

No. 627,157.

Patented June 20, 1899.

F. A. TULLOH & W. H. ARCHER.

FILTERING CISTERN.

(Application filed June 30, 1898.)

(No Model.)

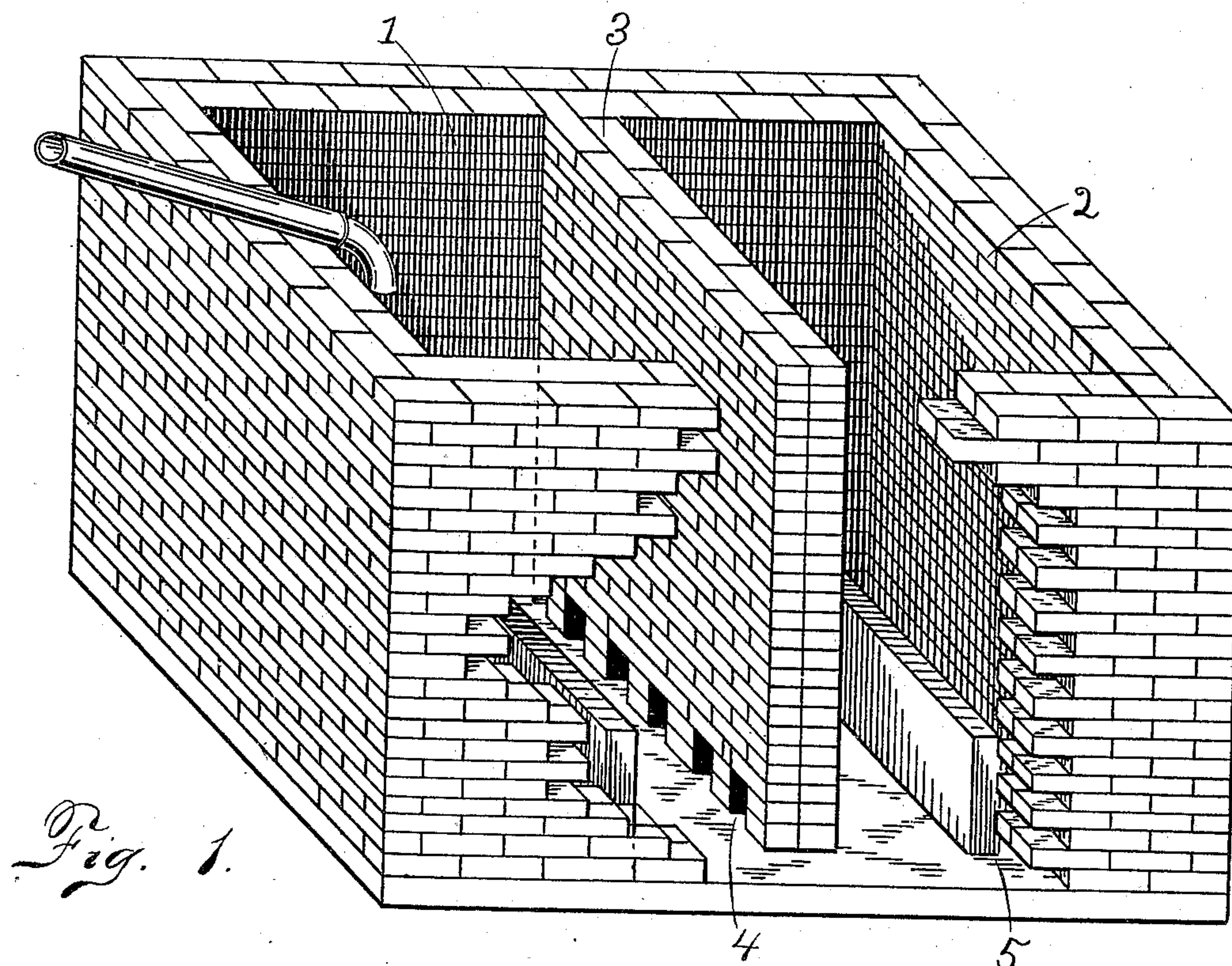


Fig. 1.

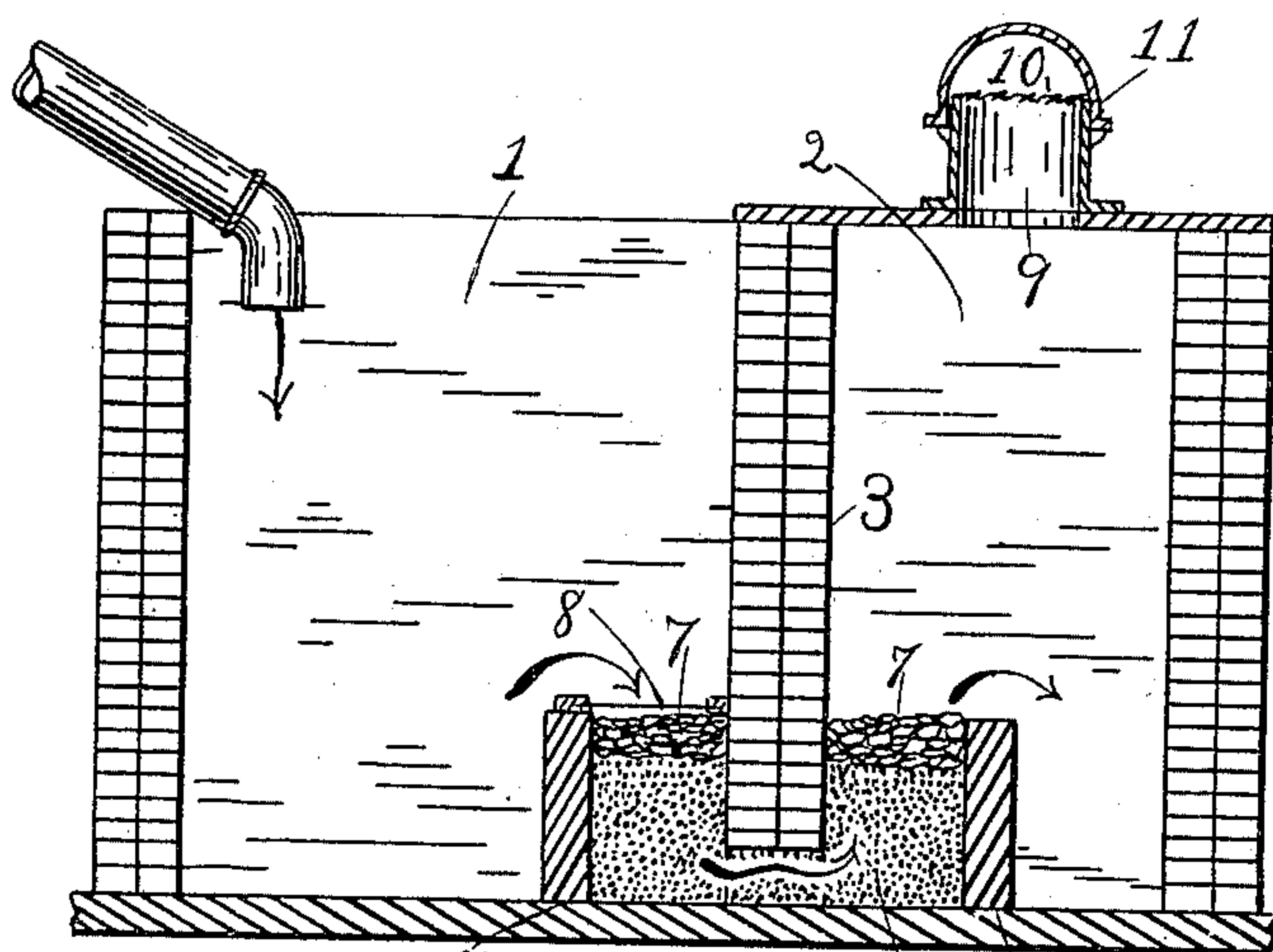


Fig. 2.

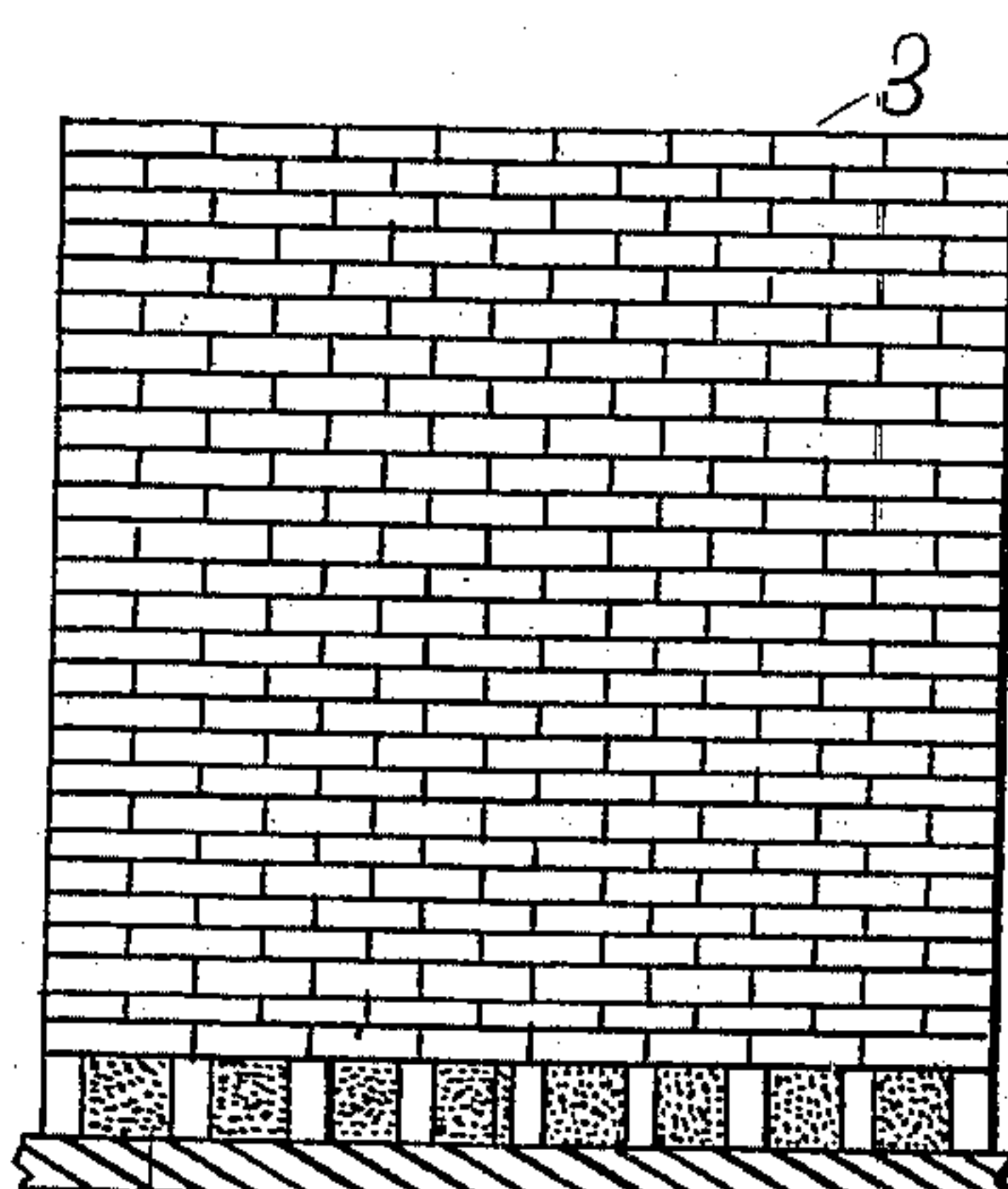


Fig. 3.

Witnesses,
A. J. Sangster.
& A. Neubauer.

Franklin A. Tulloh
William H. Archer Inventors.

By James Sangster Attorney.

UNITED STATES PATENT OFFICE.

FRANKLIN A. TULLOH AND WILLIAM H. ARCHER, OF LOCKPORT, NEW YORK.

FILTERING-CISTERN.

SPECIFICATION forming part of Letters Patent No. 627,157, dated June 20, 1899.

Application filed June 30, 1898. Serial No. 684,777. (No model.)

To all whom it may concern:

Be it known that we, FRANKLIN A. TULLOH and WILLIAM H. ARCHER, citizens of the United States, residing at Lockport, in the county of Niagara and State of New York, have invented certain new and useful Improvements in Filtering-Cisterns, of which the following is a specification.

Our invention relates to an improved filtering-cistern, and comprises two compartments which are separated by a main wall or partition, the lower end of which is perforated to receive the filtering medium, and two comparatively low walls which are arranged one on each side of the main wall and at a short distance from it and which act as guard-walls to support the filtering material. By this particular arrangement of walls the larger portion of the sediment collects at the bottom and is not carried into the filtering material, all of which will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 represents a perspective view, a portion being broken away to expose the interior. Fig. 2 is a cross-section illustrating the filtering device in operative condition. Fig. 3 represents a detached view of the main partition.

Referring to the drawings for the details of construction, in which like numerals designate like parts, 1 represents the compartment into which the water first flows, and the compartment containing the filtering material is designated by the numeral 2. These two compartments are separated from each other by means of the substantially perpendicular wall or partition 3, the lower end of which is provided with perforations 4, substantially as shown in the drawings, and the perforations are filled with charcoal or similar material.

Upon each side of the main wall 3 is located a supplementary wall or partition 5, which extends a short distance upward from the floor. By means of these supplementary walls a bin is formed on each side of the

main wall, which is filled to within a short distance from the top with charcoal 6 or similar filtering material, and a layer of gravel 7 is placed upon the charcoal to hold it in place during the filtering operation. The top of the bin in compartment 1 is also covered with a muslin cloth 8 or similar fabric or material, the office of which is to catch any leaves or other floating particles and also act as an additional filtering medium. This cloth can be held in place by piling stones upon its edges or by any other well-known means. The bin in compartment 2 is provided with an upper layer of gravel only, the cloth not being required, as this bin is free from floating particles. The top of the filtered-water compartment 2 is entirely closed or covered, save for the opening 9, which is covered by a woven-wire screen 10 and an exterior cap 11.

This principle of filtering can also be applied to reservoirs and analogous receptacles.

The filtered water can be removed from compartment 2 by any of the well-known means usually employed.

We may, if we desire, employ more than one wall and divide the cistern into more than two compartments or we may employ more than two supplementary walls without departing from the scope of our invention.

We claim as our invention—

A filtering-cistern, divided into two compartments, a water-receiving compartment 1, and a filtered-water compartment 2, by a substantially vertical main partition or wall 3, having perforations 4, in its lower portion filled with filtering material, two supplementary walls 5, extending a short distance upward from the floor on each side of the main partition or wall, and forming between themselves and the main wall, bins which are adapted to be filled with filtering material 6, an upper layer of heavier material 7, to sustain it in place, and a cloth 8, placed over the top of the bin in the water-receiving compartment 1, to catch the leaves and floating particles, the water in filtering passing from the water-receiving compartment through the

cloth, the upper layer of heavier material and the filtering material in the first bin through the filtering material in the perforations in the main partition, and through the filtering
5 material in the second bin into the filtered-water compartment, a top covering entirely covering the compartment 2, having an opening 9, a woven-wire screen 10, over said open-

ing, and an exterior cap 11, above the screen, as set forth.

FRANKLIN A. TULLOH.
WILLIAM H. ARCHER.

Witnesses:

PETER H. MCPARLIN,
WILLIAM H. HAYES.