Dec. 20, 1966 S. E. PERKEL 3,292,198

DEVICE FOR CLEARING GUTTERS

Filed Oct. 13, 1965

Fig. 1

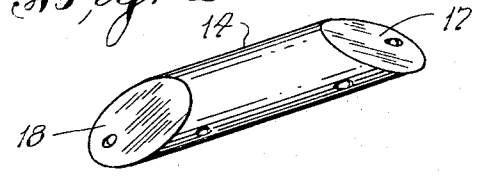
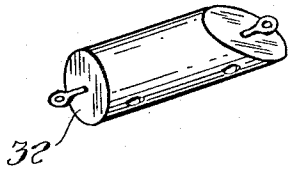


Fig. 3



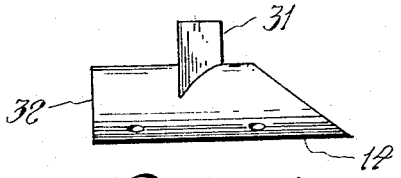


Fig. 4

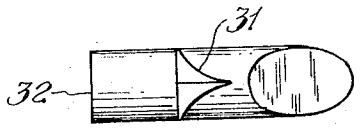


Fig. 5

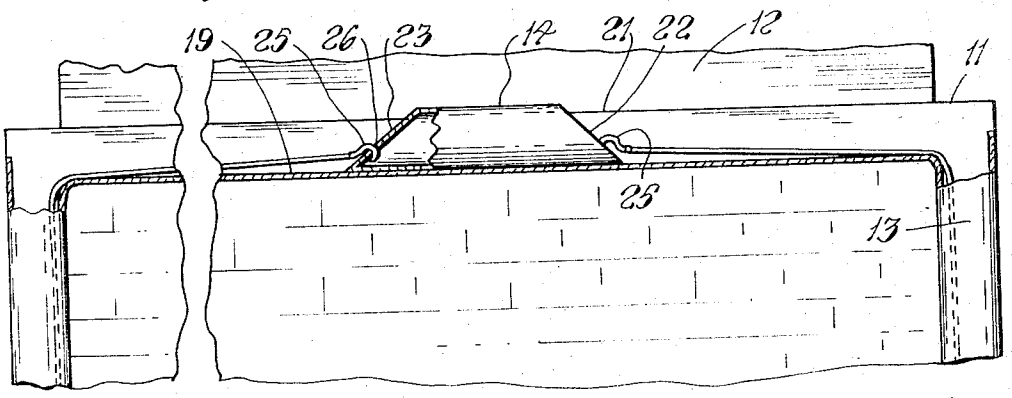
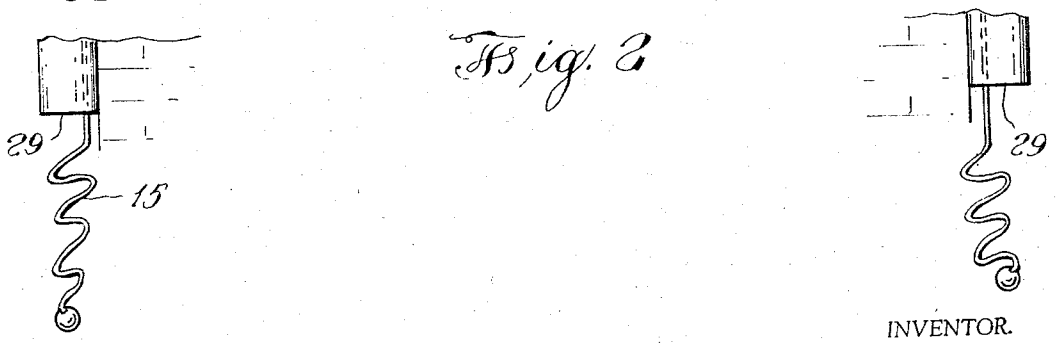


Fig. 2



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DEVICE FOR CLEARING GUTTERS

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This invention relates to a device for use in clearing the longitudinal gutters of a dwelling.

In almost every dwelling, there is a longitudinal channel-like trough attached to and extending along the eaves of a roof which is called a gutter. The latter is designed to allow any rain which falls on the roof to accumulate in the trough-like bed of the gutter which, directs the same to a drain for elimination, by minor variations in elevation. However, in many cases, the gutters described are precluded from carrying out their function by an accumulation of debris, rubbish, leaves, dirt and the like, which build up in the channel-like bed of the trough during certain seasons of the year.

Up to the present time, the most practical way to properly clean such gutters, is to place a ladder in proximity thereto, climb the same, and clear the area within the span of the arms. As is obvious, the ladder must be moved numerous times around the length and width of the house and it is necessary each time to ascend the ladder to the height of the gutter which may be a goodly distance, if the house is of the two story variety. The procedure is not only time consuming, and fatiguing but it is not altogether too safe to carry out.

It is an object of this invention to provide means which may be used to clear the bed of the channel-like gutter.

Another object is to provide a device by means of which a vertical force is translated into horizontal motion along the longitudinal length of a channel-like gutter in order to remove debris, leaves, dirt and the like from the same.

A further object is to provide a portable device of the type described having improved construction of low fabrication and maintenance costs, high durability and facile in use under a wide variety of service conditions.

Other objects and many of the attendant advantages of this invention will be readily appreciated as the same becomes better understood by reference to the following detailed description when considered with the accompanying drawings wherein—

FIG. 1 is a perspective view of the device of this invention.

FIG. 2 is a view showing the device in position in the gutter of a house.

FIG. 3 is a perspective view of another embodiment of this invention.

FIG. 4 is a view of a further embodiment of this invention.

FIG. 5 is a top plan view of the embodiment of FIG. 4.

Similar numerals refer to similar parts throughout the several views.

Referring to FIG. 2, a channel-like trough **11** is usually secured in a depending relationship to the lowest extremity of the roof **12** along the longitudinal length thereof. At each extremital end of the trough is provided a downward vertically extending hollow pipe **13** otherwise known as a drain. The bed of the channel-like trough or gutter **11** is fitted with a device **14** which travels fore and aft along the longitudinal length of the trough in response to a downward pressure of a sling engaging means **15** which is secured to either side of the device and which passes downwardly through each drain **13**.

As shown in FIGS. 1 and 2, the device **14** utilized consists essentially of a cylinder of closed end construction, the ends **17** and **18** of which are truncated in opposed or opposite directions as shown. In other words, each end

is truncated in a direction opposite to the other end and defines a sloped plow-like end surface. When the device is fitted into the bed **19** of the trough, the extremital ends of the truncated cylinder lie adjacent the top surface **21** of the bed and the angular inwardly extending sides **22** and **23** lie adjacent the sides of the trough more or less in the manner of a two directional plow. The cylinder may be solid or hollow depending on the type material utilized in its construction as long as it is of sufficient weight to maintain it in the position described in the trough. If hollow, the cylinder may be provided with holes along the bottom surface thereof which will function as drains.

Each of the angularly disposed surfaces **22** and **23**, on opposite ends of the cylinder, are provided with sling engaging means **25**, which may be secured in any manner conveniently known in the art. As shown, the engaging means may be a hook **25** which fits into a mating hole **26** provided in the angularly disposed surfaces **22** and **23** of the cylinder. A sling **15**, which is secured on either side of the cylinder to the engaging means **25**, extends along the longitudinal length of the bed **19** of the trough and passes downwardly through the vertical length of the drain **13**. The sling should be of such length that an excess extends from the extremital opening **29** adjacent the ground level of the dwelling. The sling may be made simply of heavy cord, rope, chain and the like as long as the material is strong and flexible.

In operation, a force is exerted on that portion of the sling **15** which extends out through the extremital end **29** of either one of the drains adjacent the ground level. The force exerted on the sling is transmitted up the length of the sling to the cylindrical device at which point it is translated into motion. In response to the force, the cylindrical device **14** will move in a longitudinal direction, either fore or aft, along the length of the trough depending upon which one of the slings is being acted upon. In moving, the extremital end **22** and **23** of the truncated portion of the cylindrical device adjacent the bed of the trough will function to slide under the material in the trough. As the device is moved further in the same direction, the debris material will progress up the angularly disposed surface **22** and **23** of the truncated end portion of the cylinder until it reaches the top surface of the cylinder at which point it will be forced over the side of the trough. To aid in giving direction to the debris, the top surface of the cylinder may be provided with a directional blade **31** as shown in FIGS. 4 and 5. When the device finally travels into abutment with the end of the trough, the material which has not been expended over the side of the trough may be easily recovered in a neat pile. To reset the device in position, or if the device is truncated on either end of the cylinder and it is desired to clear the trough in the opposite direction, one merely has to proceed to the opposite drain **29** and pull the sling means **15** and the operation described will be carried out in the opposed or opposite direction.

As an alternative, the scoop-like attitude of the device may be made uni-directional. As shown, in FIGS. 3, 4, and 5, one end of the cylinder **14** is truncated to define a sloped plow-like end surface while the other end extends into an ordinary closed end construction **32**. However, in any case, either end of the cylinder is provided with the sling construction described secured by engaging means to the cylinder. As a further alternative, the cylindrical device may be provided with an angularly disposed directional blade **31** secured along the upper surface of the cylinder as shown in FIGS. 4 and 5. The function of the angular blade **31**, which extends above the sides of the trough, is to provide direction and greater ease of removal of the debris as it progresses up the truncated surface of the cylinder. In this manner, the material in

the bed of the trough is directed over the sides of trough and falls to the ground.

Obviously, many other modifications and variations of the present invention are possible in the light of the above teachings. It is therefore to be understood that within the scope of the appended claims, the invention may be practiced otherwise than as specifically described.

I claim:

1. A gutter clearing device comprising:
a cylindrical body having truncated ends of closed construction,
each of said ends being truncated in a direction opposite to the other end, said truncated ends each defining a sloped plow-like end surface,
a sling means for attachment to said truncated ends of said cylinder, and
engaging means for securing said sling means to said truncated ends of said cylinder.

2. The gutter clearing device of claim 1 wherein: said cylindrical body is of hollow construction.

3. The gutter clearing device of claim 2 wherein said hollow body is provided with a plurality of drain holes.

4. The gutter clearing device of claim 1 wherein: said cylinder is of solid construction.

5. The gutter clearing device of claim 1 wherein: said cylindrical body is provided with at least one angular disposed directional blade on the top surface thereof.

6. A gutter clearing device comprising:
a cylindrical body of closed end construction,
one of said ends being truncated, said truncated end defining a sloped plow-like end surface,
a sling means for attachment to said ends of said cylinder, and
engaging means for securing said sling means to said ends of said cylinder.

7. The gutter clearing device of claim 6 wherein: said cylindrical body is of hollow construction.

8. The gutter clearing device of claim 7 wherein said hollow body is provided with a plurality of drain holes.

9. The gutter clearing device of claim 6 wherein: said cylindrical is of solid construction.

10. The gutter clearing device of claim 1 wherein: said cylindrical body is provided with one angular disposed directional blade on the top surface thereof.

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