Chilcott & Scrimgeour

Aquarium.

No. 21,719. Patented Oct. 5, 1858.

Fig: 1

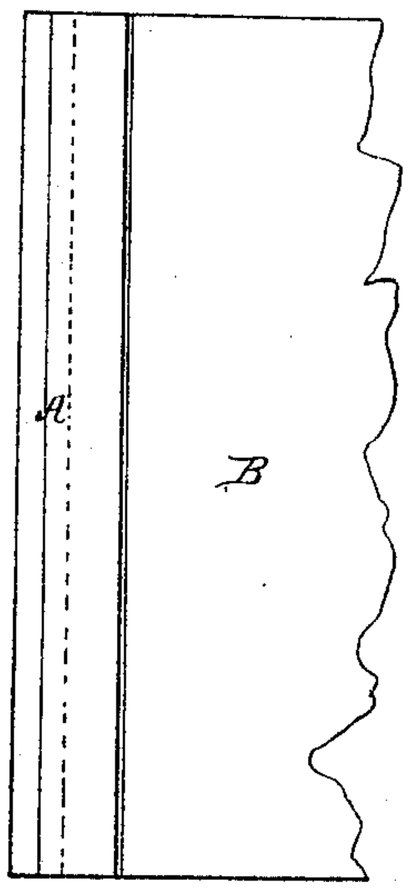


Fig: 3

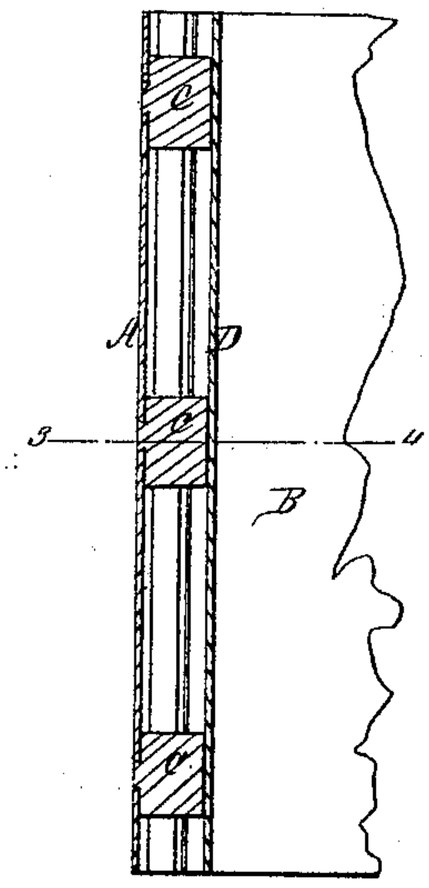


Fig: 5.

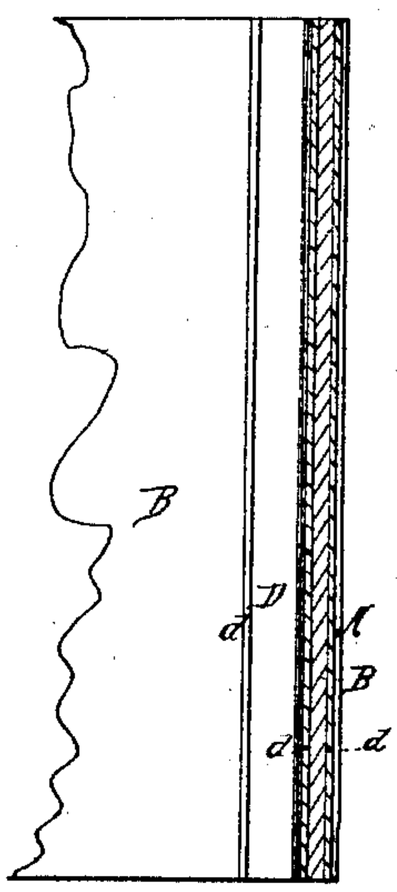


Fig: 4

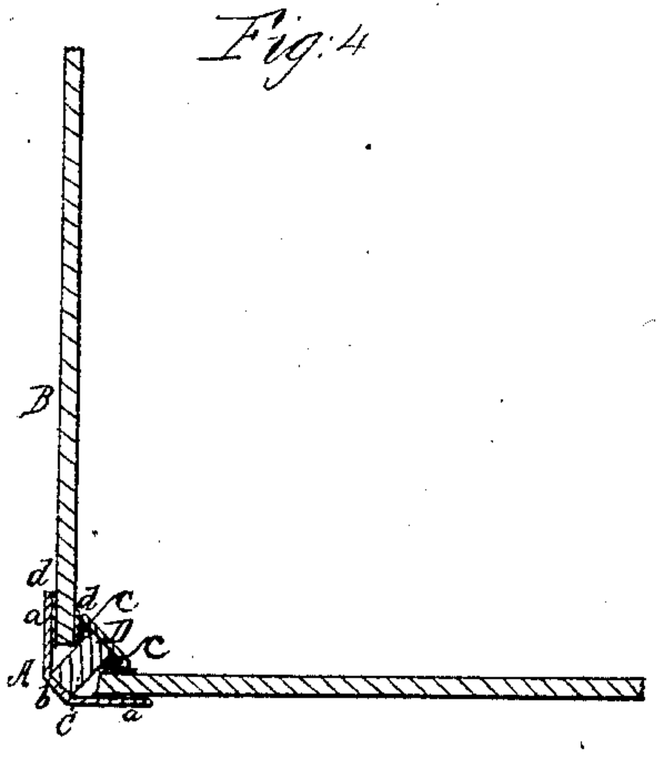
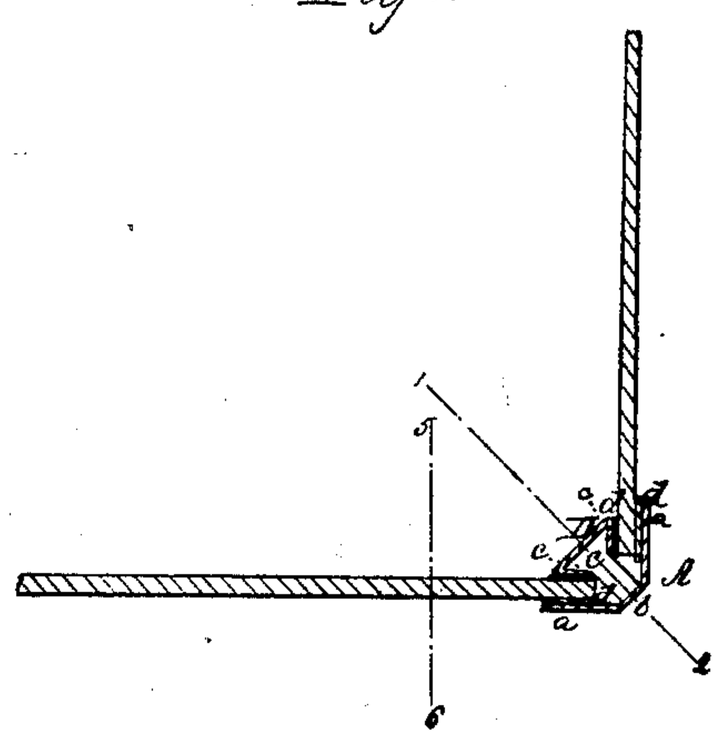


Fig: 2



UNITED STATES PATENT OFFICE.

J. CHILCOTT AND JAS. SCRIMGEOUR, OF BROOKLYN, NEW YORK, ASSIGNORS TO THEMSELVES AND GEO. F. TAYLOR, OF SAME PLACE.

IMPROVEMENT IN THE CONSTRUCTION OF AQUARIA.

Specification forming part of Letters Patent No. **21,719**, dated October 5, 1858.

To all whom it may concern:

Be it known that we, JOHN CHILCOTT and JAMES SCRIMGEOUR, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in the Construction of Aquaria, which improvement is also applicable to tanks and other vessels for containing water; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification.

Figure 1 is an elevation of the corner portion of one end of an aquarium constructed after the improved method. Fig. 2 is a top or bird's-eye view of the same. Fig. 3 is a vertical diagonal section through the corner of the said aquarium at the line 1 2 of Fig. 2. Fig. 4 is a horizontal section of the same at the line 3 4 of Fig. 3. Fig. 5 is a vertical section through the corner portion at the line 5 6 of Fig. 2.

Similar letters in the figures refer to corresponding parts.

The nature of this invention and improvement consists in confining the ends of the glass plates of which aquaria are formed between the angular marginal surfaces of metallic plates, beween which and the glass plates strips of india-rubber or other packing are interposed, the said angular plates and ends of the glass plates being so formed and arranged in relation to each other as to form a well or space between the same for the reception of cement, which is poured therein in a heated and liquid state, and allowed to cool and solidify, and thus produce a water-tight joint at the corners of the aquarium.

To enable others skilled in the art to make and use our invention, we will proceed to describe the construction and operation of the same.

The metal plates A A, forming the exteriors of the corners of the aquarium, are made straight and flat along their center, and their marginal portions *a a* are bent or set at obtuse corresponding angles with the central portion, *b*, and at right angles with each other, to correspond with the angle which the ends of the glass sides B assume in relation to each other. To the inner surface of the central flat portion of the plate are secured, at equal distances apart, by rivets or other suitable means, a series of metallic dovetailed tenons or tongues, C, the beveled or dovetailed sides of which are parallel with the angular sides of the biangulate plate A, and over the inner surfaces and beveled or dovetailed edges of these tenons or tongues is slid a correspondingly-bent plate, D, exactly fitting the said surfaces. The flat central portion of this plate D is sufficiently larger than the corresponding portion *b* of the biangulate plate A to bring its marginal and acute-angular portions *c* the required distance from the corresponding marginal and obtuse-angular flat portions *a* of the outer biangulate plate, A, to admit the ends of glass plates B, which are inserted between them, with strips of india-rubber or other elastic or yielding packing, *d*, interposed between the surfaces of the glass plates B and the angular surfaces *a c* of the plates A D, so as to form a packed joint at the corners of the aquarium, in which the ends of the glass plates B shall be firmly embraced between the marginal and angular surfaces *a c* of the plates A D and the strips of packing *d d*.

When the ends of the plates of glass B, forming the sides of the aquarium, are thus placed and confined between the angular portions *a c* of the plates A D and strips of packing *d*, a space or well is formed between the adjacent edges or ends of the plates of glass B, between the inner surfaces of the flat central and angular portions of the acute-angular plate D and edges of the same and the under exposed surface of the obtuse-angular plate A, and between the tenons or tongues C, into which is poured a cement for completing the joint, as will be hereinafter stated.

The lower edges of the plates of glass B, when thus connected, and the lower ends of the joints at their corners, may be let into rabbets, on the bottoms of which they may rest, formed in a wooden or metal bottom piece secured to a suitable base, or which may be of the required size and form to answer for the base itself, a sufficient space being left between the inner surfaces of the lower part of the glass plates and joints at their ends to form a groove or space entirely around the inside of the same, for the reception of a cement com-

posed of wax and rosin or other suitable material which shall, after being poured into said groove or space, solidify and prevent the escape of water below the glass plates B and the joints at the ends or corners of the aquarium. After they are thus placed on and secured to their bottom piece or base, the same cement is poured in a liquid form in the well at the corners, and this cement, by flowing into all the penetrable spaces and interstices situated in the well between the tenons or tongues C and the ends of the glass plates B, and the respective parts therein contained, and solidifying, forms a perfect barrier around the ends of the glass plates B to the passage of any water, and thereby produces a strong, simple, and perfectly water-tight joint at the corners of the aquarium.

This method of forming water-tight joints is applicable in the manufacture of tanks having their sides made either of plates of glass or any other material.

What we claim as new, and desire to secure by Letters Patent, is—

The combination of the dovetailed tenons or tongues C and acute-angular plate D, sliding over the same, with the outer biangulate plate, A and ends of the plates of glass B, for forming a space or well between the same for the reception of the cement, and thus enabling a perfect water-tight joint to be formed at the corners of aquaria and other vessels, substantially in the manner and for the purpose herein set forth.

JOHN CHILCOTT.
JAMES SCRIMGEOUR.

Witnesses:
WM. TUSCH,
J. W. COOMBS.