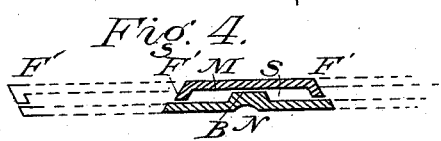
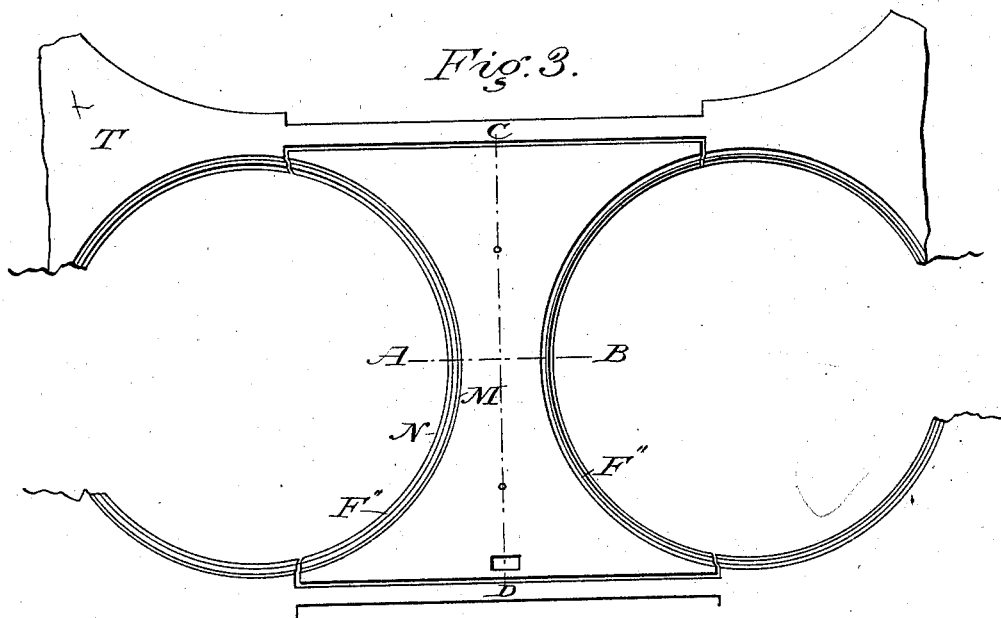
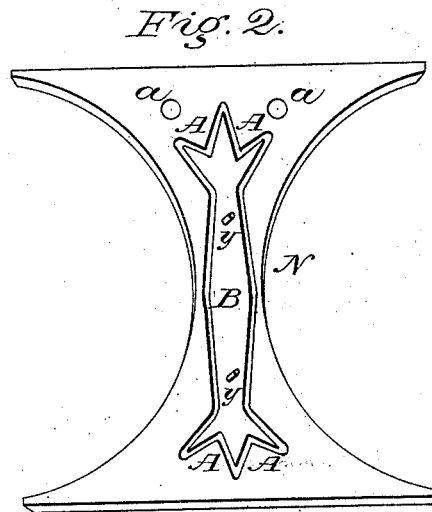
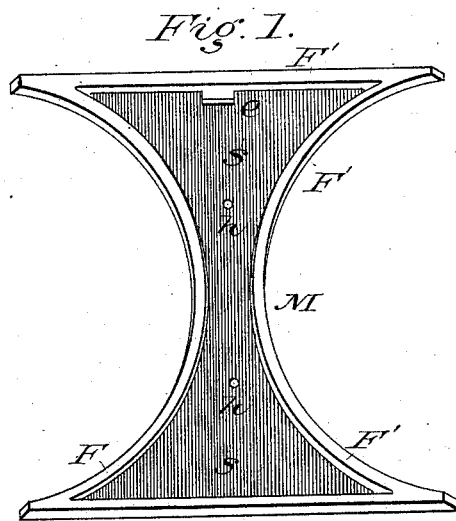


W. MORAND.  
Stove and Range Top Center Piece.

No. 216,438.

Patented June 10, 1879.



Witnesses:

Bernard Hart  
Charles S. Brintnall

Inventor:

William Morand  
by W. E. Hagan  
Attorney

# UNITED STATES PATENT OFFICE.

WILLIAM MORAND, OF TROY, NEW YORK.

## IMPROVEMENT IN STOVE AND RANGE TOP CENTER-PIECES.

Specification forming part of Letters Patent No. **216,438**, dated June 10, 1879; application filed October 21, 1878.

*To all whom it may concern:*

Be it known that I, WILLIAM MORAND, of the city of Troy, county of Rensselaer, and State of New York, have invented certain new and useful Improvements in the Construction of Stove and Range Top Center-Pieces, of which the following is a specification.

My invention relates to a manner of constructing stove or range top center-pieces, the object of the improvement being to render them more durable and less liable to warp or crack from the effects of heat.

My invention consists in forming the stove-top center-piece in two parts, similar in form and parallel in outline with the lower one resting in or upon the stove-top to support the upper one, there being formed, by means of a flange projected from one of the plates to meet the surface of the other, an intervening air-circulating chamber between the two, provided with ingress and egress openings for a draft-circulation through the inclosure, with the lower plate provided with an upwardly-projecting rib or re-enforce, arranged longitudinally upon the line of rivet attachment of the two plates, the lower one of the two being projected laterally beyond the upper one to form upon the curved sides the flanges to support the covers.

In the accompanying drawings there are five figures illustrating my invention, in all of which the same letters are employed to designate the same parts.

Figure 1 shows the under side of the upper plate of the center-piece. This figure illustrates the position of the flanges formed upon the edge of the plate, which join the surface of the lower plate when the two are attached to form an inclosure between them. This illustration shows also the position of the ingress air-opening.

Fig. 2 exhibits the lower plate upon what would be its upper side when in position, showing the manner of arranging the longitudinal rib or re-enforce and the rivet-blanks for securing the two plates when the blanks are headed. This figure also shows the position of the egress-openings for the discharge of air.

Fig. 3 illustrates the center-piece as applied, and resting in the flange usually formed in the stove-top to support the center. It also shows

the under plate projected beyond the upper one to form the cover-flange supports.

Fig. 4 exhibits a cross-section of the two plates forming the center-piece, taken in the line A' B' of Fig. 3, in proportion a little enlarged to better show the position of the flanges forming the chamber, as well as the position of the two plates when attached to form the center-piece, with the lower one projected laterally beyond the other to form the cover-rests.

Fig. 5 illustrates a section of the two plates as applied to form a center-piece, taken longitudinally on the line C D of Fig. 3, showing the position of the rib or re-enforce, the rivet attachment, and the relative position of the two plates when applied to the usual flange in the stove-top, with the lower plate resting upon the flange to support the center-piece.

The several parts comprising the center-piece are designated by letters of reference as follows: The flanges inclosing the sides of the air-circulating chamber are shown at F' F', the cover-rests produced by the lateral projection of the under plate at F'' F'', the air-circulating chamber at S, and the ingress-opening at e, and the egress-openings at a a. The rivet-holes appear at h h, the rivet-blanks at y y. The rib or re-enforce is designated at B B, and branches of the same at A A. The stove-top, to which the center-piece is applied, is shown, in part, at T, and the usual reception-flange for the center-piece at R, and the two plates composing the center-piece, when attached, are designated at M and N.

By thus constructing the stove-top center-piece in two parts of similar form, the lower one resting upon the stove-top flanges and supporting the center-piece, the lower plate takes up a portion of the expansion produced by the fire beneath separately from the upper one, and serves to act as a shield to protect the upper one from excessive heat, and obviates its bending down between its points of support. While the lower plate rests upon the flanges formed in the stove-top and thus supports the upper one, it is free to expand longitudinally between the points of support, and is prevented from bending down when heated by means of an upwardly-projecting rib, which is in contact with the upper and cooler plate. The flanges projected downward from the edge

of the upper plate serve to stiffen it, and to form with the interior surfaces of the two plates when attached an air-circulating chamber provided with apertures through which a draft-current passes to cool the parts and to prevent them from warping and distortion.

While the flanges forming the chamber between the two plates are shown as projected downward from the upper plate, they may be projected from the lower plate upward and produce the same result to inclose an air-circulating chamber between the two parallel, or nearly parallel, plates.

I am well aware that air-circulating chambers have been formed in stove center-pieces for the purpose of keeping them cool, and I make no broad claim to such an application of air.

I am also aware that re-enforcing-ribs have been placed upon the under side of stove center-pieces and projected downward toward the fire; but such a re-enforcing means I do not employ, as the rib used by me is projected upward and connects with an upper plate forming an integral part of the stove center-piece.

I am also well aware that a stove center-piece has been formed having two horizontal plates, one above the other, and connected by a screw-bolt, with the lower plate curved downwardly, so as to form a chamber between the two, that is provided with apertures for an ingress and egress current of air, the exterior edge of the lower plate subtending that of the upper one, and being turned up to form a flange that receives, supports, and surrounds the upper plate of the center upon its exterior edge.

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

1. A stove or range top center-piece composed of two attached plates, similar in form and parallel, or nearly parallel, arranged one above the other, and the lower plate constructed to support the combined parts upon the flanges

formed in the stove or range top without subtending the upper plate of the center at the point of support, as shown and described.

2. A stove or range center-piece composed of the two plates M and N, having the former arranged above the latter, with the lower plate, N, projected beyond the upper one upon its curved pot-hole sides, to form, in combination with its vertical edges and the overlapping top surface of the lower plate, the cover flange-rests F' F'', as shown and described.

3. A stove or range top center-piece composed of two attached plates of similar form and parallel, or nearly parallel, outline, provided with flanges upon the edges of one of the plates to inclose with the other, and between the two an air-circulating chamber having apertures for a draft-current through the chamber to the fire, and the lower plate provided with a longitudinal rib or re-enforce projected upwardly, and the bottom plate arranged to wholly support the combined parts in the stove or range top, substantially as shown and described.

4. A stove or range top center-piece composed of two attached plates of similar form and parallel, or nearly parallel, outline, and having an air-circulating chamber formed between the plates, provided with apertures for a draft-current through the chamber to the fire, with a rib or re-enforce projected upwardly from the lower plate, and the latter extended laterally beyond the upper plate at the curved sides to form flange-rests for the covers, and the bottom plate arranged to wholly support the combined parts in or upon the flanges of the stove or range top, substantially as shown and described.

Signed at Troy, New York, this 11th day of August, 1878.

WILLIAM MORAND.

Witnesses:

THOMAS W. HOLMES,  
JOHN SARD.