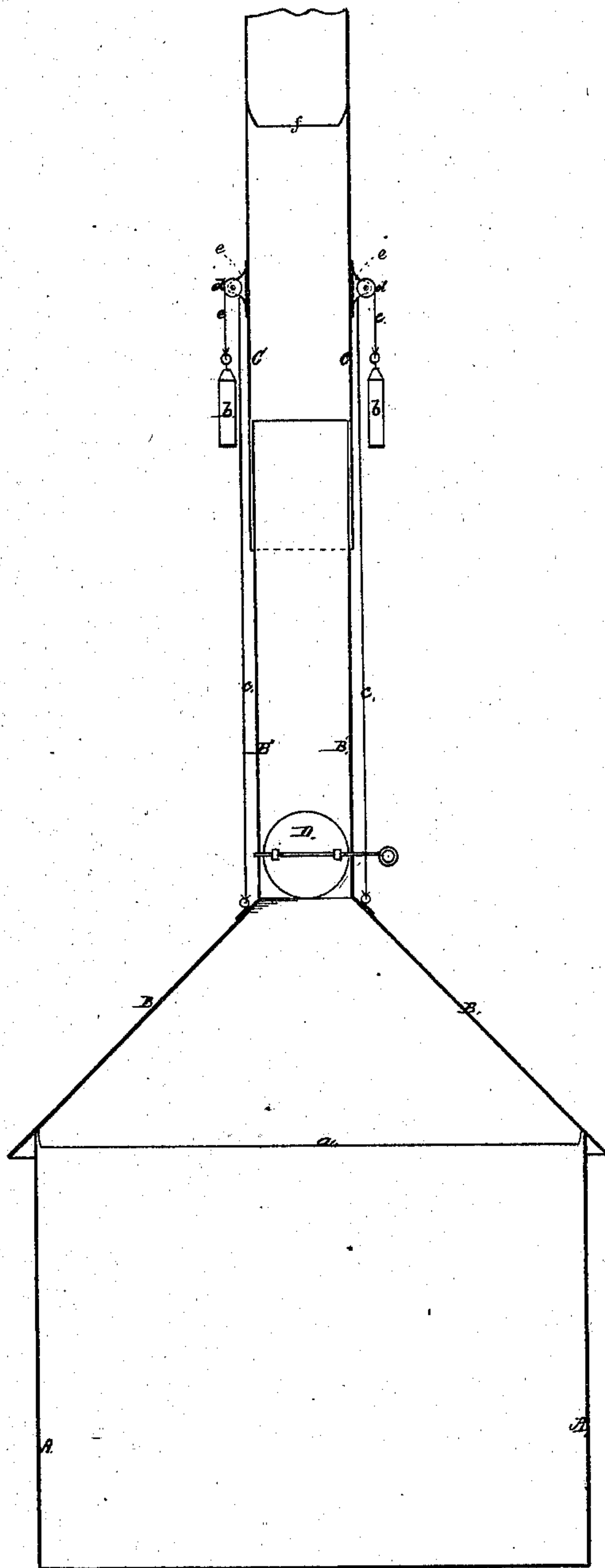


P. J. & J. ABBOTT.  
Culinary-Boiler Cover.

No. 108,082.

Patented Oct. 11, 1870.



Witnesses

S. H. Piper

L. N. Möller

P. J. Abbott and J. Abbott.

by their attorney

R. H. Eddy



# United States Patent Office.

PASCHAL J. ABBOTT AND JOB ABBOTT, OF DEXTER, MAINE.

Letters Patent No. 108,082, dated October 11, 1870.

## IMPROVEMENT IN COVERS OF CULINARY-BOILERS.

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

*To all persons to whom these presents may come:*

Be it known that we, PASCHAL J. ABBOTT and JOB ABBOTT, of Dexter, in the county of Penobscot and State of Maine, have made a new and useful invention, having reference to the Covers of Culinary-Boilers, Dye-Vats, and various other vessels; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawing, which is a vertical section of a boiling vessel with my steam-discharging and deviating cover applied thereto.

In such drawing—

A denotes the vessel or boiler, and

B, its cover, the latter being in the form of a hollow conic frustum, and made to closely fit to the top of the boiler.

An inclined flange, *a*, arranged around the inner surface of the cover, and just over the top of the vessel A, serves to intercept any condensed steam when flowing down the inner surface of the cover, and to convey or direct it into the vessel.

At the top the cover is provided with a tube or conduit, B', which opens out of the cover, and at top projects a short distance into another tube, C, leading to a chimney or discharge-flue.

In the lower part of the conduit B' is a damper or turning-valve, D, its purpose being to retain the steam within the cover, or regulate its escape therefrom, as circumstances may require.

The cover B is suspended to the tube C by means of counterbalance weights, *b b*, appended to cords or chains *c c*, carried around sheaves or pulleys *d d*, supported in brackets *e e*, such brackets being projected from the tube C.

Over the mouth or upper end of the tube B' is a flange or deflector, *f*, which is arranged in and around the tube C, so as to discharge into the tube B' any steam which may be condensed on the inner surface of such tube C.

The tube C may extend into the tube B', but this is not so good an arrangement as that hereinbefore described.

The operation of the movable cover will be readily understood. It may be raised off the boiling vessel, and, while on it, will serve to retain the steam or discharge it therefrom, as may be requisite.

The invention is specially applicable to dye-vat covers, where it is particularly useful and advantageous.

We make no claim to anything described in the United States Patent granted September 26, 1835, to Ezekiel Daboll.

We claim—

1. The counterbalanced boiler or vat-cover B, provided with the pipe B', and valve D, as set forth.
2. The boiler or dye-vat cover, as counterbalanced as described, and provided with the neck or intercepting flange *a*, or its equivalent, to extend into the boiler or vat A, or arranged to direct therein the steam that may condense in or run down on the inner surface of the cover.
3. The combination of the intercepting flange *f*, or its equivalent, with the pipes C B', and the counterbalanced lever B, arranged substantially as specified.

PASCHAL J. ABBOTT.  
JOB ABBOTT.

Witnesses:

MILTON L. ABBOTT,  
EPHRAIM GEE.