

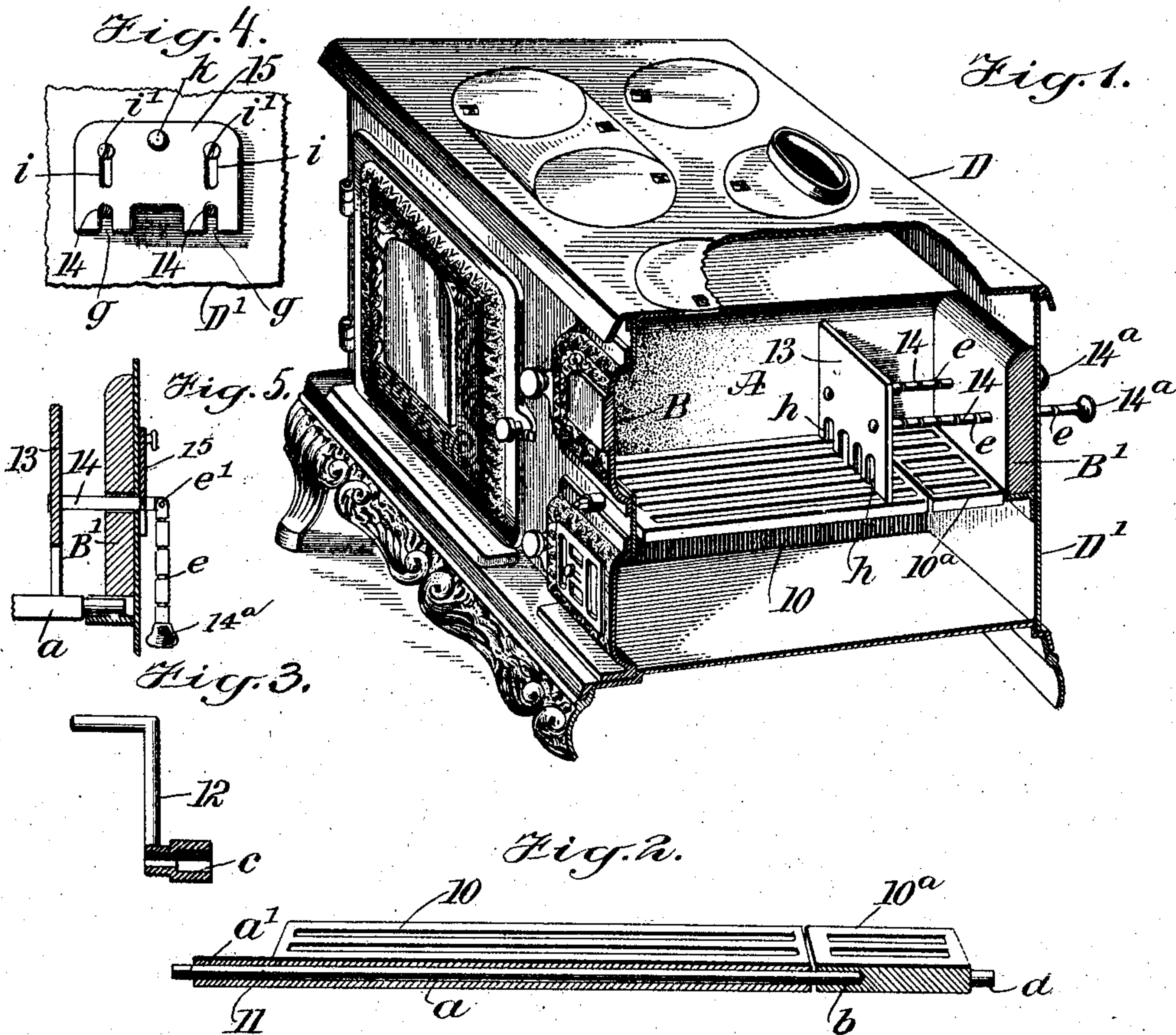
No. 772,727.

PATENTED OCT. 18, 1904.

A. MARKOFF.
ATTACHMENT FOR FIRE BOXES OF STOVES.

APPLICATION FILED SEPT. 25, 1903.

NO MODEL.



WITNESSES:

John H. Maylor.

Wm. L. Patton

INVENTOR

Aaron Markoff

Wm. L. Patton

ATTORNEYS

UNITED STATES PATENT OFFICE.

AARON MARKOFF, OF DERBY, CONNECTICUT.

ATTACHMENT FOR FIRE-BOXES OF STOVES.

SPECIFICATION forming part of Letters Patent No. 772,727, dated October 18, 1904.

Application filed September 25, 1903. Serial No. 174,581. (No model.)

To all whom it may concern:

Be it known that I, AARON MARKOFF, a citizen of the United States, and a resident of Derby, in the county of New Haven and State of Connecticut, have invented a new and Improved Attachment for the Fire-Boxes of Stoves, of which the following is a full, clear, and exact description.

This invention relates to an attachment for the fire-box of a stove or range, which affords means for changing the dimensions of the fire-box, so that more or less fuel may be consumed and the heat controlled to suit the requirements of service, and has for its object to provide novel details of construction for an attachment of the character indicated which is novel, simple, and readily applied to new or old stoves and that will enable the reduction of the grate and fire-box area any desired degree and which by easy adjustment will permit the grate to receive rocking adjustment as may be required.

The invention consists in the novel construction and combination of parts, as is hereinafter described, and defined in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improvement applied within a range. Fig. 2 is a perspective view, partly in section, of a fire-grate having features of the improvement thereon. Fig. 3 is a partly-sectional side view of a crank-handle employed. Fig. 4 is a fragmentary rear view of the range-body shown in Fig. 1 and a rear face view of a detail of the invention shown in said figure; and Fig. 5 is a sectional side view of the rear portion of the fire-box, showing a hinged joint in a spacing-rod, that in duplicate is a feature of the invention.

In the drawings that show the construction and application of the invention, A indicates one of the side walls of a fire box or chamber, and B B' the end walls of the same.

In the embodiment of the invention as represented in Figs. 1 and 2, 10 10^a are coacting

portions of the fire-grate forming the bottom of the fire-box. The bars of the two-part grate 10 10^a are disposed longitudinally and evenly spaced apart by integral transverse webs, thus providing slots between the grate-bars, as usual.

Preferably the grate-section 10, that is of greater length than the grate-section 10^a, is positioned in front of the latter and the grate-sections have equal width—that is, so proportioned as to adapt them to fit loosely in the bottom of the fire box or chamber. The central bar *a* of the grate-section 10 is longitudinally perforated and receives the cylindrical pintle-rod 11, which fits loosely therein and extends beyond the rear end of said grate-section into the center bar of the grate-section 10^a, as shown at *b* in Fig. 2, wherein said rear end portion of the pintle-rod is secured by any suitable means. The forward end portion of the pintle-rod 11 passes through a trunnion *a'*, formed on the front end of the grate-section 10, and the end of the rod is squared, as is also the adjacent end portion of the trunnion *a'* for an interlocking engagement with the socket portion *c* of the crank-handled wrench 12.

Centrally upon the rear end of the grate-section 10^a a trunnion *d* is formed or secured in alinement with the front trunnion *a'*, and these trunnions *a'* *d* are respectively held to rock on or in the rear and front walls of the range-body, so as to permit the grate-sections to receive rocking movement separately.

In the drawings means for changing the length of the fire-box is shown, and comprises the following details: A partition-wall 13, preferably of plate metal, is loosely fitted in the fire-box, so as to be adapted to take the place of the stationary rear end wall B' of the fire-box. Two rods 14 of similar dimensions are affixed by one end in or on the partition-wall 13, preferably near the respective side edges of said partition and equally spaced from the grate. The rods 14 are extended loosely through the rear end wall B' of the fire-box and project rearward through suitable perforations in the rear wall of the range-body, as is indicated in Fig. 4, and terminate

at their rear ends in handles or knobs 14^a. Each rod 14 is grooved at suitable intervals throughout its length, these vertical grooves *e* in said rods being disposed oppositely in
 5 pairs. A keeper-plate 15, having two slots *g g* formed in its lower edge, engages the rods 14 at the exterior of the stove and rear side of the same, the rods at opposite grooves *e*
 10 entering the slots *g* when the keeper-plate is placed thereon. The spacing-rods 14 each is pivotally jointed at *e'* to permit extended portions thereof to hang pendent at the rear side of the stove.

It will be seen that by a manipulation of
 15 the rods 14 together the partition-wall 13 may be moved forwardly in the fire-box and be held at a desired point if the keeper-plate 15 is mounted upon the rods at a proper distance from the partition and the keeper-plate im-
 20 pinges upon the rear wall of the stove or range. The lower edge of the partition-wall 13 may have spaced slots *h* formed therein to afford a free passage of air through said partition-wall and also adapt the wall 13 to serve
 25 as a scraper for removing ashes from the rear portion of the fire-box, which may be readily effected if the keeper-plate 15 is removed and the rods 14 are together reciprocated.

It will be seen that when the partition-wall
 30 13 is positioned on the front grate-section 10 the grate cannot be rocked; but by moving it so that the partition rests on the rear grate-section 10^a the front grate-section 10 may be freely rocked. By shoving the partition-wall
 35 13 forward, so as to permit it to rest upon the rear end of the forward grate-section 10, and applying a wrench or other suitable implement to the angular front end of the pin-
 40 tle-rod 11 the rear grate-section 10^a may be rocked for removal of material therefrom. Should it be desired to reduce the length of the fire box or chamber while a fire is burn-
 45 ing therein, this may be readily effected by locating the partition-wall 13 on the rear end of the forward grate-section 10 and then tip-
 50 ping the rear grate-section 10^a laterally. This will open a passage into the ash-pit below the grate-sections and permit the removal of a proper amount of the incandescent fuel that
 55 is in the fire-box just forward of the partition-wall 13 through the notched openings *h* therein and obviously permit the forward-sliding movement of the partition-wall a sufficient distance for the reduction in length de-
 sired for the fire-chamber. When the parti-
 tion-wall 13 is moved rearward so as to con-
 tact with the rear wall B' of the fire-box, the spacing-rods 14 may be flexed at their pivoted

joints *e'*, so as to hang pendent and out of the way.

It may be preferred to loosely secure the
 keeper-plate 15 upon the rear end wall D' of
 the range-body D, and to this end two par-
 60 allel vertical slots *i i* may be formed in the keeper-plate 15 to receive studs *i'*, that pro-
 65 ject from the rear wall D'. A knob *k* may be projected from the keeper-plate 15 to facilitate its manipulation. In this case the studs
 70 *i'* should have a sufficiently loose engagement within the slots *i* to permit the keeper-
 plate to slide, but also to be held in elevated
 adjustment by friction when the spacing-rods
 14 are to be moved. While it is preferred
 to employ two of the spacing-rods 14 for an
 75 adjustment of the partition 13, it is evident
 that a single rod 14 may be employed, if de-
 sired, and by it the plate 13 may be slid on
 the grate into a desired position.

Having thus described my invention, I claim
 as new and desire to secure by Letters Patent— 80

1. The combination with a two-part grate, the sections of which are adapted to rock lat-
 85 erally, of a partition slidable above the grate, adapted by adjustment to hold either section stationary.

2. The combination with a two-part grate, the sections of which are disposed one behind
 90 the other and adapted to rock laterally and independently, of a transversely - arranged partition which may be moved to seat on either
 grate-section for holding it stationary, and means for moving said partition.

3. The combination with a stove or range having a rectangular fire-box therein, of a
 95 two-part grate supported at meeting ends of said parts so as to rock one on the other in the lower part of the fire-box, a transverse
 partition in the fire-box seated upon the grate, two jointed and grooved spacing-rods extend-
 100 ed through the rear wall of the fire-box and rear wall of the stove or range, the forward
 ends of said rods being secured on the parti-
 tion so that a slidable movement of the rods
 will correspondingly move the partition, a
 105 keeper-plate held to slide on the rear wall of the stove or range and having slots in the
 lower edge which will engage in opposite
 grooves in the spacing-rods, thus holding
 them from sliding.

In testimony whereof I have signed my name
 110 to this specification in the presence of two sub-
 scribing witnesses.

AARON MARKOFF.

Witnesses:

DANIEL E. McMAHON,
 JOHN W. LARKIN.