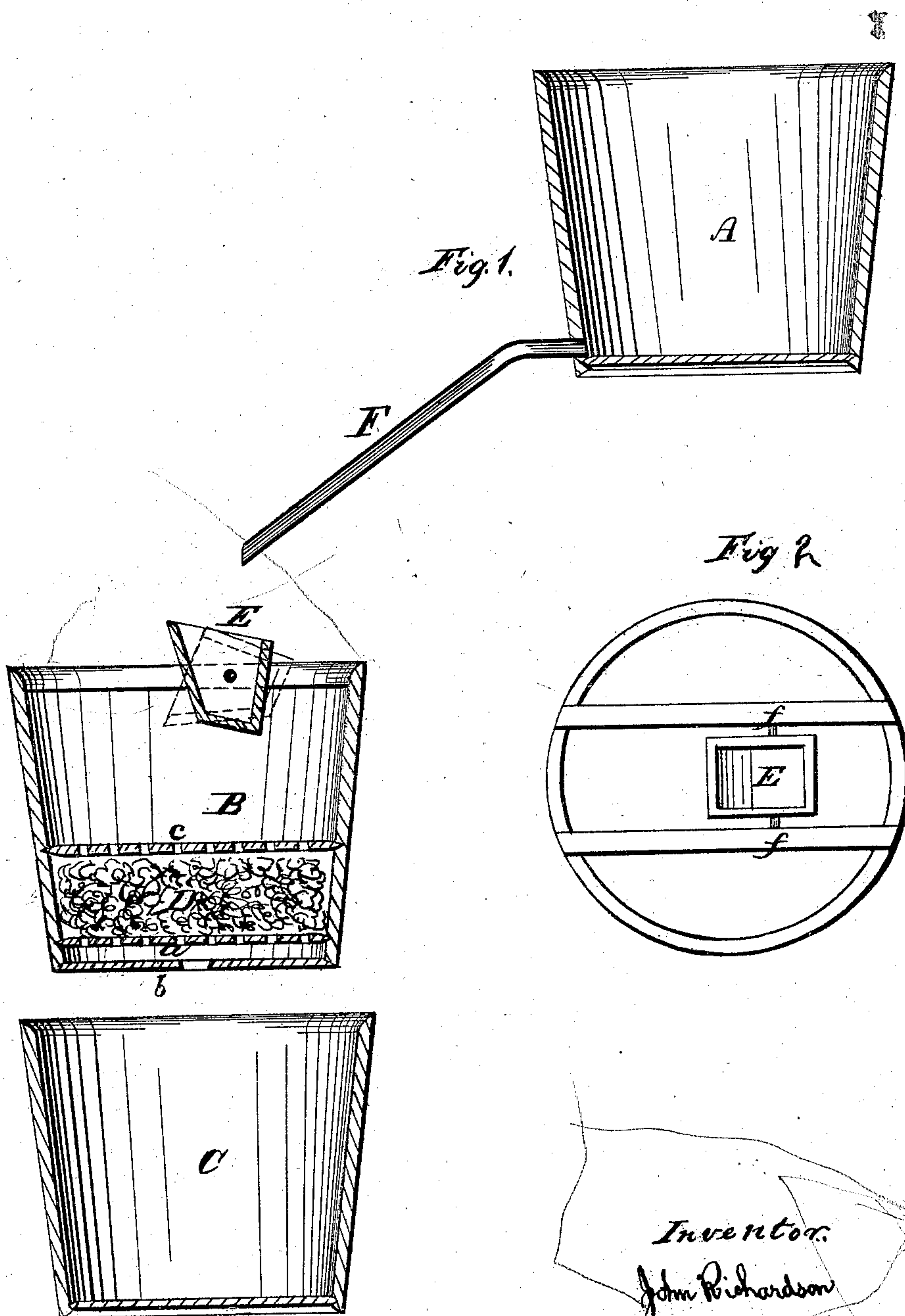


J. RICHADSON.
Making Vinegar.

No. 67,909.

Patented Aug. 20, 1867.



Witnesses:
A. J. Tibbitts
J. W. Shumway

Inventor:
John Richardson
By his Attorney
J. M. E. Earle

United States Patent Office.

JOHN RICHARDSON, OF NEW HAVEN, CONNECTICUT.

Letters Patent No. 67,909, dated August 20, 1867.

IMPROVED APPARATUS FOR THE MANUFACTURE OF VINEGAR.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN RICHARDSON, of New Haven, in the county of New Haven, and State of Connecticut, have invented a new Improvement in Apparatus for the Manufacture of Vinegar; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a sectional view of the three tanks and their connection, with my improvement attached to illustrate the process, and in

Figure 2 a top view of the generator with my improvement.

This invention relates to an improvement in the apparatus in common use, whereby it is made self-feeding, and consists in the arrangement of a self-dumping bucket within the generator, or so as at the proper time to empty itself into the generator.

In order to the clear understanding of my improvement, I will proceed to describe the same as illustrated in the accompanying drawings.

A is the reservoir, B the generator, and C the receiver, arranged usually upon floors one above the other, as in the drawing. The generator B is a tank having a perforated plate, *a*, set a little distance above the bottom *b*, and above, at suitable distance, a second perforated plate, *c*, is placed, and the space D between the two perforated plates is filled with shavings or other material to facilitate the process of making the vinegar. From the generator B a conductor leads to the receiver C. It is necessary, in pouring the fluid to be turned into vinegar into the generator, that it be distributed over the surface of the upper plate, and this must be done by pouring large quantities at intervals. This has heretofore been done by hand, drawing the fluid from the tank A into a common hand-bucket, and by hand pouring it into the generator, the fluid passing down through the material D into the receiver C.

To avoid this hand labor is the object of my invention. I arrange a bucket, E, upon pivots *f*, and constructed as seen in fig. 1, so that when filled to a certain point it will tilt as denoted in red, and pour its contents into the generator, and from the tank A a conductor, F, leads to the said bucket, and is gauged so as to fill the bucket to the point of tilting at the proper time, and thus arranged the apparatus may be left to take care of itself, and the services of the hand which had before supplied the generator are dispensed with, and the manufacture is continued whether personally attended or not. This arrangement, though designed especially for the manufacture of vinegar, may be employed for other purposes.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent, is—

The arrangement of the self-dumping bucket, so as to operate to empty into the generator, substantially as and for the purpose specified.

JOHN RICHARDSON.

Witnesses:

JOHN E. EARLE,
A. J. TIBBITS.