

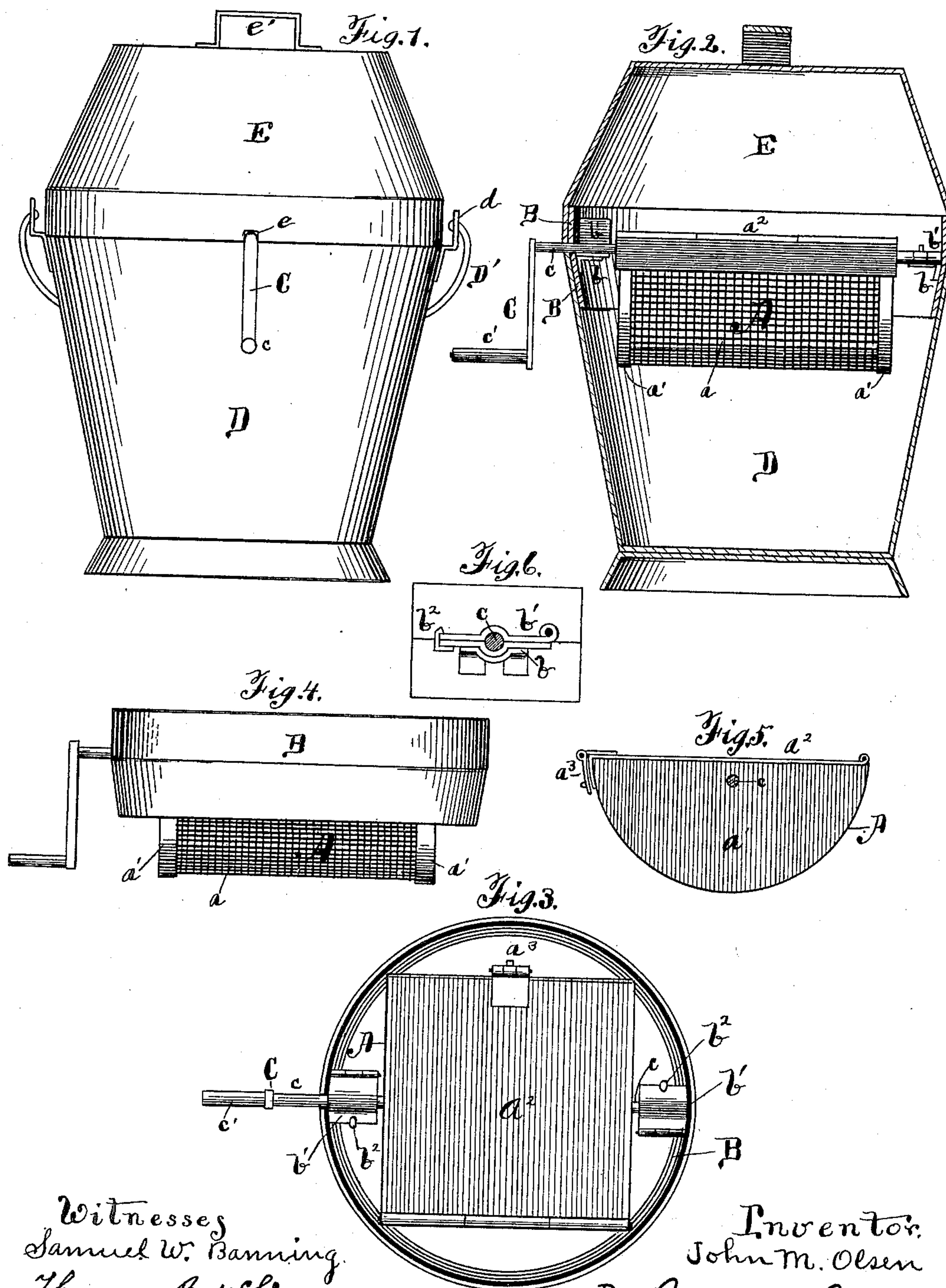
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J. M. OLSEN.
ASH SIFTER AND RECEPTACLE.

(Application filed Aug. 19, 1901.)

(No Model.)



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UNITED STATES PATENT OFFICE.

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ASH SIFTER AND RECEPTACLE.

SPECIFICATION forming part of Letters Patent No. 697,744, dated April 15, 1902.

Application filed August 19, 1901. Serial No. 72,594. (No model)

To all whom it may concern:

Be it known that I, JOHN M. OLSEN, a subject of the King of Sweden and Norway, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Ash Sifters and Receptacles, of which the following is a specification.

The object of my invention is to construct a simple, effective, and reliable ash-sifter in connection with a receptacle for the ashes which can be used, if so desired, by the side of a stove, range, or furnace and into which the ashes to be sifted can be deposited direct and the sifting operation performed without the necessity of taking up the ashes and carrying them out to a sifter, as has heretofore been the general practice. At the same time the construction of the sifter and receptacle is one which permits of the sifting operation within the room containing the range, stove, or furnace without any liability of the ashes and dust flying in the sifting operation, so that the ashes can be sifted directly in the room and no ill effects from flying ashes and dust will arise.

The invention consists in the features of construction and the combinations of parts hereinafter described and claimed.

In the drawings illustrating the invention, Figure 1 is an elevation of the sifter and receptacle constituting the invention in condition for use; Fig. 2, a sectional elevation of the parts as in Fig. 1 with the sifter in full elevation; Fig. 3, a top or plan view of the sifter and frame; Fig. 4, a side elevation of the sifter and its supporting band or frame; Fig. 5, an end elevation of the sifter, and Fig. 6 a detail showing the construction of the journal-boxes carrying the shaft or journals of the sifter.

The sifter A has its body a made of wire-netting or perforated metal of the proper mesh to furnish the necessary openings for the passage of the ashes and for retaining the particles or pieces of unconsumed coal, so that the ashes will be separated from the portions of unconsumed coal and the coal can be removed from the sifter to be burned in the fire-pot of the stove, range, or furnace. At each end of the sifter-body is a tight head

a' , which, as shown, is semicylindrical, and to these heads is secured in any suitable manner the sifter-body. A cover a^2 is hinged at one side and is of the requisite dimensions to entirely close the top of the sifter, and its free side is provided with a suitable hasp or other form of catch a^3 , by means of which the cover will be held securely down in the operation of the sifter.

The sifter A as a whole is carried in a frame or band B, made of sheet metal or other suitable material and of a diameter to fit within the top of the receptacle with which the sifter is used. The frame or band on opposite sides has an inwardly-extending journal-box each formed of a fixed section b , attached to the frame or band, and a hinged section b' , held in place when down by a catch b^2 or in any other suitable manner. Each end of the sifter near its top edge has an outwardly-extending journal or pivot-pin c , which are mounted in the journal-boxes of the band, for which purpose the journal-boxes are made with an upper hinged section, and when mounted the sifter is free to be oscillated or turned on the journals or pivot-pins within the frame or band. The journal or pivot-pin c at one end is formed to receive a handle or arm C, having a grip c' , by means of which the sifter can be oscillated or turned within its frame or band.

The receptacle D for coöperation with the sifter may be in the general form of a pail or bucket or other desired form and can be made of sheet metal or other suitable material, its open end having an interior diameter corresponding to the exterior diameter of the frame or band carrying the sifter, so that such frame or band can be entered into the top of the receptacle and have a sufficiently close fit therein to prevent the escape of fine ashes and dust in the sifting operation. The receptacle, if so desired, may have on opposite sides ears d to receive a bail D' for carrying the receptacle around. The receptacle and the sifter are to be closed, so as to be ash and dust tight, by a cover E, the open end of which fits snugly around the upper portion of the frame or band of the sifter and abuts against the top edge of the receptacle, as shown in Figs. 1 and 2, and in order to allow the cover to be

fitted closely to place a notch *e* is formed in its edge to pass over the projected journal or pivot-pin having the handle thereon, as shown in Fig. 1, and the cover can have a suitable handle *e'* for the removal and replacement thereof. The cover can be made of sheet metal or other suitable material, and the construction of the open end of the receptacle and the open end of the cover has such relation to the construction of the frame or band carrying the sifter that when the parts are assembled and in position for use the operation of the sifter will be dustless, the parts having a sufficiently close relation to prevent the escape of fine ashes and dust in the sifting operation.

In use the receptacle, with the sifter therein and the cover removed, can be placed adjacent to the ash-pit of the stove, range, or furnace, so that the ashes can be removed from the ash-pit by a shovel or otherwise and deposited within the sifter, it being understood that the cover of the sifter is raised to allow the ashes to be deposited therein. The cover when the sifter is filled with ashes is turned down and locked, and the cover *E* for the receptacle is placed in position, so as to tightly close the receptacle. The operator by means of the handle or arm *C* then oscillates or turns the sifter, which causes the ashes to be separated from the unconsumed portions of the coal and to fall down into the bottom of the receptacle, and after the sifting operation has been continued a sufficient length of time to separate the ashes the receptacle, with the sifter therein, is set to one side until the fine ashes and dust have settled, and when this condition is reached the cover *E* can be removed, the hinge-section of the journal-boxes raised, and the sifter, with the unconsumed coal therein, can be removed from the receptacle and the coal again returned to the fire-pit of the stove, range, or furnace or to a coal box or hod or other place of deposit, leaving the ashes in the bottom of the receptacle, so that the receptacle can be taken away and the ashes deposited wherever desired.

While the sifter and receptacle are adapted and intended for use together and in combination, they are made separable and so that the sifter, with its supporting-ring, can be removed from the receptacle. This enables the

entire operating mechanism independently of the receptacle to be carried to the alley or elsewhere and the sifting operation performed in a barrel or other vessel. The receptacle in addition to being a receiver for the ashes may also be used as a receiver and depository for dust, lint, or rubbish. Moreover, after the sifting operation in the receptacle the removal of the sifter enables the receptacle to be more easily carried out and emptied than would otherwise be the case.

The supporting frame or band carrying the sifter can be made of a diameter to fit into an ordinary waste pail or bucket, thus enabling the sifter, with its cover, to be applied and used with an ordinary ash bucket, pail, or can.

What I regard as new, and desire to secure by Letters Patent, is—

1. In an ash sifter and receptacle, the combination of an oscillating sifter, a journal or pivot-pin on each end of the sifter, a frame or band having a slot in one side into which one of the pivot-pins is removably mounted, hinged journal-boxes on the inner wall of the frame or band removably mounting both journals or pivot-pins of the sifter, a receptacle adapted to receive the frame or band and have the same removably and rigidly entered into its top, a cover for the receptacle over the sifter slidable over and around the frame or band to rest against the top rim of the receptacle, and a handle for oscillating the sifter, substantially as described.

2. In an ash sifter and receptacle, the combination of a semicylindrical oscillating sifter having semicircular ends, a rounded screen-surface between the ends and a hinged lid or cover, a journal or pivot-pin on each end of the sifter, a frame or band in which the sifter is removably mounted, hinged journal-boxes on the inner wall of the frame or band removably mounting the journals or pivot-pins of the sifter, a handle or arm on one of the journals or pivot-pins, and a receptacle adapted to receive the frame or band and have the same removably entered into its top, substantially as described.

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Witnesses:

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