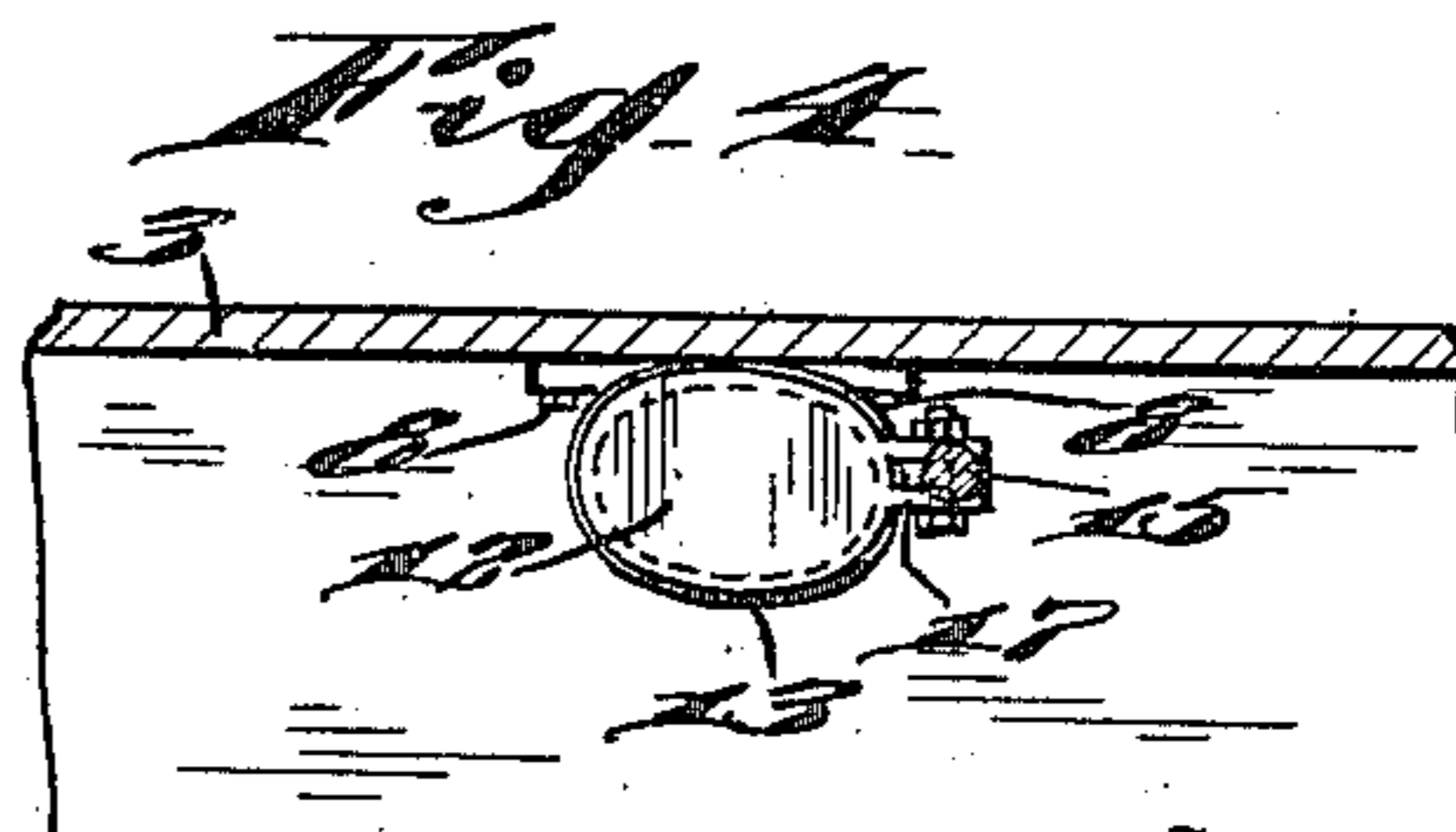
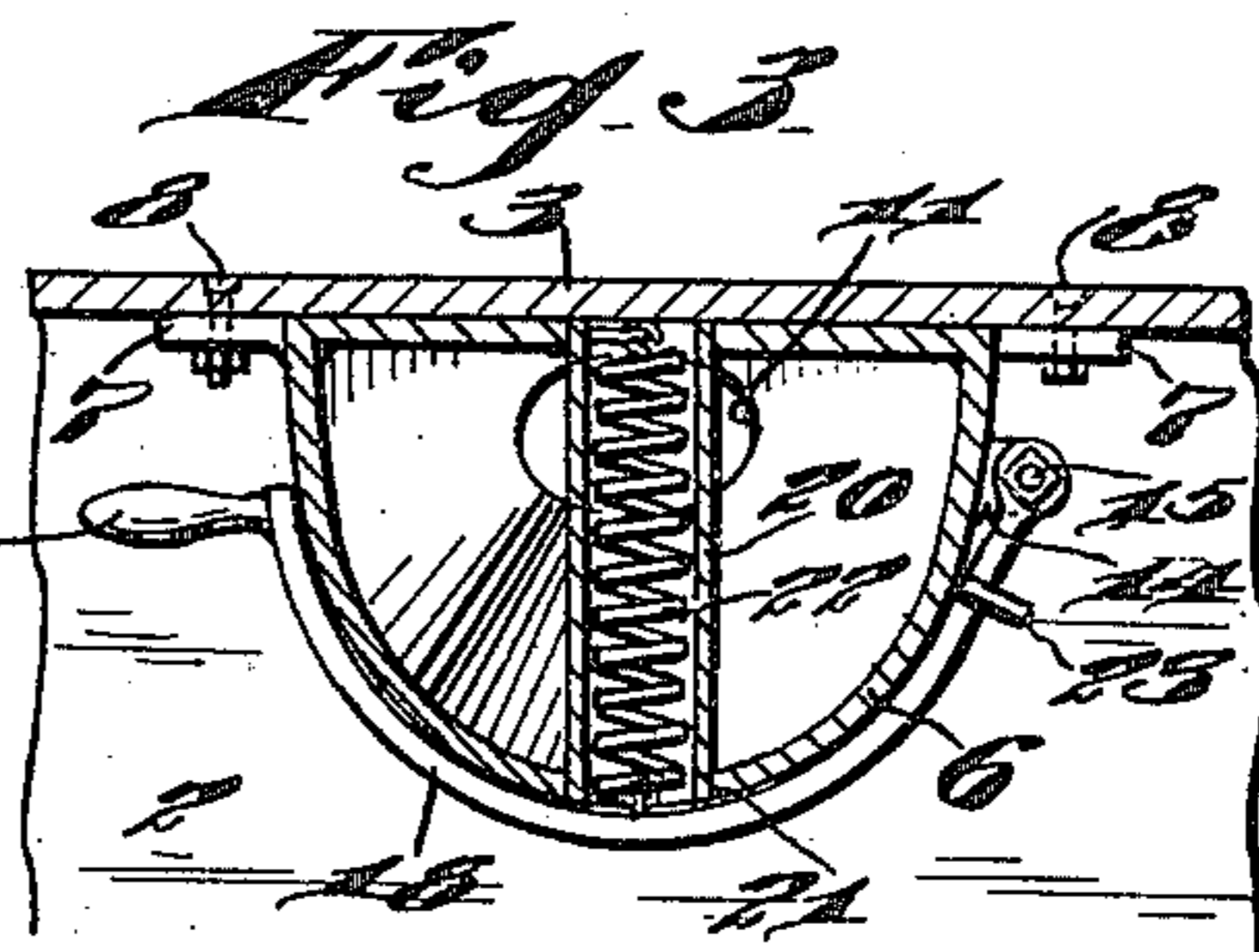
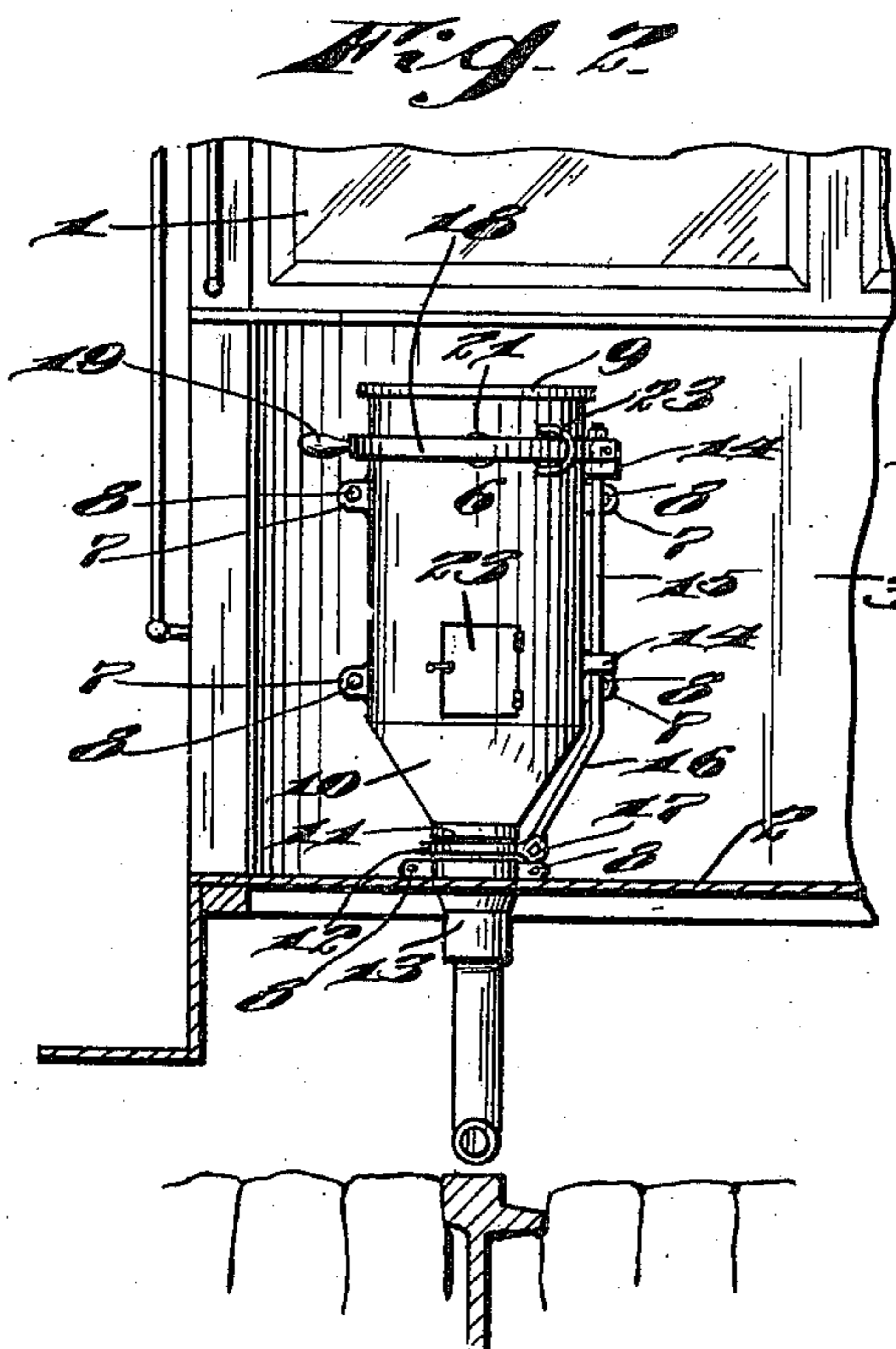
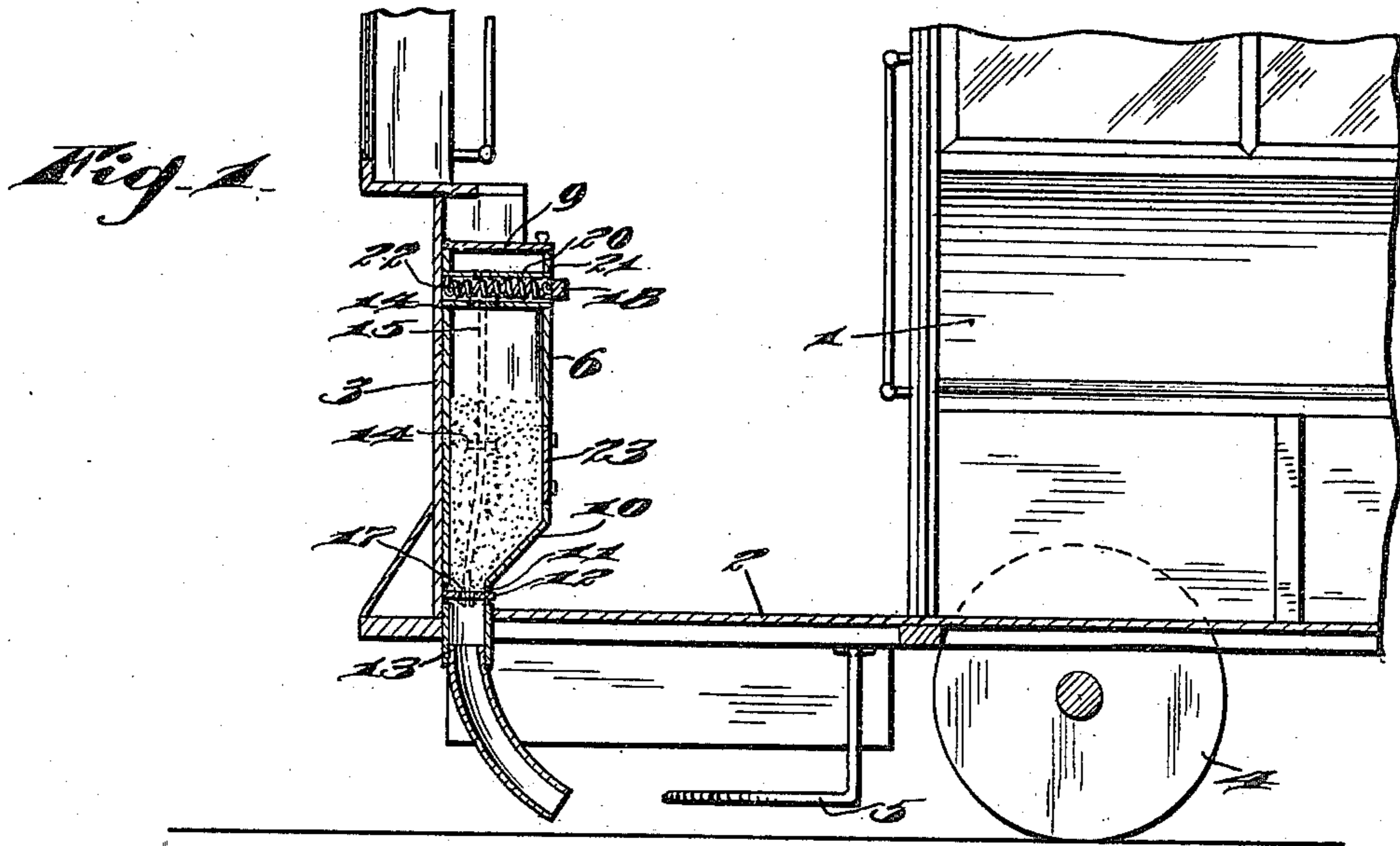


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SAND BOX FOR CARS.  
APPLICATION FILED APR. 27, 1910.

965,212.

Patented July 26, 1910.



Inventor

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# UNITED STATES PATENT OFFICE.

GEORGE H. MONROE, OF PHILADELPHIA, PENNSYLVANIA.

SAND-BOX FOR CARS.

965,212.

Specification of Letters Patent.

Patented July 26, 1910.

Application filed April 27, 1910. Serial No. 557,993.

*To all whom it may concern:*

Be it known that I, GEORGE H. MONROE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Sand-Boxes for Cars, of which the following is a specification.

My invention relates to improvements in sand boxes for cars, the object of the invention being to provide an improved sand box which is especially adapted to be secured to the inner face of the dash board, such as ordinarily employed with the closed vestibule type of cars in general use, and in which a quantity of sand is maintained and may be quickly operated to release the desired quantity of sand and guide it onto the rail in close proximity to the car wheels.

A further object is to provide a sand box with an improved gate closing the discharge end thereof, operated by a bent shaft to which an arm is secured and is normally held in close contact with the outer face of the sand box by means of a coiled spring so that the handle is out of the way, yet in convenient reach for instant use.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings: Figure 1, is a fragmentary view in longitudinal section illustrating my improvements in position on a car. Fig. 2, is a view partly in cross section, and partly in elevation taken at right angles to Fig. 1. Fig. 3, is an enlarged view in cross section through the sand box, and Fig. 4, is a view in cross section taken at a point just above the discharge controlling gate.

1, represents a car, 2 a platform, 3 the dash board of the ordinary vestibule type, 4 a wheel and 5 the ordinary wheel fender.

6, represents my improved sand box which is preferably of semi-cylindrical form in cross section illustrated, having a flat rear wall adapted to fit against the dash board 3, and provided with lugs 7 secured by bolts 8 to the dash board. The upper end of this sand box is normally closed by a hinged cover 9, and the lower end tapers inwardly as shown at 10, to an appreciably reduced diameter constituting the outlet 11. Below

this outlet 11 is my improved gate 12, which is located between the outlet and between a pipe 13, which is secured to platform 2 and projects through the platform, and then curves rearwardly so as to discharge the sand on the track as close to the wheels as it is possible to do so without disturbing the ordinary wheel fender illustrated at 5.

At one side of the box aligned bearings 14 are provided for a shaft 15. The lower portion of this shaft is bent at an angle as shown at 16, forming in effect a crank arm which is pivotally connected to the bifurcated end 17 of gate 12. To the upper end of this shaft 15, an operating arm 18 is secured. This arm 18 is curved as shown, so as to conform to the shape of the sand box, and lie close thereto, and a hand hold 19 is provided on the free end of this arm 18 to manipulate the same.

20, represents a tube which extends through the sand box and registers with an opening 21 in the wall of this sand box. In this tube 20 a coiled spring 22 is located, is secured at its rear end in the tube and at its forward end to the arm 18, and normally holds said arm against the sand box, and the gate 12 in closed position.

When it is desired to sand the rail, the motorman grasps hand hold 19 and draws the arm 18 outward which causes shaft 15 to turn, and the bent lower end of this shaft will cause the gate 12 to move outward so as to allow the sand to flow through the tube 13 as fast as desired.

To limit the opening movement of the gate, a loop or staple 23 is fixed to the box and straddles the arm 18. When the handle 19 is released, the spring 22 will return it to normal position and hold it in this position out of the way.

In the front of the box, near the lower end a hinged door 23 is provided so that access may be had to the interior of the box should it become clogged.

While I have illustrated a particular construction, which I believe to be a preferred construction, I would have it understood that I do not limit myself to the precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

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

1. A device of the character described, comprising a box having a reduced lower end, a gate normally closing said lower end, a shaft, a bent end on said shaft secured to  
5 said gate, an arm secured to said shaft and conforming in shape to the shape of the box, and a spring normally holding said arm against the box, substantially as described.

2. A device of the character described,  
10 comprising a box of general semi-circular form in cross section, and constructed and adapted to be secured to the inner face of a car dash board, said box having a reduced lower end, a gate normally closing said  
15 lower end, a pipe below said gate for directing the sand onto the rail, bearings on the side of said box, a shaft in said bearings, the lower end of said shaft bent at an angle and pivotally connected to said gate, a  
20 curved arm secured at one end to said shaft and positioned against the outer face of said box, a hand hold on one end of said arm, and a spring normally holding said arm against the box, substantially as described.

25 3. A device of the character described, comprising a box of general semi-circular form in cross section, and constructed and adapted to be secured to the inner face of a car dash board, said box having a reduced  
30 lower end, a gate normally closing said lower end, a pipe below said gate for directing the sand on to the rail, bearings on the side of said box, a shaft in said bearings, the lower end of said shaft bent at an angle  
35 and pivotally connected to said gate, a curved arm secured at one end to said shaft and positioned against the outer face of said

box, a hand hold on one end of said arm, said box having an opening in its front, a tube secured in said box and registering with  
40 said opening, a coiled spring in said tube secured at its inner end in the tube, and at its outer end to said handle, substantially as described.

4. A device of the character described,  
45 comprising a box of general semi-circular form in cross section, and constructed and adapted to be secured to the inner face of a car dash board, said box having a reduced lower end, a gate normally closing  
50 said lower end, a pipe below said gate for directing the sand on to the rail, bearings on the side of said box, a shaft in said bearings, the lower end of said shaft bent at an angle and pivotally connected to said gate,  
55 a curved arm secured at one end to said shaft and positioned against the outer face of said box, a hand hold on one end of said arm, said box having an opening in its front, a tube secured in said box and registering  
60 with said opening, a coiled spring in said tube secured at its inner end in the tube and at its outer end to said handle, and a staple or loop fixed to said box and inclosing said  
65 gate is limited, substantially as described.

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

GEORGE H. MONROE.

Witnesses:

FRANK K. HENDERSON,  
JAMES L. HENDERSON.