Dec. 3, 1968 R. M. HOYT 3,413,769

BASEMENT DRAIN

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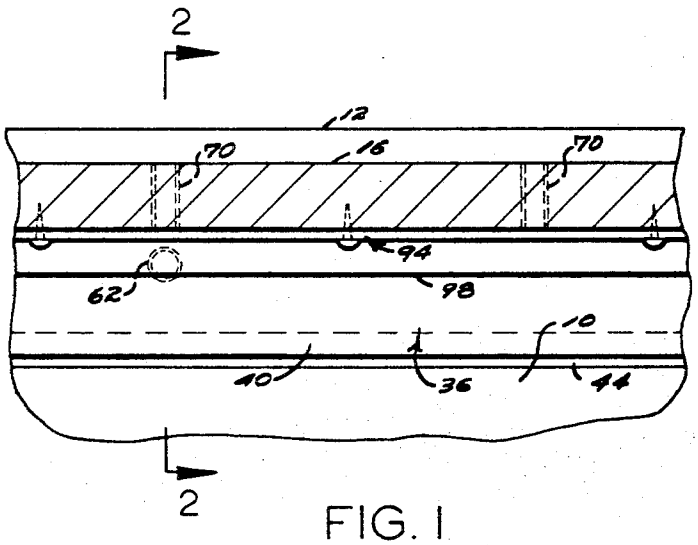


FIG. 1

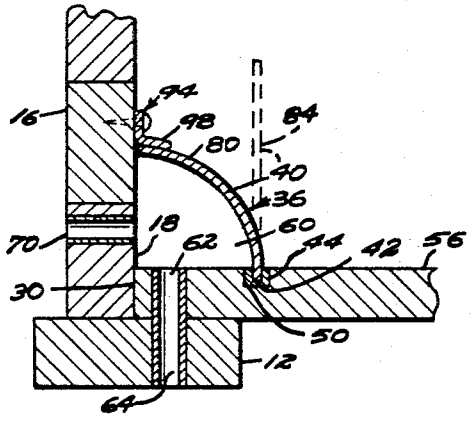


FIG. 2

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BASEMENT DRAIN

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ABSTRACT OF THE DISCLOSURE

In a basement with a concrete floor, a recess spaced from and extending continuously along a substantial part of the periphery of the floor, an elongated passage-forming means having a lower edge buried in the recess, the passage-forming means extending upwardly to form a water drainage passage between the member and the basement wall, and means in the recess for firmly anchoring said passage-forming means to said floor and for thereby substantially sealing the space between said means and the floor so that water cannot pass therethrough.

Water passages at the edges of basement floors as proposed in the prior art have had passage-forming members attached to the upper side of the concrete basement floor by various bonding means.

This means that, in effect, water is escaping from the underside of the upright passage-forming wall commonly used in such systems.

I have discovered a solution to this problem which involves providing an elongated recess deeply into the basement floor, causing the lower edge of the passage-forming means to be disposed in the recess, and having waterproof bonding and sealing means disposed between the lower edge of the passage-forming means and the walls of the recess, with the bonding means extending not only underneath the lower edge of the passage-forming means but also extending a substantial distance up each side of the passage-forming means as made possible by the depth of the recess.

I have discovered that although time is required to provide such a recess, this makes a much more permanent and trouble-free installation.

A further object is to particularly cause the recess to extend continuously for a substantial distance along the periphery of the floor.

A further object is to provide a passage-forming means as described which is preferably sufficiently flexible and resilient as to allow it to be laterally bent to substantially facilitate access to said drainage passage for cleaning.

Other and further objects and advantages of the present invention will be apparent from the following detailed description, drawings and claims, the scope of the invention not being limited to the drawings themselves as the drawings are only for the purpose of illustrating a way in which the principles of this invention can be applied.

Other embodiments of the invention utilizing the same or equivalent principles may be used and structural changes may be made as desired by those skilled in the art without departing from the present invention and the purview of the appended claims.

In the drawings:

FIGURE 1 is a top plan view of a section of the drainage system of this invention, with parts thereof shown in dotted lines.

FIGURE 2 is a sectional view taken along the line 2—2 of FIGURE 1.

Referring to FIGURE 1, a basement floor is generally indicated at **10**, and by way of illustration, it can be seen in FIGURE 2 to overlap and engage the upper side of a footing **12** supporting a basement wall **16** which extends vertically and has an inner side **18** in substantial engagement or close proximity with the outer edge **30** of the floor **10**.

In accordance with this invention, a drainage system generally indicated at **36** is provided having a passage-forming member **40** which has a horizontally extending lower edge **42** extended downwardly into an elongated recess or groove **44** which can be cut into the basement floor **10** after the floor has been laid or which can be formed in another manner during formation of the floor **10**.

Mastic or waterproof sealing means **50** surrounds the passage-forming member **40** and is retained in the groove **44** and the passage-forming member **40** extends upwardly out of the groove **44** and away from the top **56** of the floor **10** for defining with the upper surface **56** of the floor **10** and with the inner side **18** of the wall **16** a passageway or passage **60** into which water can flow to a pipe **62** having a drainage opening **64** therethrough which extends through the floor **10** and footing **12** to lead to a drain, not shown.

Water can enter the passage **60** from the outside of the wall **16** through entrance passageways **70** to that water outside the wall **16** is continually drained off by flow through the passageway **70** and into the passage **60** in which it is in communication.

There are many, many passageways **70** around the wall of the building.

The outer edge **30** is preferably formed by a material sufficiently flexible and yet sufficiently resilient that even though its lowermost edge **42** is embedded in an upwardly extending position, nevertheless its upper end **80** can be caused to be bent from a dotted line position **84**, shown in FIGURE 2, into a position inclining with respect to the vertical and horizontal, taking an arcuate form, as seen in a transverse vertical cross-section as in FIGURE 2, it can be normally disposed in a position of being tucked under a holder **94** which is an elongated piece of material suitably fixed to an inner wall having an outwardly extending flange **98** under which the upper end **80** of the passage-forming member **40** is tucked under during installation.

To clean the passage **60**, it is only necessary to press down on the passage-forming member **40** to enable a person to insert a screw driver under its uppermost edge and to thereby release the passage-forming member **40** to the dotted line position **84** allowing access to the inner wall.

In FIGURE 1, it will be seen that the recess and passage-forming means can extend continuously along only a substantial part of the periphery of the floor, if desired.

It will be seen that the passage-forming means **40** is sufficiently flexible and resilient as to allow it to be laterally bent substantially for facilitating access to said drainage passage for cleaning.

As thus described, it is believed that this invention has fulfilled the objectives above set forth.

It will be seen that this invention can be changed within the spirit of the following claims and such changes are considered to be within the scope of this invention.

I claim:

1. In combination: a vertical basement wall, said wall having openings extending laterally therethrough and disposed above a concrete basement floor for water flow therethrough from the outside of said wall, said basement floor having an upper surface extending horizontally away from said wall, said basement floor having an outer peripheral edge portion adjacent the inner side of said wall, an elongated recess extending downwardly into said basement floor through the upper surface thereof, said recess being spaced from and extending continuously along a substantial portion of the periphery of said floor, a horizontally elongated passage-forming means having an upstanding portion and having a lower edge portion buried

in said recess, said upstanding portion extending upwardly from said floor in a position to form a water drainage passage between said passage-forming means and the inner side of said wall and in a position so that said water drainage passage receives water flowing inwardly through said openings, and waterproof bonding means in said recess for sealing said passage-forming means to said floor and for substantially sealing the space between said passage-forming means and the wall of said recess.

2. The combination of claim **1** in which said passage-forming means is sufficiently flexible and resilient as to allow it to be laterally bent substantially for facilitating access to said drainage passage for cleaning.

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