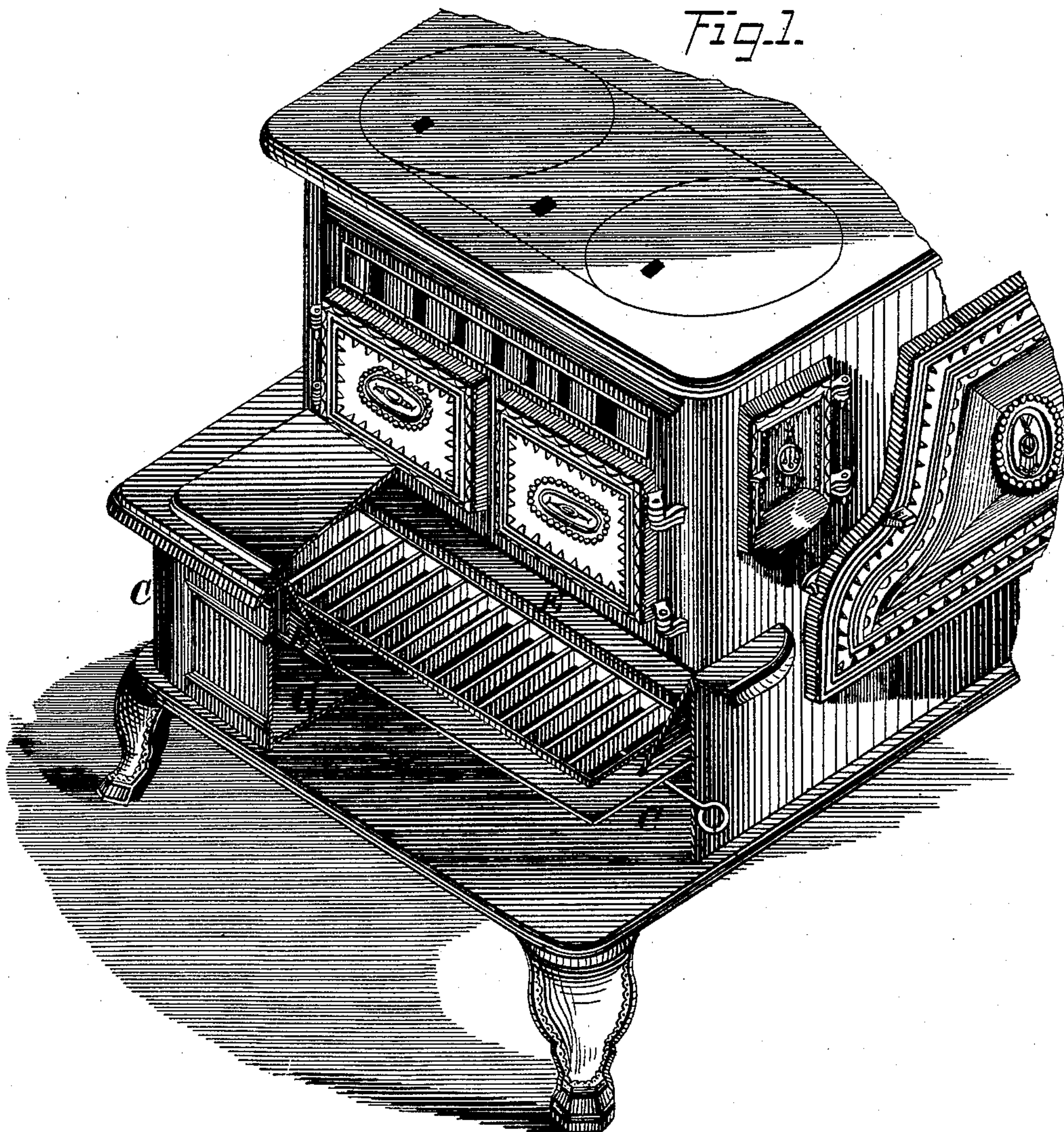


A. C. CORSE.

ASH-SIFTING ATTACHMENT FOR STOVES.

No. 170,821.

Patented Dec. 7, 1875.



WITNESSES=

Isaac Hutchinson
John R. Young

INVENTOR.

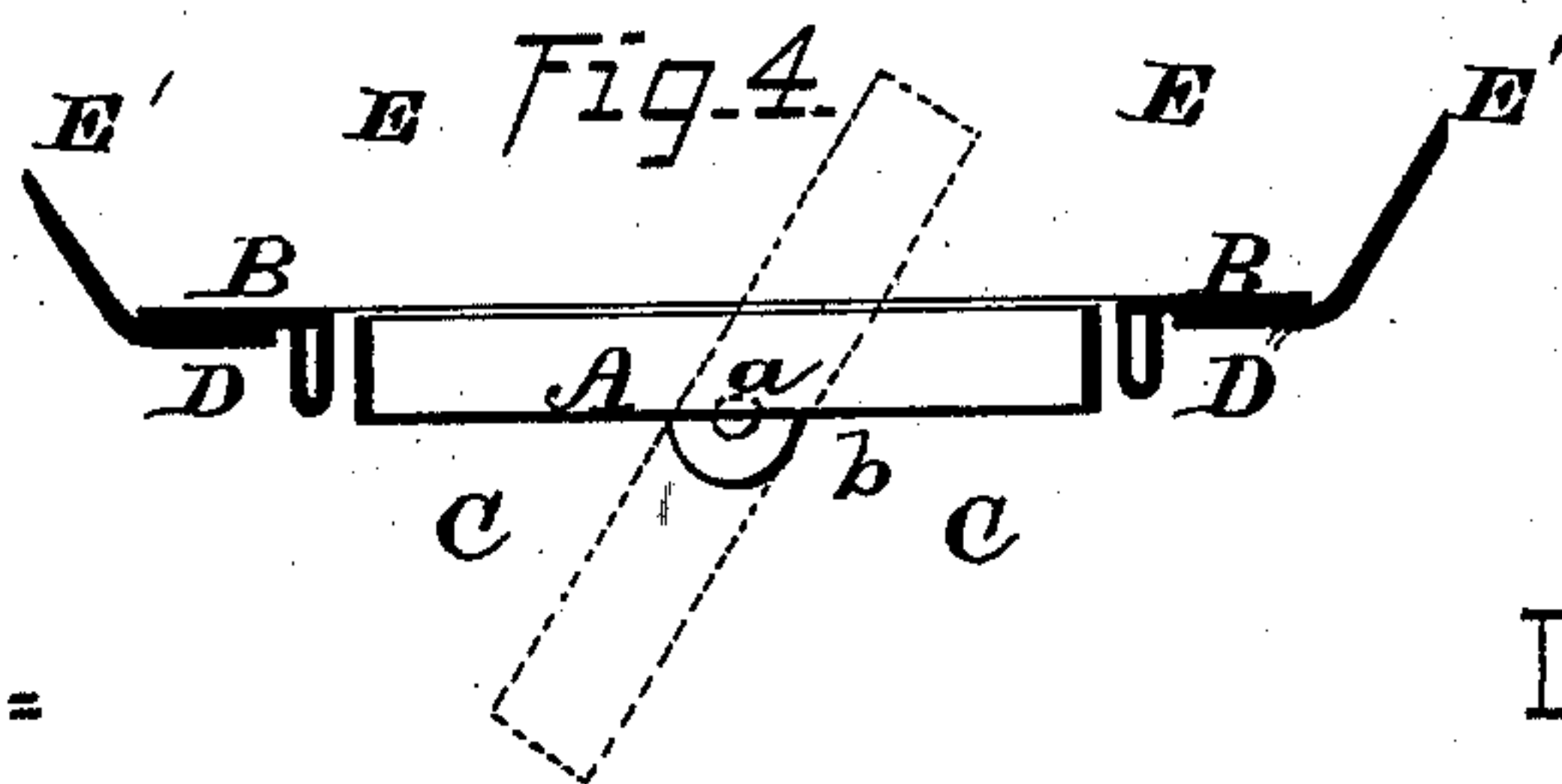
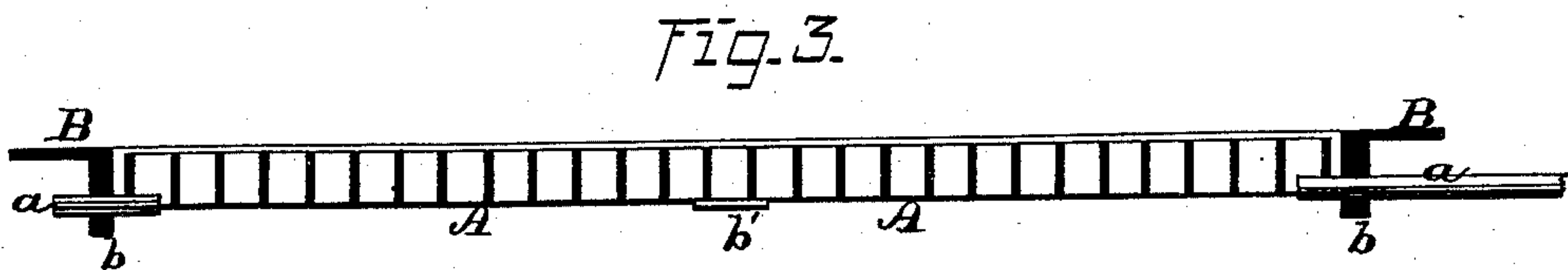
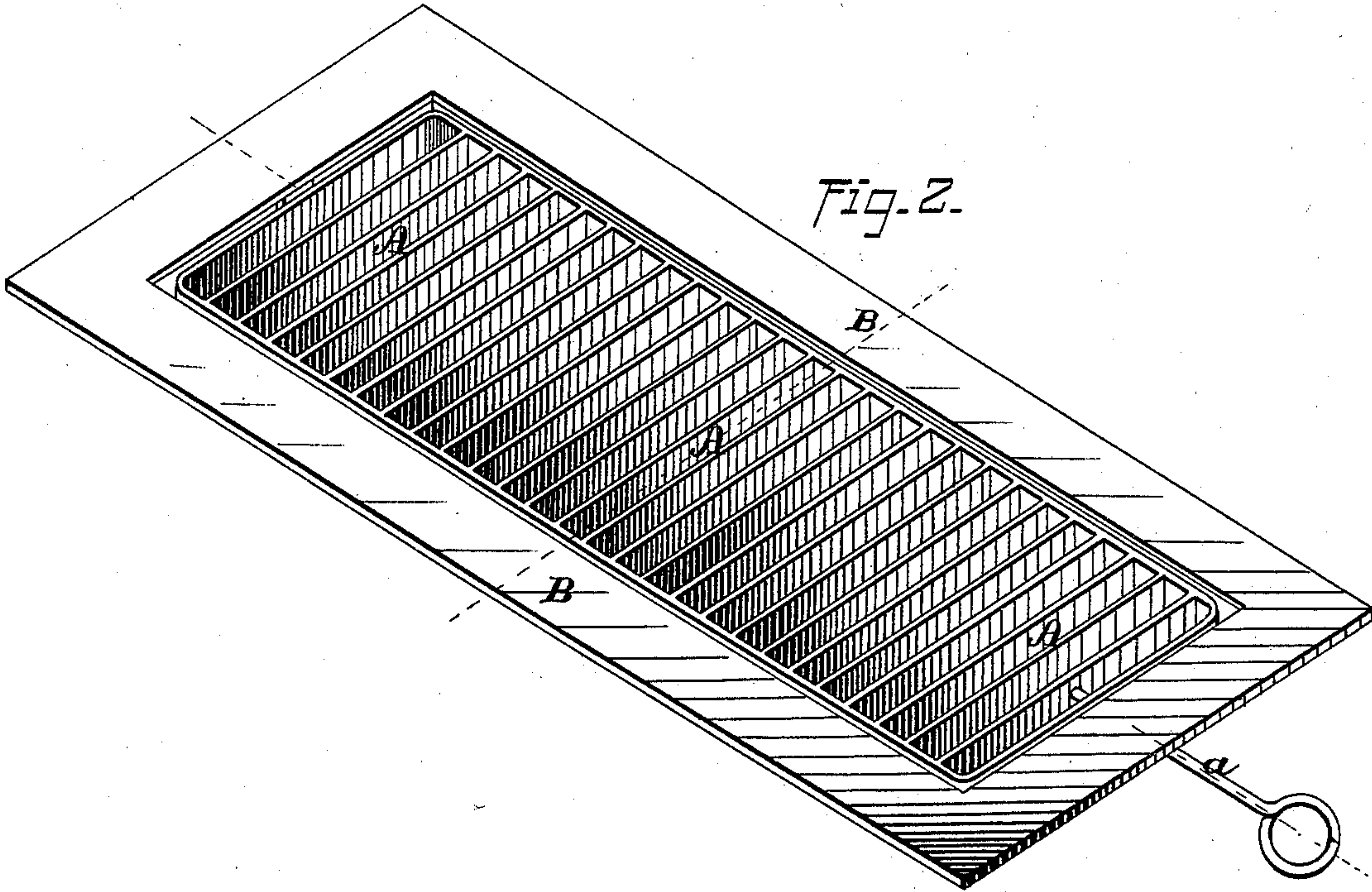
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John R. Young

INVENTOR-

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UNITED STATES PATENT OFFICE.

ALBERT C. CORSE, OF TROY, NEW YORK.

IMPROVEMENT IN ASH-SIFTING ATTACHMENTS FOR STOVES.

Specification forming part of Letters Patent No. **170,821**, dated December 7, 1875; application filed October 15, 1875.

To all whom it may concern:

Be it known that I, ALBERT C. CORSE, of Troy, in the county of Rensselaer and in the State of New York, have invented certain new and useful Improvements in Ash-Sifting Attachments for Stoves; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the front end of a stove containing my improvements, a portion of the hearth being broken away so as to show the construction of the ash-sifting devices. Fig. 2 is a like view of the sifting-grate and its frame detached from the stove. Fig. 3 is a vertical section upon a line passing through the longitudinal center of said grate, and Fig. 4 is a like view upon a line extending from front to rear.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is to increase the efficiency of ash-sifting mechanism attached to a stove; and it consists in an ash-sifting grate pivoted within an inclosing horizontally-moving frame, and capable of a partial revolution in a vertical plane within said frame, substantially as and for the purpose hereinafter specified.

In the annexed drawings, A represents a grate of ordinary form, which, at its ends, is provided with journals *a* and *a*, that rest within suitable bearings *b* and *b*, which are formed at the ends of an inclosing-frame, B, said grate being so combined with said frame as to be capable of partial rotation upon its said journals. A lug, *b'*, attached to the rear lower side of said frame, engages with the corresponding portion of said grate, and prevents the latter from being turned rearward beyond a horizontal plane. The grate and frame described are placed within the ash-pit C of a stove, said frame being contained, at its edges, within suitable bearings D and D, and capable of longitudinal horizontal motion within said ash-pit. Above the grate and frame A and B, respectively, is a space, E, which extends upward to the hearth F, and at its sides and ends is inclosed by means of downward and inward inclining plates E' and

E', that, at their lower edges, come within the outer edges of said frame, and prevent ashes falling therein from passing outside of the latter.

As thus arranged, it will be seen that ashes and cinders from the fire-box F will fall into the space E and rest upon the grate A, from which said ashes may be sifted into the ash-pit C by reciprocating said grate longitudinally.

Should pieces of slag, slate, or stone too large to pass through the openings in the grate fall from the fire-chamber, they may be passed into the ash-pit by partially turning said grate upon its axial bearings; or such motion may be utilized for dumping the cinders after the ashes have been sifted therefrom and removed from said ash-pit.

By extending one of the journals *a* of the grate A through the end of the ash-pit said journal may be used for the double purpose of shaking the frame and said grate, and of dumping the latter.

The horizontal space inclosed by the lower edges of the plates E' and E' being less than the like dimensions of the ash-pit C, an ash pan or drawer, G, fitted within and caused to loosely fill the latter, will extend in all directions beyond the grate A, and prevent ashes passing through the latter from falling outside of said pan or drawer.

The inclosing-frame of the sifting-grate furnishes a broad and durable bearing, upon which the wear and strain caused by the horizontal motion are sustained. It moves with said grate, and enables the latter to be fitted more closely around its edges than would be practicable if said edges extended to the front and rear sides of the ash-chamber, as the latter are relatively immovable, and would require to be perfectly parallel and straight to permit of the close-fitting and longitudinal motion of said grate; and, finally, said frame can, at its sides and ends, pass freely beneath the side plates of the upper ash-chamber, when such operation would be impracticable for said grate in consequence of the obstruction offered by the lodgment of coal within its openings, and the engagement of such lodged pieces with said side plates.

Having thus fully set forth the nature and

merits of my invention, what I claim as new is—

In combination with the usual grate of a stove, an ash-sifting grate, pivoted at or near its transverse center within an inclosing-frame, which parts are capable of a longitudinally-reciprocating motion in a horizontal plane, while said sifting-grate is capable of a partial revolution in a vertical plane within

said frame, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 6th day of October, 1875.

ALBERT C. CORSE.

Witnesses:

AUG. P. CORSE,

GEO. C. BALDWIN, Jr.