

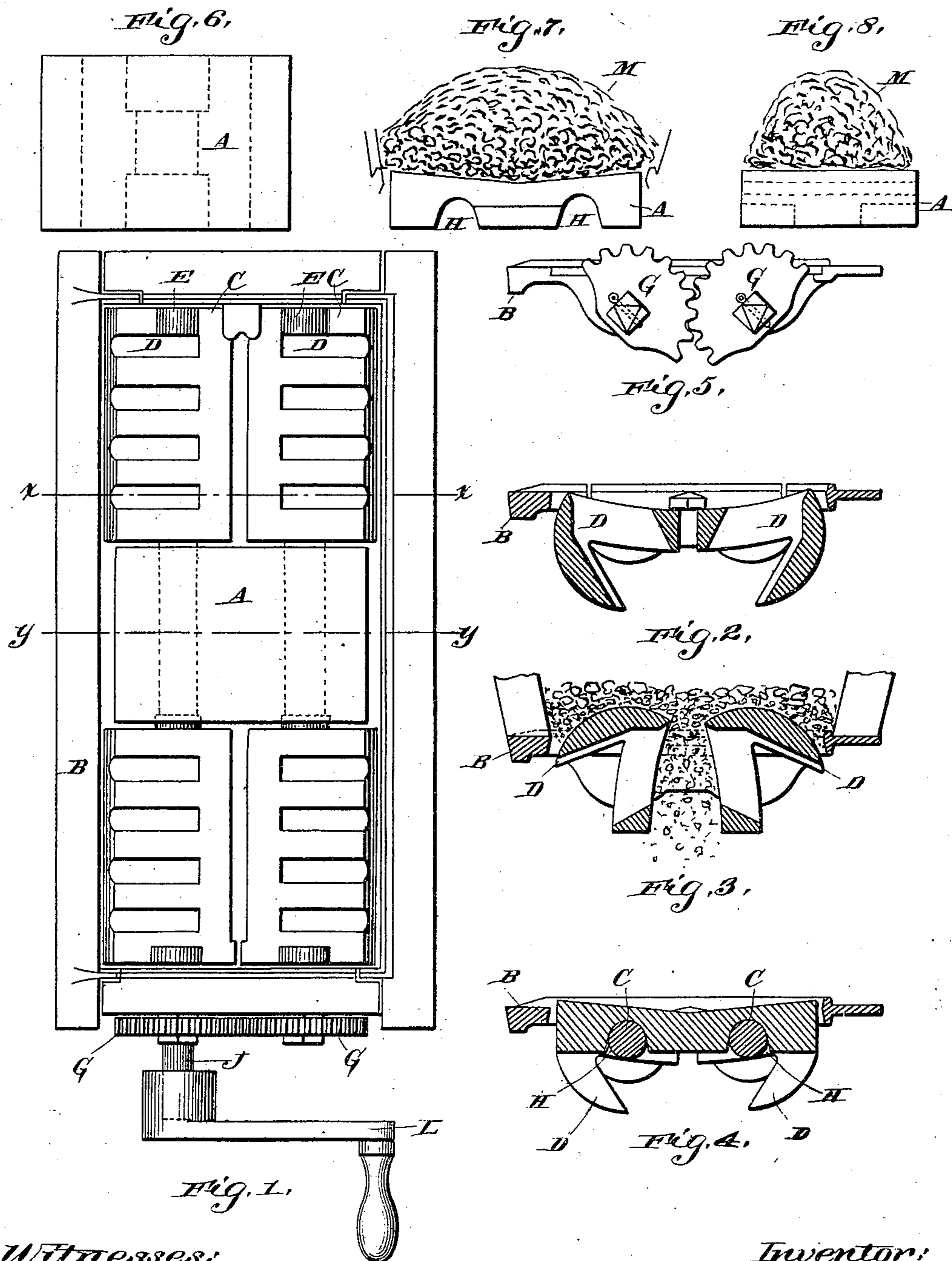
No. 725,757.

PATENTED APR. 21, 1903.

B. McCAUGHEY.
GRATE.

APPLICATION FILED JULY 19, 1902.

NO MODEL.



Witnesses:

Roscoe W. Dexter.
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Inventor:

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UNITED STATES PATENT OFFICE.

BERNARD McCAUGHEY, OF PAWTUCKET, RHODE ISLAND.

GRATE.

SPECIFICATION forming part of Letters Patent No. 725,757, dated April 21, 1903.

Application filed July 19, 1902. Serial No. 116,296. (No model.)

To all whom it may concern:

Be it known that I, BERNARD McCAUGHEY, a citizen of the United States of America, and a resident of Pawtucket, county of Providence, in the State of Rhode Island, have invented certain new and useful Improvements in Grates, of which the following is a specification.

My invention relates to improvements in grates for cooking-stoves; and the objects of my invention are as follows: first, preservation of grate; second, prevention of warping of center of top of stove directly over fire; third, to make fire burn in two circles; fourth, to make a more even distribution of heat in the oven. I accomplish these objects by the means illustrated in the accompanying drawings, in which—

Figure 1 is a top view of a grate and frame complete. Fig. 2 is a vertical cross-section on the line *xx*. (See Fig. 1.) Fig. 3 is a vertical cross-section showing grate-bars depressed; Fig. 4, a vertical cross-section on the line *yy*. (See Fig. 1.) Fig. 5 is an end view of grate-bars. Fig. 6 is a cross-sectional end view in detail of grate-bars and central section on line *xx*. Figs. 7 and 8 are views in side elevation and end elevation, respectively, of the central imperforate section.

Similar letters refer to similar parts throughout the several views.

In the drawings, B designates a metal frame, preferably integral and provided with journal-boxes E E, in which rest and revolve the journals C C. Upon these journals C C, at both ends thereof, are securely mounted two grate-bars. Each grate-bar comprises two end sections and a bar connecting each of said sections, the said sections being provided with suitable journals, and these grate-bars are agitated or revolved by means of the motion imparted to the series of two gears G G, mounted upon and secured to the ends of the said journals C C and engaging with one another by means of the crank-shaft L.

A designates a metal plate the upper surface of which conforms to the upper surface

of the several grate-bars. This metal plate is preferably made in one section and provided with recesses H H, conforming in outline to the shape of the journals C C, said recesses being designed to allow said plate to fit over and rest loosely upon the connecting-bars between the end sections of the grate in the space in the center of said grate-frame not occupied by the grate-bars. This metal plate is made of sufficient weight to retain its position, but rests loosely upon said shafts in order that it may not be affected by any rotary motion of the said grate-shafts. The integral construction of this central plate is preferable, but not necessary, as the frame might be constructed in two sections, an upper and lower, and connected by bolts. This metal plate is made preferably imperforate and flat and is arranged transversely with respect to the grate and is supported by the bars which connect the end sections of the grate-bars. The purpose of this central section is to provide a support beneath the center of the top of the stove, on which ashes M could collect or be placed, as shown in Fig. 7, thus providing grate-spaces upon either side of the center A, upon each of which a fire can be made, and this central section is made immovable, so that it will not be necessary to provide a new bed of ashes on each occasion of building a fire.

What I claim, and desire to secure by Letters Patent, is—

In a grate, the combination of a grate-frame, grate-bars journaled therein, each bar comprising two grated end sections, and a connecting-bar for said sections, and an imperforate flat plate arranged transversely to the grate-bars and supported by said connecting-bars, substantially as set forth.

Signed at Pawtucket this 11th day of July, 1902.

BERNARD McCAUGHEY.

Witnesses:

THOS. KNOWLES,
EDWARD W. BLODGETT.