J. W. ELLIOT.

STOVES.

No. 185,674. Patented Dec. 26, 1876.

Fig. 4.

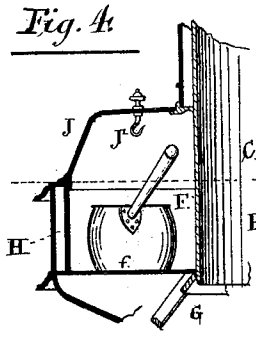
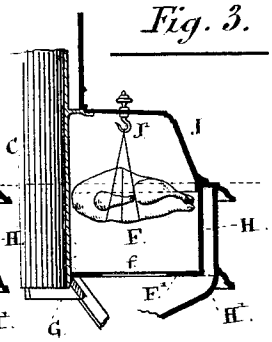


Fig. 3.



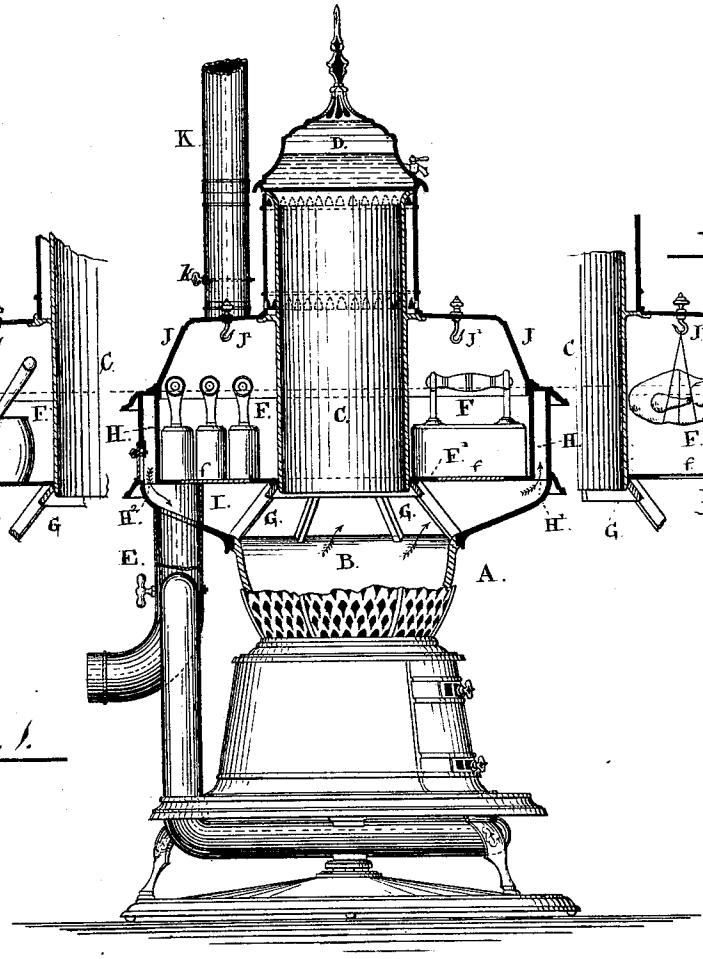


Fig. 1.

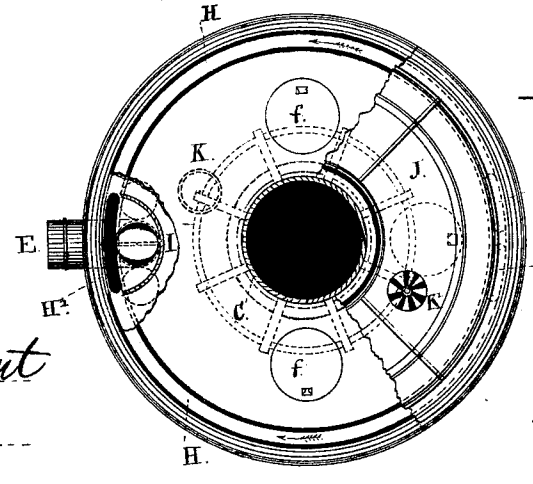


Fig. 2.

WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN W. ELLIOT, OF TORONTO, ONTARIO, CANADA.

IMPROVEMENT IN STOVES.

Specification forming part of Letters Patent No. **185,674**, dated December 26, 1876; application filed October 13, 1876.

To all whom it may concern:

Be it known that I, JOHN WHEELER ELLIOT, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, surgeon-dentist, have invented new and useful Improvements in Stoves, which improvements are fully set forth in the following specification, reference being had to the accompanying drawing.

My invention has relation more particularly to improvements on coal heating-stoves of the modern type; and it consists in forming over the fire-pot an annular chamber encircling the fuel-reservoir. Around this chamber the heated products of combustion are conveyed, and either passed into the smoke-pipe direct, or into some base-heating arrangement, such as illustrated in the drawing. This annular chamber is intended to be used for the triple purpose of heating irons for tailors, laundry purposes, &c., cooking, and as a hot-air reservoir from which heated air may be conveyed in the usual way by pipes throughout a building. To this end the chamber is furnished with detachable covers, fitted with hooks, damper, and outlet-pipe, as shown in drawing, and hereinafter more particularly described.

The object of my invention is to combine in a single stove, with a single fire, the services usually performed by three stoves, viz., first, cooking; second, heating flat-irons for laundry purposes, tailors' implements, &c.; third, house-heating.

In the accompanying drawing, Figure 1 is a sectional view of a stove embodying my improvements. Fig. 2 is a sectional plan of the same, and Figs. 3 and 4, details.

A is the stove, in which B is the fire-pot, C the coal reservoir and feeder, D the water-evaporator, and E the base-heating arrangement, all as illustrated in the several patents granted to me previously for heating-stoves. E is annular chamber surrounding the coal-feeder at a suitable height above the fire, the bottom F^1 of which chamber is centrally supported from the fire-pot by the spider G. H is a flue passing completely around the chamber F, leading the heated air and products of combustion from the fire through the openings H^1, to the front of the stove, thence backward to the pipes E, through the opening H^2. The heated air, &c., is prevented from passing at once into the pipes by the guard-plate I, which plate encircles the pipe-opening, cutting off the connection between the fire-chamber and the pipes, except by way of the flue H.

This arrangement of flue, together with the centrally-placed coal-feeder C, conveys a large amount of heat to the chamber F, which heat is, in the ordinary construction of stoves, lost. J are the dome-shaped roof-plates of the chamber F. These plates are made detachable, and are provided with hooks J′ on the under side, to which hooks articles to be cooked may be attached, as suggested in Fig. 3. The bottom of the chamber is perforated with any suitable number of cooking-holes, *f*, fitted with detachable covers. Over these holes pots, kettles, &c., may be placed, as shown in Fig. 4.

K is a hot-air pipe fitting on one of the detachable covers, and provided with a damper, *k*. This pipe is intended to be used for conveying heat to different rooms in a building, in the usual style of hot-air furnaces. K′ is a cold-air-inlet regulator fitted in the top of the opposite cover.

The stove herein described and illustrated is designed to meet the wants of that large class of operatives who work at home, such as tailors, needlewomen, washerwomen, &c. These people are generally very poor, and have to endure great hardships in winter if they cannot afford to use two or more separate service-stoves, such as have been in use heretofore.

I claim as my invention—

1. The combined heating and cooking chamber F, provided with detachable covers J, and perforated bottom, in combination with the coal-feeder C, fire-chamber B, and exterior inclosing-flue H, arranged and operating substantially as shown and described.

2. The flue H, passing around the exterior of the chamber F, in combination with the fire-chamber B and pipes E, arranged and operating substantially as described.

3. The spider G, in combination with the feeder C, chamber F, and fire-pot, arranged and operating substantially as described.

4. The hot-air pipe K, in combination with the combined heating and cooking chamber F, provided with the regulating inlet-damper K′.

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Witnesses:
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