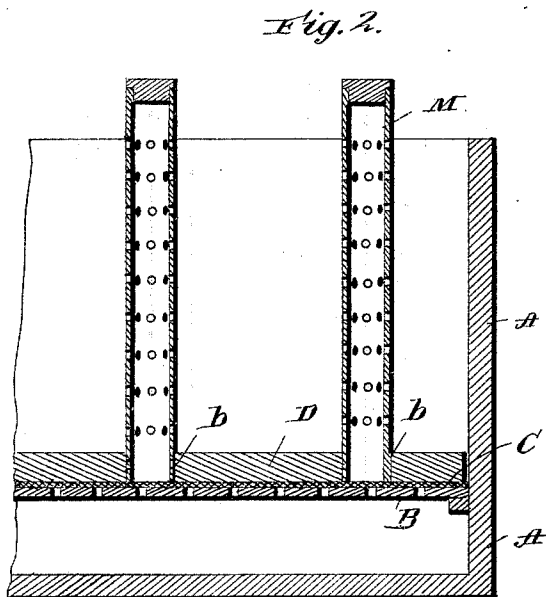
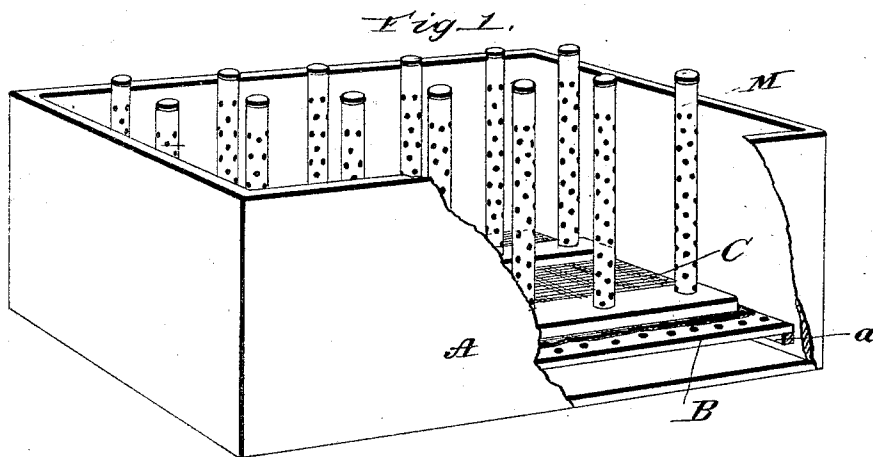


(No Model.)

C. G. BROWN.
ORE TANK.

No. 497,856.

Patented May 23, 1893.



Witnesses:

C. H. Raeder
H. F. Matthews

Inventor

Charles G. Brown.

By *James J. Sheehy*
Attorney

UNITED STATES PATENT OFFICE.

CHARLES G. BROWN, OF SALT LAKE CITY, UTAH TERRITORY.

ORE-TANK.

SPECIFICATION forming part of Letters Patent No. 497,856, dated May 23, 1893.

Application filed August 10, 1892. Serial No. 442,679. (No model.)

To all whom it may concern:

Be it known that I, CHARLES G. BROWN, a citizen of the United States, residing at Salt Lake City, in the county of Salt Lake and Territory of Utah, have invented certain new and useful Improvements in Ore-Tanks; and I do 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.

My invention has relation to improvements in tanks for leaching or saturating ore with solutions, and it has for its object to hold the pieces of ore apart and subject every side thereof to the direct action of the solution and thereby facilitate the leaching or saturating process.

With the foregoing end in view, the invention will be fully understood from the following description and claims when taken in conjunction with the accompanying drawings, in which—

Figure 1 is a perspective view of a tank embodying my invention; one of the side walls being broken away to illustrate the interior construction, and Fig. 2 is an enlarged, detail transverse section of the same.

Referring by letter to the said drawings: A, indicates a tank which may be of the rectangular form illustrated and of any suitable capacity, and B, indicates the perforated false bottom thereof which is placed at about the proportional distance illustrated above the bottom of the tank and is supported by the ledges *a*, or in any other approved manner.

Arranged upon the upper side of the perforated false bottom B, is a piece of matting or other textile C, which is designed and adapted, in practice, to prevent the small particles of ore from closing the openings in the bottom B, and interfering with the circulation of the solution.

D, indicates a series of supporting strips which are preferably arranged longitudinally of the tank and are arranged at suitable intervals apart as shown. These strips D, are provided at intervals in their length with the vertically disposed apertures *b* to receive the perforated tubes M, which are seated in the

said apertures *b* as shown and serve to lead the water to all parts of the mass of ore within the tank. These tubes M, which preferably extend a slight distance above the upper edge of the tank as illustrated, have their upper ends plugged so as to prevent the ore from entering the same, but the lower ends of the said tubes which rest upon the matting C, are open so as to allow the water to enter the same from the space below the false bottom.

In practice the tubes M, are first placed in position as shown in Fig. 1, of the drawings and the tank is filled with ore. After the tank is charged with ore, the solution with which it is desired to treat the ore, is poured into the tank until the same is full.

By reason of the peculiar construction of my improved tank it will be perceived that the solution poured into the tank will percolate down through the ore to the space between the bottom and false bottom of the tank and will then take up through the tubes M, and will be distributed throughout the body of ore. After the leaching or saturation of the ore is finished the tubes M, are removed by pulling them up and out of the apertures *b*, when the tank may be discharged in the ordinary or any approved manner.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a tank for leaching or saturating ore, the combination with a perforated false bottom; of a series of vertically disposed perforated tubes arranged upon and extending above the false bottom and having their lower ends open, substantially as specified.

2. In a tank for leaching or saturating ore, the combination with a false bottom and a piece of textile material laid upon the upper side of said false bottom; of a series of vertically disposed perforated tubes designed and adapted to hold the pieces of ore apart and promote the circulation of the leaching or saturating solution, substantially as specified.

3. In a tank for leaching or saturating ore, substantially as described, the combination with a perforated, false bottom and a piece

of textile material laid upon the upper side
of the false bottom; of a series of strips ar-
ranged upon the textile material and having
vertically-disposed apertures at intervals in
5 their length, and the vertically disposed, per-
forated tubes seated in the apertures of the
strips, substantially as specified.

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

CHARLES G. BROWN.

Witnesses:

E. W. TAYLOR,
LOUIS LODE.