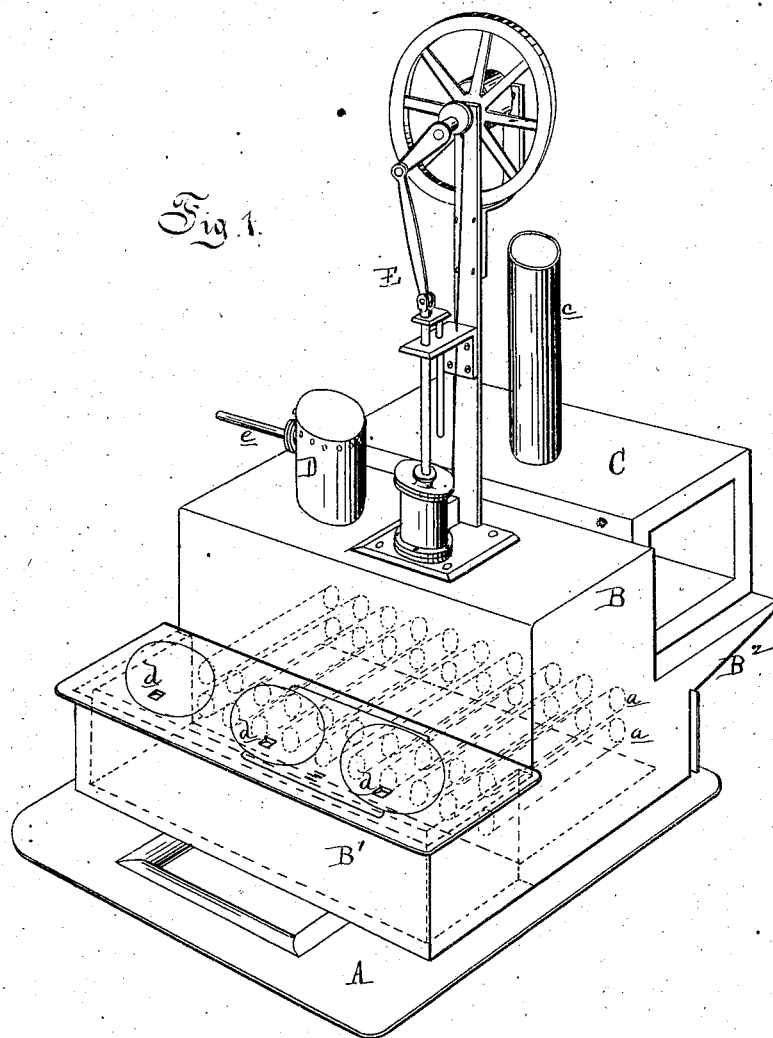


T. PENTON.

Cooking-Stove and Steam-Heater.

No. 162,413.

Patented April 20, 1875.



Attest:
Edmund Parthel.
E. E. Quinn

Inventor:
Thos. Penton
By Atty
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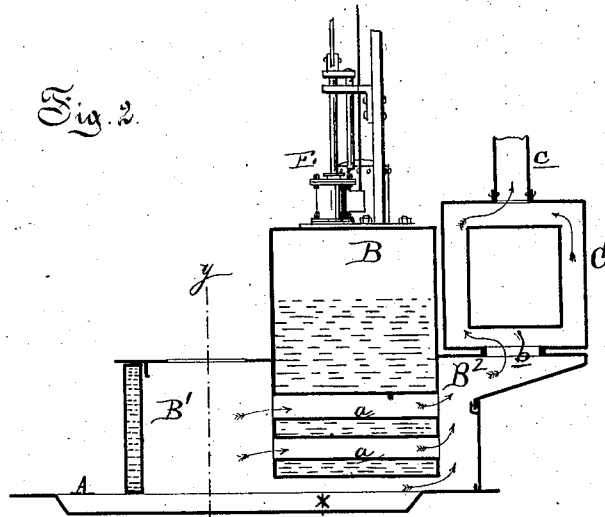
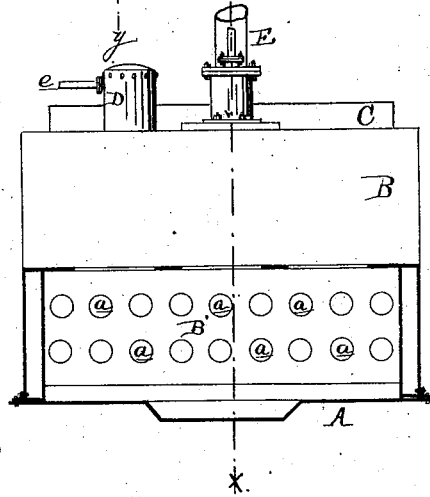


Fig. 3.



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UNITED STATES PATENT OFFICE.

THOMAS PENTON, OF SARNIA, CANADA.

IMPROVEMENT IN COOKING-STOVES AND STEAM-HEATERS.

Specification forming part of Letters Patent No. **162,413**, dated April 20, 1875; application filed March 6, 1875.

To all whom it may concern:

Be it known that I, THOMAS PENTON, of Sarnia, in the county of Lambton and Province of Ontario, Canada, have invented a Combined Steam-Generating and Cooking Apparatus, of which the following is a specification:

My invention has for its object to combine, with a cooking-stove, a steam-boiler, in which steam is generated by the combustion of the fuel necessary to carry on the various culinary operations, the steam so generated being utilized in the warming of the dwelling, or in driving a small engine for any purpose where a small amount of power is required.

Figure 1, Sheet 1, is a perspective view of my apparatus. Fig. 2, Sheet 2, is a longitudinal vertical section at *x x* in Fig. 3, which is a cross-section at *y y*.

In the drawing, A represents a rectangular base-plate, on which is erected, at the back part, a rectangular boiler, B, having a fire-box, B¹, of the full width, but of less height at the front, which fire-box is double-walled, to form a water-leg. Two rows of tubes, *a*, extend from the fire-box horizontally back through the boiler below the water-line, and deliver the gaseous products of combustion into a smoke-box, B², extending across the back end of the boiler, with a prolongation to the rear, on top, with a long throat, *b*, for their escape. On top of the smoke-box is mounted a double-walled oven, C, around

which the heated currents circulate before escaping, at the pipe-collar *c*, at the top of said oven. *d* are griddles in the top of the furnace, which are made in removable parts, like that of an ordinary cooking-stove, for boiling, frying, broiling, and otherwise preparing food, except baking, which is done in the oven. The fuel is introduced into the fire-box through the griddle-holes. D is a steam-dome at the top of the boiler, with a steam-pipe, *e*, through which steam may be conveyed to heating-coils or radiators, for warming the dwelling, wholly or in part, the water of condensation being returned to the boiler as in the ordinary way of steam-heating; or the steam may be used to drive a small steam-engine, E, mounted on the top of the boiler, which can be used to operate a lathe, grinding-mill, or any light machinery in the house, the steam so used being generated with what would otherwise be waste heat.

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

The combination, with the base-plate A, of the boiler B, having tubes *a*, smoke-box B², oven C, and double-walled fire-box B¹, forming a water-leg, and having its top adapted to culinary operations, substantially as described and shown.

THOS. PENTON.

Witnesses:

R. S. GURD,
WM. I. GURD.