

(No Model.)

F. E. AVERY.
Oven Grate or Shelf.

No. 231,141.

Patented Aug. 17, 1880.

Fig. 1.

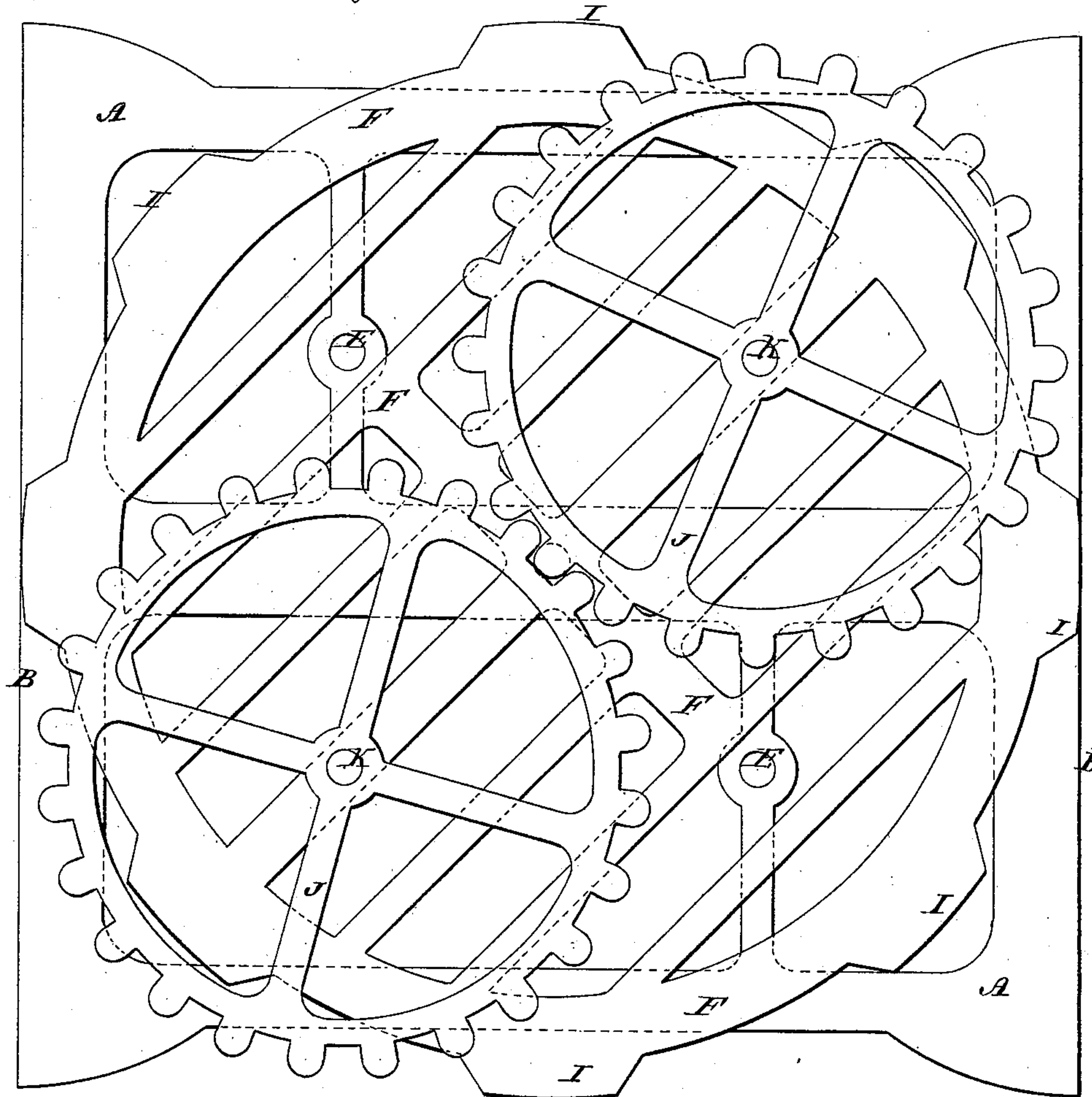
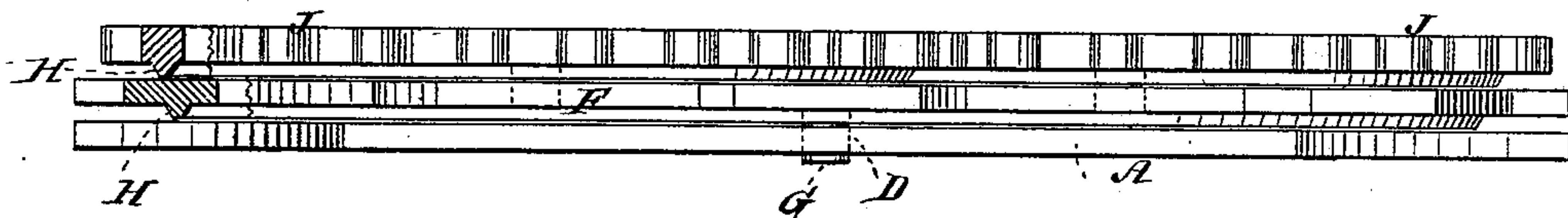


Fig. 2.



Witnesses:

Jno. E. Garvin

Chas. M. Higgins

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Atty.

UNITED STATES PATENT OFFICE.

FRANCES E. AVERY, OF METUCHEN, NEW JERSEY.

OVEN GRATE OR SHELF.

SPECIFICATION forming part of Letters Patent No. 231,141, dated August 17, 1880.

Application filed March 12, 1880. (No model.)

To all whom it may concern:

Be it known that I, FRANCES E. AVERY, of Metuchen, Middlesex county, New Jersey, have invented certain new and useful Improvements in Oven Grates or Shelves, of which the following is a specification.

My invention relates to that class of oven grates or shelves which are formed with a rotating plate or rest, on which the baking-pan is supported, and whereby it may be turned in a convenient and effective manner within the oven, so as to present its different sides successively to the hottest part of the oven, and thus insure more uniform and thorough baking.

Heretofore such grates or shelves have been formed with but a single rotating plate pivoted at the center of the oven, or thereabout, so that the pan may be turned bodily around the oven, but not on its own axis, unless the pan be placed centrally over the axis of the plate.

My invention therefore consists in forming an oven grate or shelf with two or more rotating plates of relatively small size, each pivoted at different parts of the oven, or its grate, and geared or operatively connected together, and also preferably mounted on a third and large rotating plate, which is, in turn, pivoted at the center of the oven or thereabout, so that the pans may be turned on their own axis or moved bodily from the center of the oven, and so that several pans in different parts of the oven may be turned on their own axis by manipulating one of the geared plates from one side of the oven, as hereinafter set forth.

Figure 1 in the accompanying drawings is a plan or top view of one form of my invention applied to a shelf adapted to be put in the baking-oven of an ordinary stove or range, and Fig. 2 is a front elevation of the same with a part in section.

A is the oven-shelf, consisting of a metal plate or skeleton-frame adapted to rest on the bottom of an oven, or to rest by its edges B on the cleats or brackets of the sides of the oven. At the center it has a pivot-hole, D, (shown in dotted lines,) and at other points, E, it has other pivot-holes.

F is a large circular adjusting skeleton-plate or pan-rest having its pivot G firmly

attached to its center and projecting from the under side, so as to enter pivot-hole D, for the support of said plate in a manner to allow it to be shifted about, as above stated. Near the center, and also near the outer edge, the said plate has a little rib, H, on the under side, for guide-bearings upon the shelf below, and upon the periphery it has lugs or projections I by which to push with the fingers or other object to shift it about.

J represents a couple of smaller adjusting-plates or pan-rests, similarly mounted by pivots K upon the upper side of large plate F, to be carried around on it if desired, and also to turn on their own axis, and they are geared together by teeth formed on their faces for turning one by the other in case it may be desired to do so. These smaller plates may be applied directly to the shelf A without the large plate F, if desired. They are also provided with guide-ribs H, similar to those on the large plate, for guide-bearings upon the plate below.

To apply these shifting plates or pan-rests directly to the bottom of the oven without the shelf or plate A needs only that little sockets be made in said bottom for the pivots D or E, or if plate A be made the bottom of the oven it will be a continuous or solid plate without the openings here shown, which are to lighten it and economize metal.

What I claim as my invention is—

1. An oven grate or shelf formed with two or more adjustable rotary pan-rests or plates pivoted at different points in the oven or its grate, and geared together, whereby both plates may be rotated by turning one of them, and the two or more pans turned on their axes within the oven, substantially as herein set forth.

2. An oven grate or shelf formed with a large rotary plate or pan-rest pivoted at the center of the oven, or thereabout, in combination with two or more smaller rotary plates or pan-rests mounted on said larger plate, whereby the pans may be turned bodily around in the oven or rotated on their own axes therein, substantially as herein set forth.

FRANCES E. AVERY.

Witnesses:

EDWARD H. REDFIELD,
SIMEON S. PHILLIPS.