

P. FATH.
RAIN SPOUT CUT-OFF.
APPLICATION FILED OCT. 18, 1910.

984,365.

Patented Feb. 14, 1911.

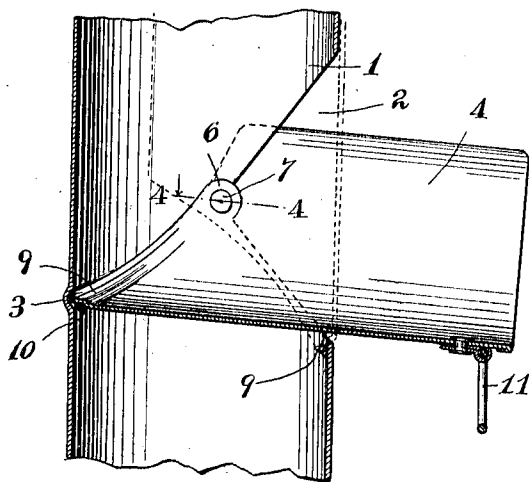


FIG. 1.

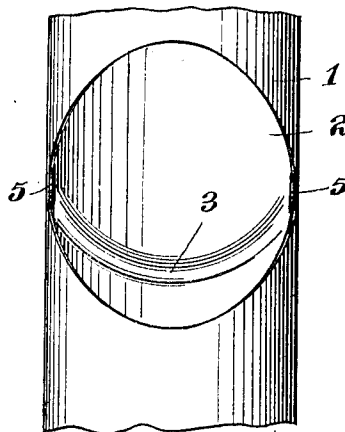


FIG. 2.

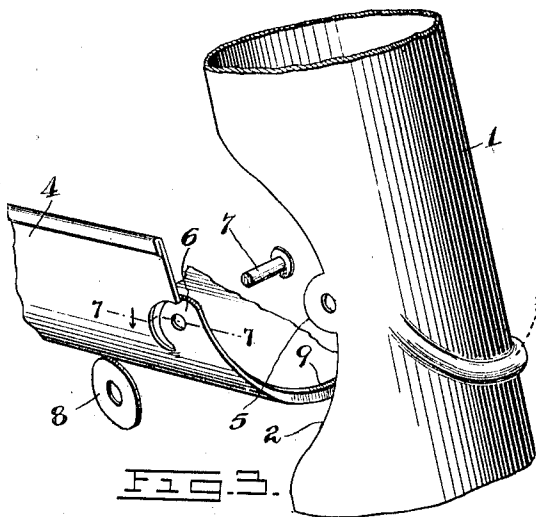


FIG. 3.

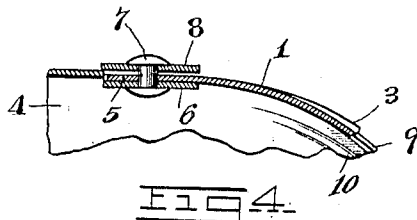


FIG. 4.

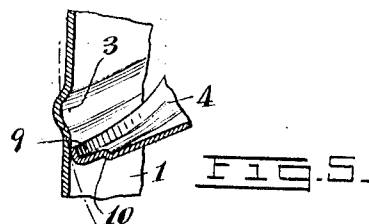


FIG. 5.

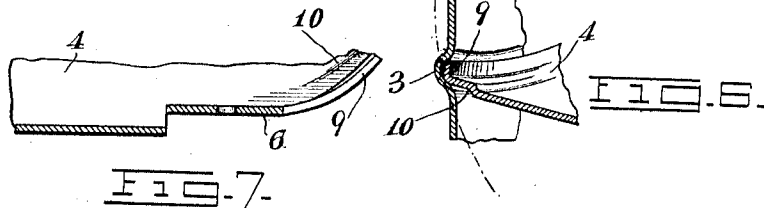


FIG. 6.

Witnesses

Thos. H. Knox,
U. B. Hillyard.

Inventor
Philip Fath

By Victor J. Evans.
Attorney

UNITED STATES PATENT OFFICE.

PHILIP FATH, OF ST. LOUIS, MISSOURI.

RAIN-SPOUT CUT-OFF.

984,365.

Specification of Letters Patent.

Patented Feb. 14, 1911.

Application filed October 18, 1910. Serial No. 587,730.

To all whom it may concern:

Be it known that I, PHILIP FATH, a citizen of the United States, residing at St. Louis, State of Missouri, have invented new and useful Improvements in Rain-Spout Cut-Offs, of which the following is a specification.

The present invention supplies a cut-off for rain spouts of simple and novel construction and practically embodying but two parts, that is the pipe and the cut-off pivoted thereto, the parts being so formed as to insure close joints between them in either position of the cut-off as well as positively fixing the latter without movement to either one of its extreme positions.

The invention consists of the novel features, details of construction and combination of parts, which hereinafter will be more particularly set forth, illustrated in the accompanying drawing, and pointed out in the appended claims.

Referring to the drawing, forming a part of the application, Figure 1 is a vertical central section of a pipe and cut-off embodying the invention, the full lines showing the position of the cut-off when lowered and the dotted lines showing the position of the cut-off when turned to lie against the side of the pipe. Fig. 2 is a front view of the pipe. Fig. 3 is a detail perspective view of portions of the pipe and cut-off, together with one of the pivot fastenings and washers, the parts being separated. Fig. 4 is a horizontal section on the line 4-4 of Fig. 1. Fig. 5 is a detail sectional view of part of the pipe having the portions pressed outwardly therefrom to form the groove and the lower end of the cut-off, the latter being shown about to snap into the groove to interlock therewith. Fig. 6 is a view of the parts shown in Fig. 5 after the lower end of the cut-off has snapped into the groove. Fig. 7 is a horizontal section on the line 7-7 of Fig. 3.

Corresponding and like parts are referred to in the following description, and indicated in all the views of the drawing, by the same reference characters.

The pipe 1 is of sheet metal and may be of any length and diameter and is formed in a side with an opening 2 which is approximately of elliptical form. A groove 3 is formed in the rear side of the pipe 1 a short distance above the lower end of the opening 2, said groove being formed by pressing a

portion of the pipe outwardly. The groove 3 conforms approximately to the outline of the lower end of the opening 2 and is designed to receive the lower end of a cut-off 4 when the latter is turned into approximately horizontal position, thereby insuring a close joint between the parts as well as an interlocking of the lower end of the cut-off with the pipe so as to positively hold the cut-off in lowered position, as indicated by the full lines in Fig. 1.

Rounded portions 5 are formed at opposite sides of the opening 2 in line with the minor axis of the opening and correspond with rounded portions 6 at opposite sides of the cut-off 4, the rounded portions 5 and 6 overlapping and having registering openings to receive pivot fastenings 7. Washers 8 are mounted upon the outer ends of the pivot fastenings 7 and serve to strengthen the joint formed between the parts 5 and 6. The rounded portions 6 of the cut-off are placed against the inner sides of the rounded portions 5 of the pipe 1 and the lower ends of the side portions of the cut-off beyond the rounded portions 6 are arranged exterior to the pipe 1 to engage the outer sides thereof.

The cut-off 4 constitutes a spout which, when turned against the side of the pipe 1, closes the opening 2 thereof and which, when lowered into an approximately horizontal position, extends across the pipe 1 and directs the water laterally through the opening 2. The cut-off may be of any length and in transverse section is slightly greater than a semi-circle, whereby its edge portions embrace opposite sides of the pipe 1 and hold the cut-off in the position indicated by the dotted lines in Fig. 1. The lower or inner end of the cut-off 4 is made rounding to conform to the rear side of the pipe 1 and is adapted to spring into the groove 3 and interlock therewith so as to form a close joint and at the same time hold the cut-off in lowered position. The lower end of the cut-off has an inwardly deflected lip 9 which springs into the groove 3 and insures the formation of a close joint. This lip also serves to direct the water away from the opening 2 when the cut-off is closed against the side of the pipe 1. The lower portion of the cut-off is deflected inwardly, as indicated at 10, to receive the upper edge portion of the pipe bordering upon the lower end of the opening 2, thereby admitting of the cut-off

coming flush with the outer side of the pipe 1 bordering upon the lower end of the opening 2. A ring or finger piece 11 is fitted to the upper end of the cut-off to enable the upper end of the cut-off to be conveniently drawn outwardly and downwardly when it is required to lower the cut-off to deflect the water through the opening 2.

From the foregoing description, taken in connection with the accompanying drawing, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the device I now consider to be the embodiment thereof, I desire to have it understood that the device shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claims appended hereto.

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

25 1. In combination, a pipe having an opening in a side thereof and having a groove in

its rear side about in the plane of the lower end of the opening, formed by pressing a portion of the pipe outwardly therefrom, and a cut-off pivotally connected to the pipe at opposite sides of the opening and having its lower end constructed to spring into the said groove to form a close joint and hold the cut-off in lowered position.

2. In combination, a pipe having an opening in a side thereof and having a portion pressed laterally from the opposite side and conforming approximately to the outline of the lower end of the opening, and a cut-off having a portion inwardly deflected to form a lip which conforms to and is adapted to engage with the part pressed from the rear side of the pipe to form a close joint therewith and to hold the cut-off when turned to deflect the water laterally through the opening of the pipe.

In testimony whereof I affix my signature in presence of two witnesses.

PHILIP FATH.

Witnesses:

RAY HINSHILLWOOD,
LOUIS J. WEBER.