

No. 631,384.

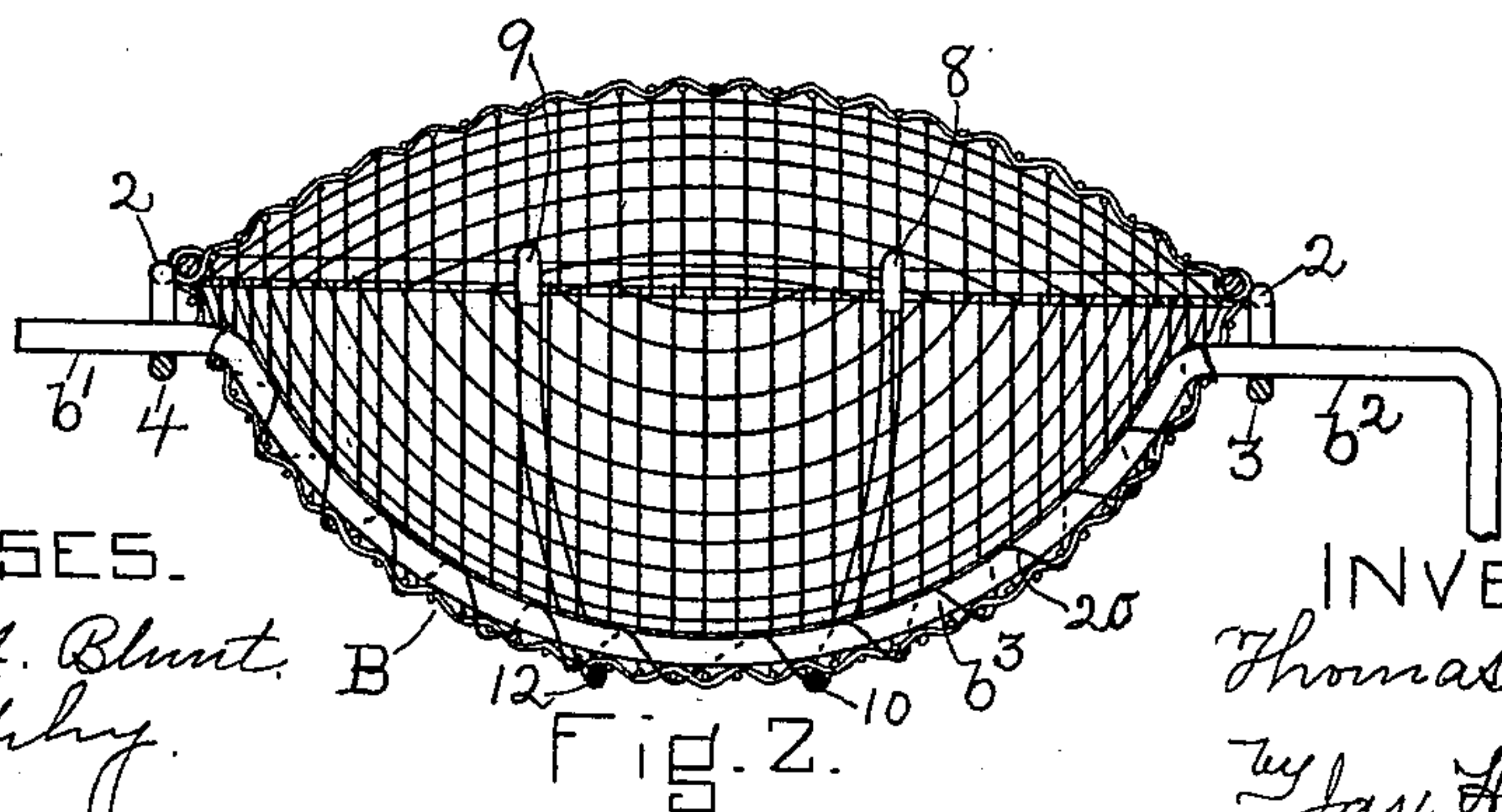
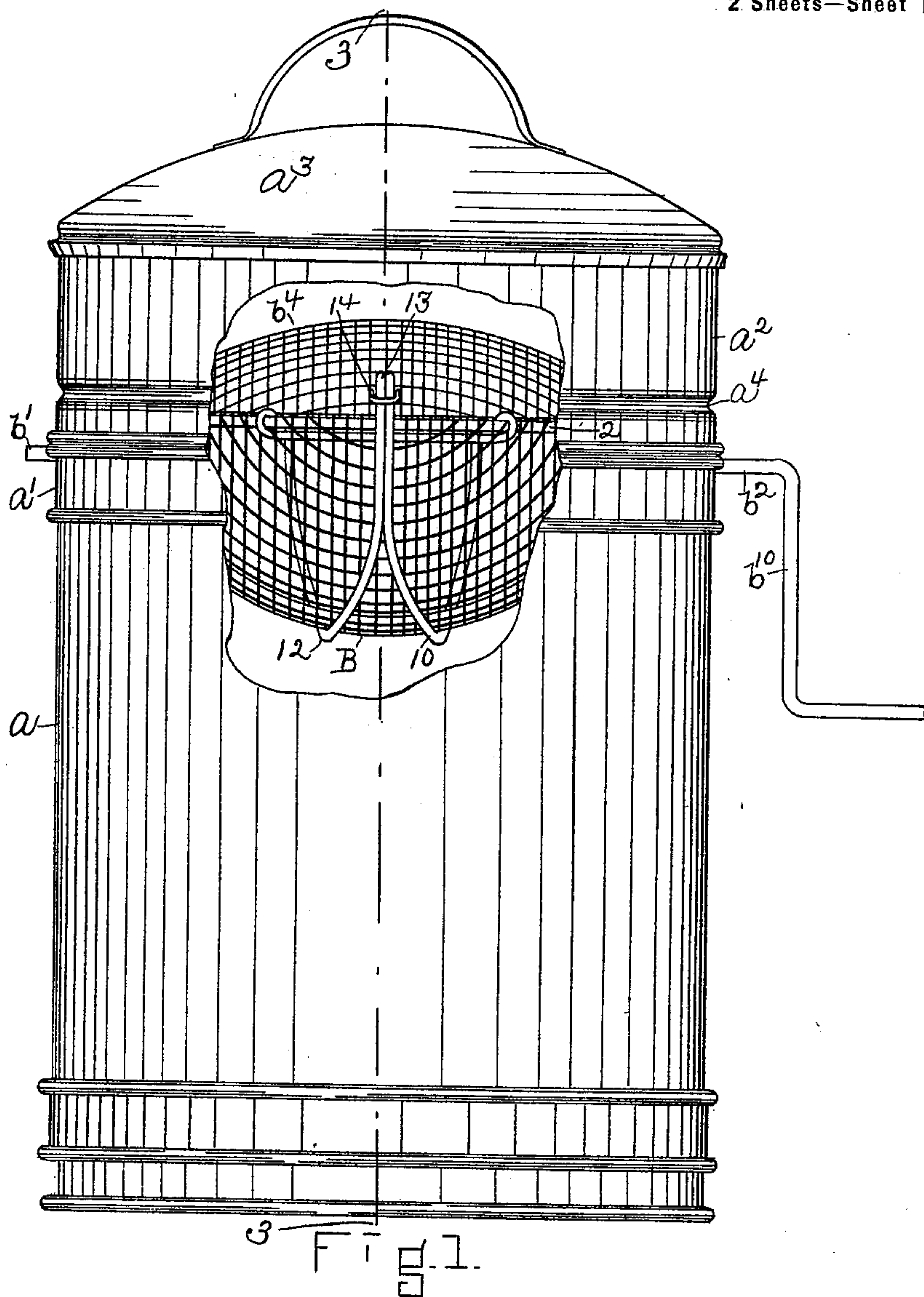
Patented Aug. 22, 1899.

T. ROSS.
ASH SIFTER.

(Application filed Aug. 17, 1898.)

(No Model.)

2 Sheets—Sheet 1.



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ATT'Y.

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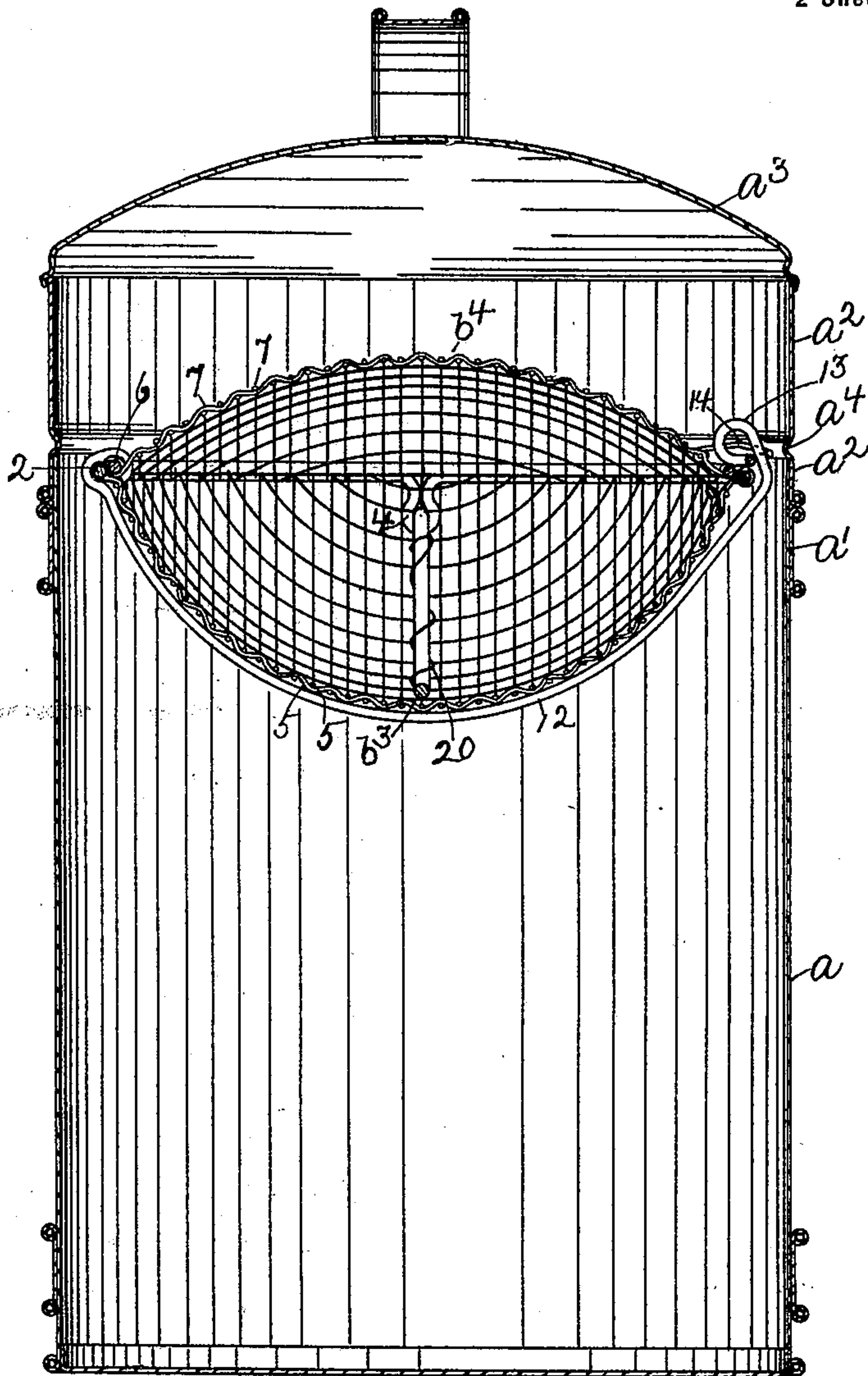


Fig. 3.

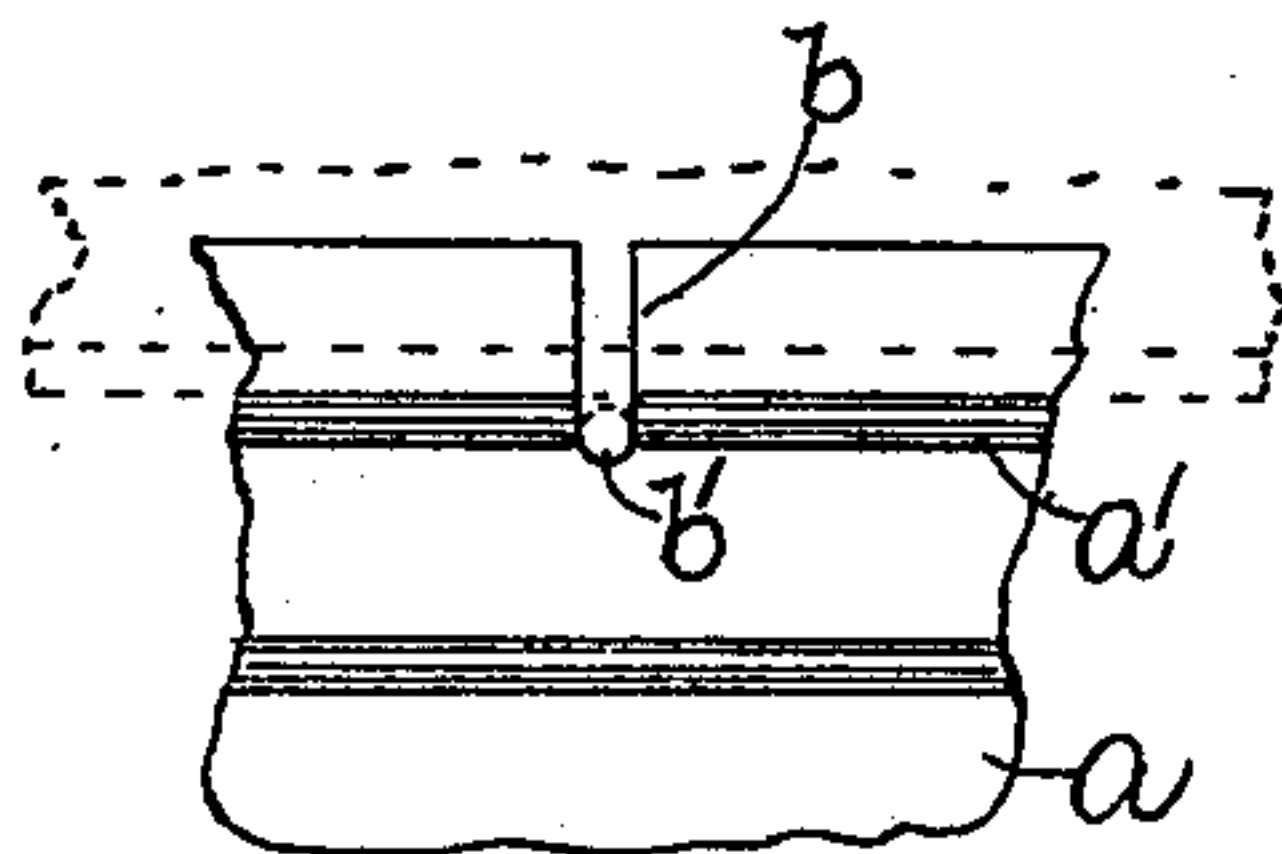


Fig. 4.

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UNITED STATES PATENT OFFICE.

THOMAS ROSS, OF HUDSON, MASSACHUSETTS.

ASH-SIFTER.

SPECIFICATION forming part of Letters Patent No. 631,384, dated August 22, 1899.

Application filed August 17, 1898. Serial No. 688,748. (No model.)

To all whom it may concern:

Be it known that I, THOMAS ROSS, a citizen of the United States, residing in Hudson, in the county of Middlesex and State of Massachusetts, have invented an Improvement in Ash-Sifters, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

This invention relates to an apparatus for sifting ashes, and has for its object to provide a simple, efficient, and substantially dust-tight apparatus for the purpose specified.

The invention further consists in a novel construction of sieve with which the ashes may be effectually separated from the cinders, as will be described.

These and other features of this invention will be pointed out in the claims at the end of this specification.

Figure 1 is an elevation, partially broken out, of an apparatus embodying this invention; Fig. 2, a sectional detail of the sieve shown in Fig. 1; Fig. 3, a vertical section of the apparatus shown in Fig. 1 on the line 3 3, and Fig. 4 a detail in elevation to be referred to.

The ash-sifting apparatus herein shown consists of a cylindrical receptacle *a*, preferably of metal, but which may be of wood, provided on its outer side, near its upper end, but below the top edge thereof, with a band or hoop *a'*, which forms a stop or rest for the depending annular flange *a²* of a cover *a³*.

The annular flange *a²* is provided, as shown, with an inwardly-extended annular bead *a⁴*, which is made in the said flange at the proper distance above the lower edge of said flange, to insure the said bead making contact with and being seated upon the upper edge of the cylindrical receptacle *a*, at the same time the lower edge of the flange *a²* on the cover makes contact with the band or hoop *a'*, thereby effecting a double sealing of the cover on the barrel or receptacle *a*, and thus rendering the apparatus substantially dust-tight.

The cylindrical receptacle *a* is provided on substantially diametrically opposite sides with vertical slots *b* for the reception of the journals *b' b²* (see Fig. 2) of a shaft *b³*, to which a revoluble sieve B is attached. The

sieve B is preferably made of wire, and consists, as shown, of a circular rim 2, made of a wire rod bent at substantially diametrically opposite points to form loops 3 4, through which the journals *b' b²* of the shaft *b³* are extended below the rim 2, and the said rim has secured to it intermeshing strands 5 of wire of curved form. The sieve is provided with a cover *b⁴*, made in a similar manner, and comprises a circular rim 6, made of a wire rod, and intermeshing curved strands 7 of wire.

The cover *b⁴* is hinged to the sieve, as shown, by the looped or bent ends 8 9 of reinforcing wire rods 10 12 engaging the rims 2 6 and passed under the sieve and carried to the opposite sides above the rim 2 to form a projection or hook 13, which is adapted to be engaged by a loop 14, secured to the cover, and by which means the cover is locked to the sieve in its closed position.

The shaft *b³* between the journals is made of substantially the same curvature as the sieve, and the latter is firmly secured to said shaft, as by the wire 20, which is wound about the shaft, and some of the strands 5 of the sieve.

The slots *b* in the receptacle *a* are extended into the band or hoop *a'* a sufficient distance to bring the upper surface of the journals *b' b²* below the upper edge of said band or hoop, and thereby enable the cover to be seated on said band or hoop.

The journal *b²* is provided with a crank *b¹⁰*, forming a handle by which the sieve may be rotated in the receptacle.

It will be noticed from the drawings that the sieve and cover when closed do not form a true sphere, but that the sieve is materially deeper below the journals than the cover is above the same. This construction facilitates agitation or tumbling of the ashes in the revolution of the sieve, and thereby facilitates the separation of the ashes from the cinders, enabling the ashes to be sifted in a minimum time, and the double sealing of the cover on the receptacle avoids the escape of the fine ashes or particles out of the receptacle.

I prefer to make the receptacle *a* of metal; but the sieve and cover may be employed with the receptacle when made of wood and, in fact, with a wooden barrel, providing, however, that the latter is provided with a hoop

below its upper edge, and the said hoop is provided with the slots b for the reception of the journals b' b^2 to enable the cover to be double-sealed.

5 I claim—

1. In an ash-sifter, the combination of the following instrumentalities, viz: a cylindrical receptacle or barrel and a sieve composed of a circular rim, intermeshing curved wire
10 strands attached thereto, a curved shaft having substantially straight journals and extended across the sieve in a plane substantially at right angles to the angular rim, said shaft being journaled in the receptacle or
15 barrel, and a cover for the sieve composed of a circular rim and intermeshing curved wire strands attached to said rim and of a different curvature from the strands of the sieve, substantially as described.

20 2. A foraminous curved sieve composed of a circular rim, intermeshing curved wire strands attached thereto, a curved shaft extended across the sieve in a plane at an angle to the plane of said circular rim and having

substantially straight portions projecting be- 25 yond the sieve to form journals, and a curved cover attached to said sieve and of a different curvature than said sieve, substantially as described.

3. A foraminous curved sieve composed of 30 a circular rim made of a wire rod having substantially diametrically opposite loops, and curved wire strands attached to said rim, a curved shaft extended across the sieve in a plane substantially at right angles to the cir- 35 cular rim and secured to the inner side of the sieve and provided with journals extended through the said loops, and a foraminous cover attached to the said sieve, substantially as de- 40 scribed.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS ROSS.

Witnesses:

H. L. BROWN,
JOHN B. BLAKE.