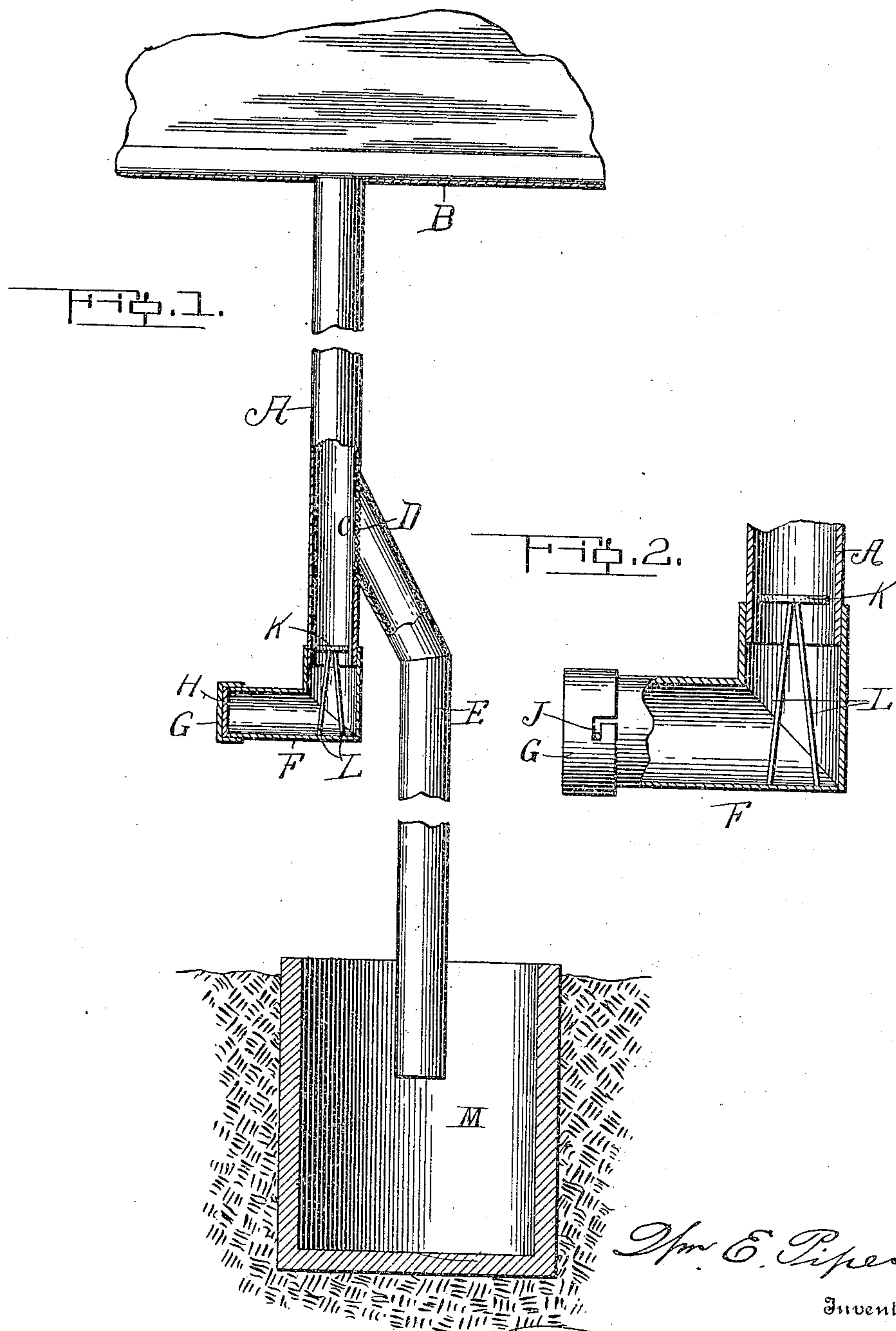


No. 808,477.

PATENTED DEC. 26, 1905.

W. E. PIPER.
DRAIN PIPE STRAINER AND CUT-OFF.

APPLICATION FILED MAY 26, 1905.



Wm. E. Piper,
Inventor

Witnesses
J. H. Rogers
W. E. Moore

By *Wm. E. Moore*
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM ELLERY PIPER, OF UNION STAR, MISSOURI.

DRAIN-PIPE STRAINER AND CUT-OFF.

No. 808,477.

Specification of Letters Patent.

Patented Dec. 26, 1905.

Application filed May 26, 1905. Serial No. 262,361.

To all whom it may concern:

Be it known that I, WILLIAM ELLERY PIPER, a citizen of the United States, residing at Union Star, in the county of Dekalb and State of Missouri, have invented certain new and useful Improvements in Drain-Pipe Strainers and Cut - Offs, of which the following is a specification.

My invention relates to improvements in a drain-pipe strainer and cut-off; and one object of my invention is the provision of a strainer and cut-off which may be readily applied to any existing system of drainage for conducting water from the roof-gutter to the cistern.

Another object of my invention is the provision of a strainer and cut-off which will effectively catch and retain all filth—such as leaves, bugs, or foreign matter—which may be washed into the pipe, which may be readily cleaned and kept in a sanitary condition, and which is cheap, simple, and durable in construction.

With these objects in view my invention consists of a device of the character and for the purpose stated embodying novel features of construction and combination of parts substantially as disclosed herein.

Figure 1 is a central sectional view of a complete system embodying my invention, and Fig. 2 is an enlarged detail view of the trap and cut-off.

In the drawings the letter A designates the upright drain - pipe, which communicates with the gutter B, suitably mounted to collect the rain-water falling upon a house or other structure. This drain-pipe or down-spout has an opening C in its side, and over this opening is secured the strainer D, and the outlet-pipe E is secured to the drain-pipe at an angle, so as to entirely cover the strainer. I have shown this pipe as rigidly secured to the drain-pipe; but it may also be detachably connected thereto. On the lower end of the drain-pipe is secured the elbow forming the trap portion F, which is provided on the end with a water-tight sleeve or cap G, having the washer H therein. This cap is secured on the elbow by means of the bayonet-and-slot connections J, which allows the cap to be easily removed and provides a secure and water-tight joint.

The deflecting-plate K, of slightly less diameter than the pipe and provided with standards L, is placed in the pipe with the standards resting on the bottom of the elbow, and the water falling down the pipe strikes the plate and is deflected, so that the sediment in the bottom of the elbow is not disturbed by the falling water.

The strainer D may be either of wire or punched from sheet metal and may be fine or coarse, as occasion demands. The trap-elbow is preferably placed near the ground, so as to be within easy reach for examination or operation.

In practice when the water first enters the vertical drain - pipe the accumulation is washed therein and settles in the elbow at the bottom of the pipe, and as the water rises it flows through the strainer and into the pipe E, which conducts it to the cistern M.

To clean or inspect the trap, it is simply necessary to give the cap a slight twist, which releases it from the elbow, and the accumulated refuse in the elbow may then be easily and readily removed. When it is desired to cut off the flow of water into the cistern, it is simply necessary to open the trap, as described, and the water may then be conducted off by any well-known system of surface drainage.

I claim—

1. The combination with an upright pipe, of an elbow connection at the lower end of said pipe, a cap secured thereto by a bayonet-catch, a horizontal deflecting-plate supported on standards in said pipe, and an outlet above said deflecting-plate.

2. The combination with an upright pipe having detachable closing means at its lower end, a horizontal deflecting-plate mounted on standards therein, and an outlet-pipe connected to the upright pipe above the deflector-plate and a screen at the opening of said outlet-pipe.

3. The combination with an upright pipe, an elbow on the lower end of said pipe provided with detachable closing means, a horizontal deflector in said pipe, and an outlet provided with a screen above said deflecting means.

4. The combination with an upright pipe, of an elbow connection at the lower end of

said pipe, a cap or sleeve detachably secured
on the end of said elbow by a bayonet-and-
slot catch, a deflecting-plate mounted on
standards in said pipe, an outlet-pipe con-
5 nected to the upright pipe above the deflec-
tor, and a screen at the opening of said out-
let-pipe.

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

WILLIAM ELLERY PIPER.

Witnesses:

D. O. ROBERTSON,
THOMAS WILKERSON.