

G. L. Witsil.
Pulp Washer.

N^o 84,850. Patented Dec. 8, 1868.

Fig. 2.

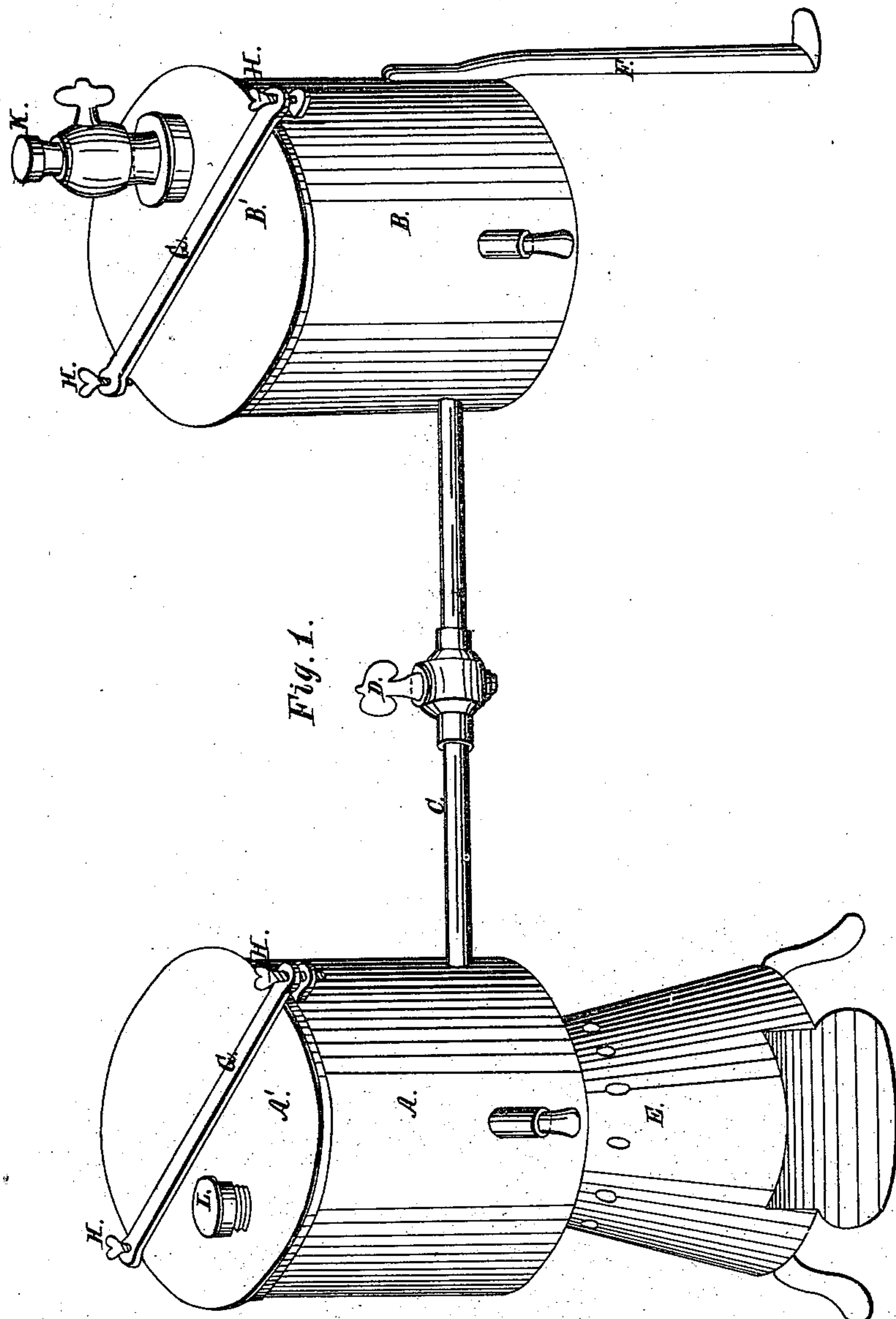
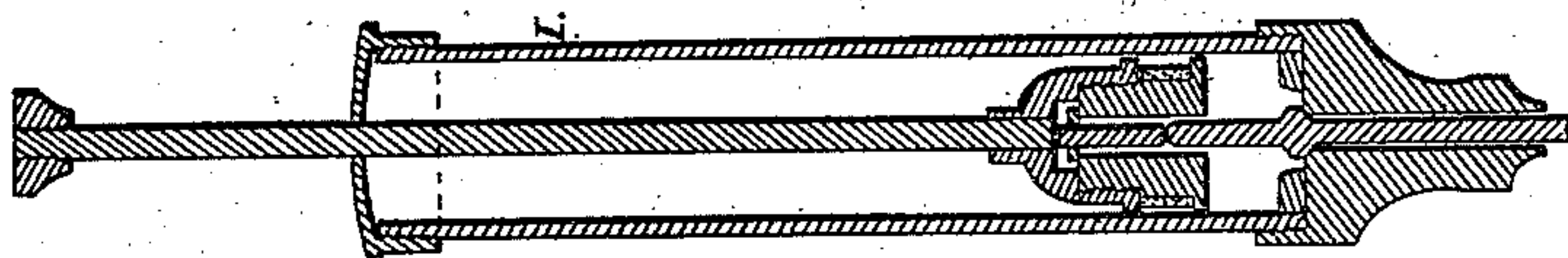


Fig. 1.

Witnesses.
C. F. Clausen
Joseph R. Edson

Inventor.
G. L. Witsil
by
D. P. Moway & Co.
his atty.

United States Patent Office.

GEORGE L. WITSIL, OF ST. LOUIS, MISSOURI, ASSIGNOR TO HIMSELF AND T. L. BATES, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 84,850, dated December 8, 1868.

IMPROVED APPARATUS FOR CLEANING RAGS.

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, GEORGE L. WITSIL, of St. Louis, in the county of St. Louis, and State of Missouri, have invented a new and useful Improvement in Apparatus for Cleansing Rags, pulp, &c.; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a perspective view; and

Figure 2, a section of the pump.

My improvements relate to the construction and arrangement of an apparatus for cleansing rags, pulp, clothes, &c., so that by the use of two cisterns, by the alternate exhaustion of the air from each, a current of hot water may be caused to flow through the articles subjected to the treatment, serving to remove all soluble impurities contained therein.

The following description will enable persons skilled in the art to construct and apply my apparatus to use.

In the annexed drawings I have shown, at A and B, two close tubs, or cisterns, of any form, and of any required size.

These cisterns are connected by a pipe, C, leading from near the bottom of one to near the bottom of the other.

This pipe is closed or opened by a stop-cock, D, placed therein.

The cistern A rests upon a furnace, of any convenient construction, represented at E, by means of which the water in said cistern may be heated to any required temperature.

The cistern B is supported upon legs, F, or in any other convenient manner.

The cisterns are covered by covers, A' and B', the joint being packed by felt, India rubber, or other suitable material, so as to be made air-tight.

The covers may be held in place by bars, G, which are screwed down by thumb-screws, H, passing through lugs, so as to draw the covers closely upon the pack-

ing, and also to prevent the covers from being displaced when the water is hot enough to generate steam of high pressure.

I is an air-pump, of any ordinary construction, which may be either attached to the pipe on cistern B, above the stop-cock K, or to the pipe in the cover A', closed by a cap, L.

Two air-pumps may, if preferred, be used, one being permanently attached to each of the cisterns.

The operation of the apparatus is as follows:

The articles to be cleansed are to be placed in cistern B, and the water is poured into cistern A, and heated to the required temperature. The stop-cock D being closed, the air should then be exhausted from cistern B, by operating the air-pump. The stop-cock D should then be opened, and the hot water will immediately rush from cistern A into cistern B, passing through the articles placed therein. The air-pump applied to the pipe L should then be set in operation, and the air exhausted from cistern A. The pressure of air through the open pipe K will drive the water from the cistern B, through the pipe C, into the cistern A, when the stop-cock D is again closed, and the air is exhausted from the cistern B, and the water again admitted.

By continuing this operation, the hot water is made to flow through the articles submitted to its action, until they are properly purified.

What I claim as my invention, and desire to secure by Letters Patent, is—

An apparatus, for the uses specified, consisting of the cisterns, pipes, stop-cocks, and air-pumps, arranged for operation, substantially as set forth.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

GEO. L. WITSIL.

Witnesses:

J. H. CUNNINGHAM,
THOMAS L. BATES.