W. STOUT.

Cross-Pieces for Cooking-Stoves.

No. 162,113. Patented April 13, 1875.

Fig. 1

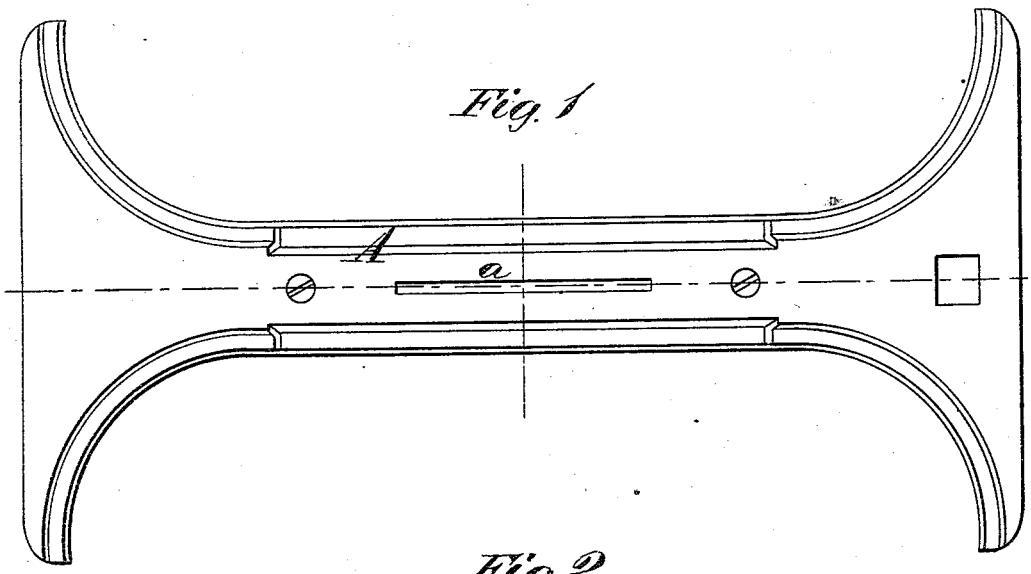


Fig. 2

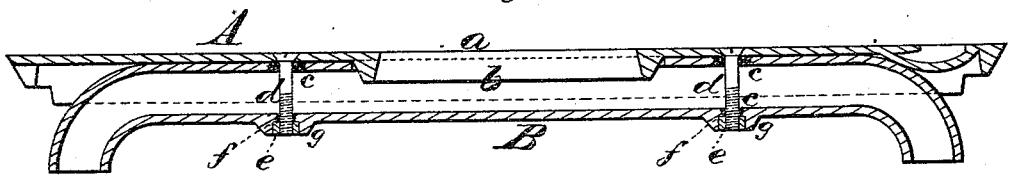


Fig. 3

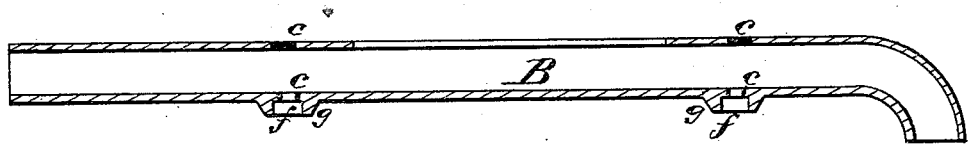
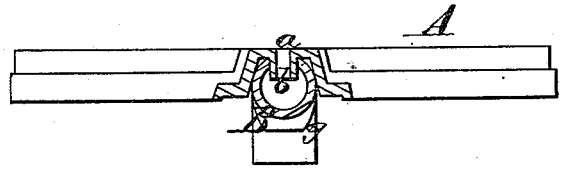


Fig. 4



WITNESSES

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UNITED STATES PATENT OFFICE.

WATSON STOUT, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN CROSS-PIECES FOR COOKING-STOVES.

Specification forming part of Letters Patent No. **162,113**, dated April 13, 1875; application filed March 20, 1875.

To all whom it may concern:

Be it known that I, WATSON STOUT, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and valuable Improvement in Cross-Pieces for Ranges and Cooking-Stoves; 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 annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a plan view of my device. Figs. 2 and 3 are longitudinal sectional views of the same, and Fig. 4 is a sectional detail view.

This invention relates to the cross-pieces or bridges which are used on and form parts of the tops of cooking-stoves and ranges; and the nature of my invention consists in a hollow shield applied on the bottom of a bridge-piece, having an opening leading into the shield, the latter communicating at one or both ends with the combustion-chamber of the stove, whereby cold air will circulate in said shield and prevent the bridge from sagging or warping. It also consists in means for allowing free longitudinal expansion and contraction of the shield and bridge, and for protecting the nuts on the screws which confine the shield to its bridge, as will be hereinafter explained.

In the annexed drawings, A designates the cross-piece or bridge of a cook-stove or range, which bridge is rabbeted to receive the edges of other bridges, and also pot-hole covers. Through the contracted part of the bridge A is an oblong slot, *a*, which is surrounded, on the bottom of the bridge, by a downwardly-tapered flange, *b*, which wedges itself into an oblong slot made in the upper side of a hollow shield, B, (shown in Figs. 2 and 4,) and thus forms a tight joint. Fig. 2 shows both ends of the shield turned downward for the purpose of discharging air which enters through the slot *a* into the combustion-chamber of the stove or range. Fig. 3 shows a hollow shield, one end of which discharges air downward, the other end being straight. The shield has short oblong slots *c c* through its upper and lower sides, through which and the bridge A screws *d d* pass and receive nuts *e e* on their lower ends, which nuts are seated into recesses *f f*, formed in bosses *g g* cast on the under side of the bridge A. The slots *c c* allow free expansion and contraction of the parts, and thus prevent cracking from this cause, and the recesses *f f* for inclosing the nuts *e e* prevent these nuts from rapidly wearing out.

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

1. The hollow slotted shield B, open at its ends, and secured to the bottom of the slotted bridge A, substantially as described.

2. The shield B, slotted at *c c* and recessed at *f f*, in combination with the screws *d d* and nuts *e e*, and the bridge A, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WATSON STOUT.

Witnesses:

H. C. BRICK,

JNO. J. NOLAN.