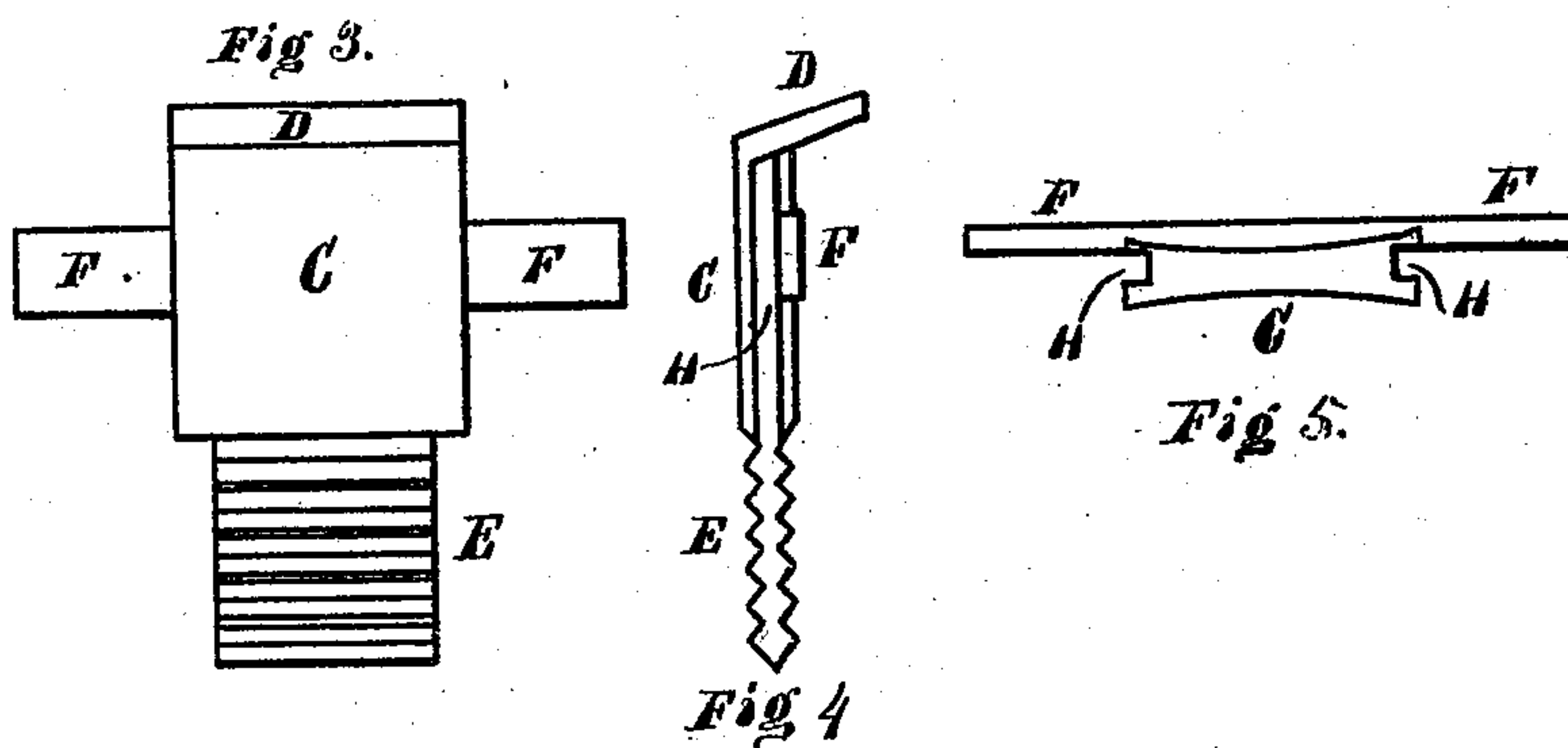
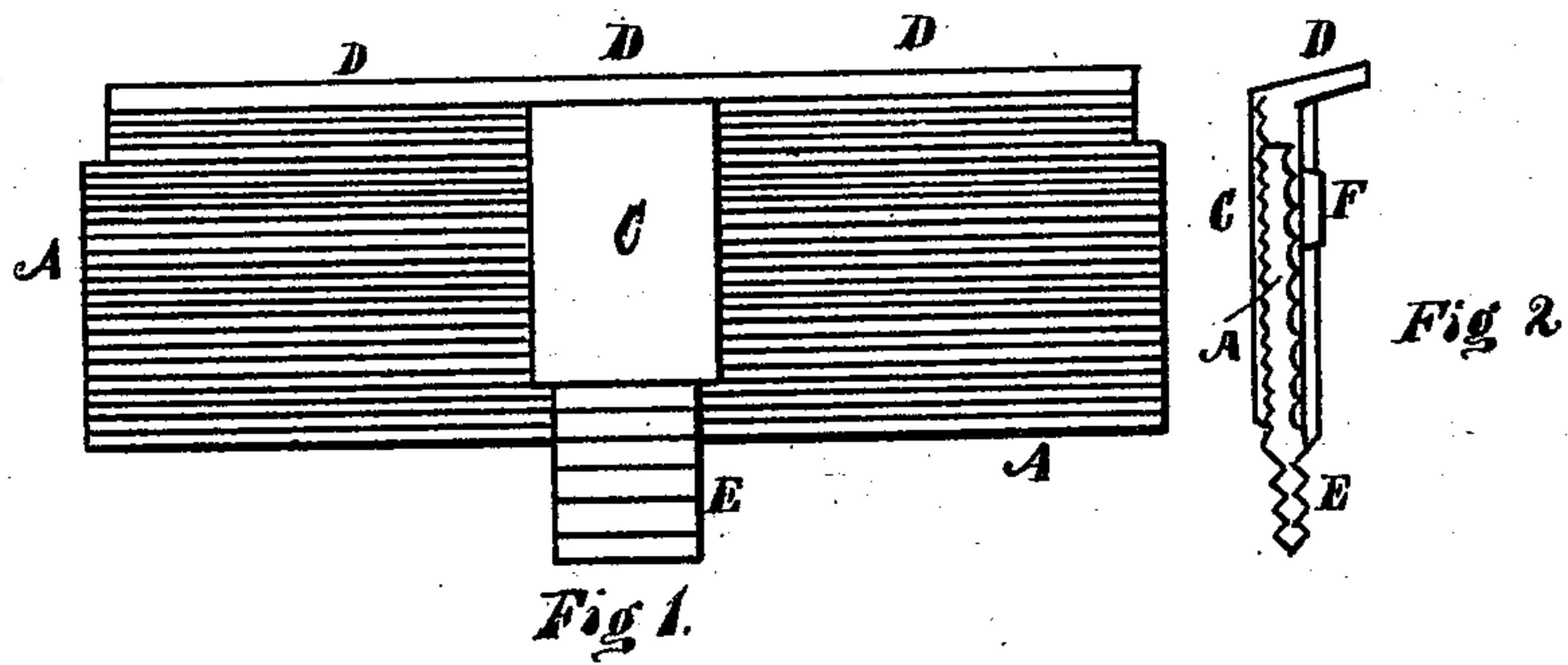


J. C. BURDIN.
FIRE BACK WALL FOR STOVES.

No. 172,912.

Patented Feb. 1, 1876.



Witnesses;
J. S. Long
H. C. Sprink

Inventor.
James C. Burdin.
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UNITED STATES PATENT OFFICE.

JAMES C. BURDIN, OF WAVELAND, INDIANA.

IMPROVEMENT IN FIRE-BACK WALLS FOR STOVES.

Specification forming part of Letters Patent No. **172,912**, dated February 1, 1876; application filed December 13, 1875.

To all whom it may concern:

Be it known that I, JAMES C. BURDIN, of Waveland, Montgomery county, State of Indiana, have invented a new and useful Improvement in Back Fire-Walls, to be adapted to stoves of all sizes, of which the following is a description, reference being had to the accompanying drawings.

Previous to my invention there has been great trouble and difficulty in repairing burned-out or broken back fire-walls of stoves, owing to the difference in the sizes and variety of stoves as now manufactured, and the impossibility of stove-dealers keeping a stock of the various sizes of fire-walls required to make such repairs.

In order to overcome these difficulties I have invented a new back fire-wall, which is composed of several pieces of castings, each of which is constructed as to be readily united to the others and adapted to any size of stove desired; and my invention consists of the construction and arrangement of three pieces—a center and two sides—the center piece being made with breaking grooves at the bottom, so arranged as to allow any desired portion to be broken off to give the required height, and each side of the center piece is provided with a groove of sufficient depth and width to receive the edge of the side pieces, which are also provided with breaking grooves at the bottom and sides for the purpose of adjustment, as hereinafter more fully described.

Figure 1 represents a front view of the three sections of my improved back fire-wall. Fig. 2 is a side view of the same. Fig. 3 is a front view of the central section, showing the projecting supporting-bars on each side. Fig. 4 is an edge view of the same, showing the grooves in the side in which the side sections are held when in the stove. Fig. 5 is a top view of the same.

A A represent the side sections, each of which are formed with grooves across their faces, which are designed as breaking grooves, and arranged in such a manner, parallel with the bottom and sides, as to allow any required portion of the pieces to be broken off, so as to leave the side sections of the proper length and width, to be combined with the center section C, and fit the stove. Each section is provided with an extended rib at the top, as at D, which projects back and strengthens each piece, and prevents them from warping

at the top. Each of the upper corners of the side sections A is notched, so as to allow the projecting flange or rib D on the top of the center piece C to overlap them when the edges of the sides are inserted in the grooves H, formed in the sides of the center section, as shown in Fig. 1. The center section C is also formed with breaking grooves at the bottom, and with the projecting flange D at the top, and is also provided on each side with the grooves, as recesses H H, to receive the edges of the side sections A. On the back of the center section C, or on the inner edges of the side sections A, are arranged the projecting arms, as braces F, which are designed to support each section and prevent them from warping.

In fitting my improved back fire-wall into stoves of various sizes the center section C is first fitted to its proper height by breaking off as much of the bottom as is required; next, the sides A A are fitted in the same manner to the desired width and height, and are then placed in their position, after which the center piece is inserted between them, with the edges of the sides A in the grooves H H, and the back is complete.

It will be readily seen that with my improved fire-wall I am enabled to replace burned-out or broken back walls in any kind or size of stove with great facility, and with less labor and loss of time than would be required with a solid back; and as an article of manufacture for stove-dealers to keep in stock it is of great value and utility.

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

In a fire-wall for stoves, the combination of the side pieces A A and center piece C, the latter having vertical grooves to receive the inner edges of the former, constructed to be united together substantially as described, and each piece provided with breaking grooves, arranged as described, to admit of the breaking off of any part that may be required in order to make the several pieces, when united, fit into stoves of various depths, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

Witnesses: JAMES C. BURDIN.
E. O. FRINK,
I. S. LONG.