No. 822,921. PATENTED JUNE 12, 1906.

I. G. CHATFIELD.

DETACHABLE ADJUSTABLE STOVE GRATE.

APPLICATION FILED SEPT. 12, 1904.

Fig. 1.

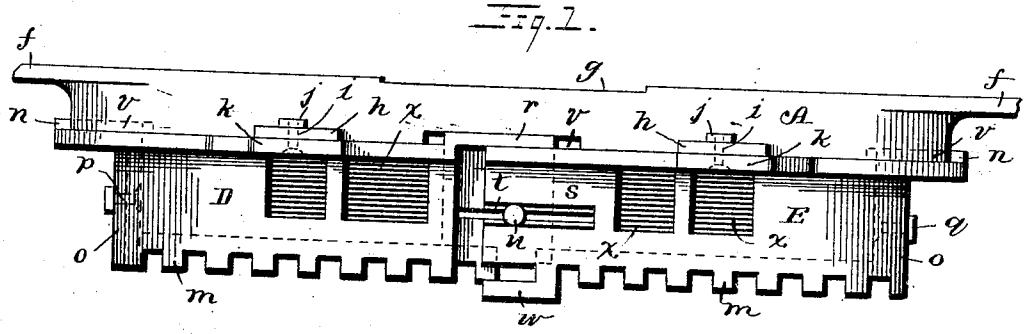
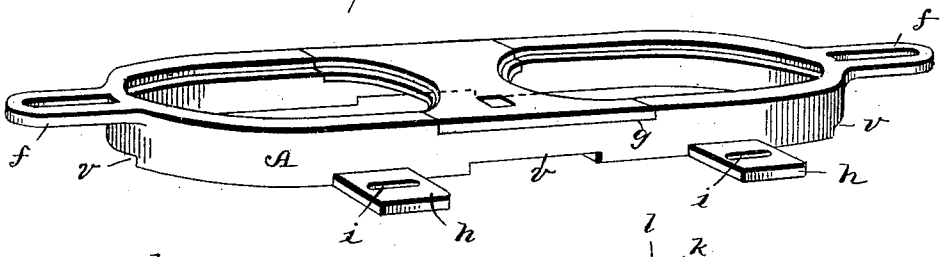
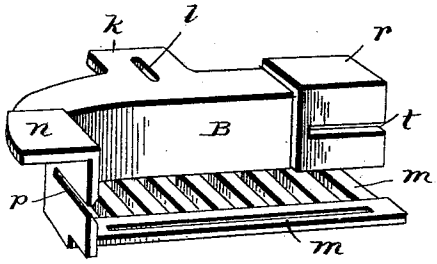
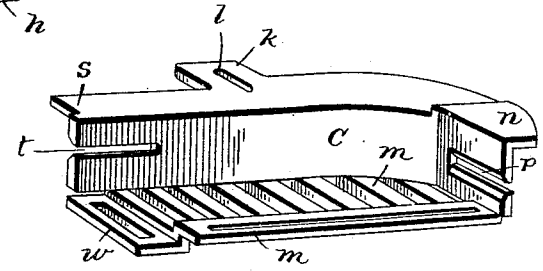
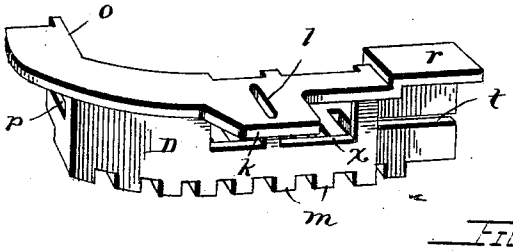


Fig. 2.









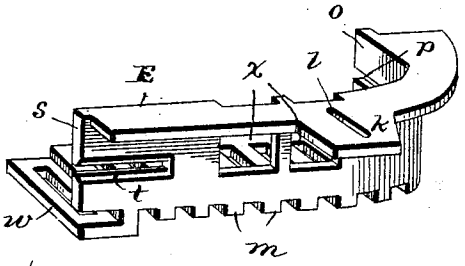


Fig. 3.

WITNESSES:

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IRVING G. CHATFIELD, OF WATERBURY, CONNECTICUT.

DETACHABLE ADJUSTABLE STOVE-GRATE.

No. 822,921. Specification of Letters Patent. Patented June 12, 1906.

Application filed September 12, 1904. Serial No. 224,083.

To all whom it may concern:

Be it known that I, IRVING G. CHATFIELD, a citizen of the United States, and a resident of Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Detachable Adjustable Stove-Grates, of which the following is a specification.

My invention relates to new and useful improvements in detachable combined stove-grates and fire-pots adapted for burning charcoal in ordinary cook-stoves and is designed to be used above and in lieu of the ordinary coal-grates found in stoves of this class.

It is the object of my invention to provide a shallow stove-grate and fire-pot which may be set in the fire-box of an ordinary cook-stove and used for burning charcoal without disturbing or rearranging any of the parts of the stove, excepting to remove the lids, which may again be used for covering my novel grate.

It is the special object of this invention to provide a grate and fire-pot for the above purpose which may be made up of several parts secured together in an adjustable manner to make it fit stove-openings of different sizes, thus avoiding the necessity of making special grates for the numerous sizes of stoves. The grate is not only adjustable lengthwise, but sidewise, and can thus be employed to accommodate almost any width or length of fire-box opening found in the ordinary cooking-stove.

It is further an object of this invention to construct the parts in such a way that the same may be formed of cast metal and without the necessity of any great amount of finishing, and, finally, to provide adjustments which will be simple in character and easily set.

With the above and other minor objects in view my invention resides and consists in the novel construction and combination of parts shown upon the accompanying sheet of drawings, forming a part of this specification, upon which similar characters of reference denote like or corresponding parts throughout the several figures, and of which—

Figure 1 shows a side elevation of my improved adjustable charcoal-grate and fire-pot complete. Fig. 2 is a detail perspective view of the plate or frame member of my device, and Fig. 3 shows similar detached perspective views of the four bottom sections of the invention.

Referring to the drawings, it will be noted that my device consists of substantially five parts, with the exception of several bolts and nuts that are employed to secure the parts together. Each of these sections is preferably formed of cast metal, being designed in a manner to permit of their free withdrawal from the sand of the mold in a way to form substantially a complete article that will require little or no fitting and the addition of but small parts in its assemblage.

Referring in detail to the characters of reference marked upon the drawings, A represents the top or frame member. B, C, D, and E indicate the several bottom sections forming the grate, which, as shown in Fig. 1, are not only adjustably secured to the frame A, but are also adjustably secured together.

The frame A is provided with ears *f f*, one on each end, by means of which the complete device may be handled. *g g* indicate recesses in the top edge of the sides of the frame to receive the T or bridge plate of the stove-covers. *h* represents lugs on each side of the lower portion of the frame, which are provided with horizontal slots *i*, through which bolts *j* are passed in the attachment of the sections of the grate to the frame. These several sections of the grate and fire-pot are also provided with lugs (designated as *k*) and containing transverse slots *l*, through which the before-mentioned bolts *j* are passed in the attachment of the sections to the frame.

It will be noted that the slots in the lugs of the sections are arranged at a right angle to the slots in the lugs of the frame, thus affording both a longitudinal and transverse adjustment of said sections with respect to the frame, permitting an adjustment which will readily increase or diminish the size of the fire-pot both as to length and width. The bottom of the fire-pot is provided with transverse and longitudinal slots forming transverse and longitudinal grate-bars *m*.

The sections B and C of the fire-pot are provided with offsets *n* on their outer ends to receive the straight transverse ends *o* of the sections D and E, respectively. The outer ends of said sections are provided with transverse slots *p* to receive the bolts *q*, which adjustably secure such end portions of said sections together. The sides of the sections are provided with a similar adjustable connection, an offset *r* being formed on each of the sections B and D to receive the ends *s* of the sections C and E. These parts are also pro-

vided with registering slots *t*, through which the bolts *u* pass to secure the sides of the fire-pot together, as is clearly shown in Fig. 1. It will also be noted that the under side of the frame is cut away, as at *v*, on each side and at each end to accommodate the offset on sections and in a manner to permit of the desired adjustment of such parts beneath and with respect to said frame. A further offset *w* is provided on the inner end of each of the sections C and E to receive the straight ends of the abutting sections B and D and to form an extension in the bottom or grate, as is obviously necessary when the parts are drawn outward to any of its outer positions.

The sections D and E are further provided with openings *x*, which form the draft or flue openings from the grate, it being obvious that the side of the grate containing said openings is the part which in practice is set toward the back of the stove, thus insuring a proper escape of the smoke and gases out into the body of the stove, from whence it passes off in the usual way.

It will be obvious that the details of construction of this grate may be varied without departing from the essence of the invention. Consequently I do not wish to be limited to the exact details shown.

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

1. In an adjustable grate and fire-pot, the combination with a frame adapted to fit upon the top of a stove and having lid-openings, and lugs on each side, of four grate and fire-pot sections adjustably attached to said lugs of the frame.

2. In an adjustable grate and fire-pot, the combination with a frame adapted to fit on top of a stove and having extended lugs, of grate and fire-pot sections adjustably attached to said lugs and having overlapping end and side portions and means for adjustably connecting said overlapping portions.

3. In an adjustable grate and fire-pot, of the class described, the combination with a frame having a lid-opening and side lugs, of grate and fire-pot sections adjustably attached to the lugs of the frame and also adjustably connected together.

4. In an adjustable grate and fire-pot, of the class described, the combination with a frame adapted to fit on a stove and having lugs on its sides and suitable lid-openings, of grate and fire-pot sections comprising end and side portions adjustably connected to the lugs of said frame, and means for adjustably securing said side and end portions of said sections together.

5. In an adjustable grate and fire-pot of the class described, the combination with a frame adapted to fit on the top of a stove and having extended side lugs, of grate and fire-pot sections secured together and adjustable longitudinally and transversely, and means for attaching said sections to the lugs of the frame.

Signed at Waterbury, in the county of New Haven and State of Connecticut, this 8th day of September, A. D. 1904.

IRVING G. CHATFIELD.

Witnesses:
H. F. CAMP,
WM. H. LOWE.