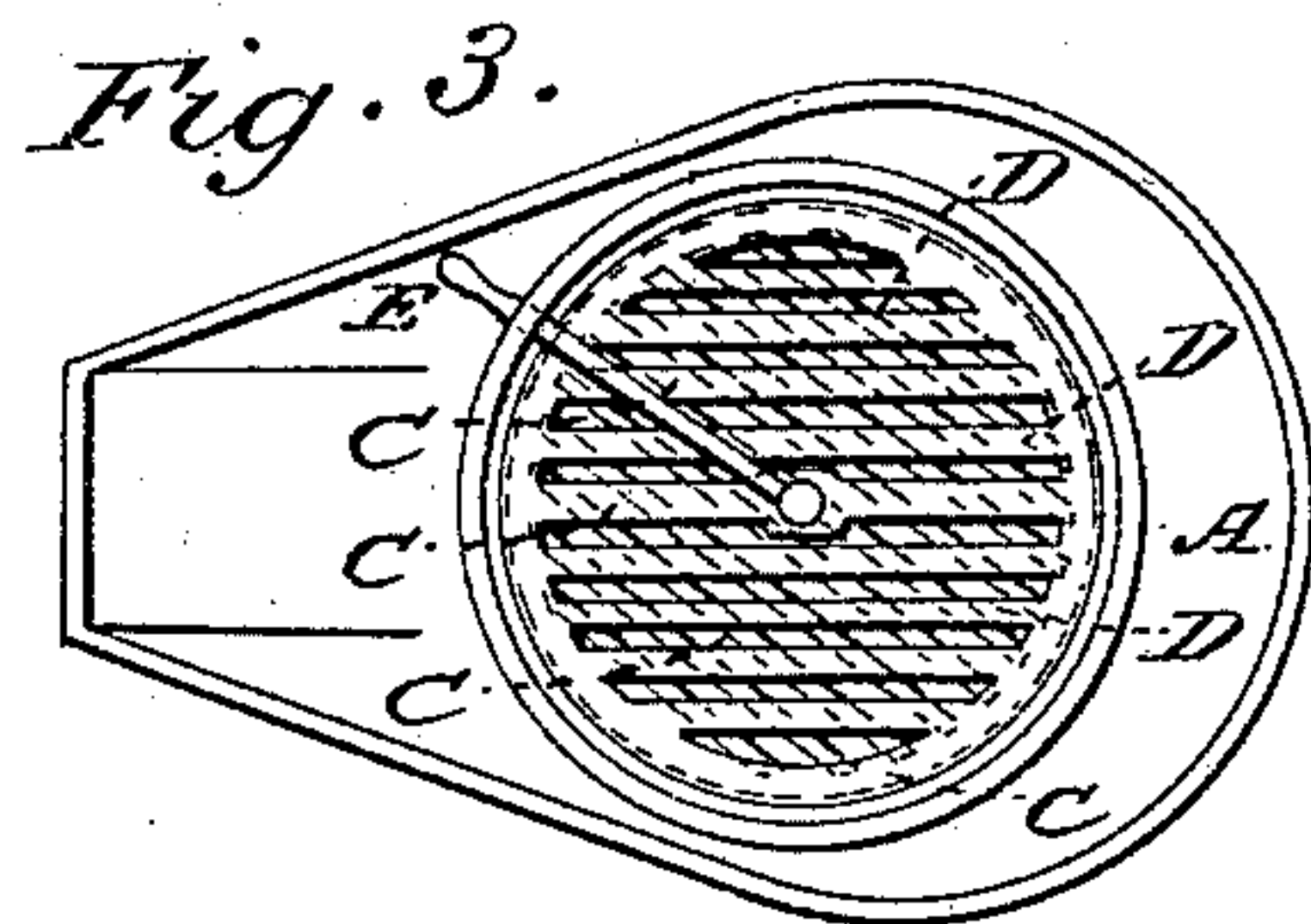
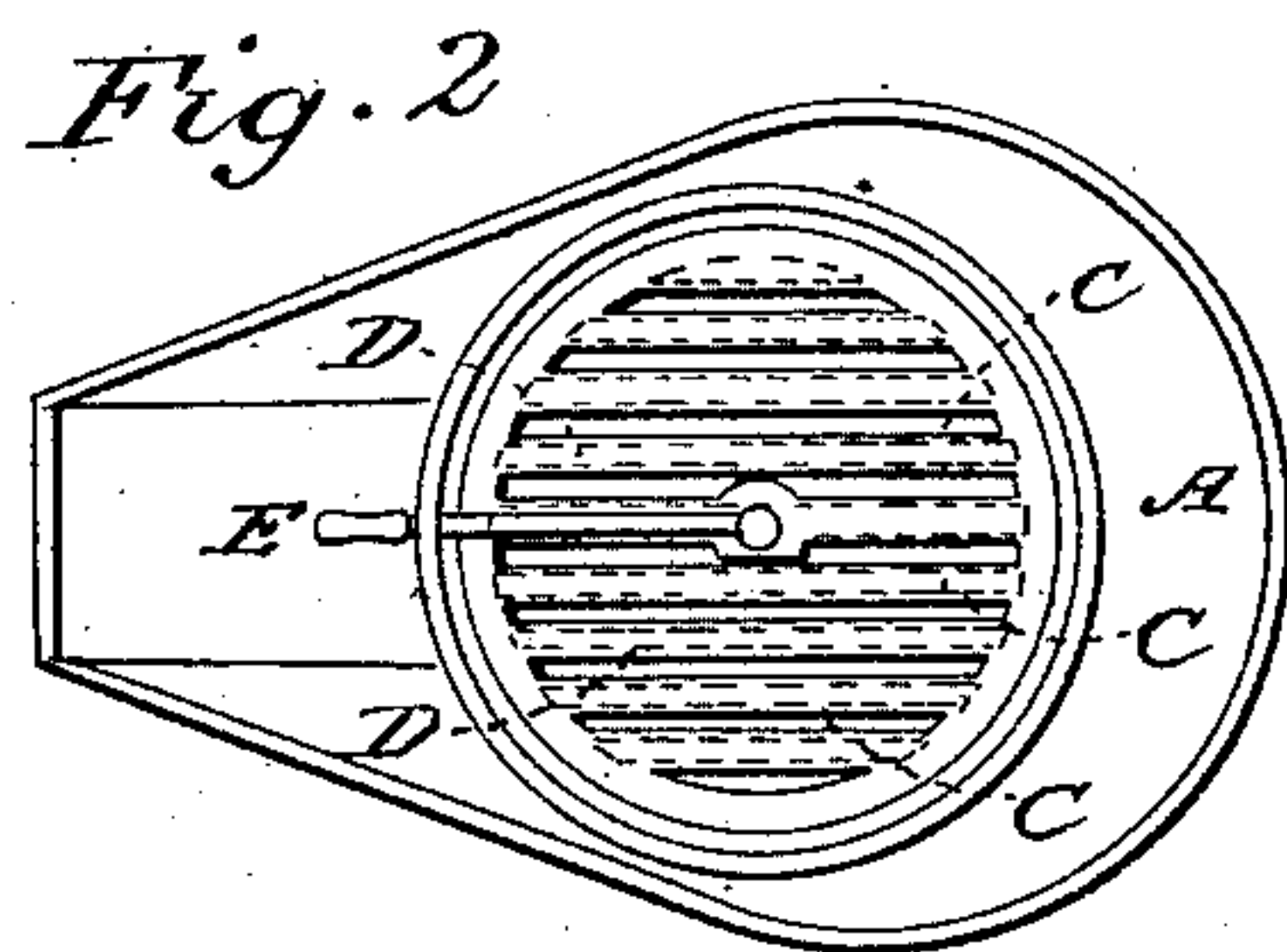
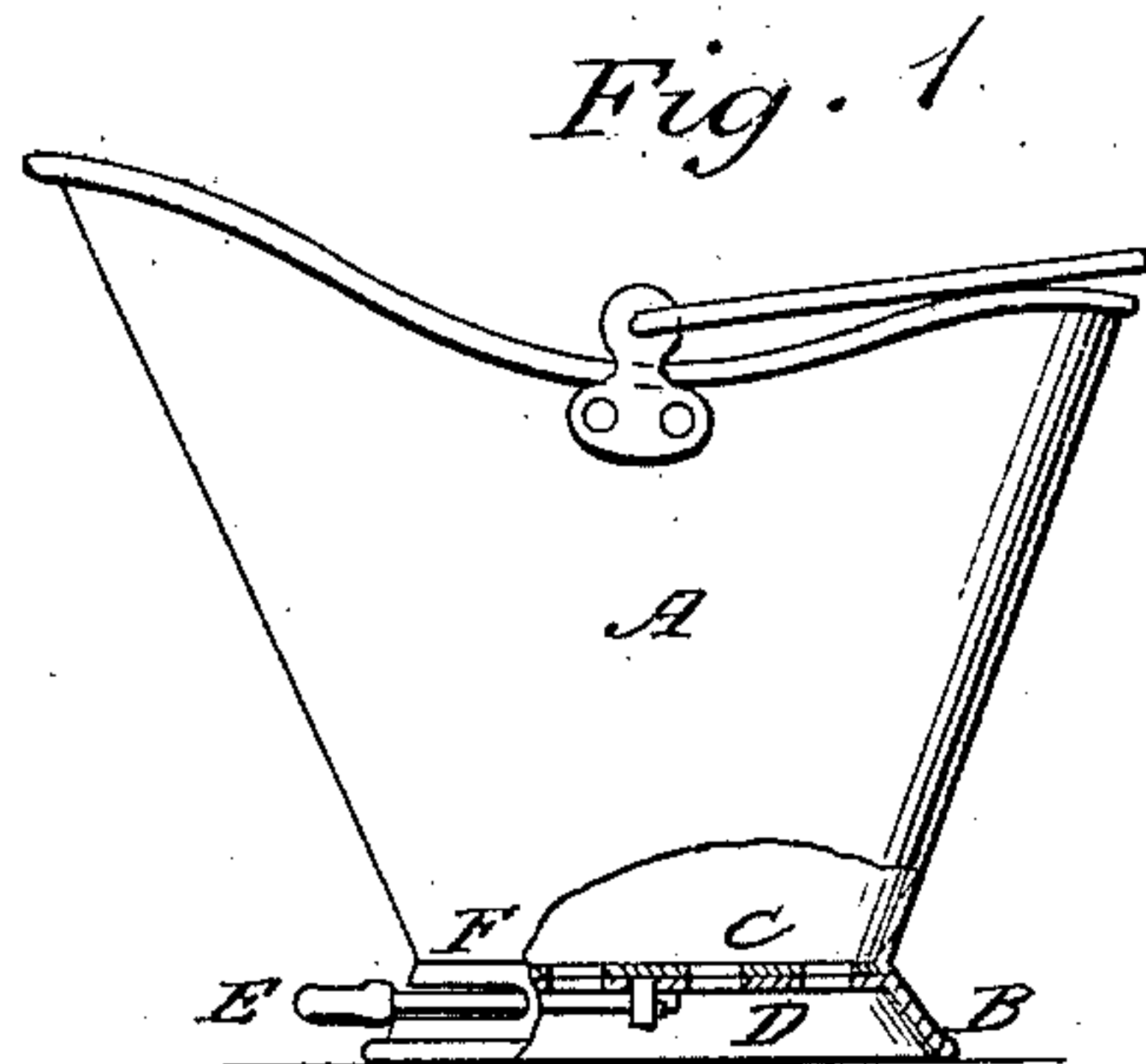


B. F. COWAN.
Coal Scuttle.

No. 61,054.

Patented Jan. 8, 1867.



Witnesses:
J. M. B. Conington
Wm. Treiman.

Inventor:
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B. F. COWAN, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF, J. D. SHEWELL,
AND JOHN SUMNER, OF THE SAME PLACE.

Letters Patent No. 61,054, dated January 8, 1867.

COAL SCUTTLE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, BENJAMIN F. COWAN, of the city and county and State of New York, have invented a new and improved Coal Scuttle; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a side view of a coal scuttle made according to my invention, a portion of the side being broken away to show the bottom.

Figure 2 is an inverted view, showing the bottom tight or closed.

Figure 3 is an inverted view, showing the bottom open.

The object of this invention is to produce a coal scuttle, or coal hod, as it is sometimes called, whose bottom, by a simple movement of a lever or handle, can be changed from a condition in which it forms a complete unbroken surface, so as to hold coal, ashes, cinders, or refuse matter, which may then be carried in the hod with safety from place to place, to the condition of a grate, through which the finer part of the contents of the hod can pass out, and which, furthermore, by reason of the peculiar construction of the bottom, can be also used as a sifter, one portion thereof, the upper, being made movable on the other, so as alternately to open and close the bottom, the contents of the hod or scuttle being meanwhile agitated by the vibration of the movable portion with which they first come in contact. After the finer portions of such contents have been sifted out by such agitation and alternate opening and closing of the bottom, the movable portion is left in such a position as to make the bottom complete and whole again, so as to retain the other portions of the contents, without the liability of littering the apartment or place where the scuttle is kept.

The letter A designates a scuttle to which my improvement has been applied. B is the usual supporting flange below the level of the bottom of the scuttle, the rim of which flange rests on the ground. The bottom of the scuttle is commonly made of a fixed and unbroken piece of metal or wood, and since it is then fixed in place and unmovable, it follows that whatever matters are placed in the scuttle must be discharged therefrom through its top. It has been, however, proposed or attempted to put a wire gauze diaphragm across the interior of a coal scuttle, at a sufficient distance above its bottom to form an ash or refuse chamber between the two, the diaphragm being fixed, or else fitted to reciprocate, so as to allow the ashes above to fall upon the bottom of the scuttle. I disclaim these methods of making a coal scuttle. In my improvement the bottom is composed of two slotted plates, C D, placed one upon the other at the usual place or level of the bottom of an ordinary scuttle. The slots extend nearly to the edges of the plates, and are made for each plate parallel with each other; consequently those slots are the longest which are nearest the diameters of the plates, and they decrease in length as they recede therefrom. By stopping the slots short of the edges of the plates, I produce a continuous rim along their edges, which in this example is of circular or ring form, because the lower part of the scuttle is made cylindrical, or nearly so. The slots in the plates may be of a different form or shape from that here shown, provided that such form does not prevent or interfere with the proposed opening and closing of the bottom, as herein set forth. The lower plate, D, is fixed by its rim to the interior of the scuttle, but the upper plate, which rests thereon, is not connected with the sides of the scuttle, although its edge comes as close as may be without binding or interfering with its proper movements, as hereafter set forth. The slots in the upper plate are so arranged that when brought into parallel lines with the slots of the under plate, they are directly over the bars of the under plate, such bars being greater in width than the slots of the upper plate, so as to close them completely; and, at the same time, the bars which are intermediate the slots of the upper plate, come directly over the slots of the lower plate, and close them completely, the bars of plate C being wider than the slots of plate D, so that they overlap the edges of the bars of the last-named plate. When in this condition, the two plates form a complete and unbroken bottom, which will not let anything pass through it, the upper plate, which is loose, being held down close to the lower plate by the weight of the contents of the scuttle. When, however, the upper plate is turned so that its slots are no longer parallel with those of the plate below, the bars of the upper plate are made to extend obliquely across the bars and slots below, thereby uncovering such portions of said slots as are not covered over by the width of the upper bars. The two centre bars of the upper plate, are, in

this example, united at the middle of their length, so as to form a hub, with which the actuating lever E may be connected. This hub may extend downward through the centre bar of the lower plate to meet the lever, or, as in this example, the lever may be bent upward, and be passed through the lower plate in order to become connected with the upper plate. The lever E extends beneath the lower plate, in a horizontal direction, through the flange B of the scuttle, a slot, F, being made therein to allow the lever to be moved to and fro a distance of one-quarter of a circle, more or less. The lever E may be placed above the upper plate if desired, and the mode of attaching the lever to the movable plate may be also varied in any way desired from that here shown. From this construction it follows that when one moves the lever E in the slot F, the upper plate, C, will be also moved over the plate D, whose slots or openings will be thereby opened or closed, as above explained, the plates mutually opening and closing each other's slots or openings. With this improvement one can take up cinders and ashes from a stove or grate in a house, and carry them out doors without producing any litter by dropping any part thereof, and there, by oscillating the lever E, sift out the ashes as in a sifting apparatus, retaining the unburnt coal in the scuttle. When the sifting or separating operation is completed, the lever is turned so as to close the bottom, when the rest of the contents of the scuttle can be taken back to the grate or stove in a fit condition to be returned to the fire, without the customary change from one vessel to another, as from a scuttle to a sifter, and back again from the sifter to the scuttle, and without dropping any part thereof through the bottom of the scuttle. It will be observed that the plate C, which is the movable one, is in immediate contact with the mass of the contents of the scuttle, and that its movements act with directness in agitating and separating the finer from the coarser parts. Any suitable form of openings may be adopted for the plates provided they are such that the solid parts of the movable plate shall close the open parts of the fixed plate, and *vice versa*.

I do not wish to confine myself to the precise details here shown, but desire to embrace any equivalent means for accomplishing these results.

Claim.

Making the bottoms of coal scuttles of plates having slots or openings and solid parts intermediate, and so arranged that the slots are opened and closed by the oscillation of one of the plates, substantially as above described.

B. F. COWAN.

Witnesses:

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