G. M. LEEPER.

DRIER ATTACHMENT FOR STOVES.

APPLICATION FILED JAN. 2, 1920.

1,352,071. Patented Sept. 7, 1920.

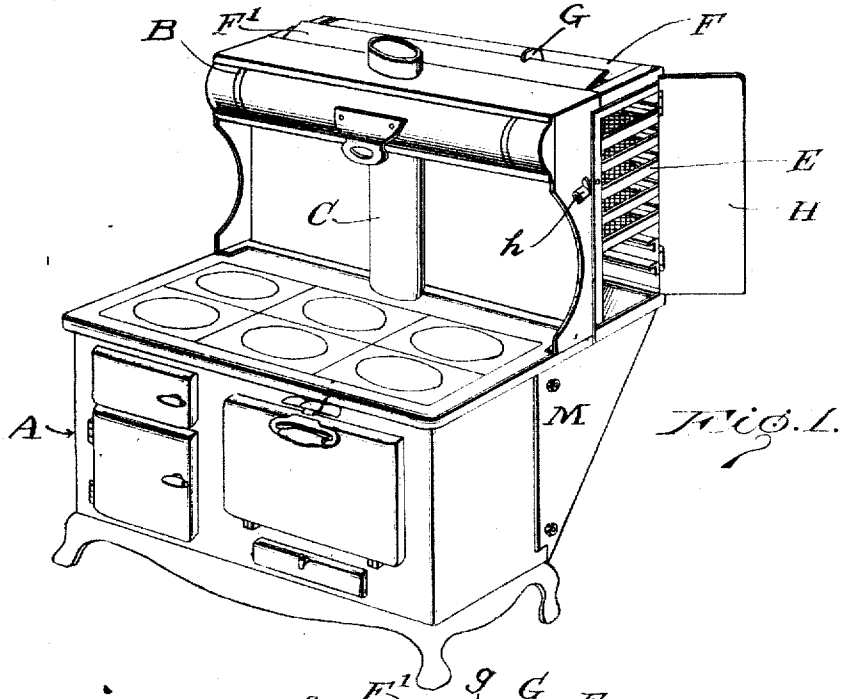


FIG. 1.

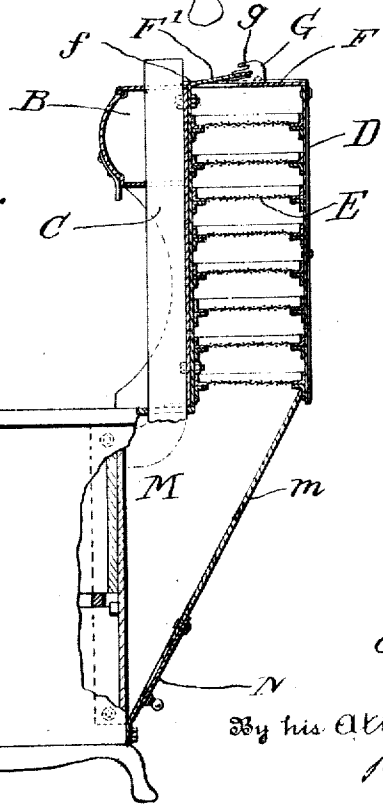
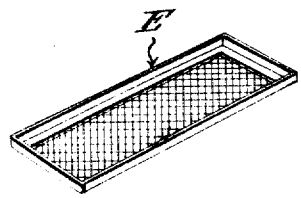


FIG. 2.

FIG. 3.



Witness

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UNITED STATES PATENT OFFICE.

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DRIER ATTACHMENT FOR STOVES.

1,352,071. Specification of Letters Patent. Patented Sept. 7, 1920.

Application filed January 2, 1920. Serial No. 349,107.

To all whom it may concern:

Be it known that I, GEORGE M. LEEPER, a citizen of the United States, residing in Oakland, in the county of Douglas and State of Oregon, have invented certain new and useful Improvements in Drier Attachments for Stoves, of which the following is a specification.

The object of this invention is to provide a drier that can be readily applied to a domestic stove or range of ordinary construction for drying fruit, vegetables, etc., without interfering with the use of the range or stove for ordinary cooking purposes or for other uses, and which is of such construction and is so applied as to utilize what would otherwise be wasted heat.

In carrying out my invention, I provide a casing for holding a series of drying trays, and which is secured to the back of the upper part of the stove in rear of the warming closet and below this casing I provide an air chamber closed at its ends in any suitable way and having an inclined rear wall which serves to support the casing of the drier and also acts as a reflector or director for guiding or directing the heated air into the lower portion of the casing.

Provision is made for admitting air to the lower portion of the air chamber and for regulating the passage of hot air from the upper portion of the drier.

Other features of the invention will be hereinafter specified.

In the accompanying drawings:—

Figure 1 is a perspective view of a kitchen stove or range of well known construction with my improvements applied.

Fig. 2 is a view partly in side elevation and partly in section of the same.

Fig. 3 is a perspective view of one of the drying trays.

The stove or range shown is of well known construction. A indicates the body of the stove, B a warming closet and C a smoke pipe. D indicates a casing for the drying trays E. This casing is made of metal and secured to the back of the upper part of the stove in rear of the warming closet in any suitable way. As shown, it is bolted to the stove, and as before stated its construction is such that it may readily be applied thereto. Preferably the casing D extends entirely across the back of the upper part of the stove. It is provided at the top with a cover, one part, F, of which is fixed or stationary, while the other part F′ may be raised and lowered to a limited extent; being made of sheet metal it may be readily bent at *f* which in effect provides a hinge.

G indicates a device for holding the part F′ in position. It is attached to the fixed part F of the cover and is provided with a series of slots *g* to receive the edge of the part F′, and hold it in any desired position to regulate the ventilation of the drier; that is, to permit a greater or less amount of heated air to pass out through the casing. At each end the casing is provided with a door H which may be fastened by a suitable fastening device *h*. The trays E may be of any suitable construction and may be held in the casing in the usual way.

Below the casing I provide an air chamber M arranged in rear of the lower portion of the stove and having at its rear a wall *m* which is inclined from its lower end where it joins the rear portion of the stove to its upper end where it joins the bottom of the casing and thus serves to partially support the casing. The air chamber is closed at opposite ends in any suitable way and the rear wall *m* is provided with a ventilating valve or device N of any suitable construction to regulate the admission of air to the chamber. Air entering at N passes into the chamber M, is thoroughly heated and is directed up into the drying chamber, passes through the trays and passes out as rapidly as may be desired through the opening in the top of the casing.

Experience has demonstrated that a drier constructed in the manner before described is most efficient. It is permanently attached to a part of the stove that is not ordinarily used and occupies what would otherwise be wasted space. It does not interfere in any way with the use of the stove for cooking or for other purposes. It is especially intended for drying small quantities of fruit, vegetables, etc., for domestic use and is not intended for use on a large commercial scale.

I claim as my invention:—

1. The combination with a stove or range provided above its top with a warming closet, of a drier applied to the stove in rear of its lower portion and the warming closet, comprising a drying chamber in rear of the warming closet and an air chamber

below the drying chamber having as its front wall the rear wall of the stove and as its rear wall an inclined, reflecting plate which serves to support the drying chamber and having side parts which are attached to the sides of the stove, substantially as described.

2. A drier, comprising a casing adapted to contain drying trays and adapted to be attached to the rear part of a stove or range, an inclined plate below the drying chamber provided with a ventilator and which is secured to the lower end of the drying chamber and is adapted to be secured to the rear part of the stove, said inclined rear plate being connected with side walls to constitute opposite walls for an air chamber below the drying chamber when the drier is applied to a stove

3. The combination with a stove or range, of a drier applied to the rear part thereof, comprising a drying chamber attached to the upper part of the stove and an air chamber below the drying chamber having as its front wall the rear wall of the stove and as the rear wall an inclined reflecting plate provided in its lower portion with devices for controlling the admission of air, and means at the upper portion of the drying chamber for regulating the air exit.

In testimony whereof, I have hereunto subscribed my name.

GEORGE M. LEEPER.