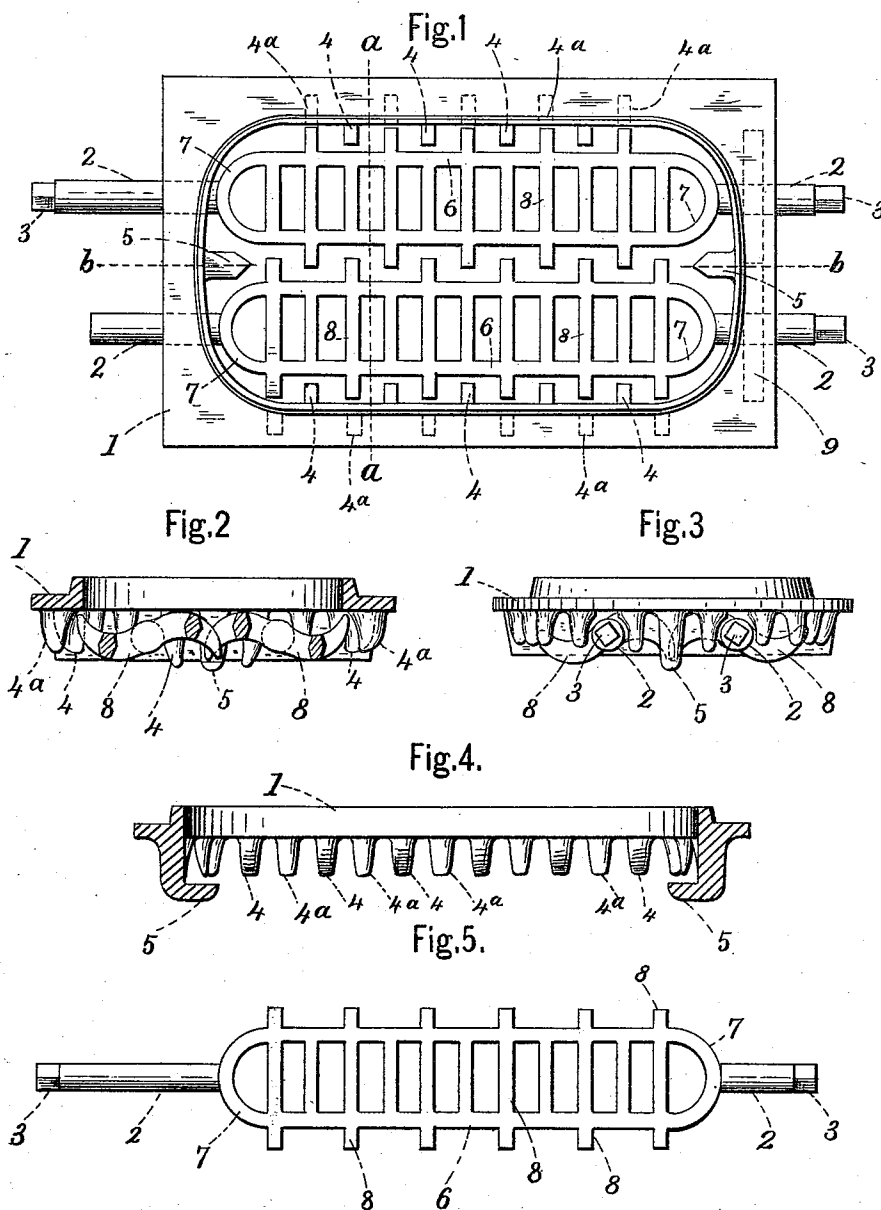


(No Model.)

F. WILL.
STOVE GRATE.

No. 508,458.

Patented Nov. 14, 1893.



Witnesses.

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UNITED STATES PATENT OFFICE.

FREDERICK WILL, OF ROCHESTER, NEW YORK.

STOVE-GRATE.

SPECIFICATION forming part of Letters Patent No. 508,458, dated November 14, 1893.

Application filed February 24, 1893. Serial No. 463,524. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK WILL, a citizen of the United States, residing in Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Stove-Grates, of which the following is a specification.

My invention relates to certain improvements in duplex rocking grates for stoves and will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a plan or top view of the grate complete. Fig. 2 is a cross section through the grate in or about line *a a*, Fig. 1. Fig. 3 represents an end view of the grate. Fig. 4 is a longitudinal central section through the grate in or about line *b, b*, Fig. 1. Fig. 5 is a detached top view of one of the rocking grates.

The supporting frame 1, of the grate is generally formed in one piece and is constructed with openings in which the shafts or bearings, 2, of the grate are fitted. One or more of the shafts, 2, are provided with a square head, 3, to receive a wrench for turning them. The supporting frame is also provided with a double series of downward projecting grate bars 4 and 4^a, the bars 4, inclining slightly forward and the bars 4^a, inclining back, see Figs. 1 and 4, where this construction is shown, the bars, 4^a, being shown in dotted lines. The supporting frame piece is also provided at each end with a central grate bar, 5, which projects downward and then horizontally forward toward each other (see Fig. 4). The object of these bars, 5, is to fill in the space between the rounded ends of the movable grate bars at the center of the supporting frame. The other sides of the rotatable bars are protected by the rounded opening in the supporting frame. The rotatable grate bars are constructed with a longitudinal frame portion, 6, having semicircular ends, 7, each being provided with a shaft bearing piece, 2, adapted to fit and turn in bearings in the supporting frame. This frame, 6, is provided with a series of substantially S-shaped transverse bars, 8, having their ends projecting downward where they pass each other in the center. The opposite ends being reversed project upward. The object of this construction is to allow the end of the S-shaped transverse bars to curve downward where they pass each other

at the center of the grate so that as the two rotatable grate bars are being turned, the ashes and cinders are taken from the outer sides and gathered together from each side and thrown downward from the longitudinal center of the grate frame, 1.

The rotatable bars are all cast or formed in one piece and are used in pairs, mounted so as to turn in the supporting frame, as in Fig. 1, and may be geared together in any well known way by two gear wheels 9, substantially as shown in dotted lines in Fig. 1. This construction enables me to use the grate in a stove having a fire box with rounded ends which is an important feature in this kind of grates.

I claim as my invention—

1. In a stove grate two rotatable grates each consisting of two longitudinal parallel bars connected together by a series of transverse bars and a semicircular bar at each end provided with shafts upon which they may rotate, each having a series of short outwardly projecting bars on opposite sides of the longitudinal parallel bars, in combination with a frame in which they are mounted so as to be rotatable, the frame having two downward and forward projecting finger bars located in the center between the semicircular ends of the two rotatable grate bars, and having a surrounding series of downwardly projecting grate bars, substantially as described.

2. In a stove grate, the combination of two rotatable grate bars, each consisting of two longitudinal parallel bars united at the ends in the form of a semicircle provided with shafts on which they turn, and connected together transversely by a series of S shaped bars, the ends of which incline downward in the center where they pass each other while being rotated, a surrounding frame having an oblong opening with rounded ends, a series of downward and forward inclined bars surrounding said opening in which the rotatable grates are mounted and operate, a finger bar projecting downward and inward from the center of the ends of the frame and between the rounded ends of the rotatable bars, substantially as described.

FREDERICK WILL.

Witnesses:

GEORGE KOCH,
WM. M. STEWART.