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W. B. TREADWELL.

Heating Stove.

No. 30,097. Patented Sept. 18, 1860.

Fig. 1,

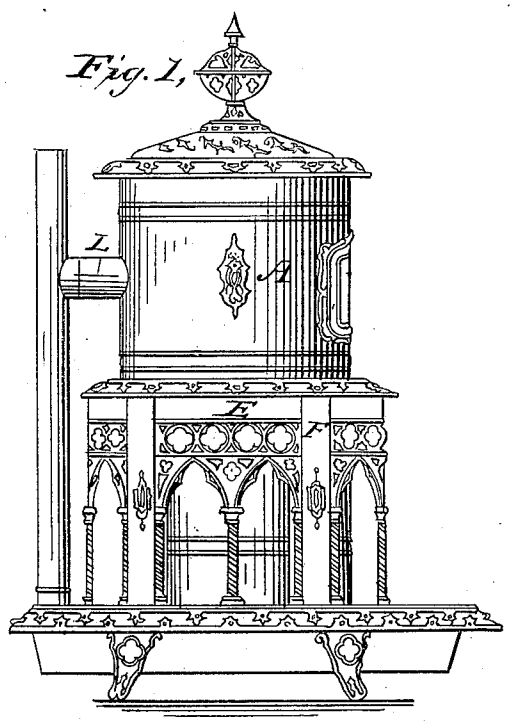
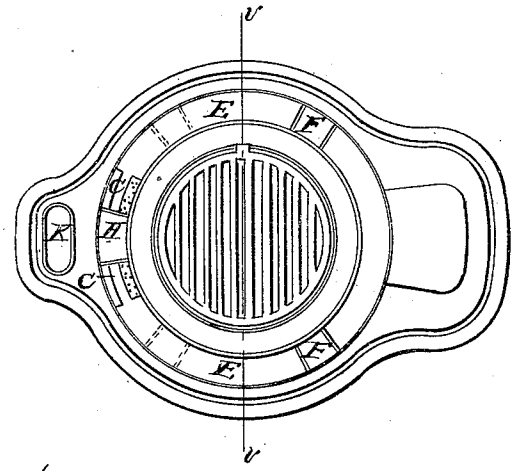


Fig. 3,



WITNESSES

C. M. Alexander

C. A. A. Featherstonhaugh

INVENTOR

W. B. Treadwell

N. PETERS. Photo-Lithographer. Washington, D. C.

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Fig. 5,

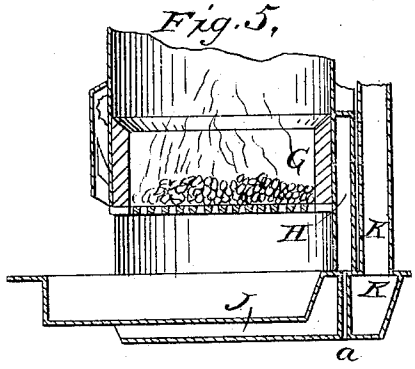


Fig. 2,

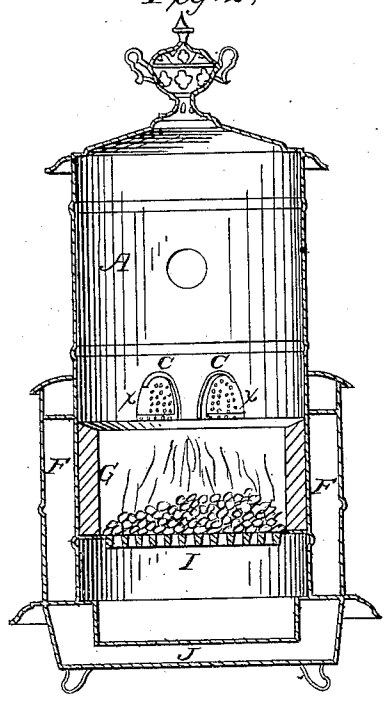
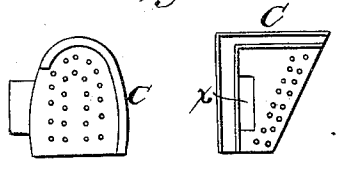


Fig. 4,



WITNESSES:

C M Alexander

A A Yeatman

INVENTOR

W B Treadwell

N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM B. TREADWELL, OF ALBANY, NEW YORK.

STOVE.

Specification of Letters Patent No. 30,097, dated September 18, 1860.

To all whom it may concern:

Be it known that I, W. B. TREADWELL, of Albany, in the county of Albany and State of New York, have invented certain new and useful Improvements in Stoves; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists in constructing and arranging the several parts of the stove hereinafter particularly described substantially in the manner set forth.

In the annexed drawings Figure 1 represents a side elevation. Figs. 2 and 5 are sections taken vertically in different positions. Fig. 3 is a cross section. Fig. 4 is a view of one of the gas cups.

In the figures, A, represents the body of the stove, which may be made partly of sheet, and partly of cast metal or wholly of both as may be desired.

G, represents the ordinary cylinder or fire chamber, which is lined with fire brick or any other suitable material.

Near the top of the cylinder and within the stove are secured two or more gas cups C, C. These cups are made hollow, are perforated with small holes as shown, and have projecting lips as seen in Fig. 4. The products of combustion pass through openings in the sides of these cups as shown at *x*, *x*. Said products then pass along the horizontal flues E, on the outside of the stove, down the vertical flues F, F, into the chamber J, at the bottom of the stove and thence up the stove pipe, or smoke pipe K.

H, represents a hot air chamber situated on the outside of the cylinder G, and at the rear of the stove. This chamber connects with the open air by means of a pipe *a*. At its upper end the chamber connects with the gas space cups C, C.

The atmospheric air passes into the chamber H through pipe *a*, and becoming heated passes up and through the small apertures or openings in the gas cups, and is thus supplied and mingled with the products of combustion as they pass into and through the openings in the sides of said cups. The hot air being made to mingle with and thus supply oxygen to the gases a very perfect combustion is produced; and the horizontal, as well as the vertical flues, and the bottom of the stove are highly heated.

The greater portion of the exterior of the cylinder is exposed to the air as in many other heating stoves.

A damper is placed in the short pipe L, which connects with the smoke pipe K, and by means of said damper a direct draft may be produced when desirable in starting a fire in the stove.

By this arrangement a very economical and effective parlor stove is made.

The view in section Fig. 2, represents the vertical flues, F, F, at the side of the cylinder as though they were on a line drawn through the center of said cylinder. They may be thus located, or they may be located front of a line through the center as in Fig. 3, *z*, *z*, representing the line.

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

1. The employment of the gas cups C, C, with projecting lips above when the said cups are perforated with small holes, and are provided with an opening through which the products of combustion pass, substantially as herein specified.

2. The combination of the cups C, C, with the horizontal flues, E, and the vertical flues, F, the same being used substantially as and for the purpose specified.

3. The use of the hot air chamber, H, in connection with the cylinder G, the gas cups C, C, and the flues (E) and (F) the several parts being employed substantially in the manner and for the purpose set forth.

W. B. TREADWELL.

Witnesses:

JOHN J. PERRY,

JNO. G. TREADWELL.