J. L. MOTT.

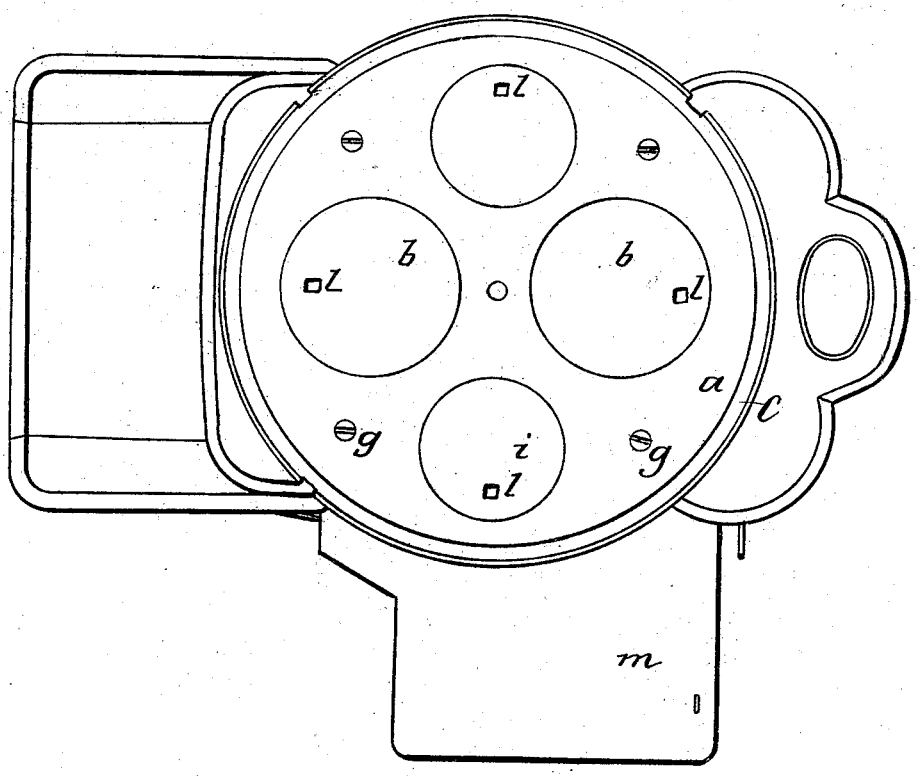
2 Sheets—Sheet 1.

Cooking Stove.

No. 7,347.

Patented May 7, 1850.

Fig. 1.



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Cooking Stove.

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Fig. 2

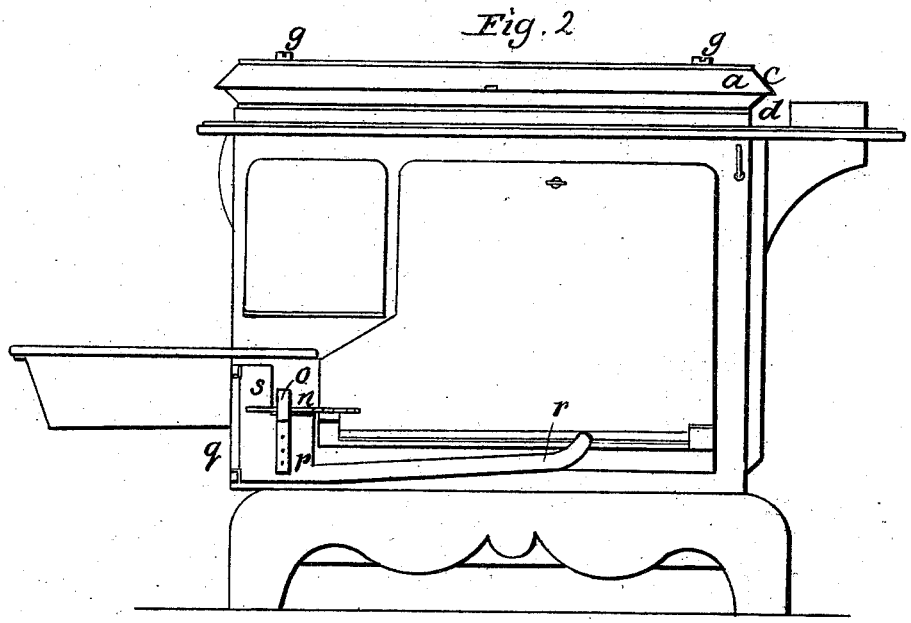
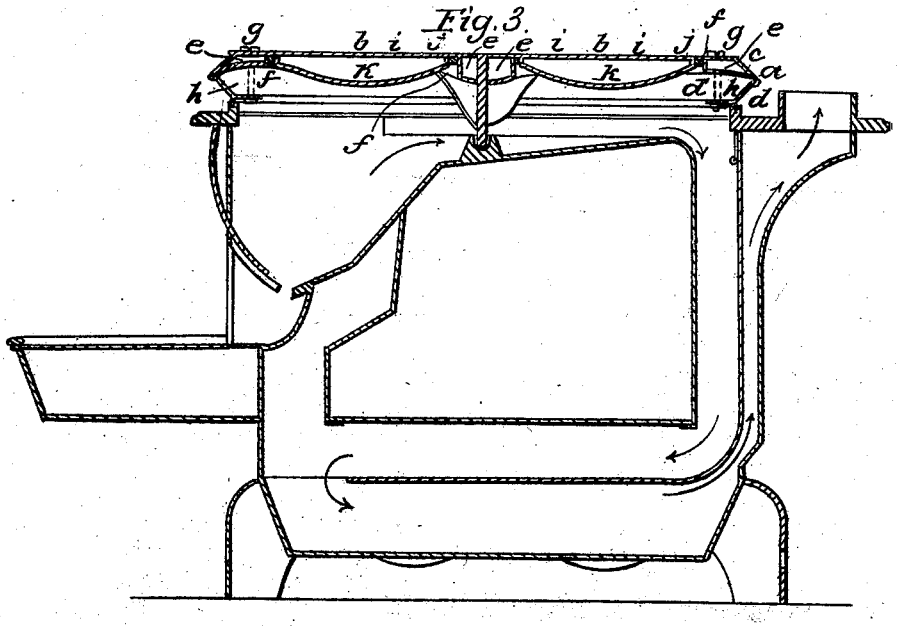


Fig. 3



UNITED STATES PATENT OFFICE.

J. L. MOTT, OF NEW YORK, N. Y.

COOKING-STOVE.

Specification of Letters Patent No. 7,347, dated May 7, 1850.

To all whom it may concern:

Be it known that I, JORDAN L. MOTT, of the city, county, and State of New York, have invented certain new and useful Improvements in Cooking-Stoves, and that the following is a full, clear, and exact description of the principle or character which distinguishes them from all other things before known and of the manner of making, constructing, and using the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a plan of the stove with one of the oven doors open, Fig. 2 a side elevation, and Fig. 3 a longitudinal vertical section.

The same letters indicate like parts in all the figures.

My improvements are represented in the accompanying drawings and hereinafter described as applied to a rotary top cooking stove, but they are equally applicable to other stoves.

The first part of my invention relates to the protecting of the boiler hole covers from the injurious action of intense heat by lining such covers with a concavo-convex metal plate which will bend to yield to the expansion and contraction due to the varying heat to which they are exposed and against which they protect the covers. And the second part of my invention relates to the supporting the oven and other doors when open, and consists of a lever or arm jointed or hinged to the body of the stove, and so connected with the door that when the door is let down the said lever or arm is turned out to make a support on which the door rests.

The accompanying drawings represent my improvements as applied to a stove with a rotary top (*a*) provided in the usual manner with boiler holes (*b*) though, as has been said, they can be applied to other stoves. The outer periphery of this top is formed with a bevel flanch (*c*) to which is fitted a bevel ring (*d*) of corresponding but reversed form. A lining plate (*d'*) is fitted to the under side of the rotary top, and having its edges bent so as to come in contact simply around the edges thus leaving a hollow space (*e*) between the two. The rotary top plate is made with flanches (*f*) all around the boiler holes against which the edges of the lining plate abut. This lining plate is then clamped and held against the bottom of the plate (*a*) by means of the bevel ring (*d*) which is secured to the plate (*a*) by means of screw bolts (*g*) which pass through the two plates and a series of ears (*h*) projecting from the inner periphery of the ring.

The boiler hole covers (*i*) are formed with a flanch (*j*) projecting from the under face to fit the boiler holes, and the plate within the flanch is lined with a concavo-convex plate (*k*) secured in plate by a central bolt, its periphery abutting against the flanch. A hole (*l*) is made in the top of the cover so that air has free ingress and egress to and from the space between the two plates.

The lining will receive the intense action of the heat and thus protect the upper plate of the cover, and as the two plates are exposed to different temperatures, the one will expand and contract to a greater extent than the other, the curved form of the under one or lining enabling it to bend and thus yield to this unequal expansion and contraction without the danger of fracture. Instead of making the lining separate, it may be cast in one piece with the cover.

The oven door (*m*) is hinged in the usual manner along its lower edge. At one side there is an arm (*n*) which when the door is let down, strikes against a projection (*o*) on a lever (*p*) which is hinged at (*q*) to the side plate of the stove and thus turns out the lever so far that its outer extremity (*r*) forms a support for the doors to rest upon. When the door is closed the arm strikes against another projection (*s*) of the lever which forces the lever up against the side of the stove to be out of the way. If desired, two such levers may be used for each door, one on each side, but I have found one to give sufficient support.

The arm of the door may be connected with the lever in any manner which will move the lever in or out as the door is closed or opened.

It will be obvious from the foregoing that this method of supporting a door is applicable to all the doors of stoves which are hinged along the lower edge; and it will be evident that the mode of lining boiler hole covers is applicable to the lining of covers to all stoves.

I do not wish to confine myself to any particular form for the lining of the boiler covers as any form which will present a curved line in the cross section will answer the purpose contemplated.

What I claim as my invention and desire to secure by Letters Patent is—

1. The method of protecting boiler covers against the injurious action of varying temperatures by combining therewith a lining made of metal so formed that in its cross section, it shall present a curved line, that is, a line longer than a straight line as described.

2. And I also claim the method of supporting the doors of stoves by means of a lever or levers so connected with the doors, substantially as described, that the said lever shall be moved in and out by the closing and opening of the doors as described.

JORDAN L. MOTT.

Witnesses:
C. W. M. KELLER,
CAUSER BROWNE.