

(No Model.)

J. C. STEVENS.

TILE FOR STEAM BOILERS.

No. 256,403.

Patented Apr. 11, 1882.

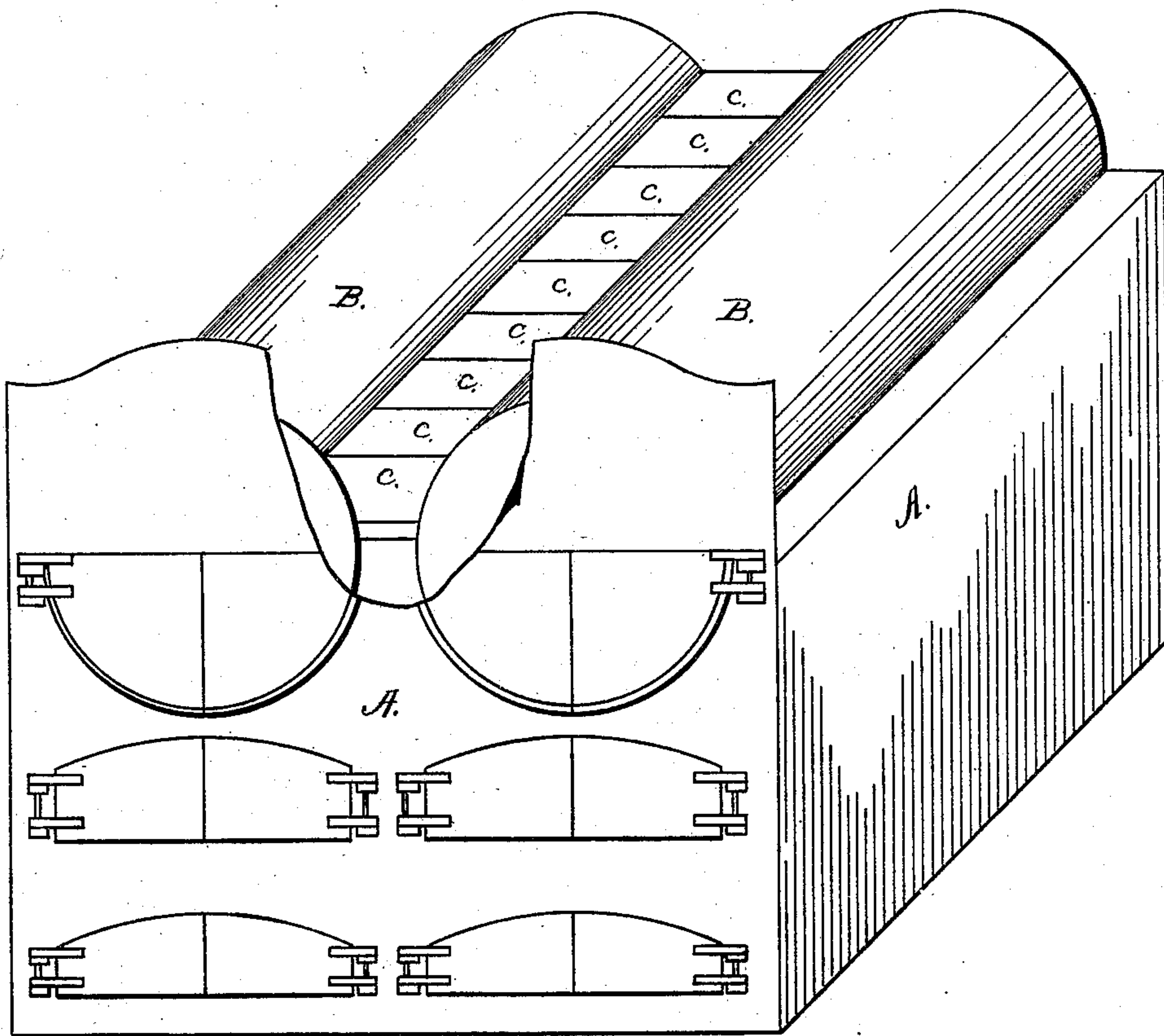


Fig. 1.

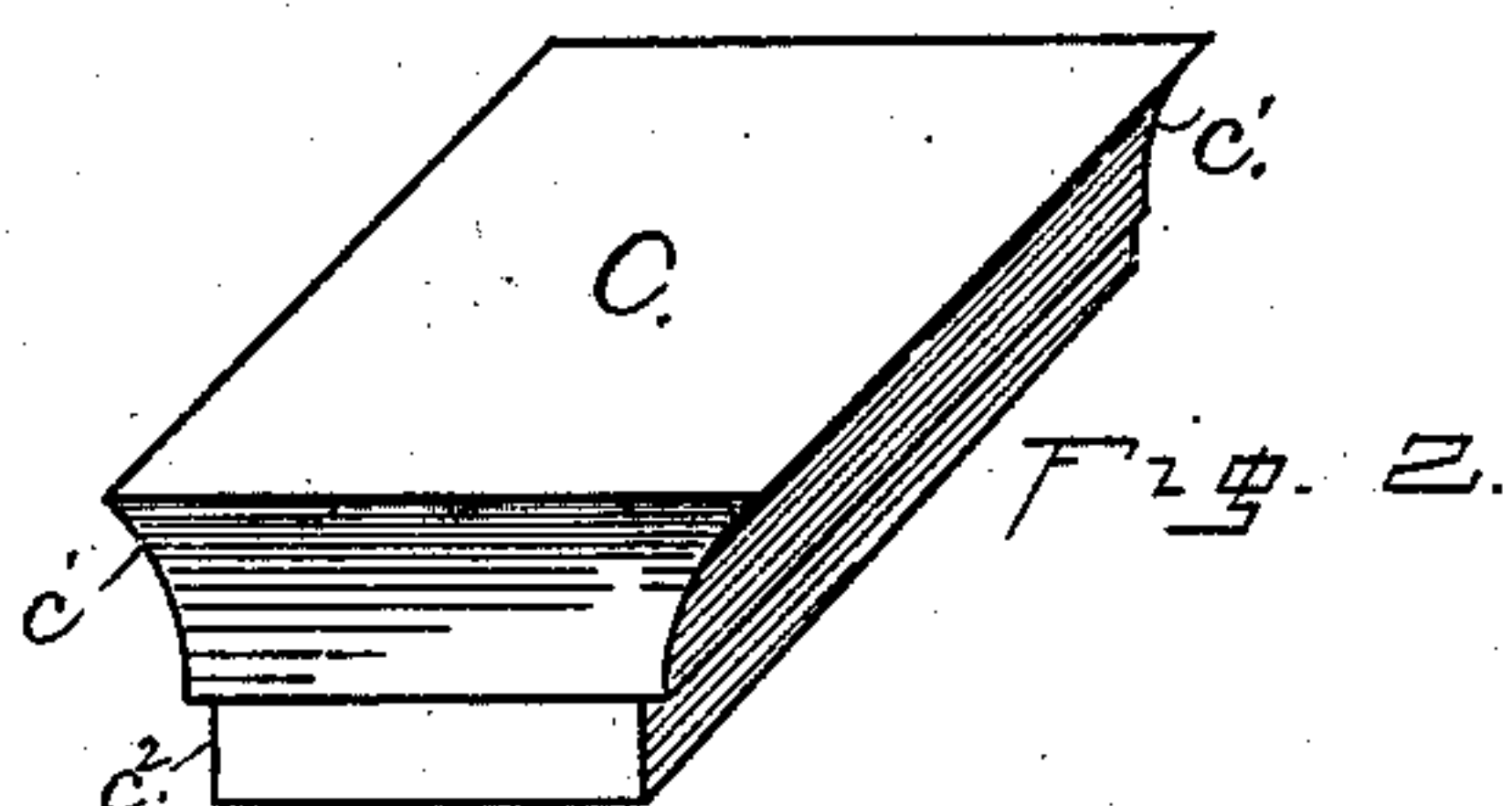


Fig. 2.



Fig. 3.

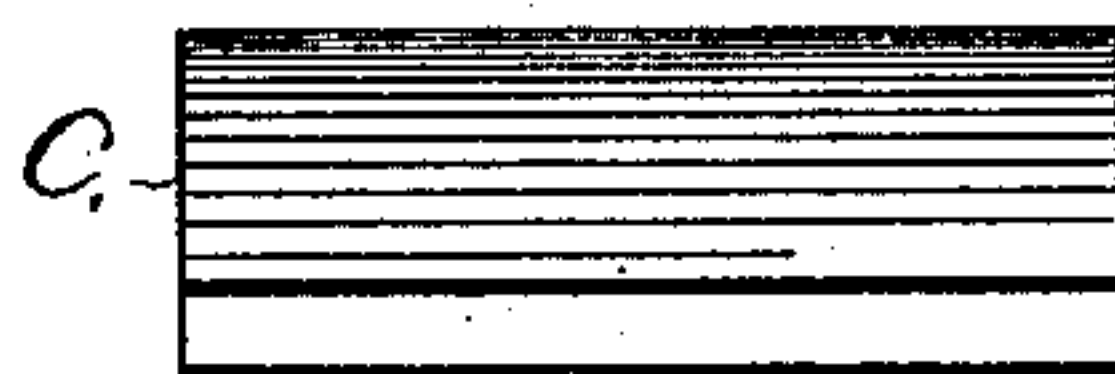


Fig. 4.

Witnesses.

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JOHN C. STEVENS, OF PITTSBURG, PENNSYLVANIA.

TILE FOR STEAM-BOILERS.

SPECIFICATION forming part of Letters Patent No. 256,403, dated April 11, 1882.

Application filed January 13, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. STEVENS, of the Thirty-fifth ward, Pittsburg, Pennsylvania, have invented a new and useful Improvement in
5 Tiles for Steam-Boilers, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

Similar letters of reference indicate corresponding parts.

My invention relates to a tile to be placed between two steam-boilers, and by its singular formation is made to adjust itself to the sides of the boilers in their expansion and contraction, which changes they undergo by reason
15 of heat and the absence of the same.

In the accompanying drawings, Figure 1 is a view of two steam-boilers in position in perspective. Fig. 2 is a perspective view of one
20 of my tiles. Fig. 3 is an end view of the same, and Fig. 4 a side view.

A A is the bed-work of two boilers. B B are two boilers in position. *c c c* are my adjustable tile in position. C is one of my tiles
25 shown separate, and is seen in Figs. 2, 3, and 4 in different sections and views.

The tile, as will be seen, has concave sides, made so as to fit closely up against the outer surface of a steam-boiler. This concave surface *c' c'*, as seen in Fig. 3, extends from the
30 top of the tile to near the bottom, where there is a square cut-out, as seen in Fig. 3 at *c² c²*. By this means the lower side of the tile will not impinge the boiler's sides, and will be made
35 to work freely when in place.

It will be readily seen that when my tile is placed between two boilers, and by heating the same boilers, their sides are made to expand, the tile then will be forced upward, but still

fitting closely to the sides of the boilers, and that when the heat is reduced contraction
40 begins and the tile will fall, still keeping up a close fit.

It has been the fault of other tile heretofore used for this purpose that when any contraction of the boilers would take place the old
45 kind of tile would fall down and become closely wedged in between the boilers, and that when afterward an expansion would take place the boilers would be forced outward, to the great
50 injury of the foundations of the same.

I make my tile preferably of earth, adequately burned, and of various sizes, to suit all classes of boilers.

Though I prefer clay for my tile, yet they
55 may be made of other materials, such as iron, steel, and like metals. Hence I do not confine myself to clay alone.

I am aware of the fact that certain shapes of tile have heretofore been used for the purpose I intend for mine; but they have not been
60 sufficiently adjustable, lacking that important property set forth descriptive of my tile. Therefore I do not desire to claim an article of tile for the purpose herein set forth, broadly; but
65

What I do claim, and desire to secure Letters Patent for, is—

As a new article of manufacture, a self-adjusting tile for steam-boilers, having the concave sides *c' c'* and cut-out *c² c²*, substantially
70 as described and shown.

In testimony that I claim the foregoing as my invention I hereto set my hand in presence of two witnesses.

JOHN C. STEVENS.

Witnesses:

JOHN H. CRATTY,
THOS. J. MALOY.