

No. 834,116.

PATENTED OCT. 23, 1906.

J. W. FOIZEY.
SANDING DEVICE.
APPLICATION FILED APR. 21, 1906.

Fig. 1.

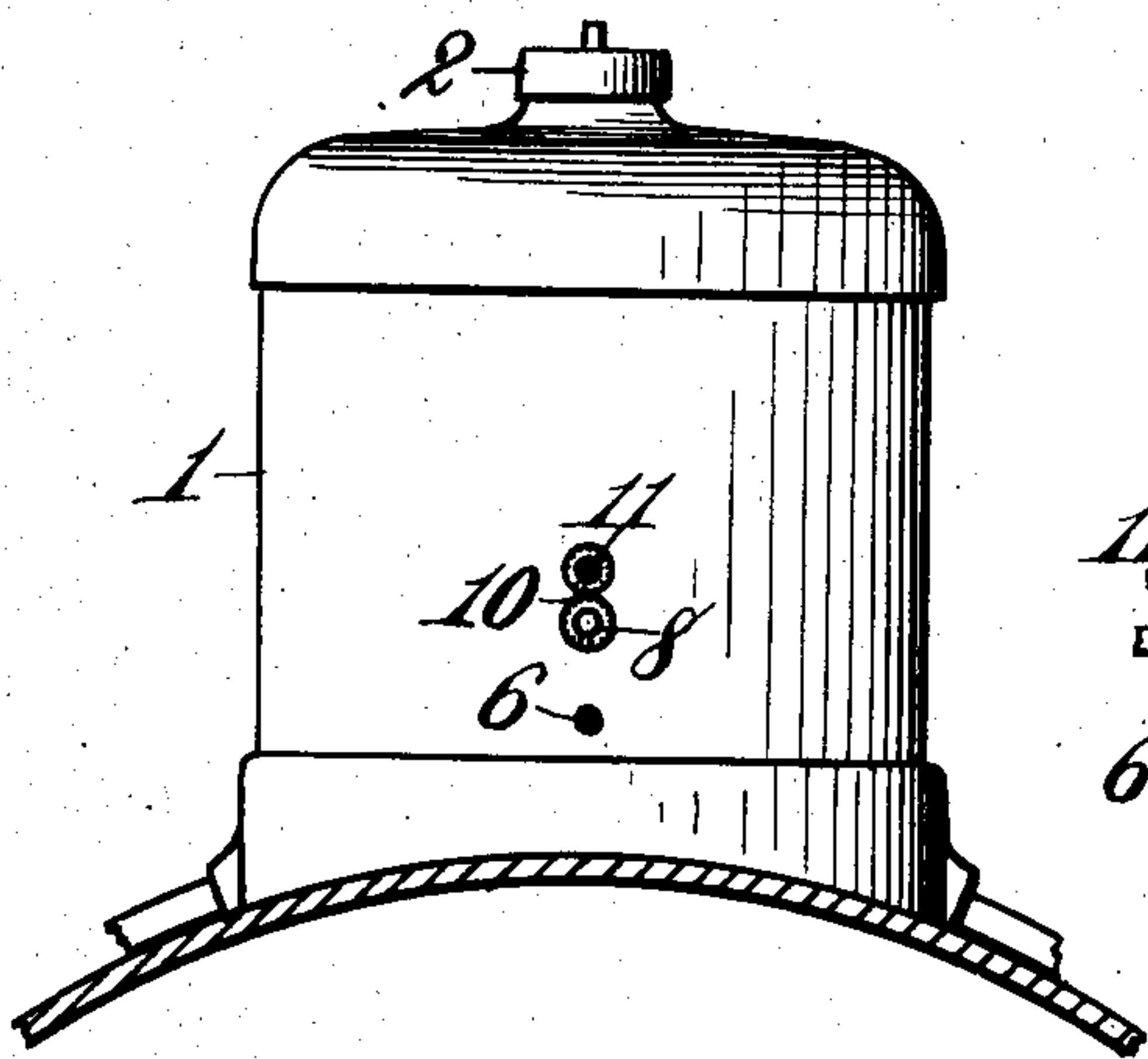


Fig. 2.

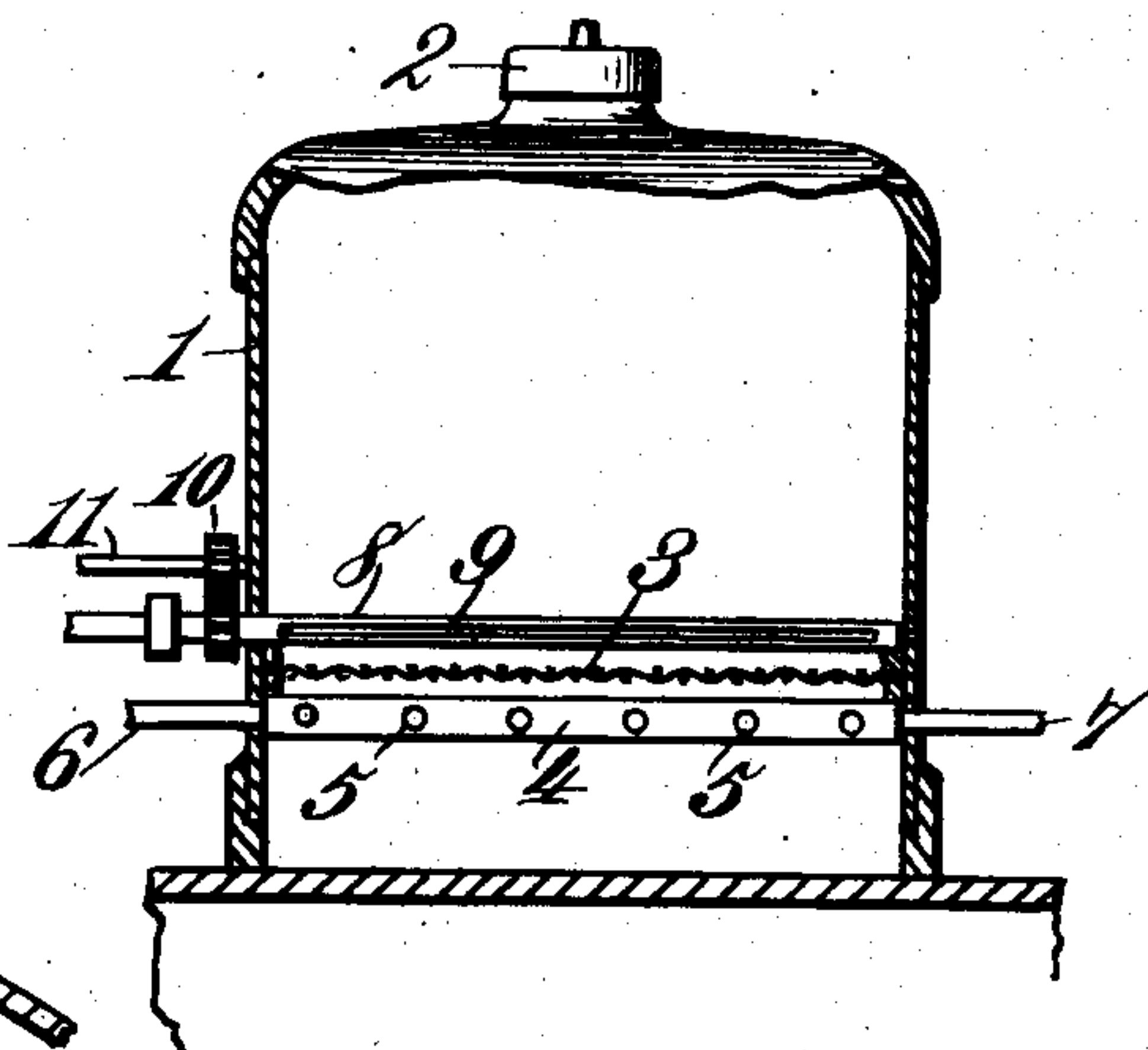


Fig. 3.

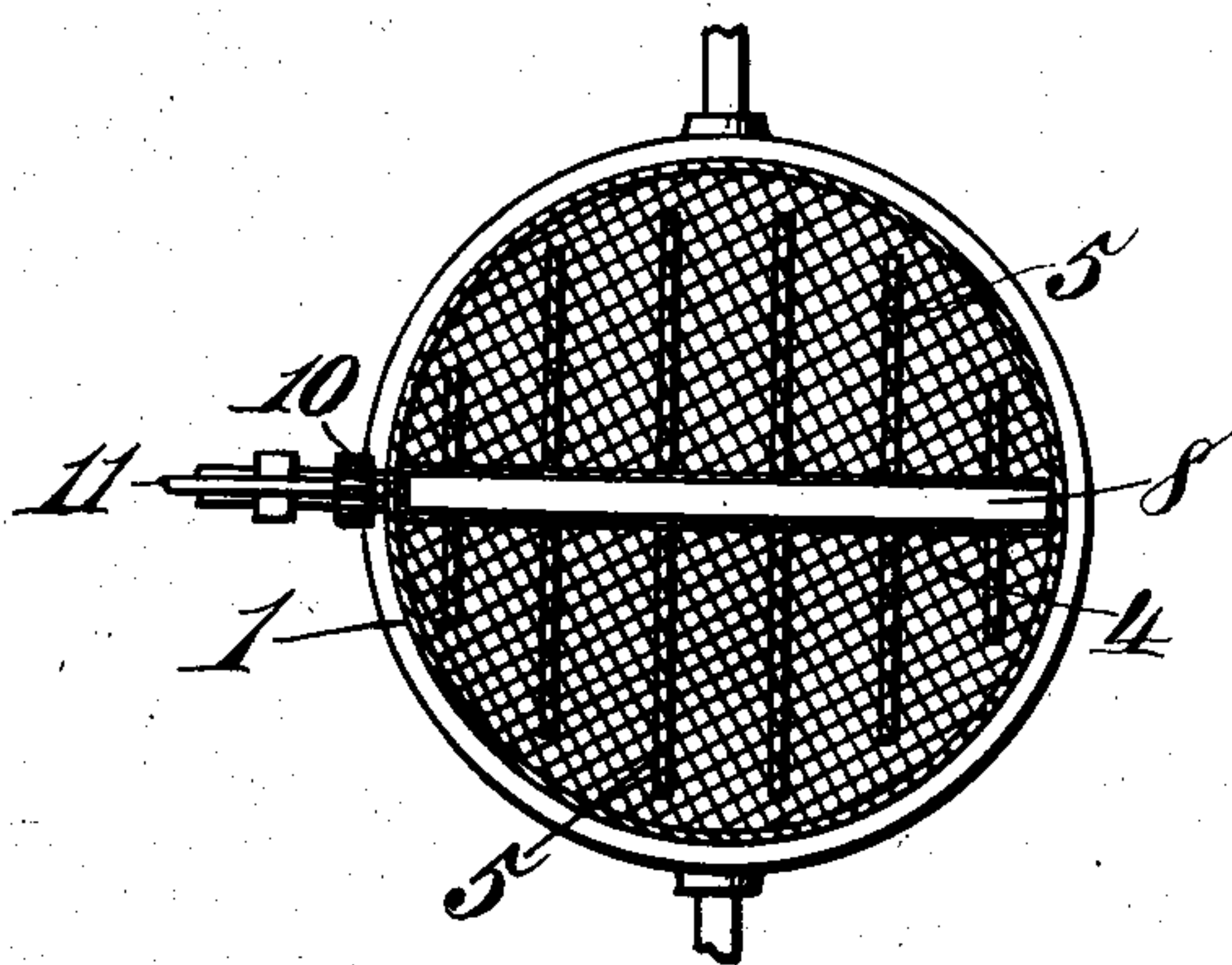
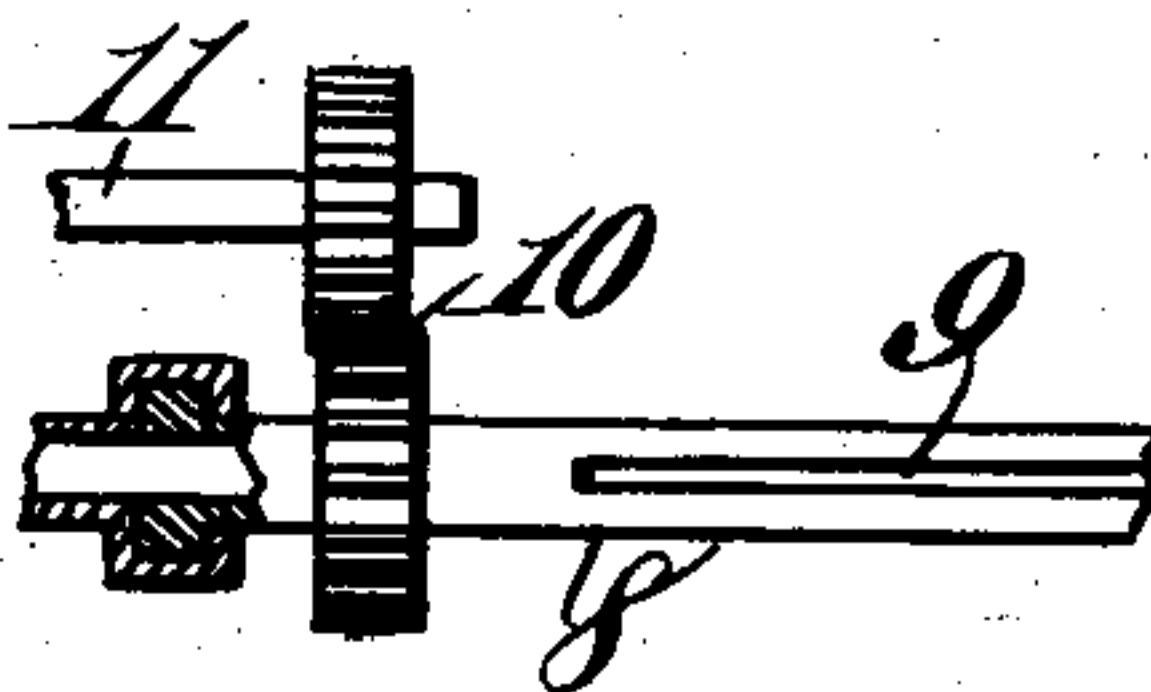


Fig. 4.



Witnesses:
Robert Corbett,
J. B. Keefe

Inventor:
James W. Foizey.
By James L. Norris.
Att'y.

UNITED STATES PATENT OFFICE.

JAMES W. FOIZEY, OF NEWPORT NEWS, VIRGINIA.

SANDING DEVICE.

No. 834,116.

Specification of Letters Patent.

Patented Oct. 23, 1906.

Application filed April 21, 1906. Serial No. 313,060.

To all whom it may concern:

Be it known that I, JAMES W. FOIZEY, a citizen of the United States, residing at Newport News, in the county of Warwick and State of Virginia, have invented new and useful Improvements in Sanding Devices, of which the following is a specification.

This invention relates to means for applying sand to the rails of car-tracks, and particularly to a sand box or receptacle for application to a locomotive-engine.

In ordinary methods of preparing sand for track-sanding operations it is necessary to first dry the sand by tedious operations which materially increase the expense, and after the sand is dried it is placed in the sand-boxes.

The present invention contemplates the drying of the sand within the box, or, in other words, the wet sand is placed directly in the box and is dried as well as screened before it reaches the bottom of the box, and while located in the bottom of the box it is still affected by drying-heat until it is used or dispensed through the usual sanding-pipes.

The invention consists in the construction and arrangement of parts, which will be more fully hereinafter set forth.

In the drawings, Figure 1 is an elevation of a sanding-box embodying the features of the invention. Fig. 2 is a transverse vertical section on the line 2 2, Fig. 1. Fig. 3 is a horizontal section taken in the plane of the line 3 3, Fig. 2. Fig. 4 is a detail view of the rotary air-distributing pipe forming part of the improved sand-box.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates a casing of the usual form and construction of sand-boxes as now applied to locomotive-engines and is provided with suitable outlets or distributing-pipes arranged as usual and connecting with the bottom of the casing 1. The top of the casing 1 has an inlet-cover 2, by means of which sand may be introduced into the box. Near the bottom of the box is a horizontal screen 3, which separates the interior of the device into upper and lower compartments, and immediately below the screen 3 is a steam-radiator, consisting of an enlarged diametrically arranged tubular member 4 and outwardly-projecting tubular arms 5, which extend from opposite portions of the

member 4. The tubular member 4 has a supply connection 6 at one end which is located exterior of the casing 1 and an outlet connection 7 at the opposite end. The steam used may be taken from any part of the locomotive, and it is proposed in some instances to use the exhaust-steam, which may be conveyed to the connection 6 of the member 4 by any suitable pipe means. Immediately above the screen 3 is a rotary air-distributing pipe 8, having a slit or longitudinal opening 9 extending over the entire length thereof within the casing 1. This air-distributing pipe may be rotated by any suitable means—such, for instance, as gears 10, actuated by a rod 11 from the cab of a locomotive. This pipe is operated to cause the slit or longitudinal opening 9 therein to semi-circularly sweep the interior of the box.

In the operation of the device wet sand is placed in the casing above the screen 3 and over the air-distributing pipe 8. Steam is admitted to the member 4 and circulates through the tubular arms 5 and effectively dries the wet sand. During the drying operation the air-distributing pipe is turned in opposite directions, and the sand is opened or loosened and prevented from packing, and, furthermore, by the formation of the slit or longitudinal slot 9 in the pipe 8 obstruction to the outlet of the air from said pipe is avoided and is materially advantageous in view of: the ordinary perforate stationary pipe construction which simply blows holes into portions of the sand without operating on the entire body of sand, as will result by the operation of the pipe 8. The dry sand passes or sifts through the screen 3, and all grit or other clogging substances that may be therein are prevented from passing downwardly into the bottom of the casing, and therefore obstruction of the delivery or dispensing pipes is obviated.

By providing a box to receive the wet sand and to dry the latter and prepare it for use is a material saving in labor, time, and expense as compared with the ordinary methods now pursued in preparing sand for use in sand-boxes on locomotives and other devices, and the additional cost to construct the improved sand-box relatively to the common form of box is a small consideration when compared to the expense of ordinary methods now employed to prepare sand prior to the application thereof to a sand-box.

Having thus fully described the invention, what is claimed as new is—

1. A sand-box of the class set forth having a rotary air-distributing pipe therein.
- 5 2. A sand-box of the class set forth having a rotary air-distributing pipe disposed horizontally therein.
3. A sand-box of the class set forth provided with heating means, and a rotary air-
- 10 distributing pipe therein.
4. A sand-box of the class set forth provided with heating means, and a rotary air-distributing pipe disposed therein and having a longitudinal opening.
- 15 5. A sand-box of the class set forth having a screen horizontally disposed therein, a heating means below the screen, and an air-distributing pipe movably disposed above the screen.
- 20 6. A sand-box having a screen horizontally disposed therein and dividing the same into upper and lower compartments, and a heating means in the lower compartment adjacent to the screen and having members ex-
- 25 tending outwardly in opposite directions under said screen.
7. A sand-box having a horizontally-dis-

posed screen therein, and a rotary air-distributing pipe disposed over and adjacent to the screen.

8. A sand-box having a heating means comprising a tubular member with tubular arms extending outwardly from opposite portions thereof, and a screen above the said heating means.

9. A sand-box having a heating means therein comprising a diametrically arranged tubular member with tubular arms extending outwardly from opposite portions therein.

10. A sand-box of the class set forth having a horizontal screen therein, a heating means arranged below and close to the screen and provided with a tubular member and tubular arms extending from opposite portions of the latter, and a rotary air-distributing pipe dis-

posed over the screen and extending diametrically of the casing.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses:

JAMES W. FOIZEY.

Witnesses:

H. A. APPLEWHITE,
J. W. JENKINS.