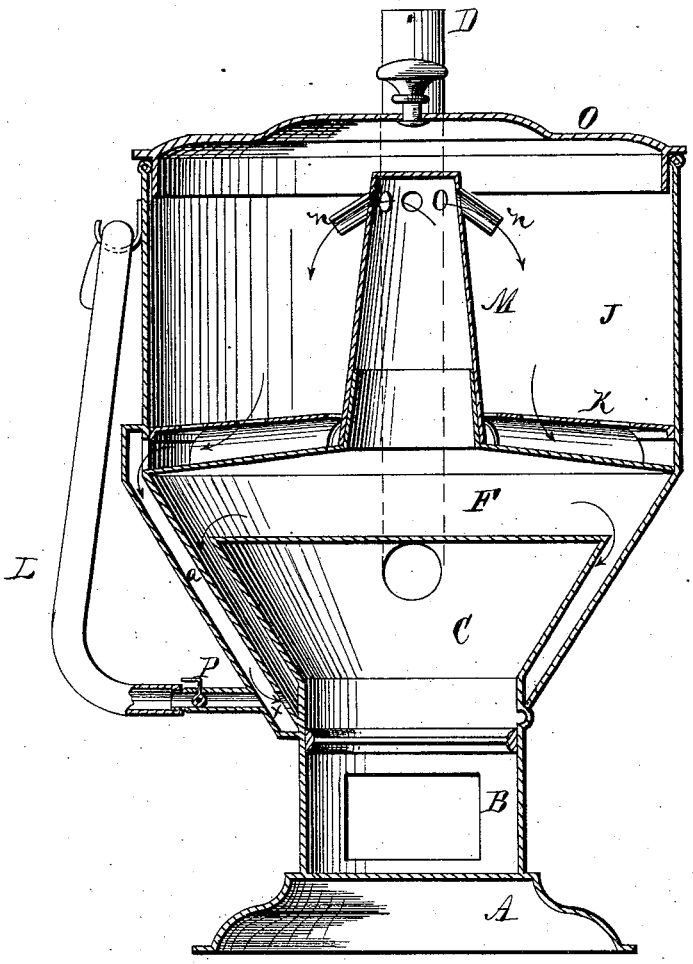
2 Sheets--Sheet 1.

W. COOPER.

Steam Cooking and Washing Apparatus.

No. 162,033. Patented April 13, 1875.

Fig 1



WITNESSES

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THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

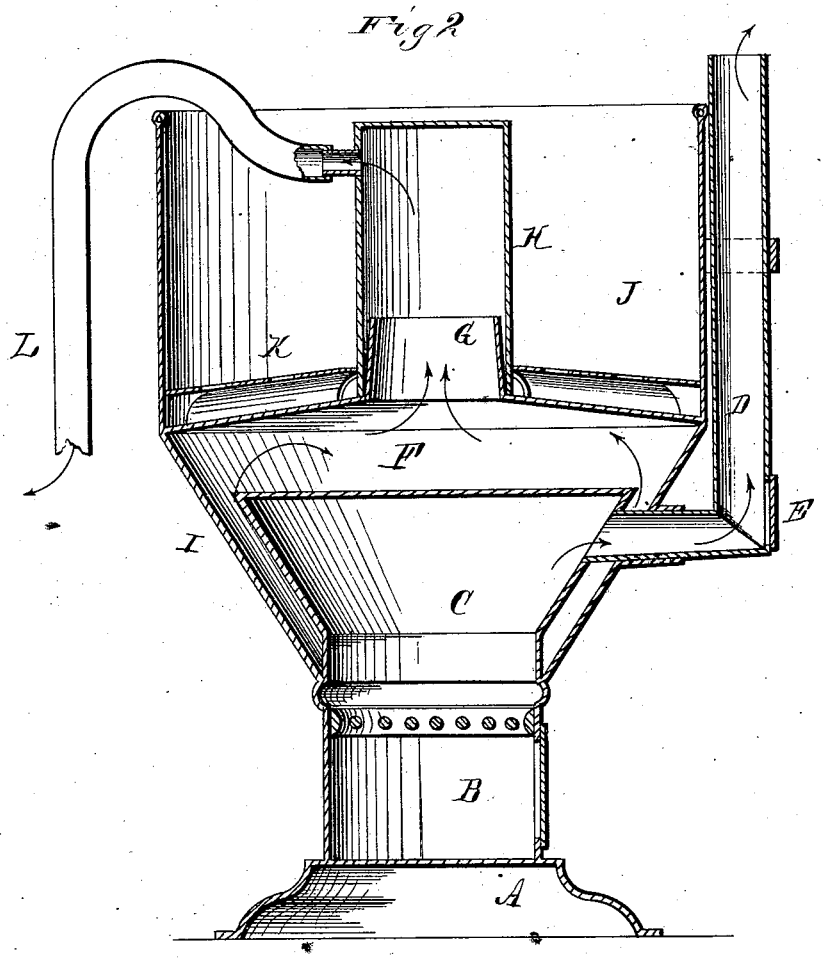
2 Sheets--Sheet 2.

W. COOPER.

Steam Cooking and Washing Apparatus.

No. 162,033. Patented April 13, 1875.

Fig 2



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UNITED STATES PATENT OFFICE.

WILLIAM COOPER, OF YPSILANTI, MICHIGAN.

IMPROVEMENT IN STEAM COOKING AND WASHING APPARATUS.

Specification forming part of Letters Patent No. **162,033**, dated April 13, 1875; application filed February 18, 1875.

To all whom it may concern:

Be it known that I, WILLIAM COOPER, of Ypsilanti, in the county of Washtenaw and in the State of Michigan, have invented certain new and useful Improvements in Steam Cooking and Washing Apparatus; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of the several parts of a steam cooking and washing apparatus, the peculiarities of which will be hereinafter more fully set forth.

In the annexed drawings, making part of this specification, both figures, 1 and 2, are vertical sections, but on different lines.

In the figures, A represents the base of the machine. B represents the ash-pit, and C the fire-chamber. This fire-chamber is inclosed within a boiler, F, but has an outlet through the pipe D. E represents a door in this pipe, which communicates with the fire-chamber, and through which fire is introduced. Both the fire-chamber and the boiler are conical in shape.

In the top of the boiler F is a pipe, G, which communicates with a vessel or apartment, J, which forms the upper portion of the apparatus. This vessel is used for the steaming of clothes, or vegetables, or whatever may be placed in it.

When it is to be used for steaming and cleansing clothes, a conical-shaped pipe, M, is fitted over the pipe G, as seen in Fig. 1. This pipe M is closed at its upper end, but near this end a series of small tubes, *n n*, are inserted with their mouths opening downward. The clothes are placed upon a perforated diaphragm, K, which is supported upon ribs in the bottom of vessel J. When the water becomes hot and steam is generated, both the steam and water pass up from the boiler through pipes G and H, and through the tubes *n n*, and are injected upon and into the clothes. The cleansing of the clothes is effected then as in all steamers and washers of this class.

When vegetables or food is to be steamed, the pipe M is removed, the diaphragm raised and secured at any suitable height in the vessel J, and the steam allowed to pass in through pipe G. A cover or lid, *o*, is first, however, placed upon the vessel.

When I desire to heat water outside of the boiler, or to steam food for animals, I use a pipe, H, which is made of uniform diameter, as seen in Fig. 2. This pipe is closed at its upper end, but has an elastic pipe or a suitable pliable hose connected to it, as seen, by means of which steam may be conducted to any heater or tank when water is to be heated or food steamed. The pipe H is fitted over pipe G, of course, as represented.

While the process of steaming and washing clothing is being carried on, the water which would otherwise be all carried out from the boiler is allowed to pass down again from the vessel J into the boiler by means of a pipe, *a*. This pipe *a* connects to the boiler near its bottom, and then passes or connects to the vessel J near its bottom, so that neither water or steam will pass up through it, but water will pass down.

The boiler is emptied of water through a small stop-cock pipe, P, which is located near its bottom. The hose-pipe may be connected to this, and the water thus conveyed away to any desirable place.

It will be seen that both the fire-box and the boiler are flaring in shape—that is, in the shape of truncated cones inverted.

By this construction I get more heat and heating-surface than I could otherwise in the same space.

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

1. The combination of the boiler F and its pipe G, as arranged with the fire-chamber C, and the pipe D with feed-door E, all constructed as and for the purpose specified.

2. The pipe H, as constructed, and the hose L, in combination with the pipe G of the boiler, as and for the purpose set forth.

3. The combination, with the boiler F, fire-chamber C, pipe D, and pipe G, of the vessel J, perforated removable diaphragm K, and the removable pipe M, having downward-projecting tubes *n*, and the connecting-pipe *a*, all constructed substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 17th day of February, 1875.

WM. COOPER.

Witnesses:
J. TYLER POWELL,
J. M. MASON.