W. M. JACKSON.

OVENS FOR GAS STOVES.

No. 187,013. Patented Feb. 6, 1877.

Fig. 2.

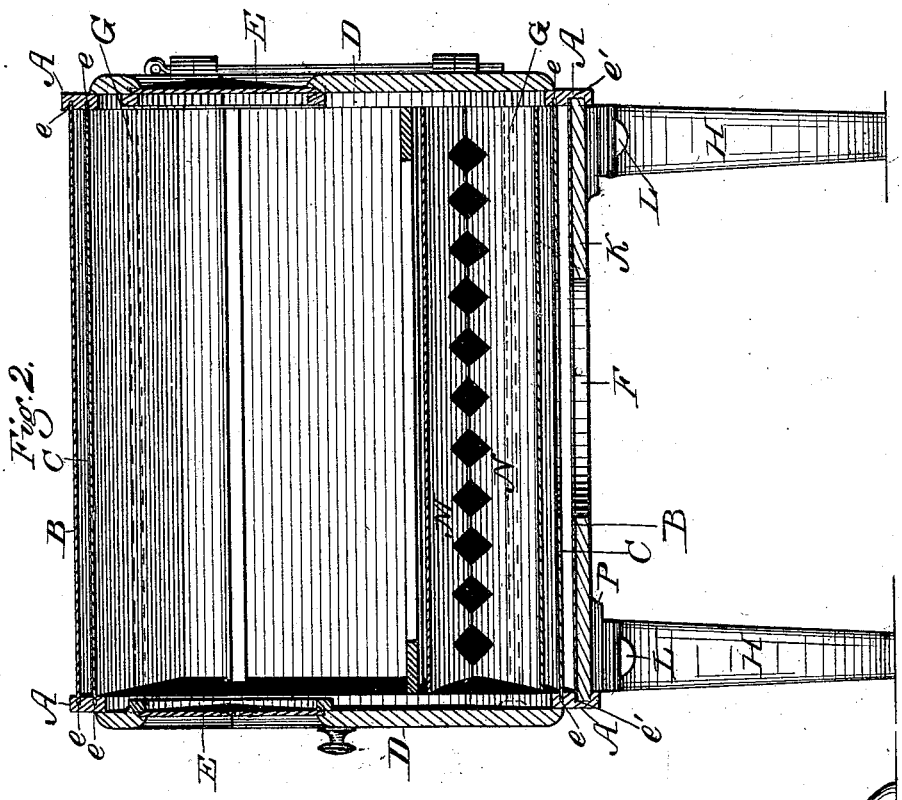
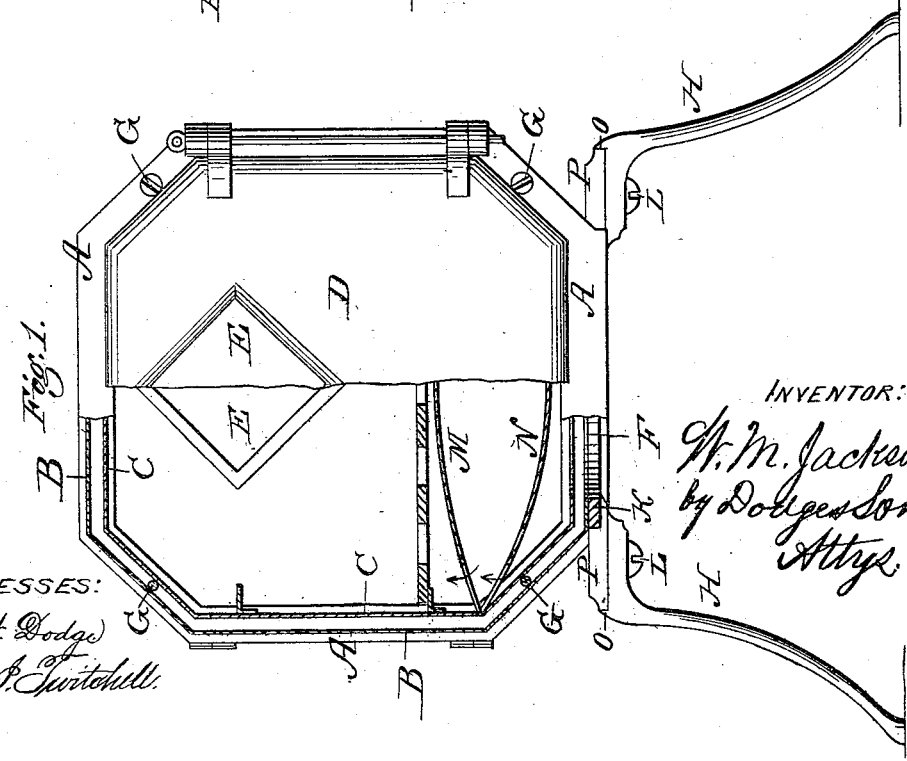



Fig. 1.

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# UNITED STATES PATENT OFFICE.

WALTER M. JACKSON, OF PROVIDENCE, RHODE ISLAND.

## IMPROVEMENT IN OVENS FOR GAS-STOVES.

Specification forming part of Letters Patent No. **187,013**, dated February 6, 1877; application filed August 1, 1876.

*To all whom it may concern:*

Be it known that I, WALTER M. JACKSON, of Providence, in the county of Providence and State of Rhode Island, have invented certain Improvements in Ovens for Gas-Stoves, of which the following is a specification:

My invention consists in an improved construction of portable gas-ovens, as hereinafter more fully explained.

In the drawings, Figure 1 represents an end view of my improved oven, partly in section, and Fig. 2 a longitudinal vertical section through the center of the same.

The objects of this invention are to increase the efficiency and cheapen the construction of the oven, and at the same time produce one which may be readily put together or taken apart and packed in a small space for shipment.

In constructing my improved device I first provide two metal rims or end plates, A, of any suitable form, each plate or rim having two small grooves, *e*, extending entirely around it in one of its faces. Extending between the two end plates A are two thin sheets of metal, B and C, so bent as to conform exactly in shape and size to the grooves *e*, into which the edges of the sheets fit, as shown. At the lower side of the rim or end plates the lower groove is enlarged, as shown at *e'*, to receive the ends of a base-plate, K, which is of the same length as the metal sheets B and C, and extends between the end plates or rims A in the same manner. This plate K serves to brace and strengthen the body of the oven, and also forms a convenient place for attaching the legs H. These legs may be detachable from the base, as shown, or be made solid with the base-plate, and both be detachable, as preferred. The edges of the metal sheets B and C, and of the plate K, being inserted into the groove *e*, screw rods or bolts G are inserted between the plates B and C, one end of the rods being provided with a head or enlargement, and the other end with a screw-thread, said rods connecting the end plates or rims, as shown. By screwing up these rods G the end plates or rims A are drawn toward each other, causing the edges of the metal sheets B and C, and of the plate K, to be firmly seated in the grooves *e*. This arrangement is very simple, and produces a very firm strong body for the oven.

It will be seen that by making the walls of the oven as above described a space is left between the sheets B and C, which space, being filled with air, prevents the radiation of heat from the body of the oven.

As shown in the drawing, a suitable opening, F, is made through the base-plate K, and directly over the same, through the metal sheets B and C, for the entrance of the heat from the burner below. In the lower part of the oven are placed two thin plates of metal, M and N, curved, one upward and the other downward, as shown. These plates have their edges serrated or notched, as shown in Figs. 1 and 2, and serve to deflect the flame or heat as it enters at the bottom of the oven, and cause it to travel outward from the center toward the sides of the oven, thus diffusing the heat over the whole oven. The oven is provided either at one or both ends with a door, D, as shown, said door having a piece of glass or other transparent material, E, placed in it, so that the condition of things in the oven may be seen without opening the door.

As before stated, the oven is mounted on legs H, made detachable, and which are here represented as being made separate, and attached by means of screws L to the base-plate K, the plate being formed with suitable lugs or projections P for that purpose. As shown in Fig. 1, the legs H are provided with a lip, *o*, projecting upward past or against the end of the projection or lug P, thus enabling the leg to be fastened in position by means of a single screw without danger of turning or working loose.

It will be seen that the legs may be readily detached from the body and placed inside of the same for shipment or storage, thus making a small compact package.

If desired, the metal sheets B and C may be formed with simply a slight crease at each of the points at which they are to be bent, in which case the plates may be left folded out flat, and they, together with the end plates, doors, legs, and shelf, done up in a thin flat parcel, in which shape they would occupy the

smallest possible space. The simplicity of its construction would enable any person of ordinary ability to set the oven up.

As heretofore made, the ovens were set on the stove and required to be lifted on and off the same; but by thus mounting the oven upon legs this necessity is avoided, the oven simply being placed over the stove or burner, and being supported entirely by its legs.

By this means the oven can be made of any required size, and be firmly supported without danger of being upset, even though the burner be ever so small.

This oven is specially designed to be used in connection with the gas stove or burner patented to me January 4, 1876, No. 171,814, the base of which, being quite small in comparison to the size of the oven, would not form a safe or efficient support for the oven.

I am aware that stoves been made with detachable legs or feet; but I am not aware that ovens for gas-stoves have ever before been made with legs for supporting them independently of the stove or heater, and which are made detachable, so they can be packed in in the oven for transportation.

Having thus described my invention, what I claim is—

1. A sheet-metal oven for gas-stoves, provided with a separate cast-iron base-plate, K, having the legs H attached thereto, substantially as described, whereby the oven is supported independently of the stove or burner, and the legs can be detached with or without the base-plate, as set forth.

2. An oven for gas-stoves, provided with the deflecting-plates M N, having serrated or notched edges arranged to operate substantially as set forth.

3. In combination with the base-plate K, the legs H, provided with the shoulder *o*, and secured by the screw L, as set forth.

WALTER M. JACKSON.

Witnesses:

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