

L. BERWANGER.
STRAINER FOR SEWER TRAPS.
APPLICATION FILED MAR. 19, 1909.

951,795.

Patented Mar. 15, 1910.

FIG. 1.

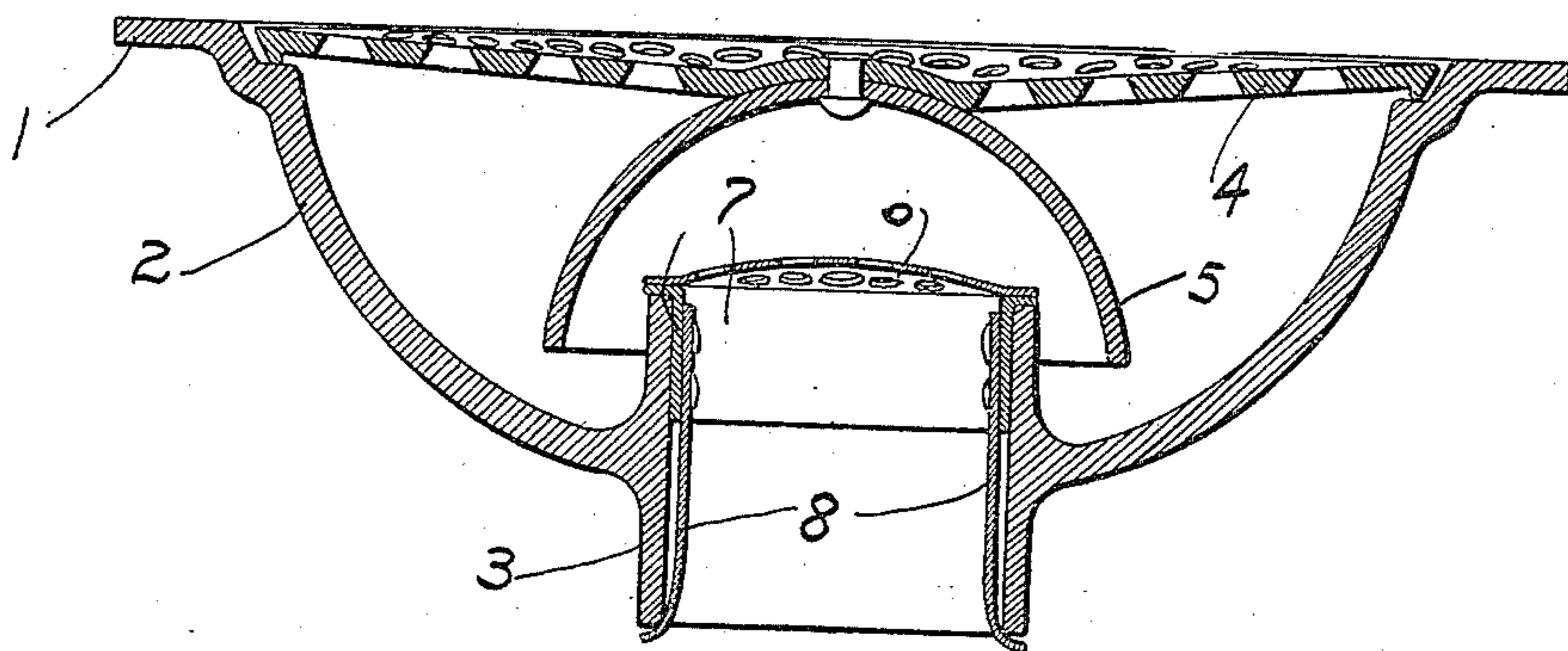
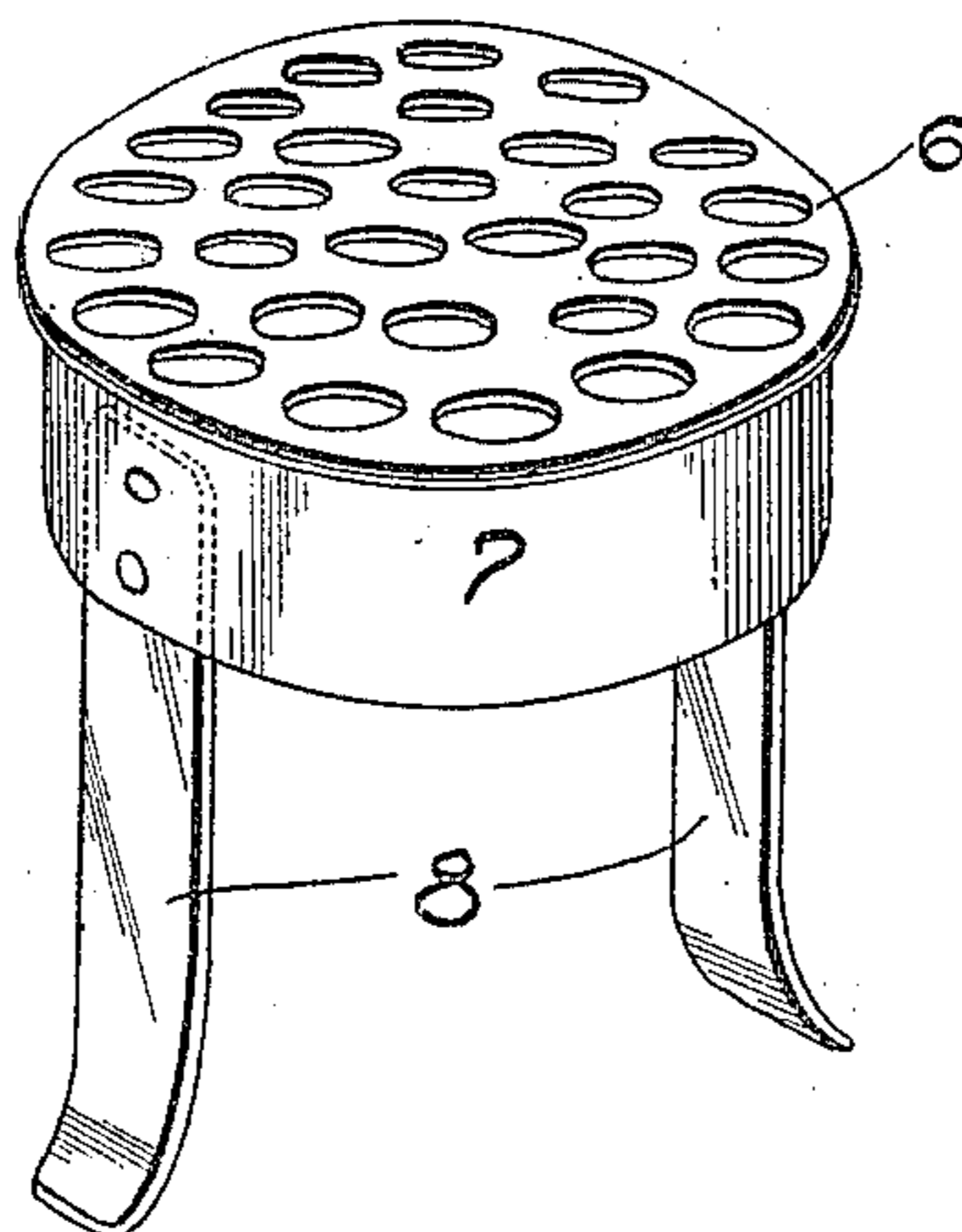


FIG. 2.



WITNESSES
H. J. Janus.
Elmore Clark.

INVENTOR
LOUIS BERWANGER
BY *J. R. Cornwall* ATT'Y.

UNITED STATES PATENT OFFICE.

LOUIS BERWANGER, OF ST. LOUIS, MISSOURI.

STRAINER FOR SEWER-TRAPS.

951,795.

Specification of Letters Patent. Patented Mar. 15, 1910.

Application filed March 19, 1909. Serial No. 484,409.

To all whom it may concern:

Be it known that I, LOUIS BERWANGER, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Strainers for Sewer-Traps, of which the following is a full, clear, and exact description, 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 drawings, forming part of this specification, in which—

Figure 1 is a vertical sectional view through a sewer trap provided with my improved strainer. Fig. 2 is a detail view of the strainer.

This invention relates to a new and useful improvement in strainers for sewer traps, the object being to provide a trap with a strainer which, when introduced into position, cannot be removed except by the use of appropriate tools.

In the drawings I have illustrated an ordinary bell trap in which 1 indicates a casting having a bowl 2, above and below the bottom of which extends a cylinder 3, constituting a waste-pipe terminal, the lower portion of said cylinder being designed to enter the upper end of the waste-pipe.

4 indicates a removable strainer having a bell 5 secured to its under side, which bell extends around and below the upper edge of cylinder 3 constituting a water seal or trap which permits water, entering the bowl 2, to overflow into the cylinder 3, but prevents gases from the waste pipe from escaping through the water seal thus provided, into the bowl 2.

The trap above described is of well known construction, and is largely in use, particularly in area ways, basements, laundries, and other indoor waste pipe openings.

Frequently, where bell traps as above described are used, such, for instance, as in laundries, where large volumes of water are to be carried off, the strainer 4 to which the bell 5 is connected, is removed so as to give free access to the cylinder 3; the water will thus be conducted off more quickly. Sometimes, stockings, rags, or other articles not intended to enter the waste pipe, will be carried by the flow of water into the cylinder 3 with the result that the waste pipe is choked. These accidents are rendered possible by the removal of the strainer.

My invention contemplates the use of a

strainer which is removable only by the use of special tools, which strainer may be inserted in the cylinder 3. My invention, therefore, is capable of being used in connection with existing forms of bell traps, and my improved strainer can readily be introduced into position and used in bell traps which are installed and in operation.

6 indicates a strainer having a marginal flange 7 at whose upper edge is a shoulder designed to rest upon the upper edge of cylinder 3.

8 are yielding jaws secured to the flange 7 and whose lower ends are bent or flared outwardly so as to engage under the lower end of cylinder 3. When my improved strainer is inserted in position the jaws 8 are sprung inwardly so as to pass through the cylinder 3, the strainer being then forced home, said home position being determined when the outwardly bent ends of the jaws engage the lower end of cylinder 3. When the parts are in this position, which is shown in Fig. 1, it is possible to remove the strainer from above only by the use of a special tool, preferably one in the form of a spanner wrench having hooks on its two jaws which pass through perforations in opposite sides of the strainer. The jaws 8 are strong enough to hold the strainer in position and prevent its removal by the application of ordinary power. Furthermore, there are no hand-or finger-holds by which a person can remove the strainer.

By the use of my improvement, it is practically impossible for a person not provided with the proper tools to remove the strainer 7 and consequently the strainer 4 and its bell 5 can be removed to permit the free entry of water into the bowl 2, but no particles of such size as would tend to choke the waste pipe can enter the cylinder 3.

I am aware that minor changes in the construction, arrangement and combination of the several parts of my device can be made and substituted for those herein shown and described, without in the least departing from the nature and principle of my invention.

Having thus described my invention, what I claim is:

1. The herein-described strainer for sewer traps, comprising a perforated strainer, a flange depending from the under side of the strainer, there being a shoulder between said flange and the edge of the strainer, and

yielding jaws carried by and depending from the flange, the lower ends of which jaws are bent outwardly.

2. The herein-described strainer for sewer traps, comprising a perforated plate, an annular flange depending from the under side thereof, and a pair of resilient jaws depending from said flange.

3. The herein-described strainer for sewer traps, comprising a perforated plate, an annular flange on the under side of said plate, a pair of oppositely disposed yielding jaws depending from said flange, and the lower ends of which jaws are bent outward.

4. The herein-described strainer for sewer traps comprising a perforated plate, a flange fixed to the under side of said plate and depending therefrom, which flange is arranged

a short distance inside the edge of said plate and a pair of yielding jaws carried by and depending from the flange.

5. The herein-described strainer for sewer traps comprising a perforated plate, a flange fixed to the under side of said plate and depending therefrom, which flange is arranged a short distance inside the edge of said plate, a pair of yielding jaws carried by and depending from the flange, and the lower ends of which jaws are bent outward.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this 17th day of March, 1909.

LOUIS BERWANGER.

Witnesses:

F. R. CORNWALL,
LENORE CLARK.