

(No Model.)

E. G. SCHULTZ.
REVOLVING ASH SIFTER.

No. 254,886.

Patented Mar. 14, 1882.

FIG. 1.

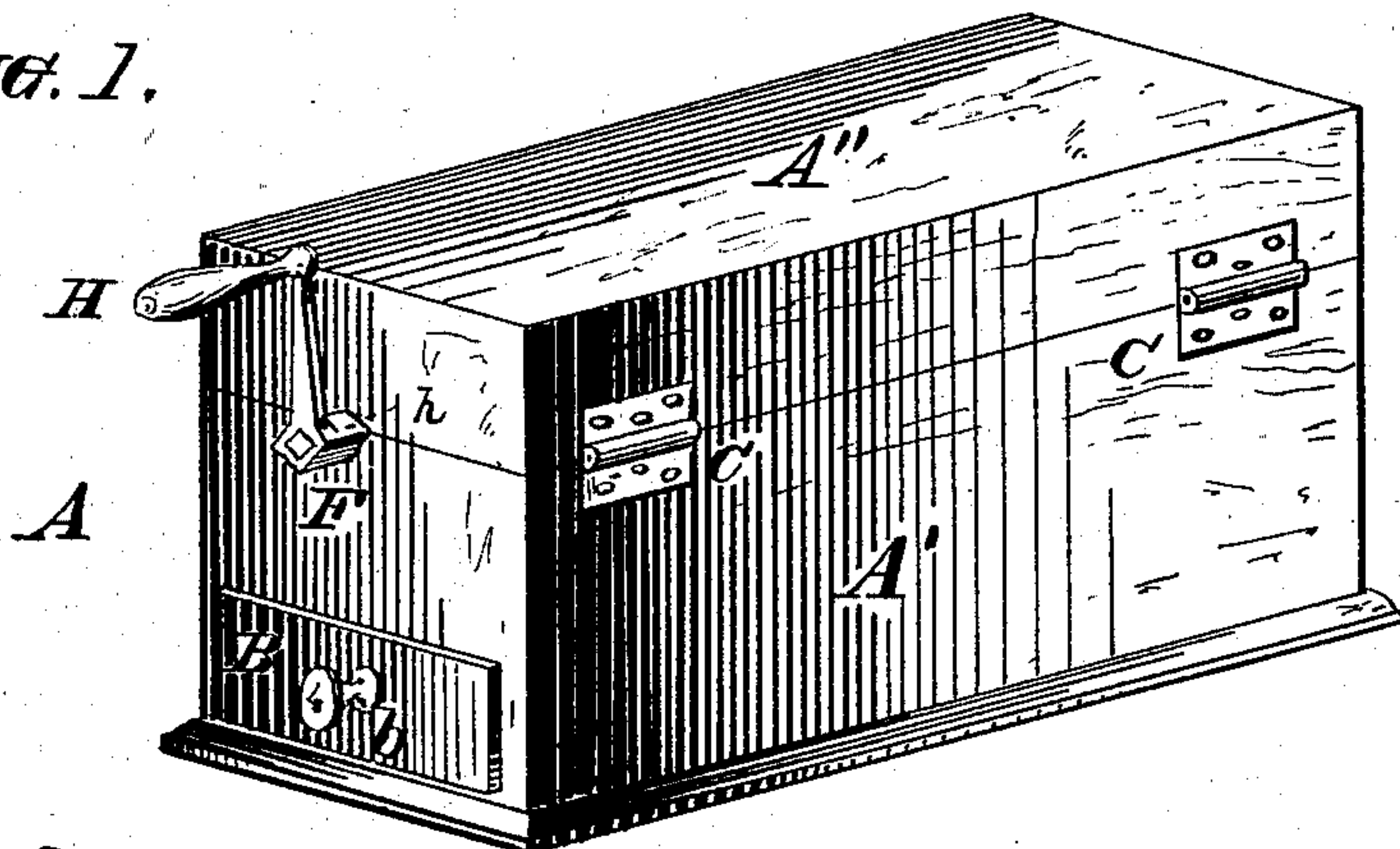


FIG. 2.

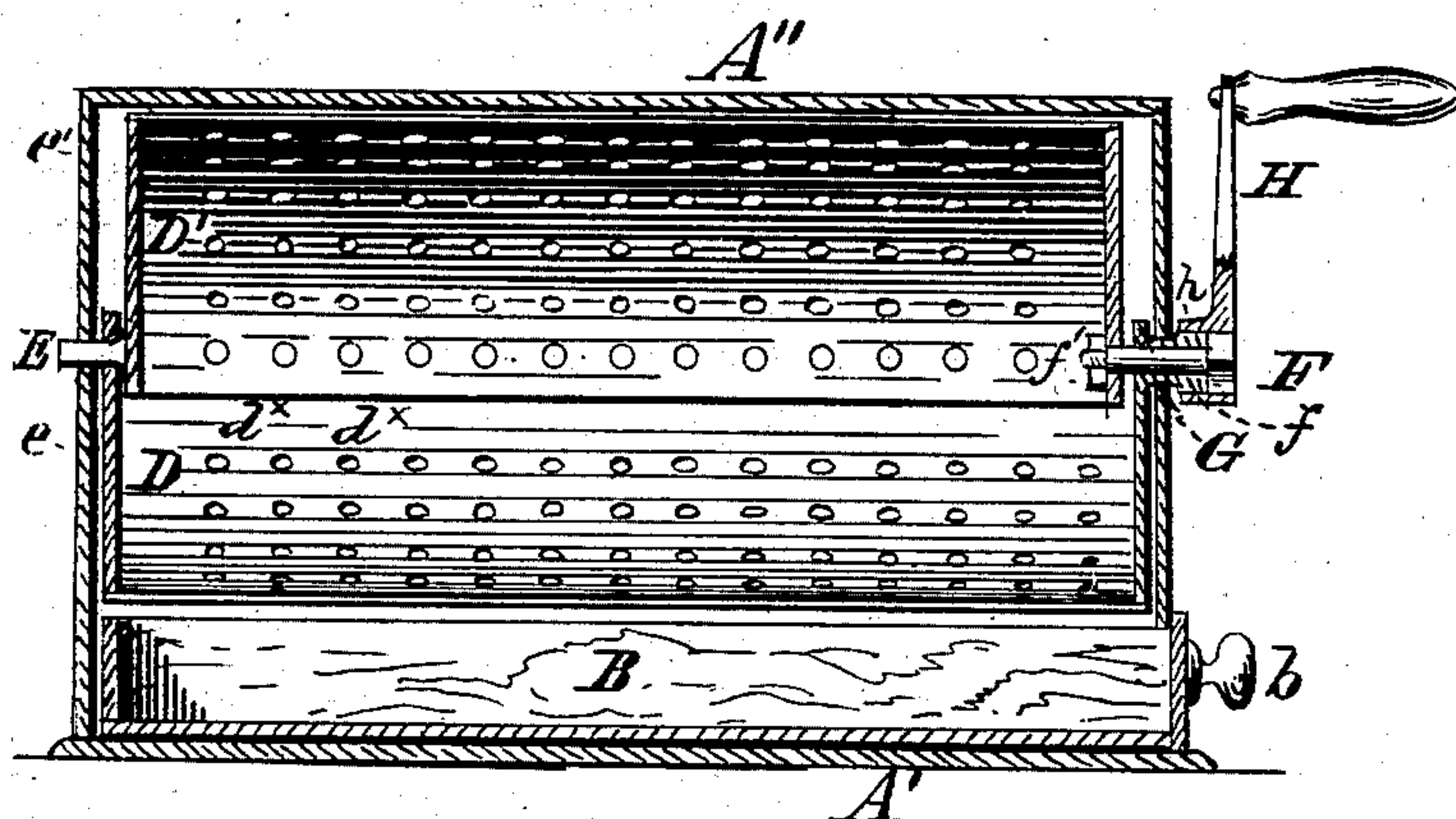


FIG. 3.

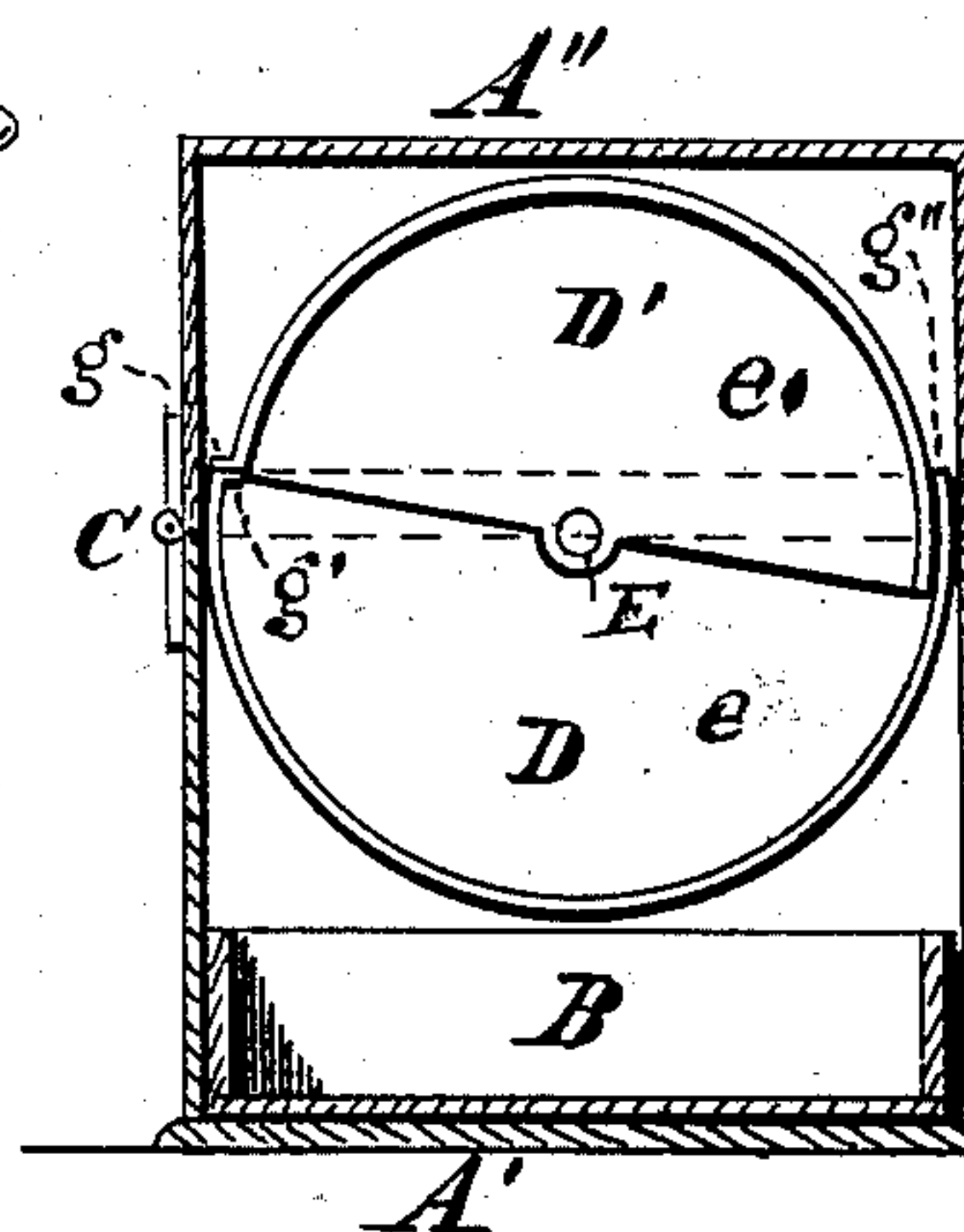


FIG. 4.

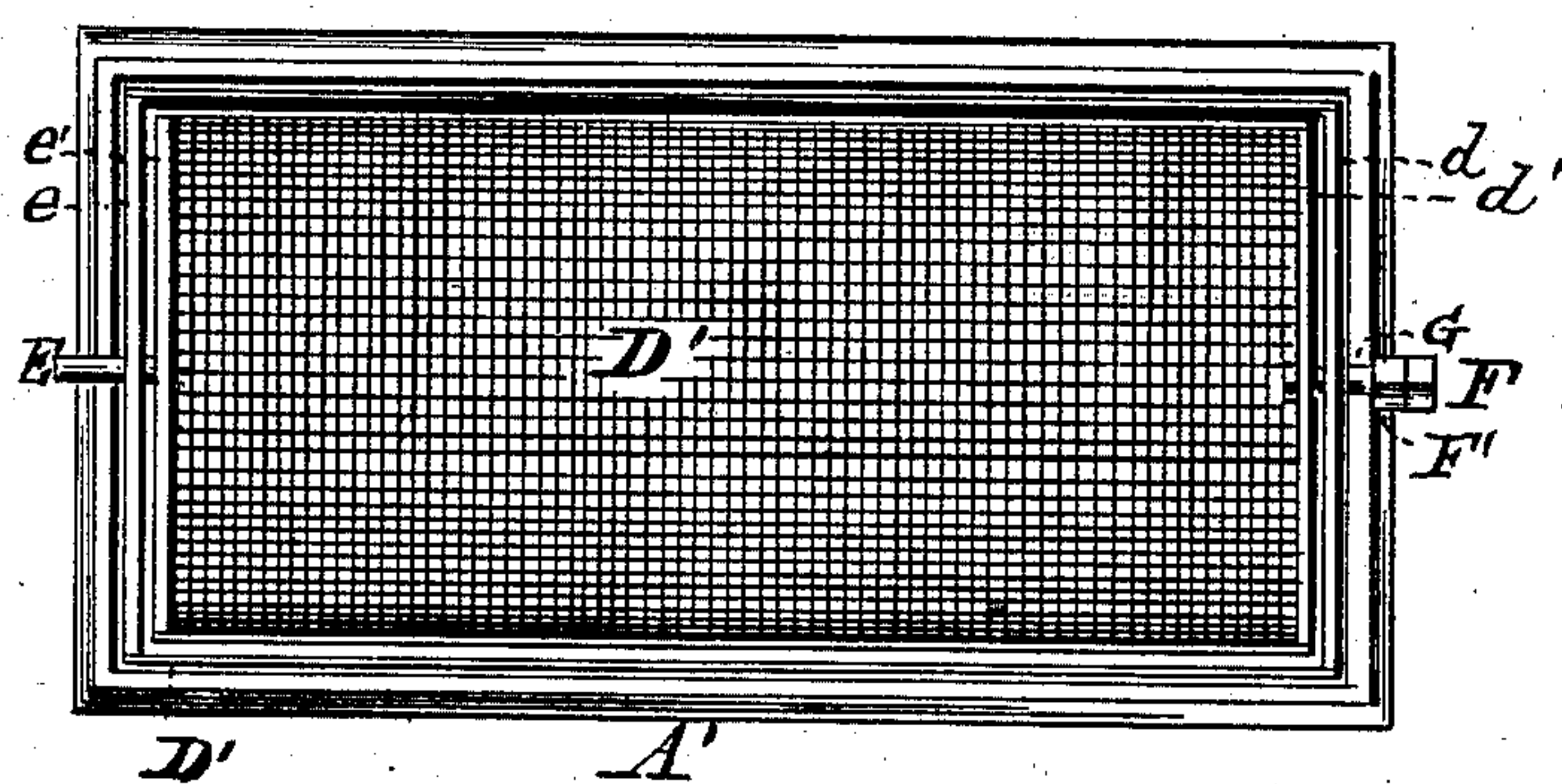


FIG. 5.

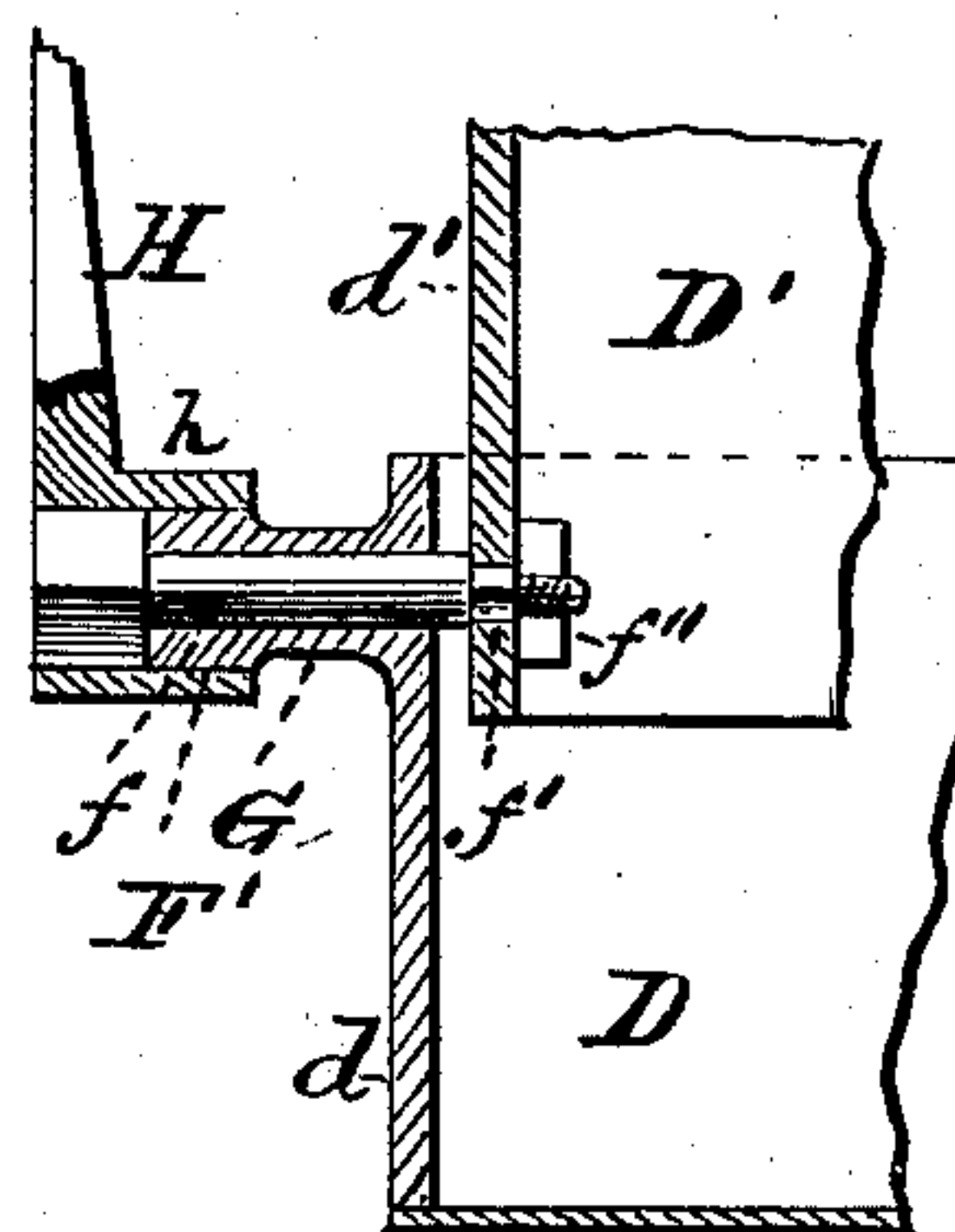
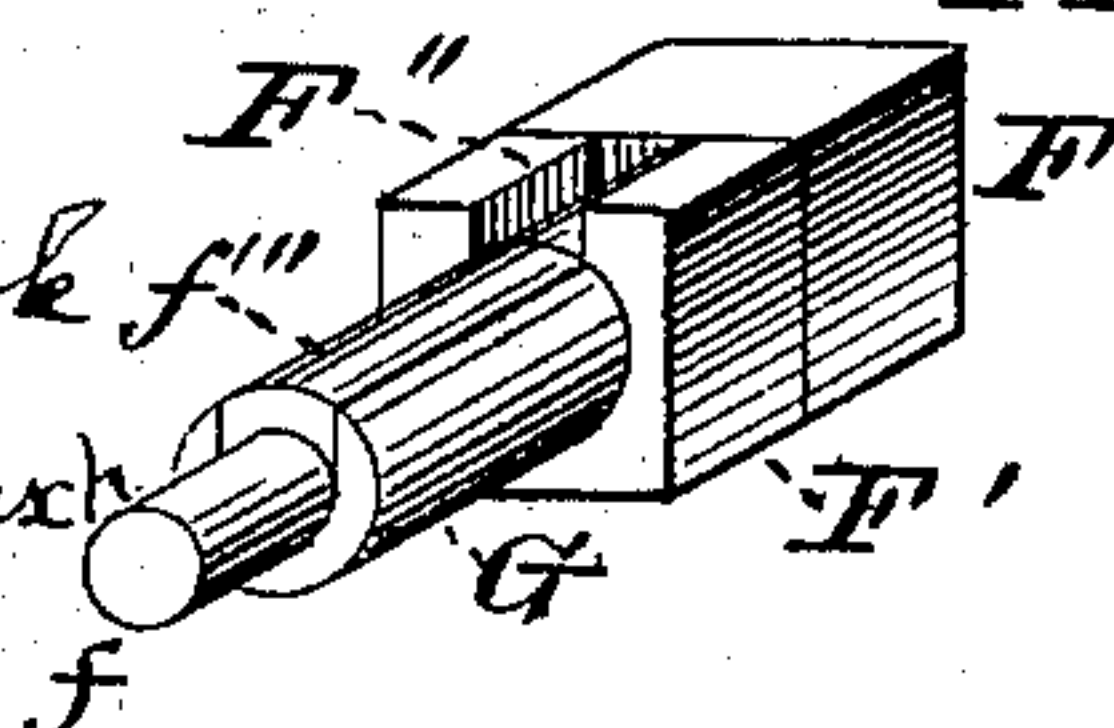


FIG. 6.

Witnesses:

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Inventor:

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UNITED STATES PATENT OFFICE.

EDWARD G. SCHULTZ, OF BUFFALO, NEW YORK, ASSIGNOR OF ONE-HALF
TO FERDINAND J. KERSTEN, OF SAME PLACE.

REVOLVING ASH-SIFTER.

SPECIFICATION forming part of Letters Patent No. 254,886, dated March 14, 1882.

Application filed January 30, 1882. (No model.)

To all whom it may concern:

Be it known that I, EDWARD G. SCHULTZ, of Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements on a Revolving Ash-Sifter; and I do hereby declare that the following description of my said invention, taken in connection with the accompanying sheet of drawings, forms a full, clear, and exact specification, which will enable others skilled in the art to which it appertains to make and use the same.

This invention has general reference to ash-sifters; and its object is the production of a cheap, durable, and serviceable sifter for separating the ashes from the coal and clinkers, substantially in the manner as hereinafter first fully set forth and described, and then pointed out in the claims.

In the drawings already mentioned, which serve to illustrate my said invention more fully, Figure 1 is a perspective view of my improved ash-sifter. Fig. 2 is a longitudinal sectional elevation of the same. Fig. 3 is a transverse sectional elevation. Fig. 4 is a plan, and Figs. 5 and 6 detached sectional perspective views, of parts of the machine.

Like parts are designated by corresponding letters of reference in all the figures.

The letter A in these figures designates a receptacle of any kind, consisting of two portions, A' A'', respectively, the lower one of which is provided with a drawer, B, both sections being hinged together at C, as clearly shown in Figs. 1 and 3. Within this receptacle is placed a revolving sifter consisting of two semi-cylindrical portions, D D', respectively constructed, as hereinafter specified, in such manner as to form, when placed in the position shown in Figs. 2 and 3, a completely-closed cylindrical shell, wherein the ashes, coal, &c., are contained. The section D consists of two semicircular disks, *d e*, respectively, the former being provided centrally with an aperture forming a bearing for a journal, E, and the latter with a hollow journal, G, having on its extreme end an angular section, F'. Around the periphery of these two disks is secured a perforated sheet having the perfora-

tions *d^x d^x*, or, instead of such a sheet, a wire-cloth covering, as indicated in Fig. 4. The section D' is constructed in a manner similar to the section D, except that it has the pivot E in one of the disks *e'*, and a bolt, *f*, in its opposite disk, *d'*. This bolt *f* has an angular head, F, on one end, and a nut, *f'*, on its opposite end, where said bolt is attached to said disk *d'*, to form a pivot for the shell on that end.

In the journal G may be made a longitudinal groove, F'', wherein the bolt *f* is placed, the gap being afterward filled by a lining-piece, *f'''*, as clearly shown in Fig. 6.

In arranging the two sections of the drum in position, care is taken that the inner section revolves freely within the outer one, and that ledges *g* are formed on the section D', and similar ledges, *g'*, on the section D, so that when the drum is in an open position the ledges will overlap the longitudinal seams and prevent the ashes, &c., from working in between the two sections D D', and thereby prevent their proper operation.

In operation the two sections D D' are placed in the position shown in Fig. 4—*i. e.*, in an open condition. Now, the ashes, coal, &c., to be sifted are placed into the semi-cylindrical shell D'; then the wrench H is placed upon the angular portion of the bolt-head F, and by the other angular section, F', the section D is revolved one-half of a revolution, whereby the receptacle for the ashes, &c., is formed into a complete cylindrical shell. Now, the wrench H, with its socket *h*, is moved over and caused to embrace the angular section F', in addition to the angular section F, and by doing so to lock the two semi-cylindrical shells D D' securely in position, after which the sifter may be revolved until the entire contents are cleaned and separated from the ashes, which are gathered in the drawer B.

It will now be readily observed that on account of the peculiar construction of the journals for the two semi-cylindrical sections or shells D D', as hereinbefore specified, in conjunction with the handle H, having the socket *h*, I can lock the two semi-cylindrical shells D D' together, so that they will either form a complete cylindrical shell, as shown in Figs.

2 and 3, or an open semi-cylindrical receptacle, as shown in Fig. 4.

Owing to the peculiar construction of this sifter it is admirably adapted for use in stoves, ranges, &c., by placing the two semi-cylindrical sections into the ash-pit of such stoves or ranges and collecting the ashes, &c., as they fall through or from the grate in one of the said semi-cylindrical sections. When full the other section may be revolved so as to complete the cylindrical shell, as specified, and then the drum revolved around its pivots or journals E G until the ashes are clearly separated from the coal and clinkers.

Instead of placing the drawer B into the casing A, I may provide the latter with an open bottom and a rim, so as to fit the said casing A to an ordinary ash-barrel in the usual and well-known manner, so that the entire apparatus may be readily used for household purposes, &c.

Among other obvious advantages to be derived from the construction of this apparatus I may mention one—viz., that the ashes, &c., may be separated from the coal, &c., without causing a particle of dust to escape from the box A—an advantage that cannot be derived from any shaking sifter.

Having thus fully described my invention, I desire to claim as new and to secure to me by Letters Patent of the United States—

1. As an improved article of manufacture, an ash-sifter composed of two semicircular sections having end walls, as specified, said sec-

tions being pivoted upon journals or axles located in the center of said sections, whereby the sections are opened and closed by revolving one section around the other, substantially in the manner as and for the object specified.

2. In ash-sifters, two semi-cylindrical perforated sections, D D', journaled as specified, in combination with angular sections F F' on the journal G and bolt f, and the handle H, with the socket h, as and for the object specified.

3. As an improved article of manufacture, an ash-sifter consisting of a hinged casing, A, having the drawer B, two semi-cylindrical perforated sections, D D', provided with pivot E and hollow journal G, respectively, the latter having the angular section F', and the bolt f, having the angular section F, the whole being constructed and combined substantially in the manner as and for the use and purpose indicated.

4. In ash-sifters having a drum consisting of two semi cylindrical sections journaled as specified, the means, substantially as described, whereby said sections are locked together in either an open or a closed position, substantially as described, for the object mentioned.

In testimony that I claim the foregoing as my invention I have hereto set my hand in the presence of two subscribing witnesses.

E. G. SCHULTZ.

Attest:

MICHAEL J. STARK,
JOHN C. DUERR.