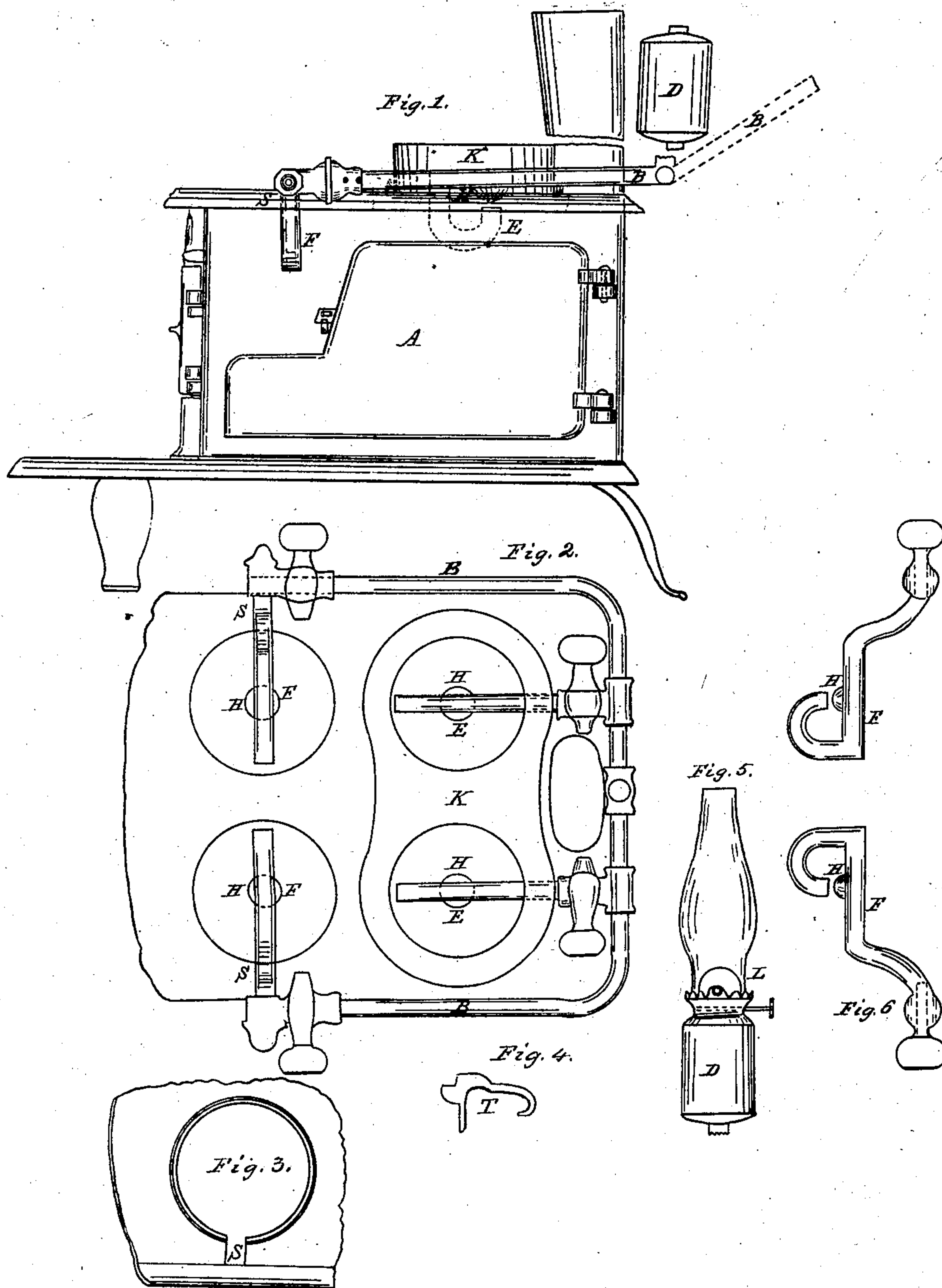


No. 75,400.

PATENTED MAR. 10, 1868.

D. L. EMERSON.
PETROLEUM OR GAS STOVE.



Witnesses

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D. L. EMERSON, OF ROCKFORD, ILLINOIS.

Letters Patent No. 75,400, dated March 10, 1868.

IMPROVEMENT IN PETROLEUM OR GAS-STOVES.

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, D. L. EMERSON, of the city of Rockford, in the county of Winnebago, and State of Illinois, have invented a new and useful Improvement in Petroleum or Gas-Stoves; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, forming part of this specification, in the several figures of which similar characters of reference denote the same part. In the drawing—

Figure 1 is a side elevation of a common cooking-stove, with the devices for burning petroleum, gas, or other burning-fluids, in position for use.

Figure 2 is a plan view of the top of the stove, also the conducting-pipes and burners.

Figure 3 shows the position of the slot S with reference to the kettle-opening of the stove.

Figure 4 shows the stopper T for the opening S.

Figure 5 shows the lamp L attached to the reservoir D.

Figure 6 shows the burners F F'.

My invention has reference to the application of devices for using, in the common cooking-stove, petroleum, gas, or other burning-fluids, and consists of certain combinations of devices hereinafter to be set forth.

In the drawing, A is the cooking-stove, of any approved pattern, upon which are placed the conducting-pipes B B, which, for convenience of putting on and removing, are placed about the top of the stove, as shown in fig. 2. From these pipes B B the burners E E' F F', one for each of the cooking-openings of the stove, or so many as may be desired, conduct the fluid to the place of burning, each burner being supplied with a stop-cock for admitting and shutting off the fluid. The fluid is supplied from the reservoir D, which may be placed in any convenient position above the stove, so that the fluid may be brought to the pipes B B. The oval or conical-shaped disk H is placed stationary under the pipe B, and directly over the burner. The object of placing this disk over the burner is to spread, and to a certain extent arrest, the passage of the flame, so as to insure the complete combustion of the gas. This disk also serves to protect the conducting-pipe from the too severe action of the flame. Some of the advantages of the oval or conical disk over the flat disk heretofore used are, that the flame can be spread just enough to insure perfect combustion, and at the same time be brought directly against the bottom of the cooking-vessel, instead of being wasted on the casing surrounding the flame, as when the flat disk is used. This shape of the disk also allows the opening of the burner to be seen and cleaned when necessary, without removing the disk, which cannot be done when the flat disk is used. The space over the oven is generally too shallow to admit the placing of the burners E E' low enough to be out of the way of the cooking-utensils, to obviate which difficulty the elevated rim K is placed about said holes, having in it holes for the cooking-utensils, so that they may be the right height over the burners E E'. The burners F F' are placed in the fire-box of the common stove, the conducting-pipe being bent so as to be out of the way of the cooking-vessels, as shown in figs. 1 and 6. For the purpose of conveniently putting on and removing the burners F F', the notch or slot S is made in the stove-plate surrounding the cooking-opening, in which the pipe enters, being bent so as to be out of the way of the cooking-utensils.

It will be seen that the only change made in the common cooking-stove to adapt it to the use of petroleum, gas, or other burning-fluids, upon this plan, is to cut the notch or slot S, as described, and put in position the reservoir D, conducting-pipes B B, with such burners as may be desired. When it is desired to use wood or coal in the stove without removing the petroleum-fixtures, the burners F F' are turned on their hinge out of the fire-box of the stove, as indicated by the dotted lines in fig. 1, when wood or coal may be used alternately with petroleum in the burners E E', or both may be used at the same time.

Instead of the slot S for putting in the pipes B B, as already described, the pipes may be inserted in holes drilled in the top or sides of the stove, or, in new stoves, the slot may be left for inserting said pipes and burners, but the plate shown is deemed best for cheapness and convenience.

The stopple T is made to close the notch S, when the pipe B is not in said slot, that the draught of the stove may not be injured thereby.

The lamp L is placed on the reservoir D, for the convenience of having it always filled and ready for use.

whenever the reservoir is filled; and its convenience in being always ready for use, and in a safe position, added to the excellence of the light obtained from the fluids we use, make it a very desirable addition to a petroleum-stove.

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

The oil-reservoir D and lamp L, (as one vessel,) in combination with the tubes B B, and burners E E' and F F', constructed as described, and operating as and for the purposes set forth.

D. L. EMERSON.

Witnesses:

W. W. BURSON,
JAMES G. MANLOVE.