# United States Patent

**Nelson**

[15] **3,668,829**

[45] **June 13, 1972**


## [54] FOOTING TILE FOR TRANSVERSE FLOW OF SEEPAGE


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[21] Appl. No.: **19,907**

[52] **U.S. Cl.**.....**52/169,** 52/302
[51] **Int. Cl.**.....**E02d 31/02**
[58] **Field of Search**.....52/505, 310, 302, 303, 169, 52/220, 221, 98, 99, 100; 138/111, 178, DIG. 8; 61/10, 11, 14, 29



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| 1,772,518 | 8/1930 | Pardini | 61/29 |
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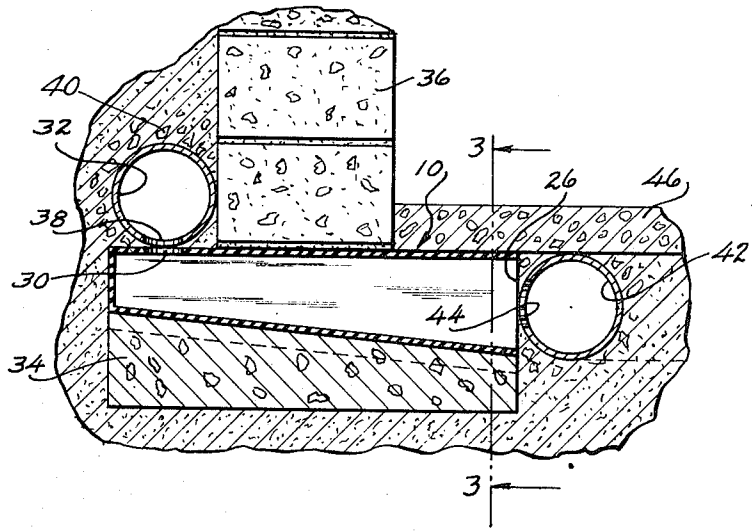
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[57] **ABSTRACT**

A transverse tile, preferably of molded material, to be embedded transversely in the concrete of a foundation footing to convey seepage water from an exterior drain tile to an inner drain tile. A means is included to subsequently provide a drain opening in the panel of the transverse tile after the mason work has been done, for the purpose of allowing seepage to flow into the tile.


**2 Claims, 6 Drawing Figures**



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SHEET 1 OF 2

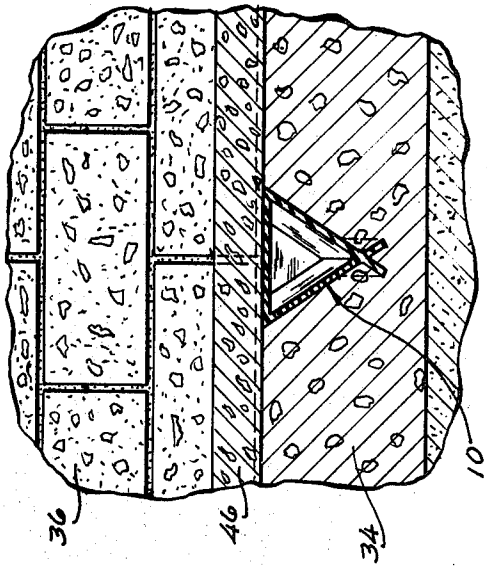



FIG. 3

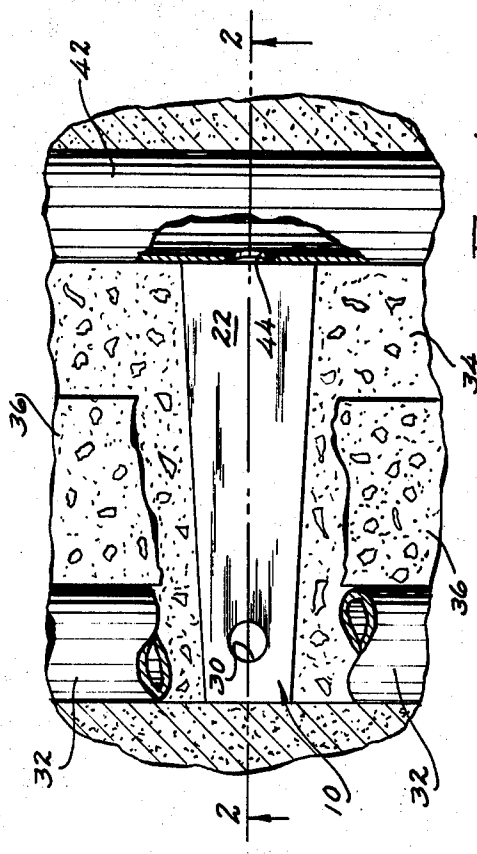



FIG. 1

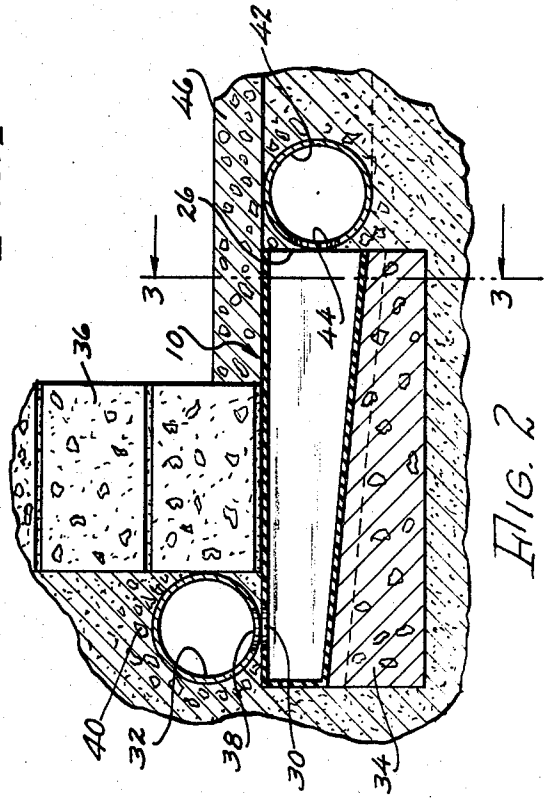



FIG. 2

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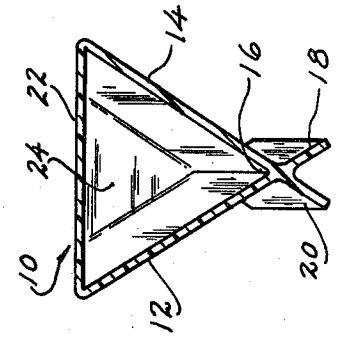



FIG. 6

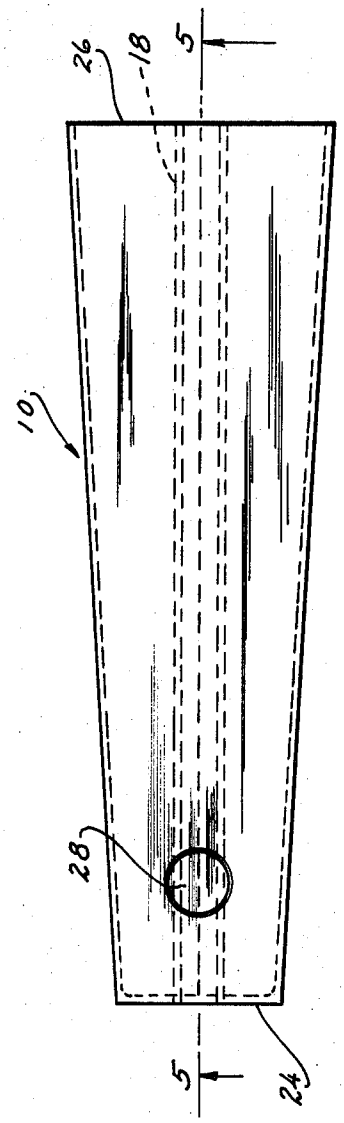



FIG. 4

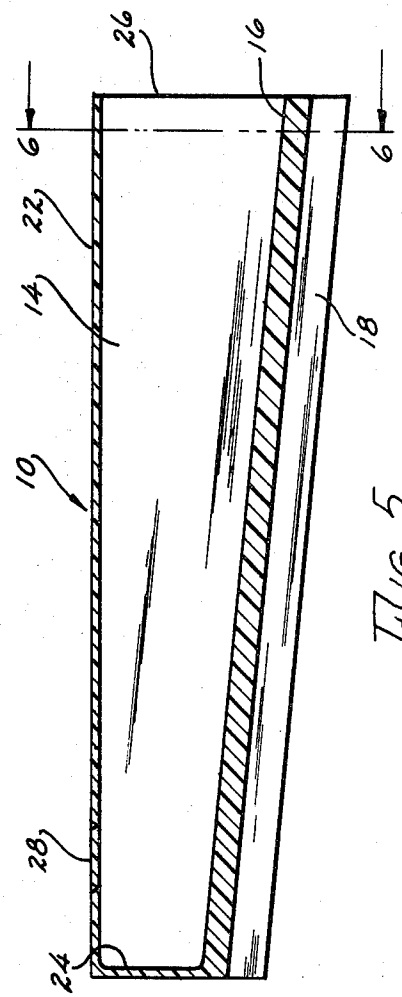



FIG. 5

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# FOOTING TILE FOR TRANSVERSE FLOW OF SEEPAGE

## BACKGROUND OF THE INVENTION

1. Field of the Invention.

This invention relates to a means of collecting seepage water accumulating adjacent a foundation of a building and conveying it to an inner drain tile. The latter tile then directs the seepage to an appropriate sump.

2. Description of the Prior Art.

The known prior art concerns various means of collecting seepage, including transverse conduits under the footing or embedded therein. There is the ever-present danger of mud or other matter clogging the conduits during the subsequent filling in of sand and other fill material. The known prior art is as follows:

| | |
|---|---|
| Suskind | 2,703,002 |
| Marchi | 2,948,993 |
| Smith | 3,017,722 |
| Holloway | 3,037,326 |

## SUMMARY OF THE INVENTION

This transverse tile is preferably of a molded material, and of the shape shown, and serves to convey seepage transversely from an exterior drain tile to an interior drain tile. The tile of this invention is embedded transversely in the upper surface of the footing as the latter is being poured. The exterior drain tile has an opening made therein to coincide with the opening made in the transverse tile. The inner tile is placed at the inner opening of the transverse tile and is also provided with an opening to receive seepage flowing therefrom. An object of this invention is to provide a transverse tile of molded material and prefabricated ready for use.

Another object is to provide a tile having a "knockout" means to provide an opening for the entrance of seepage.

Further objects and advantages of this invention will become apparent from a consideration of the following detailed description taken in connection with the accompanying drawings wherein an embodiment of the invention is shown. It is, however, to be understood that the invention is not limited to the details disclosed, but includes all such variations as fall within the spirit of the invention.

Referring to the drawings:

FIG. 1 is a plan view of a footing and foundation with parts broken away to show the tile of this invention, embedded in the footing.

FIG. 2 is a section taken at 2—2 of FIG. 1.

FIG. 3 is a section taken at 3—3 of FIG. 2.

FIG. 4 is a plan view of the tile of this invention.

FIG. 4 is a plan view of the tile of this invention.

FIG. 5 is a section taken at 5—5 of FIG. 4.

FIG. 6 is a section taken at 6—6 of FIG. 5.

The preferred form of this transverse tile is indicated by reference numeral **10**, and comprises a shell of suitable molded material and defines a trough. It is preferably of the shape shown, having upwardly-diverging side panels **12** and **14**, extending from a downwardly-sloping apex **16**. The planes of panels **12** and **14** are continued downwardly to define extensions such as portions **18** and **20**. The purpose of portions **18** and **20** is to provide means to anchor the tile **10** against upward pressure of the concrete until the latter has hardened. Panels **12** and **14** terminate in an integral top panel **22**. An end wall **24** closes the outer end of the passageway of the tile **10**, while the inner end **26** remains open. A circular "knockout" portion **28** is defined by means of a groove in the top panel **22** to be subsequently broken out after mason work has been completed, thus providing an opening **30**, and in preparation for placing the exterior drain tile **32**.



When the tile **10** of this invention is to be placed in the footing, it is positioned transversely between the shoring planks, usually at 8 foot intervals, and with the top panel **22** in the plane of the upper edges of the planks. The tile then becomes anchored in the poured concrete of the footing **34**; the extensions **18** and **20** being engaged by the concrete, and thus preventing the tile **10** from floating during the setting of the concrete **34**. The block wall **36** can then be erected in the usual manner.

When drain tile **32** is to be laid, "knockout" **28** is removed, thus providing the opening **30**. Tile **32** is provided with corresponding openings such as **38** which are aligned with the openings **30**. Stone **40** is usually placed about tile **32** to assist in seepage reaching the tile.

An inner tile **42** is placed along the inner wall of footing **34**, and adjacent the end **26** of tile **10**. An opening **44** is provided in tile **42** at each tile end **26** to receive seepage flowing from the tile **10**, and to then convey the seepage to a sump. The floor **46** can then be poured in the customary manner.

The standard length of tile **10** is **24** inches. However, if the footing is less than 24 inches in width, the tile **10** can be conveniently cut to the desired length with a saw.

The above being a complete description of an illustrative embodiment of the invention, what is claimed as new and desired to be secured by Letters Patent of the United States is:

1. In a building a foundation structure comprising a footing and a wall supported thereon, a subterranean run of drain tiles disposed exteriorly of the wall and resting on the upper surface of said footing, an opening in the periphery of the tile adjacent said upper surface, a second run of drain tiles disposed inwardly of the wall and positioned adjacent the inner edge of the footing below said upper surface, an opening in the second run of tiles adjacent the edge of said footing, a transverse tile embedded in said footing and extending thereacross, said transverse tile comprising a passageway defined by planar side panels diverging upwardly from an apex and terminating in an integral top panel coplanar with said footing upper surface, said passageway having an outer end which terminates in a wall closing said passageway at said outer end and an inner end which opens into communication with the opening in said second run of drain tiles, said apex extending downwardly relative to said top panel from said outer to said inner end, said top panel having a drain opening in the surface thereof near said outer end and communicating with the opening in the outer run of drain tiles, whereby moisture accumulating in the first mentioned run of drain tiles is conducted through said transverse tile into said second run of drain tiles.

2. A foundation as in claim 1 wherein said transverse tile further includes a plurality of projecting portions which extend divergently from and below said apex, each of said projecting portions being coplanar with one of said planar side walls and imbedded in said footing.

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