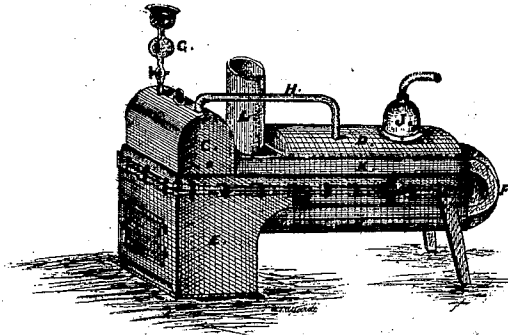


W. J. ESTES.

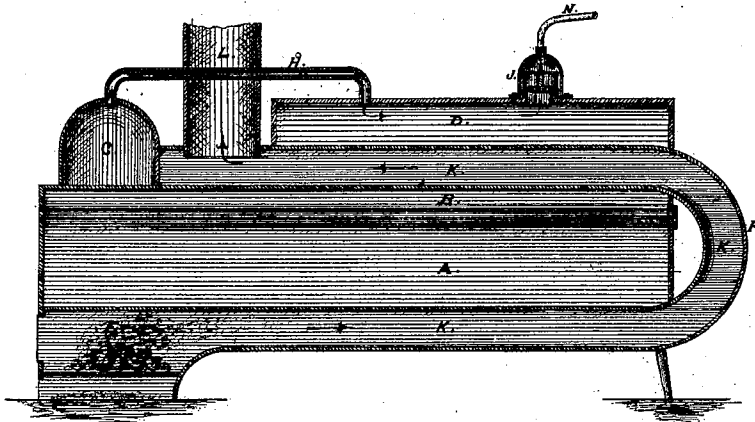
STEAM BOILER FOR COOKING FOOD FOR STOCK.

No. 102,521.

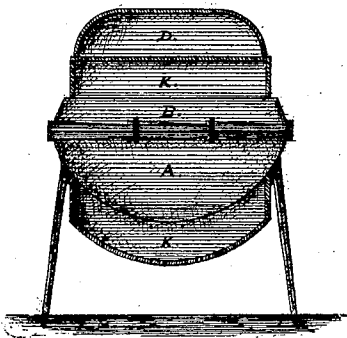
Patented May 3, 1870.



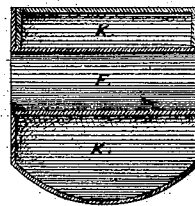
VIEW.



LONGITUDINAL -  
SECTION.



SECTION.



END SECTION.

Witnesses:  
Louis Heyon  
A. C. Thompson.

# United States Patent Office.

WILLIAM J. ESTES, OF PENN TOWNSHIP, ILLINOIS.

Letters Patent No. 102,521, dated May 3, 1870.

## IMPROVEMENT IN STEAM-BOILER FOR COOKING FOOD FOR STOCK.

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, WILLIAM J. ESTES, of Penn Township, Stark County, State of Illinois, have invented a new and Improved Steam-Boiler for the purpose of Steaming Food for Stock; and I do hereby declare the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists in a cast-iron boiler, made in two halves. Each half has on its outer edge a flange, provided with a number of inclined planes, for the purpose of fastening the two halves together by means of gripes, so that it can be easily taken apart and cleaned.

It is provided with a steam-dome on the top of the boiler, to receive the steam. On the top of the dome there are three or more openings, one to attach the filling-can, one for the safety and vacuum-valves, and the other for a pressure-valve, in the top of which is a steam-pipe to conduct the steam from the boiler to the superheater, which is attached to the top of the boiler.

The filling-can is provided with a valve or cock in the lower part, and a tunnel on the upper part, through which the boiler is supplied with water.

The pressure-valve regulates the pressure of steam in the boiler.

Letter A represents the lower half of boiler.

B, the upper half, with wedge-shaped flanges, and gripes *m m m*.

C the steam-dome, on which are the filling-can, the

safety and vacuum-valves, and the pressure-valve, which can be put on the top of the superheater when desired.

D is the superheater.

E, the fire-box.

F, the return-flue.

G, the filling-can.

H, the steam-pipe.

I, the safety-valve.

J, the pressure-valve.

*n* is the pipe which conveys the steam from the pressure-valve to the cooking-tub.

K is a flue from the fire-box under the boiler, through return-flue F, and between the top of the boiler and the superheater, to the smoke-stack L.

*m m m* are wedge-shaped flanges around the edges of the boiler, for the purpose of fastening the two halves together by means of gripes.

The return-flue F is fastened to the boiler with a rod or bolt, so that it can be readily taken apart and cleaned.

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

The two halves of boiler A and B, with wedge-shaped flanges and gripes *m m m*, steam-dome C, superheater D, fire-box E, return-flue F, filling-can G, steam-pipe H, and pressure-valve J, with pipe *n*, substantially as herein described and set forth.

WM. J. ESTES.

Witnesses:

LOUIS KEYON,

A. C. THOMPSON.