

W. H. TEELING.
OVENS.

No. 177,299.

Patented May 9, 1876.

Fig. 1

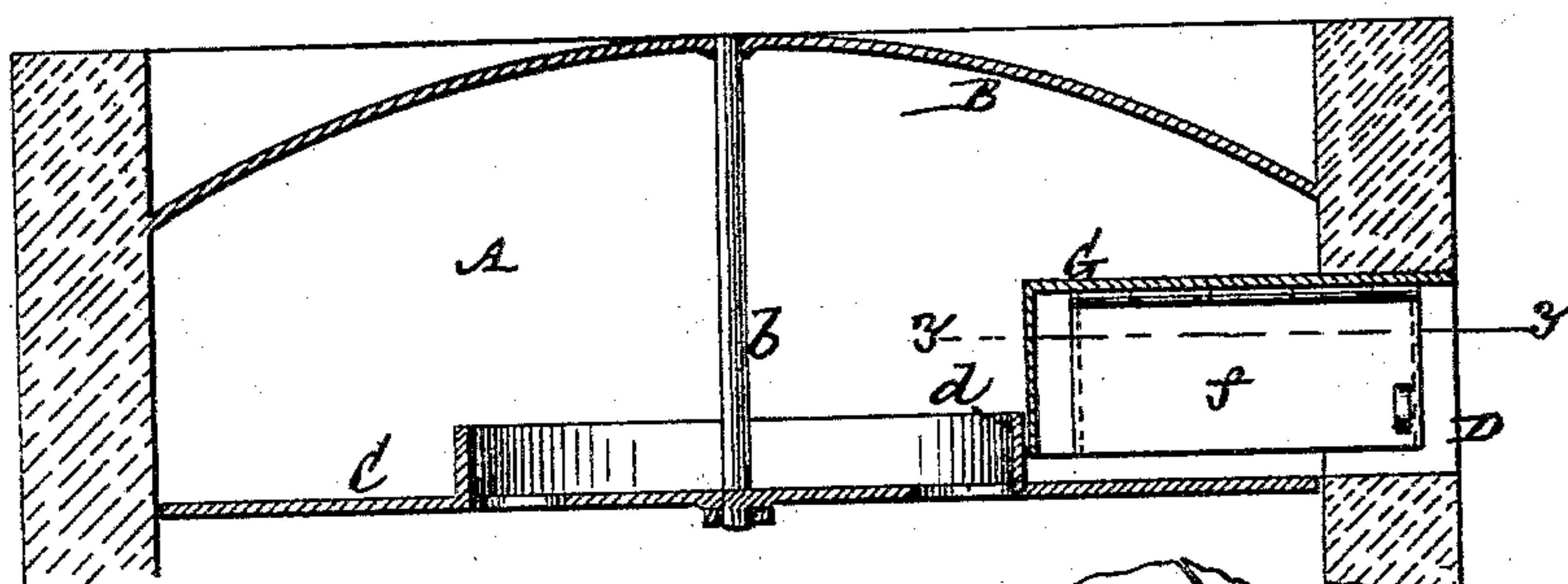


Fig. 3

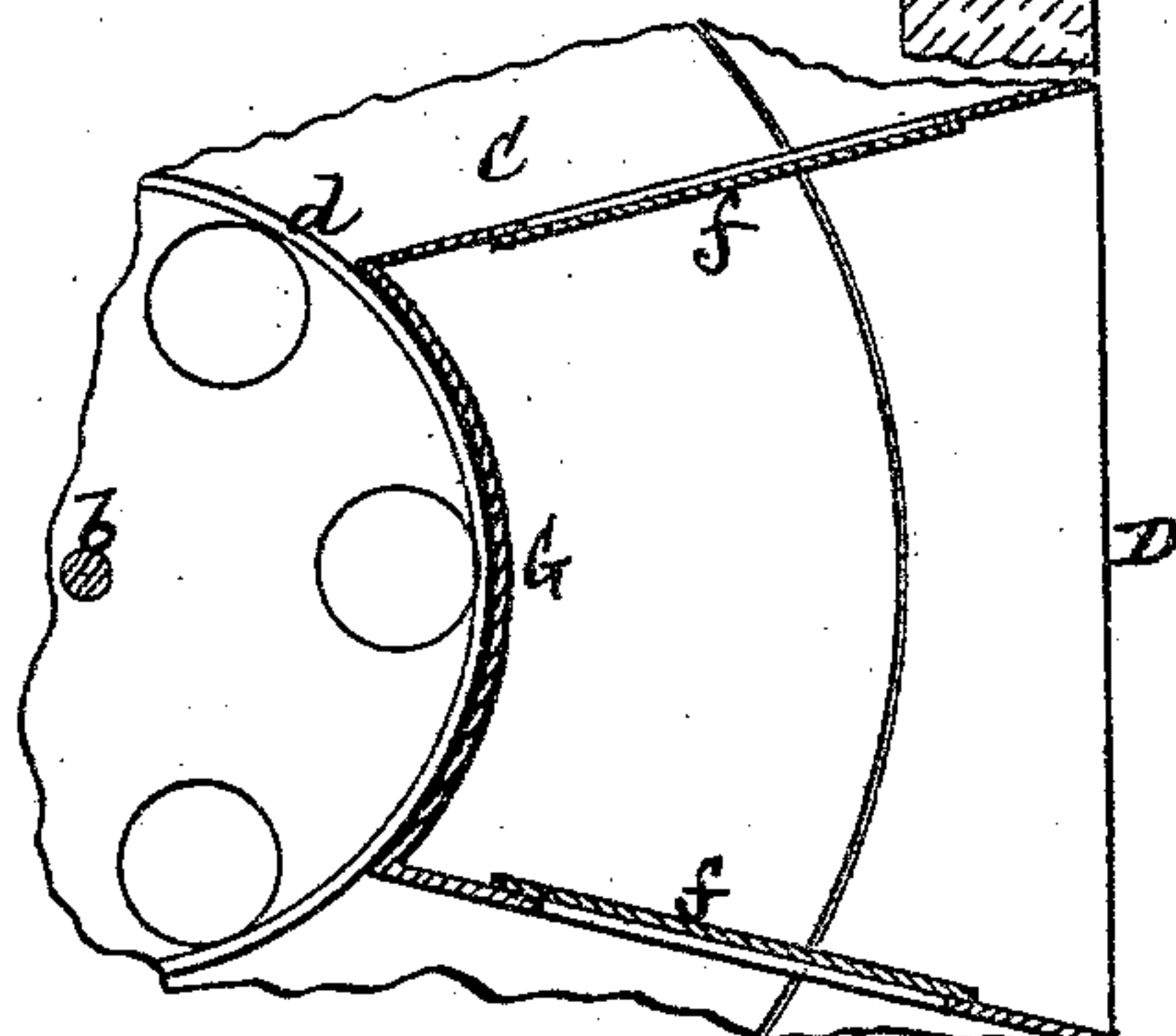
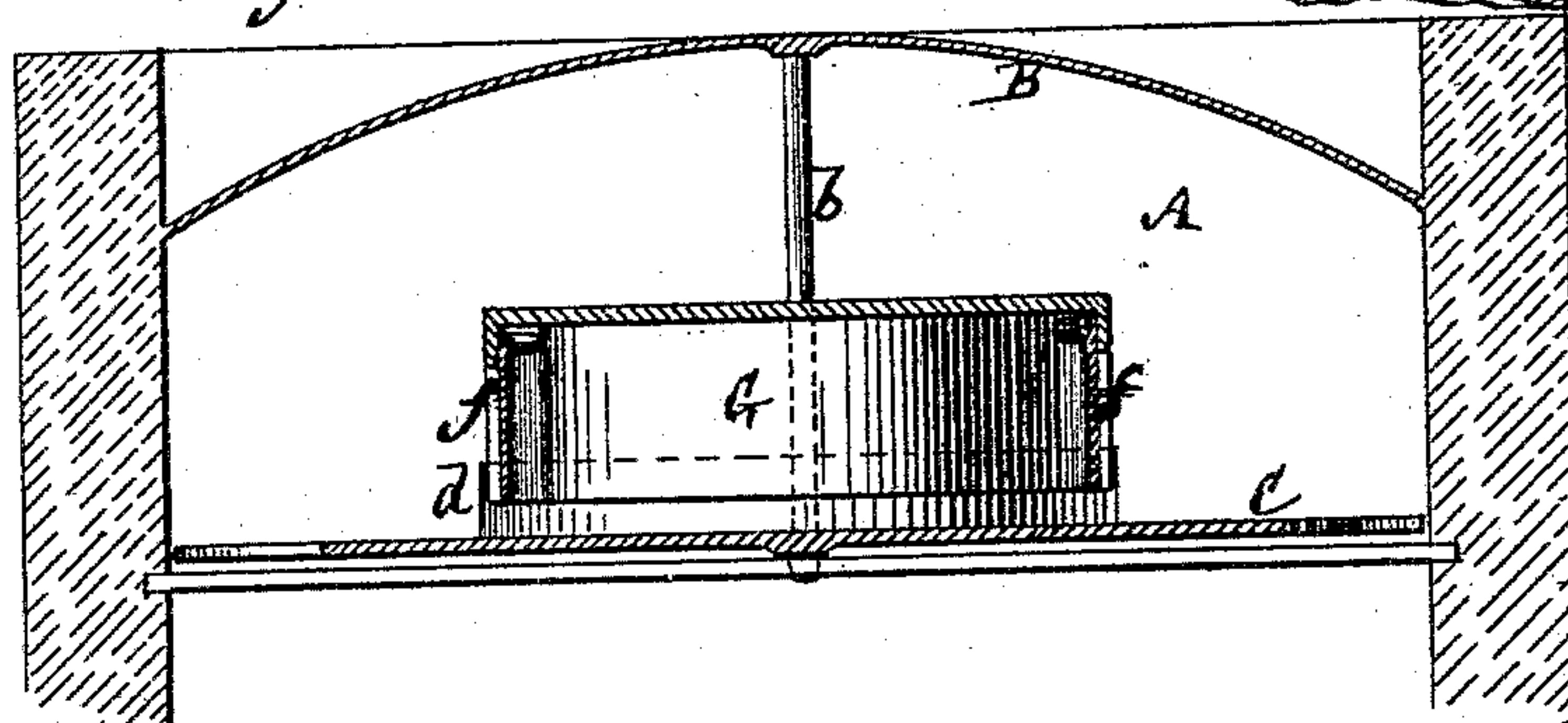


Fig. 2



Witnesses:
Michael Ryan
Fred. Haynes

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UNITED STATES PATENT OFFICE.

WILLIAM H. TEELING, OF PITTSFIELD, MASSACHUSETTS.

IMPROVEMENT IN OVENS.

Specification forming part of Letters Patent No. **177,299**, dated May 9, 1876; application filed April 24, 1876.

To all whom it may concern:

Be it known that I, WILLIAM H. TEELING, of Pittsfield, in the county of Berkshire and State of Massachusetts, have invented a new and useful Improvement in Bakers' Ovens; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, which forms part of this specification.

This invention more particularly relates to what is known as the "Vale bake-oven," in which a rotary hearth, secured to and rotating on a central shaft, and operated without the aid of gearing, is employed, said hearth being arranged beneath a crown plate or disk and over one or more grates and flues, by which heat is conveyed to the oven, and the necessary draft secured.

The invention consists in an open-bottom box or chamber extending from the door-frame of the oven to the inside band or hoop of the baking plate or hearth, but constructed so that it offers no impediment to the entry, removal, or passage under it of the crackers or articles being baked. By this attachment to the oven the operator is protected from the efflux of heated air or gases from the oven when its doors are open; cold air is excluded from entering the oven and heated air from escaping therefrom, thus adding largely to the working capacity of the oven, and greatly economizing fuel.

Figure 1 represents a sectional elevation of a Vale bake-oven, in part, having my invention applied, and Fig. 2 a further vertical section on the irregular line *xx*. Fig. 3 is a horizontal section, in part, on the line *yy*.

A is the baking-chamber of the oven, and B is its crown or upper disk.

The fire-grates, covers, flues, regulating-dampers, chimney, and ash-boxes are not shown here, as they form no part of this invention, and may be the same as in other ovens of the description referred to.

C is the rotating hearth or baking-plate secured to and rotating on a central shaft, *b*. D is the mouth of the oven, which is designed to be fitted with the usual door-frame and doors

for charging the oven with crackers to be baked, and for removing them when baked. G is a box or chamber, which may be made of sheet-iron, and extends from the door-frame or mouth D of the oven, with which it makes a close fit, back to the inside band or hoop *d* on the rotating hearth C. It is open at its bottom and in front, but is closed at its sides, top, and back, and may either have an independent roof or be made to fit nicely under the crown of the oven. The sides of said box or chamber, however, do not come in contact at their lower edges with the rotating hearth, but are raised an inch, more or less, above it, and said sides are formed by hinged flaps or doors *ff*, opening upward, whereby ample provision is made for the entry of the unbaked crackers and for their removal when baked, also for their passage under the lower edges of the sides of the box when rotating the hearth. Such construction, however, of the box or chamber G does not interfere with its acting as a shield or guard at the mouth of the oven over the hearth to prevent the efflux of heated air from the oven, or rush of cold air into it through the mouth or door-frame.

I claim—

1. The combination, with the rotating hearth C, of the open-bottom box or chamber G, arranged to extend from the mouth D of the oven over the baking-surface of the hearth on the forward side of the axis of the latter, and constructed to form a covered passage or close chamber in communication with the baking-chamber by an intervening space beneath the lower edges of its sides and the top of the hearth, substantially as specified.

2. The open-bottom box or chamber G, constructed with hinged sides or doors *ff*, in combination with the rotating hearth, and arranged in relation with the mouth D and baking-chamber A of the oven, essentially as and for the purposes herein set forth.

W. H. TEELING.

Witnesses:

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