

R. W. BELSON.

Cooking Stove.

No. 23,748.

Patented April 26, 1859.

Fig. 3

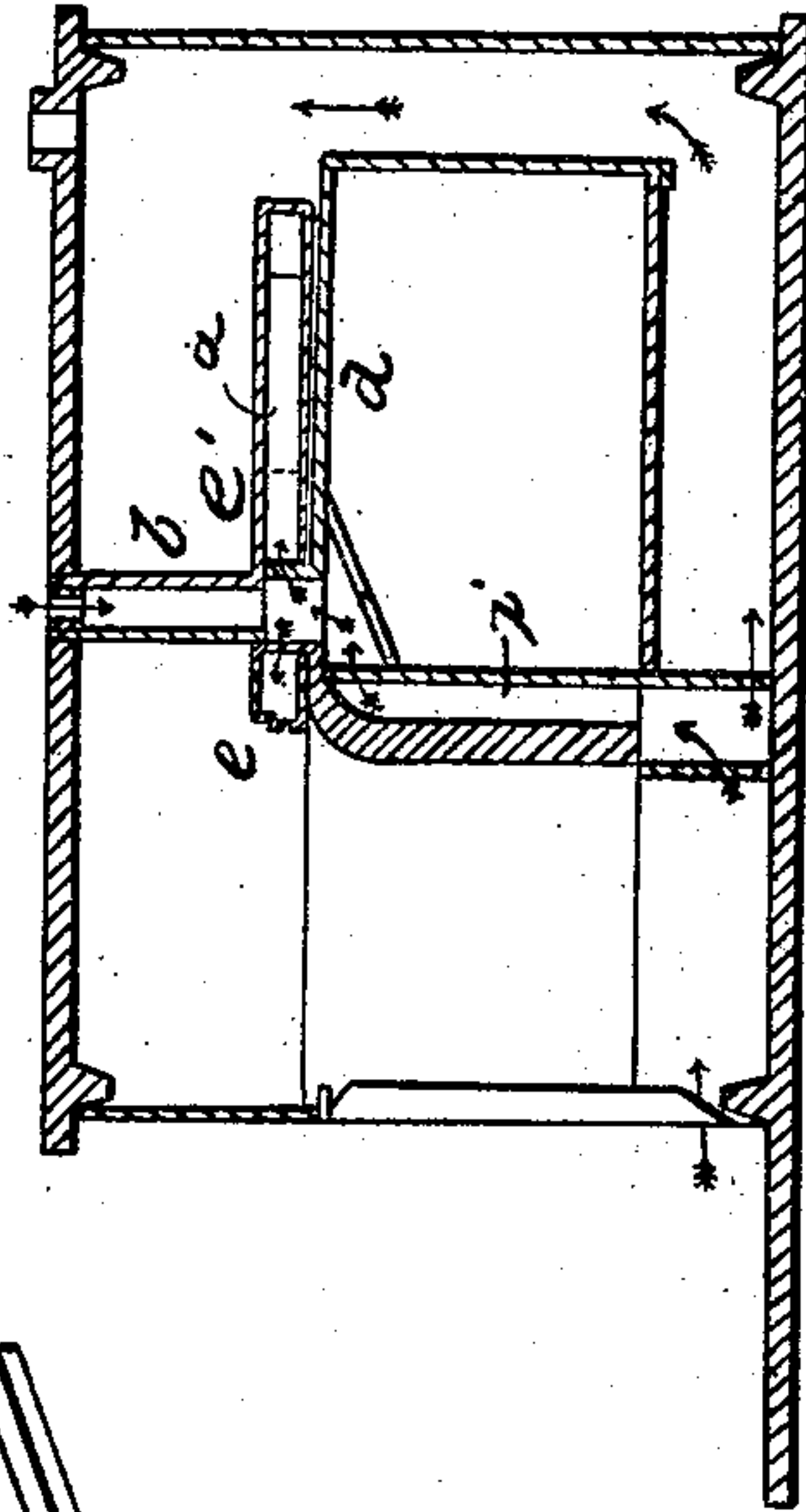
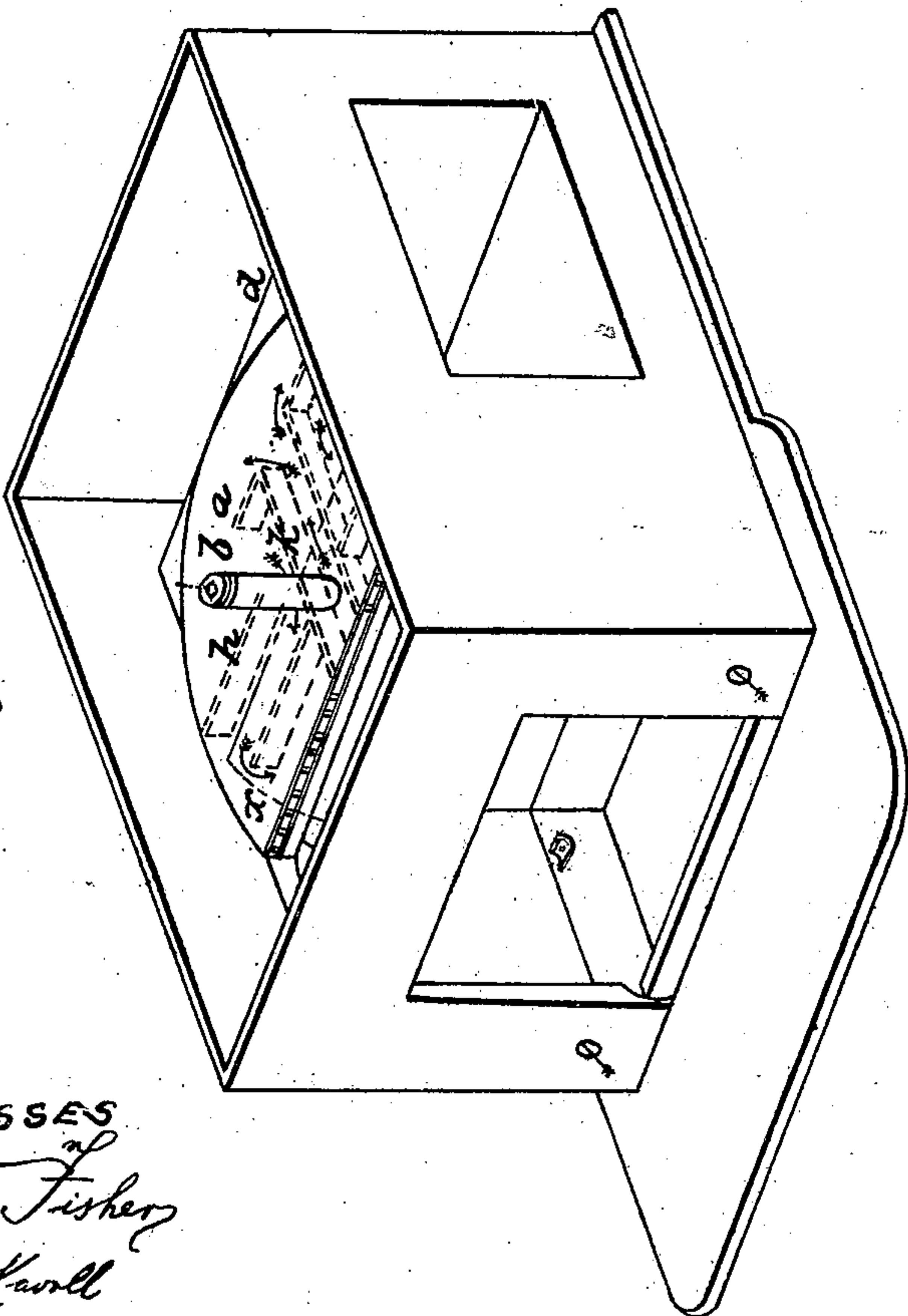


Fig. 1



WITNESSES
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R. W. BELSON, OF PHILADELPHIA, PENNSYLVANIA.

STOVE.

Specification of Letters Patent No. 23,748, dated April 26, 1859.

To all whom it may concern:

Be it known that I, R. W. BELSON, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented an
5 Improvement in Gas-Consuming Cooking-Stoves, and that the following is a full, clear, and exact description of the principle or character which distinguishes it from all
10 other things before known and of the usual manner of making, modifying, and using the same, reference being had to the accompanying drawings, of which—

Figure 1, is a perspective view showing the interior of the air heater; Fig. 2, a vertical middle section from back to front of the
15 stove, and Fig. 3 a representation of the key or handle for revolving the air heating chamber.

My improvement in gas consuming cooking stoves is described and represented as
20 follows: Over the top oven plate I arrange an air heating chamber *a* of semicircular form which chamber turns upon the hollow axis *b* and also upon the open collar *c*. The
25 air is admitted to chamber *a* through the hollow axis *b* and as the air is taken from over the top of the stove it is considerably heated prior to its entrance into *b*. The
30 straight edge *e* of chamber *a* is perforated with numerous small holes for introducing the heated air among the gases arising from the fire. The chamber *a* is divided into several
35 apartments by partitions *h* after a well known manner for the purpose of prolonging the passage of the air and heating it thoroughly. The hollow axis *b* is fixed fast to the chamber *a* and turns with it. They
40 both turn upon an open collar *e'* which is fixed to the top oven plate *d* and which rises into the chamber *a*, so as to admit hot air into the chamber from the air chamber *i* in rear of the fire back, with which chamber *i*

the open collar communicates as clearly shown in Fig. 2; the arrows indicating the course of the air.

In using the chamber or heater *a* when the fire is started the chamber is turned so as to bring nearly its whole surface over the fire when it becomes rapidly heated and is then
50 turned back into its position over the oven as shown in Figs. 1 and 2. In Fig. 1 the red line *x* indicates its position when over the fire. If necessary the central bearing of the heater may be upon a screw thread so that
55 when the heater is turned over the fire it may be somewhat elevated so as to leave a space for the draft between the heater and the top oven plate.

One of the distinguishing features of this improvement is, that the heater can be
60 placed directly over the fire, and be rapidly heated and then be withdrawn entirely from over the fire when necessary which is not the case where movable air heaters are made
65 merely to approximate to or recede from the fire.

Fig. 3 represents a key or handle by which the chamber *a* is turned around by inserting the square end *w* into the pipe end of hollow
70 axis *b*.

What I claim as my improvement in gas consuming cooking stoves is—

1. The semicircular heater *a*, turning upon the hollow axis *b* near to one side of the heater arranged and combined with the stove
75 in the manner set forth.

2. I claim combining said heater by means of collar *e'* with the air chamber in rear of the fire back as set forth.

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Witnesses:

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