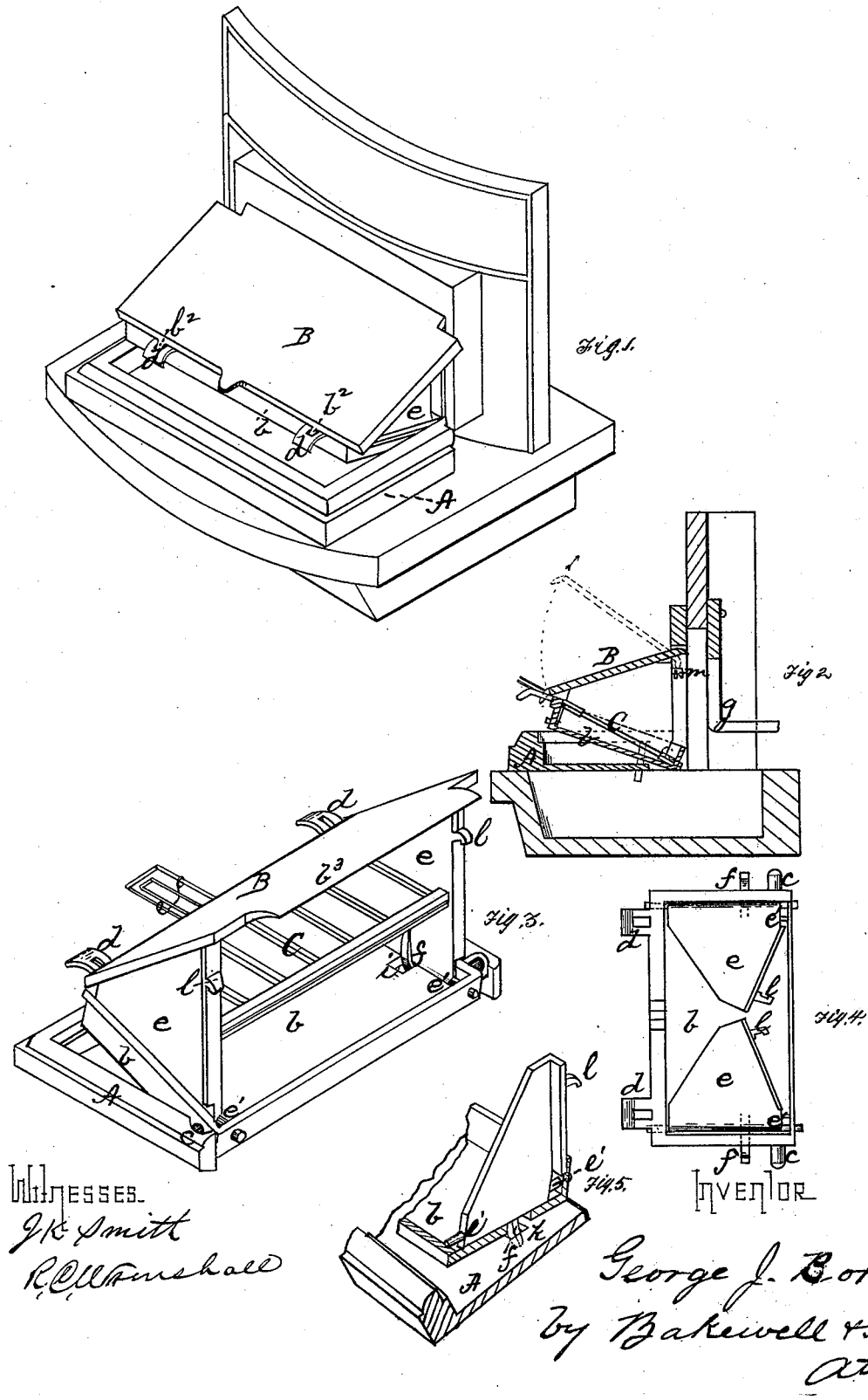


G. J. BORN.
 Broiler Attachment for Stoves, Ranges, &c.
 No. 211,549. Patented Jan. 21, 1879.



WITNESSES.
 J. K. Smith
 R. C. Marshall

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UNITED STATES PATENT OFFICE.

GEORGE J. BORN, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO FRANK S BISELL, OF SAME PLACE.

IMPROVEMENT IN BROILER ATTACHMENTS FOR STOVES, RANGES, &c.

Specification forming part of Letters Patent No. **211,549**, dated January 21, 1879; application filed November 16, 1878.

To all whom it may concern:

Be it known that I, GEORGE J. BORN, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Broiler Attachments for Stoves, Ranges, &c.; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an elevation, in perspective, of devices embodying my invention, as applied to a stove or range and in use. Fig. 2 is a sectional view. Fig. 3 is a detached view. Fig. 4 is a view of the devices when not in use, the cover removed, showing the broiler-cavity and folding sides. Fig. 5 is a sectional view, showing the means for automatically lifting the folding sides or leaves.

Like letters refer to like parts wherever they occur.

My invention relates to the construction and operation of certain attachments for stoves, ranges, &c., to be used in broiling, baking, or to form a hot-closet; and consists, mainly, in combining with a sunken hearth, whether fixed or movable, a series of pivoted plates, so adjusted with relation to each other that they can be set with relation to the grate to form a broiling or baking chamber, or can be folded and concealed by the hearth-cover, as desired; and, also, in a specific construction or details thereof, which will be hereinafter more fully set forth.

I will now proceed to describe my invention, so that others skilled in the art to which it appertains may apply the same.

In the drawings, A indicates the sunken hearth of a stove or range, and may be a fixed sunken hearth, continuous with the stove or range, adapted for the reception of broiling apparatus, as described in Patent No. 207,286, dated August 20, 1878; or it may be a swinging hearth, or an independent movable hearth, at the will of the manufacturer, or as dictated by the demands of the trade.

Having a sunken hearth, A, of either form specified above, I pivot therein a pan or receptacle, *b*, as at *c*, so that the same can be

turned up toward the grate *g* for the desired distance, and on the outer side of the pan *b*, I form eyes *d*, or equivalent means, for pivoting the cover or plate B.

The pan *b* and cover B, when raised, will form the top and bottom of a broiling-chamber, to close the sides of which I provide two pivoted plates, *e*, adapted to fold down into the pan *b* when not in use.

The side plates, *e*, are pivoted to the bottom plate or pan, *b*, as at *e'*, and are each provided with one or more curved arms or levers, *f*, which extend through slots *i* in plate or pan *b*, and under the edges of hearth A, passing through slots *k* in the latter, if said slots be found necessary. It will be here noted that when the bottom plate or pan, *b*, is lifted, the curved arms *f'* will come in contact with the edge of the hearth, and will cause the side plates, *e*, to rise or swing up into a vertical position.

In order to hang up the box thus formed, or to cause the same to retain its position before the grate *g*, one or more catches, *l*, is formed on each plate *e*, and so arranged and constructed as to take over lugs *m* on the stove frame or front. The chamber formed by the pan or bottom plate, *b*, and side plates, *e e*, is closed above by the plate or cover B, as before specified. This cover B has at its outer edge lugs *b²*, which engage with eyes *d* of the pan or bottom plate, *b*, and is preferably formed with a curved flange, *b³*, at its inner edge, so that when the lugs *b²* are freed from the eyes *d* the said cover may be lifted, as indicated in dotted line, Fig. 2, for inserting, turning, or removing the contents of the chamber.

In order to obtain a reflecting-surface, as well as one easily cleaned, I prefer to tin the interior surface of the chamber, or line the same in any of the well-known ways suitable therefor.

C represents a broiler, which may be inserted in the chamber by lifting cover B, and which can be arranged centrally, as shown, its inner end supported by a lug on the grate, or other suitable means, when it is desired to broil both sides of the article at once by reflection, or can be against either plates B *b*, accordingly as it is desired to broil only one

side at a turn. To accommodate the long handle of the broiler, a notch or notches may be formed in the outer flange of plate or pan *b*.

When setting the devices to form the broiling-chamber or hot-closet, all that has to be done is to lift or tilt up the outer side of plate *b*, when the change of position of the curved arms or levers *f* will raise the side plates, *e*, and force up cover B automatically. When lifted the desired distance, or until arrested by the stove-front, the catches *l* will take over the lugs *m* and retain the whole in position. The broiler, if used, can then be inserted and turned, as before specified.

When no longer required the broiler is removed, and a slight shake will disengage the catches *l*, after which the pan or bottom plate, *b*, can be lowered, and the side plates, *e*, will fold in automatically as the curved arms change their position.

The advantages of my devices are, that a hot-closet, baking, or broiling chamber can be easily formed at will, and when not required the parts constituting the same can be folded into small compass and stored in the hearth out of the way, and so as not materially to alter the shape or appearance of the stove or range.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with a hearth or hearth-plate, whether fixed or movable, of a series of plates pivoted thereto, and adapted to form, when set, a hot chamber or closet for broiling, &c., said plates being arranged as described, so as to be folded into the hearth for storage, substantially as set forth.

2. The combination, with a pivoted pan or bottom plate, of the pivoted side plates and the pivoted cover, the whole constructed substantially as specified, whereby the raising of either the cover or bottom plate causes the side plates to rise, substantially as and for the purpose specified.

3. The combination of the pan or bottom plate arranged within and pivoted to a hearth, the side plates pivoted on the pan and provided with curved arms or levers which engage with the hearth, and the cover pivoted to the bottom plate or pan, substantially as and for the purpose specified.

In testimony whereof I, the said GEORGE J. BORN, have hereunto set my hand.

GEORGE J. BORN.

Witnesses:

FRANCIS TORRANCE,
EDWARD B. ALSOP.