

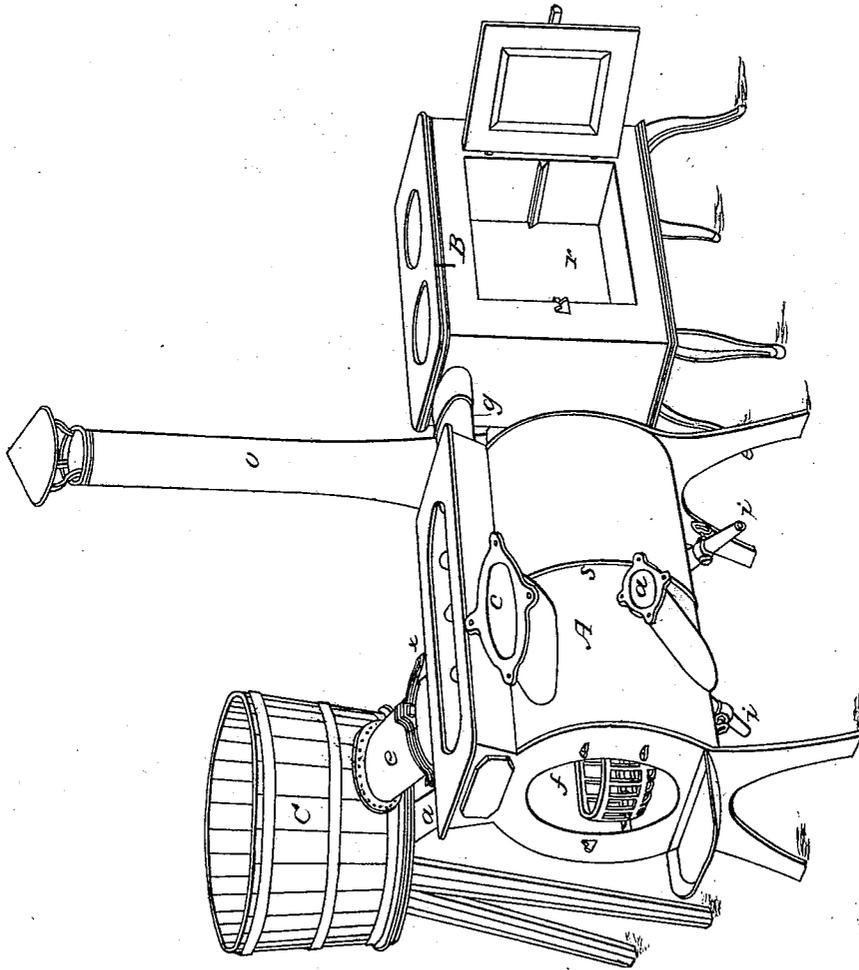
J. VAN.

7 Sheets—Sheet 1.

Cooking Stove.

No. 13,589.

Patented Sept. 18, 1855.



WITNESSES

*John K. Adams*

INVENTOR

*John Van*

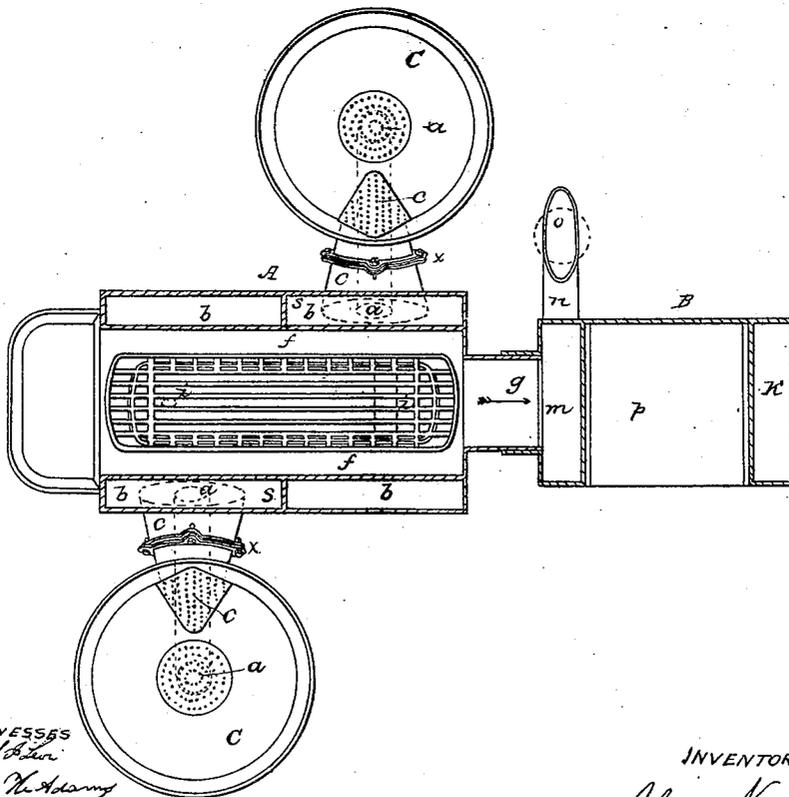
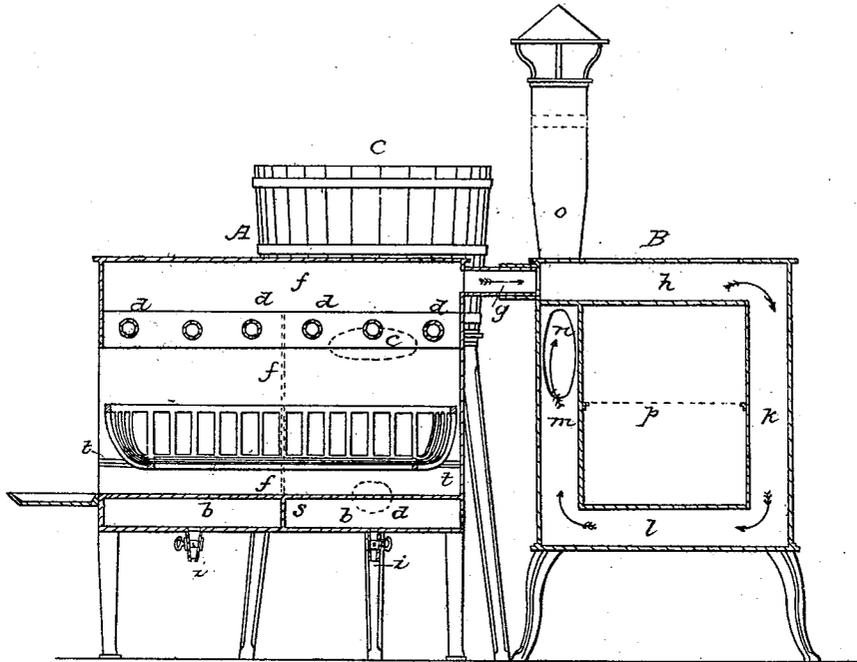
J. VAN.

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WITNESSES  
*J. Van*  
*John W. Adams*

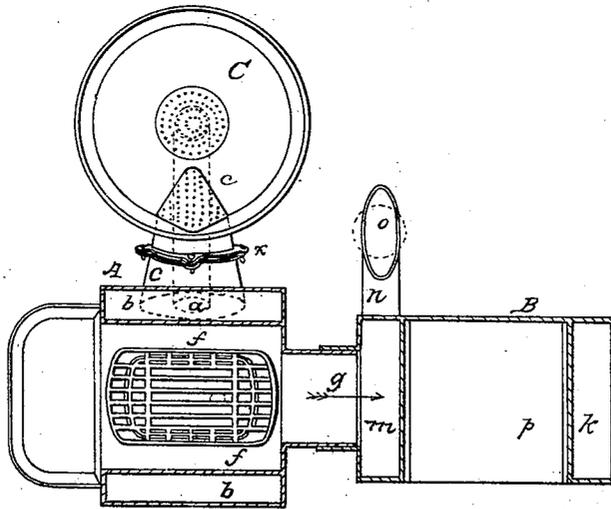
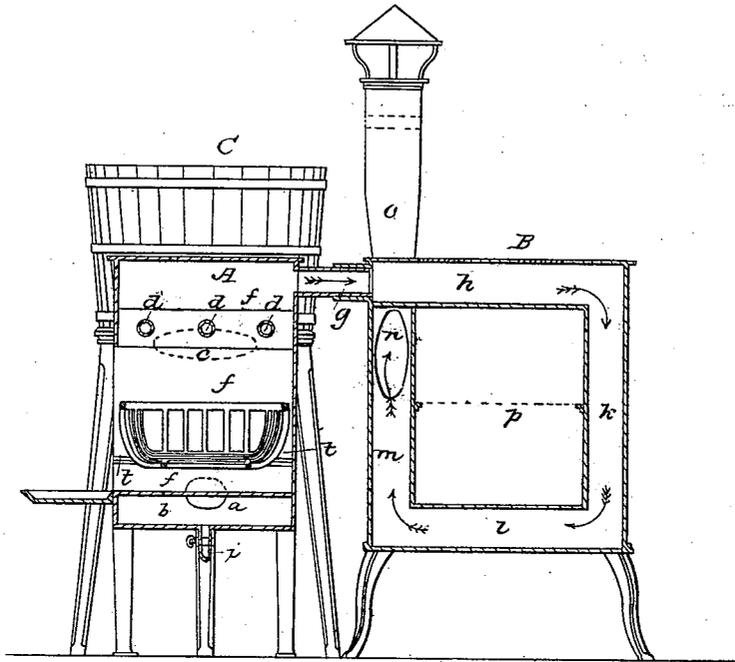
INVENTOR  
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WITNESSES  
*John Williams*

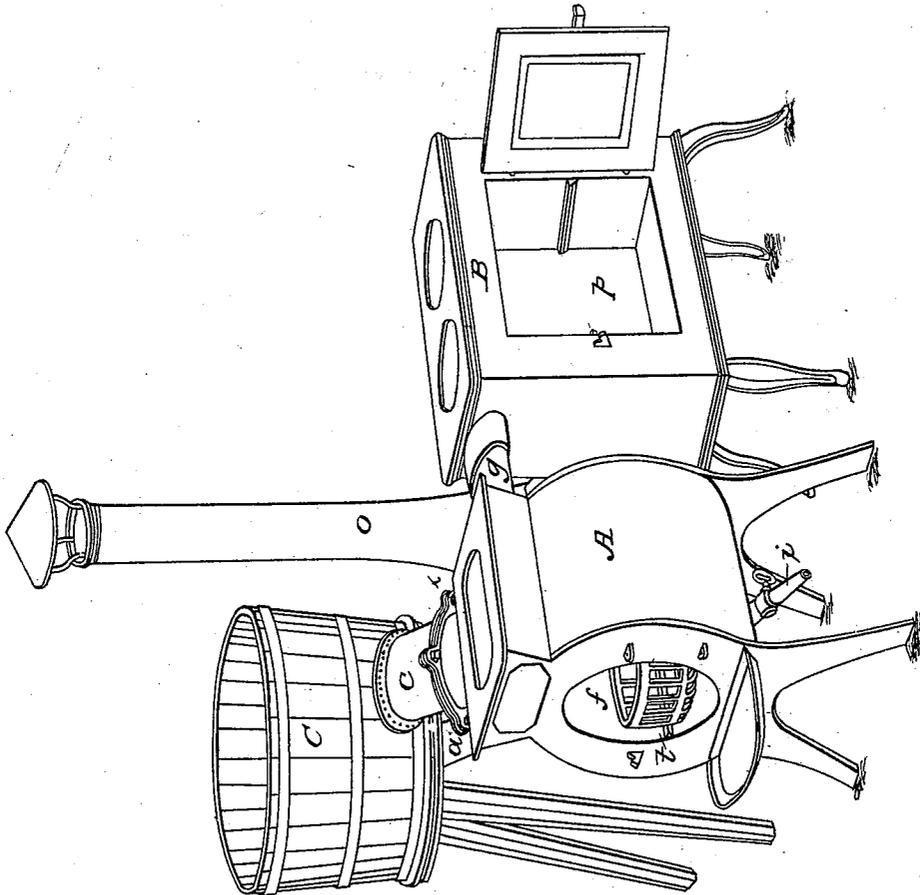
INVENTOR  
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WITNESSES

*S. P. Lee*  
*John H. Adams*

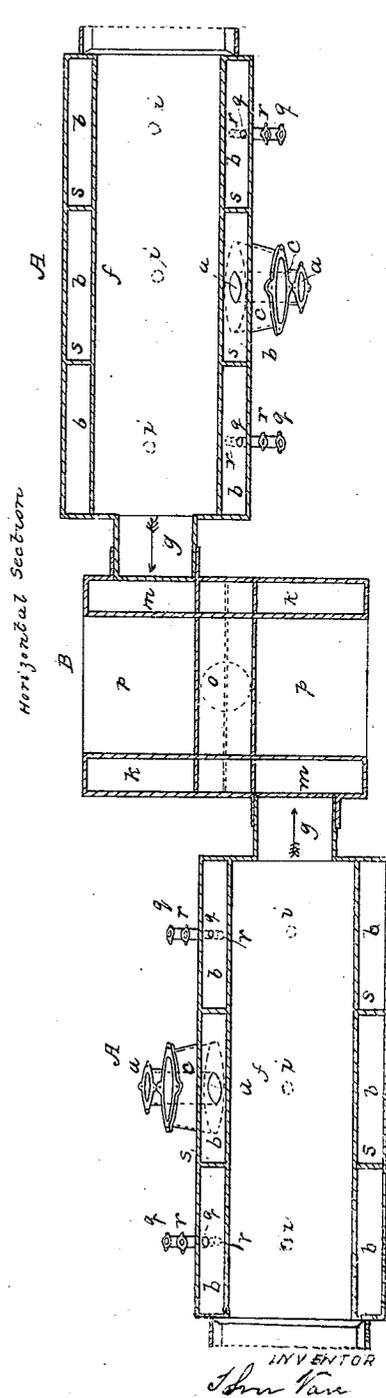
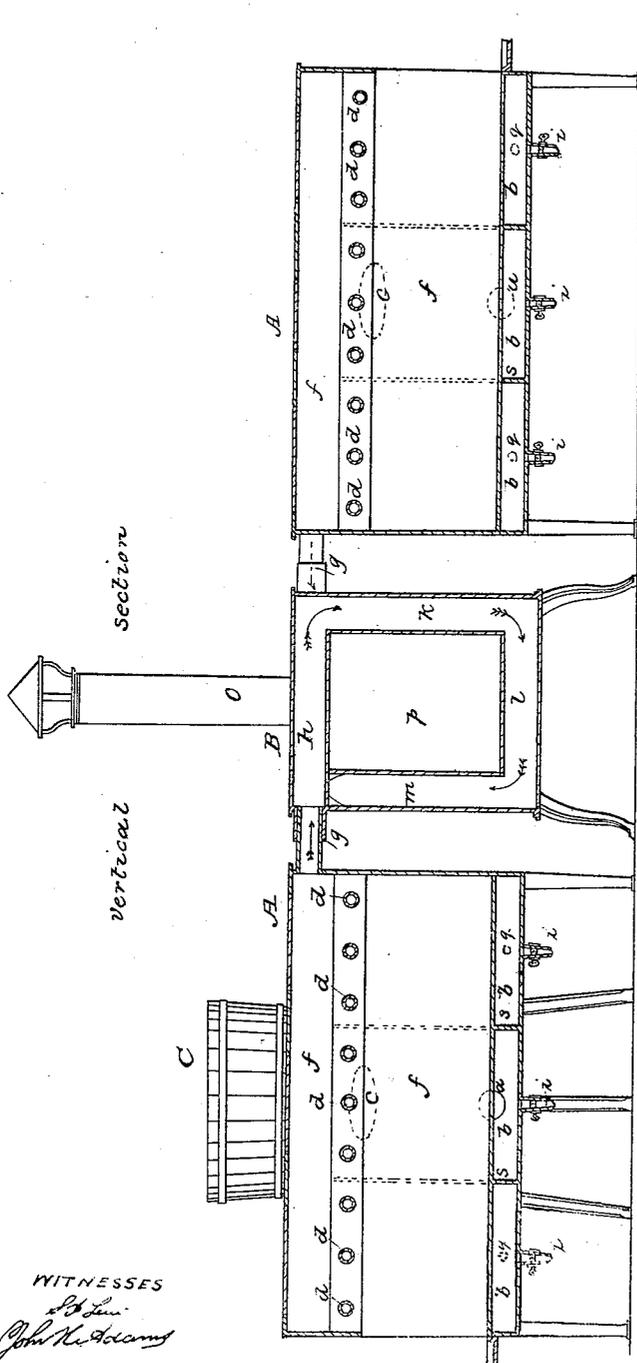
INVENTOR

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WITNESSES  
*John H. Adams*

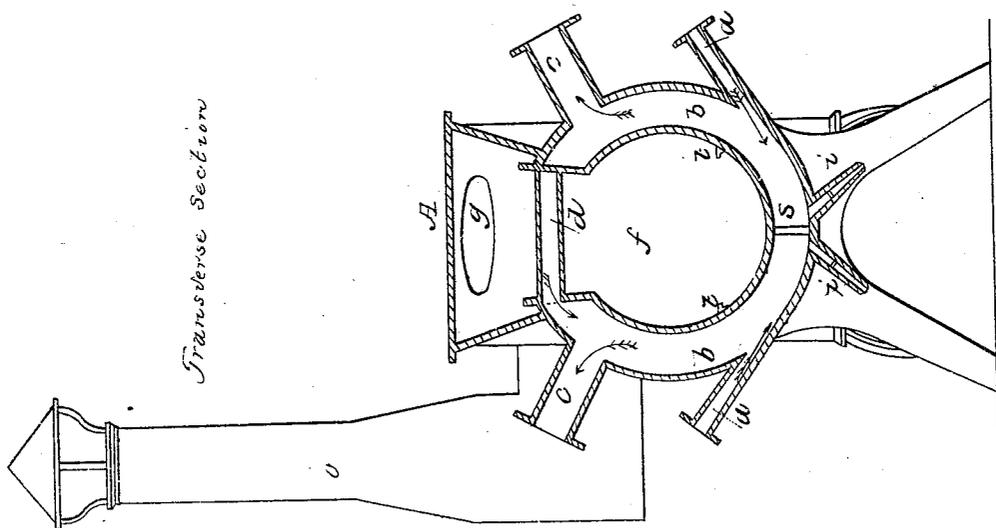
INVENTOR  
*John Van*



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WITNESSES

*S. J. Van*  
*John H. Adams*

INVENTOR

*John Van*

# UNITED STATES PATENT OFFICE.

JOHN VAN, OF ST. LOUIS, MISSOURI.

## COOKING-STOVE.

Specification of Letters Patent No. 13,589, dated September 18, 1855.

*To all whom it may concern:*

Be it known that I, JOHN VAN, of the city of St. Louis and State of Missouri, have invented a new and Improved Combined  
5 Cooking-Stove; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, No. I being a perspective view  
10 of one of my improved stoves provided with two water-chambers around the fire-cylinder; No. II, longitudinal, vertical, and horizontal sections of the same; No. III, longitudinal, vertical, and horizontal sections of  
15 a stove containing one water-chamber around the fire-cylinder; No. IV, a perspective view of the same; No. V, longitudinal, vertical, and horizontal sections of a double stove containing six water-chambers around  
20 the fire-cylinder; No. VI, a perspective view of the same; No. VII, a transverse vertical section of a stove through the cold-water and hot-water pipes.

Like letters designate corresponding parts  
25 in all the views.

I construct a cylindrical water vessel A, of suitable dimensions, and divide it transversely into the desired number of chambers by partitions *s*, as hereinafter set forth. In  
30 the middle of this cylinder is placed another, concentric cylinder *f*, for containing the fire; which is furnished with a suitable grate for burning either wood or coal. An opening, of proper width, is left in the top of the  
35 water cylinder, which allows the heat and smoke to pass up from the fire cylinder into a heating or fire space at the top of the stove. This opening is crossed, from side to side, by a number of tubes *d*, *d*; which form  
40 a free communication between the two sides of the water chambers, for the passage of water; and, being surrounded by the flame and heat of the fire; cause the water in them to be heated very rapidly.

The object of having separate water chambers, is for each to contain water for different uses; as for instance, one chamber may contain pure water for culinary purposes, while another chamber may contain water  
50 for common use in cleaning, heating, &c. For an ordinary family, two chambers will be sufficient, as shown in drawings I and II.

In other instances, a single chamber will only be required, as in drawings III and IV. For hotels and other large establish-  
55 ments, several chambers may be required, as represented in drawings V and VI.

Instead of dividing the water cylinder transversely, it may be divided longitudinally, (as shown in drawing VII,) a partition  
60 *s*, running lengthwise at the bottom, while one half of the cross tubes *d*, *d*, are closed at one end, and the other half at the opposite ends, so that both sides or chambers may have equal benefit from the heat-  
65 ing tubes.

Each water chamber is to be provided with a cold-water pipe *a*, leading from the bottom thereof to the bottom of a tub, or  
70 reservoir, C, from which it is supplied with water; and also has a hot-water pipe *c*, extending from its top to the side of said tub, or reservoir, substantially as shown in the drawings. By this means a circulation of  
75 water is kept up through the chambers. Each chamber has a faucet *i*, for drawing off water, when required for use.

The top of the stove is constructed substantially like an ordinary stove, for boiling,  
80 and other uses. An oven B, may also be attached thereto, a collar, or flue, *g*, being employed to convey the heat from the fire cylinder around it, the draft being regulated by suitable dampers, if necessary. The top of  
85 the oven may also be used for boiling, &c., like a separate stove, as represented. The stove may be made of cast-iron, sheet-iron, or any suitable metal; and its form and arrangement may be varied in many particulars,  
90 without changing the nature of the invention.

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

The arrangement of the water cylinder, with separate chambers, fire cylinder, or  
95 space, in its center, opening through its top, and cross, heating tubes, combined and operating substantially in the manner and for the purpose herein set forth.

JOHN VAN.

Witnesses:

S. J. LEN,  
JOHN H. ADAMS.