T. J. COUSLTON.

Stove-Lid Hinge.

No. 93,600. Patented Aug. 10, 1869.

Fig. 1

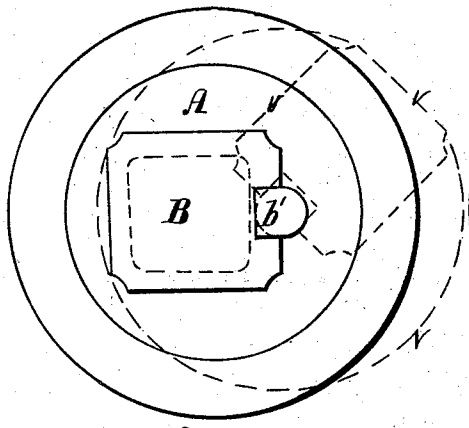


Fig. 2

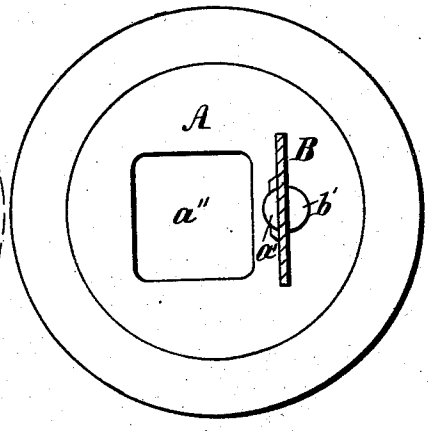


Fig. 3

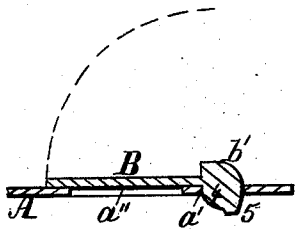


Fig. 4

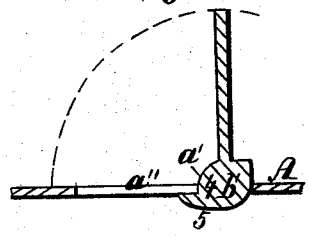


Fig. 5

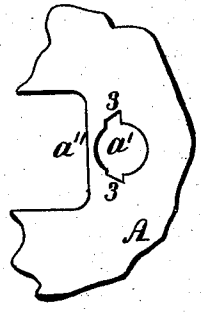


Fig. 6

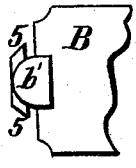
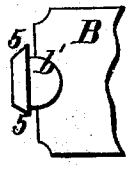


Fig. 7



Witnesses

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THOMAS J. COULSTON, OF SPRINGVILLE, ASSIGNOR TO E. S. SHANTZ AND JOSEPH JOHNSON, OF ROYER'S FORD, PENNSYLVANIA.

Letters Patent No. 93,600, *dated August* 10, 1869; *antedated May* 25, 1869.

HINGE FOR STOVE-LID.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, THOMAS J. COULSTON, of Springville, in the county of Chester, and State of Pennsylvania, have invented a new and useful Improvement in Hinges for the Lids of Stoves, Tea-Kettles, &c.; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a plan or top view, showing a lid applied and closed;

Figure 2, a like view, showing the same lid raised;

Figures 3 and 4, central vertical sections of figs. 1 and 2 respectively; and

Figures 5, 6, and 7, plan views of detached portions of the hinge.

Like letters and numbers of reference indicate the same parts when in the different figures.

The nature of my invention consists in the production of a hinge for the lid of a stove-top, tea-kettle, or other vessel requiring a lid, by means of a hole and a projection, cast respectively with the two plates, substantially as hereinafter described, whereby the said two parts can be readily adjusted together, so as to form a hinge between them without the addition of a pintle, rivets, screws, or other devices heretofore required in the construction and application of a hinge for the purpose.

Referring to the drawings—

A represents the top or mouth-plate of a stove or kettle, and B, the lid of the same, hinged thereto—*a'* and *b'* together constituting the hinge.

Near the edge of the opening *a''*, which is to be covered by the lid B, a hole, *a'*, is produced in casting the plate A, which, in its general form, may be described as a combination of the circle and the trapezoid, the shorter parallel side of the trapezoid being near that side of the circle which is next to the opening *a''* that is to be covered by the lid B, the longer side crossing the centre, or near the centre of the circle, and the angular or sloping ends 3 3, (see fig. 5,) projecting at short and unequal distances beyond the respective opposite sides of the said circle.

On the under side of that part of the lid B which is to be directly attached to the plate A, there is cast a circular boss, 4, which projects a little more than half its diameter beyond the edge of that part of the lid B, its diameter being such as to allow it to fit in the circular part of the hole *a'*, so that it can be rotated therein with facility and accuracy.

The upper portion of this boss 4 extends upward, and, in its semi-diameter, curves over on the upper side of the lid B, so as to form part of the same, and fill the adjacent half of the hole *a'* when the lid is raised, as indicated in figs. 2 and 4.

On the projecting edge of the lower part of the boss 4 is a solid block, 5, which corresponds with the trapezoidal part 3 3 of the hole *a'*, so that it can be readily passed through the same when the said lid is applied with its ends in a reversed position from that shown in figs. 1 and 3, and so that the projecting parts 5 5 will then pass under the plate A, in turning the lid B around horizontally, as indicated by the dotted lines *v v* in fig. 1, and thus prevent the said lid from being tilted, and at the same time allow it to be turned upward and downward, as occasion may require, the parts *a'* and *b'* serving both as a hinge and a swivelling joint for the lid.

It will, therefore, be seen that this hinge will serve as a joint for the lid of a stove-top, tea-kettle, or other vessel, and admit of its being operated either by raising and lowering the lid in the usual manner on a joint, or by swivelling it around horizontally.

The latter motion is often required in stove-tops for the purpose of introducing the fuel, and at the same time affording a support for the ornamental cover removed for the purpose; and that, as the two parts *a' b'* are cast in the respective plates A and B, and require merely to be adjusted together to form the complete hinge, without requiring either drilling, filing, the use of rivets, or a pintle, it will cost less than any other hinge in use, and operate equally well for the purpose.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

A hinge, consisting of the two parts *a' b'*, cast simultaneously with the respective plates, and the hinge completed, by simply adjusting the two parts together, substantially as set forth and described.

THOS. J. COULSTON.

Witnesses:

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WM. BROWER.