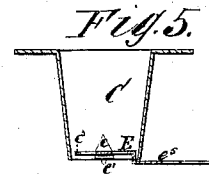
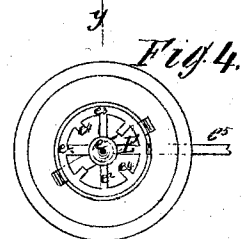
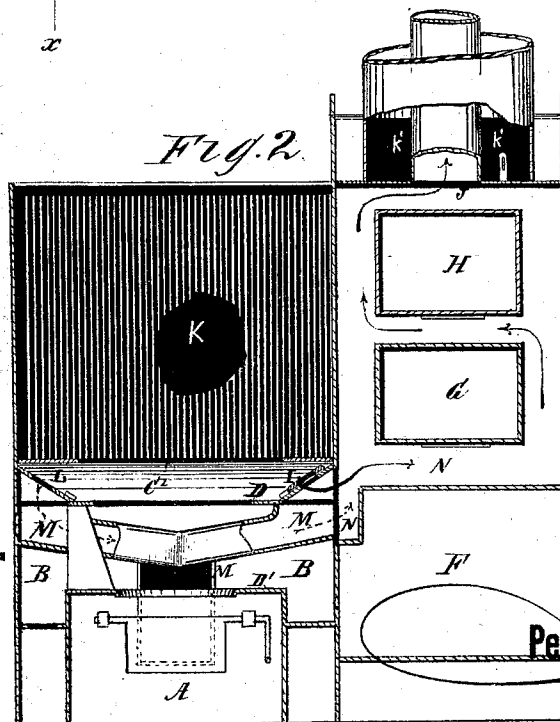
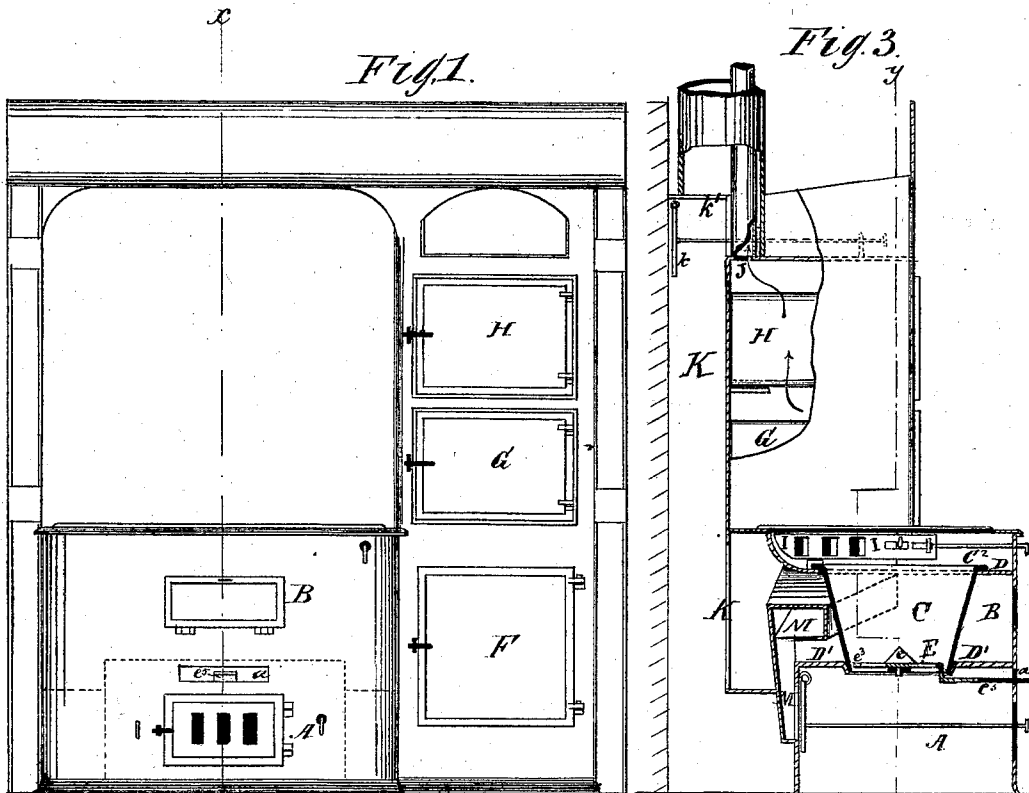


I. J. BAXTER.
Heating-Ranges.

No. 147,592.

Patented Feb. 17, 1874.



Witnesses.
G. Mearns
John Kemmer

Inventor,
Isaac J. Baxter
Per [Signature]

Attorneys.

UNITED STATES PATENT OFFICE.

ISAAC J. BAXTER, OF PEEKSKILL, NEW YORK.

IMPROVEMENT IN HEATING-RANGES.

Specification forming part of Letters Patent No. **147,592**, dated February 17, 1874; application filed November 5, 1873.

To all whom it may concern:

Be it known that I, ISAAC J. BAXTER, of Peekskill, in the county of Westchester and State of New York, have invented a new and Improved Heating-Range; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a front view. Fig. 2 is a vertical transverse section in line *y y* of Fig. 3. Fig. 3 is a vertical section in line *x x* of Fig. 1. Fig. 4 is a plan view of fire-box and grate. Fig. 5 is a vertical section of supplementary fire-box.

The invention relates to cooking-ranges wherein it is contemplated to economize the fuel used in the warmer seasons of the year, and utilize the surplus heat necessarily generated at other seasons. This heat is employed in raising the temperature and comfortably warming other apartments of the house.

The invention will first be fully described in connection with all that may be necessary to a full understanding thereof, and then clearly indicated in the claim.

A represents the ash-chamber, and B the air-chamber around the fire-box of a range. C represents a supplementary fire-box, which I employ in warm weather instead of the usual one, and thereby lessen the consumption of fuel, and the consequent amount of heat evolved. These are of a conical form, the flare being toward the top, which is provided with a horizontal flange, that rests on the plate D, whereupon the auxiliary fire-box is thus suspended, while the lower end, in which the grate is fitted, merely enters or may slightly protrude through the plate D'. E is a grate, consisting of the upwardly-pointed cone, *e*, with subjacent stud *e*¹, in the center, and with the long arms *e*², the connected circle-plate *e*³, and the short arms *e*⁴, projecting from said circle-plate. By this construction, the ashes and cinders are readily precipitated through the open spaces whenever the arm *e*², which extends to the outside of stove through slot

a, is vibrated by hand. F is the warming-closet, and G H the sheet-iron box-ovens, the latter opening only at the end next to door, and fitting tightly to front and back of case, but having their sides sufficiently far from case to allow the passage of hot air. The heated products of combustion pass from the fire-pot and combustion-chamber C², through the register I, (whose damper has a handle extending to outside of stove,) to a flue, N, which leads between oven G and warming-closet F; thence along the outer side of the said oven, then between the two ovens G H, and up by the inner side of the latter, finally passing through the back part of the top of case to the opening J, which discharges into smoke-pipe. K is a hot-air reservoir, having a valve, *k*, and an outlet-chamber, *k'*, wherein is fitted the pipe which conveys hot air to same apartment that is to be warmed by the surplus heat. This pipe surrounds the smoke-pipe to any desired distance, abstracting therefrom a considerable quantum of heat.

By shutting off the register I when none or only a portion of the heat is wanted for the ovens, the products of combustion are carried through the opening L into the diving-flue M, which passes through the hot-air chamber B, and from thence the products of combustion are caused to pass around the ovens, and out through the smoke-pipe. This greatly augments the usual temperature of the air before it enters the reservoir K, and allows the heat to be applied where it can be of service.

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

In a range provided with a rear hot-air chamber, K, and chamber B, surrounding the fire-pot, the diving-flue M, communicating at its ends with the combustion-chamber, and provided with a damper or register, I, substantially as herein shown and described, and for the purpose set forth.

ISAAC JAY BAXTER.

Witnesses:

WILLBUR F. WESSELLS,
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