

(No Model.)

C. H. FISHER.

GRATE.

No. 300,059.

Patented June 10, 1884.

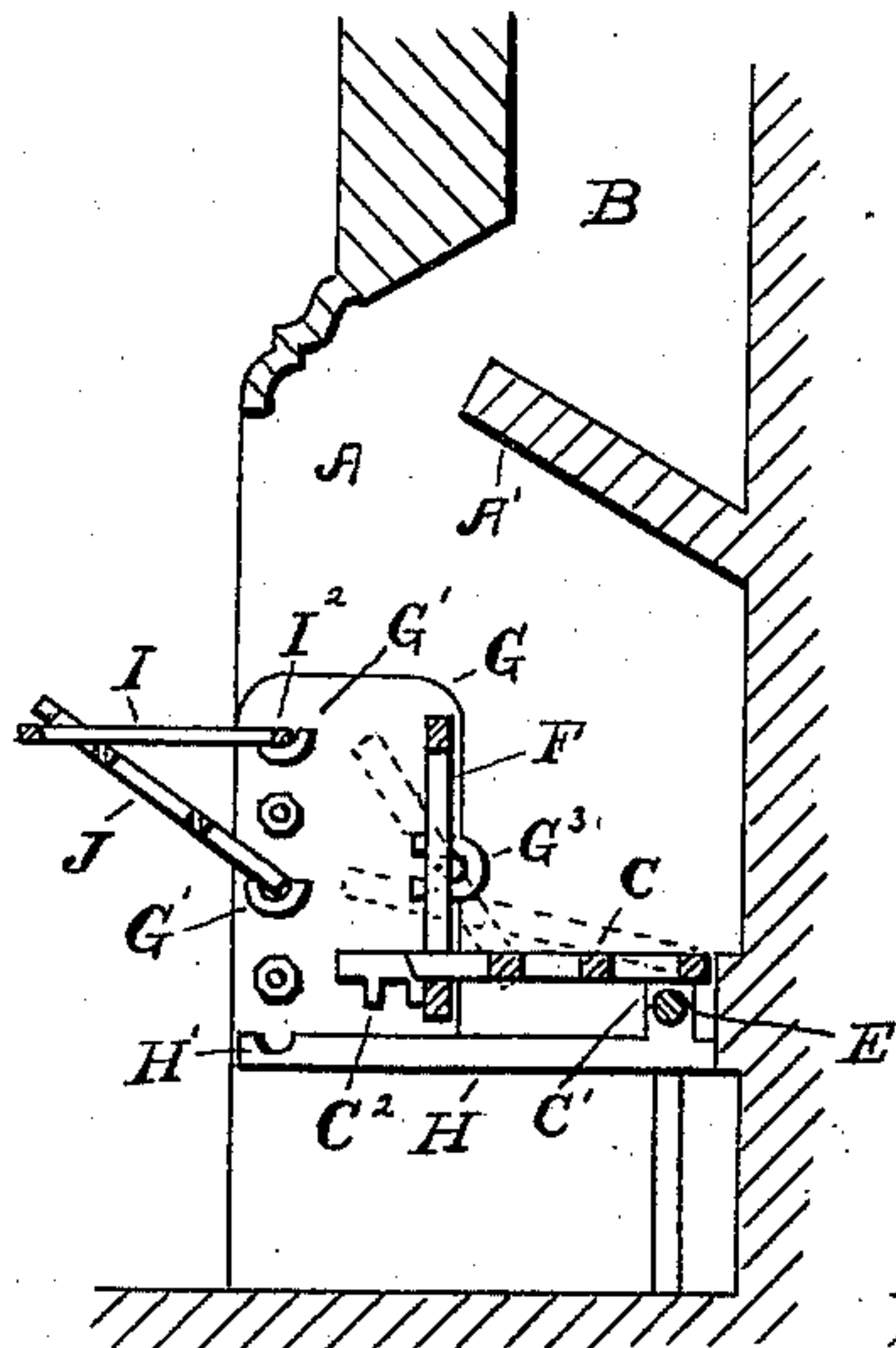


Fig. 1.

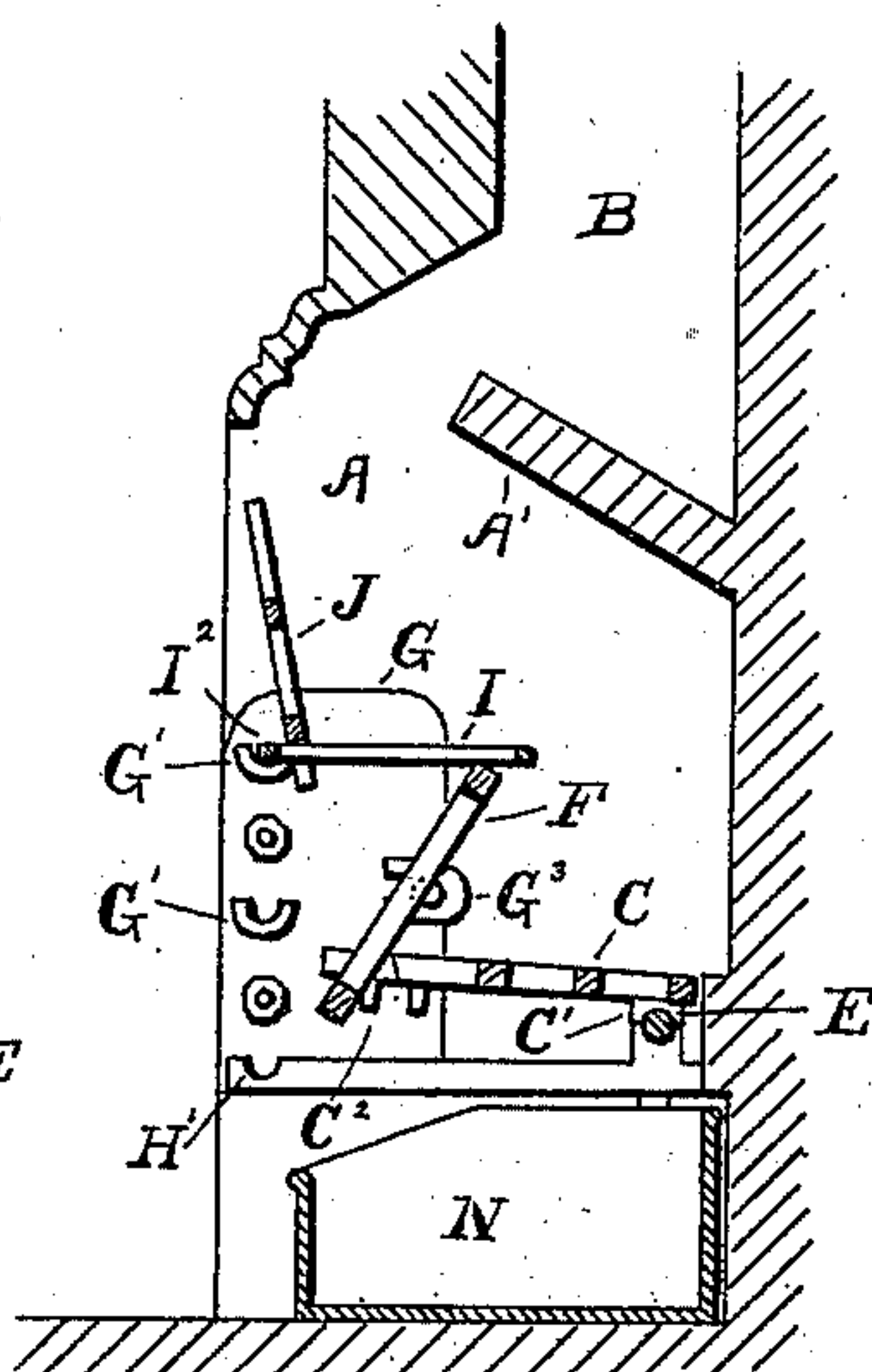


Fig. 2.

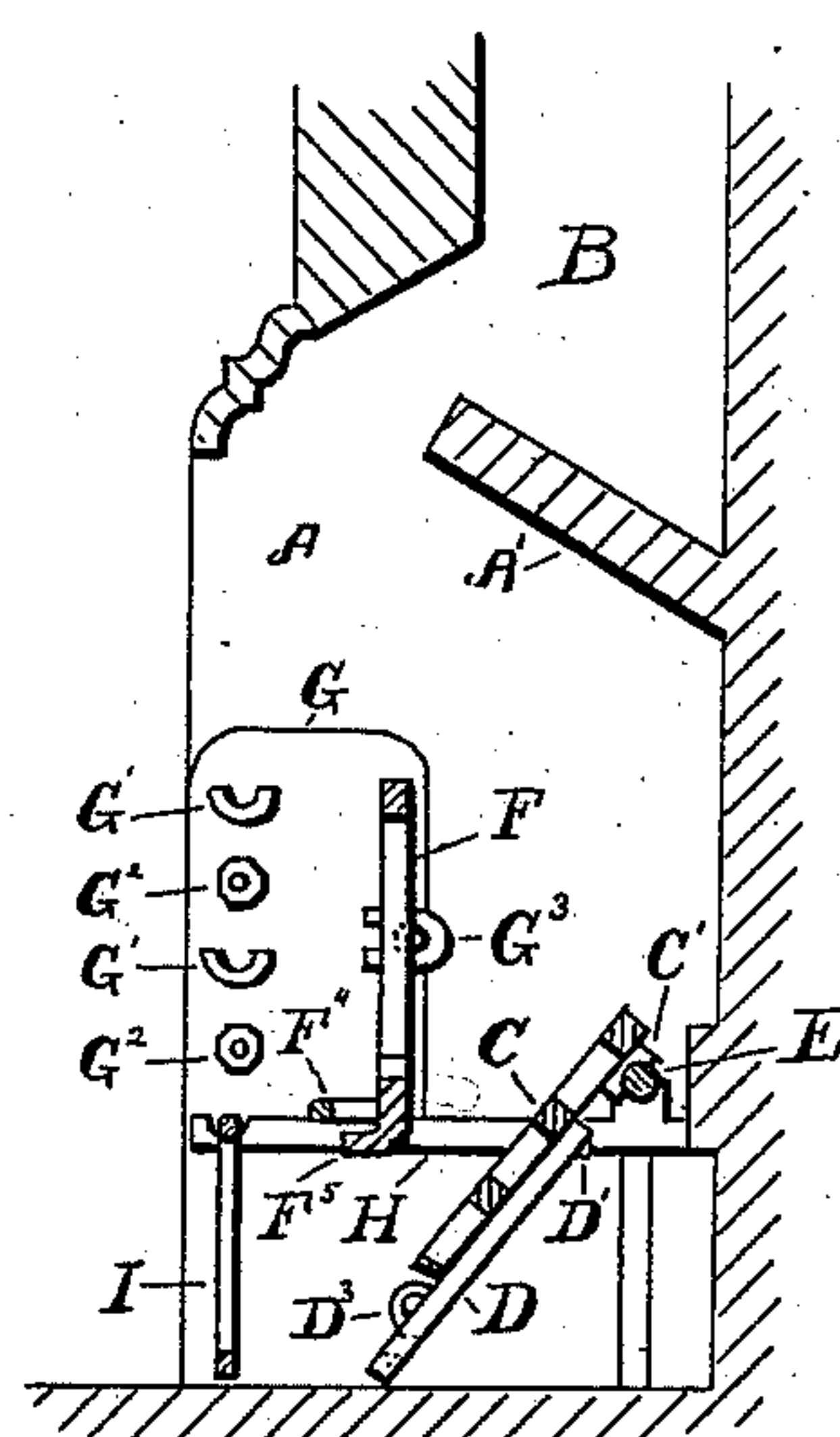


Fig. 3.

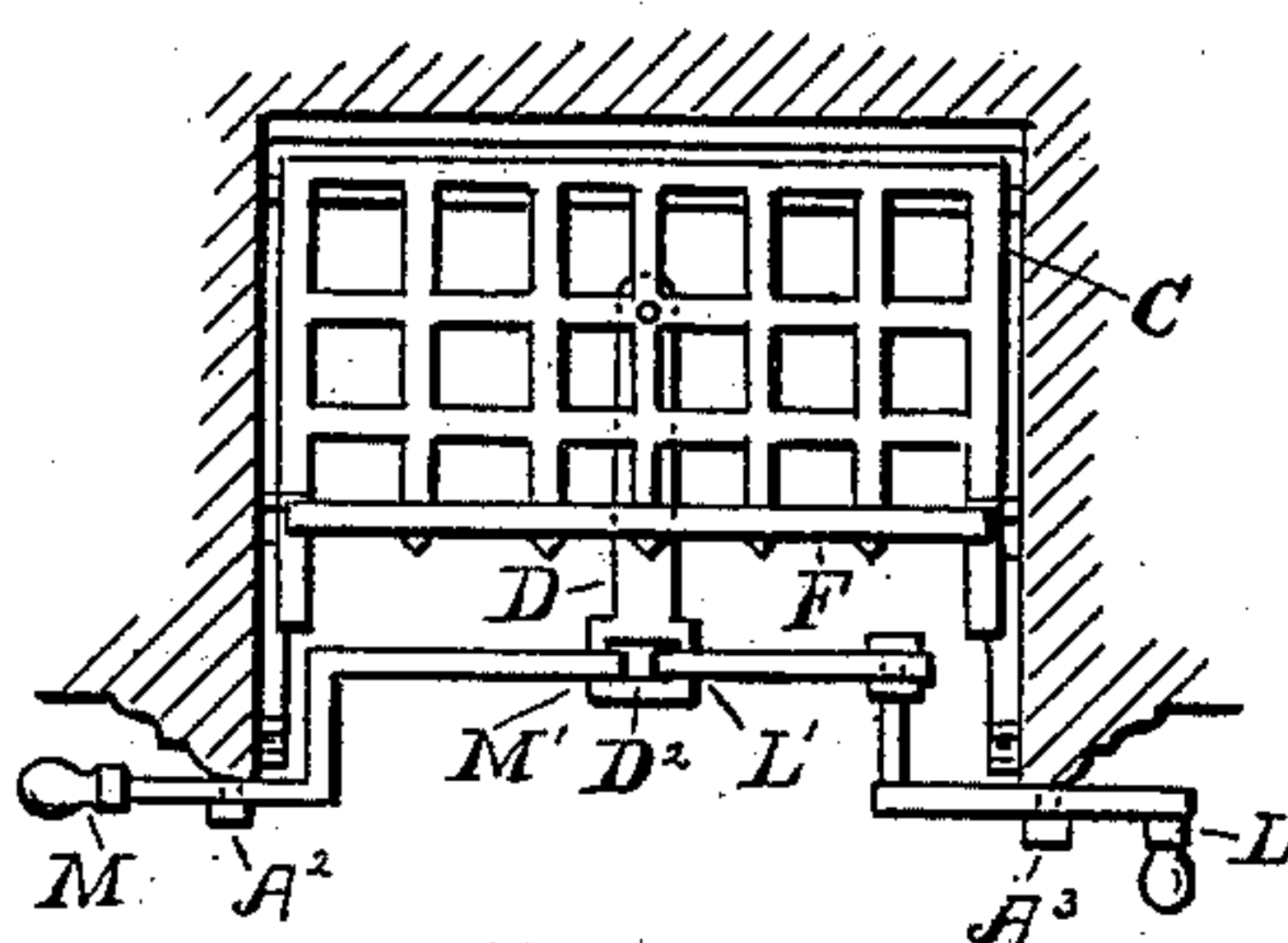


Fig. 4.

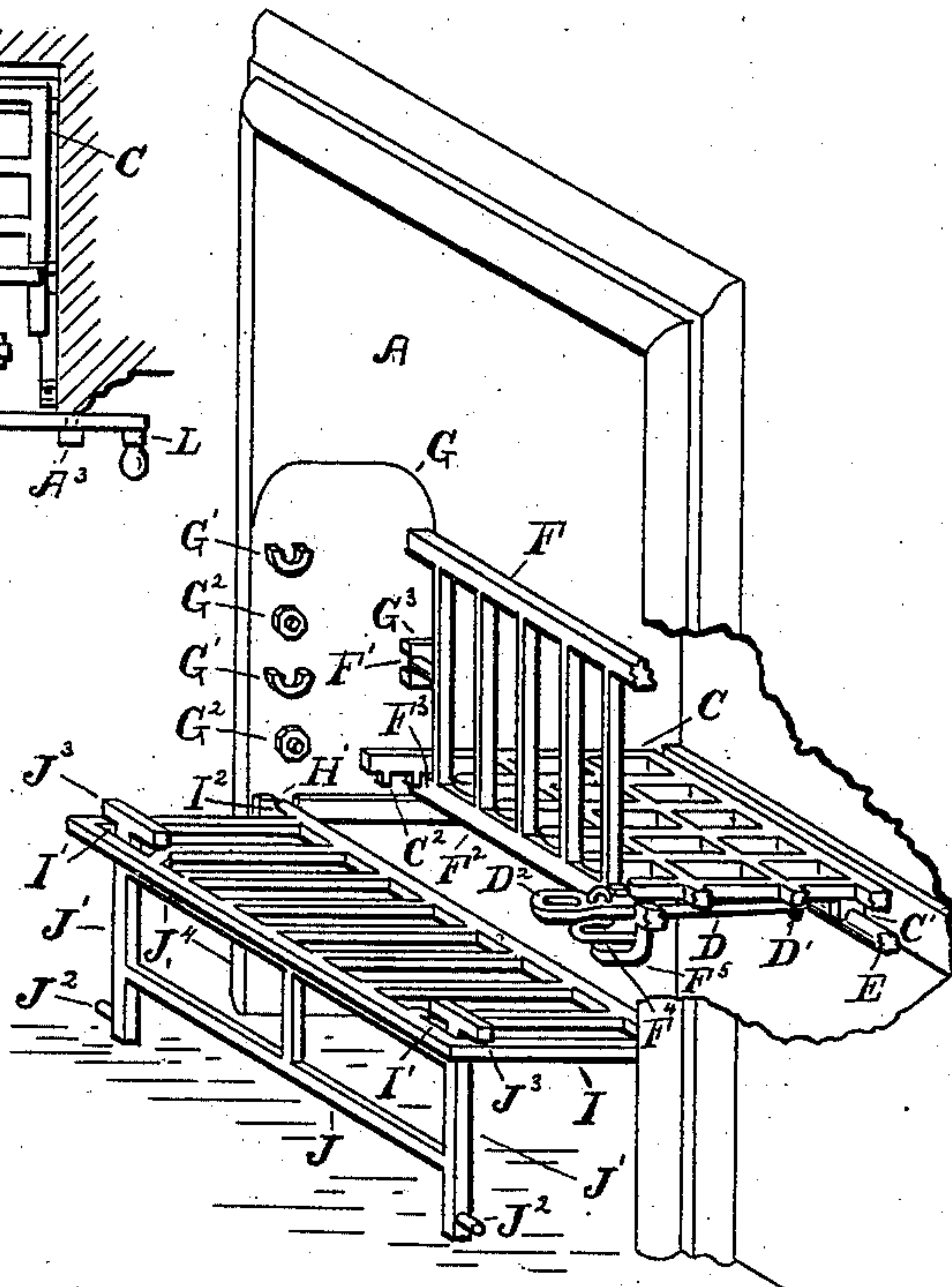


Fig. 5.

WITNESSES.

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CHARLES H. FISHER, OF WHEELING, WEST VIRGINIA.

GRATE.

SPECIFICATION forming part of Letters Patent No. 300,059, dated June 10, 1884.

Application filed November 30, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. FISHER, a resident of Wheeling, in the county of Ohio and State of West Virginia, have invented certain new and useful Improvements in Grates; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 of reference marked thereon, which form a part of this specification.

My invention relates to open fire-places in general, and grates in particular; and it consists in the parts which will be hereinafter described, and pointed out in the claims.

Figures 1, 2, and 3 are central vertical sections showing the grate in various positions, which will be more fully hereinafter specified. Fig. 4 is a plan view showing the tilting and shaking mechanism connected to the grate-lever. In this view the supplementary grate and its legs are omitted. Fig. 5 is a perspective view with a part of the vertical and horizontal grates, and also a part of the fire-place portions, broken away.

Like letters indicate like parts throughout the several views.

The letter A represents the side of the fire-place, and A' the deflector. B is a vertical flue above said deflector. C is the main grate, provided with grooved lugs C' on the rear under side thereof. C² are downwardly-projecting lugs on the forward under side of the end bars of said grate. D is a lever pivoted at D' to the under side of the grate C. D² is the lever-handle projecting out beyond the grate. D³ is a loop on the top of said projection. E is the cross-rod upon which the rear end of the grate C is mounted. The grate-lug C' rests upon the rod E and turns thereon. The ends of the rod E are secured to the side bars, H. These bars are secured to the sides of the fire-place. F is a vertical grate, provided with side central lugs, F'. F² is the bottom bar of grate F, and F³ are the side projections on said bar. G is a side plate, provided with the U-shaped lugs G' and G³. G² are bolts, by means of which said plate is secured to the side of the fire-place. The grate F, by means of its side lugs, F', is pivotally mounted

in the lugs G³. The end projection, F³, of the grate F lies under the end bar of the horizontal grate C. This projection F³ fits between the lugs C² of said end bar. The grate F can be turned backward or forward, and secured in several inclinations by means of the lugs C². F⁴ is a loop, and F⁵ is a downward projection on the central underside of the grate F. The opening D² in the grate-lever D, and the loop D³ thereon, and the loop F⁴ of the vertical grate are adapted to receive various sizes and kinds of pokers, whereby the grates may be dumped and adjusted. The forward end of the lever D passes through a recess in the upper edge of the bar F² of the vertical grate. H' is a recess in the upper front of the side bar, H. I is a supplementary grate, provided with openings I' and side lugs, I². These side lugs, I², lie within the recesses H' of the side bars, H. J is the supporting-frame for the grate I. This frame has side legs, J', and side projecting lugs, J². The upper ends of the legs are T-shaped, J³, and pass through the openings I' of the grate I. J⁴ is the horizontal piece on the supporting-frame J, upon which rests the front part of the grate I when the parts are in the position shown in Fig. 5. L, Fig. 4, represents a shaking-rod in two parts, pivoted at A³. The inner end of this rod, L', is secured to the forward end of the lever in the opening D². The grates F and C are so fixed in their bearings that they have a loose sidewise movement, whereby they may be shaken by the lateral vibration of the rod L. M is a rod, pivoted at A² on the face of the fire-place. The inner end of this rod, M, is also secured to the outer end of the lever D. This rod is intended to elevate and tilt the grate C. N is the ash-pan under the grate C, into which the contents of said grate may be dumped when desired.

The supplementary grate I and its support J may be adjusted so as to assume various positions. In Fig. 1 the supplementary grate I is in a horizontal position on a line with the top of the vertical grate F, and the support J extended out to a degree sufficient to prevent a child from coming in contact with the fire. The lugs I² on the grate I in said figure are engaged in the U-shaped lugs G', and the lugs J² on the supporting-frame engage the lower

lugs, G', whereby the grate I is braced and supported. In Fig. 2 the grate F is inclined slightly backward and supporting the inner end of the grate I, while the standard J extends upward. When the parts are in this position, bread may be toasted on the grate I by resting it against the frame, or water boiled by setting the vessel on the grate. In Fig. 3 the horizontal grate C is shown in a dumped position and the grate I hanging on the pivots in front of the ash-pan, serving as a fender. In Fig. 5 the grate I is shown in a level position resting on the frame J. While in this position articles of food may be kept warm by placing them upon the grate I.

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

1. In a fire-place, the grate C, provided with the lugs C' and lever D, said grate pivotally mounted on the rod E, in combination with the grate F, supporting the grate C, and having lugs F', and the side plates having the side lugs, G³, substantially as specified.

2. In a fire-place, the grate C, provided with lugs C' and side lugs, C², and rod E, in combination with the grate F, supporting the grate C, and having the lugs F', and the side plates having the side lugs, G³, substantially as specified.

3. In a fire-place, the grate C, provided with lugs C', lever D, having opening D², and the shaking-lever L, secured in said opening, in combination with the grate F, supporting the grate C, and pivotally mounted in the side of the fire-place, the grates C F having lateral play, whereby they may be shaken by the lever L, substantially as specified.

4. In a fire-place, the grate C, pivotally mounted on the rod E, and provided with lugs C' and lever D, the tilting-rod M, secured to the forward end of the lever D, in combination with the grate F, supporting the grate C, and pivotally mounted in the sides of the fire-place, substantially as specified.

5. In a fire-place, the grates F C, pivotally mounted, and having lateral movement, and provided with lever D, in combination with the shaking-rod L and tilting-rod M, substantially as specified.

6. In a fire-place, the supplementary grate I, having the supporting-frame J, movably secured thereto, said grate being provided with end lugs, I², the support being provided with end lugs, J², in combination with the side of the fire-place, provided with grooved lugs, whereby the lugs I² and J² may be secured and the grate caused to assume various positions, substantially as described and specified.

7. In a fire-place, the pivoted grates C and F, in combination with the grate I and lugs G', whereby one end of the grate I may rest on said lugs, and the rear end of said grate rest on the top of grate F, and the grate I elevated immediately over the fire, substantially as described, and for the purposes set forth.

In testimony that I do claim the foregoing as my own I hereby affix my signature in presence of two witnesses.

CHARLES H. FISHER.

Witnesses:

J. V. L. RODGERS,
B. H. JONES.