

No. 666,347.

Patented Jan. 22, 1901.

F. E. GREGORY.
ARTIFICIAL STONE TANK.

(Application filed Sept. 4, 1900.)

(No Model.)

Fig. 1.

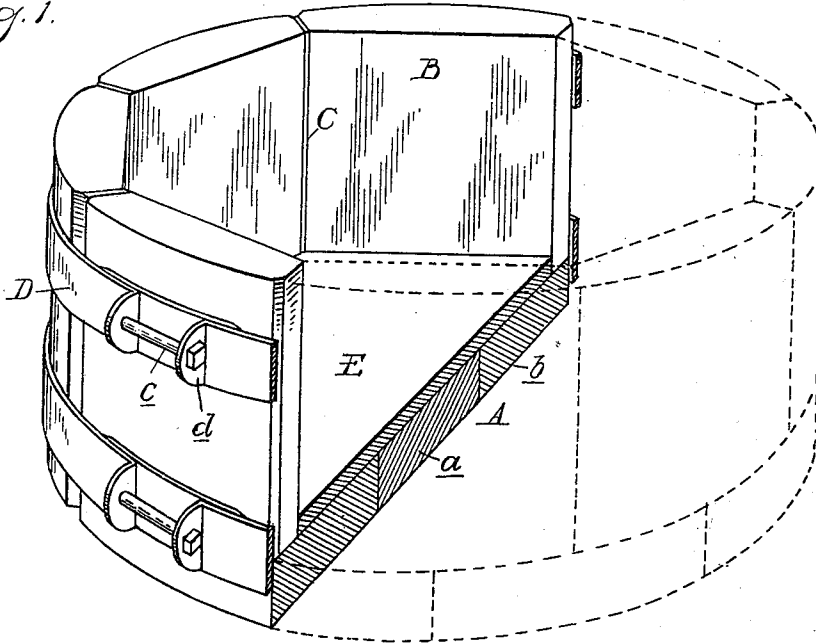


Fig. 2.

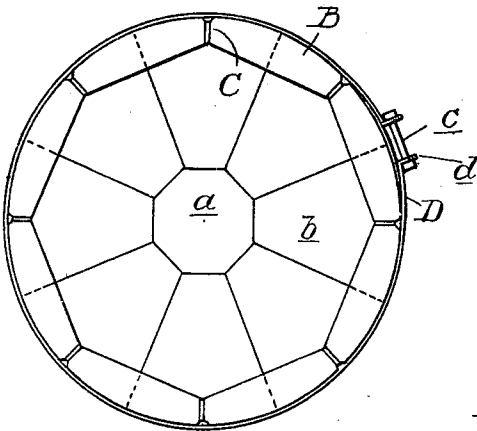
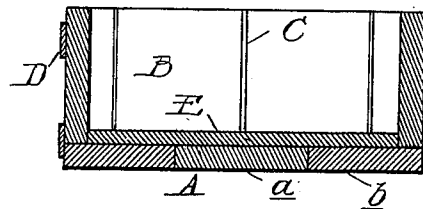


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

FRANK E. GREGORY, OF ST. JOHN'S, MICHIGAN.

ARTIFICIAL-STONE TANK.

SPECIFICATION forming part of Letters Patent No. 666,347, dated January 22, 1901.

Application filed September 4, 1900. Serial No. 28,924. (No model.)

To all whom it may concern:

Be it known that I, FRANK E. GREGORY, a citizen of the United States, residing at St. John's, in the county of Clinton and State of Michigan, have invented certain new and useful Improvements in Artificial-Stone Tanks, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to artificial-stone tanks; and it is the object of the invention to obtain a construction which may be more readily built, which is more durable, and can be more easily repaired when necessary than constructions heretofore used.

The invention consists in the peculiar construction of a tank comprising a plurality of separately-formed sections, and, further, in the peculiar manner in which said sections are united to each other, all as more fully hereinafter described and claimed.

In the drawings, Figure 1 is a sectional perspective view of the tank. Fig. 2 is a plan view showing the tank before the lining thereof is laid. Fig. 3 is a cross-section through the completed tank.

Heretofore in the construction of artificial-stone tanks it has been customary to form a monolithic structure. This is objectionable for a number of reasons, among which are, first, that on account of the great weight the tank cannot easily be moved from one place to another, and, further, through the action of the elements, especially frost, the walls are liable to fracture. In my construction these objections are overcome by forming a sectional tank, which is constructed as follows:

A is the bottom of the tank. This for small-sized tanks may be a monolithic slab; but for larger structures I preferably form it, as shown, of a number of sections. In Fig. 2 the bottom is shown as composed of a central octagonal section *a*, around which are arranged the wedge-shaped segments *b*. These sections may be separately formed in suitable molds and, if desired, may be manufactured at the factory and shipped to the point of erection. The wall of the tank is formed of a plurality of staves *B*, which preferably rest upon the outer edge of the bottom *A*. Between the adjacent faces of these staves is

arranged any suitable packing material of an elastic nature, such as indicated at *C*. To hold the staves in position, bands or hoops *D* are placed around the same, and these bands are preferably provided with adjusting means, such as the clamping-bolts *c*, engaging with the ears *d*. The lower hoop is preferably arranged to bridge the joint between the lower ends of the staves *B* and the bottom *A*.

In constructing the tank the sections composing the bottom *A* are first laid upon a suitable base, after which the staves *B* are arranged in position and secured by the clamping-hoops *D*. As the packing *C* is placed between said staves it will serve to form a liquid-tight joint. As, however, the bottom is formed of a number of sections and as the staves *B* simply rest upon these sections, it is necessary to provide additional means for forming a water-tight joint. This I accomplish by laying a thin layer of plastic artificial stone upon the bottom of the tank, which forms a lining therefor and seals all of the joints between sections. It also is of sufficient depth to seal the joint between the staves and bottom. When this lining is solidified, the tank will be as water-tight as the monolithic constructions. At the same time if it is desired to remove it from its original location this may be readily done, section by section. It is simply necessary to again reline the bottom when erected in its new position.

A further advantage of this construction is that contraction and expansion caused by the varying temperatures may be provided for either by the elastic packing *C* or, if necessary, by tightening or loosening the clamping-bolts *c*. Still further, if the action of the frost on the supporting-base should cause a separation or slight upheaval of one or more of the base-sections the tank may still remain water-tight by reason of the lining *E*, or in case the latter is fractured it may be readily repaired by an additional layer of cement.

What I claim as my invention is—

1. An artificial-stone tank comprising a bottom slab, sides composed of a plurality of staves resting on said bottom, a hoop or band surrounding said staves and overlapping said

bottom and a plastically-laid lining of artificial stone sealing the joint between said staves and bottom.

2. An artificial-stone tank comprising a
5 bottom slab, sides composed of a plurality of
staves resting on said bottom, packing material
between joints of said staves, a hoop
or band surrounding said staves and overlapping
said bottom and a plastically-laid
10 lining of artificial stone sealing the joint between
said staves and bottom.

3. An artificial-stone tank comprising side
walls formed of a plurality of staves, packing
material between joints thereof and sur-

rounding clamping-band; a bottom slab composed
15 of a plurality of adjoining sections upon which
said staves rest and a plastically-laid lining
of artificial stone sealing the joint between
sections of the bottom and between the latter
and the lower ends of said
20 staves.

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

FRANK E. GREGORY.

Witnesses:

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