

No. 867,945.

PATENTED OCT. 15, 1907.

W. H. CARSON.
DRAIN TILE.

APPLICATION FILED FEB. 18, 1907.

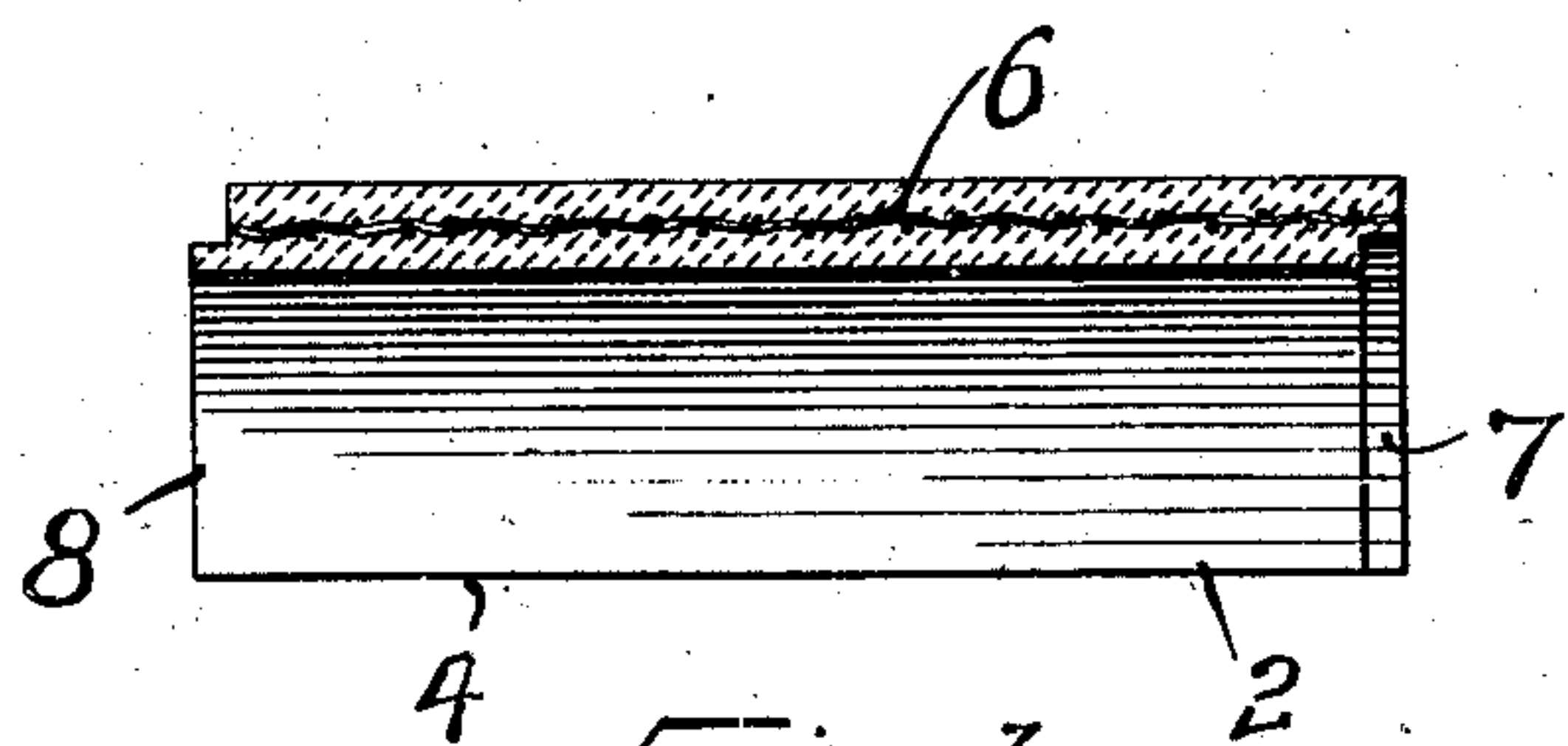


Fig 1.

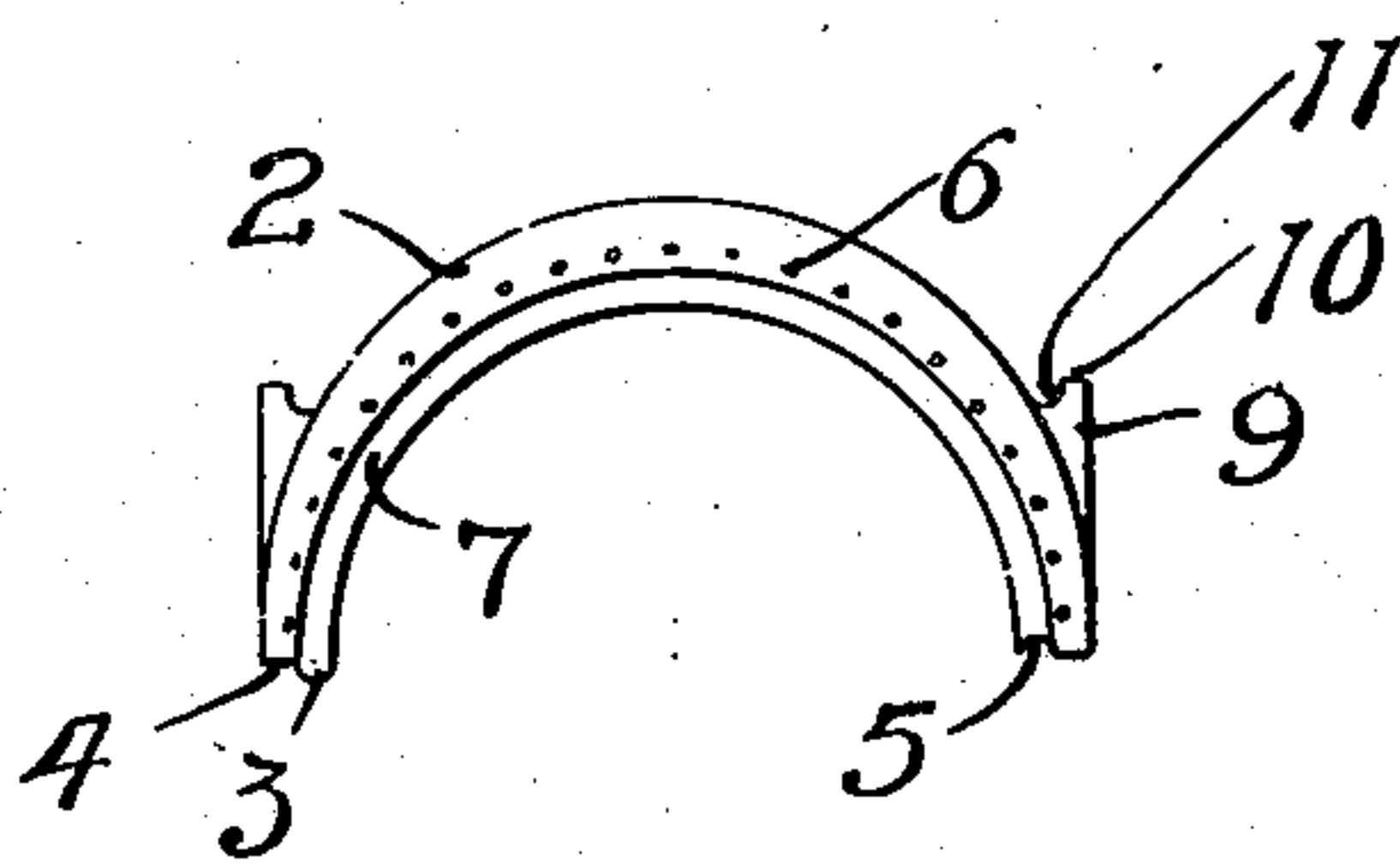


Fig 2.

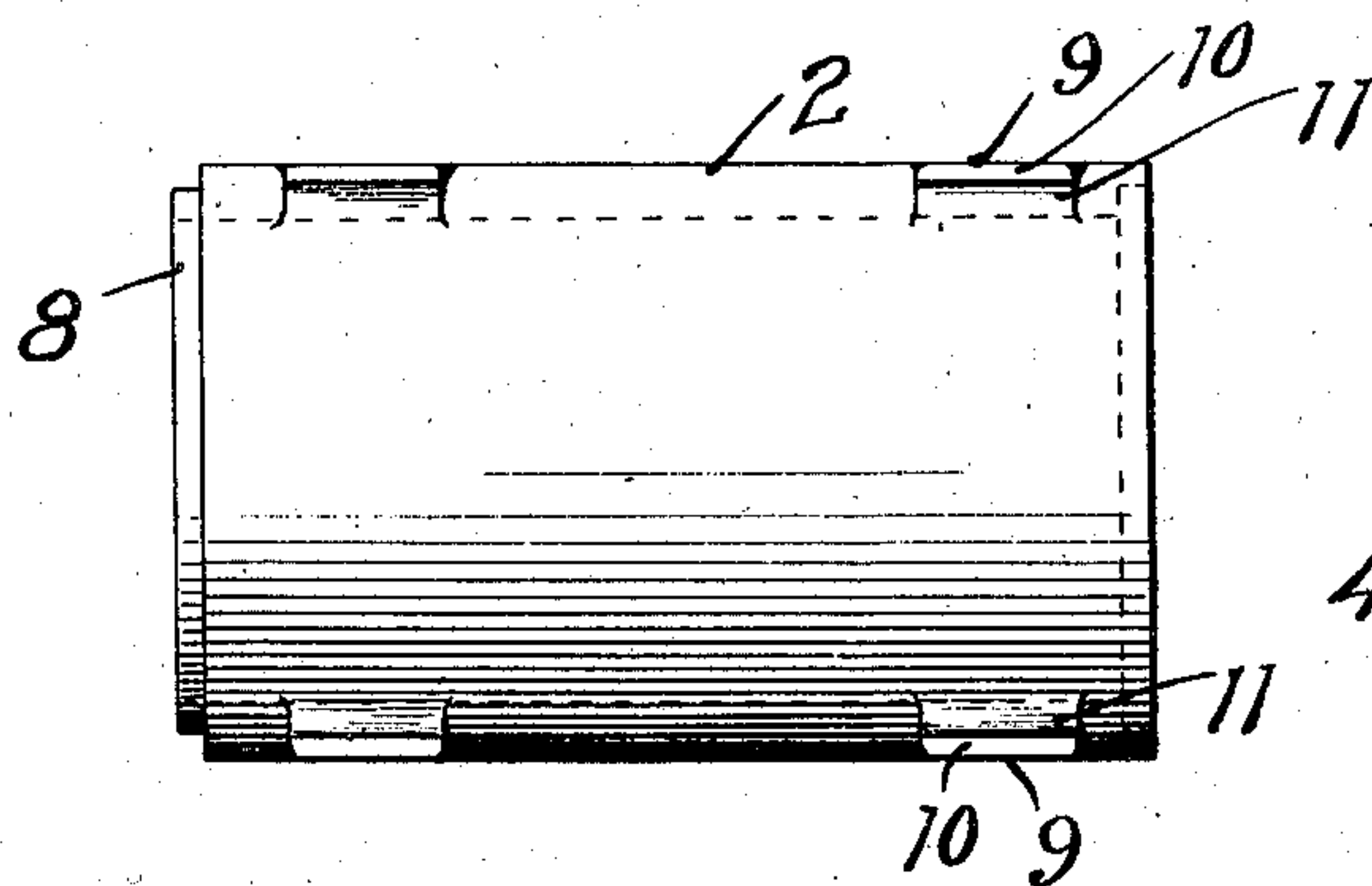


Fig 3.

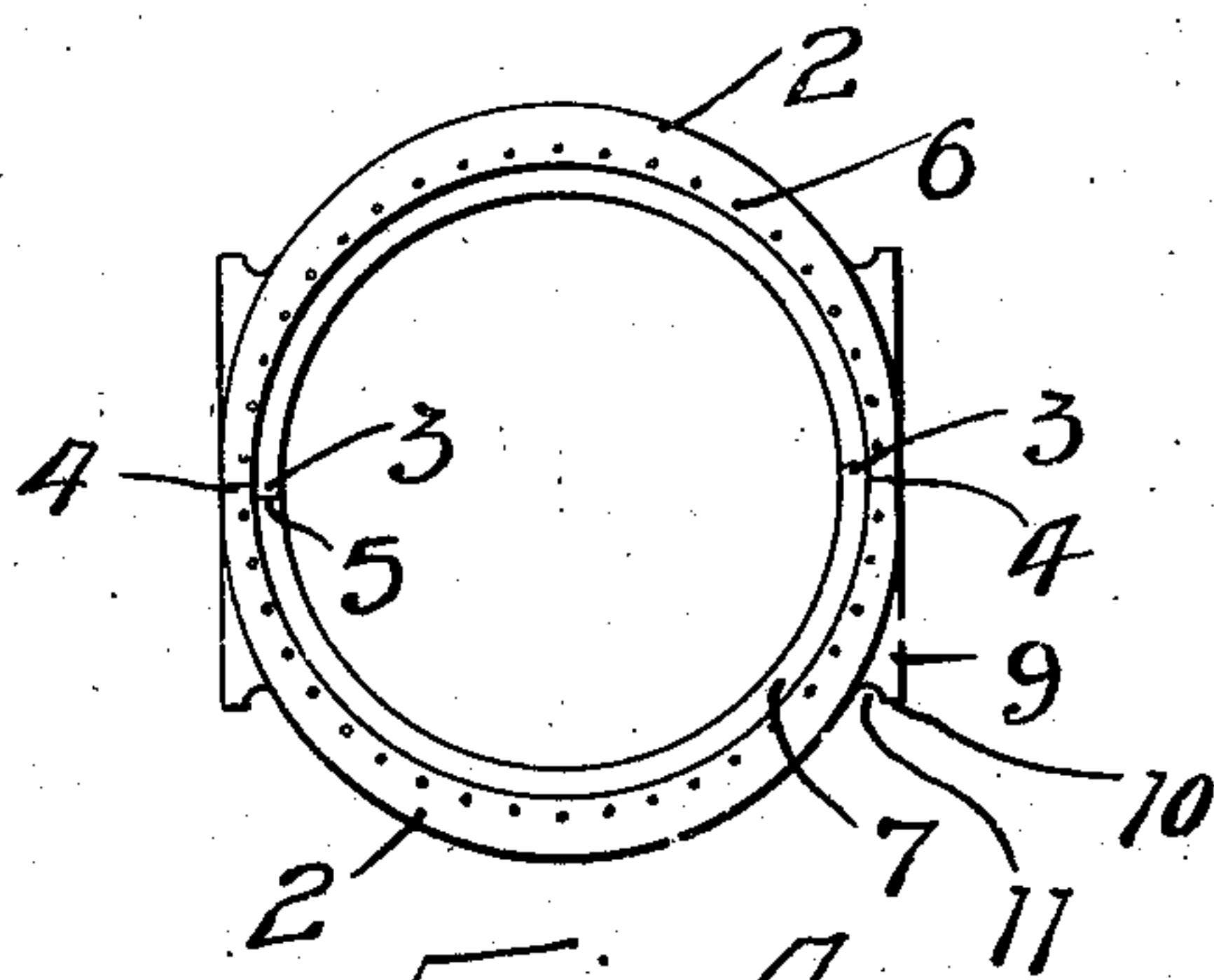


Fig 4.

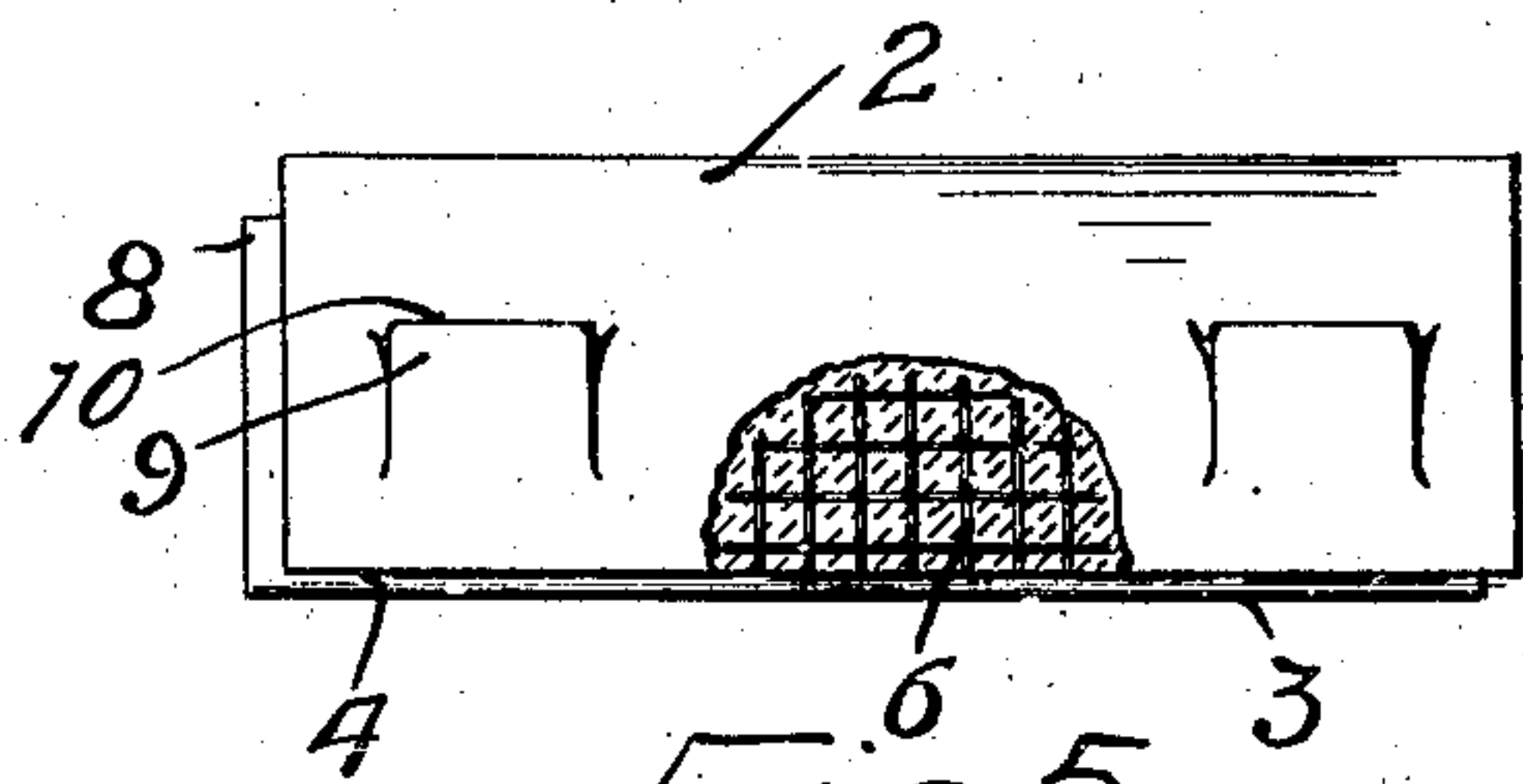


Fig 5.

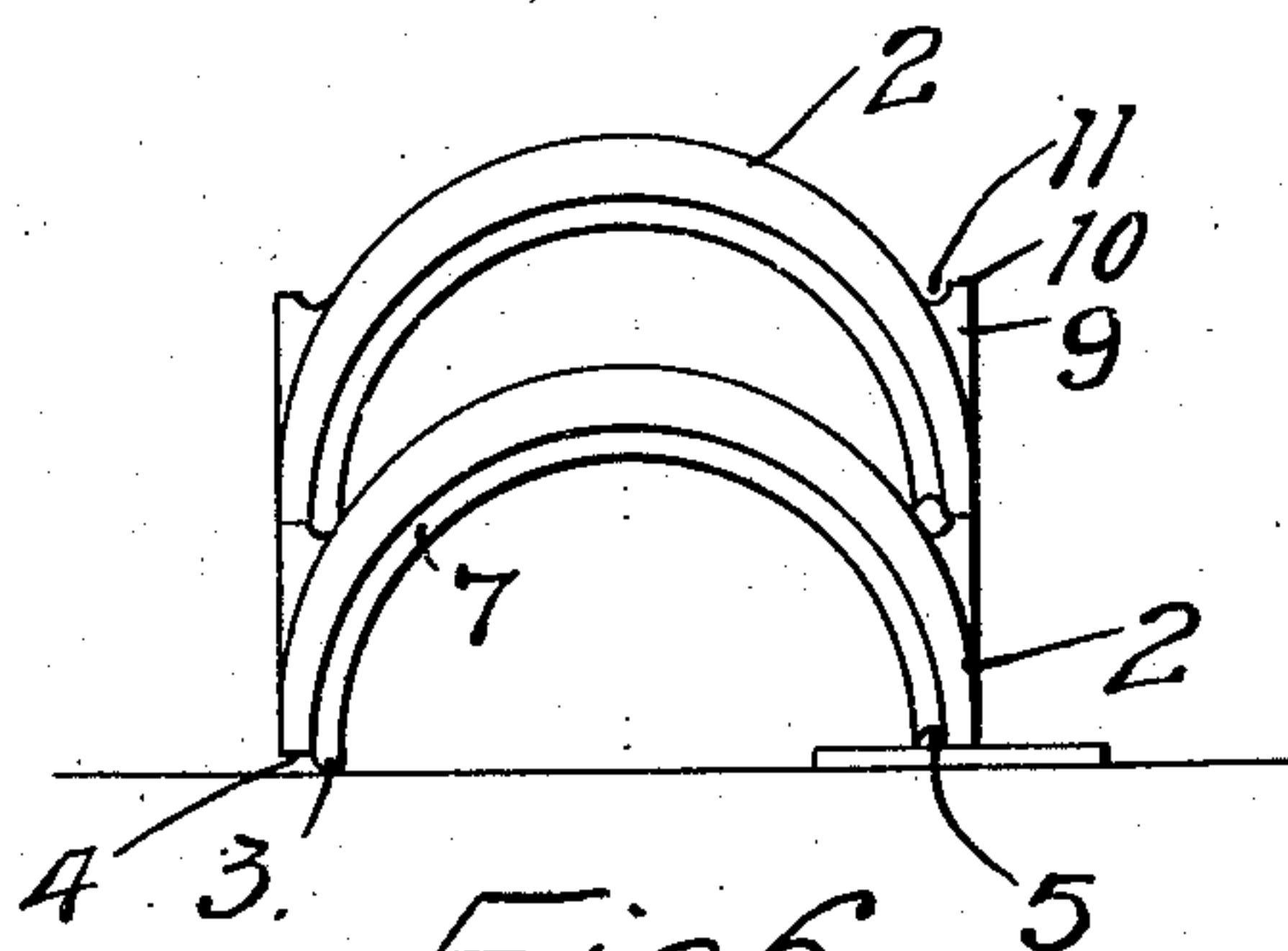


Fig 6.

WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM H. CARSON, OF MADISON, MINNESOTA.

DRAIN-TILE.

No. 867,945.

Specification of Letters Patent.

Patented Oct. 15, 1907.

Application filed February 18, 1907. Serial No. 357,841.

To all whom it may concern:

Be it known that I, WILLIAM H. CARSON, of Madison, Lac qui Parle county, Minnesota, have invented certain new and useful Improvements in Drain-Tile, of which the following is a specification.

The object of my invention is to provide a tile that is capable of being molded in sections and laid in the trench or ditch as fast as the sections are sufficiently dry or set to be handled.

A further object is to provide a sectional tile that is of much cheaper construction though fully as strong and durable as the drain tile now in general use.

The invention consists generally in various constructions and combinations, all as hereinafter described and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a longitudinal sectional view of a section of tile embodying my invention. Fig. 2 is an end view of the same. Fig. 3 is a plan view of a completed section. Fig. 4 is an end view of the same. Fig. 5 is a side view of a half section, a portion of the wall being broken away showing the reinforcing wires. Fig. 6 is an end view illustrating the manner of piling the tile sections one upon another.

In the drawing, 2 represents a tile section substantially semi-circular in cross section and having a rib or tongue 3 at its inner edge on one side and a flat bearing surface 4 adjoining said tongue on the same side and a corresponding flat surface on the other edge adjoining a shallow groove or depression 5. The other section of the tile corresponds to the one described so that when the sections are placed together the tongue of one section will enter and interlock with the groove of the other section, while the flat surfaces of one section will abut and fit squarely against the corresponding surfaces of the other section. A joint is thus formed between the sections which will prevent them from slipping sidewise upon one another and also prevent the entrance or escape of moisture. Each tile section is preferably reinforced by a wire netting 6 of suitable mesh that is embedded in the material during the process of molding. The sections are preferably composed of a sand and cement composition mixed in suitable proportions, the mold boxes being located, if preferred, along beside the ditch or trench in which the

tile is to be laid so that as fast as the sections are formed and dry they may be laid in the trench. If preferred, however, the tile may be formed or molded and piled up to dry at a distance from the ditch and delivered to the work as fast as needed. Each tile section, as indicated in Fig. 2, is thicker near the middle line and gradually decreases in thickness from that point towards each edge. One end of each section is provided with an annular recess 7 and the other end with a correspondingly shaped flange 8 so that when the tile are placed together the ends will form a tight joint with one another. On the outer surface of each tile section I provide webs 9 having flat surfaces 10 and curved recesses 11 to receive the correspondingly shaped surfaces of the edges of the tile sections and permit them to be easily and quickly piled upon one another and as readily removed. The tile, of course, will be made in any suitable size either as to length or diameter according to the character of the work where it is to be used.

I have shown the tile made in a substantially circular form but it may be made square or polygonal in cross section if preferred.

I claim as my invention:

1. A composition tile comprising two longitudinally divided sections of equal size, each section having a longitudinally arranged tongue and an adjoining flat surface on one edge, and a longitudinally arranged recess and a flat surface on the other edge, said tongue and recess being oppositely arranged on the sections of each tile, whereby the edges of the tile will interlock when placed together, substantially as described.

2. A composition tile comprising longitudinally divided sections having interlocking abutting edges, each tile section gradually decreasing in thickness from its middle portion toward the edges thereof, and a reinforcing material embedded within said tile sections.

3. A tile composed of separable sections substantially semi-circular in form, webs provided on the peripheries of said sections, each web having a surface adapted to fit the edge of a tile section placed thereon, whereby said sections may be piled one upon another and supported by said webs.

In witness whereof, I have hereunto set my hand this 26th day of January 1907.

WILLIAM H. CARSON.

Witnesses:

ELIAS HAUGE.
C. M. BOWEN.