No. 694,440. Patented Mar. 4, 1902.

B. A. STAIR.

STRAINER FOR DOWN SPOUTS.

(Application filed June 20, 1901.)

(No Model.)

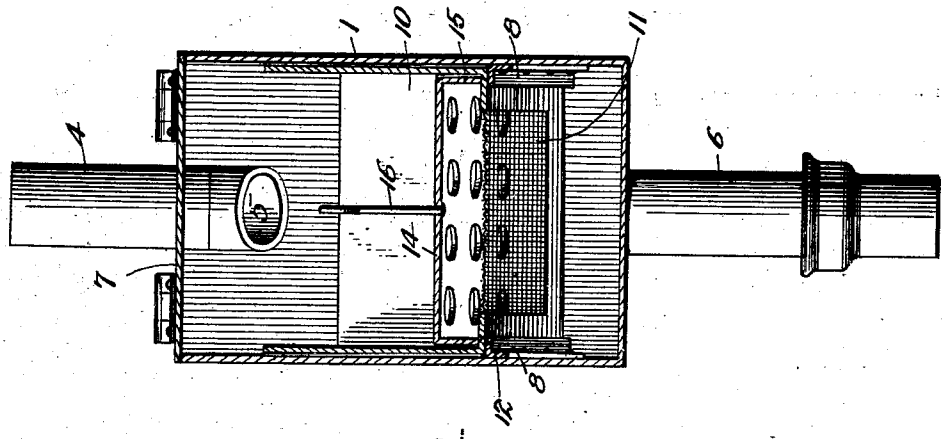


Fig. 2.

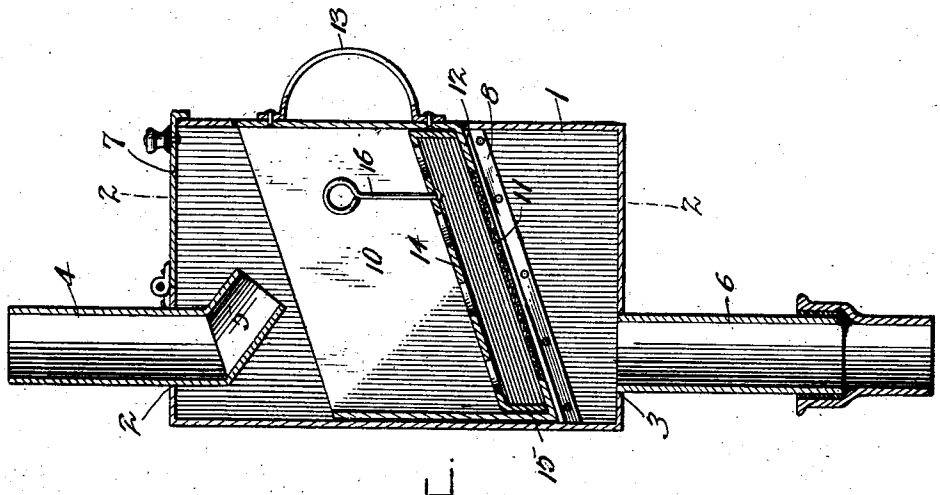


Fig. 1.

Witnesses
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UNITED STATES PATENT OFFICE.

BURTON AROUS STAIR, OF HARRISONVILLE, MISSOURI, ASSIGNOR OF ONE-HALF TO ALBERT B. BOHON, OF HARRISONVILLE, MISSOURI.

STRAINER FOR DOWN-SPOUTS.

SPECIFICATION forming part of Letters Patent No. 694,440, dated March 4, 1902.

Application filed June 20, 1901. Serial No. 65,382. (No model.)

To all whom it may concern:

Be it known that I, BURTON AROUS STAIR, a citizen of the United States, residing at Harrisonville, in the county of Cass and State of Missouri, have invented a new and useful Strainer for Down-Spouts, of which the following is a specification.

This invention relates to down-spouts, and has for its object to provide an improved strainer therefor which may be conveniently connected thereto and is arranged to collect foreign matter and sediment, so that the same may be readily removed from the strainer, whereby the latter may be maintained in a sanitary condition.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawing, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing, Figure 1 is a central longitudinal sectional view of a strainer embodying the present invention. Fig. 2 is a cross-sectional view taken on the line 2 2 of Fig. 1.

Like characters of reference designate corresponding parts in both figures of the drawing.

In carrying out the present invention there is provided a box-like casing 1, which is preferably rectangular in shape and is provided with top and bottom corresponding openings 2 and 3, which are located adjacent to the back of the casing. The upper opening 2 is designed for the reception of a pipe-section 4, which is projected a suitable distance into the interior of the casing and is provided at its inner end with an elbow 5, that is inclined or directed toward the front of the casing. A lower pipe-section 6 depends from the lower opening, so as to carry off the water introduced through the upper pipe.

It will be understood that the present device forms a section of a down-spout, the upper and lower pipe-sections being connected to the adjacent sections of the down-spout. A suitable hinged cover 7 is provided in front of the upper pipe-section, so as to give access to the interior of the casing.

Within the interior of the casing and adjacent to the bottom thereof there is provided the opposite cleats or flanges 8, which are secured to the inner faces of the opposite sides of the casing and incline downwardly from the front of the device. In the front of the casing and extended upwardly from the outer or front ends of the cleats there is provided an opening which extends for the entire width of the front and is for the reception of a removable box or sediment-receptacle 10, which has its bottom inclined to correspond with and rest upon the cleats or flanges 8. This box is equal to the cross-section of the casing, and its front closes the opening through which it is inserted. The intermediate portion of its bottom is made perforate, preferably by means of a wire screen 11, which leaves a marginal bottom flange portion 12. A suitable handle 13 is provided upon the exterior of the front of the box for convenience in applying and removing the box. A removable false bottom 14, which is also perforated with comparatively large openings, is provided for the sediment-box and has a pendent marginal foot-flange or rim 15, which rests upon the bottom flange portion 12 of the box, and also has an upstanding handle 16 for convenience in lifting the false bottom outwardly through the open top of the box.

From the foregoing description it is apparent that water is discharged through the elbow 5 toward the front of the casing and upon the front upper end portion of the false bottom of the sediment-receptacle, from which it runs down to the lowermost inner portion of the bottom of the receptacle and thence outwardly through the discharge-pipe 6. The perforate false bottom is designed to collect leaves and large objects, while the screen 8 collects the small particles of foreign matter and sediment, which may be conveniently removed from the device by withdrawing the box outwardly through the front of the casing and then removing the false bottom.

What is claimed is—

1. A strainer of the class described, com-

prising a casing, having an upper inlet, and a lower outlet, opposite internal supports adjacent to the bottom thereof, and a sediment-receptacle removably supported upon the supports and inserted through an opening in the device, the outer side of the receptacle closing the opening, the bottom of the receptacle having a strainer, and a removable perforate false bottom within the receptacle.

2. A strainer of the class described, comprising a casing, having a top inlet, a bottom outlet, an opening in the front thereof, and opposite internal supporting-flanges inclined downwardly from the bottom of the opening in the front of the casing, a removable sediment-receptacle inserted through the opening and supported upon the flanges, the front of the receptacle closing the opening, and having a handle, the intermediate bottom portion of the receptacle having a strainer, a perforate false bottom having a pendent marginal foot-flange supported upon the marginal edge portion of the receptacle.

3. In a strainer of the class described, the combination of a casing, having an inlet-pipe projected through the back of the top thereof, and provided at the lower end of the pipe with an elbow directed toward the front of the casing, a pendent discharge-pipe piercing the bottom of the casing, a hinged cover in front of the inlet-pipe, there being an opening formed in the front of the casing, corresponding flanges provided upon the inner faces of the opposite sides of the casing and inclined downwardly from the bottom of the opening in the front of the casing, a removable sediment-receptacle inserted through the opening and supported upon the flanges, the receptacle closing the opening, and having an open top, there being an intermediate strainer in the bottom of the receptacle, a handle upon the front of the receptacle, and a perforate false bottom, having a marginal foot-flange supported upon the bottom of the receptacle, and an upstanding handle.

4. A strainer for down-spouts having a casing provided with an inlet and an outlet, a sediment-receptacle removably fitted in the casing between the inlet and outlet thereof and provided with a screening-bottom which is inclined backwardly toward its rear or inner ends, with a perforated false bottom removably fitted in the receptacle and having an upstanding handle disposed wholly within the receptacle, and means for directing the incoming water upon the upper front portion of the false bottom.

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

BURTON AROUS STAIR.

Witnesses:
J. D. RUSSELL,
LEVI SMITH.