G. J. DEHN.

CAP FOR VENT PIPES.

APPLICATION FILED NOV. 22, 1907.

912,823. Patented Feb. 16, 1909.

Fig. 1.

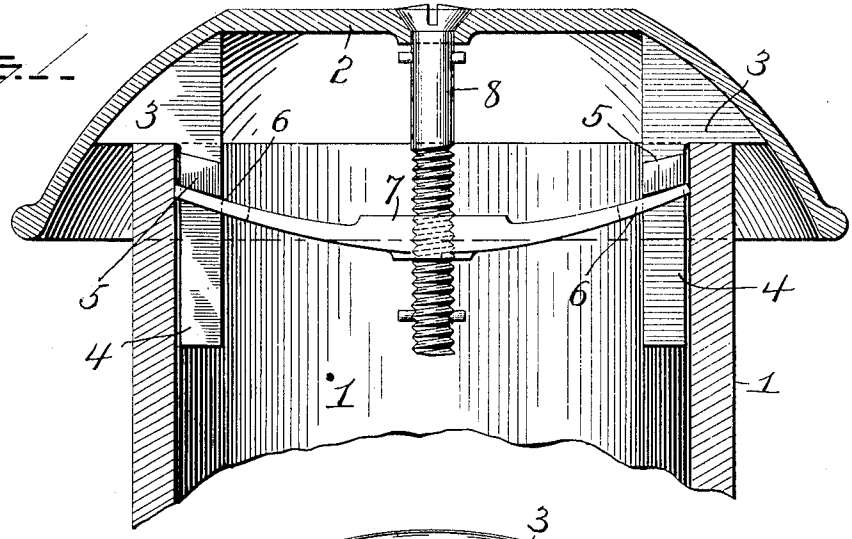


Fig. 2.

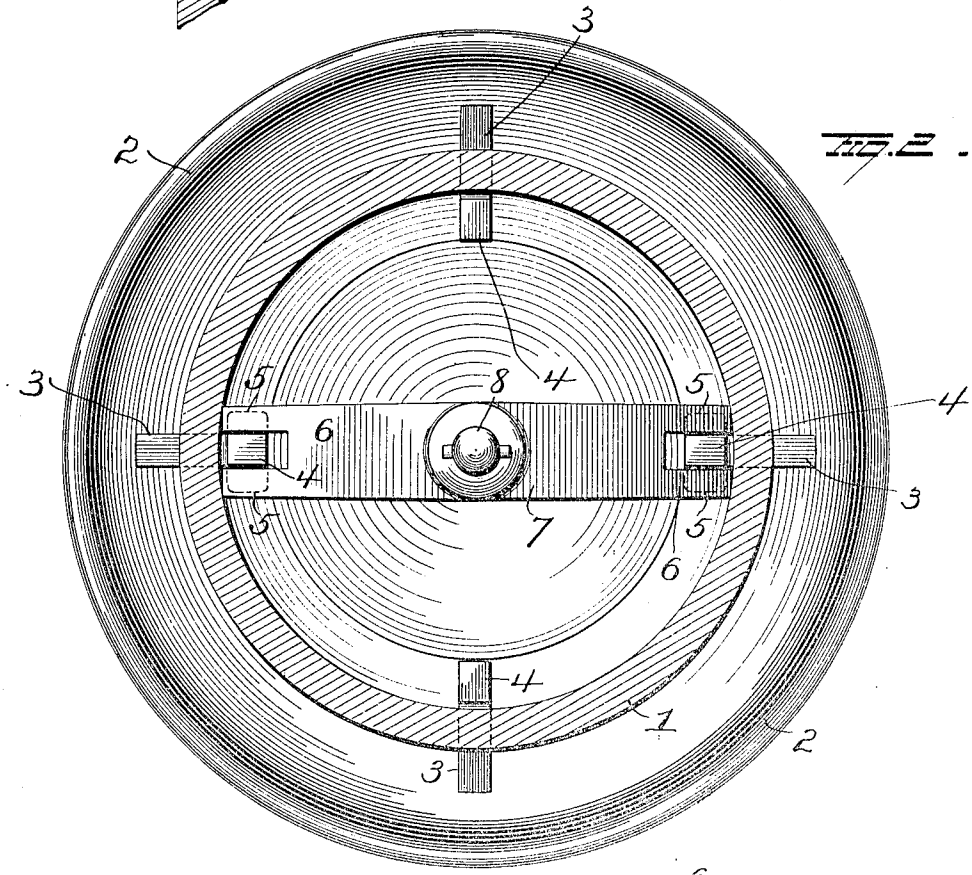
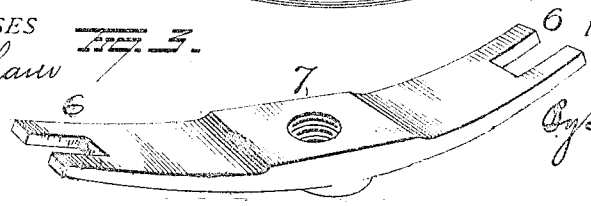


Fig. 3.



WITNESSES

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GEORGE J. DEHN, OF CHICAGO, ILLINOIS.

CAP FOR VENT-PIPES.

No. 912,823. Specification of Letters Patent. Patented Feb. 16, 1909.

Application filed November 22, 1907. Serial No. 403,387.

To all whom it may concern:

Be it known that I, GEORGE J. DEHN, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Caps for Vent-Pipes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in caps for vent pipes, the object being to provide simple and effective means for detachably securing the cap to the free open end of the pipe, thus covering and protecting the pipe, and at the same time providing for the free passage of air to and from the same.

With this end in view my invention consists in the parts and combinations of parts and in the details of construction, as will be more fully explained and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in vertical section through the upper end of a pipe and showing my improvement in position thereon. Fig. 2 is a view of the under or concave face of the cap and Fig. 3 is a view in perspective of the locking saddle.

1 represents a pipe, which may be a vent from a sewer or closet, and which must be protected against the entrance of obstructions from the top and at the same time permit of the free entrance and exit of air.

2 is the cap preferably concavo-convex in shape, and of a size to overlap the upper open end of the pipe. This cap is provided on its concave or lower face with a plurality of integral lugs 3, forming seats which rest on the upper edge of the pipe and support the cap in a position over, but removed from the pipe, so as to provide free space for the entrance and exit of air. These lugs 3, preferably four in number, are located equal distances apart, and two, or all of them are provided with downwardly projecting legs 4, which enter the open upper end of the pipe and operate to hold the cap centrally over the pipe, the cap, as shown, being of greater diameter than the pipe, and the lugs or seats 3 being so located with relation to the edge of the cap, as to bring said lower edge in a plane below the upper end of the pipe, thus fully protecting the upper end of the pipe, and at the same time providing for free ventilation. Two of the legs 4 are arranged diametrically opposite, and each is provided with laterally projecting shoulders 5 against which the bifurcated ends 6 of the yielding saddle 7 bear, the bifurcated ends straddling the legs carrying shoulders 5. The lower faces of the shoulders 5 against which the ends of the saddle 7 bear, are in a plane below the top of the pipe 1, so that when the saddle is straightened out and thus elongated as will be explained, the ends thereof will engage the inner surface of the pipe and lock the cap 2 thereto. This saddle which is made of metal, is curved or bow shaped longitudinally, and is thicker at its center than at its ends, the latter being sufficiently thin and flexible to give or yield when the central portion thereof is forced upwardly by the screw 8. The head of the screw 8 is mounted in a countersunk hole in the center of the cap, and passes downwardly through a threaded opening in the center of the saddle, pins being provided for locking the screw to the cap and the saddle to the screw.

The ends of the saddle 7 are bifurcated so as to straddle the legs 4 and bear against the shoulder 5 on opposite sides of the legs 4, hence it will be seen, that, by turning the screw 8 in the proper direction, the central portion of the saddle will be drawn upwardly, while upward movement of the ends thereof will be prevented by the shoulders 5, thus causing the saddle to straighten out and elongate and forcing the free ends thereof into contact with the inner surface of the pipe 1. This contact between the ends of the saddle and the pipe locks the cap 2 in place. By turning the screw in the opposite direction the cap will be released.

The locking pin carried by the screw for holding the saddle in place, is so located with relation to the lower ends of the legs 4, that the bifurcated ends of the saddle cannot be moved to a position to be disengaged from said legs hence after the saddle has been properly placed and locked on the screw by the securing pin, it cannot be lost by dropping into pipe 1 nor can it be disengaged from the legs 4.

These caps and saddles may be of various sizes to fit the different sizes of pipe used, and the parts may be of different constructions and shapes from those described hence I would have it understood that I do not confine myself to the exact details shown but consider myself at liberty to make such changes and alterations as fairly come

within the spirit and scope of my invention.

Having fully described my invention what I claim as new and desire to secure by Letters-Patent, is:—

1. As a new article of manufacture, a cover for vent pipes comprising a cap provided with seats adapted to rest on the open upper end of a pipe and with legs projecting into the pipe, the said legs having shoulders, a screw carried by the cap and locked thereto against longitudinal movement, a flexible saddle mounted on the screw and having a sliding connection with the legs, the ends of said saddle bearing against the shoulders on the legs, and means for limiting the downward movement of the saddle on the screw, whereby the saddle is prevented from disengagement with the legs.

2. As a new article of manufacture, a cover for vent pipes comprising a cap provided with seats adapted to rest on the open upper end of a pipe and with legs projecting into the pipe, the said legs having shoulders, a screw carried by the cap and locked thereto against longitudinal movement, a flexible saddle carried by the screw and having a sliding connection with the legs, the ends of said saddle bearing against the shoulders on the legs, and means for limiting the downward movement of the saddle on the screw, whereby the saddle is prevented from disengagement with the legs.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

GEORGE J. DEHN.

Witnesses:
GEO. P. MCCLELLAND,
FRANK WARCH.