E. KREUTZBERG.

SELF CLEANING EAVES TROUGH.

APPLICATION FILED JUNE 9, 1909.

956,372. **Patented Apr. 26, 1910.**

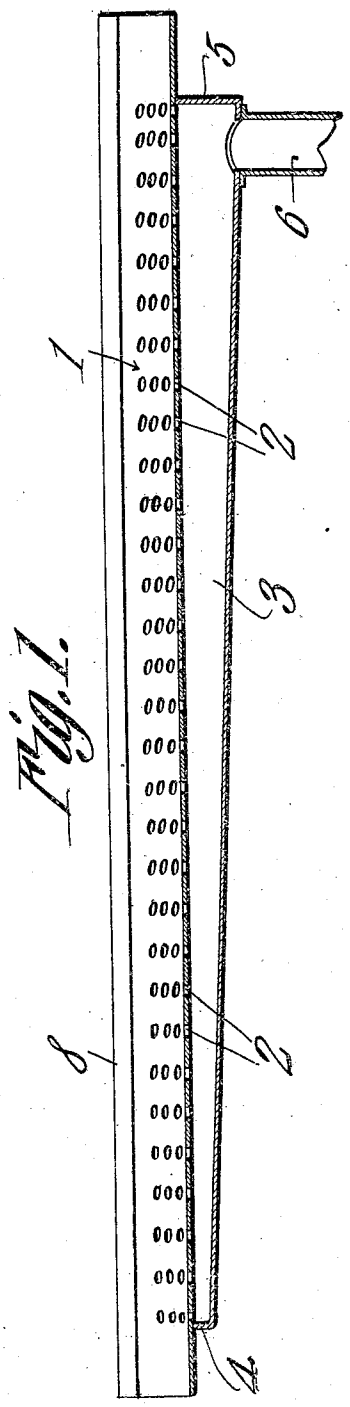

Fig. 1.

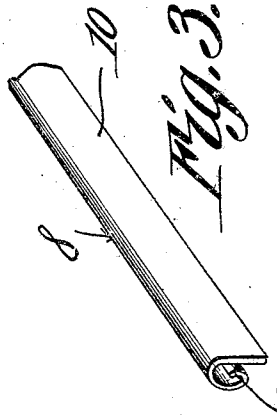

Fig. 3.

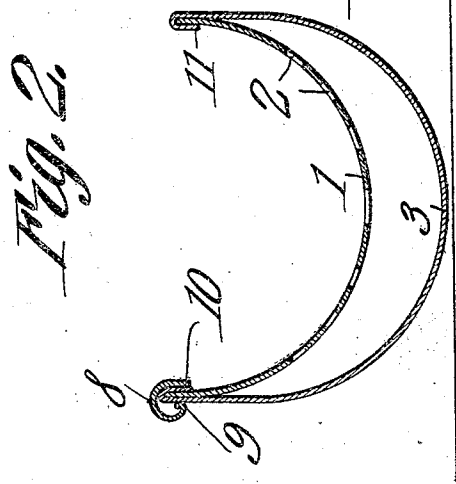

Fig. 2.

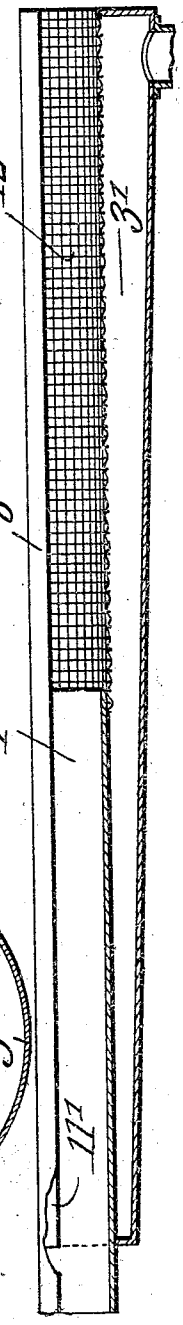

Fig. 4.

Witnesses

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ERNST KREUTZBERG, OF ST. LOUIS, MISSOURI.

SELF-CLEANING EAVES-TROUGH.

956,372. Specification of Letters Patent. **Patented Apr. 26, 1910.**

Application filed June 9, 1909. Serial No. 501,136.

To all whom it may concern:

Be it known that I, ERNST KREUTZBERG, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented a new and useful Self-Cleaning Eaves-Trough, of which the following is a specification.

My invention relates to eaves-troughs, more particularly to self cleaning eaves-troughs, and has for an object to provide a device of this character which will arrest leaves, sticks and other impurities and prevent their admission into the conductor pipe of the trough.

Another object is to provide a device of this character in which the arrested material will be washed off from the eaves trough and will not accumulate as in the usual form of eaves-troughs.

Still another object is to provide a device of this character that will have a few simple parts that will not easily get out of order and which will be durable and efficient in operation.

With these and other objects in view which will be described in the following specification and set forth in the claims, my invention embraces the structure illustrated in the accompanying drawing, in which:

Figure 1 is a longitudinal section of a self-cleaning eaves-trough constructed in accordance with my invention. Fig. 2 is a transverse section of the same. Fig. 3 is a detail perspective view of the keeper. Fig. 4 is a modified form of my invention.

In a more detailed description of my invention, in which like characters of reference designate similar parts in the views shown, 1 designates an eaves-trough having formed adjacent its end a plurality of holes 2, communicating with the water receiver 3 which depends from the eaves-trough. The water receiver 3 is adapted to conform to the contour of the under surface of the perforated eaves-trough 1 and is held obliquely inclined thereto by end pieces 4 and 5 adapted for contact with the perforated portion of the eaves-trough and forming a closure for the opposite ends of the water receiver 3. The end pieces may be secured in position in any desired manner, the connection in this instance being made by fitting the end pieces to the ends of the water receiver and soldering them in place. Adjacent the lower end of the inclined water receiver 3 is a down spout 6 through which the water is discharged to a cistern or other receptacle designed to receive the water flowing from the eaves. The outer longitudinal edge of the water receiver may be beaded and over said edge a keeper 8 engages to clamp together the longitudinal edges of the eaves-trough and water receiver. The keeper 8 is substantially equal in length to the length of the water receiver and terminates at one longitudinal edge in a bent portion 9 adapted to engage the outer side of the receiver and at the other edge in a downwardly projecting clamping portion 10 adapted for contact with the inner surface of the eaves-trough adjacent the longitudinal edge thereof.

In applying the water receiver to the eaves-trough the longitudinal edges are bent inwardly and downwardly to form hooked portions 11 which may be slid along the longitudinal edges of the strainer until the water receiver is in the desired position when these hooked portions are pressed flat to firmly clamp the longitudinal edges of the strainer. The keeper 8 is then slipped down into place and may be soldered on by the tinner when in this position to form a water tight joint between the strainer and water receiver. The keeper 8 may be secured to either longitudinal edge of the eaves-trough so that either end of the same may be placed away from the eaves to accommodate the exigencies of any particular use of the trough.

The openings 2 in the eaves-trough perform the function of a strainer to prevent any foreign substance from flowing into the water receiver, and thereby clogging the down spout and fouling the cistern. The end of the eaves-trough being open will easily permit all sticks, moss, leaves, etc., to be washed from the eaves trough as soon as they find lodgment thereon. Thus it is evident that foreign matter cannot accumulate as in the usual style of eaves troughs in which strainers are employed to collect all foreign matter which must be periodically removed in order to keep the eaves trough in working order.

In Fig. 4 is shown a modification of my invention which embodies a wire sieve 12 to form the strainer in place of the perforated eaves trough. In this construction the wire sieve is bowed downwardly to conform to the contour of the end of the eaves trough 1′ and forms a terminal extension for the

same. The hooked longitudinal edges 11′ of the water receiver 3′ will embrace the longitudinal edges of the eaves trough and sieve extension, and hold the parts in operative position as shown, the keeper 8′ being hooked over one longitudinal edge of the water receiver and clamped sieve and slid along to engage the longitudinal edge of the eaves trough after which it may be soldered in position as above explained.

The water receiver may be made in any desired length, but in practice it has been found preferable to limit the length to about 18 inches, which is sufficient to work in a highly efficient and practical manner during the heaviest storms.

From the foregoing description, taken in connection with the accompanying drawings, it is thought that the construction and operation of my invention will easily be understood without a more extended explanation, it being understood that various changes in the form, proportion and minor details of construction may be made without sacrificing any of the advantages or departing from the spirit of the invention.

Having thus described my invention, what I claim is:

1. The combination of an eaves-trough having a foraminous portion near one end, a water receptacle extended under said foraminous portion and having its edge detachably engaged upon the edges of the trough, and a down spout leading from said receptacle.

2. The combination with an eaves-trough provided with a perforated bottom near one end, of a water receiver adapted to conform to the contour of said perforated bottom and held in inclined spaced relation thereto by terminal end pieces adapted for contact with the eaves-trough, a down spout assembled with said water receiver, and a keeper having clamping portions adapted for contact with the eaves-trough and water receiver whereby to hold the same clamped in operative position.

3. The combination with an eaves-trough having a plurality of perforations in its bottom constituting a strainer, of a water receiver having spaced clamping portions adapted for contact with the internal walls of said eaves-trough, a down spout communicating with said water receiver, and a keeper adapted to embrace said clamping portions and eaves-trough and clamp the same in operative position.

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

ERNST KREUTZBERG.

Witnesses:

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