3,445,973
REMOVABLE COVER FOR DRAIN FIXTURE
Robert E. Stone, 708 W. 24th St., Billings, Mont. 59102
Filed Feb. 1, 1967, Ser. No. 613,356
Int. Cl. E03g 21/24; E03f 5/06; A47k 1/14
U.S. Cl. 52—173
2 Claims

ABSTRACT OF THE DISCLOSURE

A cover plate for protecting the grill plate of a drain fixture during the pouring of a concrete floor. The cover plate has a lower face which is congruent with the area presented by the end of the drainage fixture and is secured thereto for the duration of the construction process by the same retention screws available to secure grill plate to the upper end of the fixture.

This invention relates to a cover plate for a drainage fixture and more particularly relates to a temporary protective cover plate for a drainage fixture during building construction.

In the building industry, it is necessary to install floor drains in concrete floors prior to the pouring thereof. In some instances the plumber will have his drain fixtures located many days prior to the pouring of the concrete. This creates many problems because the waste material and refuse which accumulates during the construction work is carried into the said drains resulting in difficult stoppages. The grill plates are not secured to the fixture to prevent this because the cement finishers invariably permit concrete to enter the grill work. After hardening it is very difficult to remove this concrete.

Therefore, it is common to store the grill plates at a removed location until the construction of the building is completed. The drainpipe is usually stuffed with newspapers or rags during the interim, and after completion of the aforesaid construction the workmen remove the rags or newspapers from the drainpipe, and finally install the grill plate. Many times the grill plates are misplaced or the drainpipe stuffing is dislodged with the result that the grill plate is lost or the drainpipe is filled with refuse, debris or concrete. It is, therefore, a primary object of the invention to provide a simple and inexpensive device which is secured to the assembled drainage fixture to insure protection thereof throughout the construction operation.

Another object of the invention is to provide a protective covering plate which will aid in the pouring of a concrete floor.

A further object of the invention is to provide a protective cover plate for a drain fixture which has a flat mating surface which is congruent with the drainage fixture top surface as defined by its outer perimeter.

Yet another object of the invention is to provide a protective cover plate for the end face of a drainage fixture which, when the cover plate is removed, will be flush with the top surface of the floor.

These and other objects of the invention will become more apparent to those skilled in the art by reference to the following detailed description when viewed in light of the accompanying drawings, wherein:

FIGURE 1 is a plan view of the cover plate in use; and

FIGURE 2 is a side elevational view in section of the cover plate in use.

Referring now to the drawings wherein like numeral indicate like parts, the numeral 10 indicates the cover plate while the numeral 12 indicates the drainage fixture. The drainage fixture is comprised of a drainpipe 13 having an annular flange 14 with diametrically opposite threaded bores 16 therein. A removable refuse guard of grill plate 18 rests on the flange 14 and has a plurality of perforations 20 as is well known in the art. It also has two circular countersunk openings 22 which are located to fit concentrically over the said bores. Screws 24 are provided through the openings 22 into threaded engagement in the bores 16 in order to rigidly secure the grill plate to the drainpipe for the life of the building.

In order to maintain the drainpipe free from debris during construction of the building and more particularly during pouring of the concrete floor designated at 26, the cover plate 10 is emplaced against the top surface of the drainpipe. The cover plate 10 is made of a plastic or metallic material and has a lower face 28 which is congruent, that is, is of equal area and configuration as the area of the top surface of the drainage fixture as delineated by its perimeter. The edge of the cover plate is rounded at 30 for safety reasons in order to lessen the hazards presented by a sharp protruding corner. The cover plate has two openings 34 located so as to be in axial alignment with the said aligned openings 22 and bores 16.

Because of its construction the cover plate can be emplaced over the grill plate and the screws 24 can be inserted so as to rigidly secure both the cover plate and the grill plate to the drainpipe as soon as the drainpipe is emplaced. No further precautions relative to the drainpipe fixture to building completion need be taken. Indeed, the cover plate itself will aid in the ensuing further construction of the building, for when it is time to emplace the concrete floor, the concrete may be poured at a quicker rate since no care or worry need be wasted for fear of clogging the drain.

Once the concrete floor has hardened, the screw 24 is withdrawn and the cover plate 10 removed and saved for reuse. The screws may then be replaced to rigidly secure the grill plate 18 to the drainpipe 14.

What is new and therefore desired to be protected by Letters Patent of the United States is:

1. A floor drain fixture of a type which is to be embedded in a concrete floor, such fixture having a grill plate received in the upper end of said fixture said grill plate having a top surface coplanar with said fixture upper end and located so as to lie in the plane of the upper surface of the concrete floor, said fixture having a plurality of retention screws having lengths substantially more than double the thickness of said grill plate, said grill plate and said fixture having matching openings for receiving said screws to secure said grill plate to said fixture, a lightweight disc for placement over said fixture and grill plate having an upper and lower surface, said lower surface having a perimeter the same as that of said fixture upper end, said disc having a thickness substantially equal to that of said grill plate and having openings which can be arranged coaxially with said matching openings for receiving said retention screws whereby said disc can be temporarily secured against said fixture upper
3. And before said concrete floor is poured and removable hereafter to expose said grill plate.

2. The invention recited in claim 1 wherein the upper surface periphery of said disc is uniformly less than the lower periphery thereof facing said fixture and said disc having an annular uniformly tapering surface joining said upper and lower peripheries.

References Cited

UNITED STATES PATENTS

<table>
<thead>
<tr>
<th>Patent Number</th>
<th>Date</th>
<th>Inventor</th>
<th>Class</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>797,585</td>
<td>8/1905</td>
<td>Kees</td>
<td>210-164</td>
<td>X</td>
</tr>
<tr>
<td>1,912,312</td>
<td>5/1933</td>
<td>Schacht</td>
<td>4-293</td>
<td></td>
</tr>
</tbody>
</table>

3,445,973

4. 1,973,304 9/1934 Boosey 210-165
2,605,634 7/1959 Comroe 220-3.4
2,936,092 5/1960 Johnson 220-3.4
3,253,730 5/1966 Mount 220-3.4

FOREIGN PATENTS
18,698 9/1899 Great Britain

JOSEPH R. LECLAIR, Primary Examiner.
JAMES R. GARRETT, Assistant Examiner.

U.S. Cl. X.R.
52—303, 127; 220—3.4; 4—293; 210—163