

**GINDRE & DOERLER.**

Oven.

No. 39,042.

Patented June 30, 1863.

*Fig. 1.*

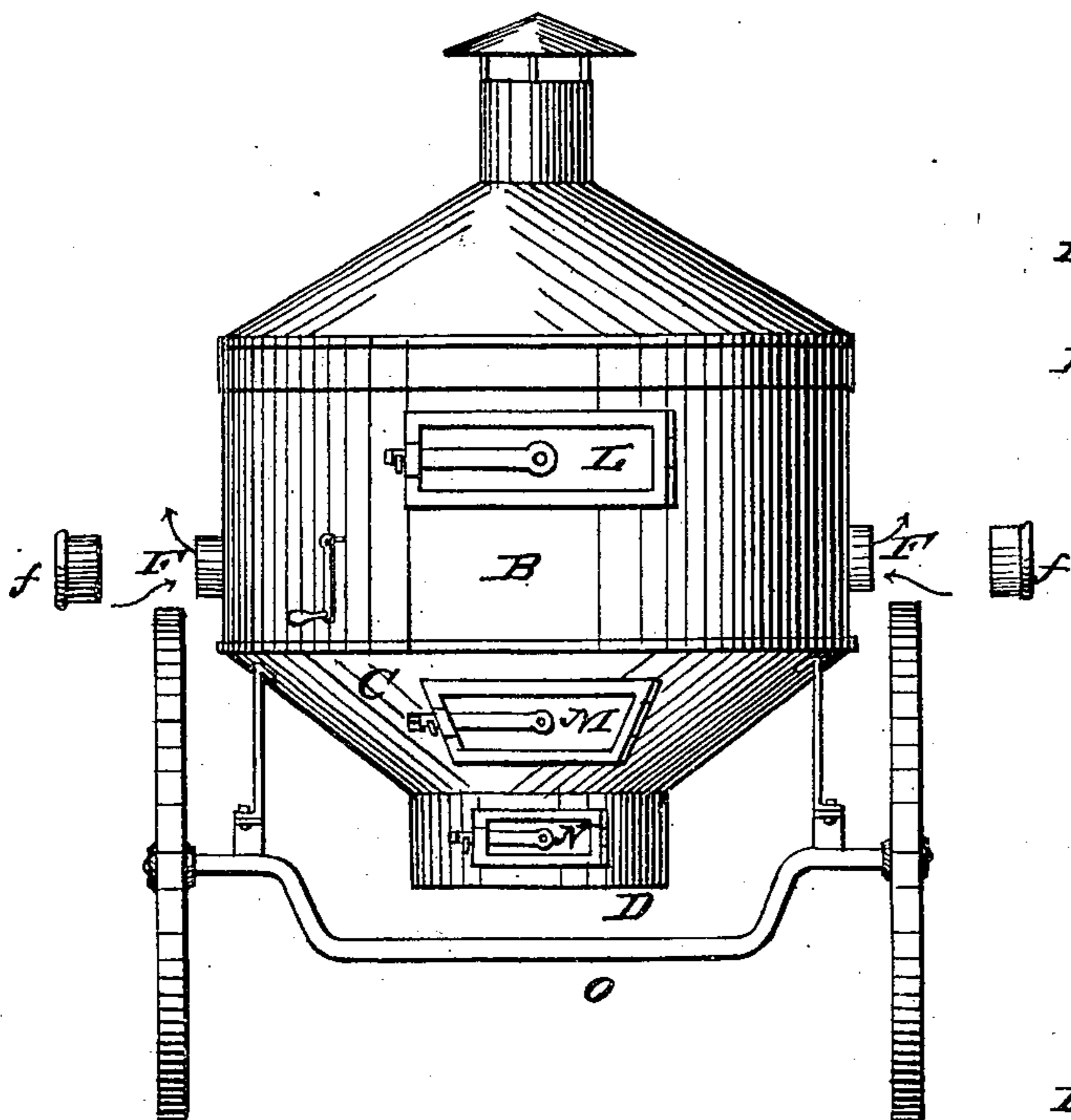


Fig. 2.

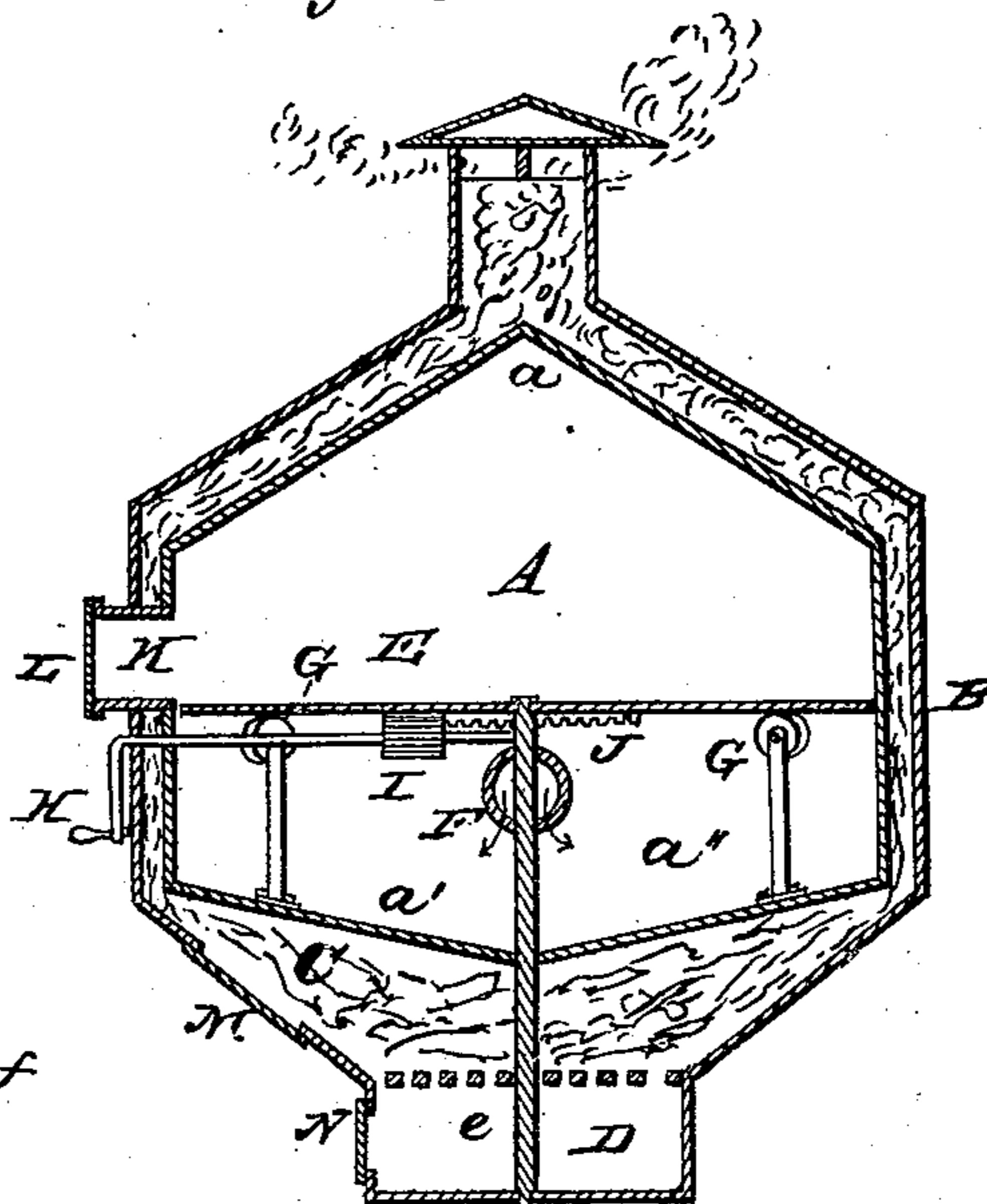
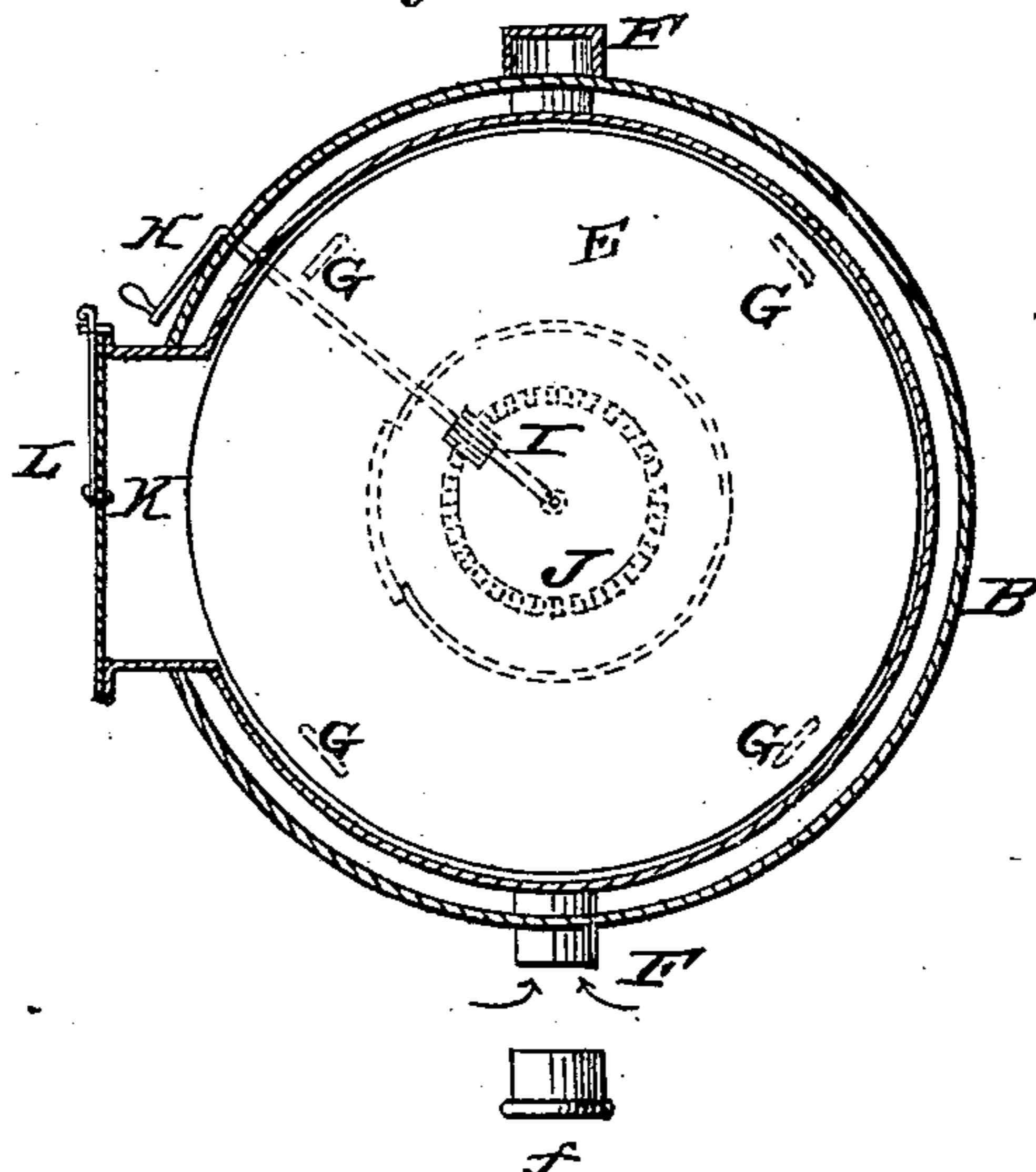


Fig. 3.



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# UNITED STATES PATENT OFFICE.

P. J. GINDRE AND JOHN DOERLER, OF CINCINNATI, OHIO.

## IMPROVEMENT IN OVENS.

Specification forming part of Letters Patent No. 39,042, dated June 30, 1863.

*To all whom it may concern:*

Be it known that we, PETER J. GINDRE and JOHN DOERLER, both of Cincinnati, Hamilton county, Ohio, have invented a new and useful Portable Bake-Oven; and we do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the annexed drawings, making part of this specification.

Our invention relates to a provision or mode of construction whereby the baking of bread and other viands in portable ovens is more easily controlled and is more equable and complete in its operation than heretofore attainable in this class of appliances.

Figure 1 is a front elevation of an oven embodying our improvements. Fig. 2 is an axial section by a plane at right angles to the above. Fig. 3 is a horizontal section taken immediately above the oven-floor.

Our oven proper, A, has the form of a short vertical cylinder whose top or crown *a* is elevated toward the middle and whose bottom *a'* is slightly depressed. The oven is secured centrally, so as to be completely enveloped within a furnace, B, of nearly similar form to the oven, but more depressed toward the middle of its bottom portion, so as to afford a fire-space, C, and ash-pit D.

The floor E, which receives the viands for baking, is a turn-table surmounting a vertical shaft, *e*, journaled coincident with the axis of the oven, and supporting the said table some distance above the bottom *a'* of the oven, so as to leave a ventilating-space, *a''*, underneath the table, which space communicates with the external air through a number of tubes, F, which we call "ventilators."

*f* are caps or registers by which the ventilators may be closed or opened, as may be found desirable.

The outer edge of the table E is supported by rollers G. The table is rotated by means of a winch, H, pinion, I, and crown-wheel, J.

K is the mouth of the oven closed by a door, L.

M N are the doors of the fire and ash places, respectively.

By turning the winch H the table is shifted, so as to enable it to be easily charged with a batch of bread or other viands.

The provision of regulatable ventilating-chamber *a''* enables the baker to modulate the heat of the table, and thus prevent scorching the bread. This is found to be of great service.

O is the axle of a small cart, upon which the apparatus is mounted, and by which it is supported at a height convenient for use or conveyed from place to place.

We have selected to illustrate our invention a form which actual test in camp has proved to be efficient, one of five feet external diameter being found to produce one thousand well-baked ration loaves in six hours, so that a single machine to each regiment will supply an abundance of fresh and wholesome bread at a saving of fifty per cent. to the soldier in breadstuff rations and to the Government in cost of transportation.

We claim herein as new and of our invention—

1. The arrangement of oven A, placed concentrically within and entirely enveloped by the portable furnace B, in combination with a cart or wagon, substantially as set forth.

2. A portable oven circular in its horizontal section, and having an elevated and revolving floor, E, capable of discretionary ventilation on its under side, as and for the purposes set forth.

3. In the described adaptation to a portable oven, the ventilating-chamber *a''*, interposed between the floor E and bottom *a'* of the oven proper, and having registered communications F *f* with the external air, substantially as and for the purposes set forth.

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