

H. H. BAKER.

Fire Bank.

No. 45,956.

Patented Jan. 17, 1865.

Fig. 1

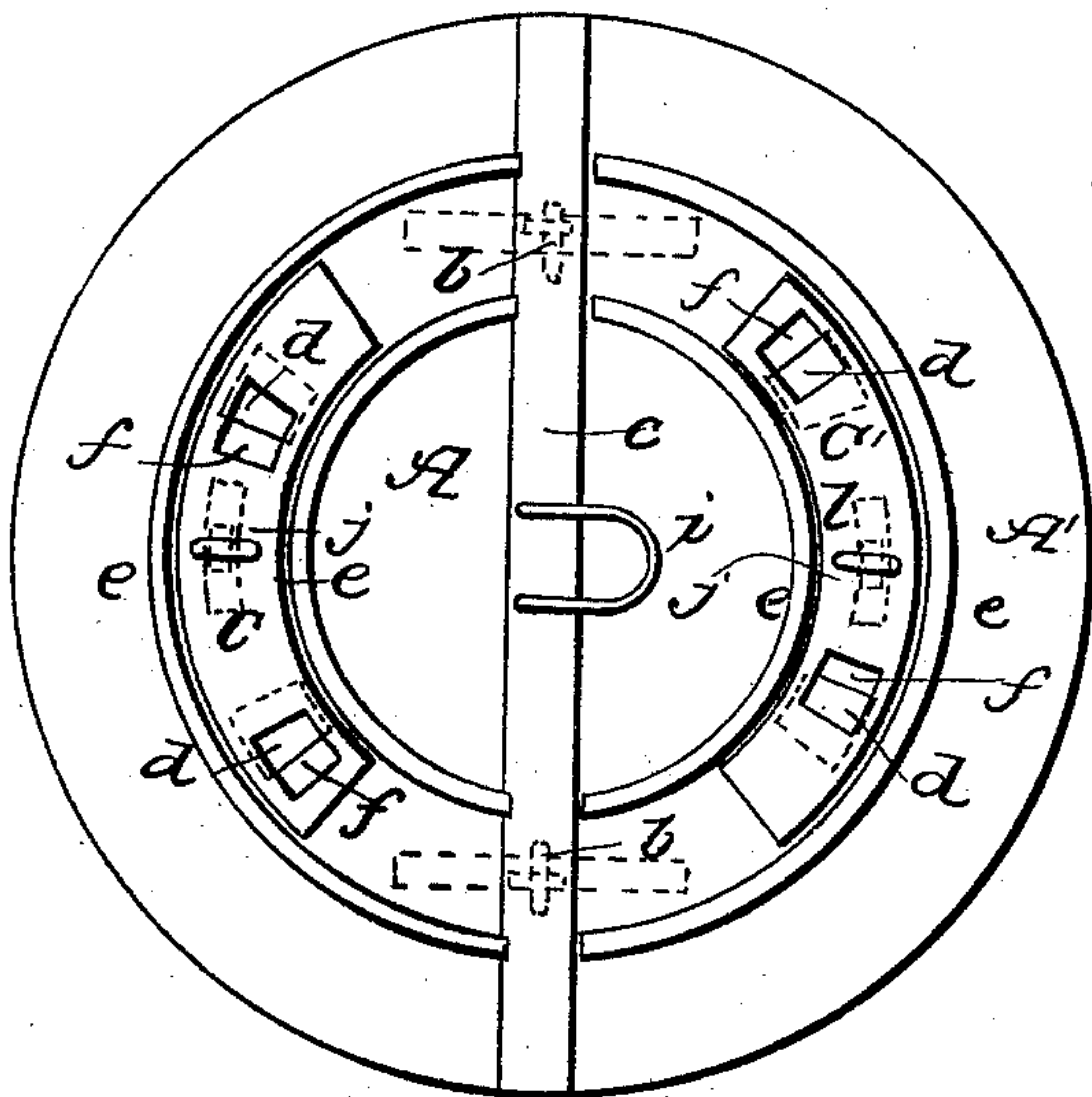


Fig. 2

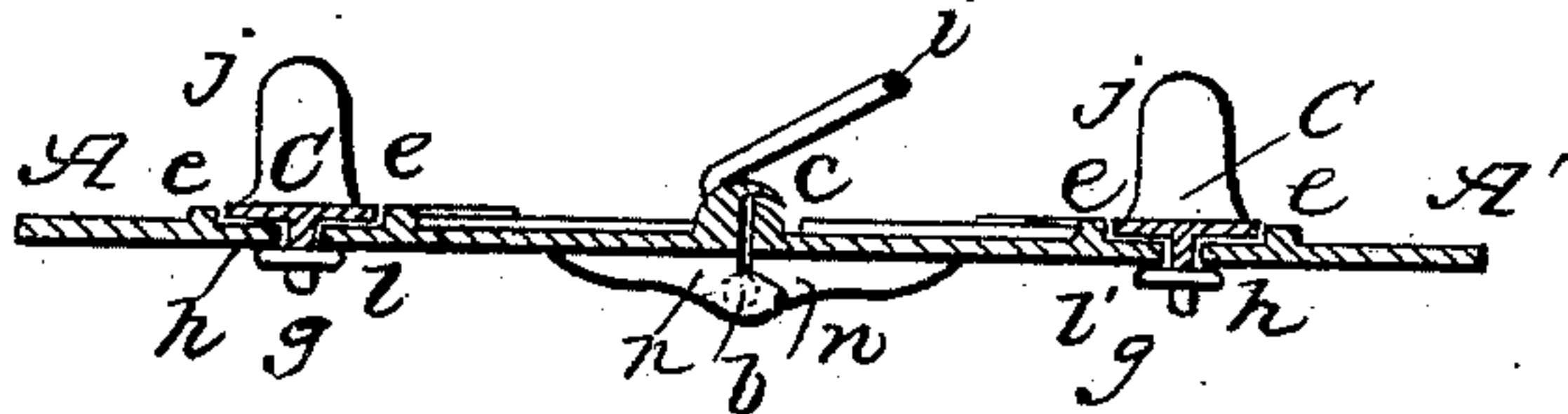
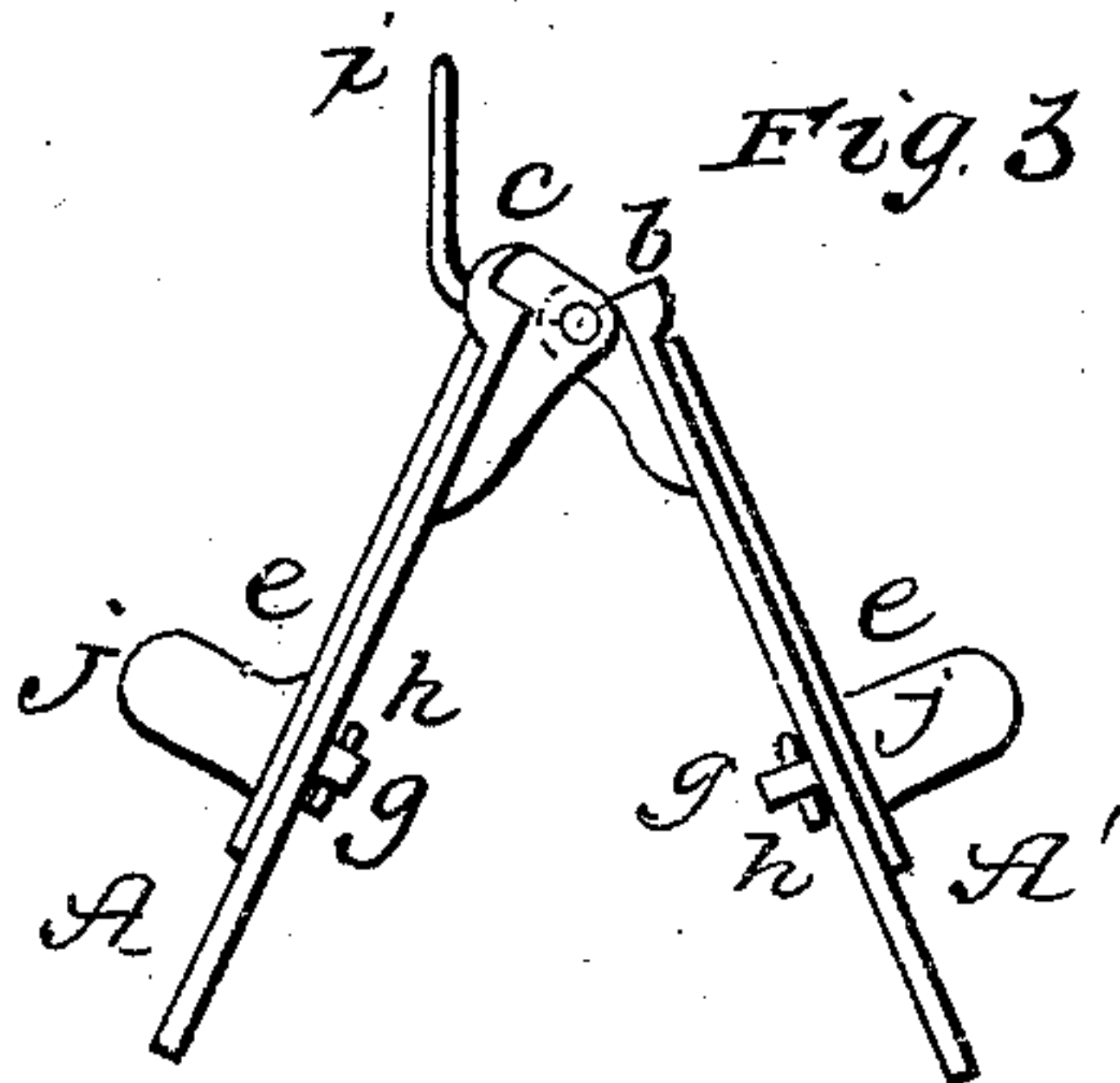


Fig. 3



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HALSEY H. BAKER, OF NEW MARKET, NEW JERSEY.

IMPROVED FIRE-BANK.

Specification forming part of Letters Patent No. 45,956, dated January 17, 1865.

To all whom it may concern:

Be it known that I, HALSEY H. BAKER, of New Market, in the county of Middlesex and State of New Jersey, have invented a new and Improved Device for Banking Fires in Stoves, Ranges, Furnaces, &c., which I term a "Fire-Bank;" and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan of a fire bank adapted for a stove with a circular fire-pot. Fig. 2 is a vertical section of the same in its operative condition. Fig. 3 is a side view of the same in the condition in which it enters the stove-door.

Similar letters of reference indicate corresponding parts in the several figures.

The object of my invention is to provide for the "banking" of the fire in a stove, range, or furnace more effectually than it is done by the ordinary method of putting on wet coal or ashes.

It consists in what I term a "fire-bank," composed of a plate or combination of plates of such form or size as to fit or nearly fit the interior of the fire-pot or fire-box, and lie directly on the top of the fuel.

It also consists in providing such a fire-bank with one or more openings and valves or shutters, which may be more or less opened to permit a limited and regulated degree of combustion of the fuel below.

It also consists in the construction of such a fire-bank of two or more plates, hinged together in such a manner as to permit the fire-bank to fold, for the purpose of passing through the door of a stove or furnace, and to be unfolded or extended after its insertion thereinto.

It further consists in so applying, in combination with the hinge of such a fire-bank, a hook or its equivalent, by which the fire-bank may be suspended in such manner as to allow it to fold by gravitation for passing it through the door of a stove or furnace.

A great advantage of this fire-bank, besides its banking the fire more effectually than wet coal or ashes, is that when raised up from the fire it leaves the fire clean and permits it to burn up immediately.

To enable others skilled in the art to make

and use my invention, I will proceed to describe it with reference to the drawings.

The example of my invention represented in the drawings is composed of two semicircular iron plates, A and A', connected by hinges *b b* at their straight sides in such manner as to enable them to fold, as shown in Fig. 3. One plate, A, is made with a lap, *c*, along its straight edge, to cover the corresponding edge of the other one. In each plate there are represented two holes, *d d*, arranged between circles concentric with the center of the circle formed by the outer edges of the two plates when extended in a flat form, as shown in Figs. 1 and 2. Over these holes *d d* there are arranged two arc-formed slides, C C', fitted to slide easily between concentric circular guiding projections *e e*, provided upon the upper surfaces of the two plates A and A', and constituting valves or shutters to the said holes *d d*, and in these slides there are holes *f f*, corresponding with *d d*. These said slides are attached to the plates A A' by projections *g g*, formed on the under sides of the said slides, and passing through holes in the said projections. On the top of each of the slides there is a projection, *j*, which enables it to be moved by a poker or other contrivance after the fire-bank has been placed on the fire in a stove. The plate A has attached to it near the line of the hinge-joint, between it and A', a hook or loop, *i*, of wire, by which to suspend the fire-bank from a poker or other device, and when the fire-bank is so suspended it folds by gravitation, as shown in Fig. 3. When the fire is to be banked, the fire-bank is taken up by inserting a poker through or into the hook or loop *i*, and folding by gravitation, as shown in Figs. 1 and 2. If the fire is to be so banked as to as nearly as possible prevent combustion, the slides C C' are moved to such positions as to close the openings *d d* in the plates A A', and sufficient vent will be left around the outer edges of the said plates for the escape of such gaseous products as are eliminated from the fuel by the limited amount of combustion, without which the fire could not be maintained; but if a greater but still limited amount of combustion is desired to be kept up, the slides C C' are moved to give a greater or less amount of opening to the holes *d d*, and increase the vent according to the degree of combustion desired. To take out the fire-bank, the poker

is to be inserted through the hook or loop *i* and the fire-bank lifted off the fire, when it folds, as shown in Fig. 3, and can be taken out through the door. It may, however, when not required to be used, be suspended from a hook in the upper part of the stove. It is not desirable that the two plates should fold close up together or nearer together than represented in Fig. 3, or there might be some difficulty in extending them after they had been placed on the fire. In order to prevent them from folding too near together, stops *n n* are provided on their under sides.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A fire-bank composed of a plate or combination of plates fitted to the fire-pot or fire-box of a stove, range, or furnace, to lie upon the fire, substantially as herein described.

2. Providing such a fire-bank with one or more openings and valves or shutters, substantially as and for the purpose herein specified.

3. The construction of such a fire-bank of two or more plates hinged together in such a manner as to fold substantially as herein described, for the purpose of enabling it to pass through the door of a stove or furnace.

4. Providing such a fire-bank with a hook or loop, *i*, so applied, in combination with a hinge or hinges, that it will fold by gravitation when suspended by the said hook or loop, substantially as and for the purpose herein set forth.

H. H. BAKER.

Witnesses:

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