

G. WELLHOUSE.

GRATE.

No. 170,612.

Patented Nov. 30, 1875.

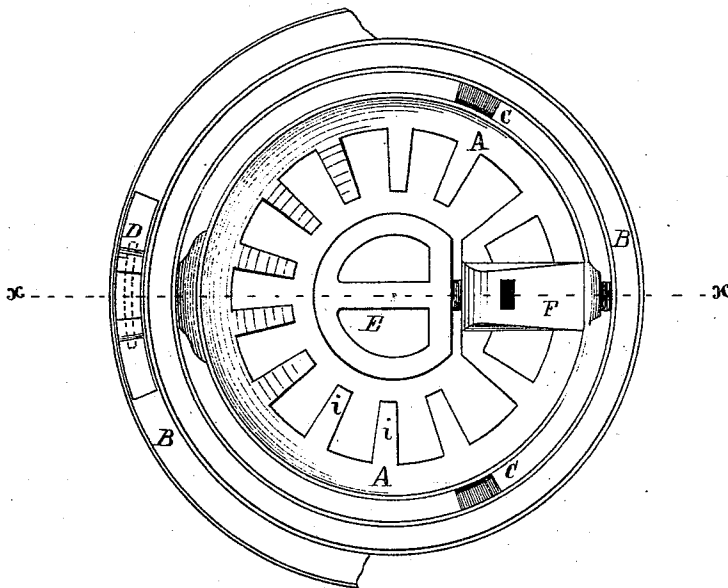


Fig. 1.

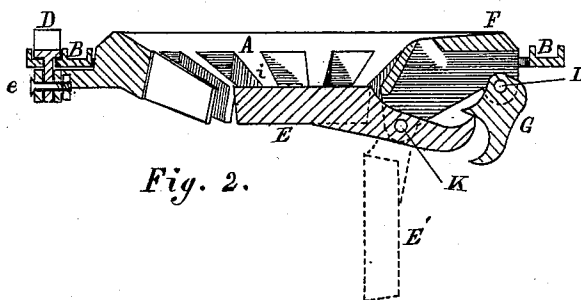


Fig. 2.

Witnesses:

John H. Campbell
J. A. Kohler

Inventor:

George Wellhouse
by Humphrey & Stuart
his Atty.

UNITED STATES PATENT OFFICE.

GEORGE WELLHOUSE, OF AKRON, OHIO.

IMPROVEMENT IN GRATES.

Specification forming part of Letters Patent No. **170,612**, dated November 30, 1875; application filed November 9, 1875.

To all whom it may concern:

Be it known that I, GEORGE WELLHOUSE, of the city of Akron, county of Summit and State of Ohio, have invented an Improvement in Stove-Grates, of which the following is a specification:

My invention relates to that class of grates used in coal-burning heating-stoves; and my object is to construct a shaking-grate provided with a means of removing clinkers, slate, and other unconsumed substances, without dumping the grate or disturbing the fire. I accomplish this by constructing the grate with an opening at or near the center large enough for the removal of clinkers, &c., and providing this opening with a door opening downward, which, when closed, shall form a part of the grate, and released or held in place by a self-acting latch.

In the accompanying drawing, Figure 1 is a plan of a grate embodying my invention and the supporting stove-plate, and Fig. 2 a cross-section of the same at the line *x x*.

A is the grate, consisting of an outer rim and short bars *i i*, projecting inward. This grate rests, at two points within the plate B, upon the lugs C C, which project from the bottom of the plate B, under the rim of the grate A. From the front of the grate an arm extends under the plate, through which is a mortise, and a tenon from the bottom of the shaking-plate D enters this mortise, and is held in place by a bolt, *e*, thus furnishing the third support for the grate. The tenon of the plate D moves in a curved slot in the plate B, (in-

dicated by dotted lines at D,) thus permitting a shaking motion to the grate. The grate A is made concave, to cause clinker, &c., to descend to the center thereof. Within the opening between the ends of the bars *i i* is a door, E, of the shape shown. From the back of this door an arm extends into a recess in the grate at F, and, by means of a pin, forms a hinge for the door at the point K, and the end of this arm rests upon the shoulder of the catch G. This catch G swings upon a pivot, L, and is so arranged as to swing forward when free, and engage the extremity of the arm of the door E.

By pressing back the catch G with the poker the door falls down, as indicated by dotted lines at E', leaving free the opening in the grate, through which the clinkers, &c., are removed by a hooked poker. The door being swung upward is again caught by the catch G and held in place.

Having thus described my invention, I claim—

The combination, in a stove-grate, of a rim adapted to rotate for shaking out the ashes, and having inwardly-projecting arms *i* and recess F, with the drop-plate B, pivoted in said recess, and having a rearwardly-projecting arm, and the pivoted gravitating-catch G, substantially as shown and described, for the object herein set forth.

GEORGE WELLHOUSE.

Witnesses:

C. P. HUMPHREY,
E. W. STUART.