

R. S. MANNING.
Wash-Boiler Fountains.

No. 133,654.

Patented Dec. 3, 1872.

FIG. 1.

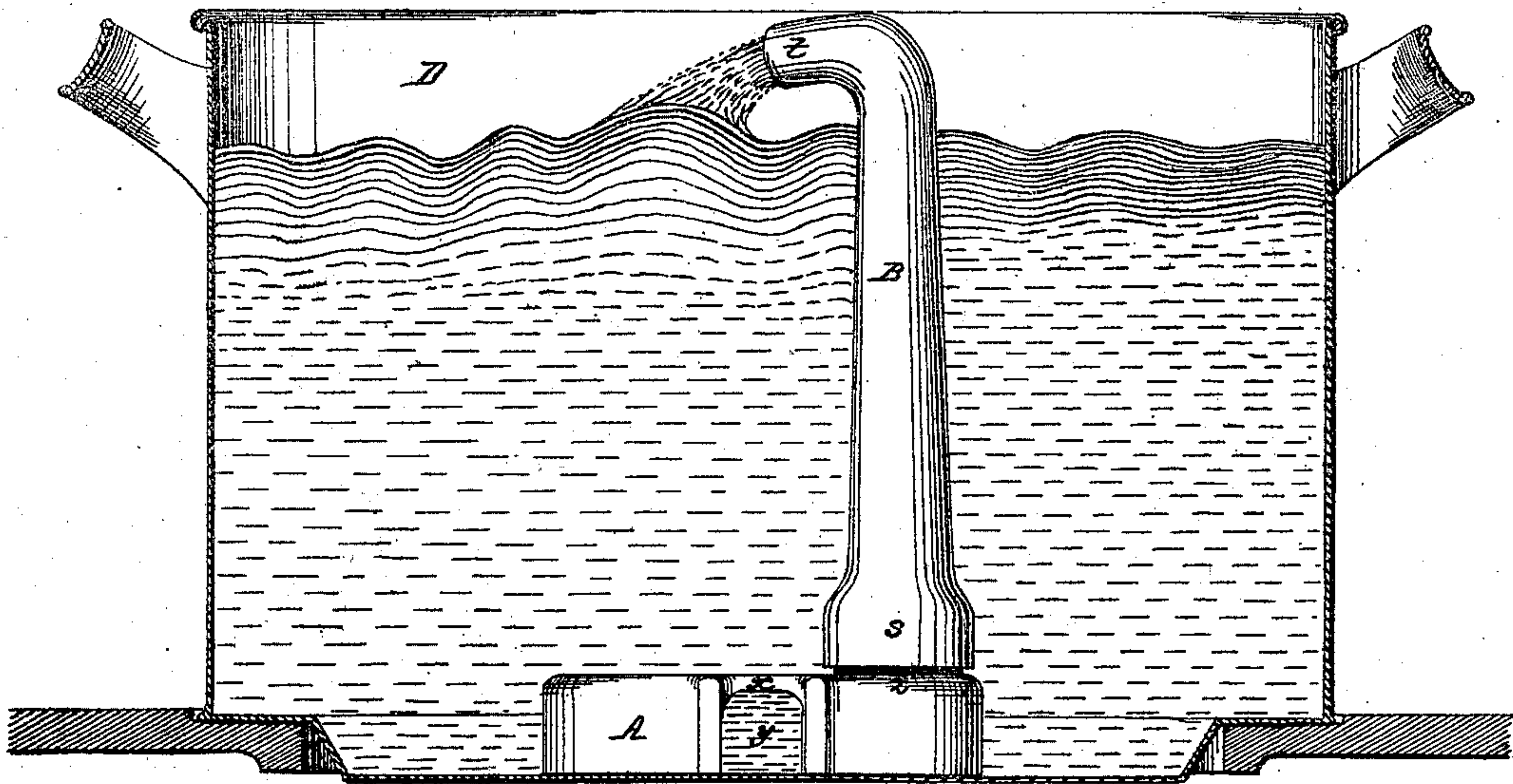
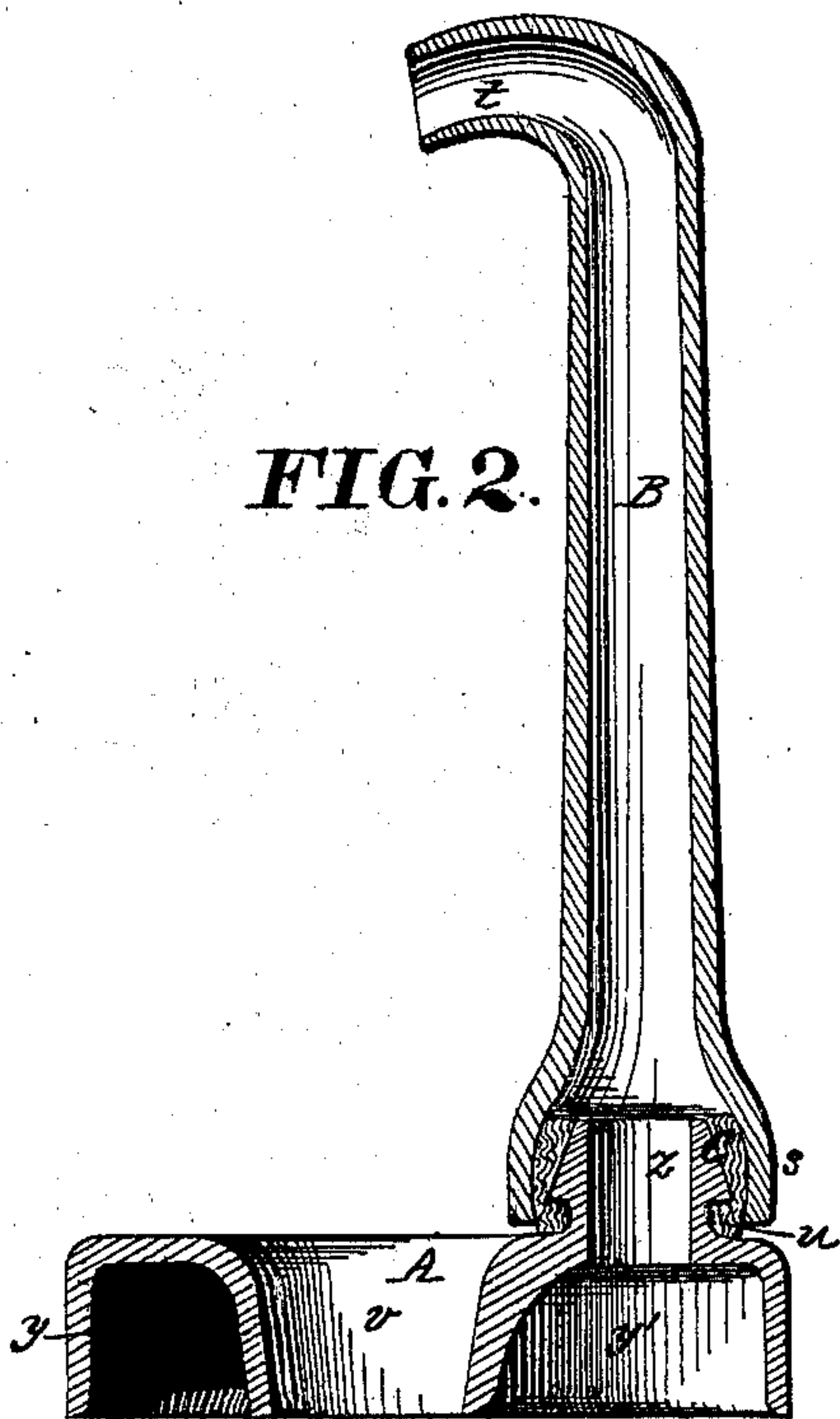


FIG. 2.



WITNESSES.

Geo. L. Ewin
Walter Allen.

FIG. 3.

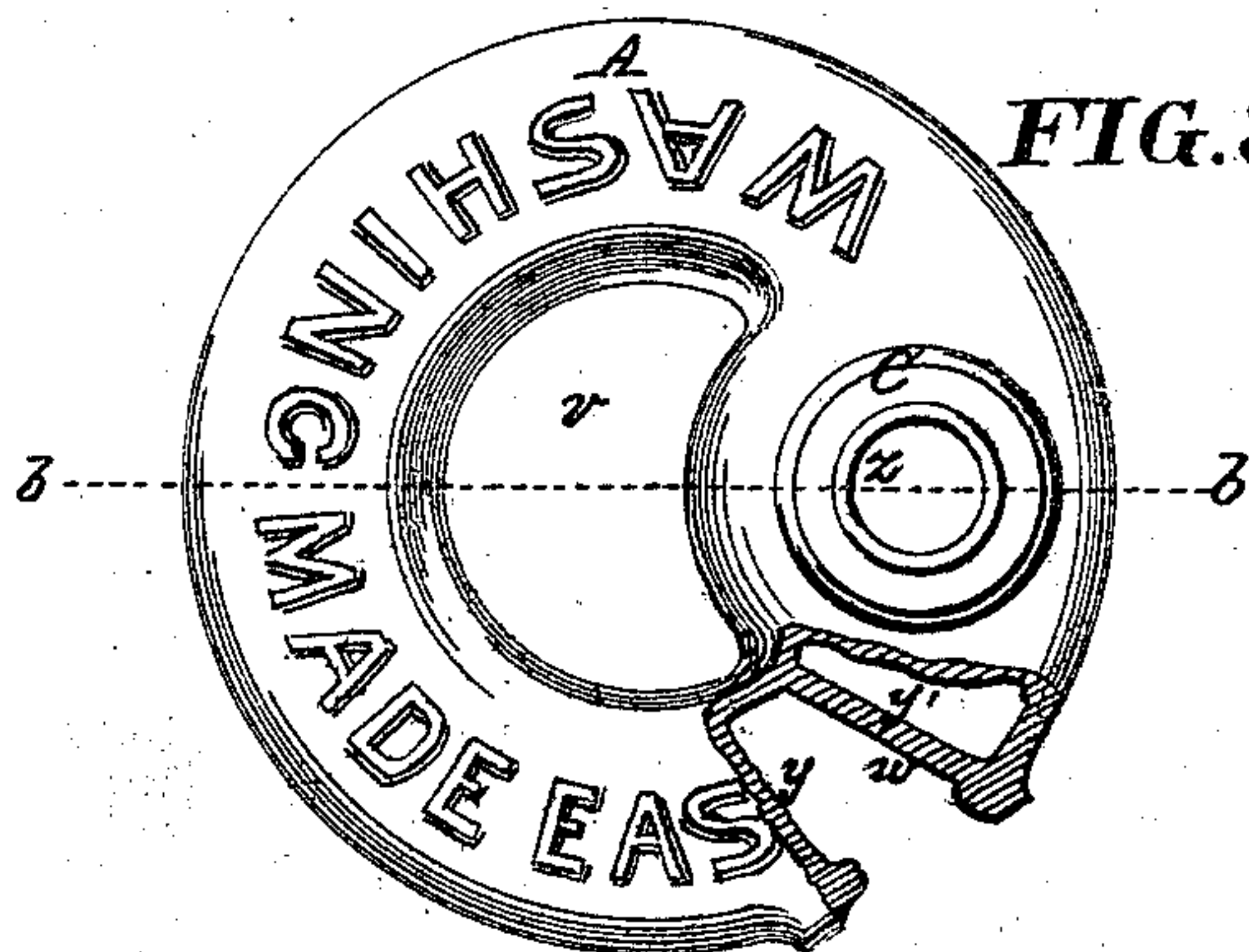
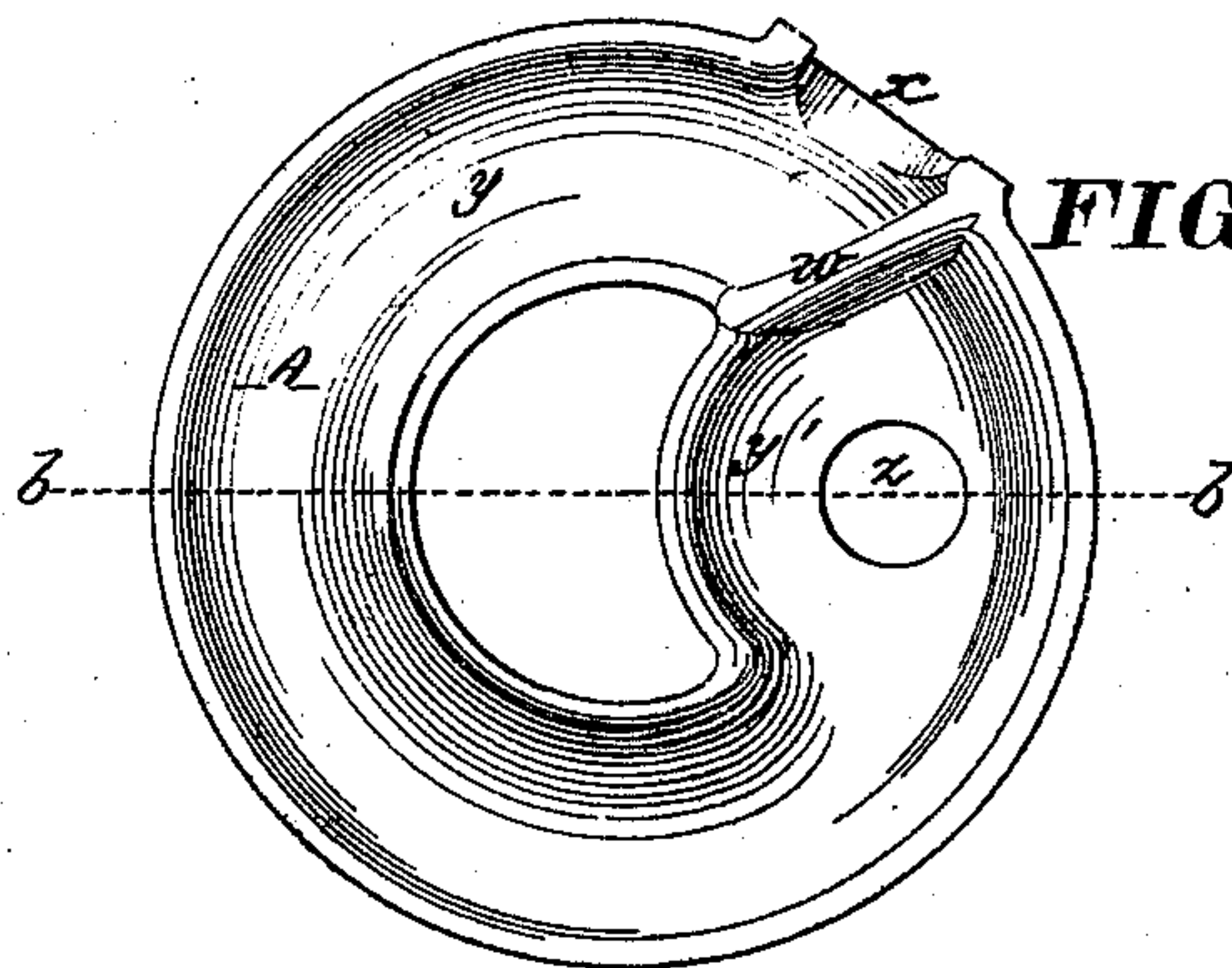


FIG. 4.



INVENTOR.

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UNITED STATES PATENT OFFICE.

ROBERT S. MANNING, OF TRENTON, NEW JERSEY.

IMPROVEMENT IN WASH-BOILER FOUNTAINS.

Specification forming part of Letters Patent No. 133,654, dated December 3, 1872.

To all whom it may concern:

Be it known that I, ROBERT S. MANNING, of Trenton, in the county of Mercer, New Jersey, have invented a certain Improvement in Fountains for Wash-Boilers, of which the following is a specification:

Nature and Objects of the Invention.

This invention relates primarily to wash-boiler fountains made of porcelain or similar non-corrosive material, as described in Letters Patent No. 132,094, issued to the inventor October 8, 1872; and the first part of the invention consists in a tube made of like material, and constructed with an enlarged socket to receive the neck of the fountain proper, with an interposed rubber collar, by which a tight joint is formed and liability to fracture the parts is reduced. The invention further consists in a circulating fountain constructed with an upwardly-flaring central receptacle for soap and with a circular enlargement beneath the vertical tube. This fountain is constructed with an open bottom so as to form the circulating channel on the bottom of the boiler for the purpose of securing a more prompt action.

Description of the Drawing.

Figure 1 represents a vertical section of a stove-top and wash-boiler, and a side elevation of the fountain with its appurtenances, illustrating the operation of the latter. Fig. 2 represents a vertical section of the fountain, collar, and tube. Fig. 3 is a plan view of the fountain, partly in section. Fig. 4 is a plan view of the fountain inverted.

The lines *b b*, Figs. 3 and 4, indicate the plane of the section represented in Fig. 2.

General Description.

In carrying out this invention a fountain, A, and a tube, B, are manufactured, of porcelain or similar non-corrosive material, by a common process, and a collar, C, of vulcanized rubber, is provided for application to the neck Z of the former. The fountain A is annular in general form, and a channel, *y*, is

formed in its under side, leading to the discharge-neck Z from a lateral inlet, *x*, a thin transverse partition, *w*, forming the ends of the channel. A soap-receptacle, *v*, is formed by the upwardly-flaring central space within the fountain, where the soap is dissolved and distributed among the clothes by the washing action of the water circulating beneath the clothes outside of the fountain. To improve the forcing action of the fountain the channel *y* terminates in a circular enlargement, *y'*, concentric with the discharge-neck, which enlargement tends to induce and maintain the whirling action of the ascending column. The neck Z is constructed of tapering form and with a square groove at its base to receive and confine the rubber collar C, which is correspondingly constructed with an internal flange, *u*; but these details are not essential. The tube B is preferably made in one piece, including a curved nozzle, *t*. At its lower end the tube is formed with a socket, *s*, with sides parallel or nearly so to embrace the neck Z of the fountain, with the collar C interposed.

In use, the fountain A B C is placed in a boiler, D, so as to rest on a flat portion of the bottom. A piece of soap is placed in the receptacle *v*, the clothes are introduced, and the boiler is then filled with water and placed over the fire. When the water boils the confined steam causes the lower particles to circulate within the fountain and soap-receptacle, and, by the force acquired within the former, to discharge through the tube B onto the clothes, which are thus automatically cleansed.

The fountain, as constructed, with an open bottom, operates with less power than the close channel fountain, but more quickly, as in the latter the fountain has first to be heated, and in the present form this is not the case; but this feature of the fountain forms no part of the invention.

Claims.

The following is claimed as new:

1. The socketed tube B *s*, constructed of porcelain or similar non-corrosive material, for

use in combination with a wash-boiler fountain, A Z, of like substance, and an interposed rubber collar, C, substantially as herein shown and described.

2. The fountain A, constructed with the upwardly-flaring soap-receptacle *v* and channel enlargement *y'*, formed and operating substantially as set forth, for the purpose specified.

To the above specification of my improved fountain for wash-boilers I have hereunto set my hand this 29th day of October, 1872.

ROBT. S. MANNING.

Witnesses:

JAS. L. EWIN,
OCTAVIUS KNIGHT.