

E.H. & W.A. Stuart,

Cheese Vat.

No. 112090.

Patented Feb. 21. 1871.

Fig. 1.

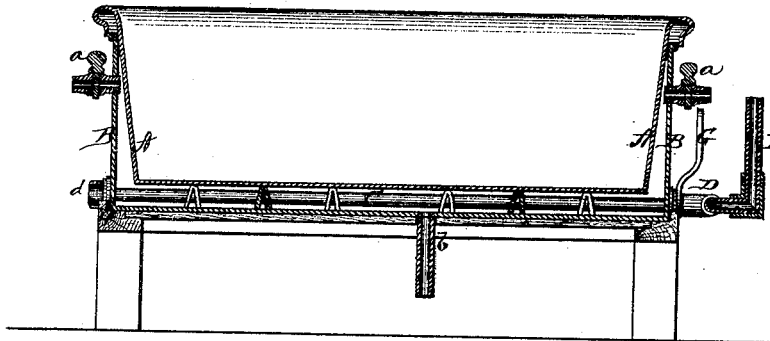
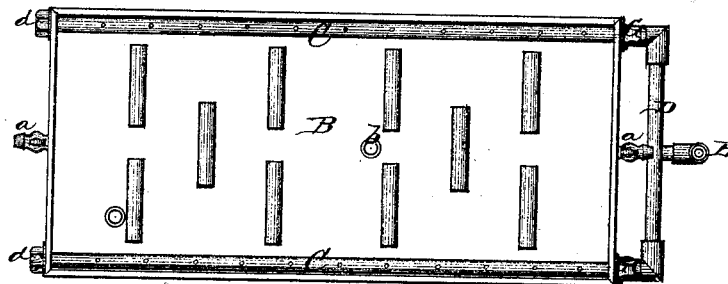


Fig. 2.



Witnesses

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EZRA H. STUART AND WALTER A. STUART, OF CEDARVILLE, NEW YORK.

Letters Patent No. 112,090, dated February 21, 1871.

IMPROVEMENT IN CHEESE-VATS.

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

To all whom it may concern :

Be it known that we, EZRA H. STUART and WALTER A. STUART, of Cedarville, in the county of Herkimer and State of New York have invented certain new and useful Improvements in Cheese-Vats; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon which form a part of this specification.

The nature of our invention consists in the construction and arrangement of a vat to be used in the manufacture of cheese, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a longitudinal vertical section of our vat, and

Figure 2 is a plan view of the case.

Our vat consists of a double vat with an air-tight space between the two, at the sides, bottom, and ends, of about one inch.

The inside vat A, which we style the "milk-vat," is about the same shape as the vats now in use, and made of tin or tinned iron.

The outside vat B, called the "case," is made of tin, zinc, iron, or other suitable metal. This case is made about two inches larger on the bottom, each way, than the milk-vat, and about two-thirds as deep, with a faucet, *a*, at each end, near the top, and another, *b*, under the bottom, near the center.

The top edge of the case B is drawn in so that it fits close to the sides of the milk-vat A. The top edges of the case are either soldered to the sides of the milk-vat, or are allowed to rest on rubber packing in a flange that is soldered to the milk-vat, thus making the space between the vat and case air-tight, preventing the heat from escaping.

Two iron pipes, C C, run lengthwise through the case on the bottom, one close to each side, which pipes extend through both ends of the case about two inches in length.

On the outside, at one end of the case, the pipes C C are connected by a cross-pipe, D, which cross-pipe is connected with a pipe, B, that leads to the boiler.

At the opposite end of the case the pipes C C are closed with screw-plugs *d d*, which can be removed and let the stream pass through to clean the pipes of sediment, if any should collect in them.

At one end of the case there is a short lever, G, attached to each of the pipes C, for the purpose of turning said pipes.

The pipes C C are perforated with a number of small holes drilled in them in a straight line, on one side of each pipe, to let the steam into the space between the vat and case.

If we wish to heat the milk-vat on the sides and not have any heat on the bottom, we turn the pipes C C by use of the levers G G, so that the steam is thrown from the holes in the pipes up the sides of the vat, opening the faucets *a a* and closing the faucet *b*, or reverse to heat the bottom and not the sides of the vat. If we wish a uniform heat all through the vat, we close all the three faucets in the case.

Having thus fully described our invention,

What we claim as new, and desire to secure by Letters Patent, is—

1. The movable perforated steam-pipes C C, arranged one on each side in the air-tight space of the double vat A B, substantially for the purposes herein set forth.

2. The case B, provided with faucet *a* at each end, a faucet, *b*, at the bottom, in combination with the milk-vat, A, perforated pipes C C, with their screw-plugs *d d*, cross-pipe D, connecting-pipe E, and levers G G, all constructed and arranged substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

EZRA H. STUART.
WALTER A. STUART.

Witnesses:

B. E. DAVIS,
F. E. EASTON.