

March 29, 1927.

G. H. LANG

1,622,652

INLET BOX FOR DRAINS

Filed May 1, 1926

3 Sheets-Sheet 1

FIG. 1.

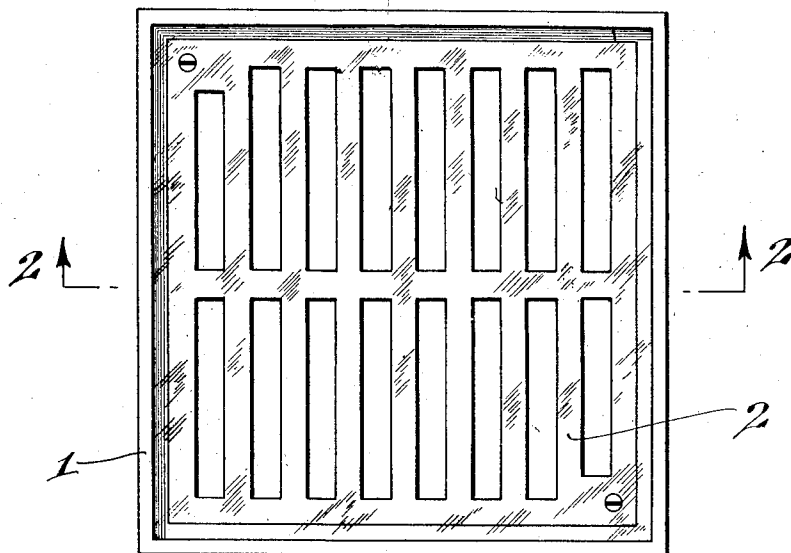
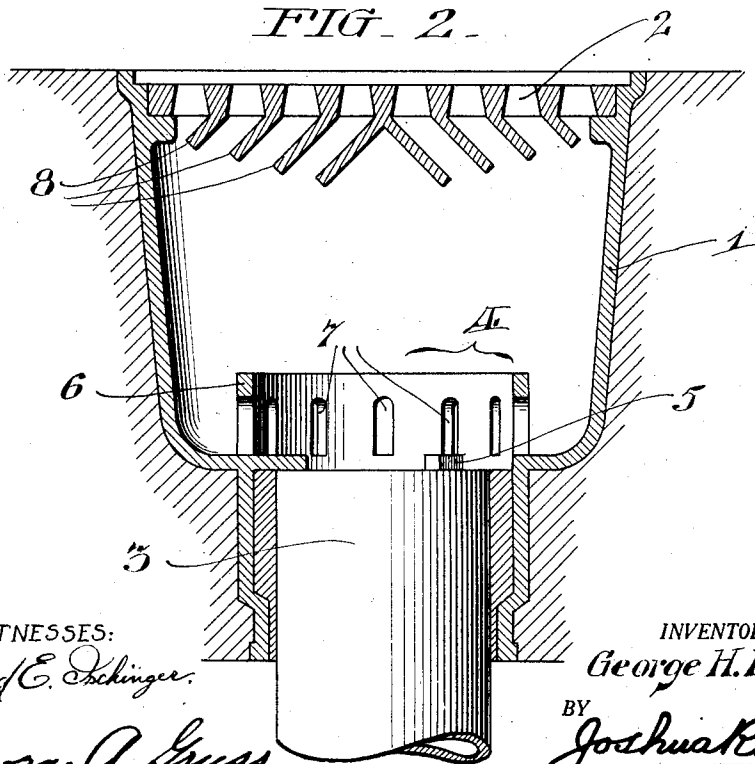


FIG. 2.



WITNESSES:

Alfred E. Schinger.

George A. Gross

INVENTOR:

George H. Lang,

BY

Joshua R. H. Tothe
ATTORNEY.

March 29, 1927.

G. H. LANG

1,622,652

INLET BOX FOR DRAINS

Filed May 1, 1926

3 Sheets-Sheet 2

FIG. 3.

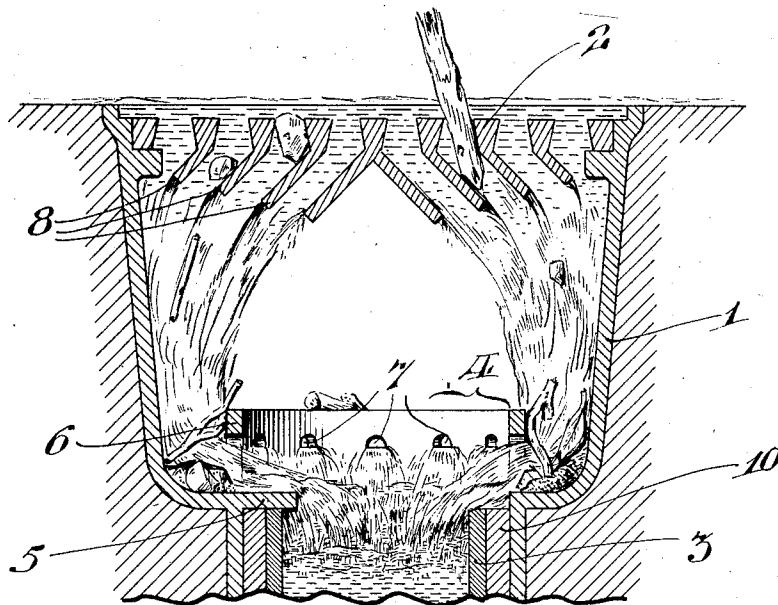
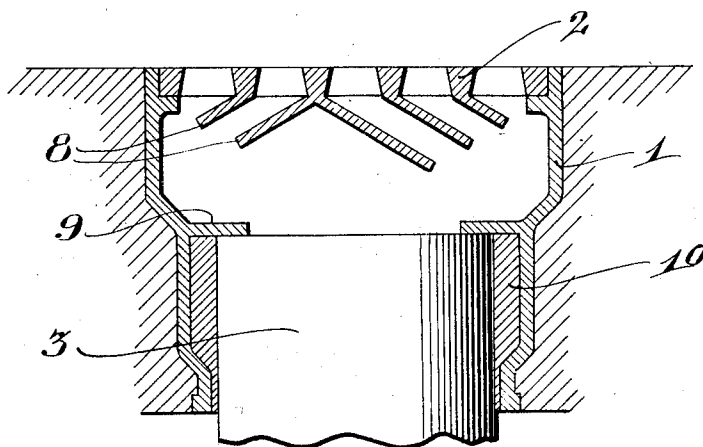


FIG. 4.



WITNESSES:

Alfred E. Ischinger
George A. Guss

INVENTOR:

George H. Lang,

BY

Joshua P. Hottel
ATTORNEY.

March 29, 1927.

1,622,652

G. H. LANG

INLET BOX FOR DRAINS

Filed May 1, 1926

3 Sheets-Sheet 3

FIG. 5.

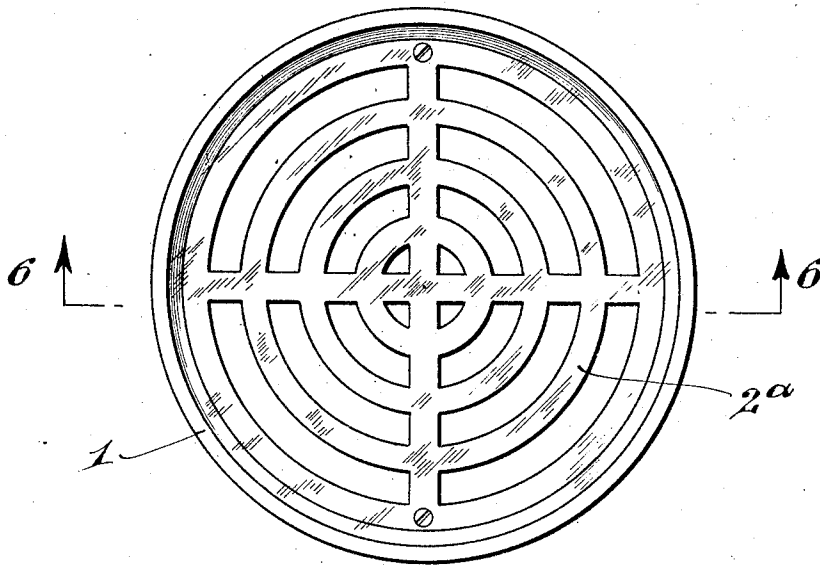
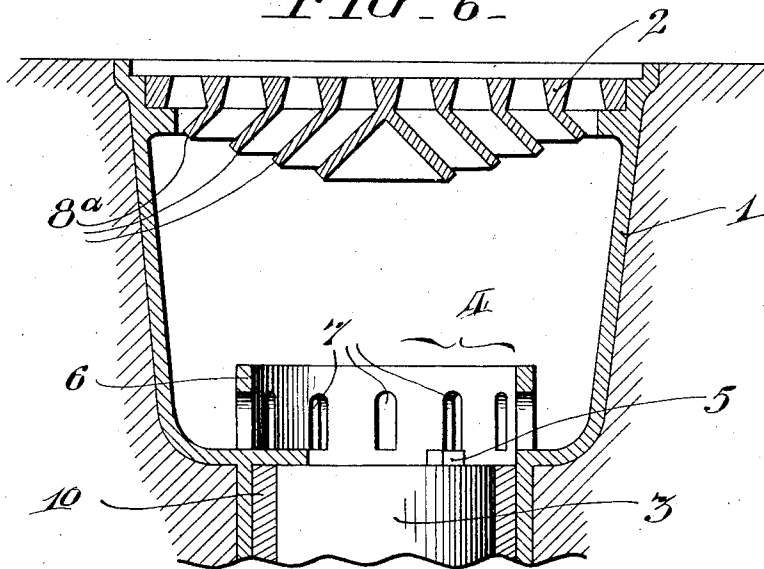


FIG. 6.



WITNESSES:

Alfred E. Schinger.
George A. Guss

INVENTOR:

George H. Lang,
BY
Joshua R. Hoff.
ATTORNEY

UNITED STATES PATENT OFFICE.

GEORGE H. LANG, OF PHILADELPHIA, PENNSYLVANIA.

INLET BOX FOR DRAINS.

Application filed May 1, 1926. Serial No. 106,000.

My invention relates to inlet boxes for drains. As usually constructed the inlet box is provided with a grate of comparatively coarse mesh which permits passage of water and more or less solid matter all of which goes into the drain pipe which is liable to be clogged by the solids. Clearing a clogged drain is a troublesome and time consuming job.

10 The object of my invention is to provide means for trapping the objectionable solids which pass through the grate and retaining them in the inlet box from which they may be readily removed.

15 These objects, and other advantageous ends which will be described hereinafter, I attain in the following manner, reference being had to the accompanying drawings in which—

20 Figure 1 is a plan view of a drain inlet box embodying my invention,

Figure 2 a section on line 2—2 of Figure 1,

25 Figure 3 a sectional view but showing the path of the water and the solids when the grate is in use,

Figure 4 a vertical central section showing a modified form of the invention.

30 Figure 5 a plan view of another modification, and

Figure 6 a section on line 6—6 of Figure 5.

Referring to the drawings, the numeral 1 indicates the wall of a drain inlet box, 2 a grate covering the inlet and 3 the drain pipe. The inlet box is provided at its bottom with a central opening 4 communicating with the drain pipe and with lugs 5 projecting inwardly from the wall of the opening and over the upper edge of the drain pipe. A sleeve 6 of somewhat greater diameter than the drain pipe surrounds opening 4 and extends downwardly and upwardly from the bottom of the inlet box. The upwardly extending part of the sleeve is provided with a series of radial slots 7, the area of the slots being less than that of the openings in grate 2 so that the slotted upper part of the sleeve serves as a supplemental grate of finer mesh than that of the upper grate. The interior diameter of the inlet box is of substantially greater diameter than that of sleeve 6 so that there is a space between the wall of the box and the supplemental grate. A series of baffles 8, integral with grate 2, depend therefrom and are disposed

at an angle which will deflect the incoming water and the suspended matter toward the peripheral wall of the inlet box and into the space surrounding the supplemental grate. 60 If the inlet box is substantially rectangular, the baffles on one side of a central line through the grate extend in one direction and those on the other side extend in reverse direction. If the inlet box is circular, 65 the baffles are arranged in a series of concentric circles each baffle extending toward the periphery of the inlet box. The water flows through the supplemental grate into the drain pipe but foreign substances which have passed through the openings in the upper grate are arrested and held in the bottom of the box from which they may be removed from time to time, access thereto being had by removing the upper grate. 75

In the modification shown in Figure 4, the supplemental grate is omitted and the box is comparatively shallow. This form is designed more particularly for arresting the passage of sticks or other objects of some length. Sticks are usually drawn through the grate with their ends downward. If a stick passes through the angular passage formed by two adjacent grate bars and baffles, its end engages the wall of the inlet box or an annular ledge 9 which extends over the upper edge of the drain pipe and the stick is held by the ledge and a baffle. 80

The form shown in Figures 5 and 6 differs from that shown in Figures 1 and 2 by employment of a circular inlet box and grate and the arrangement of the baffles in concentric circles before referred to. I have accordingly indicated the circular grate as 2^a and the baffles as 8^a. 85

The space between the drain pipe and the lower part of sleeve 6 is filled by a packing 10 to provide a water tight joint.

While I have described my invention as taking a particular form, it will be understood that the various parts may be changed without departing from the spirit thereof, and hence I do not limit myself to the precise construction set forth, but consider that I am at liberty to make such changes and alterations as fairly come within the scope of the appended claims. 100

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:— 105

1. An inlet box for drains including a box of larger diameter than the drain pipe, 110

a grate adapted to be seated upon the box, and an inclined baffle depending from each grate bar and adapted to direct the flow of the incoming water toward the periphery of the box.

2. An inlet box for drains including a box of larger diameter than the drain pipe, the box having a sleeve extending above the end of the drain and having a series of slots therein for passage of water therethrough, a grate adapted to be seated upon the box, and an inclined baffle depending from each grate bar and adapted to direct the flow of the incoming water toward the periphery of the box.

3. An inlet box for drains including a box of larger diameter than the drain pipe, the box having a sleeve extending above and below the upper end of the drain pipe and adapted to be seated thereon, the upper part of the sleeve having a series of slots therein

for passage of water therethrough, and a grate adapted to be seated upon the box and provided with inclined baffles adapted to direct the flow of the incoming water toward the periphery of the box.

4. An inlet box for drains including a box of larger diameter than the drain pipe, the box having a sleeve extending above and below the upper end of the drain pipe and a series of inwardly extending lugs adapted to be seated upon the drain pipe, the upper part of the sleeve having a series of slots therein for passage of water therethrough, and a grate adapted to be seated upon the box and provided with inclined baffles adapted to direct the flow of the incoming water toward the periphery of the box.

In testimony whereof I have signed my name to this specification.

GEORGE H. LANG.