

(No Model.)

J. TETTELBACH.
GRATE FOR STOVES, RANGES, &c.

No. 498,326.

Patented May 30, 1893.

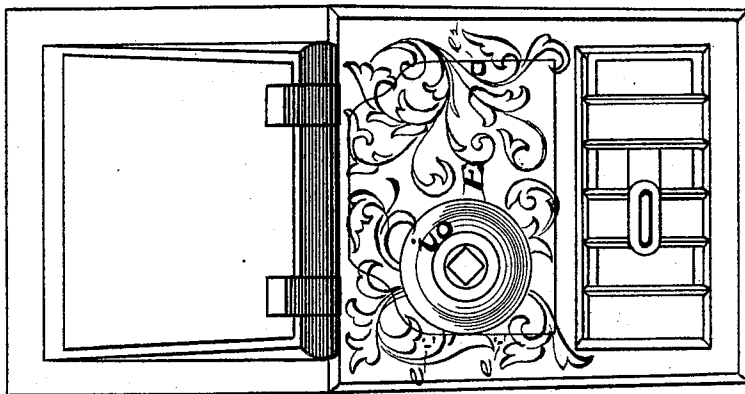


Fig. 2.

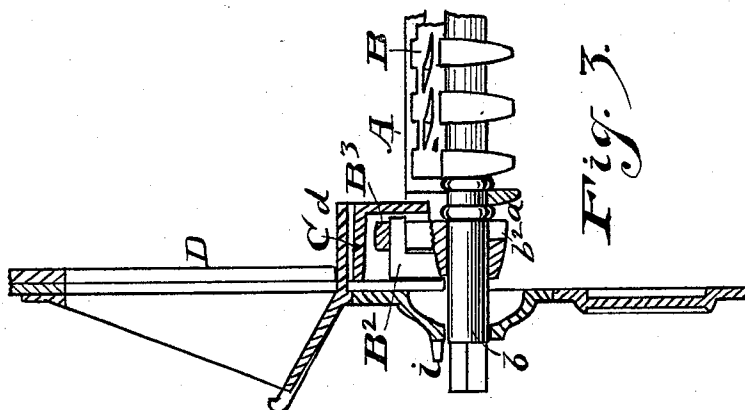


Fig. 3.



Fig. 5.

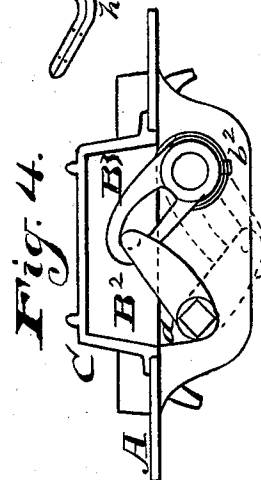


Fig. 4.

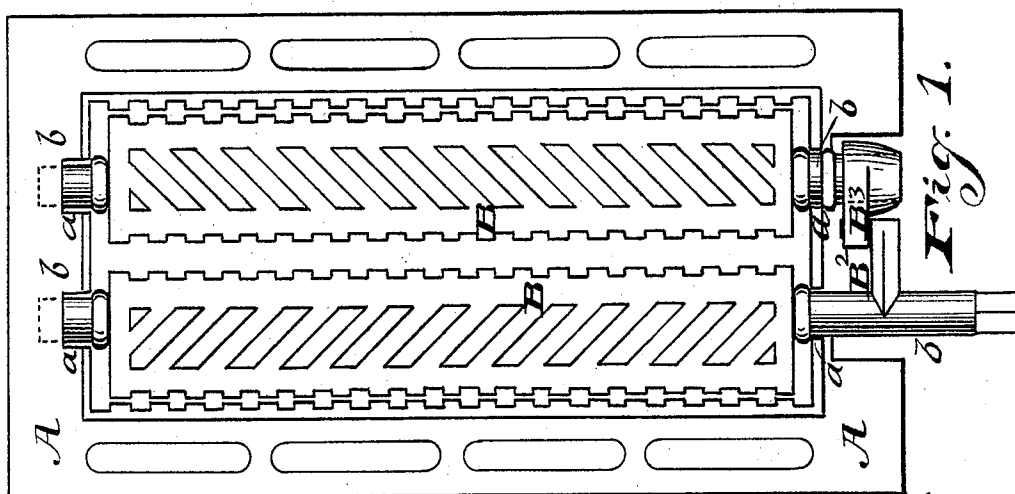


Fig. 1.

Witnesses,

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UNITED STATES PATENT OFFICE.

JOHN TETTELBACH, OF CLEVELAND, OHIO.

GRATE FOR STOVES, RANGES, &c.

SPECIFICATION forming part of Letters Patent No. 498,326, dated May 30, 1893.

Application filed February 10, 1893. Serial No. 461,833. (No model.)

To all whom it may concern:

Be it known that I, JOHN TETTELBACH, a citizen of the United States, and a resident of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Grates for Stoves, Ranges, or Furnaces, of which the following is a specification.

This invention relates to grates for stoves, ranges or furnaces, and has for its object to provide a grate composed of parts so constructed, combined and arranged that the same may be readily removed and replaced, for repairs or otherwise, without removing any other part of the stove, range or furnace except a removable plate in the front plate of the stove, range or furnace, provided for that purpose. The several parts of the grate can be inserted or removed through such opening, and when in place are secured therein by the said plate, which plate is fastened in its place by a single bolt, resulting in great economy of cost, time and labor.

In the accompanying drawings:—Figure 1 is a top or plan view of my new grate. Fig. 2 is a front elevation of range front plate. Fig. 3 is a vertical section of same showing the crank shaking mechanism. Fig. 4 is a front end elevation of the cranks and their covering. Fig. 5 is a shaker handle.

A represents a frame for supporting all the working parts of the grate which sets on suitable ledges or lugs provided for the purpose in the body or frame-work of a stove, range or furnace not shown. In the ends of said frame are provided the bearings *a, a*, for the grate-bars.

B B are parallel grate bars provided with journals *b, b*, at each end. The journal of one of the bars at the front end is prolonged and projects through the front plate of the stove or range, and upon which a shaking-handle or lever may be applied. Said journal also has a crank arm *B²*. On the journal of the other grate bar is placed a slotted crank arm *B³*, and the crank *B²* has a pin *b²*, engaging in the slot of the crank *B³*. An open space is provided in the front end of frame *A* for the play of the cranks.

C is a cap or cover placed over the cranks, and resting on the edges of the open space in

the frame *A*, and it incases the cranks for protecting them from ashes or otherwise.

D is a lining frame to the front plate of the stove or range and has a flange *d* which sets over the said cover *C*.

An opening in the front plate of the stove or range is covered by a removable plate *E*, which is secured in place by lugs *e, e*, at one side, and by one bolt *e²* at the other side. This opening is designed for enabling the grate bars and their attachments to be removed or replaced. The plate *E* has a half spherical projection *F* through which the end of the journal of the grate bar protrudes, which the handle or lever is applied. By means of these crank arms the grate bars are jointly shaken or dumped by the use of a handle *H*, Fig. 5, the handle being so constructed that one end is used for shaking the grates, and the other for dumping. The corner *h*, at one end of the handle being sharp, strikes against a pin *i*, on the front plate, and thus limits the movements of the handle lever, so that it can only shake the grates. The corner *h²* on the other end of the handle is rounded off so as to escape the said pin *i*, and allows the handle to move farther over in order to dump the grates, the crank being turned to the lower position shown by dotted lines in Fig. 4.

To remove the parts of the grate, the plate *E* is first removed by taking out the bolt. Then the cover *C* is taken out. Then the grate bar having the fixed crank *B²* may be withdrawn; next the slotted crank *B³* can be taken off, as it is loosely attached. Then the other grate bar can be withdrawn. These parts or new ones may be replaced in the reverse order.

Having described my invention, I claim—

In a grate for stoves, ranges or furnaces the frame *A* having the bearings *a, a*, grate bars *B, B*, having journals *b, b*, fixed crank *B²* on one bar, loose slotted crank *B³* on the other bar, removable cap *C*, and the removable plate *E* in combination substantially as and for the purpose set forth.

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Witnesses:

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