

(Model.)

O. F. EVANS.

STOVE TOP.

No. 263,882.

Patented Sept. 5, 1882.

Fig. 1.

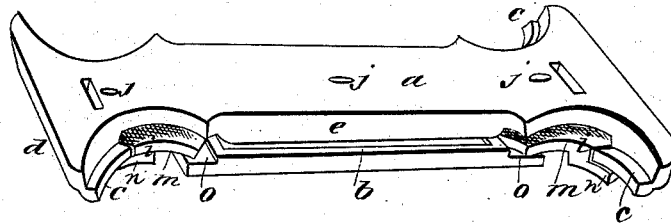


Fig. 2.

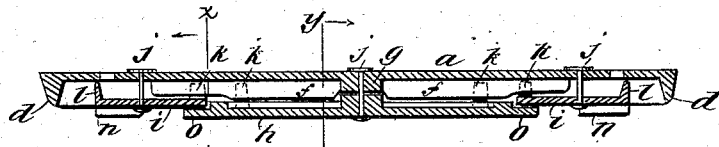


Fig. 5.

Fig. 3.

Fig. 6.

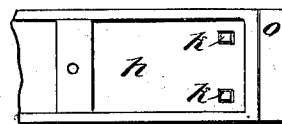
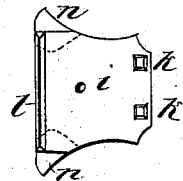


Fig. 4.

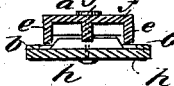
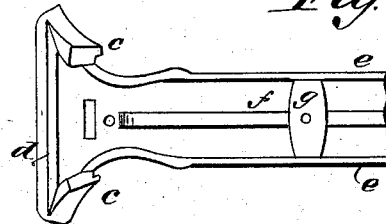


Fig. 7.



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UNITED STATES PATENT OFFICE.

OWEN F. EVANS, OF COLUMBUS, OHIO.

STOVE-TOP.

SPECIFICATION forming part of Letters Patent No. 263,882, dated September 5, 1882.

Application filed July 17, 1882. (Model.)

To all whom it may concern:

Be it known that I, OWEN F. EVANS, of Columbus, in the county of Franklin and State of Ohio, have invented a new and useful Improvement in Stove-Tops, of which the following is a full, clear, and exact description.

My invention consists of the construction of the long cross-pieces of cook-stove tops, in a novel arrangement of double plates, with spaces between the plates calculated to afford protection of the upper and supporting plate from the heat, and thereby more effectually prevent the bending of the same by the heat than as at present arranged, as hereinafter more fully described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a cross-piece constructed according to my invention. Fig. 2 is a longitudinal section of Fig. 1. Fig. 3 is a transverse section of Fig. 2 on the line *xx*, and looking in the direction indicated by the arrows. Fig. 4 is a transverse section of Fig. 2 on the line *yy*, also in the direction of the arrows. Fig. 5 is a plan of the end section of the lower plate inverted. Fig. 6 is a plan of part of the middle section of the lower plate inverted, and Fig. 7 is a plan of a portion of the upper plate inverted.

My invention relates more particularly to the long cross-piece, in which I make the top plate, *a*, of the usual form on the upper surface, but without the usual ledges, for the support of the ends of the short pieces, and only with portions *c* of the cover-supporting ledges, also with end flanges *d* to rest on the permanent ledges of the stove-top, and also with longitudinal side flanges or ribs, *e*, and middle rib, *f*, for strengthening it. The rib *f* has a depression at the middle of the plate, where a short transverse rib, *g*, of less depth than the longitudinal ribs, but of greater breadth, is located, and both the side and middle ribs are reduced in depth at and from the section-line *xx* to their ends, which terminate short of the end flanges *d* of the top plate. To the under side of the plate thus formed I apply an under plate in three sections, *h* and *i*, for its protection from the heat, said plate being bolted

to it by three bolts, *j*, but being stopped a suitable distance below it, and the ribs *e* *f* for an efficient air-space between the two parts by the studs *k* and flanges *l*, said studs being small as is consistent with the strength required to prevent as much as possible the heat from being conducted to plate *a*. The sections *i* of the said bottom plate have the parts *m* of the cover-ledges formed on them, while the side edges of section *h* form the ledges *b* for the short cross-piece. The end sections *i* of the lower plate have depressed corners *n* to bear under ledges *c* of the plate *a* to support them and protect them from the heat. The middle section, *h*, of the lower plate overlaps the ends of the short sections *i* at points *o*, where the ribs *f* are narrowed to make room for them above the ends of section *h*, and the end flanges *l* of the end sections *i* terminate sufficiently short of the end flanges *d* of the top plate to prevent any injurious effect on the top plate by longitudinal expansion of the lower plate, both at the ends of the latter and at the connecting-bolts.

Now it will be seen that by the sectional arrangement of the lower plate it will bend much less itself than it would if in one piece; that it will not bend the top plate; that by having the ledges mainly on it for the support of the short cross-piece and the covers the top plate is more effectually protected from the heat, and that in consequence of the air-space between the two parts of the plate the top part will not be heated to such extent as to cause it to bend.

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

1. The combination, in a long cross-piece for stove-tops, of a top plate, *a*, and a lower plate consisting of three sections, *h* *i* *i*, the said plates being connected together, with a separating air-space between them, substantially as described.

2. The combination, with the top plate, *a*, of a long cross-piece for stove-tops, of an under plate consisting of three sections, *h* and *i* *i*, said under plate having the ledges *b* for the short cross-piece, also ledges *m* for the covers, and also the separating-studs *k* and flanges *l*, and said upper and lower plates being bolted together, substantially as described.

3. The long cross-piece for a stove-top, consisting of top plate, *a*, having end flanges *d*, cover-ledges *c*, and side and middle ribs, *e f*, in combination with a lower plate consisting
5 of three sections, *h* and *i i*, said lower plate having separating-studs and flanges *k l*, and the cover and cross-piece ledges *m* and *b*, substantially as described.

4. The end sections *i*, having depressed
10 corners *n*, in combination with top plate, *a*, and cover-ledges *c* thereof, substantially as described.

5. The long cross-piece for a stove-top, consisting of top plate, *a*, having end flanges *d*,

cover-ledges *c*, and side and middle ribs, *e f*, 15 in combination with a lower plate consisting of three sections, *h* and *i i*, said lower plate having separating-studs and flanges *k l*, and being overlapped at the joints *o*, and arranged with respect to the end flanges *d* of the top 20 plate to avoid longitudinal stress of the top plate by expansion of the lower plate, substantially as described.

OWEN F. EVANS.

Witnesses:

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