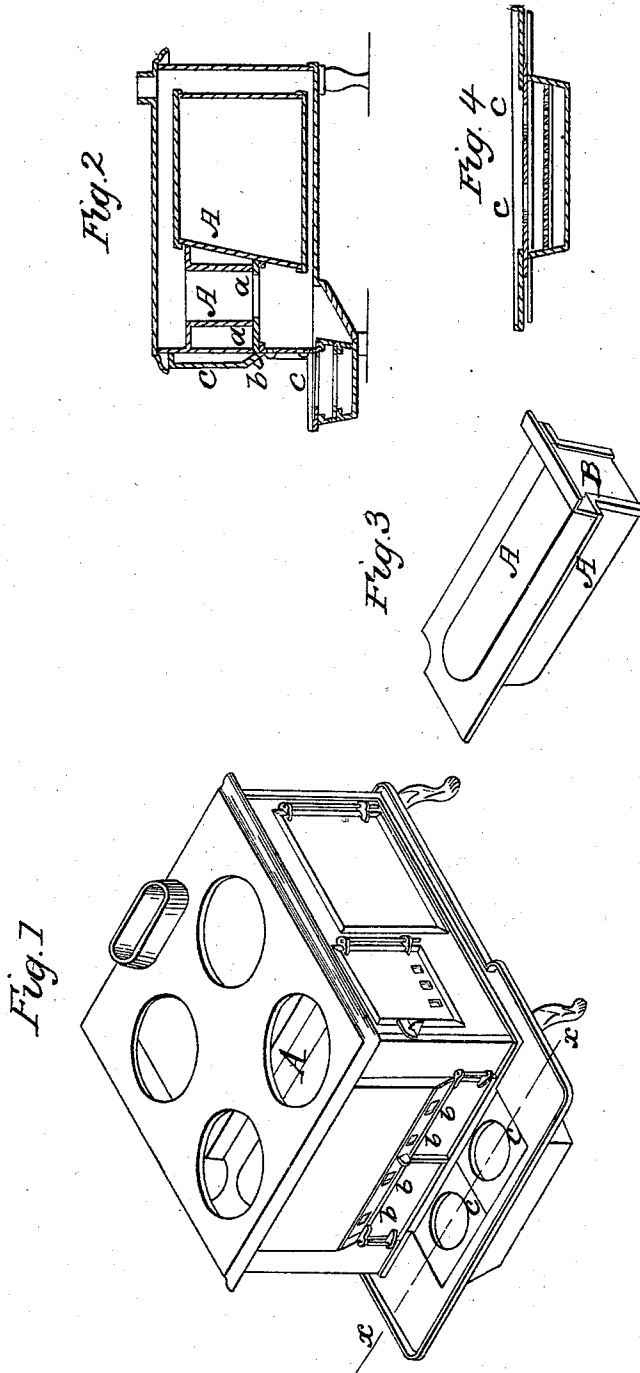


J. R. HYDE.
Cooking Stove.

No. 7,345.

Patented May 7, 1850.



UNITED STATES PATENT OFFICE.

JAMES R. HYDE, OF TROY, NEW YORK.

COOKING-STOVE.

Specification of Letters Patent No. 7,345, dated May 7, 1850.

To all whom it may concern:

Be it known that I, JAMES R. HYDE, of the city of Troy, in the county of Rensselaer and State of New York, have made certain new and useful Improvements in the Construction of Cook-Stoves; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is an isometrical perspective view of the whole stove; Fig. 2, a vertical section through the same from front to back; and Fig. 3, a perspective view of the fire box, the same letters having reference to like parts in all the figures.

The nature of my invention consists, first, in the manner of constructing the fire box so that it shall not crack in the expansion and contraction to which it is subject from the great and unequal degree of heat to which it is exposed; secondly, in the so arranging of a flue in front of the stove as to admit the smoke and gases when the summer arrangement is used in broiling, &c., so that it has a free draft to enter the fire chamber above the fire; and, thirdly, in the dividing the sliding part of the hearth so that either half shall slide under the stationary part or ends of the hearth in such a manner as that the sliding hearth is entirely out of the way, without the inconvenience resulting from having it project out beyond other parts of the stove as is usual.

The description is as follows: In my stove I arrange an air space around the fire box for heating air to be conducted in pipes for the purpose of heating apartments situated from that which is occupied by the stove, the modes heretofore employed of constructing the fire box is such as that it cracks or opens at the corners in the expansion and contraction and therefore admits the smoke and gases from the fire to pass into the air space. In my construction and form of fire box it is such as to prevent such cracking or opening by its being made round or oval at one end, and presents in a manner one continuous plate as represented at A, with a straight end B sliding in grooves which constitute the other end of the fire box; by this arrangement the sides and round end are free to expand out laterally by the box sitting on the bed plate *a*, loosely so that it is left free to expand and contract without bulging

and cracking as is the case when the box is made whole or in parts so as to make it necessary to bind it together. The great advantage gained in my mode of constructing the fire box is that it requires no fastening or stay to retain it in place or together, and is free to expand and contract without binding in any part which renders it free from bulging and consequently cracking or opening at the corners.

The flue *c*, in front of the stove admits the smoke and gases to pass off from articles cooked on the summer arrangement through the register opening *b, b*, which enters the stove above the fire and prevents the escape of the smoke and gases into the room, there not being sufficient draft for this purpose into the ash pit and through the fire. Another object gained in this arrangement of flue is that when the fire is too great there may be cold air admitted over the fire, which deadens it especially coal fires, and will not admit gas or smoke from the fire into the room, through the flue *c* which is the case when the draft of the stove is closed, the doors opened or covers removed off the top, is resorted to to accomplish this purpose, of admitting air over the fire.

The sliding hearth *c, c*, is divided in the center and either half respectively slides under the stationary ends entirely out of the way, which obviates the inconvenience of taking space in the room and being much in the way when employed about the stove.

Having thus described the nature of my invention and shown the uses thereof, what I claim therein as new and desire to secure by Letters Patent is—

1. The mode herein described of constructing fire boxes for stoves, furnaces, &c., in two pieces so that they are not confined as they are when made whole or four pieces as described, but is free to move on its bed plate.

2. I claim the manner herein described of dividing the sliding hearth of cook stoves in such a manner as to admit of its sliding under the stationary part, and be entirely out of the way, the whole being constructed in the manner and for the purpose substantially as herein described and represented.

JAMES R. HYDE.

Witnesses:

E. L. BRUNDAGE,
H. A. BLANCHARD.