(No Model.)

J. L. WELLS.

RANGE.

No. 442,563. Patented Dec. 9, 1890.

Fig. 1.

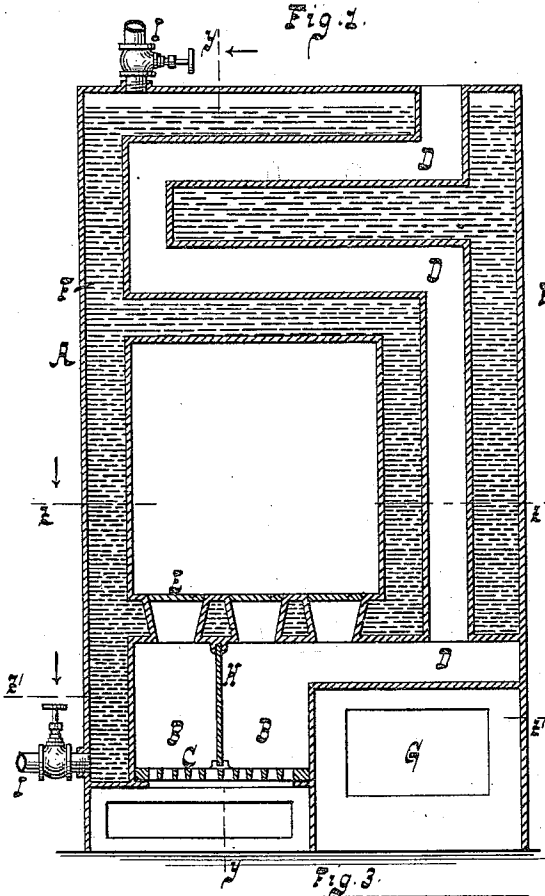


Fig. 2.

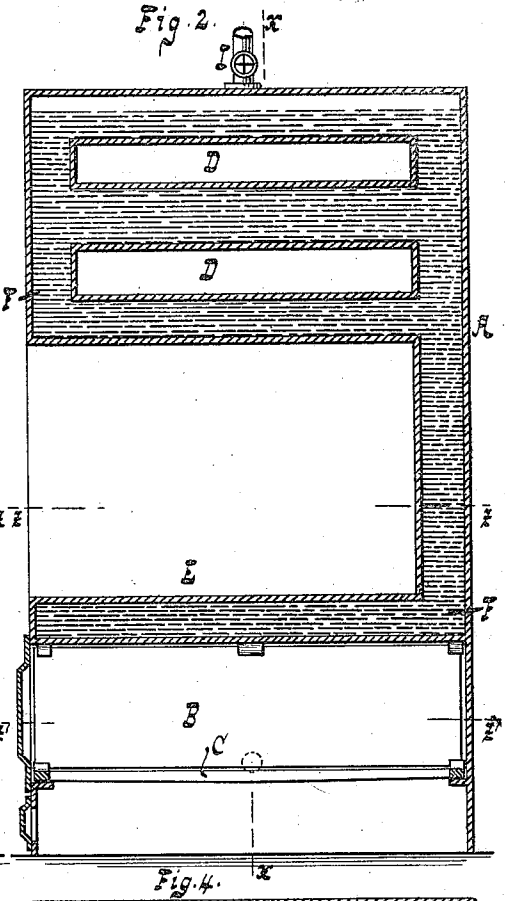


Fig. 3.

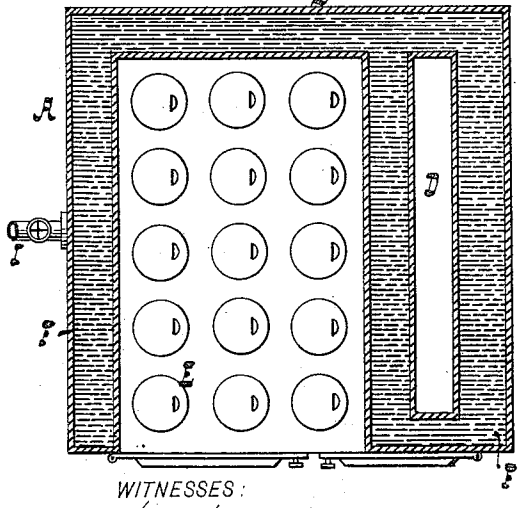
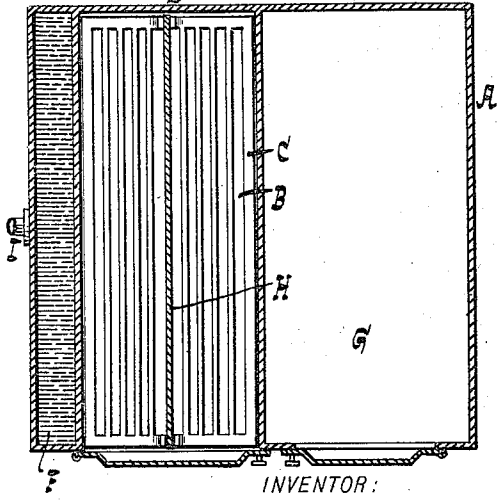


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN LELAND WELLS, OF NEW YORK, N. Y.

RANGE.

SPECIFICATION forming part of Letters Patent No. 442,563, dated December 9, 1890.

Application filed May 15, 1890. Serial No. 351,963. (No model.)

To all whom it may concern:

Be it known that I, JOHN LELAND WELLS, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Ranges, of which the following is a specification.

This invention relates to an improvement in ranges; and the invention consists in the details of construction set forth in the following specification and claim, and illustrated in the accompanying drawings, in which—

Figure 1 is a sectional front elevation of a range containing my invention, the section being taken along *x x*, Fig. 2. Fig. 2 is a section along *y y*, Fig. 1. Fig. 3 is a section along *z z*, Fig. 1. Fig. 4 is a section along *z' z'*, Fig. 1.

In the drawings, the letter A indicates the shell or case of the range, having a fire-box B, provided with a grate C. A cooking-chamber E, surrounded by a water-chamber F, is located above the fire-box, and an ascending flue D for the products of combustion rises from the fire-box and extends upwardly through the water-chamber F at one side of the cooking-chamber E, such ascending flue following a tortuous course in the water-chamber at a point above the cooking-chamber and having its exit at the extreme top portion of the water-chamber. A baking-oven G is located beneath the ascending flue D at one side of the fire-box, the construction being such that the cooking-chamber E is located above and at one side of the ascending flue D, while the baking-oven G is located beneath such ascending flue and at one side of the fire-box.

The fire-box B is provided with a removable partition H. When a small fire is required—as, for example, in the summer time, when unnecessary heat is to be avoided—the partition H is slid into place, Fig. 1, and fire is made only in that part of the fire-box lying next to the flue. When a large fire is required, the partition H is removed and the entire fire-box is then supplied with fuel.

The ascending flue D rises through the water-chamber F, so that the water in the chamber becomes rapidly and thoroughly heated by being exposed to the heat of the products of combustion passing through the flue. The water-chamber is provided with tubes I I, which can be connected to suitable heating devices or radiators. (Not shown.) By opening the valves of the tubes I I the hot water can pass from the water-chamber to a radiator or radiators, so as to heat a certain room or rooms, and from said radiators the cooled water passes back to the water-chamber, thus keeping up a circulation.

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

A combined range and hot-water heater consisting of the external casing A, a fire-box B in the base of the casing, a cooking-chamber E, located above the fire-box, a water-chamber F, surrounding the cooking-chamber and having a pendent extension around part of the fire-box, an ascending smoke-flue D, leading from the upper portion of the fire-box, rising through the water-chamber at one side of the cooking-chamber, provided with a tortuous portion located in the water-chamber directly above the cooking-chamber, and having its exit through the top of the water-chamber, and a baking-oven G, arranged beneath the ascending smoke-flue at one side of the fire-box, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN LELAND WELLS.

Witnesses:
WM. C. HAUFF,
E. F. KASTENHUBER.