

(No Model.)

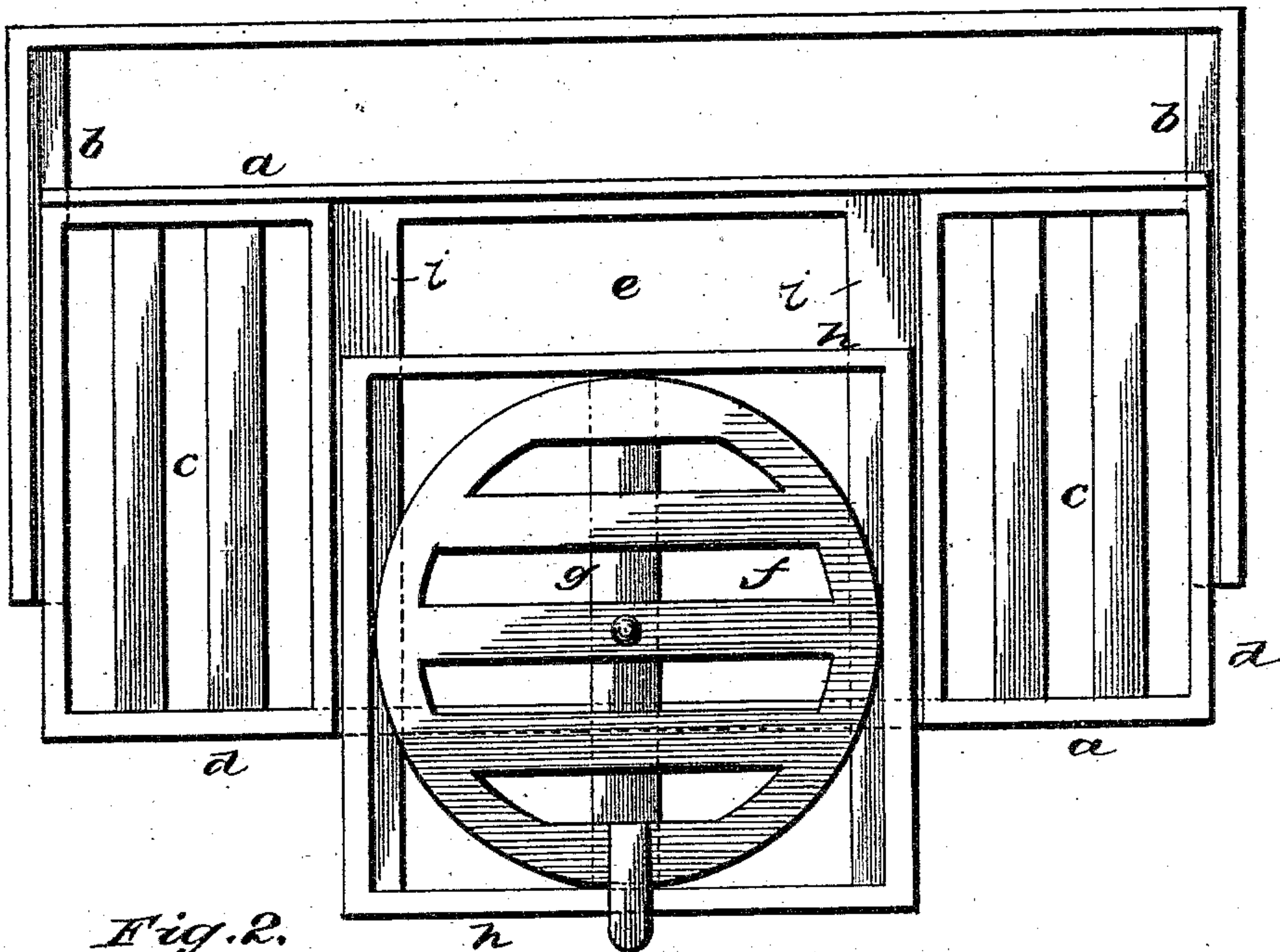
J. G. SMITH.

GRATE.

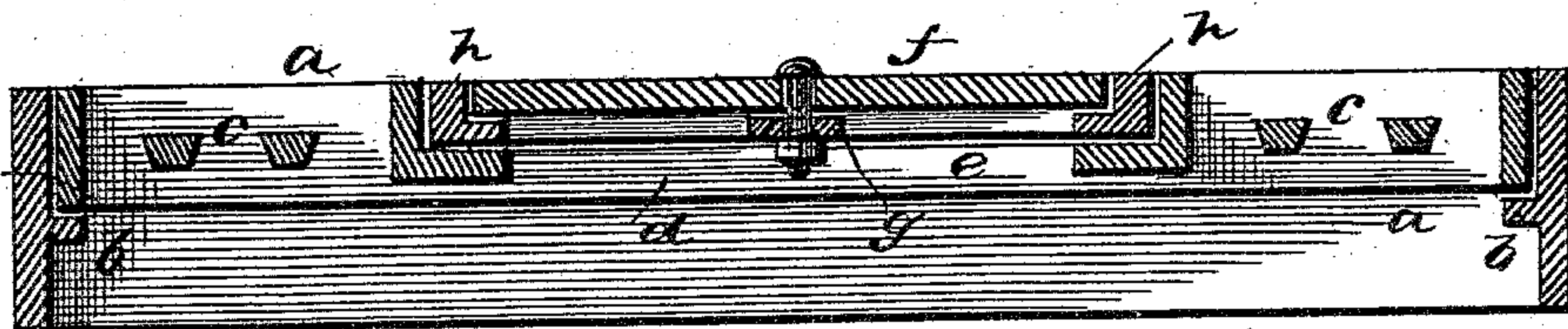
No. 295,063.

Patented Mar. 11, 1884.

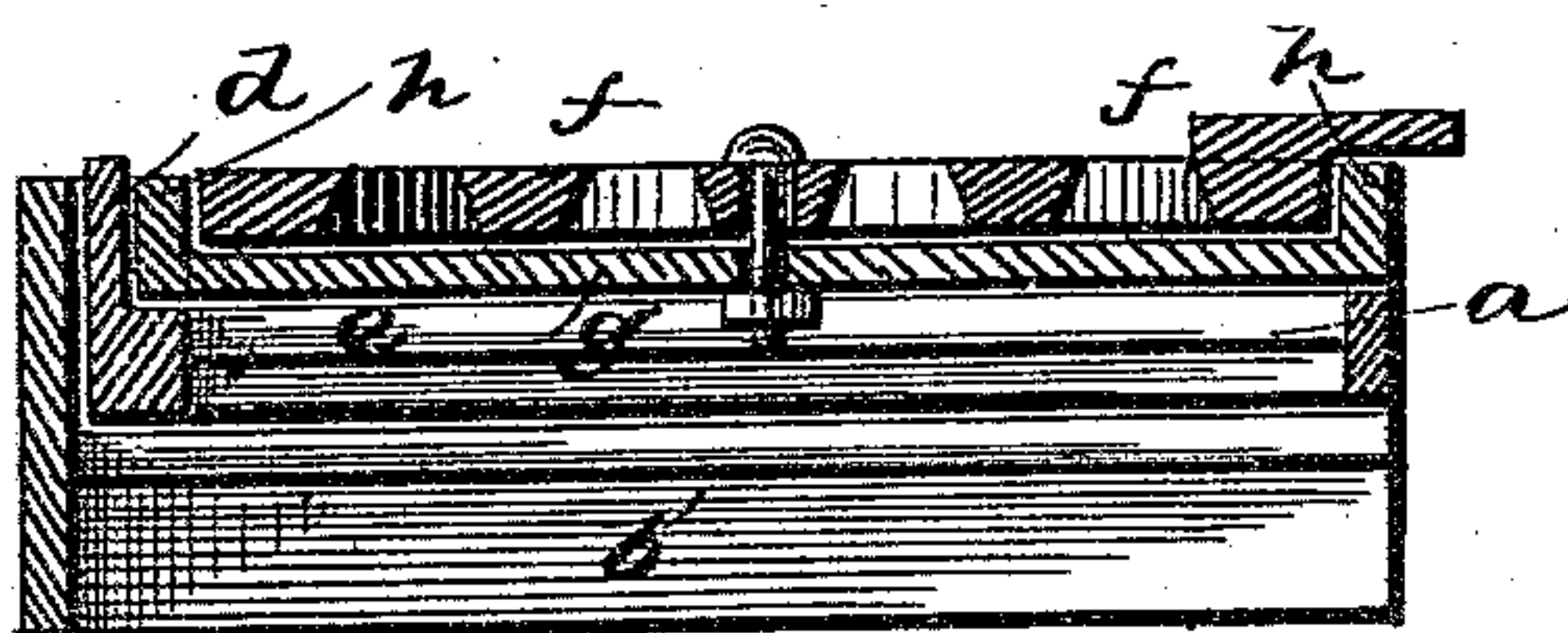
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses:  
John T. Morrow  
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Inventor:  
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by Anderson & Smith  
his Attorneys.



# UNITED STATES PATENT OFFICE.

JAMES G. SMITH, OF CLEVELAND, OHIO.

## GRATE.

SPECIFICATION forming part of Letters Patent No. 295,063, dated March 11, 1884.

Application filed August 22, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, J. G. SMITH, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Grates; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of a plan view of my improved grate. Fig. 2 is a vertical longitudinal sectional view, and Fig. 3 is a cross-section of the grate.

This invention has relation to fire-grates for stoves and fire-places; and it consists in the construction and novel arrangement of parts, as will be hereinafter fully described, and particularly pointed out in the claim appended.

Referring by letter to the accompanying drawings, *a* designates a removable sliding fire-grate for stoves or fire-places, which rests and slides upon ledges *b b* on the side of the stove or chimney, as the case may be. *c* indicates the grate-bars of the grate *a*, and *d* the grate-frame. This sliding grate *a* is provided with one or more grate-spaces, *e*, in which one or more sliding and shaking grates, *f*, are seated. The grates *f* are revolving grates, be-

ing pivoted on a cross-bar, *g*, of the sliding frame *h*, and provided with a lug or hand-piece, by which the grate may be shaken.

A grate of this construction may be quickly removed for clearing it of clinker and the like, and may be partly or wholly replaced when burned out, is easily operated, and not likely to get out of order.

The bottom grate, *a*, may be removed, carrying with it the sliding revolving grate or grates; or the revolving grates may be removed independently of the bottom grate.

I am aware that it is not new to provide a stove with a ledge to support a sliding grate, and that rotary sliding grates have been used.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with the supporting- ledges *b*, of the sliding removable grate *a*, provided with the central rectangular opening, *e*, and ledges *i i*, the central rectangular sliding frame *h*, having the cross-bar *g*, and the rotary grate *f*, pivoted to the said cross-bar, all adapted to operate in connection with a stove or fire-place, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES G. SMITH.

Witnesses:

A. A. GILES,  
T. D. PECK.