D. McKENZIE.

Improvement in Ovens.

No. 115,626. Patented June 6, 1871.

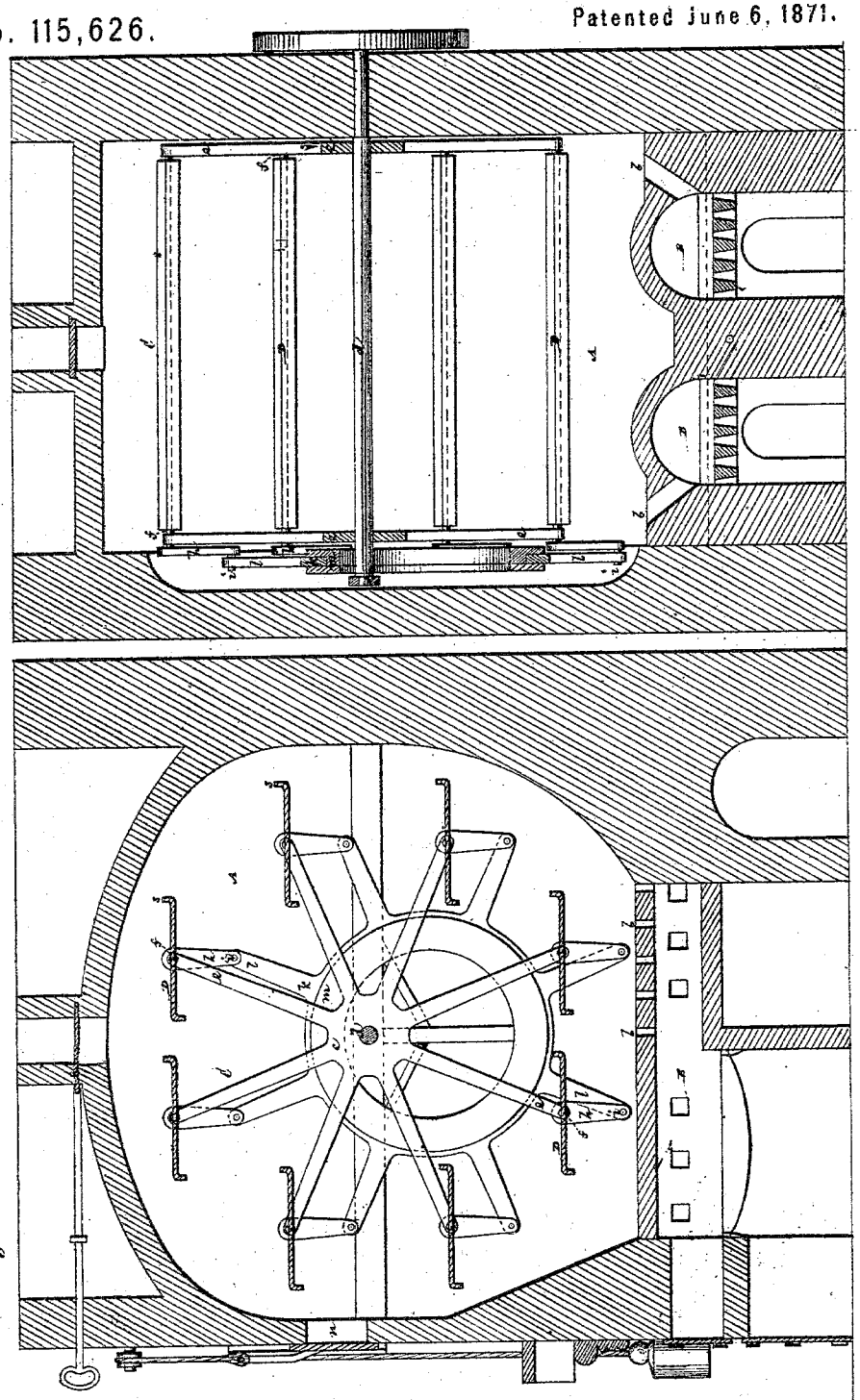


Fig. 2

Fig. 1

Witnesses.
Fred Haynes
R. E. Rodwell

Duncan McKenzie

AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

DUNCAN McKENZIE, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN OVENS.

Specification forming part of Letters Patent No. 115,626, dated June 6, 1871.

To all whom it may concern:

Be it known that I, DUNCAN McKENZIE, of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Ovens, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and in which—

Figures 1 and 2 represent sectional elevations, in planes at right angles to each other, of an oven constructed in accordance with my invention.

Similar letters of reference indicate corresponding parts in both figures.

My invention consists in the combination of an oven for baking bread or other substances, of a revolving carrier for the bread or substance to be baked, in which the shelves that carry said bread or substance are retained in a horizontal position by positive means, so that they cannot tip or swing at any time during the entire revolution of the carrier, and are at the same time disposed at suitable distances from the axis of the carrier and at proper distances apart, whereby greater facility is afforded for putting on and taking off the bread or substance, and less liability of the latter falling off the shelves than when the swinging shelves or holders hitherto employed are used. Said revolving carrier, with its positively-held shelves, is preferably arranged within a furnace or furnaces so constructed that the gaseous products of combustion pass into or through the chamber within which the carrier revolves.

In the accompanying drawing, in which the oven there represented will be described as applied to the baking of bread, A represents the baking-chamber or oven, preferably heated by a furnace or furnaces, B B, the gaseous products of combustion from which, after the fires have been fairly lit and the smoke allowed to escape by a direct draft, are passed by a system of flues, *b b*, in a direct manner through the bottom of the oven into and through the chamber in which the bread-carrier C is arranged; or said oven may be otherwise heated. The carrier C consists of two or more parallel disks, frames, or wheels, *c c*, secured at suitable distances apart to a revolving cross-shaft, *d*, and which may be made up of radial arms *e e* to form bearings at or near their outer ends for the pivots *f f* of the shelves D D that occupy a parallel relation to the shaft *d*. Fast to the pivots *f f*, at one or both ends of the carrier, are links or cranks *h h*, connected by wrist-pins *i i* to a ring-plate or frame, *k*, as by arms *l l* projecting from the latter. This ring *k* is fitted to travel on or around a fixed circular track, *m*, arranged to occupy an eccentric position relatively with the shaft *d* and frames *c c*, so that upon the rotation of the latter, together with the eccentric ring *k*, through the connecting-cranks or links *h h*, the shelves D D are rocked and held in a positive manner to make them preserve a horizontal position throughout the rotation of the carrier, and, in thus not being free to swing or move independently on their pivots, increased facility is afforded for putting on and taking off the bread when either shelf is brought opposite a suitable opening, *n*, in the oven, and the shelves cannot tip to throw off the bread. Guards *s* may be provided on the rear edges of the shelves to prevent the bread, when putting it in the oven, from being pushed off over the shelves.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The revolving carrier C, with its one or more shelves or bread-holders, D, held by positive means to occupy horizontal positions during the rotation of the carrier, in combination with an oven or baking-chamber within which said carrier is arranged, substantially as specified.

2. The combination of the shelves or bread-holders D with the revolving end frames *c c*, the cranks *h*, the ring *k*, and the eccentric track *m*, essentially as shown and described.

Witnesses: DUNCAN McKENZIE.

FRED. HAYNES,

R. E. RABEAU.