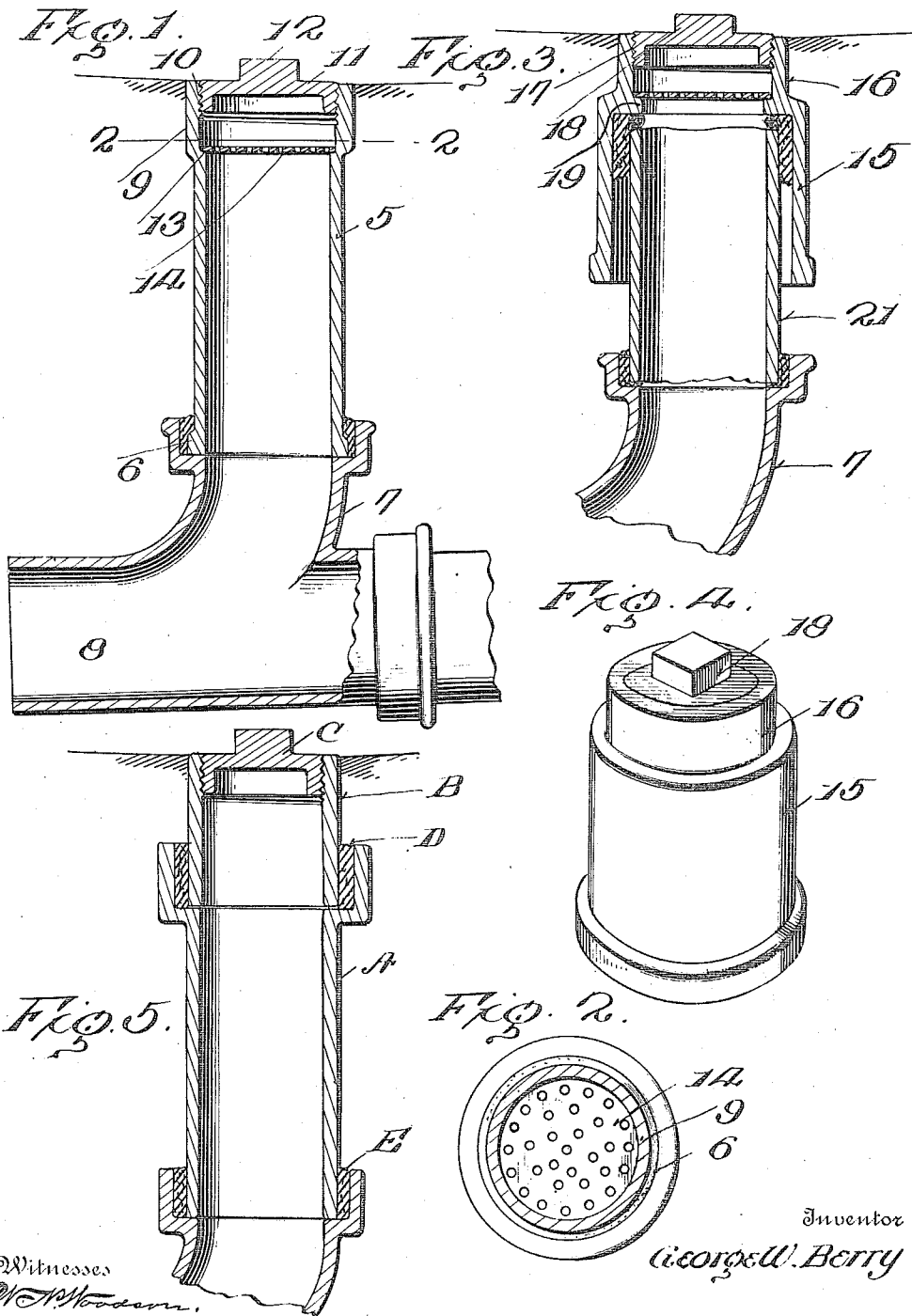


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DRAIN PIPE FITTING.
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957,487.

Patented May 10, 1910.



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UNITED STATES PATENT OFFICE.

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DRAIN-PIPE FITTING.

957,487.

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To all whom it may concern:

Be it known that I, GEORGE W. BERRY, citizen of the United States, residing at Bayonne, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Drain-Pipe Fittings, of which the following is a specification.

This invention relates to sewers and more particularly to an outlet pipe or fitting for conducting the surface water from a cellar to the drain or waste pipe.

Heretofore, the threaded plugs or closures of outlet pipes have been secured to a short pipe section and, the latter seated in the flanged end or hub of the outlet pipe, with the result that two calkings were necessary to secure the outlet pipe in position and prevent leakage, one of said calkings being disposed where the pipe section of the threaded plug entered the outlet pipe and another at the point of attachment to the lower end of said outlet pipe to the drain or soil pipe. Moreover, as the drain or soil pipe is usually inclined in the direction of the sewer main to insure proper drainage, the outlet pipes which are at present made in standard length, must be lengthened or shortened according to their point of attachment to the soil pipe so that the upper ends of said outlet pipe will not project above the surface of the ground or cellar. Where the outlet pipes are shortened, the cut or severed portions thereof are usually discarded as worthless, owing to the fact that they have no socket or flange thereon to receive the threaded plug section.

The object of the present invention is to obviate these objectionable features and to provide an outlet pipe, the construction of which is such as to necessitate but a single calking to effect the attachment of the outlet pipe and threaded plug to the drain or soil pipe, while at the same time permitting the cut or discarded sections of the outlet pipe to be utilized in the construction of relatively short fittings, thus effecting a material saving in pipe and consequently reducing the cost of installation.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a vertical sectional view of an outlet pipe constructed in accordance with my invention; Fig. 2 is a transverse sectional view taken on the line 2—2 of Fig. 1; Fig. 3 is a vertical sectional view showing the outlet pipe for utilizing short sections; Fig. 4 is a perspective view of the outlet pipe shown in Fig. 3 detached; Fig. 5 is a vertical sectional view illustrating the old or present form of outlet pipe.

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

The old construction of outlet pipe or fitting is illustrated in Fig. 5 of the drawing in which A indicates the outlet pipe, B the socket section and C the threaded plug carried by said socket section, the calking being inserted at the points D, and E.

The present invention is shown in Figs. 1 to 4 inclusive, and comprises an outlet pipe or fitting 5 preferably cylindrical in shape, as shown, and having its lower end provided with an exterior collar 6 adapted to enter the elbow 7 of the drain or soil pipe indicated at 8.

The upper end of the outlet pipe 5 is provided with an annular enlargement or flanged portion 9, the interior walls of which are threaded at 10 for engagement with a correspondingly threaded plug 11, the latter forming a closure for the upper end of the outlet pipe 5, as shown. The upper surface of the plug 11 is preferably provided with a square portion 12 so that the same may be readily gripped with a wrench or other suitable tool when removing the plug to permit drainage of the surface water.

The interior walls of the outlet pipe 5 are formed with an annular shoulder 13, the latter being spaced from the threads 10 and adapted to receive and support a strainer 14. The strainer 14 is preferably in the form of a circular disk having a plurality of perforations formed therein, the diameter of the strainer or disk being slightly less than the diameter of the plug 11 so as to permit

said strainer to be readily inserted through the upper end of the outlet pipe when the plug is removed.

By spacing the shoulder 13 from the threads 10, the plug 11 may be readily screwed in position on the outlet pipe without danger of the lower edge of the plug coming in contact with the screen and wedging the latter to its seat.

As the drains or soil pipes 8 are laid at different distances below the surface of the ground and are always inclined in the direction of the sewer main, it is necessary to cut or sever some of the outlet pipes 5 so as to prevent the upper ends of said outlet pipes from projecting above the surface of the ground or cellar. In order to utilize these cut or discarded outlet pipe sections, an outlet pipe of the form shown in Fig. 4 of the drawings is provided and used when the distance between the surface of the ground and the drain or soil pipe is relatively short. The outlet pipe used for this purpose comprises a substantially cylindrical body portion 15 having its upper end reduced at 16 and interiorly threaded at 17 for engagement with the plug 18, there being a shoulder 19 extending inwardly from the reduced portion 16 and adapted to receive and support a strainer 20. In using this form of the device, the cut or severed portion of the outlet pipe indicated at 21 in Fig. 3, is inserted in the elbow 7 of the soil pipe or drain 8, after which the outlet or fitting 15 is positioned over the upper end of said section 21 and securely calked so as to prevent leakage. Thus it will be seen that by means of the construction shown in Figs. 1 and 2 of the drawings, the outlet pipe or fitting 5 may be secured to the drain or soil pipe with a single calking, while by the construction shown in Figs. 3 and 4 of the drawings, the cut or discarded sections of the outlet pipes 5 may be utilized, thus effecting a material saving in pipe and reducing the cost of installation.

Having thus described the invention, what is claimed as new is:

1. The combination with a soil pipe, of an outlet pipe having its lower end communicating with the interior of the soil pipe

and provided with an exterior collar, the upper end of said outlet pipe being provided with interior threads and having an inwardly extending shoulder formed thereon and spaced from said threads, a strainer resting on said shoulder, and a plug engaging the threads on the outlet pipe and forming a closure for the upper end of the latter, said plug being provided with a square head.

2. The combination with a soil pipe having an elbow, of a pipe section seated in said elbow, an outlet pipe resting on said pipe section and having its upper end interiorly threaded, and a plug engaging the threads on the outlet pipe and forming a closure for the upper end thereof.

3. The combination with a soil pipe having an elbow, of a pipe section seated in said elbow, an outlet pipe engaging the pipe section and having its upper end reduced and provided with interior threads, there being a shoulder extending inwardly from the outlet pipe and spaced from the threads, a strainer resting on the shoulder, and a plug engaging the threads and forming a closure for the upper end of said outlet pipe.

4. An outlet pipe comprising a cylindrical body portion having its interior walls threaded at the upper end thereof and provided with an inwardly extending shoulder spaced from said threads, a strainer resting on said shoulder, and a plug engaging the threads and forming a closure for the upper end of the outlet pipe.

5. An outlet pipe comprising a cylindrical body portion having its upper end reduced and provided with interior threads, there being a shoulder extending inwardly from the reduced portion of the outlet pipe and spaced from said threads, a perforated disk resting on said shoulder and constituting a strainer, and a plug engaging the threads and forming a closure for the upper end of said outlet pipe.

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

GEORGE W. BERRY. [L. s.]

Witnesses:

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