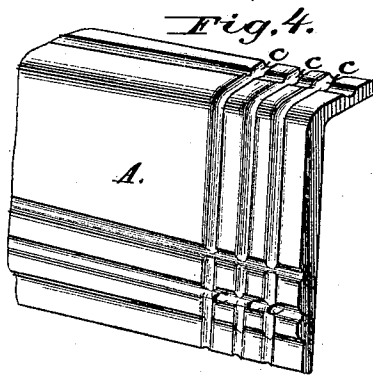
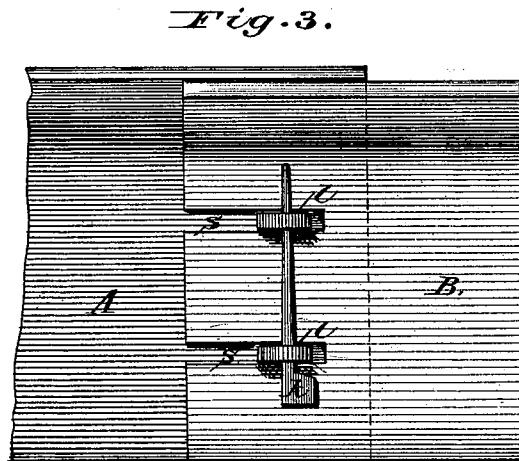
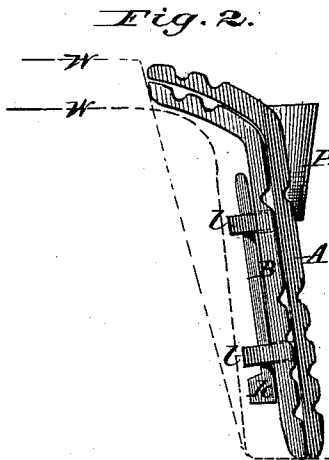
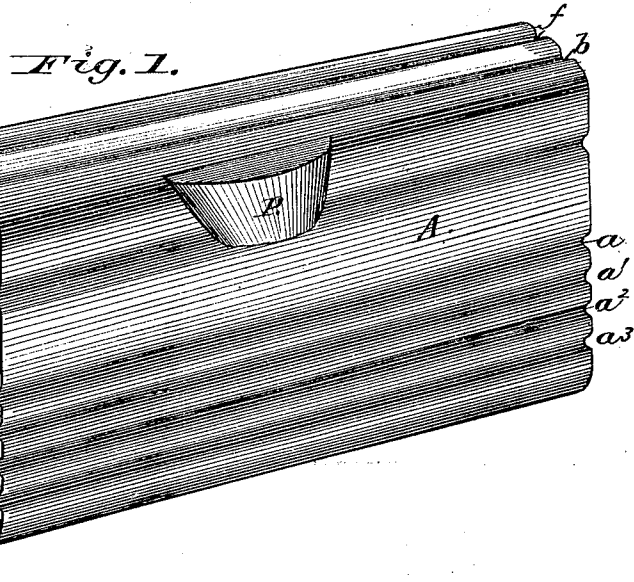


J. D. HALEY.
FIRE BACKS FOR STOVES.

No. 179,551.

Patented July 4, 1876.



Attest:
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UNITED STATES PATENT OFFICE.

JOHN D. HALEY, OF WAVELAND, INDIANA.

IMPROVEMENT IN FIRE-BACKS FOR STOVES.

Specification forming part of Letters Patent No. **179,551**, dated July 4, 1876; application filed June 13, 1876.

To all whom it may concern:

Be it known that I, JOHN D. HALEY, of Waveland, county of Montgomery and State of Indiana, have invented certain new and useful Improvements in that class of devices known as Fire-Backs for Stoves, of which the following, in connection with the accompanying drawing, is a full, clear, and exact description.

In the drawing, Figure 1 is a perspective view of my improved fire-back. Fig. 2 is a sectional elevation upon a plane passed through both the fire-back proper and its auxiliary section. Fig. 3 is a rear view, showing the method adopted of securing the two parts together, and Fig. 4 is a perspective view of a modified form of my device.

The object of my present invention is to provide a fire-back which can be readily and easily adjusted both as to length and depth, to fit the different-sized fire-pots of stoves, to accomplish which, it (the invention) consists in certain novel constructions and arrangements of parts, to be hereinafter more particularly described, and pointed out in the claims.

A is the portion of the fire-back having its lower portion corrugated, as shown at $a a^1 a^2$, &c. These corrugations facilitate the chipping off of the lower portion of the back in case it be too broad to fit into the fire-pot—an operation easily accomplished by using the hammer or pinchers. The grooves $a a^1$, &c., are sufficient in number for all ordinary cases wherein the invention is likely to be required.

Fire-pots of ordinary stoves vary much more in their length than in their depth, and it is therefore desirable that the fire-back be also variable or adjustable with respect to its length. To provide for this adjustment I employ an auxiliary sliding plate, B, placed in rear of and of same general form as the main section A. This plate B is also provided with grooves $a a^1$, &c., corresponding with the similarly-lettered grooves in plate A, to permit the two plates to be equally narrowed.

Upon the rear of the main section A I cast one or more lugs, l , which are fitted to receive

a key, k , and section B is provided with one or more slots, S, to correspond with lugs l .

The section B having been properly adjusted upon the back to make the two together of suitable length, the key k is tightly driven in, and the two pieces thereby firmly secured together.

This connection is the simplest and cheapest which I have been able to devise, and, being located in rear of the fire-back, cannot become damaged by heat until the whole back is destroyed.

I also provide the top extension of the fire-back with corrugations $f b$, &c., to permit that portion of the back to be chipped off in case it be desirable to incline it more toward the oven-wall or wall of the stove, as shown at W, Fig. 2.

At Fig. 4 is shown a modification of the invention, wherein the double adjustment is attained by using a series of vertical corrugations, $c c$, &c., in addition to and for a similar purpose as the grooves $a a^1$, &c.

This device is intended to be used in all classes of stoves wherein a fire-pot is employed, but it is especially adapted for cooking-stoves. When used for this class of stoves I cast a projection, P, upon the face of the main section, to serve as a rest for the bridge usually found therein.

By providing for both the vertical and horizontal adjustments, as above explained, I am enabled to produce a fire-back which may be fitted in place by an ordinary workman without special tools, and as but a single size is necessary, it may be manufactured with less expense, besides permitting the dealers to carry a smaller stock than would otherwise be required.

I am aware that the method of chipping off the lower portion of the supplementary back is not new, having before been described in a United States Patent, and I desire it understood that I lay no claim thereto; but Having fully described my invention, what I do claim as new is—

1. In combination with the main section A of the fire-back, provided with grooves a

*a*¹, &c., the adjustable section B, similarly grooved, as and for the purposes explained.

2. The lugs *l* and key *k*, combined with the two sections A and B, and arranged substantially as shown.

3. In combination with a fire-back, provided with horizontal grooves or corrugations, a horizontally-adjustable section, B, or its described equivalent, as and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand in presence of two witnesses.

JOHN D. HALEY.

Witnesses:

H. E. RHOADS,

J. B. CROWE.