

(No Model.)

A. E. TRENTOWSKY.  
SIFTING ATTACHMENT FOR STOVES.

No. 501,748.

Patented July 18, 1893.

Fig. 1.

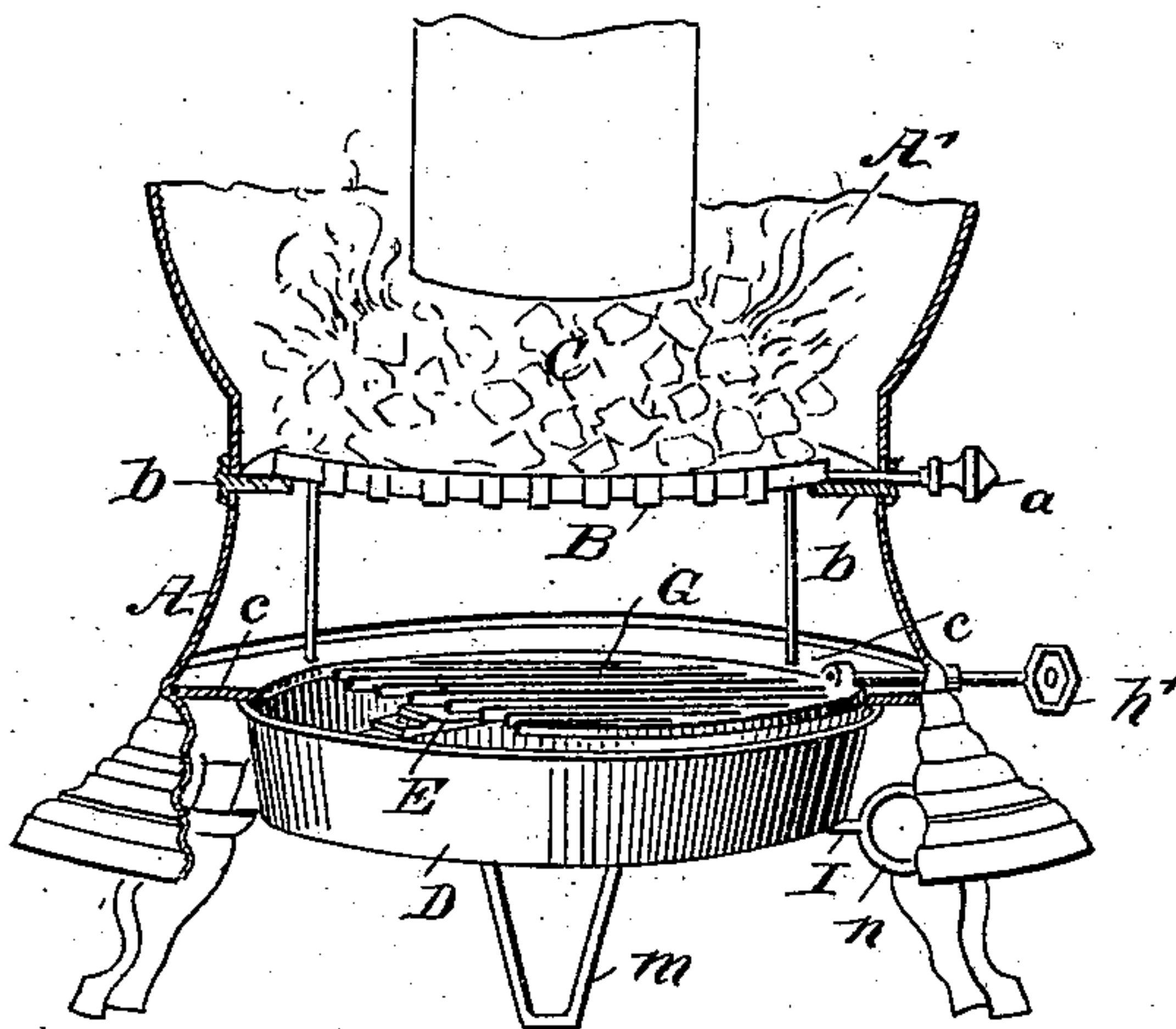


Fig. 3.

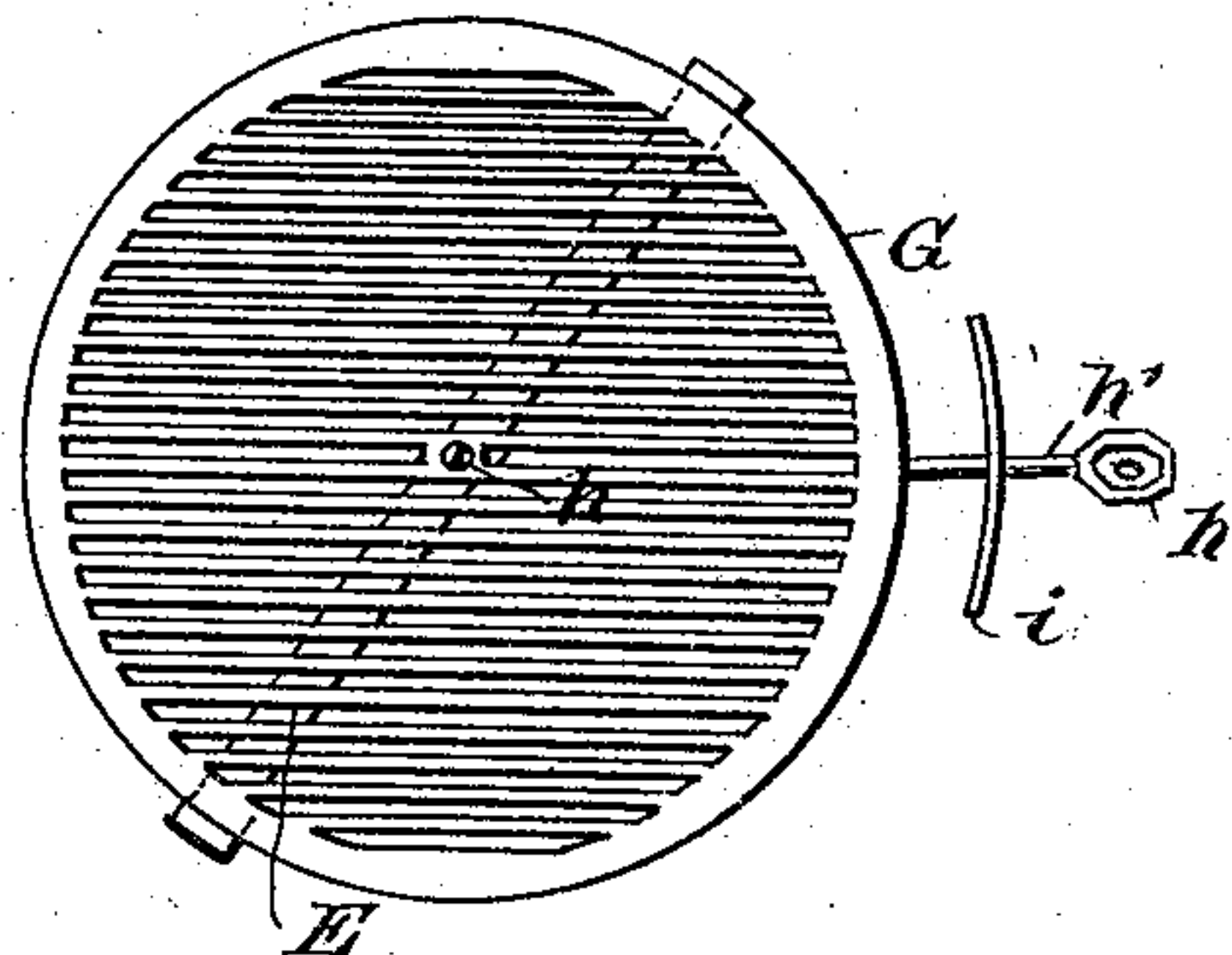


Fig. 2.

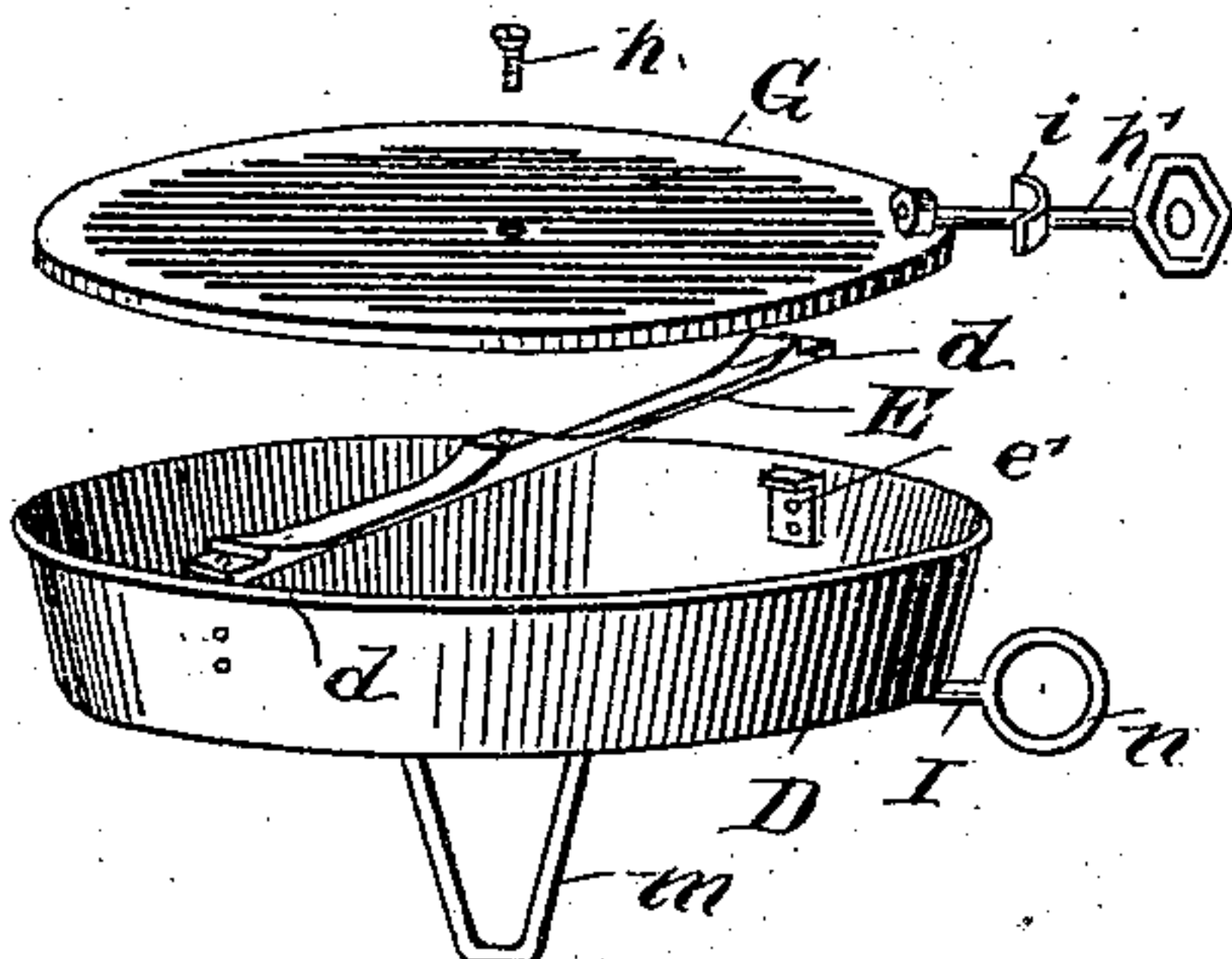


Fig. 4.

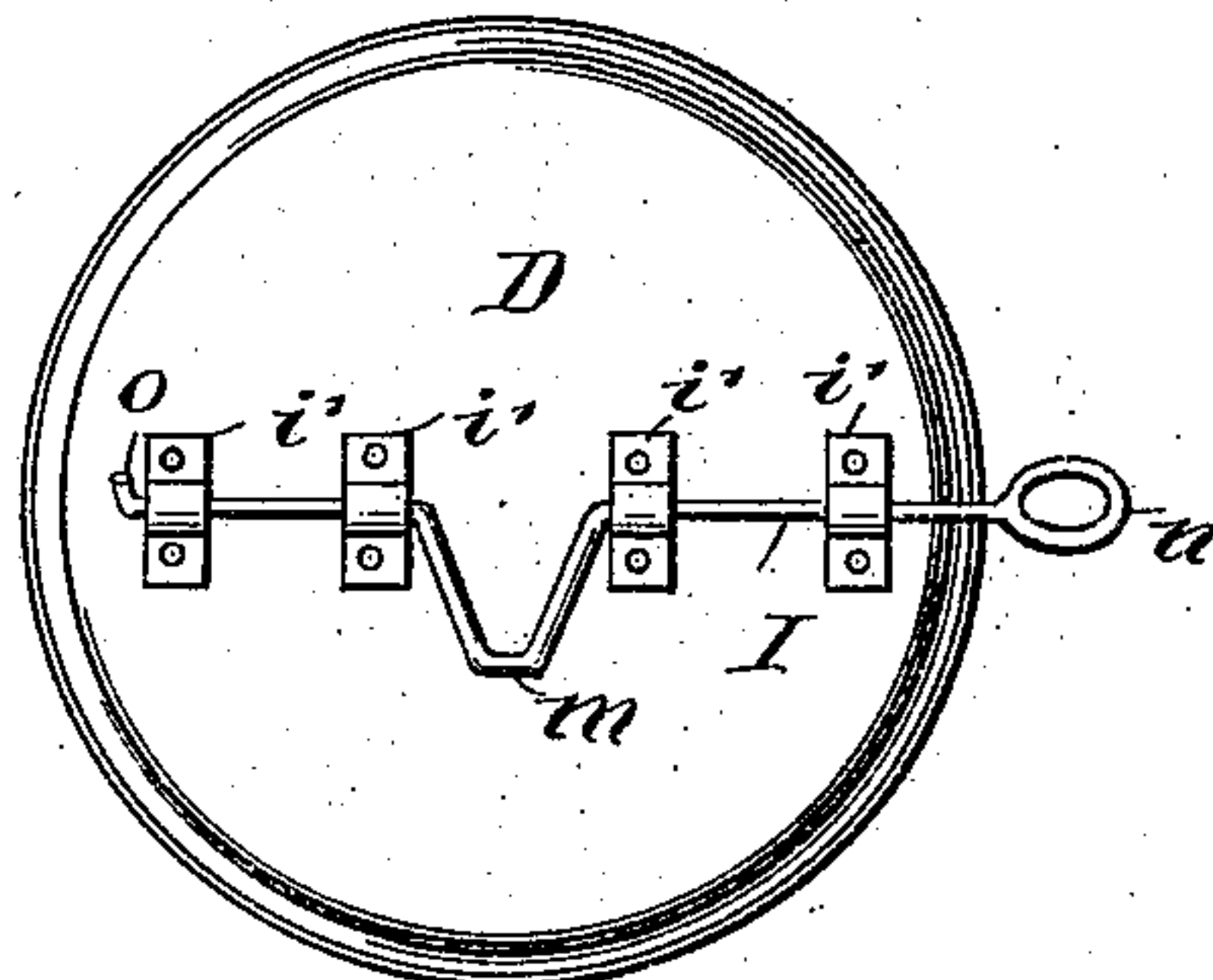
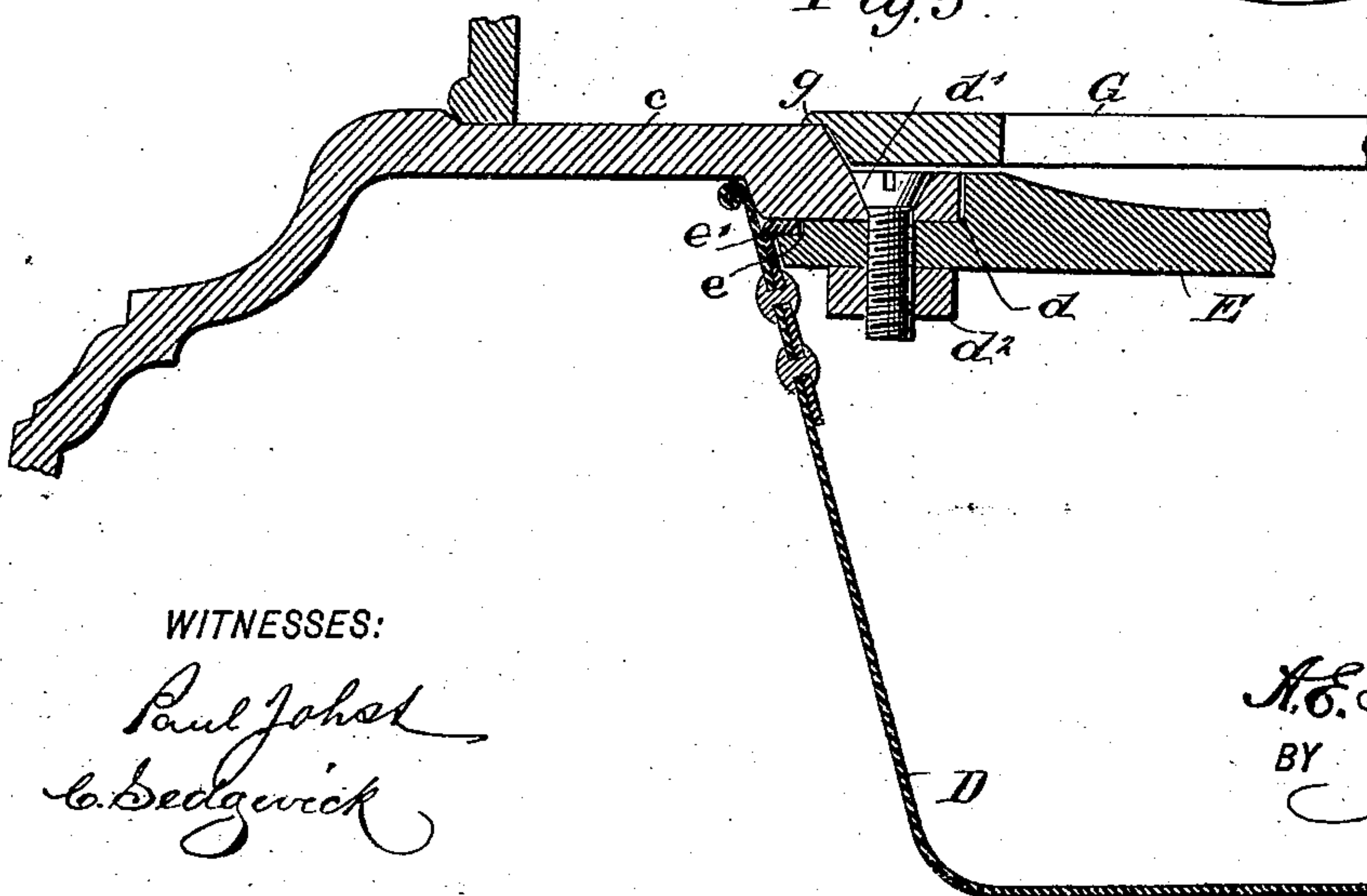


Fig. 5.



WITNESSES:

Paul Johst  
C. Sedgwick

INVENTOR

A. E. Trentowsky  
BY Munn & Co.

ATTORNEYS.



# UNITED STATES PATENT OFFICE.

ALBERT E. TRENTOWSKY, OF ST. JOHN, CANADA.

## SIFTING ATTACHMENT FOR STOVES.

SPECIFICATION forming part of Letters Patent No. 501,748, dated July 18, 1893.

Application filed March 1, 1893. Serial No. 464,175. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT EDWIN TRENTOWSKY, of St. John, in the Province of New Brunswick and Dominion of Canada, have invented a new and useful Improvement in Sifting Attachments for Stoves, of which the following is a full, clear, and exact description.

My invention relates to improvements in ash sifting devices for stoves and ranges, and has for its object to provide a novel, simple, and inexpensive attachment for base burning heating stoves, or cooking ranges, which will be adapted for a quick engagement and ready removal of the ash receptacle, that will afford convenient means for the thorough separation of ashes from partly burned fragments of coal that are riddled from the stove, and permit the easy transference of the latter to the fire chamber of the stove for complete combustion.

To these ends, my invention consists in the construction and combination of parts hereinafter described and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side view in part, of the lower portion of a base burning heating stove and the improvement attached thereto. Fig. 2 is a detached perspective view of the improved sifting and ash holding device, showing its parts in a separated condition. Fig. 3 is a plan view of the sifting device removed from the stove. Fig. 4 is a detached reversed plan view of the improvement; and Fig. 5 is an enlarged transverse sectional side view, in part, of the improvement, and of the lower portion of a base burning stove whereon the improvement is removably secured.

In the drawings, A A' represent the lower portion and the fire chamber, respectively, of a base burning heating stove of a well known type, broken away at one side to show the grate B, and the improved sifter and ash receptacle below said grate. The grate B, is furnished with a handle piece *a*, which projects through the front of the stove casing, a slot (not shown) being provided to receive said handle piece, and permit its vibratory movement for an agitation of the grate B,

sufficiently to remove ashes from the bed of incandescent coal C, that is contained by the fire chamber A', said grate being supported by lugs *b*, that project from the casing A, as indicated in Fig. 1.

At a proper distance below the grate B, the novel ash sifting and coal separating device is located and removably supported, comprising parts which will now be described.

A pan D is provided for sifted ashes, and is shown as having a circular and upwardly flaring side wall which may be altered in contour if the shape of the stove casing is different from that represented in the drawings, as the shape of the side of the pan D, should approximate the form of the side wall of the stove within the ash pit. A proper depth is given to the pan D, so as to adapt it to hold a considerable amount of sifted ashes, its diameter at the upper edge being so proportioned as to locate said edge in contact with the lower surface of the horizontal annular top wall *c*, of the bottom plate of the stove casing, and near the inner edge of said wall as shown in Fig. 1.

Across the aperture bounded by the circular inner edge of the wall *c*, a cross bar E, is diametrically extended and secured by its ends thereto, said bar being shouldered at *d*, and also at *e*, near each end, so as to permit it to be lapped upon the under side of the wall *c*, and be thereto secured by bolts and nuts *d'*, *d''*, see Fig. 5, the offsets at *e*, affording a radial groove at each end of the cross bar, between these ends and the lower surface of the wall *c*, that will receive and retain two locking lugs *e'*, which are oppositely affixed upon the inner surface of the ash pan D, near its top edge as represented in Figs. 5 and 2.

There is an annular rabbet or depression formed on the wall *c* at its free inner edge, of a sufficient width to afford a seat for the sifting grate G, which is circular in form and of a proper diameter to rotatably engage the rabbeted edge of the wall *c*, as indicated in Fig. 5, and have its radial flange *g*, rest on the marginal edge of the rabbet as shown. The sifting grate G is provided with a plurality of integral bars forming intervening slots and preferably the grate is cast into



form from iron, so as to be durable and inexpensive. A perforation is centrally produced in the sifting grate G, for the introduction of a pivot screw *h*, through the grate and  
 5 into a tapped hole in the middle of the bar E; this threaded perforation being formed in a thickened part of the cross bar at its center of length, the main portions of said bar being reduced in thickness from points near  
 10 the shoulders *d*, toward the center on the upper side, so as to lessen friction. From the periphery of the sifting grate D, a riddling lever *h'* having a handle *h*, is radially projected of a suitable length to extend through  
 15 a slot in the casing A, above the horizontal annular wall *c*, which is of a sufficient width to permit a free agitation of the sifter grate by a vibration of the lever, the slot being covered externally by a cap plate *i*, that is curved  
 20 so as to fit loosely upon the casing A, and cover the slot.

On the bottom wall of the ash pan D, a prop rod I, is secured to rock in the clip plates *i'*, which are attached to said wall, and  
 25 loosely clasp the body of the rod at proper distances apart, as shown in Fig. 4. The prop rod is bent laterally at *m*, so as to produce a substantially V-shaped leg thereon, which is of such a relative length, as will adapt it to  
 30 sustain the ash pan D, when the prop rod is rocked by its handle ring *n*, so as to cause the leg to press upon the floor of the apartment wherein the stove is located; it being essential that the length of the leg *m*, should  
 35 be proportioned to the height of the pan bottom from the floor, so that said leg will be upright when rocked into position for the support of the pan D. A toe *o*, is formed on the inner end of the prop rod I, and is so  
 40 bent that when the leg *m*, is turned toward the floor of the room and engages it while upright, the toe will prevent the rod from being rocked too far, so that an upright position of the leg *m*, is assured, if the handle  
 45 ring *n*, is rotatably moved in the proper direction.

It will be seen, that in use the agitation of the stove grate B, by its handle *a*, will cause a deposit of the ashes and partly burned fragments of coal on the sifter grate G, which by  
 50 an agitation of its lever *h'*, will permit ashes to pass between its bars into the pan D, retaining the fragments of partly burned coal on its surface, from which this coal may be  
 55 shoveled upon the fire in the chamber A', for complete combustion. When the pan D, requires to be removed for an emptying of its contents, this can be conveniently and safely effected, by first rotatably moving the pan to  
 60 release the lugs *e'*, from the ends of the cross bar E, and then gently rocking the prop rod I, by a manipulation of its handle ring *n*, and the pan being supported by the leg need only  
 65 be steadied by the other hand of the operator, until it rests on the floor, from which it

may be transported to a place of deposit for the ashes.

It is claimed for this device that it is a complete coal saver, and saves dust, dirt, and the inconvenience attending the use of a separate  
 70 ash sifter, which would permit ashes to escape and soil the clothing and person of the operator.

The improvement may be applied to stoves or ranges of various forms, used either for  
 75 cooking or heating purposes, by slight changes in the shape of the pan D, to permit its introduction within the base of such stove or range, and the grate G may also be correspondingly shaped and the top of said pan  
 80 made to sustain it for the proper operation of the grate.

It will be seen that the improvement when applied, will permit a free draft, as the pan D and grate G, in no wise interfere with the  
 85 passage of air to the fire-box, while hot coals are prevented from falling out on the floor if the door of the stove is open.

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

1. An ash sifter device, comprising a pan, a rocking prop bar thereon, transversely secured on the lower side having a leg to engage  
 the floor, and a handle on the bar whereby it  
 95 may be rocked, means for removably securing the pan below a hole in the base wall of a stove or similar heating device, and a sifter grate vibratile above the ash pan, substantially as described.

2. An ash sifting device, comprising a circular ash pan having opposite lugs thereon, a cross bar extended diametrically from edge to edge of a circular aperture in the base wall  
 105 of a stove or similar heating device and secured thereto, and adapted to be engaged by the lugs on the ash pan, a rocking prop bar on the bottom of the ash pan to normally rest on the floor, having a depending leg, and a  
 110 handle on the prop bar adapted for a rocking vibration, a sifting grate pivoted to receive rotatable motion on the cross bar, and an operating lever for the grate, substantially as described.

3. The combination with the apertured base  
 115 plate of a stove, and a cross bar secured at its ends diametrically across said aperture, a circular ash pan, diametrically opposite lugs thereon, adapted to engage the ends of the cross bar, a prop rod rotatable beneath the  
 120 ash pan, an integral bent leg thereon, a handle ring on one end of said prop rod and a toe on the other end thereof, a circular sifting grate pivoted centrally on the cross-bar, and a vibratile lever on the sifting grate, substantially as described.

ALBERT E. TRENTOWSKY.

Witnesses:

ARTHUR C. SMALLEY,  
 WM. B. WALLACE.