

J. E. SCOBEE.
AIR SANDING DEVICE.
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955,363.

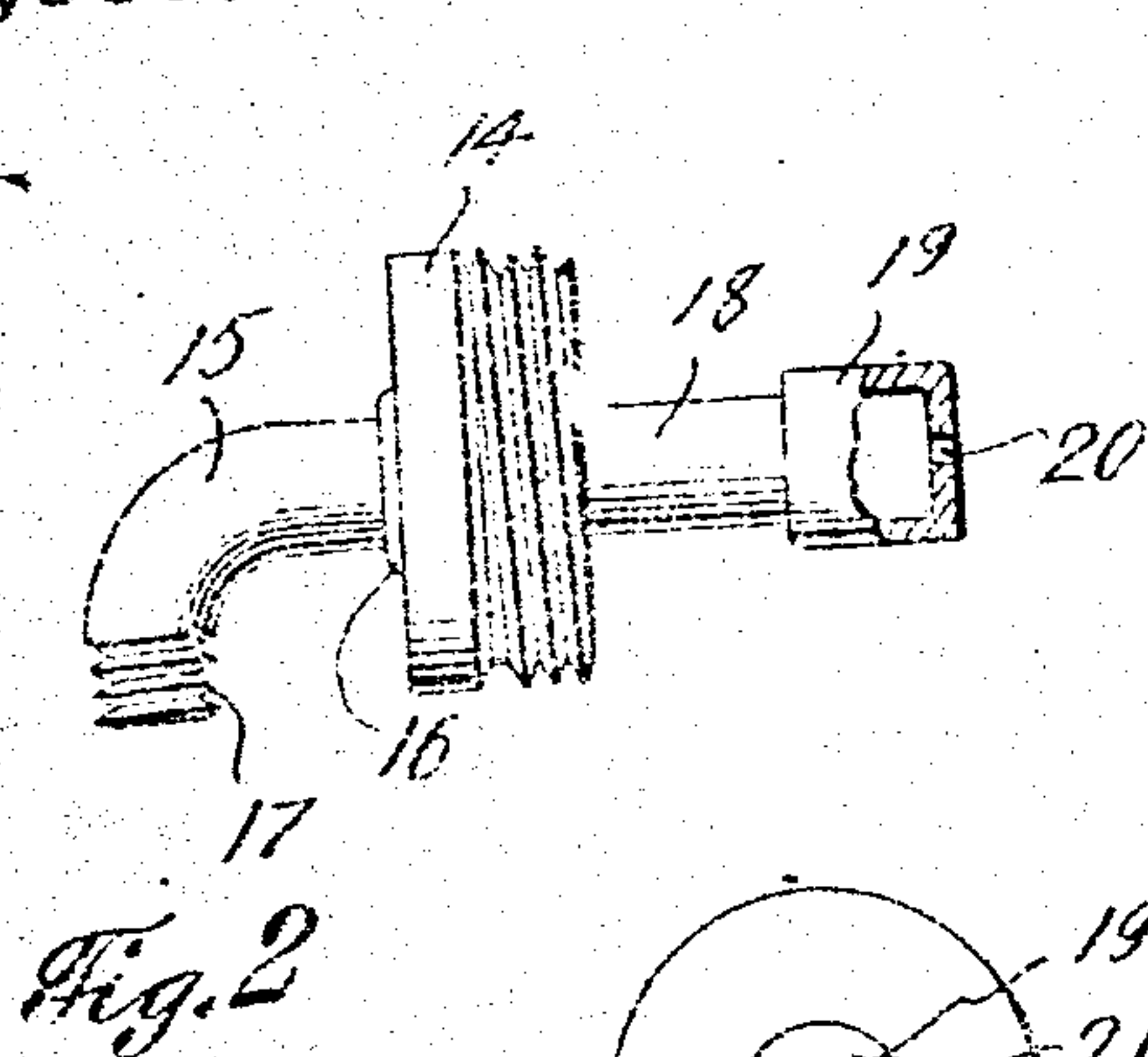


Fig. 2

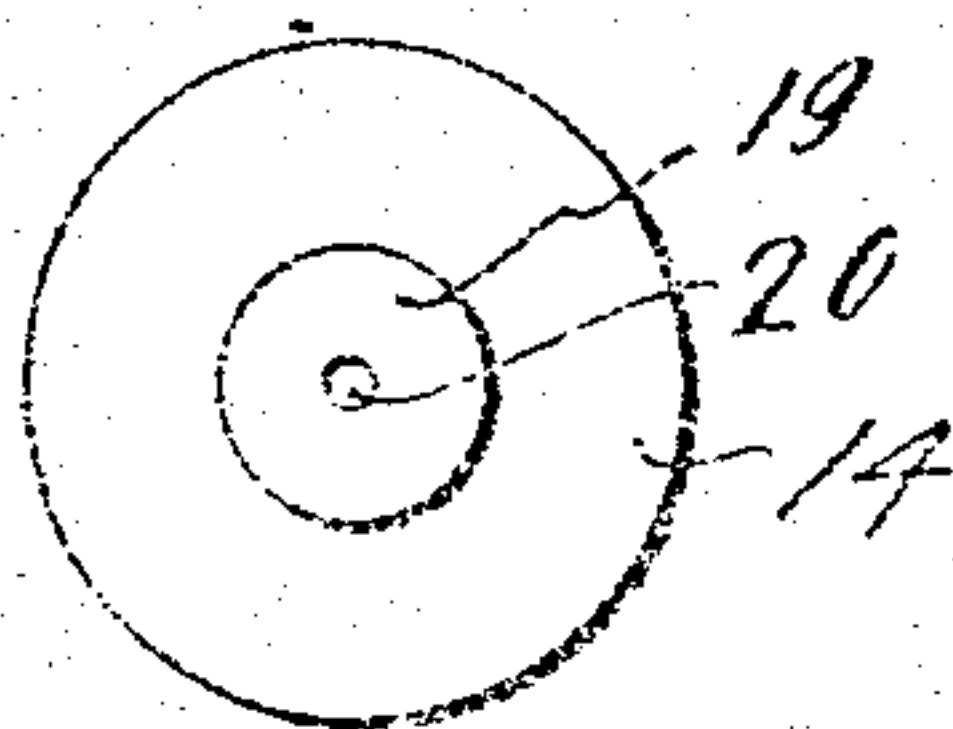


Fig. 3

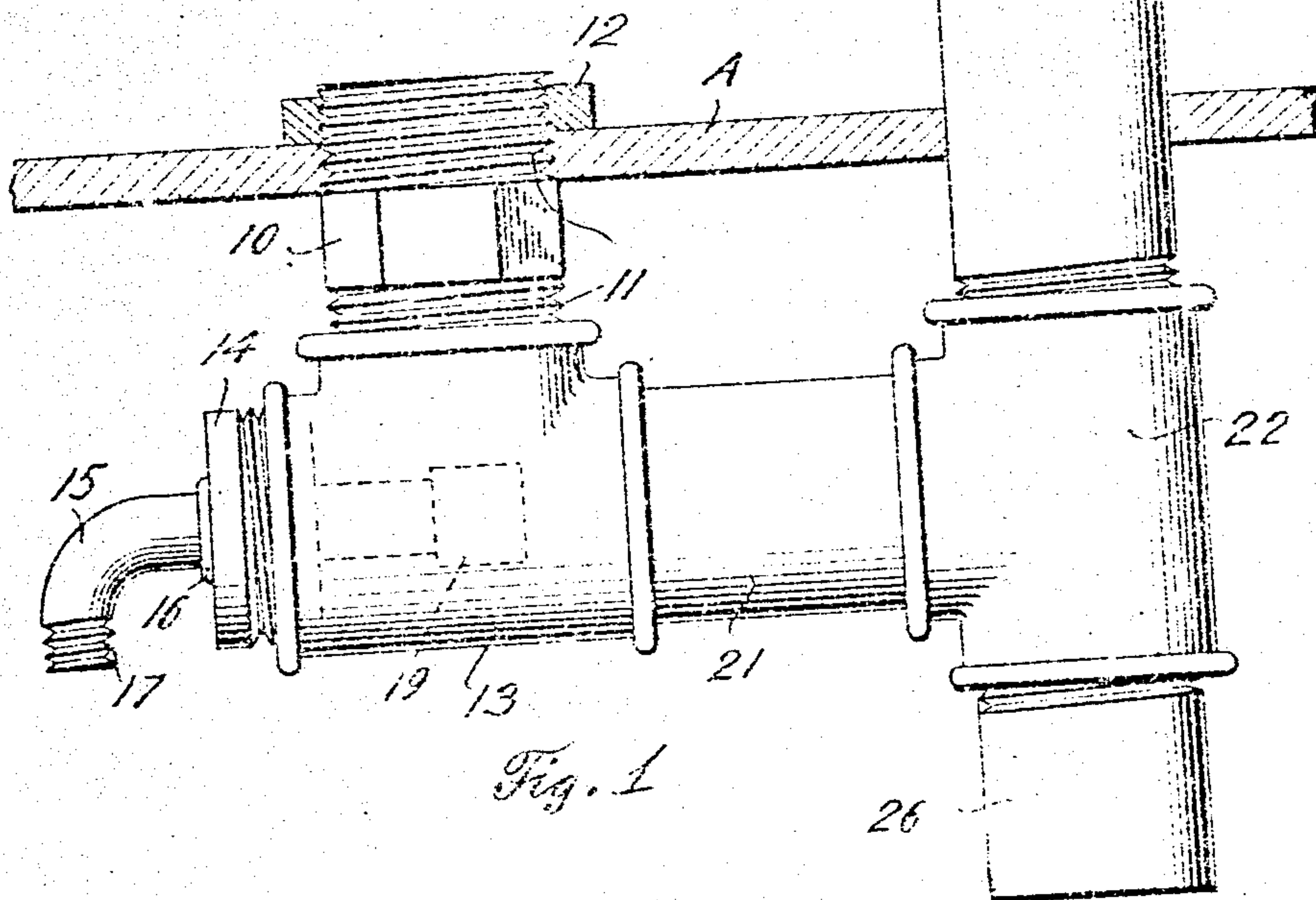


Fig. 1

Witnesses

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AIR SANDING DEVICE.

955,363.

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To all whom it may concern:

Be it known that I, JAMES E. SCOBEE, a citizen of the United States, residing at 648 South Sixth street, east, Salt Lake City, county of Salt Lake, State of Utah, have invented a new and useful Air Sanding Device, of which the following is a specification.

This invention has reference to sanding devices for electric cars and other railroad vehicles wherein compressed air is used and is designed, particularly to construct a device of this character, parts of which may be kept in stock at the shop, and readily replace all worn elements of the apparatus.

The present invention also contemplates the construction of a sanding mechanism wherein the same may be readily cleansed, and all particles of sand solidified by dampness may be broken without emptying the box.

With the above and other objects in view, this invention consists of the construction, combination and arrangement of parts all as hereinafter more fully described, claimed and illustrated in the accompanying drawings, wherein:

Figure 1 is a side elevation of a device constructed in accordance with the present invention, illustrating the connection thereof with a sand box; Fig. 2 is a side elevation of the connection between the air tank and the sand seat; Fig. 3 is a partial end elevation of Fig. 2.

Reference being had to the accompanying drawings, A indicates in general the sand box of a locomotive provided with two alined openings in the bottom thereof. Through one of said openings projects the nipple 10 provided with the threads 11 at each extremity thereof, the upper extremity of said nipple projecting through the bottom of the sand box A and being retained therein by the clamping nut 12 operating on the threads 11 formed on the upper terminal thereof. The lower extremity of the nipple 10 is connected to the T-joint 13 through the instrumentality of the threads 11 formed on the lower terminal thereof.

One extremity of the longitudinally disposed openings of the T-joint 13 has threaded therein the air connection. This air connection comprises the exteriorly threaded nut 14, which secures the connection to the T-joint through the central opening of which

extends the pipe 15, said pipe being provided with an enlargement 16 adjacent the nut to more securely retain the same in place. The free terminal of the pipe is curved upwardly and provided with the threads 17 which form a means whereby the same may be connected with an air hose. The opposite terminal 18 of the pipe 15 passes more than half way the passage of the T-joint 13 and is provided at its immediate extremity with the removable enlargement 19, said enlargement having formed therein the centrally disposed air hole 20. A nipple 21 is secured in the opposite extremity of the longitudinal passage of the T-joint 13 and provides a connection between the latter, the outlet and the cleaning flue. The free terminal of the nipple 21 is connected with the T-joint 22, the longitudinal passage of said T-joint forming the connection between the sand box and the outlet and cleaning flue.

The cleaning flue comprises a pipe or tube 23 connected in the upper terminal of the vertically extending T-joint 22, said pipe projecting through the remaining opening in the bottom of the sand box and extending upwardly in such a manner that the upper terminal thereof is adjacent to the top of said box. The upper extremity of the pipe is provided with the threads 24 on which is threaded the cap 25, said cap forming a means whereby sand is kept from said cleaning flue.

The opposite end of the longitudinal passage of the T-joint 22 has removably secured therein the outlet pipe 26, said pipe being of such a construction that a flexible hose may be secured thereto in order to conduct the sand from said pipe to the wheel with which the sanding device is adapted to cooperate.

From the foregoing, it will readily be seen that the sand will drop from the sand box through the nipple 10 which comprises a supply pipe to the T-joint 13 and thence to the nipple 21 which forms a sand seat. Air in passing through the pipe 15 and out the air hole 20 forces the sand from the T-joint 13 and the nipple 21 through the nipple 22 to the track through the instrumentality of the outlet 26.

Should any sand become solidified within any of the various elements of the device, the only operation necessary is to remove the cap 25 and insert a rod or similar element

into the flue 23 which will readily loosen the sand.

It will further be noted that, should any part become worn or rusted, the same may be readily replaced without removing the remaining parts or elements of the device.

The present invention is readily attached to all sand boxes of any ordinary or usual construction, and is securely held in place by the clamping nut 12 and retained from rotation by the cleaning flue 23.

Having thus fully described my invention, what is claimed as new is:

1. In a device of the class described, the combination with a sand box, of a supply pipe projecting through the bottom of said sand box, means whereby said supply pipe may be clamped in position, a three-way connection secured to the free terminal of said supply pipe, means for injecting air at one extremity of said three-way connection, and means whereby said connection may be removably secured to an outlet.

2. In a device of the class described, the combination with a sand box, of a supply pipe projecting through the bottom of said sand box, means whereby said supply pipe may be clamped in position, a three-way connection secured to the free terminal of said supply pipe, means for injecting air at one extremity of said three-way connection, means whereby said connection may be removably secured to an outlet, and means projecting through said sand box whereby the elements of the mechanism may be cleaned.

3. In a device of the class described, the combination with a sand box, of a nipple projecting through the bottom of said sand box provided with threads at each extremity thereof, a clamping nut threaded on the upper terminal of said nipple and bearing against the inner side of the bottom of said sand box, a T-joint connected to the opposite terminal of said nipple, means whereby air may be injected at one terminal of said T-joint, and means whereby the opposite terminal thereof may be connected with an outlet, and means for cleaning the elements of the device.

4. In a device of the character set forth, in combination with a sand box, of a nipple projecting through the base of said sand box, a T-joint connected with the free terminal of said nipple, a nut threaded in one extremity of said T-joint, an air supply pipe passing through said nut and partially through the passage of said T-joint provided with a de-

tachable enlargement at the inner terminal thereof, means whereby the opposite extremity of said T-joint may be connected to an outlet, and means for cleaning the elements of the device.

5. In a device of the character set forth, in combination with a sand box, of a nipple projecting through the base of said sand box, a T-joint connected with the free terminal of said nipple, a nut threaded in one extremity of said T-joint, an air supply pipe passing through said nut and partially through the passage of said T-joint provided with a detachable enlargement at its free extremity, said enlargement having the centrally disposed opening, and an enlargement on the exterior of the nut adapted to bear against the latter and retain the pipe in its proper position, and means whereby the opposite terminal of the passage of the T-joint may be connected with an outlet, and means for cleaning the elements of the device.

6. In a device of the character set forth, the combination with a sand box, of a nipple projecting through the bottom of said sand box, a three-way joint connected to the outer terminal of said nipple, means for injecting air in one extremity of said three-way joint, a nipple detachably secured in the opposite extremity thereof, a similar three-way joint secured to the free terminal of said last named nipple, an outlet pipe detachably secured in one extremity of the passage of the latter three-way joint, and cleaning means in the opposite terminal of said passage.

7. In a device of the character set forth, the combination with a sand box, of a nipple projecting through the bottom of said sand box, a three-way joint connected to the outer terminal of said nipple, means for injecting air in one extremity of said three-way joint, a nipple detachably secured in the opposite extremity thereof, a similar three-way joint secured to the free terminal of said last named nipple, an outlet pipe detachably secured in one extremity of the passage of the latter three-way joint, and a cleaning means for the elements comprising a tube secured in the opposite extremity of said passage and projecting substantially entirely through said sand box provided with a removable cap at its upper extremity.

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Witnesses:

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