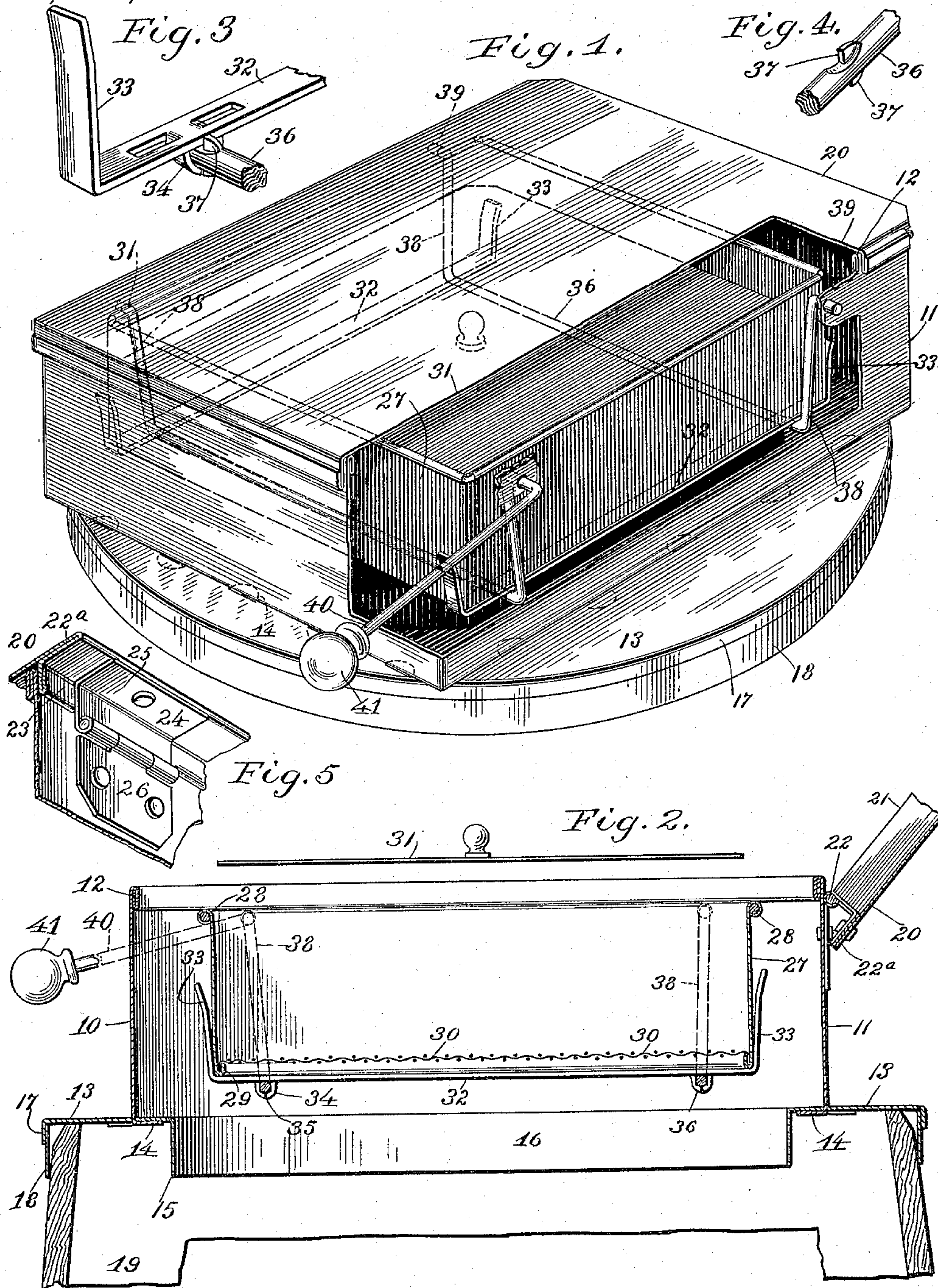


C. F. NOLTE.
ASH SIFTER.
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Witnesses:
C. Bartels
m. att.

Inventor
C. F. Nolte
By his Attorneys
Criswell & Criswell

UNITED STATES PATENT OFFICE.

CHRISTIAN F. NOLTE, OF NEW YORK, N. Y.

ASH-SIFTER.

1,154,932.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHRISTIAN F. NOLTE, a citizen of the United States, and a resident of New York, borough of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Ash-Sifters, of which the following is a full, clear, and exact description.

This invention relates more particularly to an inclosed manually operated sifter adapted to be supported on a barrel or other receptacle.

One of the principal objects of the invention is to provide simple and efficient means for supporting an ash sifter within an inclosed receptacle or body to adapt the same to have a reciprocatory and rocking motion imparted thereto and in such a way that the dust or particles freed from the coal will be prevented from escaping from the receptacle and thereby injuring the clothes of the operator or otherwise charging the atmosphere about the sifter with dust.

Another object of the invention is to simplify the construction of devices of this kind and to provide a device which may be readily made and assembled and which is comparatively inexpensive to manufacture.

A further object of the invention is to simplify the mechanism by which a sifter is supported and a vibratory movement imparted thereto.

With these and other objects in view, the invention will be hereinafter more particularly described with reference to the accompanying drawings, which form a part of this specification, and will then be pointed out in the claims at the end of the description.

In the drawings, Figure 1 is a perspective view, partly broken away, of one form of device embodying my invention. Fig. 2 is a vertical sectional view taken lengthwise of the device showing how the device is applied to the upper portion of a barrel. Fig. 3 is a fragmentary perspective view showing a part of the supporting means for the sifter. Fig. 4 is a fragmentary perspective view of a part of the sifter supporting rod; and Fig. 5 is a detail perspective view of a form of hinge that may be employed for the lid of the inclosing receptacle.

The casing 10 has a rectangular or box-like body 11 having its upper portion open and the edge thereof bent inward to form a flange or bead 12 for strengthening pur-

poses. At the bottom of the casing 10 is a circular base 13. This base 13 forms a part of the casing and is held to the body 11 by means of tongues or clips 14 which pass through openings in the base 13 and are forced in opposite directions so as to clamp the body 11 to said base as shown best in Fig. 2. This base 13 extends inward and is provided with a pendent flange 15 forming a discharge opening 16 for the dust and other particles to pass from said casing. The outer edge of the base 13 is provided with a downwardly extending flange 17 to which may be held a ring or band 18 which may be secured to the flange 17 or formed as a part thereof as desired. The flange 17 and ring 18 form a part which is adapted to extend about the upper edge of a barrel or other receptacle or receiver 19 for the dust and refuse and in such a way as to inclose the open end of the barrel to prevent the dust and particles from passing therefrom. The opening at the upper portion of the receptacle 10 is adapted to be closed by a lid or cover 20. This lid or cover corresponds substantially to the shape of the casing body 11 and is provided with a flange 21 about the edges thereof so as to fit about the upper edge of said body 11. The lid 20 is hinged, at 22, to one side of the body 11 so as to be easily swung upward and backward, as shown in Fig. 2, for access to the interior of the casing 10. The hinge 22 may be of any suitable construction and may comprise body portions formed on the lid 20 with suitable hinged portions on the body 11 which are pivotally held together by a rod extending across the body 11, or the said lid may be hinged to the body 11 in a manner substantially as shown in Figs. 2 and 5. As shown, the lid has an outwardly extending flange portion 22^a which is formed by bending the sheet metal of which the lid is made upon itself and extending a part thereof, as 23, downward which when in a closed position rests against the side of the casing body 11. The flange 22^a when the lid is in an open position is adapted to rest against the side of the body 11 of the receptacle 10 and thus limit the backward tilting movement of said lid. Two hinges 24 are provided at suitable distances apart, one part, as 25, of each hinge being fastened to the lid 20, and the other part, as 26, being secured to the side of the body 11, thus positively holding

the lid to the body and serving to permit the lid to be placed readily in either a closed or in an open position.

A sifter 27 which may conform somewhat to the shape of the body 11 of the casing 10 but of somewhat less size than said body 11, is located within said casing to adapt the same to be moved back and forth therein and to be readily removable therefrom. The sifter 27 is substantially square in plan and box-like in form and while the body 11 of the casing 10 is only slightly wider than the sifter 27, its length is somewhat greater, as shown in Fig. 2, in order that the sifter 27 may be given a vibratory and rocking movement while supported within the casing 10. The sifter 27 has its upper edge beaded and strengthened by a rod 28 and at the lower edge thereof is beaded, as at 29, and has a wire mesh bottom 30 of sufficient size and strength to support the coal or ashes within the sifter 27 and in such a way that the dust and particles which are to be removed from the ashes may pass from the sifter 27 through the opening 16 into the barrel 19, the said sifter being provided with a removable lid or cover 31 which is adapted to fit within the open mouth of the sifter 27 over the coal or ashes to be sifted and thereby further serve to prevent the dust from escaping into the atmosphere about the device even should the lid 20 be in an open or in a partly open position. The lid 20 and the cover 31 when the device is in use is in the position shown in Fig. 1.

To vibrate the sifter and to support the same so that the sifter may be readily removed, I provide a simple supporting and operating mechanism. As shown, two bars or members 32 are arranged to extend lengthwise of the casing 10. Each bar or member 32 has its end extending upward, as at 33, to provide a retaining portion for the sifter 27 and to form a seat therefor during the rocking and vibratory movement thereof. Each bar 32 may have a part, as 34, depressed therefrom to form a bearing or cleat for the transversely extending rods 35 and 36. These rods form rocker members or cradles for the sifter and to prevent the bars 32 from sliding lengthwise of the rods 35 and 36, the said rods have lugs or parts 37 depressed therefrom which form shoulders against which the edges of the bars 32 are adapted to rest. The rocker rods or members 35 and 36 are each bent or formed with upwardly extending parts 38 so as to be substantially U-shaped in form and the ends of said members 38 extend outward, as at 39, and pass through openings in the sides of the casing 10 which serve as pivots or bearings for said ends 39. One of the ends of the rod 35 extends forward to provide a lever 40 on the outer end of which is a suitable handle 41 of any desired kind.

The lever 40 extends forward to the front of the device and is located at one side so as to adapt the lever to be readily operated from the front of the device.

It will be manifest that when the material to be sifted is placed within the sifter 27 and the lever 40 operated, the rocking members 35 and 36 will be moved back and forth on their pivots, owing to the connection between the members 35 and 36 through the bars 32, and this back and forth vibratory movement will be imparted to the sifter 27. It will be further manifest that by this arrangement a very simple construction is provided and that a very rapid vibratory and rocking action may be given the sifter so that the material may be quickly and readily cleaned and within a casing that is entirely inclosed so that the escape of dust or other particles from the casing is entirely avoided. It will be still further manifest that the double motion of rocking and vibrating given the sifter serves better to remove all foreign matter from the ashes.

In the construction of the device, I prefer to make the same entirely of metal and form the casing 10 as well as the sifter 27 entirely of sheet metal except so far as the wire mesh bottom 30 is concerned, though it will be understood that neither the character of the material from which the device is made nor the construction and arrangement of the same need be followed exactly as shown and that changes clearly within the scope of the invention may be made without departing from the character of the invention.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

1. In a device of the character described, a sifter, a plurality of bars having cleat portions pressed therefrom, said bars forming a seat for said sifter, rods pivotally connected together by said bars said cleat portions of said bars embracing said rods, and means for rocking said rods.

2. In a device of the character described, a sifter, a plurality of bars having cleat portions pressed therefrom, said bars forming a seat for said sifter, rods pivotally connected together by said bars, said cleat portions of said bars embracing said rods, the latter having shoulders pressed therefrom and engaging said bars for positioning the same on the rods, and means for rocking said rods.

3. A device of the character described, comprising a metal casing having a base provided with a part adapted to fit about a receiver and with an interior opening, a lid hinged to said casing, a sifter, a plurality of bars having cleat portions pressed therefrom, said bars forming a seat for said sifter, rods pivotally connected together by said bars, said cleat portions of said bars

embracing said rods, and means for rocking said rods.

4. A device of the character described, comprising a metal casing having a base
5 provided with a part adapted to fit about a receiver and with an interior opening, a lid hinged to said casing, a sifter, a plurality of bars having cleat portions pressed there-
from, said bars forming a seat for said
10 sifter, rods pivotally connected together by said bars, said cleat portions of said bars

embracing said rods, the latter having shoulders pressed therefrom and engaging said bars for positioning the same on the rods, and means for rocking said rods.

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This specification signed and witnessed this 23rd day of July A. D. 1914.

CHRISTIAN F. NOLTE.

Witnesses:

LESTER C. TAYLOR,
C. BARTELS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."