

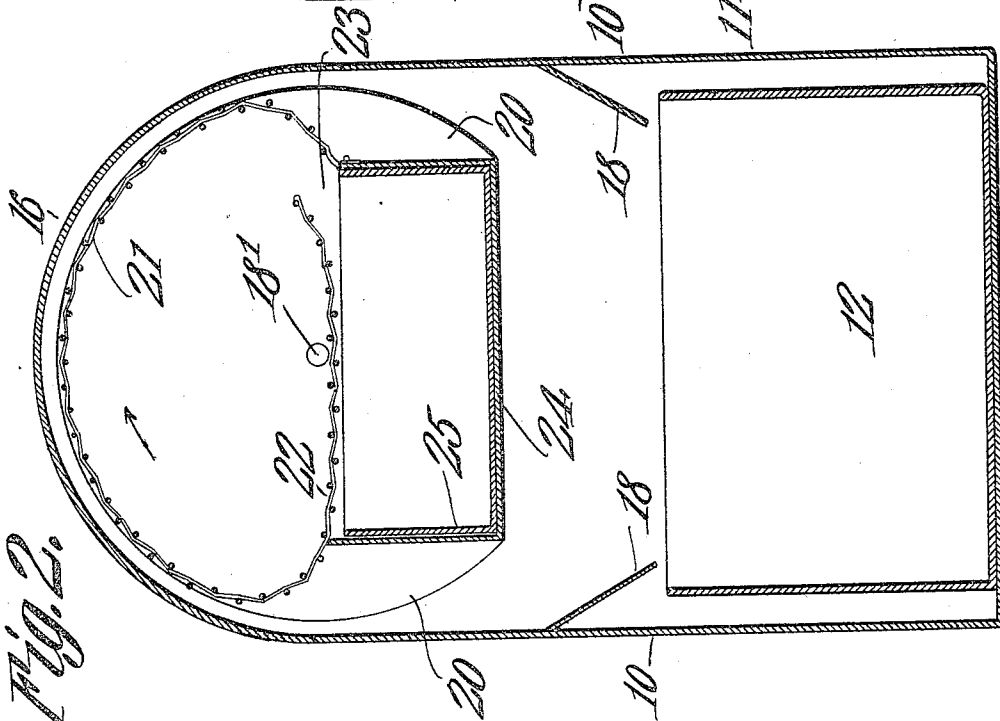
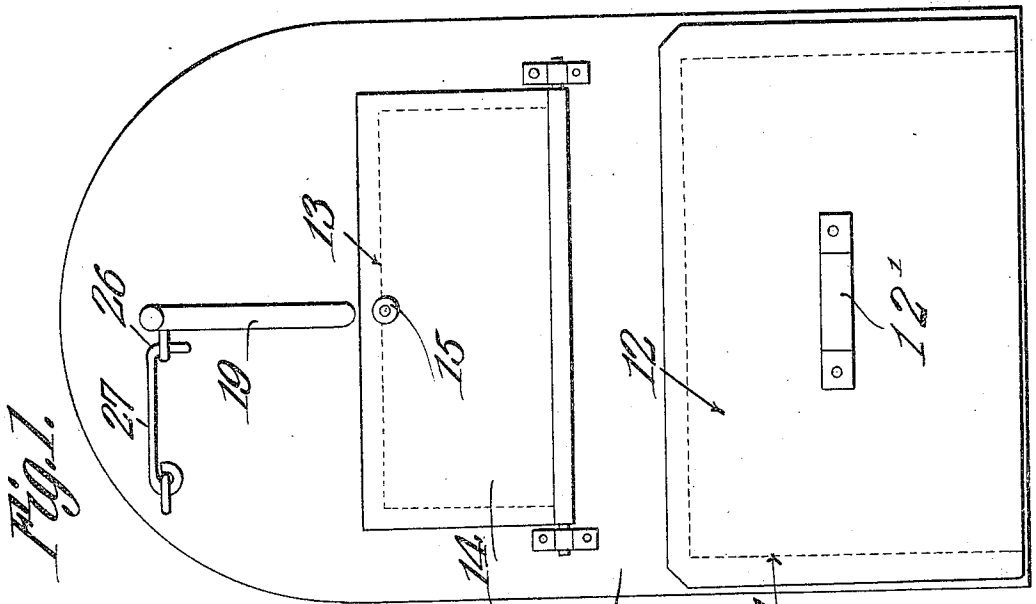
W. T. THURSTON.
ASH SIFTER.

APPLICATION FILED NOV. 6, 1908.

Patented Mar. 29, 1910.

2 SHEETS—SHEET 1.

953,402.



Witnesses

W. T. Thurston
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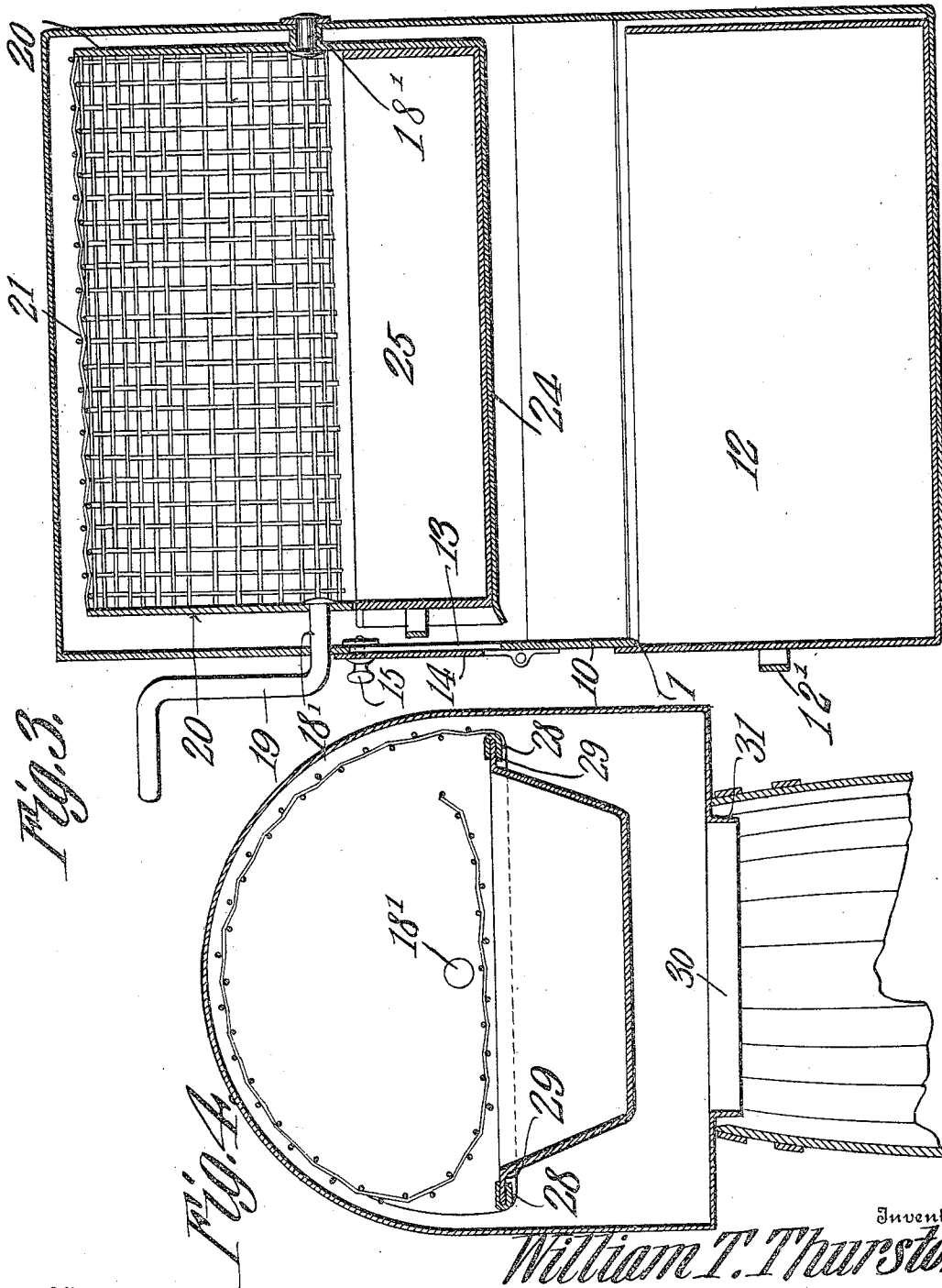
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Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM TAYLOR THURSTON, OF HASBROUCK HEIGHTS, NEW JERSEY.

ASH-SIFTER.

953,402.

Specification of Letters Patent. Patented Mar. 29, 1910.

Application filed November 6, 1908. Serial No. 461,345.

To all whom it may concern:

Be it known that I, WILLIAM TAYLOR THURSTON, a citizen of the United States, residing at Hasbrouck Heights, in the county of Bergen and State of New Jersey, have invented a new and useful Ash-Sifter, of which the following is a specification.

This invention relates to ash sifters, with especial reference to that type of ash sifters in which the screen is rotary.

One object of the invention is to provide an improved form of screen for such sifters, so that the ashes may be sifted by continuous rotary motion in one direction and, by reversal of that motion, the cinders are placed in a suitable receptacle.

Another object of the invention is to provide an ash sifter of this type with means whereby the ash pan used in a stove may be withdrawn and placed in the sifter and the sifter actuated, thus obviating the dumping of ashes into a screen, and the consequent dust and dirt arising therefrom.

The invention in general consists of a closed casing provided with suitable doors and apertures, and a rotating screen of peculiar form within said casing having an ash pan receptacle attached thereto and rotating therewith.

In the drawing, like characters of reference refer to like parts throughout the several views, and—Figure 1 is an end elevation of the invention. Fig. 2 is a transverse section therethrough. Fig. 3 is a longitudinal section therethrough. Fig. 4 is a modification of the screen and ash pan receptacle or support.

The invention comprises a casing 10 having an aperture 11 at the lower part thereof. Within the aperture 11 is held a drawer 12 forming a means for receiving the fine ashes which pass through the screen in the process of sifting. This drawer 12 is provided with a suitable handle 12', as indicated in Fig. 1. At 13 is an aperture adapted to permit an ash pan being inserted therethrough. This aperture is closed by a door 14 preferably hinged to the casing. The door 14 is provided with some suitable means, as a latch 15, to hold said door in closed position during the operation of sifting the ashes. Suitable plates 18 are arranged within the casing to form a chute, so that the ashes may not drop around the drawer 12 and thus obstruct the insertion of said drawer.

Rotatably mounted within the casing 10

is a shaft 18' that is formed of two axially alining sections, one of said sections being provided with an operating handle 19 exterior of the casing. On the shaft 18' is mounted the sifting screen which comprises spaced end plates 20 to which the shaft sections are secured and a perforate body having an arcuate portion 21, and a chordal portion 22. It is to be noted that the chordal portion does not extend clear across between the ends of the arcuate portion, but stops short to leave an opening 23, thus giving access to the interior of the screen. It is to be further noted that the chordal portion is connected to the arcuate portion by curves, so that the screen does not present any angular surfaces for the collection of impacted ashes.

Attached to and revoluble with the screen just described is an ash pan receptacle 24 adapted to receive an ash pan 25. In order that the ash pan may be inserted through the aperture 14 and into the receptacle 24, it is necessary that the receptacle and the aperture be in alinement. For the purpose of holding these parts in such relation, there is provided upon the operating handle 19 an ear 26, and a hook 27 is held upon the casing to engage this ear and hold the handle in the desired position.

In the operation of the device, the door 14 is opened and the ash pan inserted. The handle 19, being released from the hook, is then rotated in the direction of the arrow. This will cause the ashes and cinders to pass through the opening 23 and into the sieve. By continuing the motion of the handle 19 in this direction, the cinders are soon separated from the ashes. The motion of the handle is then reversed and the cinders again pass through the opening 23 and into the ash pan 25, whence they may be removed for future use.

In the modification shown in Fig. 4 there is indicated a form of the device adapted to be used in connection with a barrel. In this form the drawer 12 is omitted and the bottom raised and provided with a central opening 30 having a flange 31 arranged to fit inside of a barrel or the like. This modified structure is intended to have the ash pan held in place by the U-shaped bar 28, the flange 29 entering between the flanges of the U-shaped bar for this purpose.

What is claimed is:—

In an ash sifter, a casing having an open

lower end, a shaft rotatably mounted within the casing, spaced end plates fixed upon the shaft, said end plates having each an edge portion in the arc of a circle, and an edge
5 portion the line of extent of which is a chord of the circle, strips connecting the end plates at the corners at the ends of their chordal edges, said strips being formed with grooves and having their grooved sides presented
10 toward each other, a screen secured at one side edge to one of said strips, and at its front and rear edges to the arcuate edges of the spaced end plates, the said screen being extended inwardly from said arcuate edges
15 at a point directly above the other one of the said strips, the inwardly extending por-

tion of the screen extending across the space between the grooved edges of the strips, but in a plane above the plane occupied by the strips and having its other edge portion free
20 of connection with the end plates and spaced from the first mentioned edge portion of the screen and angularly directed with respect to the inwardly extending portion thereof.

In testimony that I claim the foregoing as
25 my own, I have hereto affixed my signature in the presence of two witnesses.

WILLIAM TAYLOR THURSTON.

Witnesses:

FRANK TOTAN,
E. W. WILHELM.