

George Stevenson's Apparatus for Heating and Evaporating Liquids &c.

118068

PATENTED AUG 15 1871

Fig. 1.

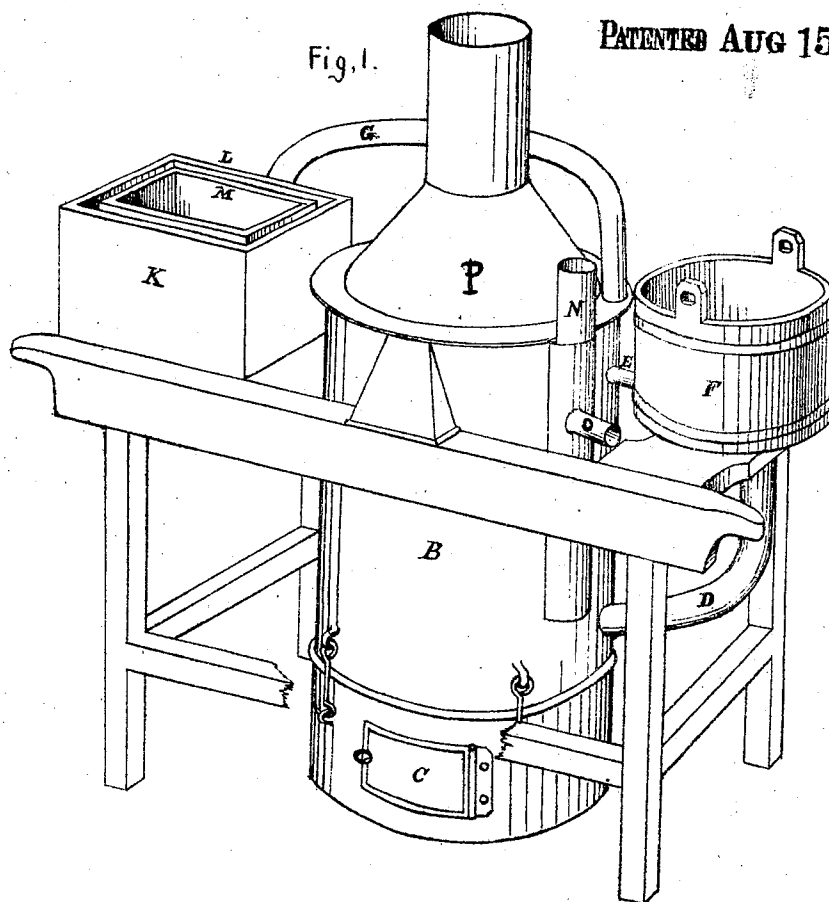
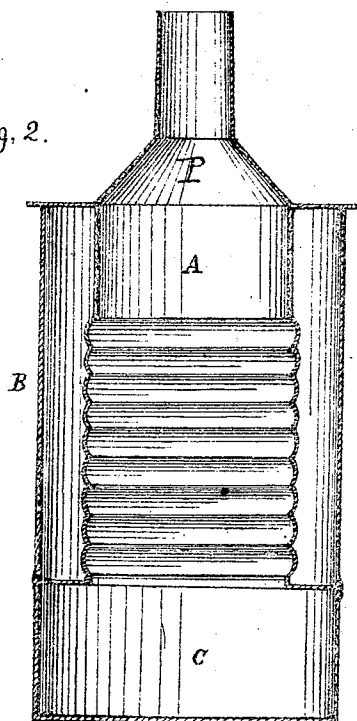


Fig. 2.



Witnesses,
W. B. Raymond
H. A. Daniel,

George Stevenson, Inventor,
by C. S. Whitman, Attorney
529 Seventh St
Washington D.C.

UNITED STATES PATENT OFFICE.

GEORGE STEVENSON, OF ZIONSVILLE, INDIANA.

IMPROVEMENT IN FARMERS' BOILERS.

Specification forming part of Letters Patent No. 118,068, dated August 15, 1871.

To all whom it may concern:

Be it known that I, GEORGE STEVENSON, of Zionsville, in the county of Boone and State of Indiana, have invented certain new and useful Improvements in Apparatus for Heating and Evaporating Liquids and Steaming Food for Stock; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in the construction and arrangement of an apparatus to be used for the double purpose of heating and evaporating liquids and for steaming food for stock, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing which forms a part of this specification, and in which—

Figure 1 is a perspective view, and Fig. 2 a transverse vertical section of my apparatus.

A represents a cylinder of any suitable dimensions placed within the boiler B, at the bottom of which is the fire-box C. The cylinder A is provided with annular corrugations, as shown in Fig. 2, and on the upper end of the same is placed the funnel-shaped smoke-pipe P. The boiler is, by means of pipes D and E, connected with the tub F, the pipe D leading from near the bottom and the pipe E from near the top of the boiler. Another pipe, G, leads from the top of the boiler to a vessel, K, which is composed of an outer box, L, and an inner box, M, the space between which is filled with sawdust or other suitable ma-

terial to prevent articles placed in said vessel from freezing in cold weather. The boiler is supplied with water through the supply-pipe N, which is provided with the waste-pipe O to prevent the water within the boiler from rising above the proper height. The pipes D, E, and G should be provided with suitable stop-cocks.

When it is desired to use the apparatus for steaming purposes the cocks in the pipes D E are to be closed, and the steam passes through the pipe G to the vessel K, where the food or other substance to be steamed is placed.

When it is required to use the apparatus for heating and evaporating liquids the boiler is filled with such liquid through the supply-pipe N, and the pipes connecting with the tub F opened. The heated liquid then rises through the pipe D and returns to the boiler through the pipe E, and the liquid within the tub is kept constantly in a boiling state.

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

The within-described apparatus, consisting of the cylinder A, boiler B, fire-box C, connecting-pipes D E G, tub F, double vessel K, supply-pipe N with waste-pipe O, and the smoke-pipe P, all of said parts being constructed and arranged substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 10th day of March, 1871.

GEORGE STEVENSON.

Witnesses:

JOHN H. LONG,
W. L. GREGORY.