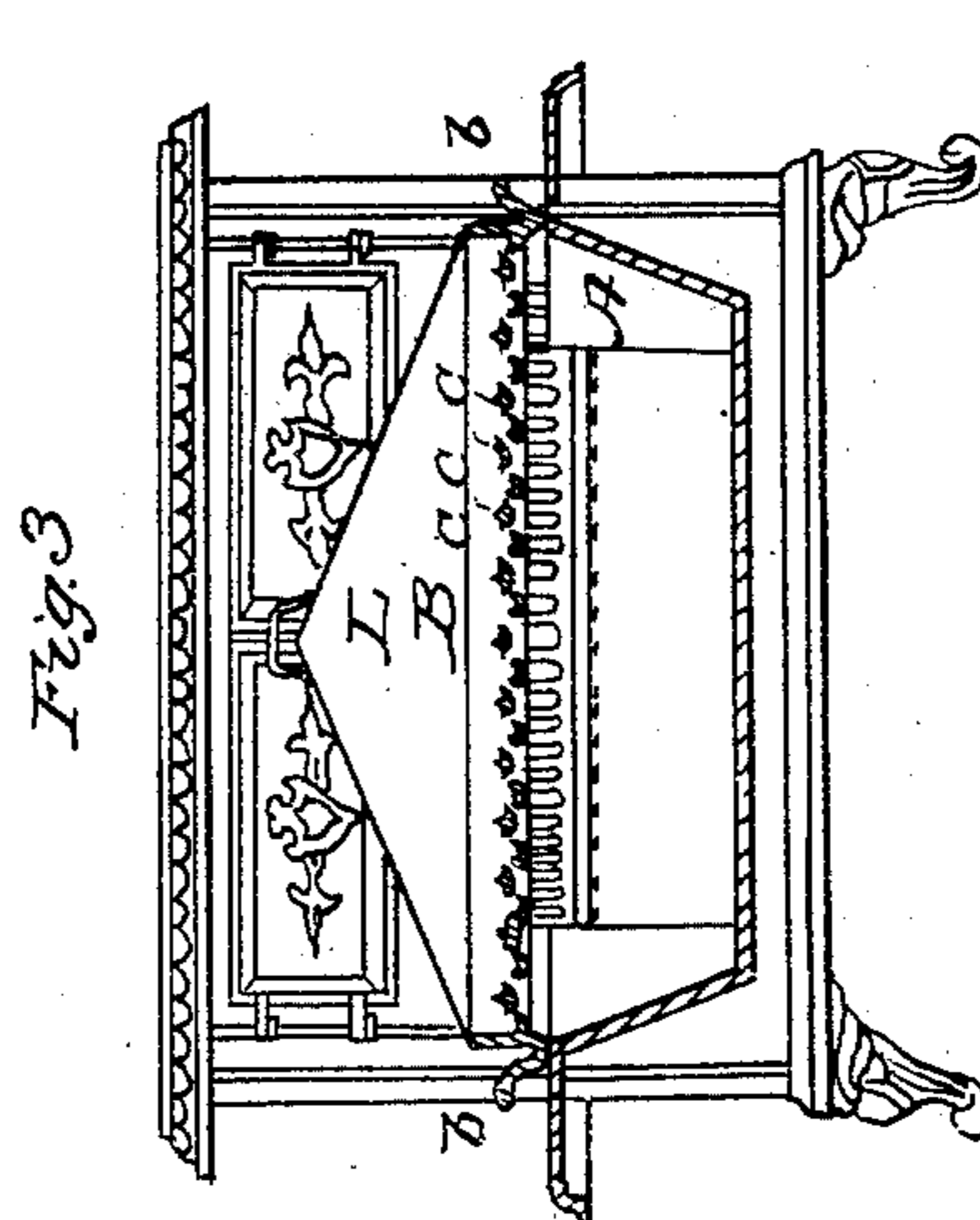
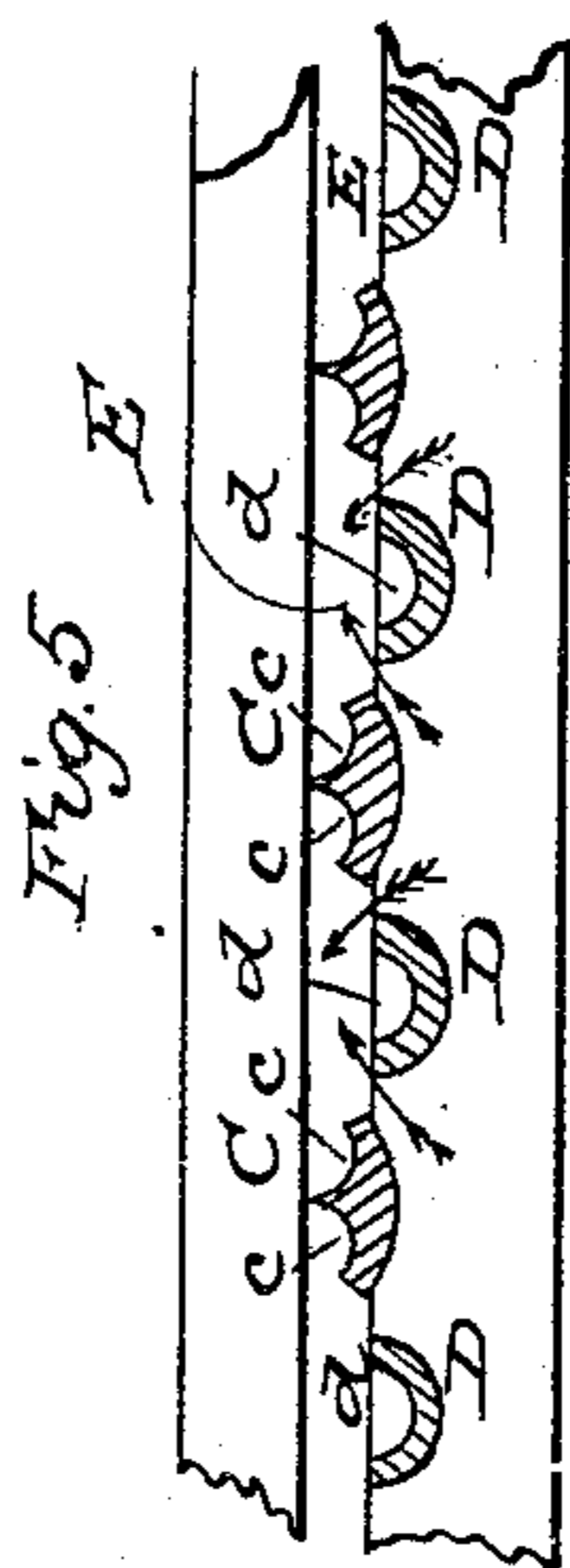
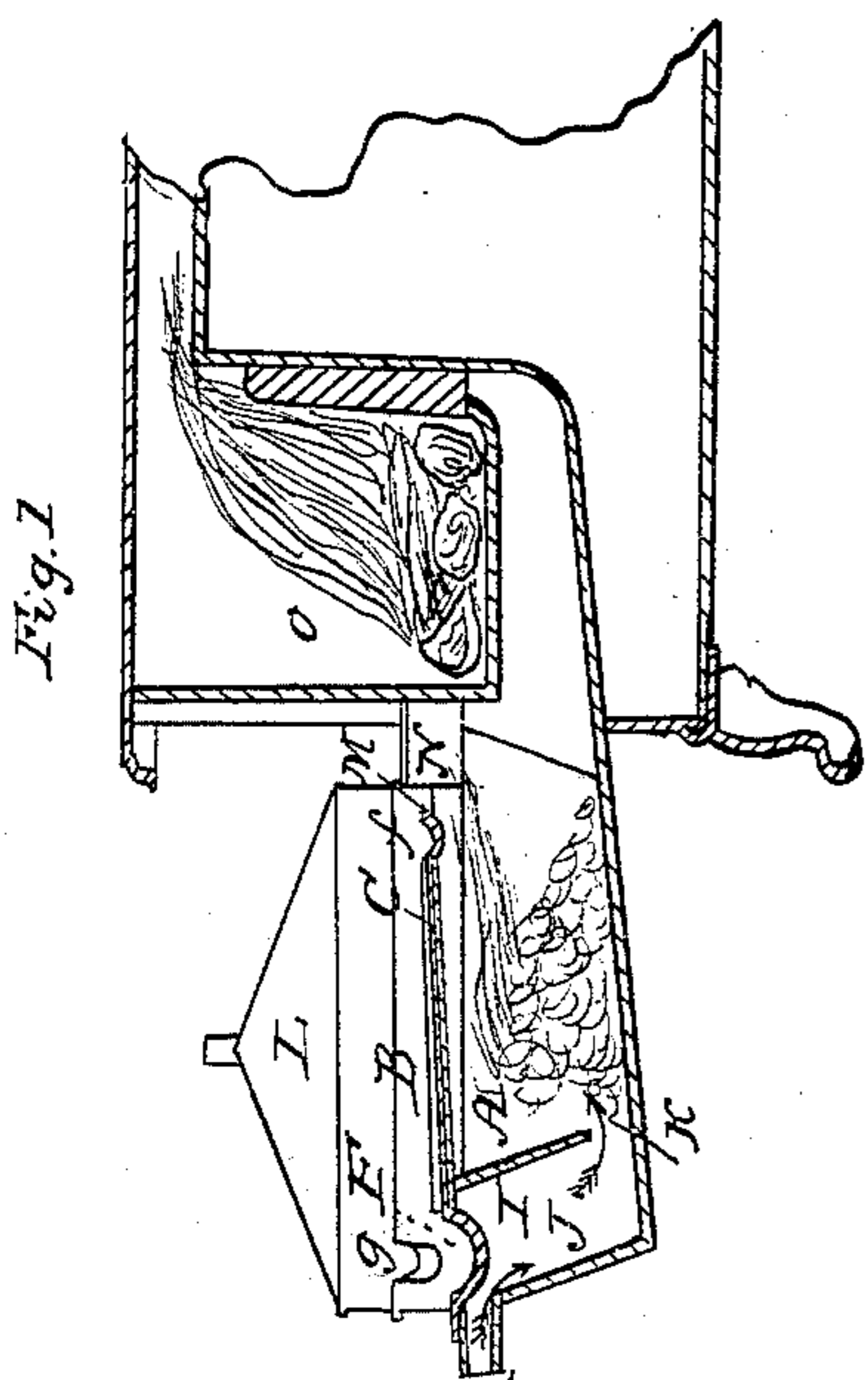
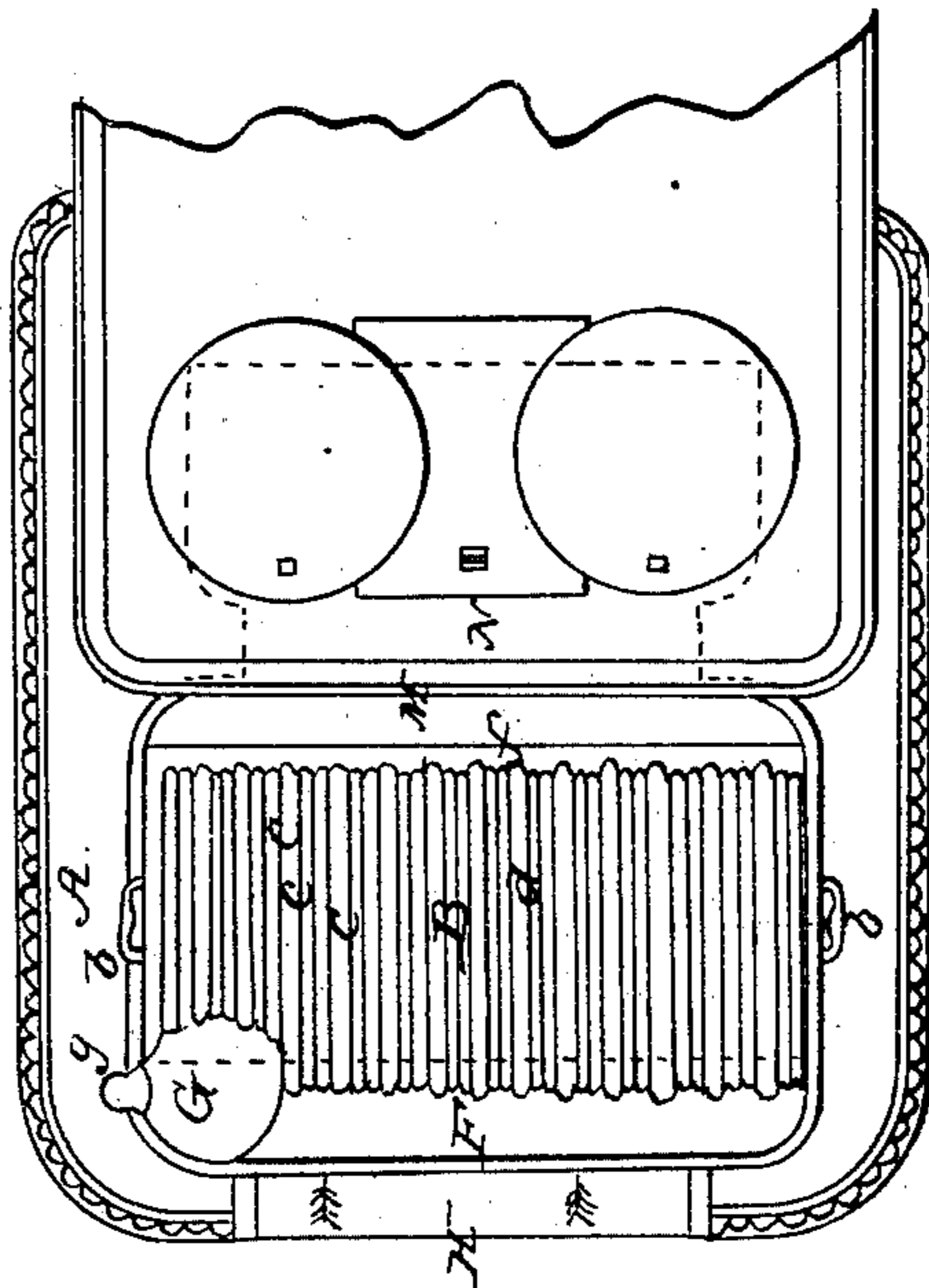
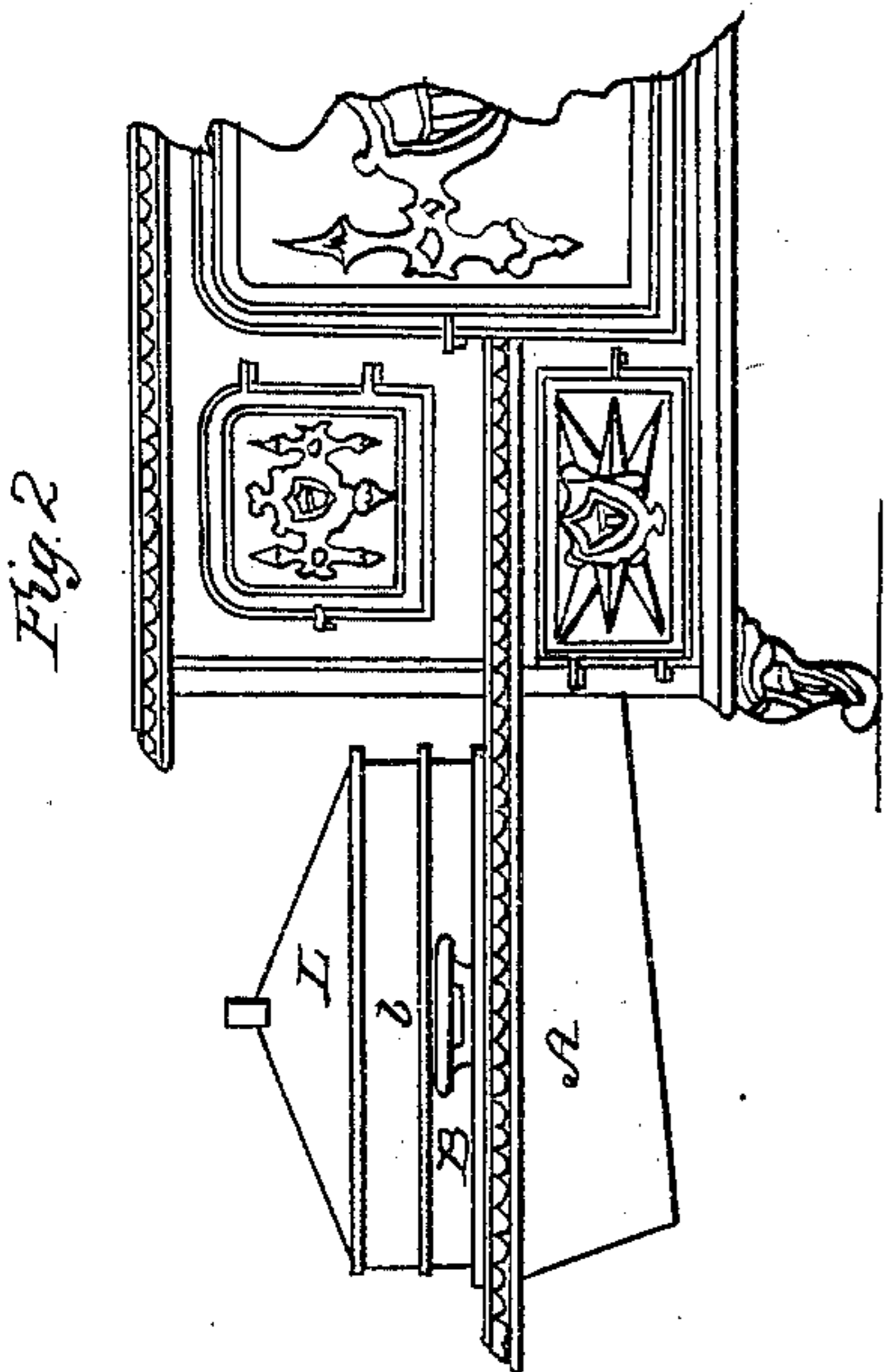


Gridiron.

No. 23,367.

Patented March 29, 1859.



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UNITED STATES PATENT OFFICE.

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GRIDIRON.

Specification of Letters Patent No. 23,367, dated March 29, 1859.

To all whom it may concern:

Be it known that we, WILLIAM A. GREENE and JOHN G. TREADWELL, both of the city and county of Albany and State of New York, have invented a new and useful Improvement in the Construction of Gridirons, the peculiar advantages gained by the use of which over all others are obvious and of the greatest importance, as will be herein clearly and distinctly specified.

The nature of the improvement consists in the use of two rows of gridiron bars, each of a different construction, the lower bars are arranged alternately, with their upper edges even with the bottom edges of the top bars, and a sufficient distance apart so as to form an open or narrow space on each side of the lower bars, thereby extending the upper, or top bars a greater distance apart than in ordinary gridirons, and consequently, exposing a much greater surface of the broiling meat resting on the thin upper edges of the top or upper bars, to the action of the heat, and flame which, striking the slightly curved under sides of the top or upper bars, and the rounded under sides of the lower bars, is reflected diagonally through the open or narrow spaces formed between the lower, and the upper bars, and is distributed over the whole surface of the meat, thereby broiling it thoroughly, and in the most perfect manner, without burning, scorching, or otherwise disfiguring said meat, as is generally the result with all other gridirons, whose bars are arranged on an even or flat surface. But by arranging the upper bars alternately with the lower bars, and forming a narrow distance apart, the rays of heat, and flame are reflected through the spaces diagonally over the whole surface of the meat, thereby broiling it thoroughly, and the gravy therefrom, which is not collected in the grooves or channels cast in the upper bars, falls into the grooves or channels in the lower bars, and is conveyed into the well or reservoir in the front of said gridiron, and from the peculiar shape, and arrangement of the bars, said gridiron is easily molded and possesses the advantage of being cast in one piece, thereby greatly lessening the expense in the manufacture of this, over a double gridiron. And also forming a recess or open space in the front of the stove hearth, directly under the reservoir, or well, cast in the gridiron for the purpose of collecting the gravy from the broiling meat,

the cold air or draft is admitted through the said recess or open space, and passing under the reservoir in the front of said gridiron, tends to cool the gravy, and renders it less liable to ignite, said reservoir being of a sufficient depth to prevent the gravy from overflowing into the fire. And also, attaching a check plate on the under side of said gridiron, immediately behind the reservoir, and riveted thereto; said check plate extends across the whole width of the hearth and descends down within a short distance of the bottom of the same, for the purpose of separating the fire from the air chamber, situated between said check plate, and the front of the hearth. The charcoal or other fuel rests on the bottom of said hearth behind said check plate, the cold air or draft admitted through the recess or open space directly under the reservoir strikes against the check plate, and then descends filling the air chamber, and passing through the open space between the bottom of said check plate and stove hearth, it is then diffused directly through said charcoal, instead of passing under or over it, dispensing with the use of a hearth grate, and damper in the hearth of a stove, and forming a contrivance, which lessens the complication, and consequently the expenses which is a most important feature in all perfectly mounted air tight stoves.

A cover is fitted on the gridiron for the purpose of confining the smoke, and vapor from the broiling meat, which then passes through an opening in the gridiron into the fire place, and is conveyed from thence in the usual way through the flue or smoke pipe.

To enable others skilled in the art to make and use our invention, we will now proceed to describe it, and certify, that the following drawings, and model are a full, and correct representation of the same, like letters corresponding with like parts.

Figure 1 represents a longitudinal section of a stove hearth and gridiron with part of a stove attached. Fig. 2 is an outside elevation of the same; Fig. 3 an end view of the stove with a vertical section of the hearth and gridiron. Fig. 4 represents a plan of the same. Fig. 5 is a full sized transverse section of a part of the gridiron.

A, Figs. 1, 2, 3, 4, represents the stove hearth, B is the gridiron resting thereon, C C C the upper bars of the same, (c c c) are grooves or channels cast in the said bars

for the purpose of receiving the gravy from the broiling meat, D D D are the lower bars arranged alternately, and with their upper edges even with the bottom edges of the bars, C C C, and are provided with grooves or channels for the same purpose, E E E shown full size at Fig. 5 are the open spaces between the upper bars C C C, and the lower bars D D D, through which the heat and flame is reflected diagonally (as represented by the red arrows Fig. 5), and distributed over the whole surface of the broiling meat, F is a deep groove or channel extending across the front or lower end of the gridiron, and (f) is a shallow one across the back or higher end, G is a well or reservoir at one end of the channel F, and is provided with a lip or spout (g) to pour off the gravy collected therein, (b, b,) are the handles cast on the sides of said gridiron B, H is a recess or open space formed in the front of the hearth A, and directly under the groove or channel F, and well G in the gridiron B, for the purpose of admitting the cold air, I is a check plate immediately behind the channel F, and well G attached to the gridiron B, and descends down within a short distance of the bottom of hearth A, for the purpose of separating the fire from the air chamber J, the cold air is admitted through the space H in the hearth A, and passes

directly under the channel F, and well or reservoir G, it then strikes against the check plate I, fills the chamber J, dives down through the space K between the bottom of the hearth A, and plate I, and passes through the charcoal or other fuel on the bottom of said hearth A, thereby avoiding the use of a hearth grate and damper, L is a cover fitted on the gridiron B, for the purpose of confining the smoke and vapor arising from the broiling meat, which then dives down through the open space M in the back end of the gridiron B, into the passage N through the fire place O, to the flues and is carried off in the usual way.

Claim.

1. We claim the upper gridiron bars C C C arranged alternately with the lower gridiron bars D D D, and cast in one piece, substantially and for the purpose above specified.

2. The check plate I and space K, and separating the fire from the air chamber J, substantially and for the purpose above specified.

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