

UNITED STATES PATENT OFFICE.

DABNEY L. ERVIN, OF CRAWFORDSVILLE, MISSISSIPPI.

STOVE.

SPECIFICATION forming part of Letters Patent No. 225,812, dated March 23, 1880.

Application filed September 10, 1879.

To all whom it may concern:

Be it known that I, DABNEY L. ERVIN, of Crawfordsville, in the county of Lowndes and State of Mississippi, have invented a new and Improved Stove, of which the following is a specification.

Figure 1 is a plan of the stove with the top removed on line *x x*, Fig. 2. Fig. 2 is a sectional elevation on line *y y*, Fig. 1. Fig. 3 is a plan of the soot-drawer. Fig. 4 is a sectional end elevation of the front of the grate. Fig. 5 is a perspective view of a side plate, showing the groove for a binding-rod; and Fig. 6 is a perspective view of the grate. Fig. 7 is a sectional detail view on line *z z* of Fig. 3.

Similar letters of reference indicate corresponding parts.

This invention consists in arranging the binding-rods of the stove in vertical grooves made in the edges of the side and back plates, so that they (the rods) may be protected from burning; in a peculiarly-constructed soot-drawer and scraper combined; in an ash-pan secured in position in a novel manner, and in a grate of peculiar construction, all of which will be hereinafter described.

In the drawings, A represents the bottom plate of the stove; B B, the top plates; C C, the side plates; D, the back plate, and L the front upper plate, the four latter of which, C, C, D, and L, have grooved edges, as shown at *a'*, Fig. 5, in which grooves *a'* are laid the binding-rods *b'*, so that they (the rods *b'*) may be protected from intense heat, and may not interfere with the cleaning of the stove, while they permit the soot-drawer to extend from side to side of the stove.

E represents the soot-drawer, that fits between the bottom A of the stove and the lower cooking-shelf F, and extends backward far enough to receive all the soot and ashes from the back flues. This drawer E contains all the under flues, E'', and can be withdrawn at any time. It is provided with lugs *c'*, through which rods or hooks pass to hold it in place, and also with a swinging or other handle, *d'*, attached to its under surface.

Extending transversely across the central part of the soot-drawer E, and secured at either end in the sides *s' s'* of the under flues, E'', is a pin, *f'*, on which is pivoted the handle *g'* of

the scraper G. This handle *g'* extends out of the front of the drawer E, and when the operator pulls the drawer E out he may press down upon the handle *g'* and force the scraper G in contact with the under surface of the lower shelf, F, so that it (the scraper G) will remove therefrom all the accumulated soot and ashes.

The flue-sides *s' s'* are grooved on their upper surfaces, and extend upward in contact with corresponding projections from the under surface of the shelf F.

H is the ash-pan, which is held in place on the hearth H'' by dovetailing the ends of the raised rim *h'*, the shape of the dovetailing being such that the front of the pan H must be lifted from corresponding dovetails in the hearth H'', in order that it may be withdrawn at any time.

The grate M is composed, as herein shown, of several pieces, which number can be increased or diminished as circumstances may require.

The ends of the upright bars *i' i'* are dovetailed two ways, the one way to prevent them from falling forward, and the other to prevent them from being pulled out vertically, and these bars *i' i'* are tenoned into an upper and lower horizontal bar, I and K, respectively, whose ends are provided with sloping grooves *k'* and connected by two upright strips, *l' l'*, and rods *m'*. By pushing these strips *l' l'*, which have beveled ends, rearward, the horizontal bars I and K are forced apart, with the effect of tightening the grate-bars *i' i'* in their positions. The rods *m'* serve to hold the strips *l'* in position. If the rods *m' m'* be removed, the grate M can easily be taken to pieces and any broken or burned bars replaced.

The horizontal grate-bars *n' n'* are dovetailed in the same manner into their bearers K T. The grate is prevented from swinging forward or backward, is held in position by properly-placed studs or stops, and is suspended from the lugs *o'*, that are fixed on the inside of the side plates, C C.

Many stove-grates become useless, or nearly so, when a bar becomes broken, and must be replaced by an entirely new one, while in this grate M a single bar may be substituted for

any broken one, thus making this one the more economical of the two; and this grate can be readily applied to the cooking-stoves now in use without any alteration of the stove; and the ash-pan and soot-drawer can be slightly modified to fit any ordinary cooking-stove.

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

1. The plates C, C, D, and L, with grooved edges a' , for the reception and protection of the binding-rods $b' b'$, substantially as herein shown and described.

2. The scraper G, arranged in the soot-drawer and provided with a handle, g' , pivoted thereto at f' and extending to the outside, whereby either the top or the bottom of the flues may be scraped on operating the drawer, as shown and described.

3. The ash-pan H, provided with a dove-tailed front rim, substantially as herein shown and described.

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Witnesses:

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