(No Model.)

W. SCHENCK.

EXTENSION STOVE GRATE.

No. 263,360. Patented Aug. 29, 1882.

Fig. 1

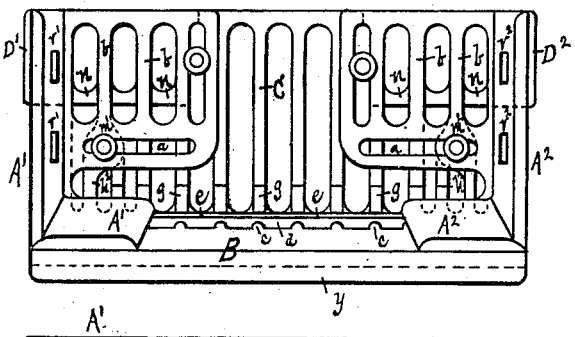


Fig. 2

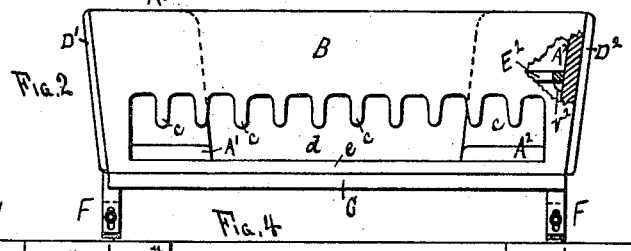


Fig. 3

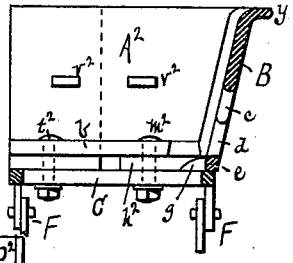


Fig. 4

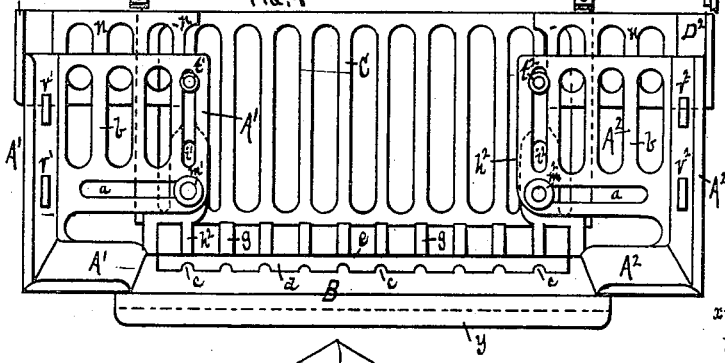


Fig. 6

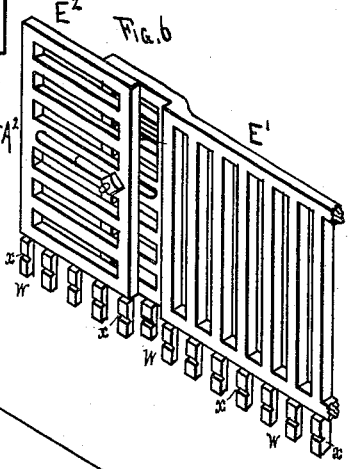
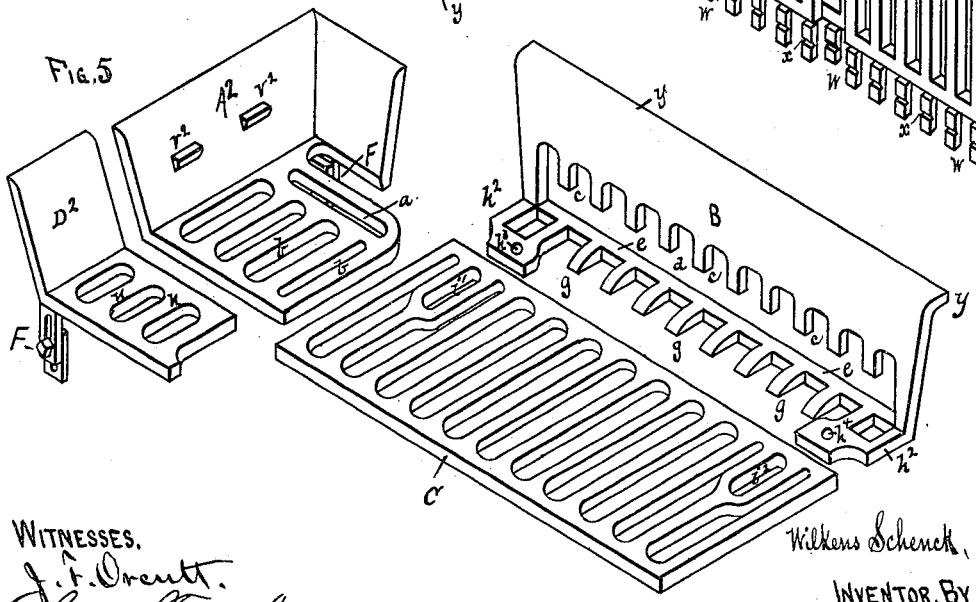


Fig. 5



WITNESSES.

J. F. Orcutt.

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Wilkens Schenck,

INVENTOR, BY

Louis Feeser & Co

Attys.

UNITED STATES PATENT OFFICE.

WILKENS SCHENCK, OF ST. PAUL, MINNESOTA.

EXTENSION STOVE-GRATE.

SPECIFICATION forming part of Letters Patent No. 263,360, dated August 29, 1882.

Application filed December 2, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILKENS SCHENCK, a citizen of the United States, and a resident of St. Paul, in the county of Ramsey and State of Minnesota, have made certain new and useful Improvements in Extension Stove-Grates, of which the following is a specification.

This invention relates to grates and fire-linings for stoves; and it consists in the construction and combination of parts hereinafter particularly described, and then sought to be specifically defined by the claims. I attain these objects by the use of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan view, Fig. 2 is a front view, and Fig. 3 is a cross-sectional view, of the extension-grate and lining closed up; and Fig. 4 is a plan view of the same extended. Fig. 5 shows perspective views of the bottom grate, front plate, one of the corner-plates, and one of the back extension-plates detached; Fig. 6, a perspective view of one end of the auxiliary fire-elevating grate.

This invention is more particularly intended to be arranged in ordinary wood-burning cook-stoves to enable coal to be used as a fuel, but may also be used in replacing burned-out grates and linings in coal-burning stoves.

A′ A^2 are two corner-plates, adapted to fit the ends and front corners of the fire-box, and having slots *a* cut through their bottoms parallel with the front of the stove, and cut up into grate-bars *b* to provide for the circulation of the air up through the fuel.

B is the front plate, formed with bars *c* and an open space, *d*, through which clinkers may be removed, and its lower ends connected by a bar, *e*, having toes *g* projecting inward therefrom, and corresponding to the bars of the bottom or main grate C, as shown. The front plate, B, is provided with horizontal lugs h^2, projecting inward from its ends, and with holes h^3 h^4, which come beneath the slots *a* of the corner-plates A′ A^2, while the grate C is provided with slots i' i^2, crossing the slots *a* at right angles, so that two bolts, m' m^2, may be passed down through the slots *a* i' i^2 and holes h^3 h^4 and hold the four parts together, and by means of the slots the end plates, A′ A^2, and grate C may be moved endwise and backward. The grate C, moving backward, leaves a gap between the plate B and grate C, and to bridge over this gap is the object of the toes *g*, which thus keep this gap covered sufficiently to hold the coal.

D′ D^2 are two angular plates with their upper sides corresponding to the sides of the end plates, A′ A^2, and their lower sides corresponding to the bottoms of the end plates, A′ A^2, between which and the grate C they are adapted to rest, as shown. The bottom parts of the plates D′ D^2 are cut up into grate bars *n*, as shown. By this means the gap that would otherwise be formed between the rear sides of the end plates, A′ A^2, and ends of the grate C when the latter is moved backward can be filled by moving the plates D′ D^2 backward with it. By these arrangements the combined fire-lining and grate may be adjusted in all directions and still retain the open-grated form, whether open or closed.

Two extra bolts, t' t^2, may be used to assist in holding the plates D′ D^2; but ordinarily the two bolts m' m^2 only will be required to hold all the parts.

r' r^2 are small lugs cast upon the end plates, A′ A^2, about midway of their heights, upon which an auxiliary grate, E′, (see Figs. 2 and 6,) may be placed, to provide for the building of a small fire up near the top of the stove when used in warm weather, or when only a small fire is required. This auxiliary grate is provided with extension ends E^2, by which it may be extended to adapt it to any length of fire-box, and it may be made with projecting bars *w*, having notches *x* formed in them, to enable portions to be broken off to adapt it to the width of the fire-box.

I am aware that it is not new to form extension-grates with the combined end and corner pieces, A′ A^2; but such I do not claim, broadly.

Attached to the corners of the end pieces, A′ A^2, and the extension-plates D′ D^2 are legs F, formed in two parts, as shown, and provided with slots and held by bolts, so that they may be adjusted to hold the grate at any desired height.

A rib, *y*, along the front of the front plate, B, enables the latter to be set close to the inner edge of the front of the stove, and thus prevent cold-air currents passing in over the top of the fuel.

What I claim as new is—

1. The combination of end plates, A′ A², grate C, and front plate, B, having the opening *d*, and provided with toes *g*, the said several parts being adjustable, as and for the purpose specified.

2. The combination of the end plates, A′ A², grate C, and extension-plates D′ D², substantially as set forth.

3. The combination of end plates, A′ A², provided with supporting-lugs, front plate, B, and auxiliary grate E′ E², substantially as set forth.

4. The combination, with front plate, B, end plates, A′ A², and grate C, of the extension-plates D′ D², provided with vertically-adjustable legs F, whereby the grate may be raised or lowered, as set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WILKENS SCHENCK.

Witnesses:

C. N. WOODWARD,

LOUIS FEESER, Sr.