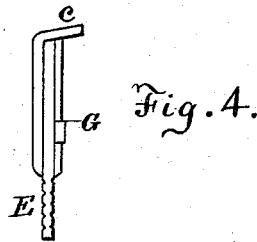
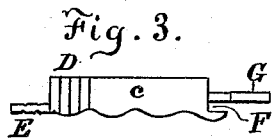
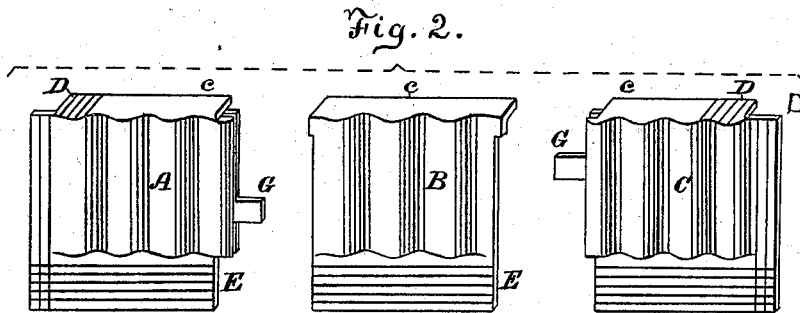
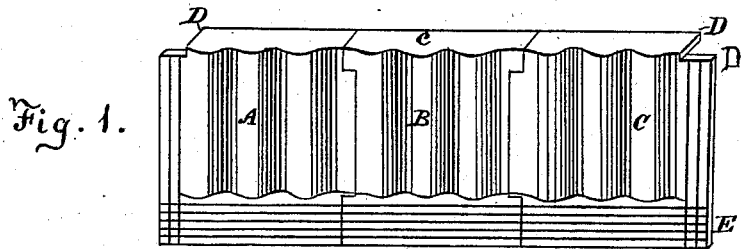


H. H. CRULL.
Back Fire-Wall for Stoves.

No. 216,945.

Patented July 1, 1879.



Witnesses :
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UNITED STATES PATENT OFFICE.

HENRY H. CRULL, OF KALAMAZOO, MICHIGAN.

IMPROVEMENT IN BACK FIRE-WALLS FOR STOVES.

Specification forming part of Letters Patent No. **216,945**, dated July 1, 1879; application filed March 19, 1879.

To all whom it may concern:

Be it known that I, HENRY H. CRULL, of Kalamazoo, in the county of Kalamazoo and State of Michigan, have invented certain new and useful Improvements in Back Fire-Walls for Stoves; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to that class of back fire-walls for stoves in which three or more detachable and interlocking sections constitute each one of said walls; and the said invention consists in the special construction, combination, and arrangement of the said sections, as hereinafter particularly set forth and claimed.

In the accompanying drawings, Figure 1 represents a perspective view of my improved back fire-wall with the sections in position. Fig. 2 represents the same with the sections separated. Fig. 3 represents a top or plan view of one of the side sections, and Fig. 4 represents an end or edge view of one of the side sections.

In said drawings, the letter A designates the left side section of one of my improved back fire-walls for stoves; B, the middle section of the same; and C the right side section of the same, the three interlocking to form a back fire-wall. This interlocking is effected by means of vertical ribs F and laterally-extending tenons G on the inner edges of the said side section, A and C, which sit into corresponding recesses in the opposite edges of the middle section, B. The sections are thus held firmly against accidental detachment, but are detachable at will by laterally withdrawing the said side sections from the said central section.

Each section is provided at its top with a horizontal rearwardly-extending flange, *c*, and when the sections are united these flanges form a continuous shield to prevent the ashes, cinders, soot, &c., from collecting in the space between the fire-wall and the back of the stove

and passing into the oven. In order to enable the said wall to be readily adjusted for use with stoves of varying shapes, so that the said wall may retain its proper position, the said flange is provided with a series of breaking-grooves, which allow the length of the said flange *c* to be lessened to the required extent by breaking the said flange along the line of one or another of said grooves. This is an important part of my invention.

The outer ends of the side sections terminate in vertical flanges D', which are provided with vertical breaking-grooves arranged in series, whereby the length of the fire-wall, as distinguished from its height, may be regulated to suit a stove of different shape or smaller size. To allow a similar reduction of the length of the horizontal top flange, it is provided with transverse grooves D, arranged in series at the outer ends of the side sections.

A series of longitudinal grooves, E, parallel to the bottom line of the said wall, and extending along its face from end to end, allow the height of the said wall to be similarly regulated by breakage. By means of these grooves the length and height of the back fire-wall and the width of its rear top horizontal flange can be readily varied so as to suit stoves of smaller sizes or different shapes. In the same way compensation may be made for expansion or contraction, either of the stove or the fire-wall under changes of the temperature.

Any wall constructed as above described is capable of successive adaptations of the sort. The said wall is fluted vertically, as shown, to increase its strength, and to prevent the wood used as fuel from resting against the entire surface and injuriously heating it.

The inner edges of the faces of the side sections are provided with vertical flanges, which slightly overlap the face of the middle section and aid in holding the wall together. For the same purpose the inner upper corners of the side sections are angularly recessed, and the corresponding corners of the middle section are provided with offsets or shoulders adapted to interlock with such recesses.

I do not claim, broadly, a fire-wall composed of sections having interlocking tongues and

grooves, and provided with breaking-grooves for diminishing the dimensions of the wall at will; but

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

In a back fire-wall for stoves, the combination of section B with sections A and C, said sections being arranged to interlock at their upper proximate corners by recesses and projections, as shown, and provided with break-

ing-grooves for varying the height and breadth of the wall.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HENRY H. CRULL.

Witnesses:

O. T. TUTHILL,

DANIEL WATERBURY.