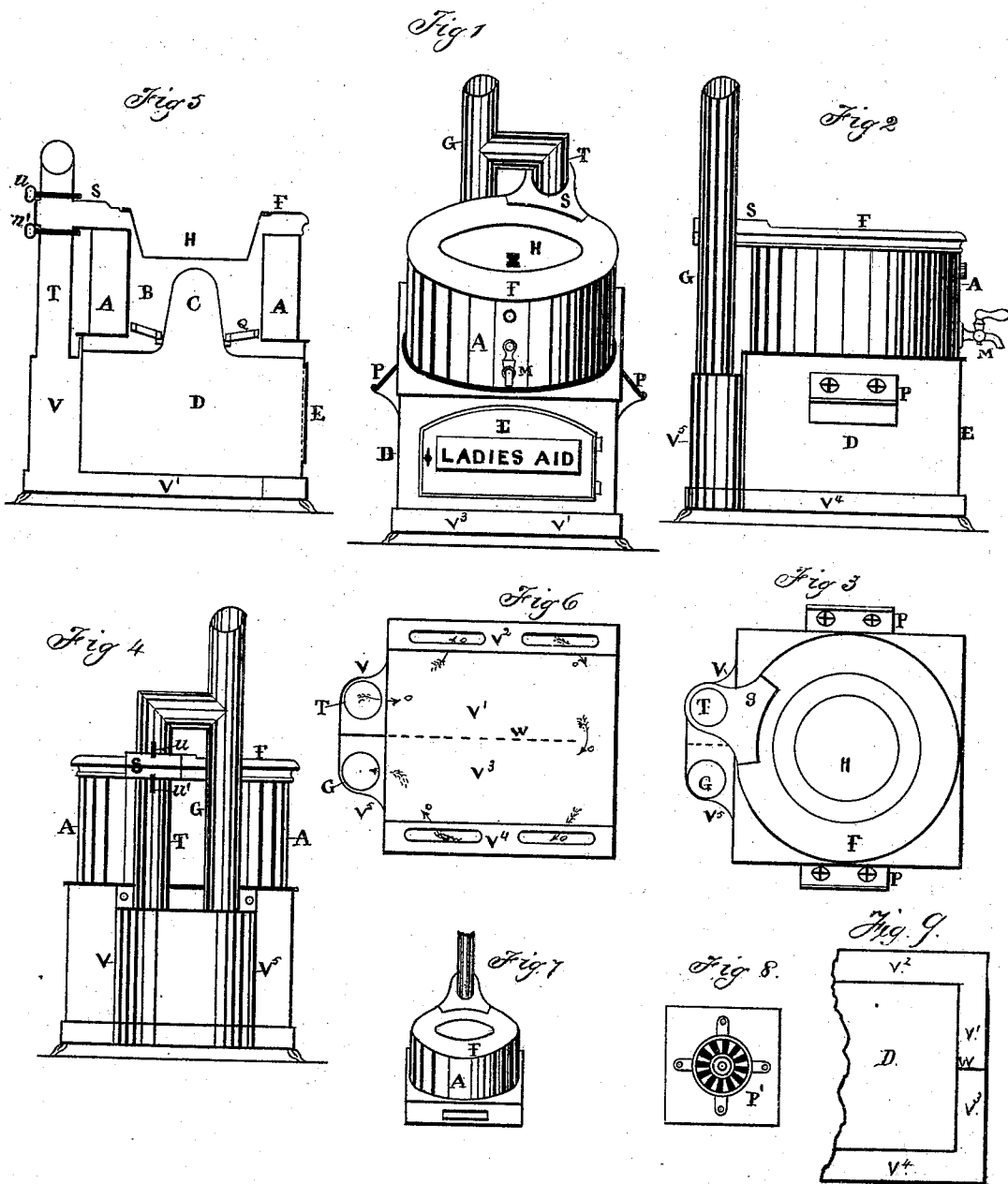


R. THOMAS.
COOKING-STOVE.

No. 170,206.

Patented Nov. 23, 1875.



Witnesses

William Gill
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ROBERT THOMAS, OF TORONTO, CANADA.

IMPROVEMENT IN COOKING-STOVES.

Specification forming part of Letters Patent No. **170,206**, dated November 23, 1875; application filed September 6, 1875.

To all whom it may concern :

Be it known that I, ROBERT THOMAS, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented new and useful Improvements in Cooking-Stoves; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings forming a part of this specification, in which—

Figure 1 is a front perspective view; Fig. 2, a side elevation; Fig. 3, a plan; Fig. 4, a back view; Fig. 5, a sectional elevation; Fig. 6, a sectional plan; Fig. 7, a front perspective view; Fig. 8, a plan.

Similar letters of reference indicate corresponding parts.

My invention consists of sundry improvements upon a cooking-stove for which I obtained a patent dated March 16, 1875, and No. 160,798.

The improvements consist of the addition of hot-air chambers, constructed beneath and on each side of and at the back of the oven, the smoke and heat being conveyed to the same by means of a descending pipe, from a raised flue on the top of the stove, and, after making the circuit of the said hot-air chambers, ascends from the same by an ascending pipe, forming a connection with the chimney.

I also make the lower portion of the stove in a square form, instead of cylindrical, as formerly, answering a better purpose and less expensive in the manufacture thereof.

The descending pipe hereinbefore alluded to is furnished with two dampers, which operate as follows: The top one being open, and the lower one shut, gives a direct draft to the chimney, and, with the lower one open and the top one shut, conveys the hot air and smoke through the said chambers, thereby materially assisting in the heating of the oven, and then passes up the ascending pipe to the chimney.

Referring again to the figures of the drawings—

Fig. 1 shows water-vessel A, tap M, door E, draft-doors P P, top F, cover H, raised flue S, portion of the descending pipe T, and of the ascending pipe G.

Fig. 2 shows water-vessel A, tap M, oven D, draft-doors P P, hot-air chambers V⁴ V⁵, and ascending pipe G.

Fig. 3 shows top F, cover H, raised flue S, descending pipe T, a portion of hot-air chamber V, and ascending pipe G.

Fig. 4 shows water-vessel A, raised flue S, descending pipe T, hot-air chamber V V⁵, and ascending pipe G.

Fig. 5 shows water-vessel A, oven D, door E, grate Q, fire-chamber B, top F, raised flue S, descending pipe T, and hot-air chambers V and V¹, and pit-cover H.

Fig. 6 shows the hot-air chambers V V¹ V² V³ V⁴ V⁵, with partition W, arrows o o o, showing the direction of hot air and smoke from descending pipe T, through the aforesaid hot-air chambers, and into the ascending pipe G.

I use the pit-cover H in Fig. 5 for heating irons and for other purposes.

It will be observed, from these drawings, that, on the heat and smoke leaving the fire-chamber B, they will pass into the raised flue S, and thence, when the damper *u* is shut and the damper *u'* is open, down the descending pipe T into the hot-air chamber V, entering therein at the one side, and thence to chambers V¹ and V², and, passing round the partition W, enters the chambers V³ and V⁴, and finally to V⁵, before passing into the ascending pipe G leading to the chimney.

I use my stove also as a camping or picnic stove, leaving out the oven D, and taking only the water-vessel A, top F with direct draft, and an ash-pan with grate P, as shown on Figs. 7 and 8 of the accompanying drawings.

Fig. 9 is a front sectional elevation, aiding in illustrating the chambers shown in Fig. 6.

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

1. The hot-air chambers V V¹ V² V³ V⁴ V⁵, as shown and described, and for the purposes set forth.

2. The descending pipe T, with dampers *u* *u'*, in combination with the raised flue S and chambers V V¹ V² V³ V⁴ V⁵, as shown and described, and for the purposes set forth.

3. The ascending pipe G, leading from the vertical chamber V⁵, in combination with the series of chambers V V¹ V² V³ V⁴, as shown and described, and for the purposes set forth.

ROBT. THOMAS.

Witnesses:

WILLIAM GILL,
WM. STARK.