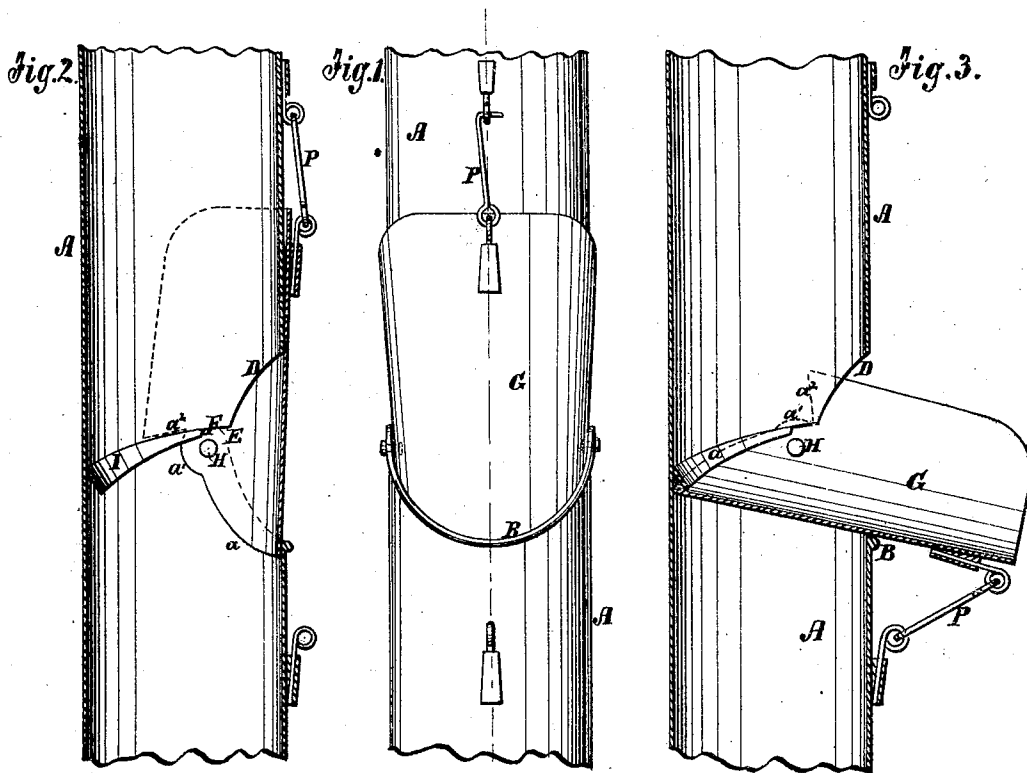


J. ABERCROMBIE & E. D. MINER.  
 Improvement in Rain-Water Cut-Offs.

No. 130,400.

Patented Aug. 13, 1872.



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# UNITED STATES PATENT OFFICE.

JOHN ABERCROMBIE AND ELIJAH D. MINER, OF MORRISANIA, NEW YORK.

## IMPROVEMENT IN RAIN-WATER CUT-OFFS.

Specification forming part of Letters Patent No. 130,400, dated August 13, 1872.

Specification describing a new and Improved Leader-Pipe, invented by JOHN ABERCROMBIE and ELIJAH DANIEL MINER, of Morrisania, in the county of Westchester and State of New York.

Our invention consists of a spout pivoted to a leader-pipe at a hole in the side of said pipe in such manner that it will swing up against the pipe, close the hole, and constitute a part of the side of the pipe when it is desired to have the water run straight down through the pipe to the cistern below, and when it is desired to shut the water off from the cistern and spout it out upon the ground or into a trough or the like, the said spout will swing down to a standing position, close the passage down the pipe, and open the one through the side. The inner end at this time closes up against a curved deflecting-plate fitted on the inside of the leader-pipe in such manner as to fit snugly into the upper side of the spout and make a tight joint between the said inner end of the spout and the side of the leader-pipe.

Figure 1 is a side elevation of a section of a leader-pipe with our spout attachment applied to it, the said attachment being closed up to let the water pass straight down. Fig. 2 is a section of Fig. 1 on the line  $xx$ . Fig. 3 is also a section on the line  $xx$ , but showing the spout turned down for closing the passage straight down and spouting the water out through the hole in the side of the leader.

Similar letters of reference indicate corresponding parts.

A represents a section of a leader-pipe which has a hole in one side, the lower wall of which is formed on the curved line B, the radius of which is about the same as that of the pipe, and the upper wall D is also on a curved line, but this need not be on any particular radius. Said lines meet at E, some distance short of

the center of the pipe, and on each side of the pipe a slit is cut from E to the center of the pipe or a little beyond, as shown at F. G is the spout, which consists of a short concave plate formed on the same radius as that of the leader-pipe, and being a little larger than a half of a section of the pipe divided lengthwise. The upper end is formed on the dotted line  $a a^1 a^2$ , seen in Figs. 2 and 3, which fits snugly against the inside of the leader-pipe, opposite the hole where said pipe, being pivoted to the leader H, is turned down, as shown in Fig. 3, and fits in the slits F to allow the parts at  $a^1$  to lap the sides of the leader-pipe at the bottom of the notch forming the hole, so as to allow of pivoting the parts together in the manner shown; also to allow of swinging said spout up to the position represented in Figs. 1 and 2, or down, as in Fig. 3. When closed up the inner end of the spout laps below the wall B of the hole and prevents the water from escaping, and the upper end laps the leader on the outside above the hole and prevents the water from escaping thereat. I is a deflecting-plate fitted on the inside of the leader-pipe in such manner that the inner end of the spout will swing under it when adjusted to spout the water out, and the lower edge of said deflecting-plate fits upon the inside of spout G snugly and makes a tight joint.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The pipe A, having recess with curved walls B D and slots F, combined with deflectors I and a spout G pivoted at H, as and for the purpose described.

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