April 7, 1925. 1,532,390

H. S. EARLE

ASH SIFTER

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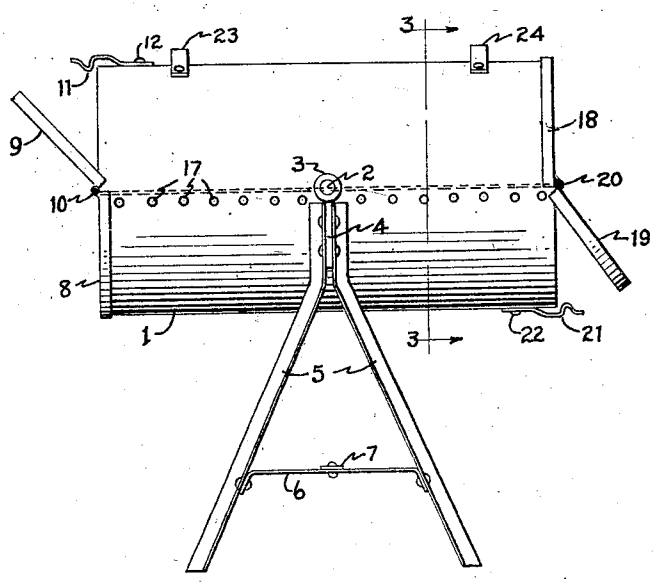


Fig. 1.

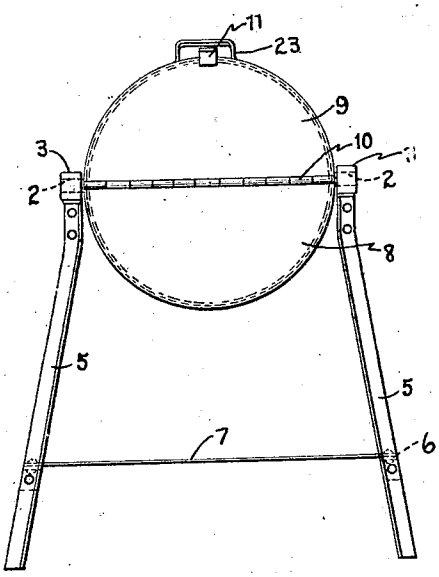


Fig. 2.

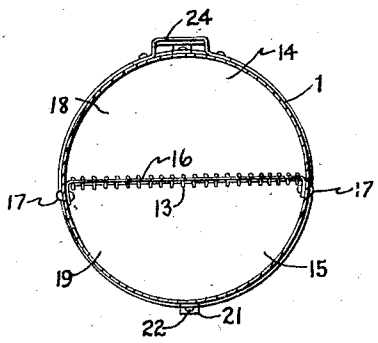


Fig. 3.

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UNITED STATES PATENT OFFICE.

HORATIO S. EARLE, OF DETROIT, MICHIGAN.

ASH SIFTER.

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To all whom it may concern:

Be it known that I, HORATIO S. EARLE, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Ash Sifters, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings which form a part of this specification.

This invention relates to ash sifters and the object of the invention is to provide an ash sifter which is of cheap construction and which is very efficient in operation. Another object of the invention is to provide an ash sifter which is pivotally mounted in a frame work, the said sifter being rocked on its pivot to sift the ashes therein. A further object of the invention is to provide a cylindrical casing pivotally mounted in a frame work, the said casing being divided longitudinally by a screen on which the ashes are positioned, the casing being rocked on its pivot to sift the ashes, the sifted ashes being delivered from the lower half of the casing and the large particles which do not pass through the screen being delivered from the upper half of the casing. These objects and the several novel features of the invention are hereinafter more fully described and claimed and the preferred form of construction by which these objects are attained is shown in the accompanying drawings in which—

Fig. 1 is a side elevation of an ash sifter embodying my invention.

Fig. 2 is an end elevation thereof.

Fig. 3 is a section taken on line 3—3 of Fig. 1.

The device consists of a cylindrical sheet metal casing 1 having a stud 2 extending outwardly from each side thereof as indicated more particularly in Fig. 2. Each stud 2 is mounted in a bearing member 3 having a shank 4 which is riveted in position between the legs 5 of the frame. A cross member 6 is provided connecting the legs 5 adjacent the lower end thereof and a metal frame member 7 shown more particularly in Fig. 2 connects the two members 6 and also acts as a stop which prevents complete rotation of the cylinder 1 on its pivot. A cover member is provided for the end of the cylinder comprising two halves shown at the left of Fig. 1, the lower half 8 being secured to the end of the cylinder 1 and the upper half 9 being hinged to the portion 8 by a hinge 10. Both cover portions 8 and 9 are provided with a flange fitting about the end of the cylinder 1 and a spring catch 11 is secured to the cylinder 1 by rivets 12, the said catch being adapted to hold the cover portion 9 closed when the ashes are being sifted. A wire screen 13 extends longitudinally through the cylinder and divides the cylinder into an upper chamber 14 and a lower chamber 15 as shown more particularly in Fig. 3. This screen 13 is provided with a series of cross bars 16 which form part of the screen and are riveted to the opposite sides of the cylinder 1 at 17. A cover member 18 is provided for the end of the cylinder at the right of Fig. 1 which is divided into two parts, the upper part 18 being flanged and secured to the cylinder 1 to close the end of the chamber 14 and the lower part 19 being provided with a flange and hinged to the upper part 18 at 20, the part 19 forming a door for the lower chamber 15. A spring catch 21 is provided which is similar to the spring catch 11 and is secured to the casing 1 by rivets 22, the catch 21 being adapted to hold the portion 19 closed during operation of the device and, a pair of hand holds 23 and 24 are provided whereby the cylinder may be rocked on its pivot.

In operation the ashes to be sifted are thrown through the door 9 into the chamber 14 onto the screen 13 at which time both doors 9 and 19 are closed and held closed by the spring catches 11, and 21. The operator then by grasping the hand holds 23 and 24 oscillates or rocks the cylinder on its pivot and causes the ashes to travel back and forth over the screen 13 which sifts the same, the fine ashes falling through the screen into the chamber 15. When the ashes have been sifted, the operator turns the device on its pivot so that the door 19 is in its lower-most position at which time the spring catch 21 may be released thus allowing the door 19 to open and deliver the sifted ashes into a receptacle placed therebeneath to receive the same. The door 19 is then closed and the cylinder is tilted so that the door 9 is in its lower-most position at which time the spring catch 11 may be released to allow the door 9 to open and deliver the coals and large pieces remaining on

the screen 13 to a receptacle provided for receiving the same. If desired both doors may be placed at one end of the cylinder, in which case, the opposite end would be provided with a cover permanently secured thereto, but it will be found somewhat easier to deliver the sifted ashes and the coals when the doors therefor are placed at opposite ends of the cylinder.

From the foregoing description, it becomes evident that the device is very simple and efficient in operation will not get out of order, is composed of few parts and is of consequent low manufacturing cost and provides a device which accomplishes the objects described.

Having thus fully described my invention, its utility and mode of operation what I claim and desire to secure by Letters Patent of the United States is—

1. An ash sifter consisting of a framework including two spaced standards, a bearing at the upper end of each standard, a cylindrical body member position between the said standards, studs positioned centrally on opposite sides of the cylindrical member and engaging the bearings, a screen extending longitudinally of the cylindrical member separating the same into two compartments, a closure member for each end of the cylindrical body member consisting of a fixed and a hinged part, the fixed part of one closure member being above the screen at one end and below the screen at the opposite end, the said cover members having hinged portions likewise respectively disposed.

2. An ash sifter consisting of a framework having spaced upright portions, a body member of cylindrical form positioned between the spaced frame portions and pivotally supported thereby, a screen extending longitudinally of the cylindrical member dividing the same into two equal compartments, a closure member for each end of the cylindrical members, each closure member consisting of two half parts one of which is fixed to the end portion and the other of which is hinged to the said fixed portion, the hinge line being in the plane of the screen and the fixed part of the one cover member at one end being below the screen and at the opposite end being above the screens and with the hinged portions likewise oppositely disposed, and a handhold near each end of the body member.

In testimony whereof, I sign this specification.

HORATIO S. EARLE.