To all whom it may concern:

Be it known that we, LEONIDAS B. DOZIER and EDGAR L. STALLINGS, citizens of the United States, and residents of Columbia, Richland county, South Carolina, have invented certain new and useful Improvements in Soil-Pipe Clean-Out Fittings; and we do declare the following to be a full and clear description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying figures, and letters thereon, which form a part of this specification.

Our present invention has for its object to provide an improved fitting for soil or waste pipes which may be produced cheaply and by the use of which a material saving in cost, labor, and annoyance may be effected both in installing the fitting and in freeing the sewer or soil pipe from stoppage and obstructions.

It has heretofore been customary to provide a means whereby the soil-pipe could be cleaned or obstructions removed through an opening provided at some suitable point; but integral fittings have not been made with the special object of providing an opening which may be readily closed by an easily-removable closure and located in a branch projection through which access could be had to the main pipe. In accordance with the present invention a fitting is provided having a branch or projection of the same size as the main pipe, the portion of the main pipe and branch being cast integrally, and the branch is made relatively short and provided at its extremity with a screw-plug or closure which will seat against a suitable packing-ring to prevent egress of gases and emanations or other material contained in the soil-pipe.

Reffering to the accompanying drawings, Figure 1 is an enlarged view of one of the fittings, the same being shown in section. Fig. 2 is a perspective view of a slightly-modified form of fitting.

Reffering to the drawings, it will be seen that the soil-pipe X' has an extension or branch Z', forming a clean-out opening, said opening being preferably in line with and of a size corresponding to the internal diameter of the main portion of the soil-pipe. At its extremity or just within its mouth it is provided with screw-threads for the accommodation of a screw-plug Y', having a suitable projection for the application of a wrench thereto. It will be particularly noted that the branch constituting the clean-out opening is relatively short, and consequently immediate access may be had to the main pipe; but when the opening is closed there is no projection such as would tend to cause the lodgment of obstructing matter or such as would reduce the cross-sectional area of the main pipe at any point, and as a consequence, while free access may be had to the soil-pipe through said opening, the provision of the opening does not in any wise detract from the efficiency of the pipe itself.

In Fig. 2 a fitting is shown in which the clean-out opening is in the Y branch of the fitting instead of in the straight section or extension thereof. In Fig. 2 the screw-plug is adapted to fit the opening B' and to seat therein, as previously described in connection with Fig. 1.

What we claim as new is—

1. A fitting for soil or waste pipes formed in an integral casting and having a short branch provided with internal threads and a screw-plug adapted to enter and close said branch, the internal diameter of said branch being substantially equal to the internal diameter of the main pipe; substantially as described.

2. As a new article of manufacture, an interchangeable soil-pipe clean-out fitting for sewer-main, comprising a main body portion adapted at one end to connect to other fittings an opening or branch connection leading from an intermediate point in said body, a clean-out opening provided at the other end of said body portion which is of uniform internal diameter throughout, interior screw-threads in said clean-out end, and a plug-closure having screw-threaded engagement with the threads in said clean-out end, said latter end being adapted to connect with other fittings and form
an intermediate section of a continuation of
the main sewer-line when said closure shall
have been removed.

3. As a new article of manufacture, an in-
terchangeable soil-pipe clean-out fitting, com-
prising a body portion, a branch integral therewith, an extension integral with said
body portion, said extension extending in the
same direction and being of the same internal
diameter as said body portion and internally
screw-threaded, and a threaded closure re-
moveably secured to said extension.

4. As a new article of manufacture, an in-
terchangeable soil-pipe clean-out fitting, com-
prising a body portion, a branch integral therewith, an extension integral with said
body portion, said extension extending in the
same direction and of the same internal di-
ameter as said body portion, and a plug re-
moveably secured in said extension.

L. B. DOZIER.
E. L. STALLINGS.

Witnesses:
BENJAMIN GAUSE,
H. BEATTIE CARTER.