

C. STEEL.

ASH SIFTER.

No. 254,720.

Patented Mar. 7, 1882.

Fig. 1.

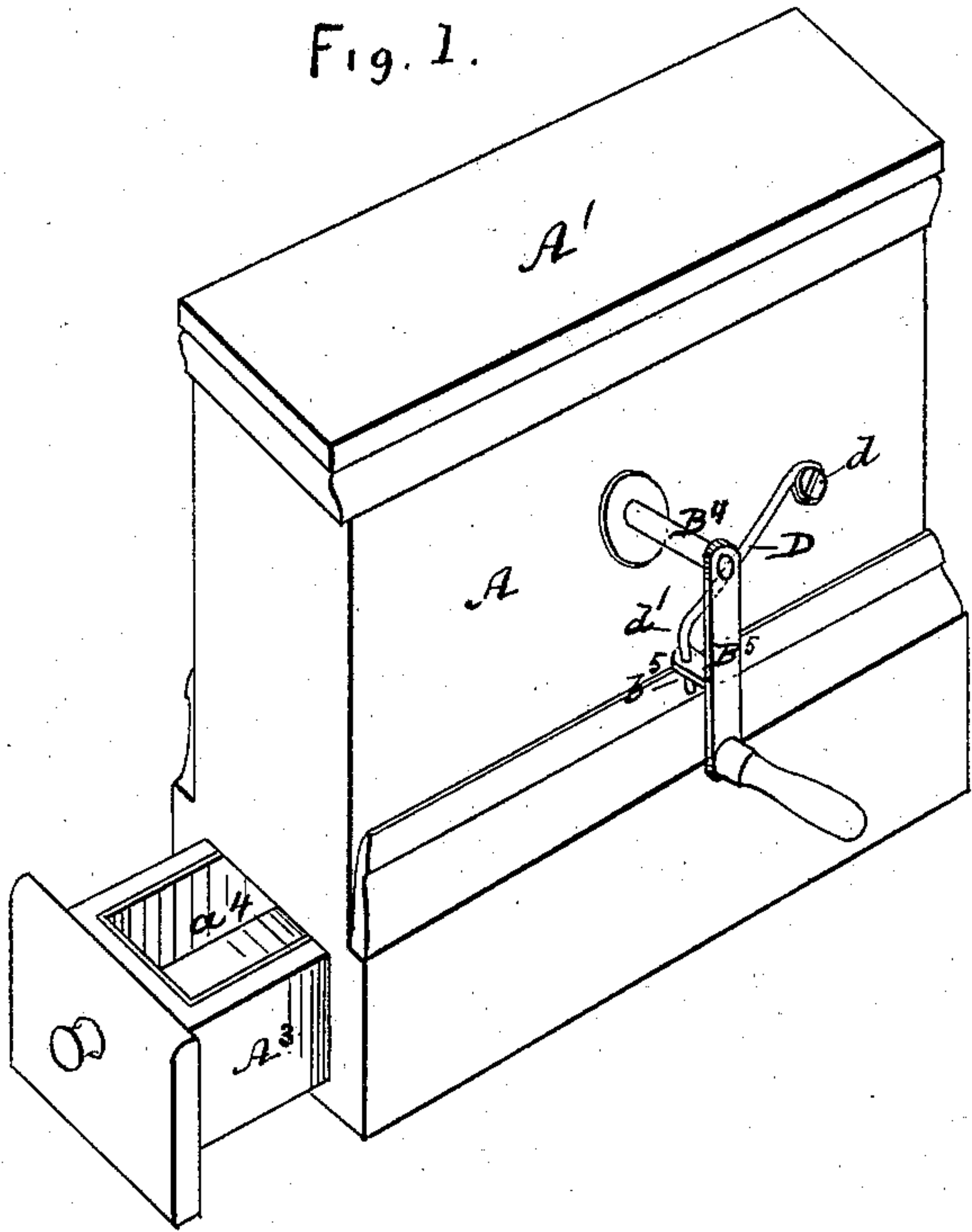


Fig. 4.

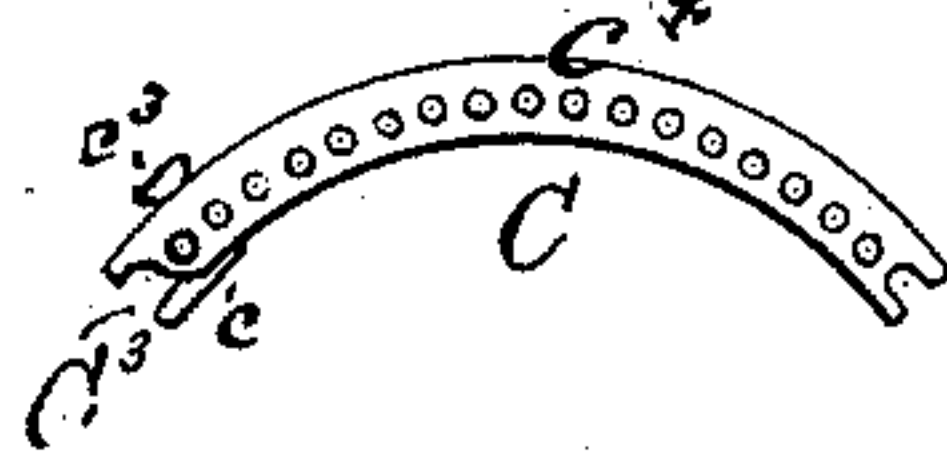


Fig. 5.

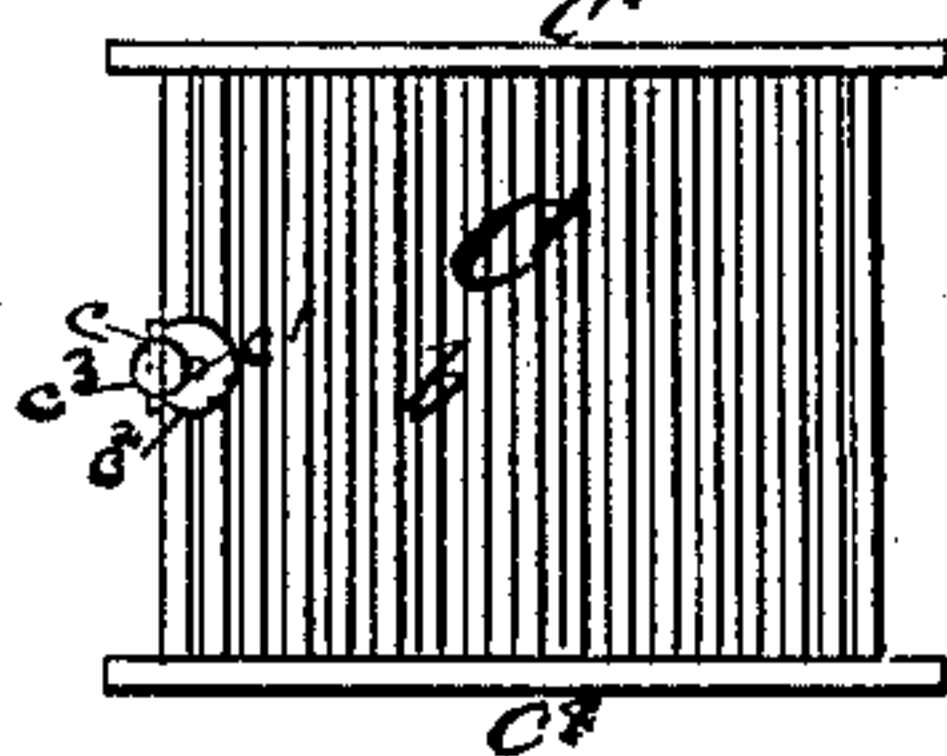


Fig. 2.

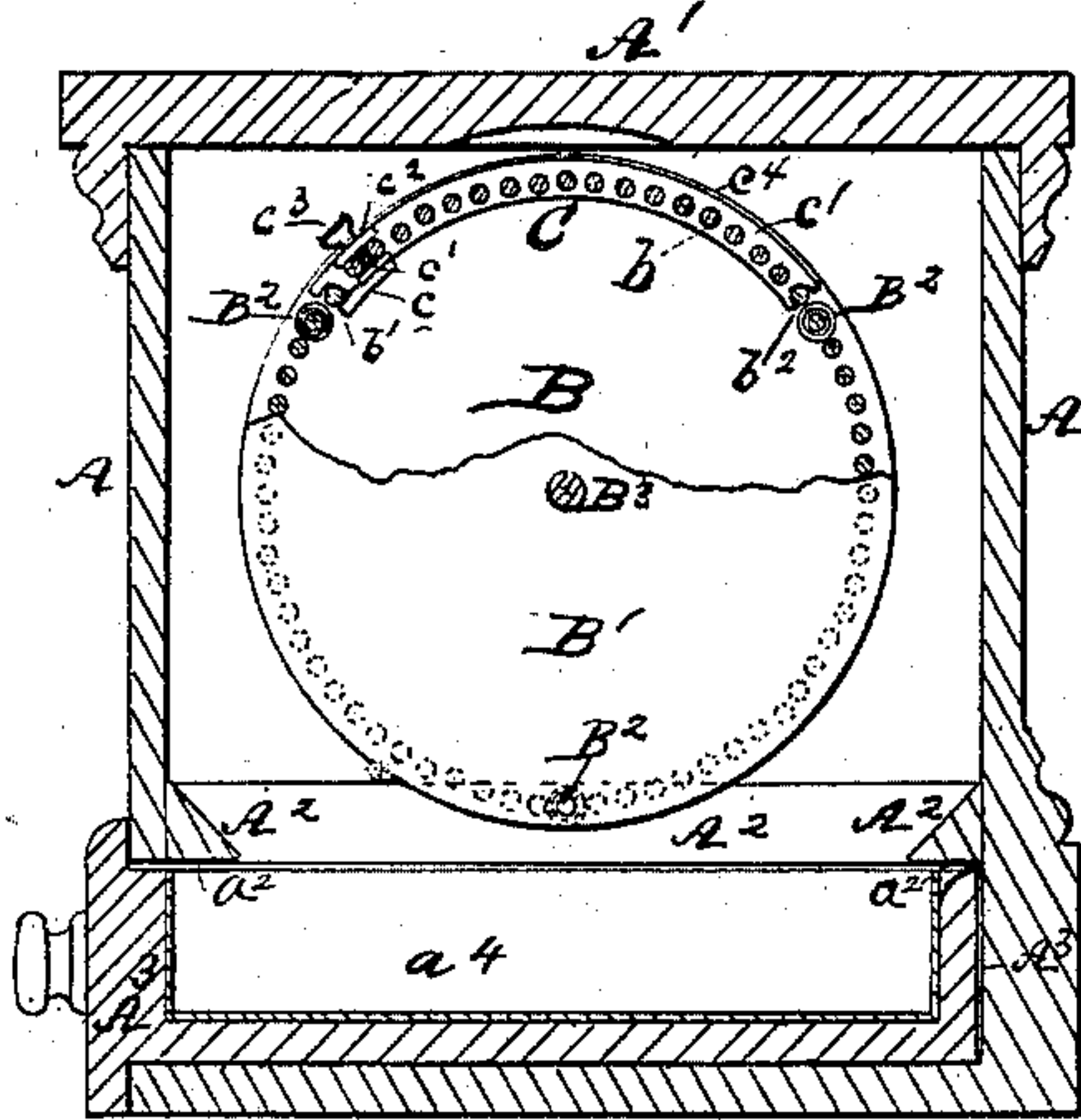
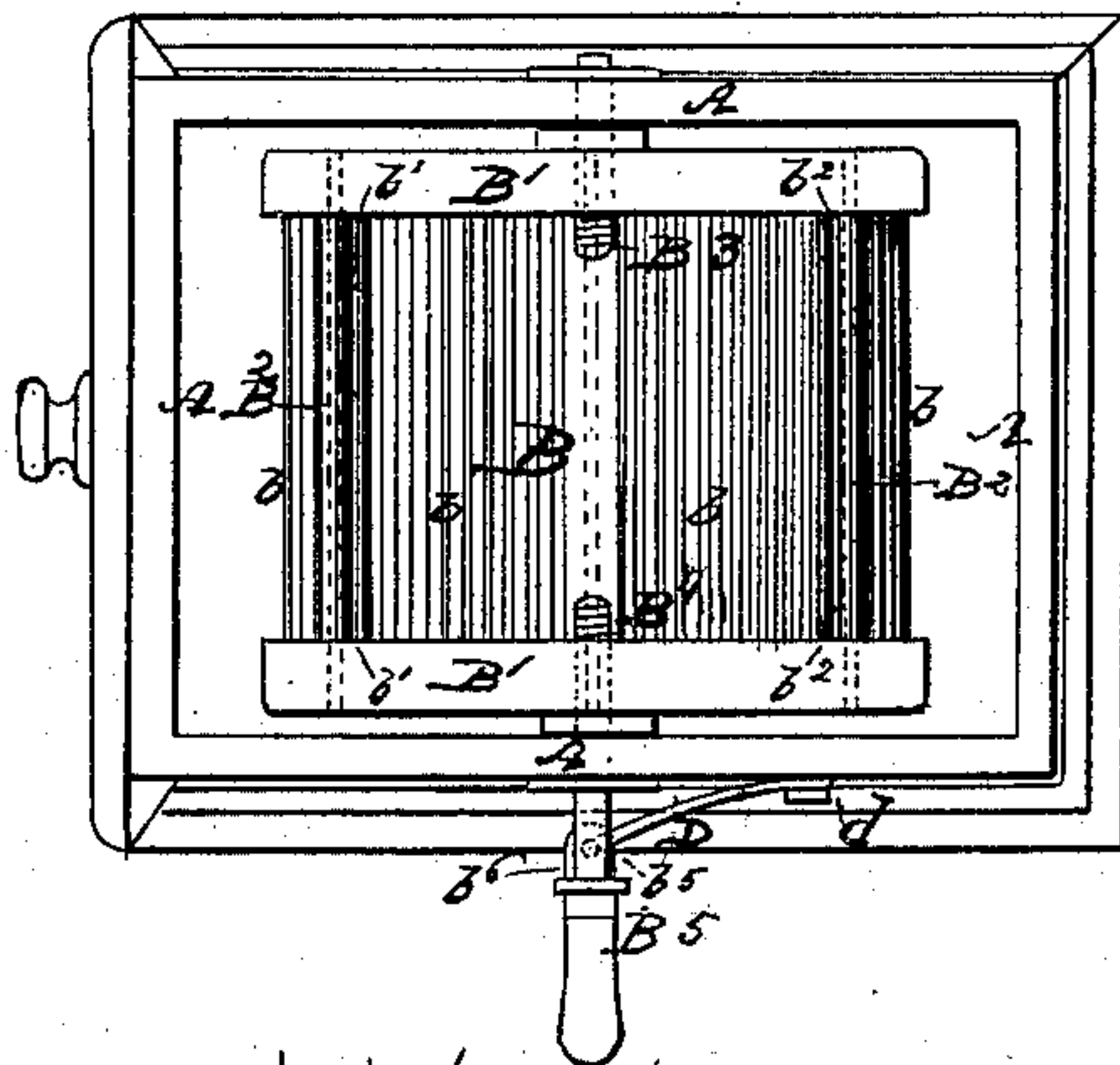


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES STEEL, OF NEW YORK, N. Y.

ASH-SIFTER.

SPECIFICATION forming part of Letters Patent No. 254,720, dated March 7, 1882.

Application filed April 21, 1879.

To all whom it may concern:

Be it known that I, CHARLES STEEL, of New York city, in the State of New York, have invented certain new and useful Improvements
5 Relating to Ash-Sifters, of which the following is a specification.

My improved sifter is of a class adapted for household use, in which the cinders and ashes are introduced through a removable door in a
10 horizontal cylinder composed of bars adapted to serve as a sifter, and are agitated by the revolution of the cylinder to shake out the ashes, while the whole is inclosed in a tight case. The ashes fall into a receptacle in the lower part,
15 and are removed by drawing out the receptacle laterally.

The improvements are in the details tending to promote convenience and utility. I provide for holding the cylinder firmly in the position
20 to receive the charge by means of a pawl, which engages in attachment to the crank. I provide a removable lining or interior drawer, which, with the other, constitutes in fact two vessels, which may be used for the reception
25 of the ashes and cinders, respectively; and I provide against dropping any of the ashes or cinders on the edges or outside of the drawer.

The accompanying drawings form part of this specification.

30 Figure 1 is a perspective view of the apparatus, showing the drawer and receiver partly removed. Fig. 2 is a central vertical section. Fig. 3 is a plan with the cover removed. Fig. 4 is a side view of, and Fig. 5 a plan of, the re-
35 movable segmental portion.

Similar letters of reference indicate corresponding parts in all the figures.

A is a rectangular case, A' a cover, and A² an inner ledge having a width greater than the
40 thickness of the sides of the drawer.

A³ is the main drawer, which contains a removable lining, a⁴, which may be of sheet metal.

B is a revolving sifting-cylinder turning on a shaft, B³ B⁴, operated by a crank, B⁵.

45 C is a curved open-work door, covering a liberal opening in one side, to receive the material and to discharge the cinders after the ashes are sifted out.

On the inner face of the crank B⁵ is an eye, b⁵.

50 To the side of the casing A is hung a bent lever, D, turning on a pivot, d. Its bent portion d' engages in the eye b⁵ when the parts are

in such position that the door C is uppermost to receive the material. This holds the cylinder very firmly while the material is being in-
55 troduced.

The drawer A³ is of such size that its upper edge is protected by the ledge A². The under face, a², of the ledge is level, and should fit tolerably close to the upper edge of the drawer.
60 The ledge A² may be carried still farther outward on all sides, as it is shown on the front side, or that on which the drawer is removed. It performs the important function of preventing the dirt from falling between the inner pan
65 or lining, a⁴, and the drawer A³, or exterior to both. It insures that the material on being sifted down shall be guided within the proper vessel. After slowly rotating the crank, and
70 thus shifting the charge for a proper time, and waiting a moment to allow the principal dust to settle, the drawer A³ and its contents are pulled out. Now, the inner lining, a⁴, may be
75 lifted out, by the aid of suitable handles or otherwise, with the fine ashes, and on returning the drawer A³, after having removed the door
C, the reversion of the sifting-cylinder dumps the cinders into the main drawer, which, on removing again and properly emptying both
80 vessels, the whole may be restored to its original condition, ready for the next use.

The sifting-cylinder B is composed of two end pieces, B', connected by iron rods b b' b², and held together by braces B².

The curved door C is formed of two end pieces, 85 c⁴, connected by cross-bars. These end pieces are hollowed at one end, so as to fit over the rod b², and cut away on their under sides at the other, so as to rest upon the rod b'.

The fastening device C³, Fig. 4, is composed 90 of a plate, c², Figs. 2 and 5, secured to the contiguous cross-bars. A shaft, c', turns in this plate. It is provided at its upper end with a button, c³, for turning it, and at the other end with a projection, c, which fits under the rod
95 b' when the shaft is turned and secures the door in position.

It will be seen that the door can be entirely removed or only opened to any required limit. After being removed it can easily be replaced,
100 and by turning the button c is secured again.

Modifications may be made in the details. I have shown the cylinder ends B' as held firmly at the proper distance apart by tubular braces

B², which are placed at intervals to inclose certain of the rods *b*; but this is not essential.

I attach much importance to the offset or shoulder *a*², and to the manner in which the drawer A³, with its removable lining *a*⁴, applies under it, so that it is protected by it from becoming clogged with the accumulation of ashes and cinders between these vessels or outside of both.

10 I claim as my invention—

In an ash-sifter having a closed box and removable drawer, the rotary sifter described, consisting of the main body B' *b* and remova-

ble door C, having the curved side pieces, C⁴, bars *b*, turn-button *c*, and handle *c*³, constructed and arranged substantially as set forth, whereby the door may be entirely removed or merely opened as a hinge-door, substantially as set forth.

In testimony whereof I have hereunto set my hand, this 26th day of March, 1879, in the presence of two subscribing witnesses.

CHARLES STEEL.

Witnesses:

W. COLBORNE BROOKES,
JOHN HAHNEUFELD.