

J. E. CONNOR.
IRRIGATION TILE.
APPLICATION FILED MAY 6, 1909.

977,435.

Patented Dec. 6, 1910.

FIG. 1

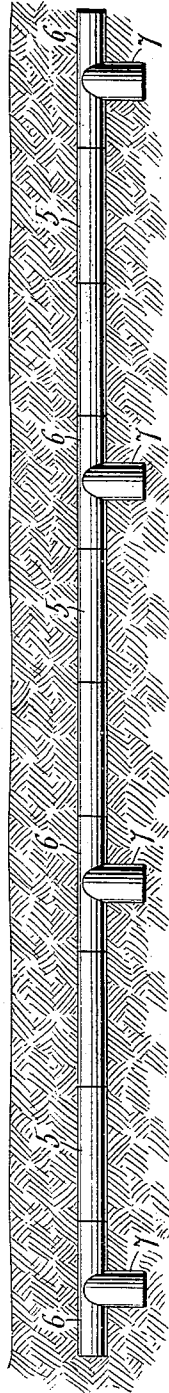
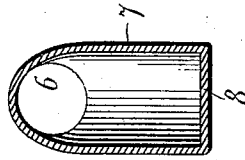
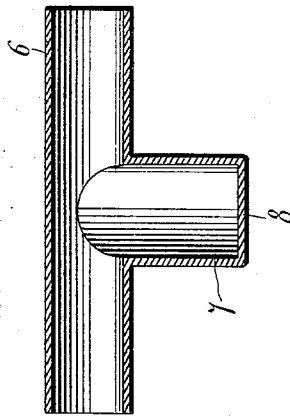


FIG. 2



Witnesses

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IRRIGATION-TILE.

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To all whom it may concern:

Be it known that I, JAMES E. CONNOR, a citizen of the United States, residing at Gillespie, in the county of Macoupin, State of Illinois, have invented certain new and useful Improvements in Irrigation-Tiles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to irrigation tiles, and contemplates providing a tile so constructed that a portion of the surface water will be retained in a reservoir of porous material, the water soaking through this reservoir into the ground when the latter becomes dry.

With this and other objects in view as will more fully hereinafter appear, the present invention consists in certain novel details of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings and more particularly pointed out in the appended claim, it being understood that various changes in the form, proportion, size and minor details of the device may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings forming part of the specification:—

Figure 1 is a side elevation of an irrigation conduit provided at intervals with tiles constructed in accordance with my invention. Fig. 2 is a longitudinal sectional view of one of the tiles showing the reservoir. Fig. 3 is a transverse section taken through the reservoir.

Similar numerals of reference are employed to designate corresponding parts throughout.

The structure illustrated in Fig. 1, is designed to be located in a ditch or trench, in such position that the surplus water will flow through the system of pipes or tiles; this is an old but approved method of drainage which continued practice has shown to give the best results. It will be noticed however, that while the general arrangement is old still at frequent intervals in the tile line, a specific form of tile is employed in which resides the spirit of this invention. In the following description of the specific form of tile sections, it must be understood that I am not limited to size or

cross sectional contour, since it will be understood from what will presently appear, that the particular form of section may be applied to the various sizes and shapes of drainage tiles and pipes now employed, therefore in arranging the system I dispose the tiles one in advance of the other in the usual way, but at intervals of every six or eight feet for instance, I substitute for one of the usual tile sections, which in the present instance are designated by the numeral 5, a section 6, which corresponds in length and diameter to the sections 5, or substantially so. It will be seen now by referring to the drawings that projecting laterally from the medial portion of the section 6 is what will subsequently be termed a reservoir or trap, the diameter of which is slightly greater than the diameter of the body portion 6 of the sections. This member is disposed at right-angles to the body 6 of the section and is somewhat less in length than the length of the latter. In forming the section 6 with the reservoir or trap 7 the parts may be molded in one piece. The outer end of the reservoir is closed as shown at 8 and is designed to enter the cavity formed in the ground and below the plane of the floor of the ditch or trench for the sections 5 and 6. The material of which the reservoir is formed will be of baked clay and porous. It is of course to be understood that the distance between the reservoirs will be optional with the user in order to suit the character of the section in which the system is employed. When arranged in place as shown the reservoirs project vertically downward so that water passing through the first section of pipe will flow into the first reservoir until the latter is filled after which the stream will continue to the next reservoir and so on until all the reservoirs in the line are filled, after which the water will flow out at the end of the line. Owing to the moist condition of the earth in the wet season, the water within the reservoir 8 will have no tendency to soak through the pores of the latter into the surrounding ground. When thoroughly drained of the surplus water and in a dry state however, the surrounding ground will then readily absorb the water which soaks through the pores of the reservoir and will remain in a moist condition as long as water is within the reservoir.

It can be seen that the entire number of reservoirs can be refilled whenever desired,

by simply allowing water to run into one end of the pipe.

It can be seen that an irrigation conduit constructed of tiles or fittings formed in accordance with my invention is exceedingly simple in structure, practically inexpensive to carry out, and will be useful in districts having a protracted wet and dry season.

Having thus described my invention what is claimed as new, is:—

A fitting for use in irrigation conduits, consisting of a section of porous pipe of T

form, open at its alined terminals for connection with contiguous pipe sections, and closed at the end of the lateral branch to provide a trap for the fluid passing through the conduit. 15

In testimony whereof, I affix my signature, in presence of two witnesses.

JAMES E. CONNOR.

Witnesses:

J. A. STICE,

WM. E. SCHMIDT.