

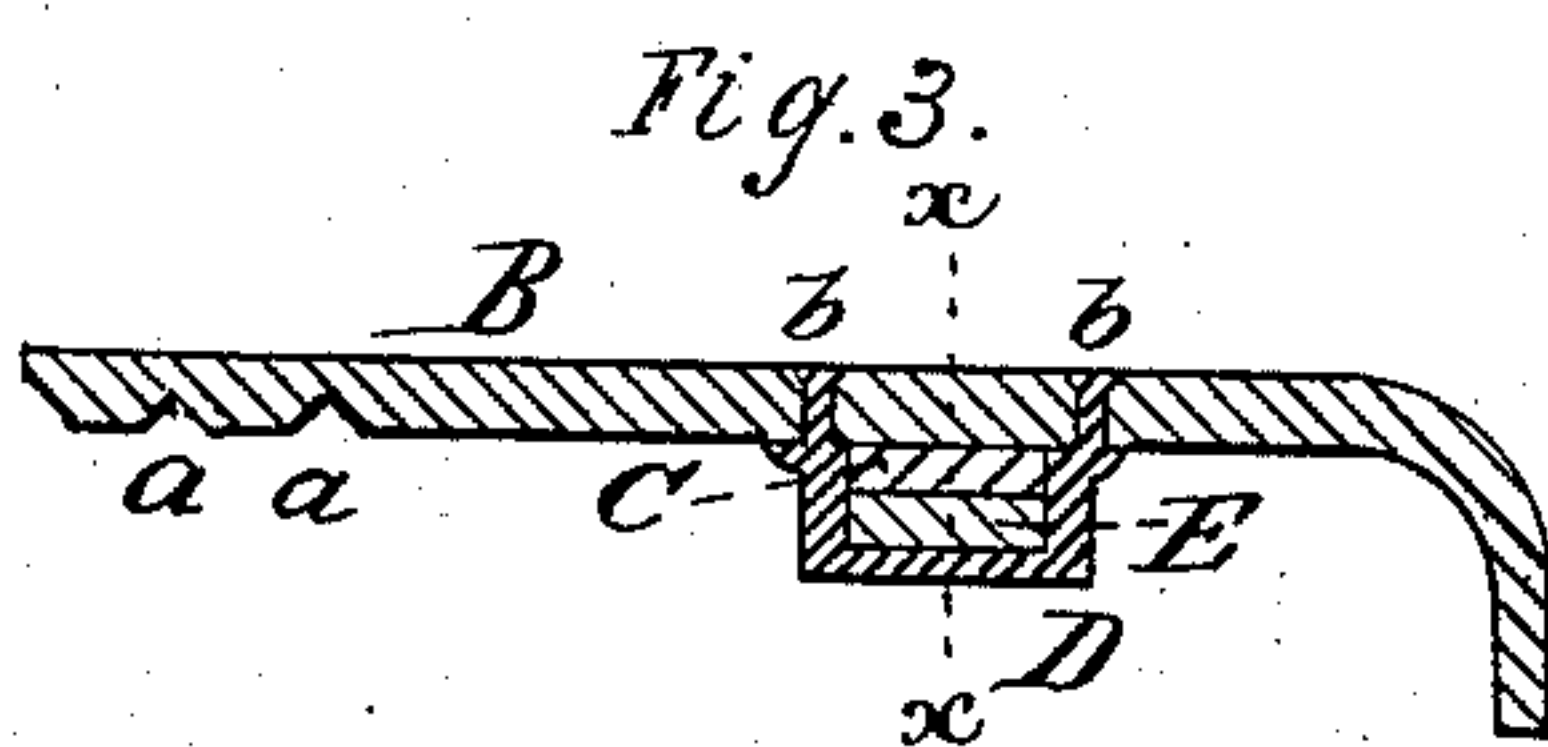
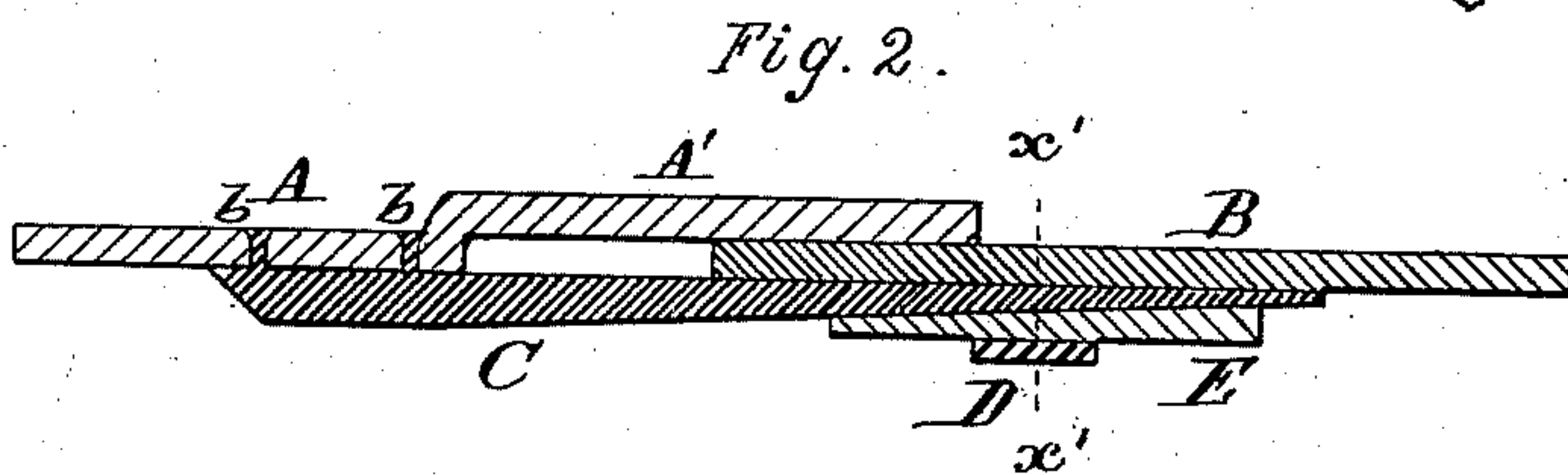
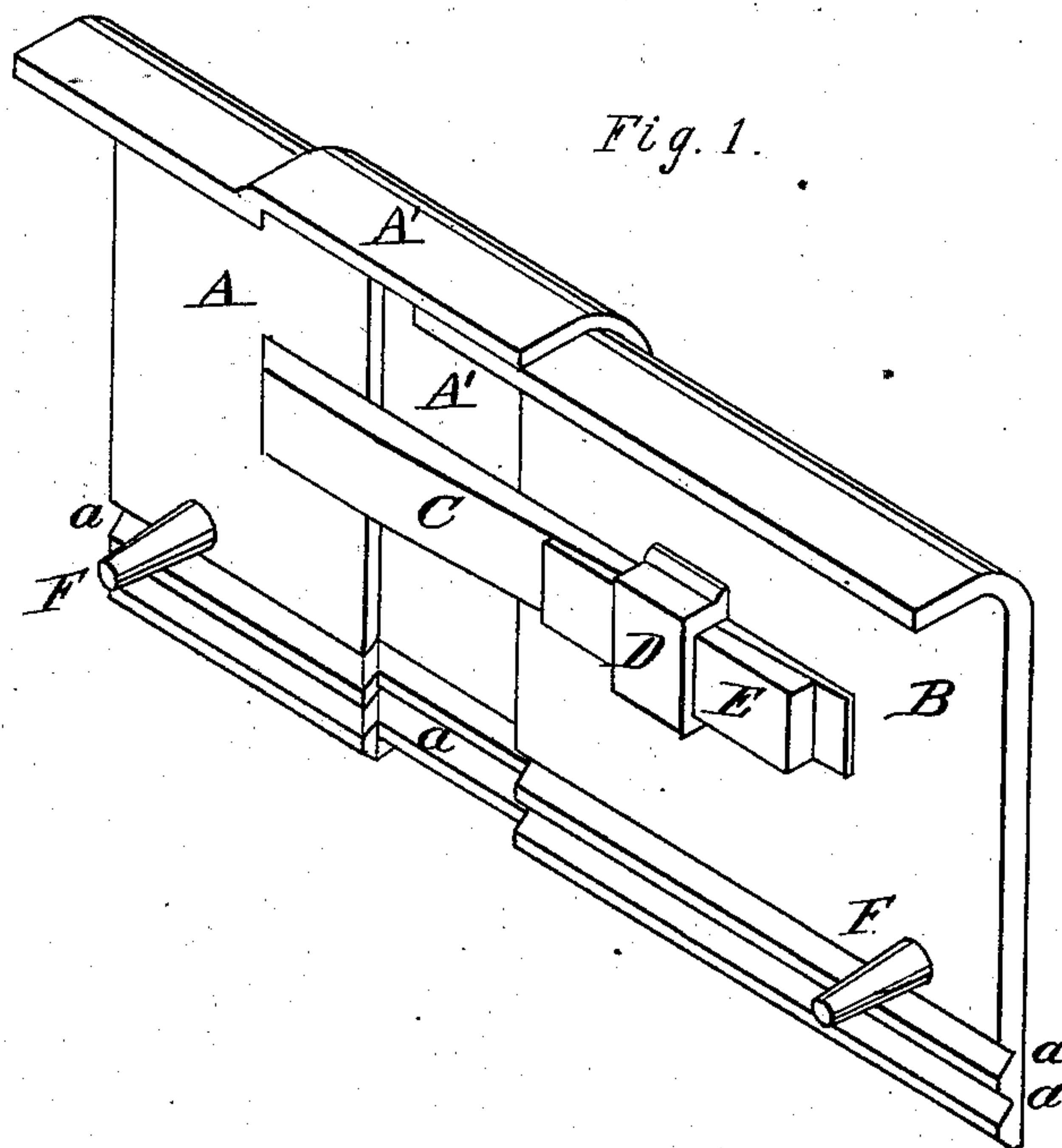
(No Model.)

2 Sheets—Sheet 1.

W. I. PERKINS.
Fire Back Plate for Cooking Stoves.

No. 239,836.

Patented April 5, 1881.



Witnesses:

Harry E. Knight
Geo. F. Smallwood Jr.

Inventor:

William I. Perkins
By Knight Bros.
Attys.

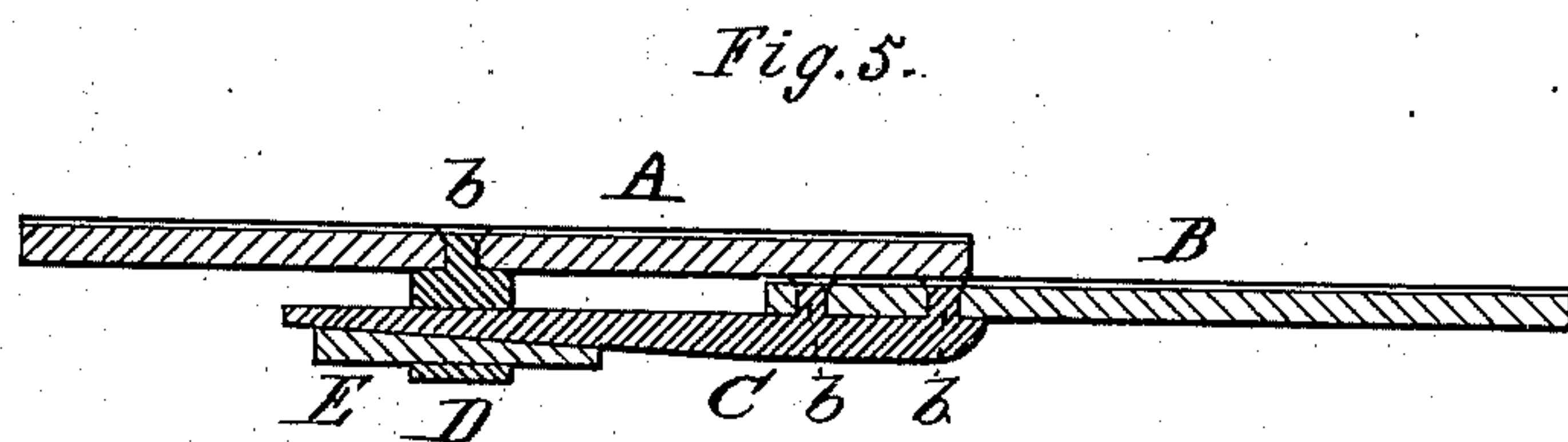
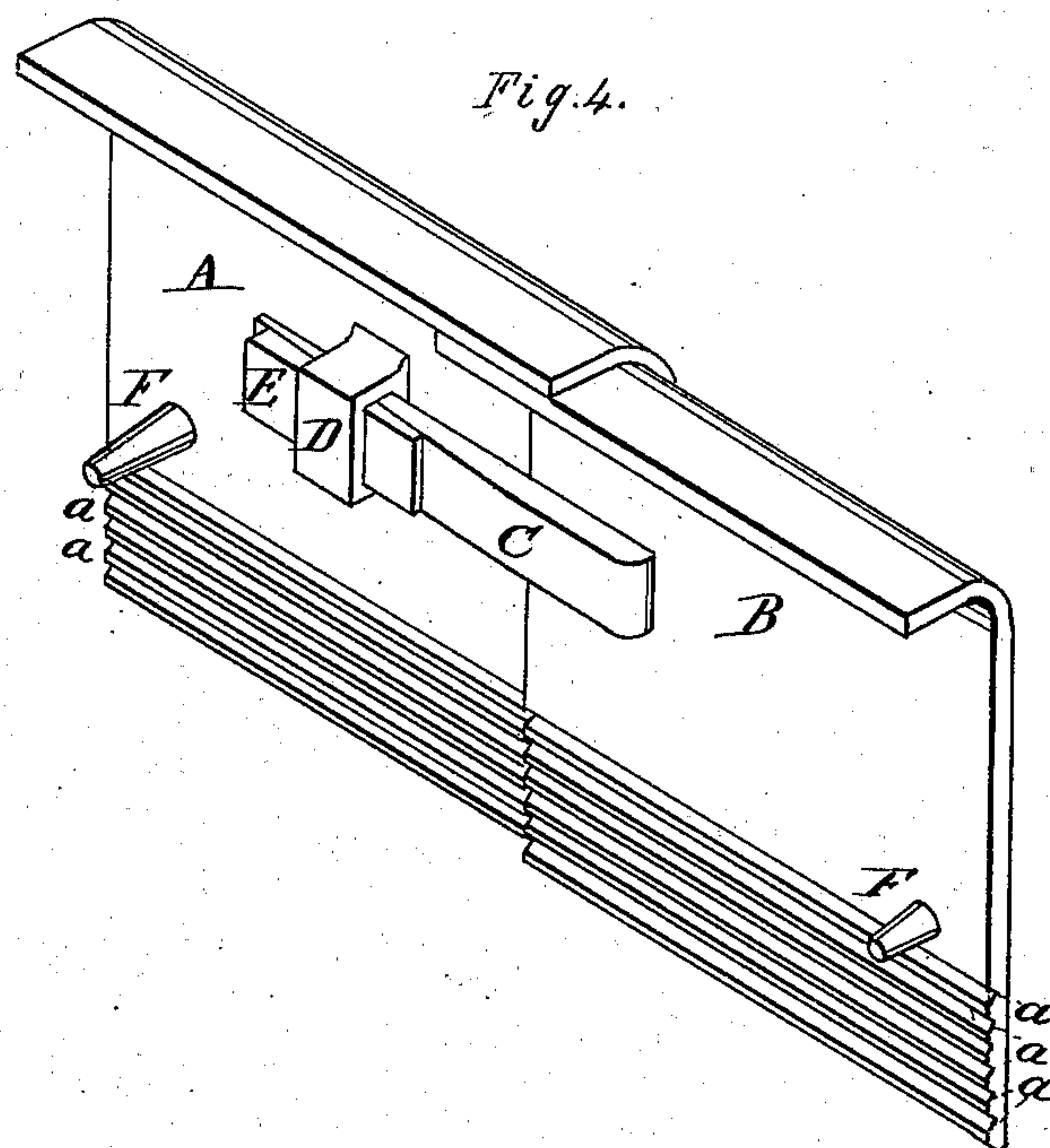
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UNITED STATES PATENT OFFICE.

WILLIAM I. PERKINS, OF ELLIOTTSTOWN, ILLINOIS, ASSIGNOR OF ONE-HALF TO HARDEN LAMBERT, OF SAME PLACE.

FIRE-BACK PLATE FOR COOKING-STOVES.

SPECIFICATION forming part of Letters Patent No. 239,836, dated April 5, 1881.

Application filed October 22, 1880. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM I. PERKINS, of Elliottstown, in the county of Effingham and State of Illinois, have invented a certain new and useful Improvement in Fire-Back Plates for Cooking-Stoves, &c., of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

My invention relates to the mode of securing together sectional or divided adjustable fire-back plates for cooking stoves, ranges, &c.; and my improvement consists in providing one member with a diagonal or gradually-tapering tongue, and the other member with a mortise-block, into which the tongue is inserted, and a diagonal or gradually-tapering wedge, adapted to slide on the tongue within the mortise-block, as hereinafter set forth.

In the drawings, Figure 1 is a perspective view of my improvement. Fig. 2 is a horizontal longitudinal section at $x x$, Fig. 3. Fig. 3 is a vertical section at $x' x'$, Fig. 2. Fig. 4 is a perspective view, showing a modification. Fig. 5 is a longitudinal section of the form shown in Fig. 4 on the line of the fastenings.

A is one member or plate of the fire-back, and B is the other member. These members are shown with breaking-grooves a at the lower part, to allow the ready breaking off of a part to reduce the vertical depth of the plate when required. I make no claim to novelty in these grooves. The plates A and B are of cast-iron, preferably cast with holes b to receive teats upon the tongue C and mortise-block D, the said teats being riveted in the holes to fix the tongue and block D each firmly to its own plate, as shown in the section drawings. The tongue and mortise-block are made preferably of malleable iron, so that they will not be liable to break.

E is a wedge, which is driven into the mor-

tise beside the tongue to hold it tightly in the mortise. This fastening is very secure and rigid. The wedge may be driven in or out without the use of a tool, and by a person un-
45 possessed of any mechanical knowledge.

I do not confine myself to any particular style or shape of fire-back, it being only necessary that it shall consist of two or more sections capable of sliding together.

In Figs. 1 and 2 the plate A is shown with an offset, A' , which lies over and before part of the plate B, while in Figs. 4 and 5 the plates A and B are of substantially the same form.

F F are studs, which rest against the oven-plate or wall of the stove or range, as the case may be. I claim no novelty in these, and they are non-essential to the fire-back.

I am aware that sectional back plates have been secured together by means of a bar engaging in a recess, and fastened in place by means of a wedge inserted through an opening at rear of the plate, between the bar and bottom of the recess. The provision of a wedge and bar I do not therefore claim, broadly; but what I do claim is my specific device, which is adapted to be more readily unfastened, it only being necessary to tap the points of the tongue and wedge to cause the separation of the parts.

I claim as my invention—

In a sectional fire-back, the diagonal or gradually-tapering tongue C, mortise-block D, and diagonal or gradually-tapering wedge E, in combination with the members A and B, the said wedge adapted to slide on the said tongue within the mortise-block, substantially as shown and described.

WILLIAM I. PERKINS.

Witnesses:

J. C. BRADY,
E. WEAUVILL.