

W. E. RIVERS.

TILE.

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998,203.

Fig. 1.

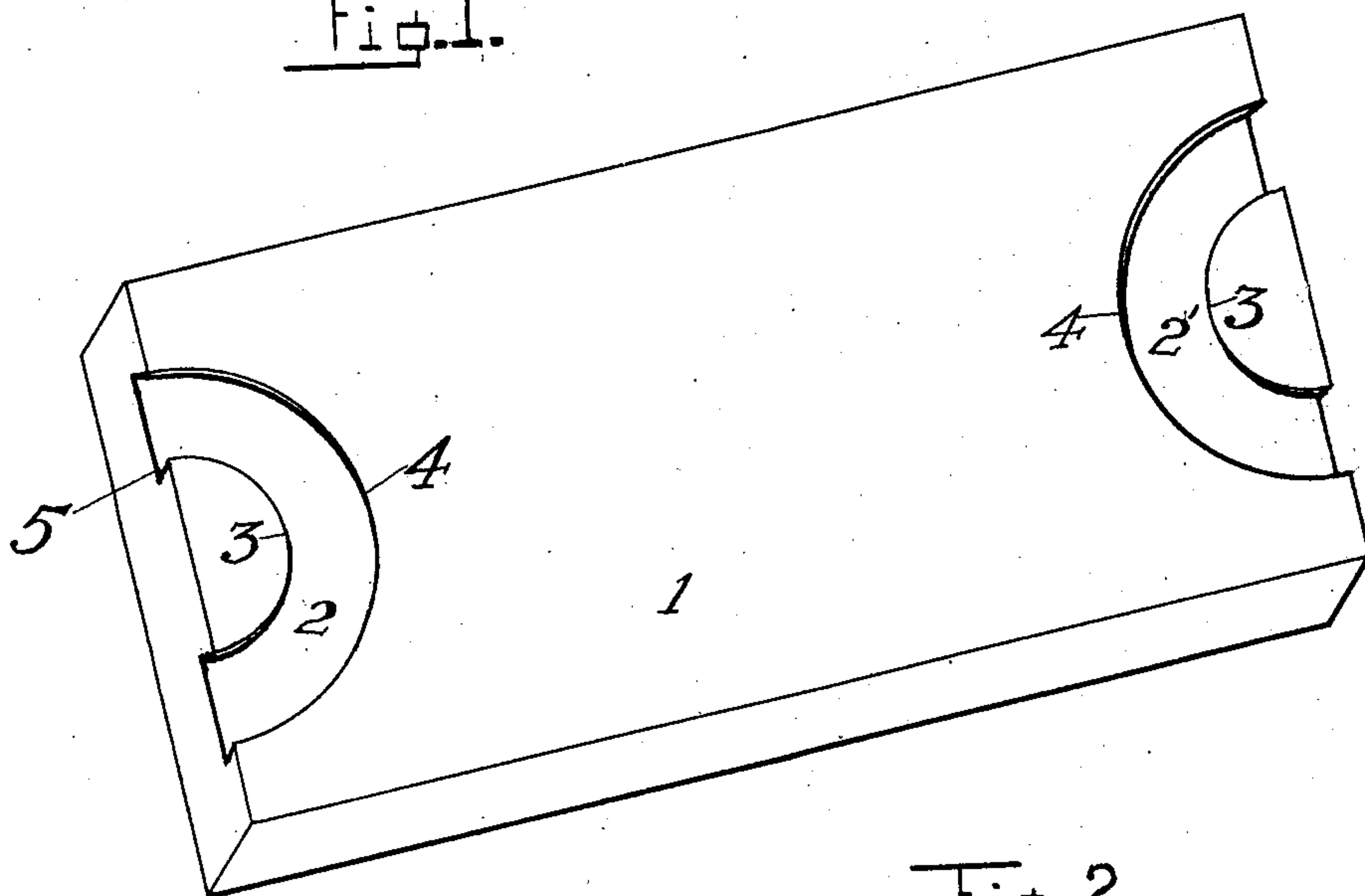
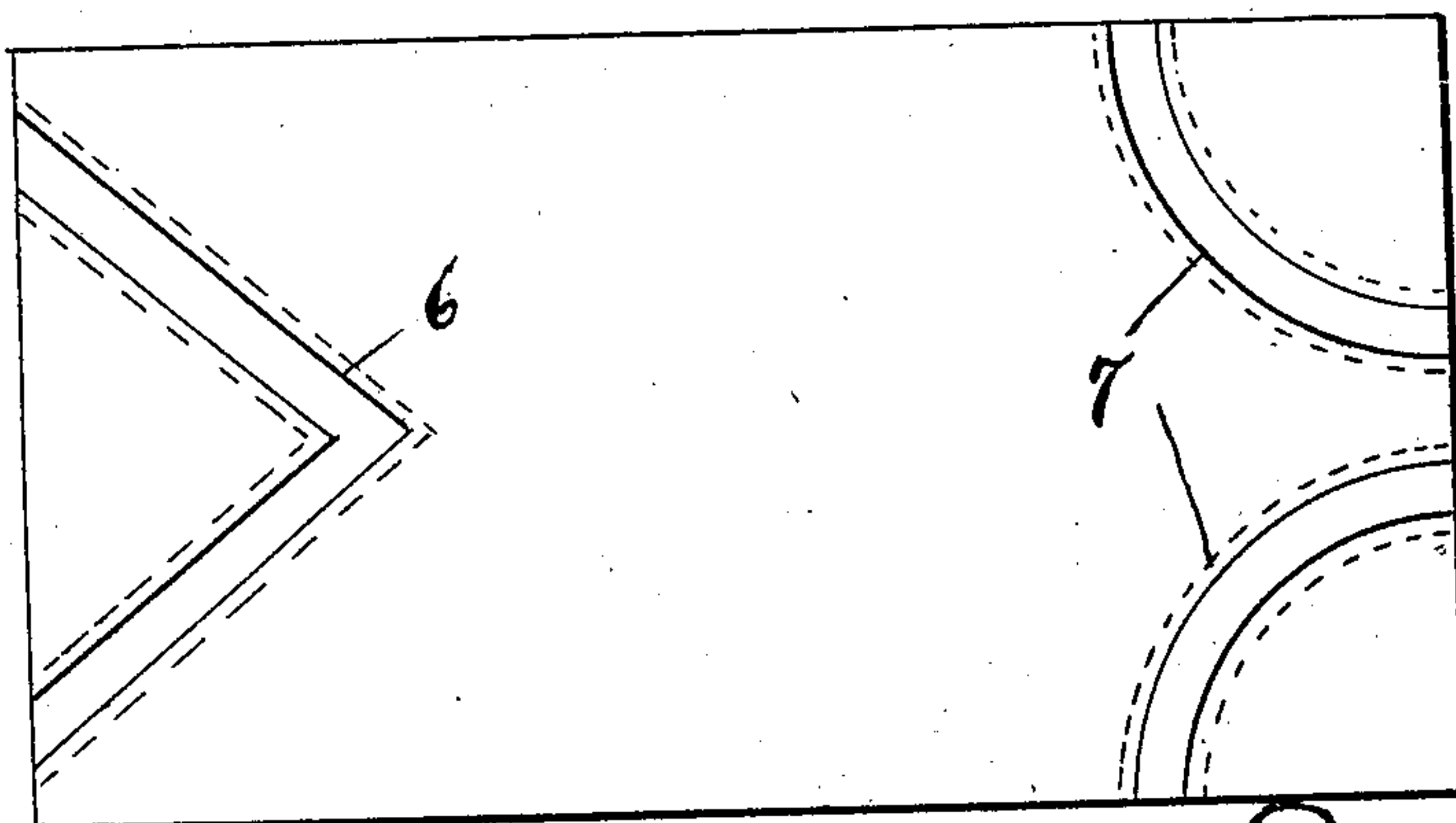


Fig. 2.



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UNITED STATES PATENT OFFICE.

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TILE.

998,203.

Specification of Letters Patent.

Patented July 18, 1911.

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To all whom it may concern:

Be it known that I, WILLIAM E. RIVERS, a subject of the King of Great Britain, and a resident of Old Bridge, in the county of Middlesex, in the State of New Jersey, United States of America, have invented certain new and useful Improvements in Tiles, of which the following is, taken in connection with the accompanying drawing and the reference-numerals marked thereon, a complete, concise, and accurate description or specification.

My invention primarily relates to certain improvements in what are commonly known as anchor back tiles, such as are illustrated in Letters Patent No. 766,526, dated August 2nd, 1904, heretofore granted to me.

One object of my invention is to provide an anchorage cavity for tiles, that will afford a free and unobstructed vent for the escape of the air during the operation of the laying or floating of the tile, and not become pocketed therein, which would otherwise tend to resist the entrance of the cement and thus result in an imperfect and insecure anchorage for the tile.

A further object of my invention is to provide the cavities of the tile with a plurality of under-cut or shouldered semi-annular edges, so positioned and arranged with relation to the ends of the tile, that either end, when presented to the adjacent set tile as it is being floated or assembled, will receive sufficient cement or anchorage adhesive under one or the other under-cut edges of the cavity to securely anchor or lock the same to its bed.

Further objects of my invention will manifest themselves upon a reading of the following specification.

Figure 1 is a perspective view of my improved tile. Fig. 2 is a view of the under side of a tile embodying a modification of my improvement.

Referring to the accompanying sheet of drawing, in which I have illustrated in perspective a tile provided with my new and improved form of anchoring cavities; in Fig. 2, a detailed modification thereof, —1— indicates the tile, which may be composed of thin plaques of burned clay or dust and kaolin, as well as of silicon or glass, but I do not limit myself in this respect. In the molding or casting of the tile, I form at the back and extremities thereof, semi-annular

grooves —2—. The edges of these grooves indicated at —3— and —4— are under-cut as shown at —5— to provide anchorage space for the cement or other adhesive substance. These grooves with the under-cut or shouldered edges may be formed in any suitable manner with one operation or more, as desired. However, I have found, as an economical and simple method, the employment of an elastic facing for the die, which, when depressed, will spread out at its bottom or lower end, to thus form the under-cut.

In applying or floating my tiles, it will be apparent that it is quite immaterial which end is first brought into contact, as they are both alike. As the tiles are applied or floated with a sliding motion, the grooves or depressions will readily fill with the cement or adhesive anchoring material, and the annular under-cut edges or portions farthest from the applied or set tile will be forced full of the material of the cement. For instance, if the tile be applied in a direction to cause the edge —4— of groove —2— to be forced full of cement in the sliding movement, so will the edge —3— of the groove —2— be filled with the cement, and the reverse if the other end is applied first to the set or mounted tile. It will likewise be apparent that when applying these tiles, the air will have ample opportunity of escaping, as the edges of the depressions extend to the ends of the tile, so that it is impossible for it to become pocketed and resist the entrance of the cement.

Now referring to the modifications shown in Fig. 2, it will be noted that I do not restrict myself specifically to the semi-annular anchoring groove heretofore described, it being within the scope of my invention to depart therefrom. For instance, I may form the groove angularly, as shown at —6—, or I may form it in the shape of a segment of a circle, as indicated at —7—. With these forms of anchor grooves, I secure a maximum amount of gripping or anchoring edge at a minimum expense of tile material.

Where I have used the terms "curved" or "semi-circular", I would have it understood that I do not wish to be restricted to curved or semi-circular grooves or channels, but am entitled to a fair range of equivalents, and as a specific instance of an equivalent I would mention the angular channel or groove shown in Fig. 2. Other grooves of

different formation may be employed without departing from the spirit and scope of my appended claims.

Having thus described my invention, what I claim as new herein, and desire to protect by Letters Patent is,

1. As a new article of manufacture, a tile having upon its under surface and at the ends thereof channels, each of the channels extending from the edge of the tile into the body of the same, reversed upon itself and terminating on the same edge of the tile as the point of beginning, each channel having an under-cut edge for the reception of anchorage material in the process of floating, said channels affording a free and unobstructed vent for the escape of air during the floating process.

2. As a new article of manufacture, a tile having upon its under surface and at its ends, the semi-circular recesses —2— and —2'—, the ends of the recesses beginning and terminating at the same edge of the tile, both edges of each of the recesses being under-cut for the reception of anchorage material in the process of floating, said recesses affording a free and unobstructed vent for the escape of air during the floating process.

3. As a new article of manufacture, a tile

having upon its under surface semi-circular channels, the ends of which begin and terminate at the edge of the tile, said channels affording a free and unobstructed vent for the escape of air during the floating process.

4. As a new article of manufacture, a tile having upon its under surface a channel having under-cut edges for the reception of anchorage material in the process of floating, said channel terminating at edge of tile other than opposite the point of beginning.

5. As a new article of manufacture, a tile having upon its under surface channels at the ends thereof, said channels having under-cut edges for the reception of anchorage material in the process of floating, each channel having ends terminating in the same edge or extremity of the tile.

6. As a new article of manufacture, a tile having upon its under surface a plurality of channels having under-cut edges, said channels terminating at edge or extremity of tile other than opposite the point of beginning, said channels adapted to receive anchorage material in the process of floating.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."