

T. MCGOWAN.

ASH SIFTER.

APPLICATION FILED MAR. 7, 1903.

NO MODEL.

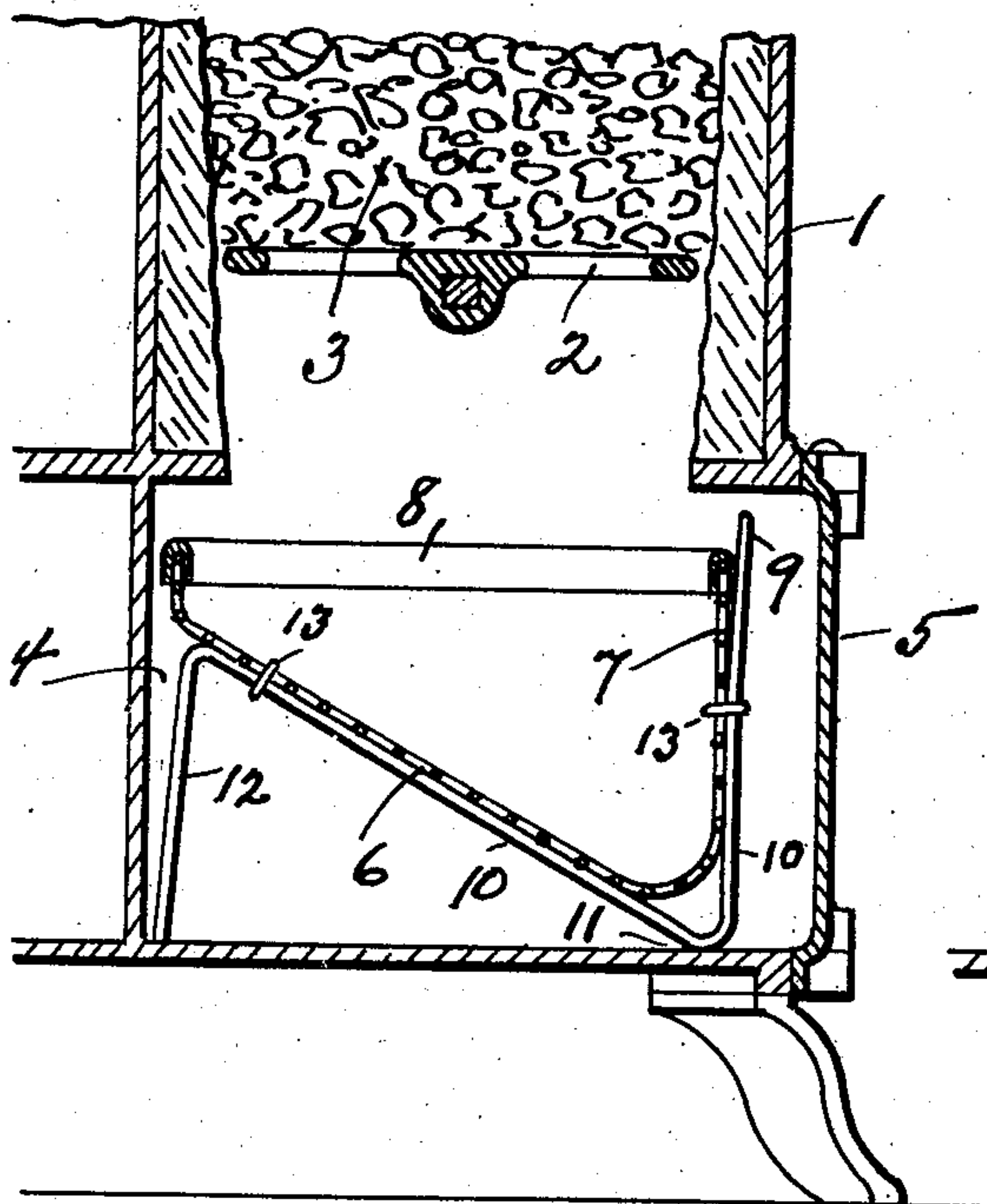


FIG. 1.

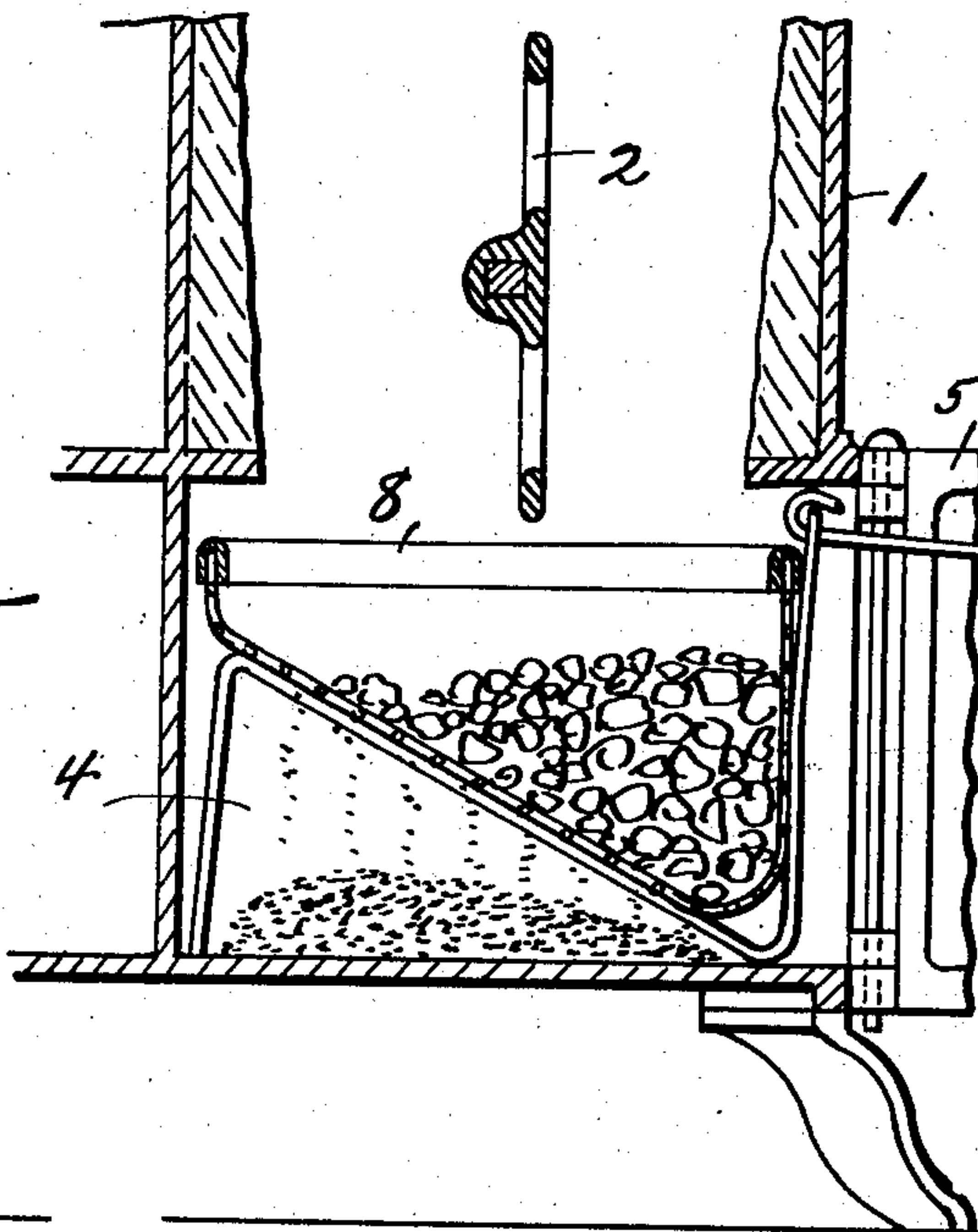


FIG. 2.

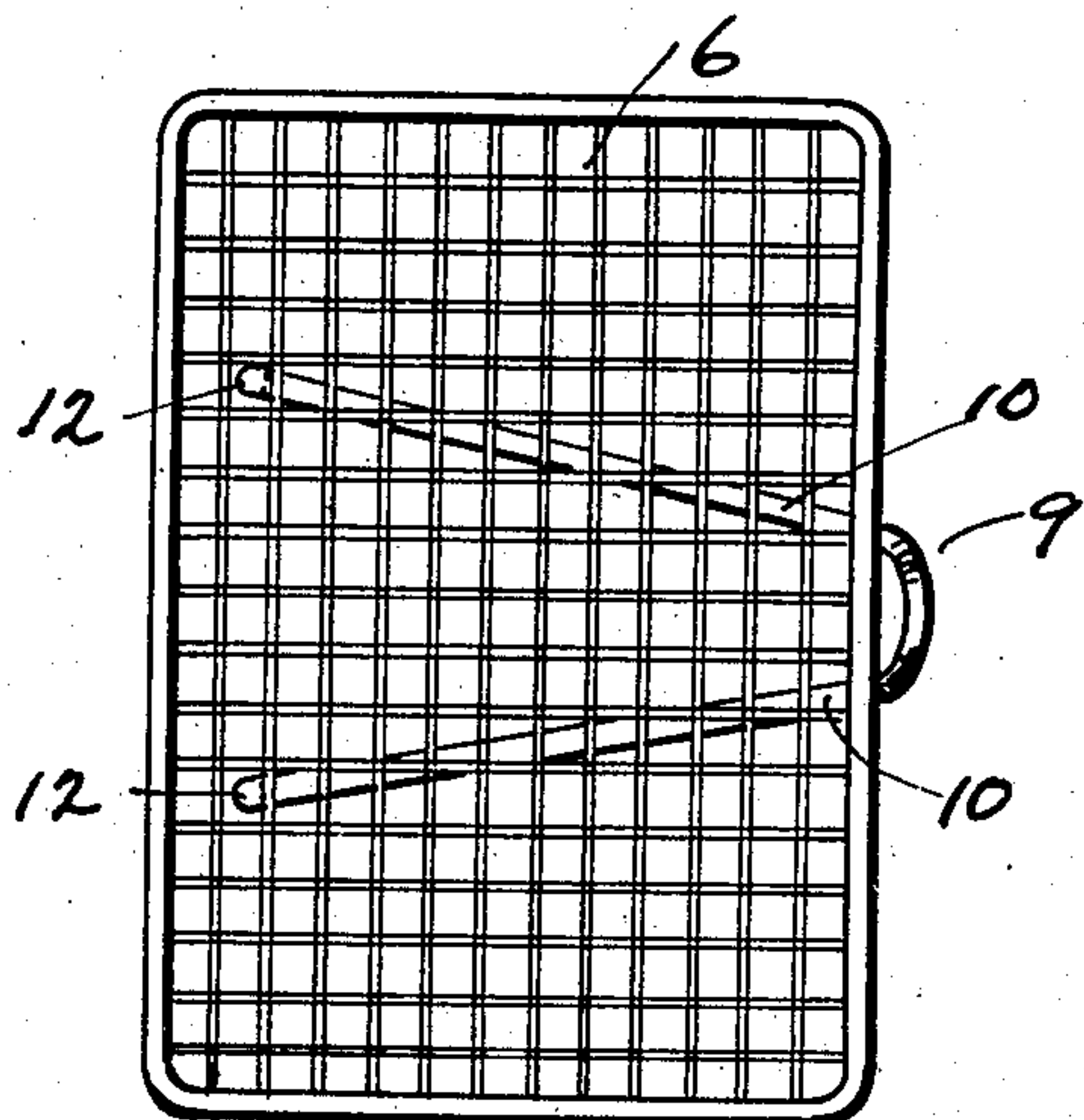


FIG. 3.

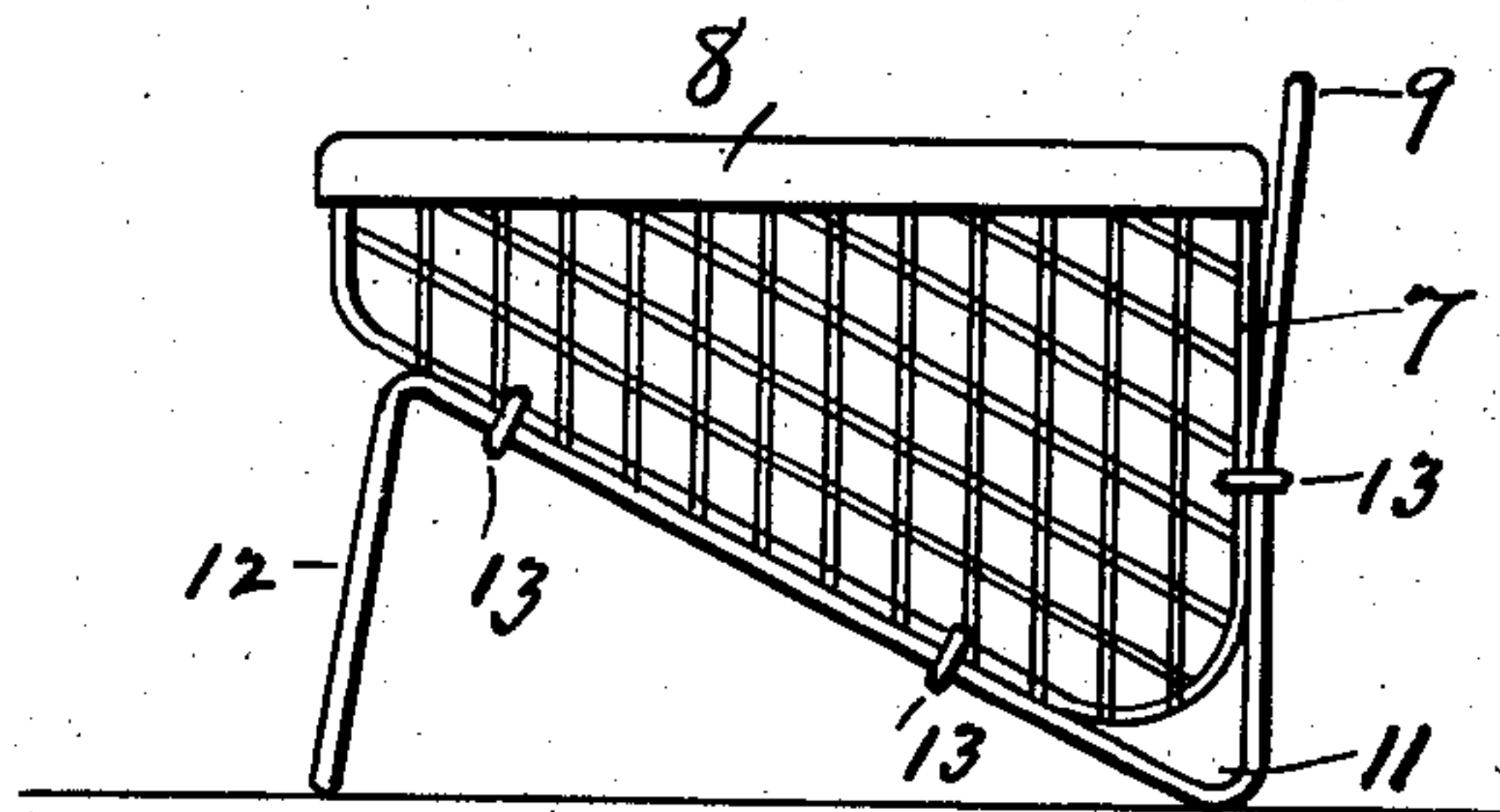


FIG. 4.

WITNESSES.

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# UNITED STATES PATENT OFFICE.

THOMAS MCGOWAN, OF STONINGTON, CONNECTICUT, ASSIGNOR OF ONE-HALF TO THOMAS SUTCLIFFE, OF STONINGTON, CONNECTICUT.

## ASH-SIFTER.

SPECIFICATION forming part of Letters Patent No. 741,696, dated October 20, 1903.

Application filed March 7, 1903. Serial No. 146,668. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS MCGOWAN, a citizen of the United States, residing at Stonington, in the county of New London and State of Connecticut, have invented certain new and useful Improvements in Ash-Sifters, of which the following is a specification.

My invention relates to separators for ashes, and its purpose is to automatically effect the recovery of the cinders from the products of coal combustion. This end is attained by means of a removable device inserted in the ash pit or box of a stove or range beneath the grate.

The advantages sought are attained by means of the device hereinafter described, with reference to the accompanying drawings, wherein—

Figure 1 is a vertical central section of an ash-box and separator inclosed therein beneath an undischarged grate; Fig. 2, a similar view of box and separator, showing the grate in discharged position; Fig. 3, a top plan of the separator, and Fig. 4 a side elevation of the same.

Like reference-numerals indicate like parts throughout the views.

In the drawings, 1 represents the body of a stove or range provided with a grate 2, supporting a mass of cinders and ashes 3. Beneath the grate is the ash-box 4, provided with the usual door 5 and containing my separating device, which is constructed as follows:

The ash-sifter comprises a reticulated body composed of a metallic mesh sufficiently coarse to allow passage therethrough of dust and ashes, but fine enough to intercept the cinders or unconsumed pieces of coal. In detail the body has a bottom or floor 6, inclined downwardly from rear to front, and a vertical front wall 7. The upper margins of the body are sheathed with thin metal 8 to strengthen the body and preserve its rectangular shape. Attached to the body is a metallic support, preferably formed of a bent metallic rod or wire, as follows: The rod is bent at its center into a loop 9, projecting above the center of the front margin of the

box. The wires 10 thereof continue vertically downward in contact with the wall 7, then forming vertically-acute angles and diverging laterally follow the floor 6 of the body to a point near the rear thereof, where they are again downwardly directed, forming two supporting-legs 12. The body is preferably secured to the bent wire 10 at intervals by any convenient means, such as bent wires 13; but such connections are not imperative.

The operation of my device is as follows: It is inserted in the ash-pit resting upon the forward bends 11 and rear legs 12. The grate 2 is then revolved and the contents fall upon the inclined meshed floor 6, with the result that the ashes and dust pass through the meshes and lie upon the bottom of the ash-box, while the cinders fall downwardly and forward, accumulating in the front of the separator ready for a second use. It is sometimes desirable to further remove adhering particles of ashes from the surfaces of the cinders, and this is effected by either manually or by aid of a poker inserted in loop 9 laterally shaking or reciprocating the separator, after which the latter is withdrawn from the ash-box and its contents emptied.

It is obvious that by the above means the unconsumed coal is separated from the refuse without the escape of dust involved in sifting ashes in the usual manner.

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

In an article of the class described, the combination with an inclined meshed floor of vertical inclosing sides, supporting projections beneath the longest side, legs beneath the elevated portion of the floor, and an engaging projection upon said longest side, said supporting projections, legs, and engaging projections being integral.

In testimony whereof I have affixed my signature in presence of two witnesses.

THOMAS MCGOWAN.

Witnesses:

THOMAS SUTCLIFFE,  
HORATIO E. BELLOWS.