

J. T. GREENWOOD.

Gas Heater.

No. 81,892.

Patented Sept. 8, 1868.

Fig. 1.

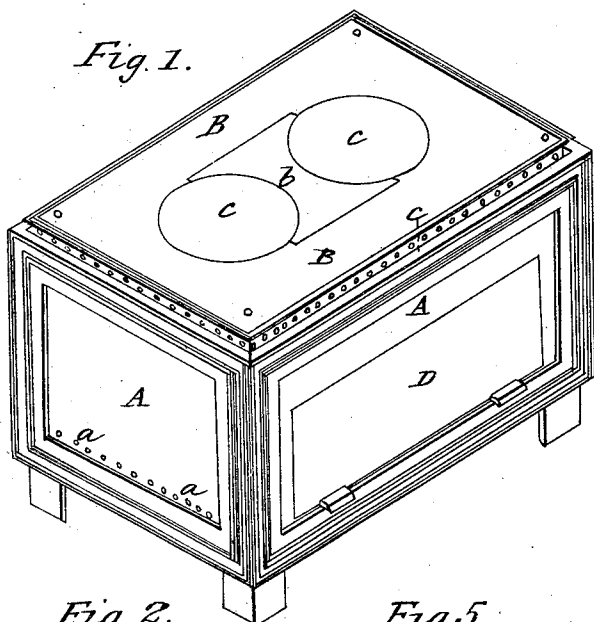


Fig. 2.

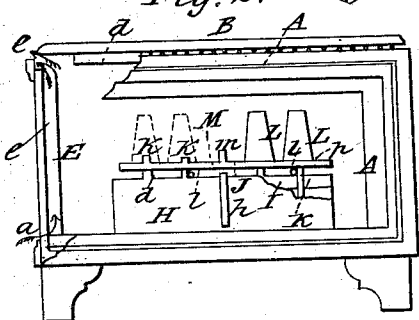


Fig. 5.



Fig. 3.

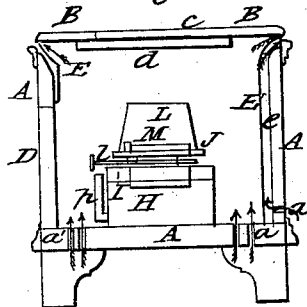
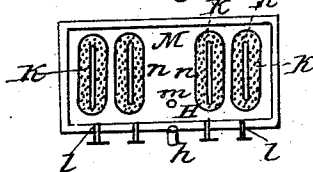


Fig. 4.



Witnesses:  
Willis Dunbar  
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att'y.

# United States Patent Office.

JOHN T. GREENWOOD, OF BELOIT, WISCONSIN.

Letters Patent No. 81,892, dated September 8, 1868.

## IMPROVEMENT IN GAS-HEATERS.

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, JOHN T. GREENWOOD, of Beloit, Rock county, in the State of Wisconsin, have invented certain new and useful Improvements in Kerosene-Stoves, and Lamps to be used in connection therewith; and I hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

The nature of my invention and improvements consists in the construction or manufacture of a kerosene-stove having the framework or body entirely of wood, thereby greatly cheapening its production, and in the same degree enhancing the value thereof to the public; also in providing cold-air draughts from the bottom and sides, the metallic lining, the hot-air draughts at the top of the stove, the heat-deflector or reservoir under the top plate, the cones upon the lamp, the plate on which the cones rest, and the water-tanks or tube-coolers, all which will fully appear by reference to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

Similar letters of reference indicate like parts in all the figures.

Figure 1 is a perspective view of the stove with the top or cover of iron complete.

Figure 2 is a longitudinal side view, in the drawings having a portion of the body removed so as to show the air-draughts and general internal arrangement of the stove.

Figure 3 is a vertical cross-section affording a similar view.

Figure 4 is a top view of the lamp, the cones being removed to show the perforations and other parts of the detachable cover of the tank M; and

Figure 5 is a side and end view of the cones detached, showing the interior construction thereof.

A A represent the body of the stove made of wood; and B B b and C C, the iron top plate and covers to the same; D is the door to the lamp-chamber; *a a* are cold-air draughts, near the bottom at the front and at each end of the stove, as shown at fig. 1, one end and front, however, being out of view. *a a* also represent the hot-air draughts for the escape of surplus heat from inside of the stove, as shown at fig. 1. E represents the metallic lining of the stove, which when made of tin answers the double purpose of cooler and reflector, as shown at figs. 2 and 3. *e e* are cold-air chambers, connected with the cold-air draughts *a a*, around and under the bottom of the stove, and for cooling the wood or body of the stove, and also for supplying combustion to the lamp-burners. *d* is a deflector for saving or reserving the heat, and is attached to and around the under surface of the stove-top, having a downward-projecting flange, producing a uniform flow of heat under and around the whole surface of the oven-bottom, or other cooking-utensil being employed. H, fig. 2, represents the lamp employed in this stove for heating, using kerosene-oil for that purpose, a portion of the upper right-hand corner being removed in the drawing, to show the lower tube-cooler or water-tank I. *h* is an ordinary tube for filling the lamp. *k k* are wick-tubes. *l l* are ratchet-wheels for regulating the wicks. L L are cones to the burners, in the drawings two of which are removed to show the action of the flame when the stove is in operation. M is the upper water-tank or tube-cooler, having the detachable cover and cone-supporter, with that portion under the cones perforated, being also supplied with a suitable tube, *m*, for filling said wick-cooling tank with water. The lower wick-tube cooler I may be supplied with water by pouring it into the open space under the upper tank. The peculiar construction and form of cones L are shown at fig. 5. A vertical section of the lamp is shown at H and L, fig. 3.

The style of cones herein described can be manufactured at a cost of ten to fifteen cents each, whereas those ordinarily used cost about two dollars and fifty cents each, and the whole stove, with lamp complete, including the necessary oven for baking, can be produced at about seven dollars, or the stove and lamp separately for six dollars.

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

A kerosene-stove, herein described, or its equivalent when made of wood, in combination with cold-air draughts *a a*, tin lining E, cold-air-chambers *e e*, (*a a*) heat-deflector *d*, cones L L, tank M, cover M', and cooler I, when the whole is constructed and arranged substantially as and for the purpose herein set forth and described.

J. T. GREENWOOD.

Witnesses:

WILLIS DUNBAR,  
JESSE WILSON.