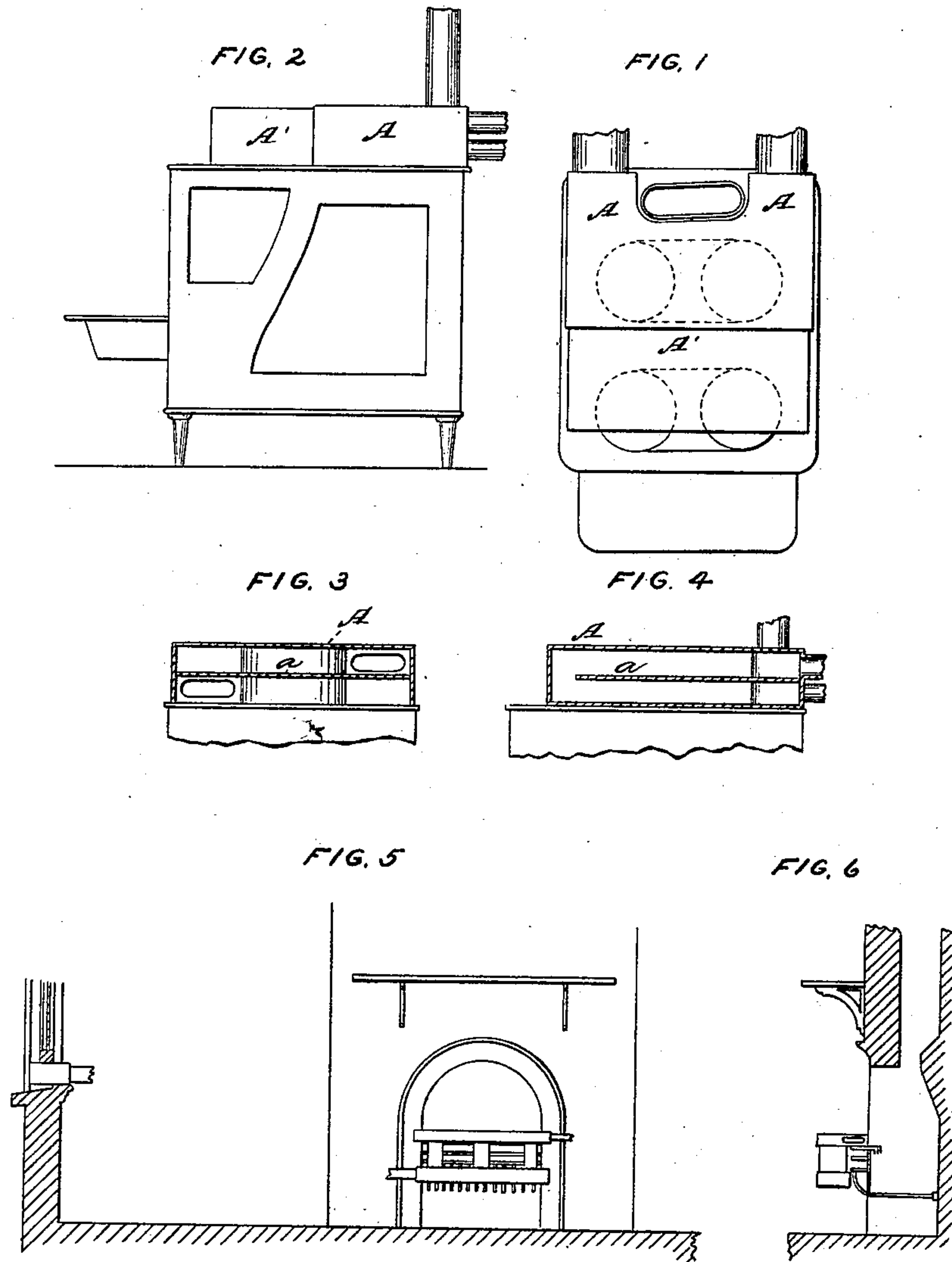


E. S. & B. R. POTTER.

Heater and Ventilator.

No. 102,590.

Patented May 3, 1870.



WITNESSES:

J. E. Maynard
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EMILY S. POTTER AND BETSEY R. POTTER, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 102,590, dated May 3, 1870.

HEATING AND VENTILATING ATTACHMENT FOR STOVES AND FIRE-PLACES.

The Schedule referred to in these Letters Patent and making part of the same

We, EMILY S. POTTER and BETSEY R. POTTER, both of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Apparatus for Warming and Ventilating Houses, of which the following is a specification.

In the drawings—

Figure 1 is a plan, and

Figure 2, a side view of a cooking-stove with our attachment.

Figures 3 and 4 are details, and

Figures 5 and 6 show the same as attached to a grate.

The object of our invention is to provide a cheap and simple apparatus which can be used with an ordinary stove or grate for the purpose of affording a supply of fresh warm air; and

Our invention consists of an air-chamber so constructed that it can be applied to an ordinary stove or grate, and have an inlet-pipe for the cold fresh air, and an outlet-pipe for the warm air.

This air-chamber may be constructed to fit any form of heating apparatus, and its shape will, of course, depend upon the heater with which it is to be used.

In figs. 1 and 2 of the drawings, it is shown as applied to a common form of cooking-stove, and consists of two parts, A and A', one of which is so constructed as to slide into the other, in order that the whole top of the stove may be covered by the heater, when the stove is not needed for culinary purposes, while part of the stove may be used when the part A' is slid into the part A. When the whole stove is to be used, the air-chamber is removed.

This form of apparatus is more especially intended to utilize heat that would otherwise be wasted, and in practice is used only when the cooking-stove is not in use for its primary purpose. From it, the nature of our invention, and its practical application to other heaters, will be plain without further detailed description.

The air-chamber may be provided with a shelf, (figs. 3 and 4,) a, for the purpose of presenting the air to be

heated in thin strata to the heating-surface, or any other of the well-known methods may be adopted to insure the heating of the air in the chamber.

Figs. 5 and 6 represent a form of an apparatus more especially adapted to the warming and ventilation of an invalid's chamber, or a sleeping-room. In this form of apparatus we construct the inlet-pipe with a rectangular mouth, of a proper size and shape to fit in the frame of a window, where it is held in place by the sash being brought down upon it. The outlet-pipe may be carried to any part of the room.

For greater convenience both the inlet and outlet-pipes are made flexible in this form of apparatus.

We are aware; of course, that in the common furnace an air-chamber having an inlet and outlet-pipe is used, and that the air in the chamber is heated by a stove; but in furnaces the stove is always within the air-chamber; we do not, therefore claim broadly an apparatus consisting of an air-chamber and an outlet and inlet-pipe, but limit our claim to such an apparatus when the air-chamber is constructed so as to be applied to the heater, and disclaim such an apparatus when the chamber is constructed so as to receive the heater within it; our invention, in fact, relates entirely to an apparatus for use with the common forms of heaters, such as stoves and grates, hot-water and steam apparatus, &c., and its object is to make those heaters not only heaters but also ventilators.

We claim as our invention—

The apparatus herein described, consisting of an air-chamber provided with an inlet and outlet-pipe, when the air-chamber is so constructed as to be applied to a heater, the whole being and operating as described.

EMILY S. POTTER.
BETSEY R. POTTER.

Witnesses:

J. E. MAYNADIER,
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