and trash in the eave trough and down-spout is agitated and loosened so that it will readily flow from the eave trough to and through the down spout with water from rainfalls, etc.

From the foregoing description, it is believed that the construction, operation and advantages of the present invention will be readily understood and appreciated by those skilled in the art. Modifications and changes in details of construction are contemplated, such as fairly fall within the spirit and scope of the invention as claimed.

Having described the invention what is claimed as new is:

1. A trash agitating attachment for an eve trough, comprising a support adapted to extend

across and rest upon the eave trough over its down-spout, a rock shaft journalled on and projecting outwardly from the support and having a depending crank arm, a lateral agitating rod loosely connected to the crank arm and adapted to extend longitudinally in and adjacent the bottom of the eave trough, and a depending wind vane secured on the projecting portion of the crank shaft and adapted to occupy a position at the outer side of the eave trough to rock the rock shaft and reciprocate the agitating rod by the action of the wind thereon.

2. A trash agitating attachment for an eave trough, comprising a support adapted to extend across and rest upon the eave trough over its down-spout, a rock shaft journalled on and projecting outwardly from the support and having a depending crank arm, a flexible agitating element suspended from the crank arm and adapted to extend downwardly into the down-spout, and a depending wind vane secured on the projecting portion of the rock shaft and adapted to occupy a position at the outer side of the eave trough to rock the rock shaft and swing the agitating element back and forth by the action of the wind thereon.

3. The construction defined in claim 2, in combination with a lateral agitating rod loosely connected to said flexible agitating element and adapted to extend longitudinally in and adjacent the bottom of the eave trough for being reciprocated therein when the rock shaft is rocked by the action of the wind on the wind vane.



4. The construction defined in claim 1, wherein said support comprises a frame having means to secure the same in a fixed position upon the eave trough, and a mount for said rock shaft adjustable on the frame parallel with said rock shaft.

5. The construction defined in claim 2, wherein said support comprises a frame having means to secure the same in a fixed position upon the eave trough, and a mount for the rock shaft adjustable on the frame parallel with the rock shaft to center the flexible agitating element relative to the down-spout.

6. The construction defined in claim 2, wherein said support comprises a horizontal U-shaped frame member, and a mount for the rock shaft adjustable on said frame member parallel with the rock shaft, a wire anchored to the intermediate portion of said frame member and adapted to be connected to the free ends of the latter for securing the support on the eave trough, said intermediate portion of the frame member being down-turned to engage behind the inner side of the eave trough, and the ends of said frame member being flexible for being bent downwardly adjacent the outer side of the eave trough.

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No references cited.