

I. A. GIBBS.
 TRACK SANDING APPARATUS.
 APPLICATION FILED APR. 29, 1908.

946,346.

Patented Jan. 11, 1910.

Fig. 1.

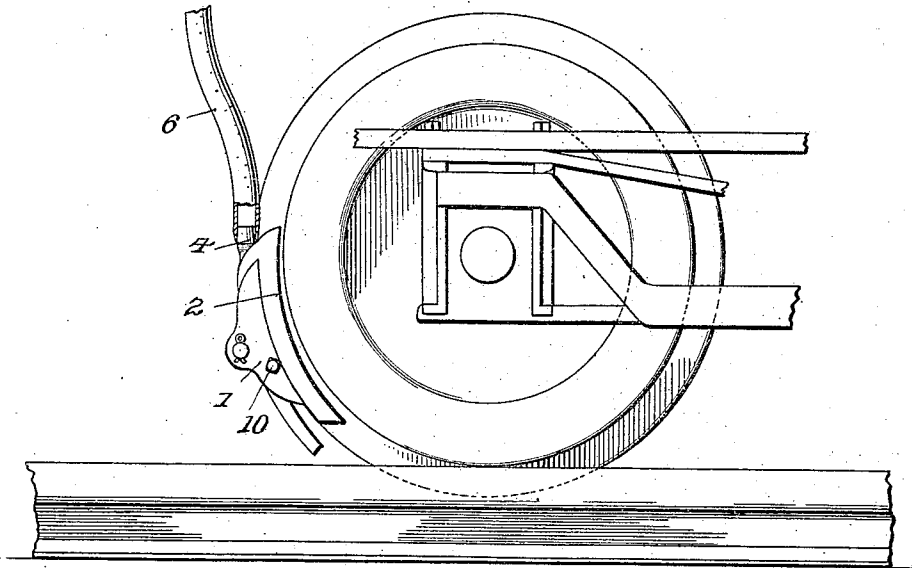


Fig. 2.

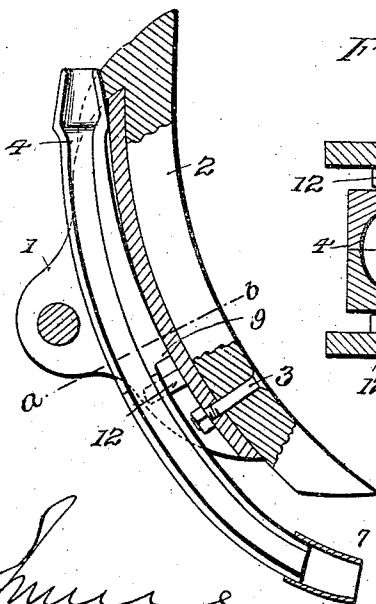


Fig. 3.

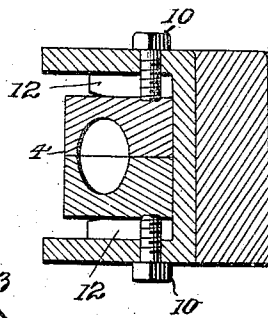
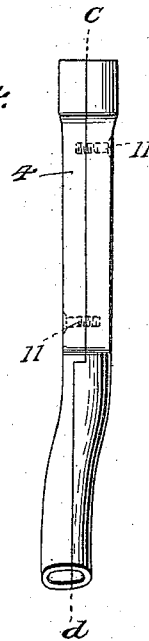


Fig. 4.



Inventor

Witnesses

Isaac A. Gibbs
Wm. C. W. Intire

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Isaac A. Gibbs
Wm. C. W. Intire Attorney

UNITED STATES PATENT OFFICE.

ISAAC A. GIBBS, OF ROANOKE, VIRGINIA, ASSIGNOR OF ONE-HALF TO JOHN ROSE, OF ROANOKE, VIRGINIA.

TRACK-SANDING APPARATUS.

946,346.

Specification of Letters Patent.

Patented Jan. 11, 1910.

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To all whom it may concern:

Be it known that I, ISAAC A. GIBBS, a citizen of the United States, residing at Roanoke, in the county of Roanoke and State of Virginia, have invented certain new and useful Improvements in Track-Sanding Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in track-sanding apparatus and particularly of that type in which the pipe or conduit through which the sand is conveyed to the track rail passes through a vertical passage in the brake-head to which the brake-shoe is connected, and is independent of the same, and consequently while the thrust-block and brake-shoe are movable toward and from the wheel of the locomotive while the sand pipe or conduit being secured in position at its upper extremity occupies a substantially fixed position with reference to the brake-head and track-rail the said pipe or conduit delivers the sand always at the same distance from the wheel. It is also liable to injury resulting from contact with the thrust block during the vibrations of the latter.

My invention has for its object to overcome the disadvantages referred to and to provide a sanding apparatus adapted to deliver the sand at a point much nearer the wheel and to move toward and from the wheel coincidentally with and to the same extent as the movement of the brake shoe.

With these ends in view my invention consists in the combination with the brake-head and brake-shoe, of a sand delivery pipe or conduit, detachably connected with the brake-head all as will be hereinafter more fully explained.

In order that those skilled in the art to which my invention appertains may know how to make and apply my improved track sanding apparatus and appreciate its advantages I will proceed to describe the same referring to the accompanying drawing in which—

Figure 1 is a side elevation showing my improvement in its relation with a brake-head and brake-shoe, and adapted for connection with the sand dome of a locomotive.

Fig. 2 is a central vertical section of the same. Fig. 3 is a transverse section on the line *a—b* of Fig. 2, and Fig. 4 is a front elevation of the sand conduit removed from the brake-head.

Similar numerals represent like parts in the several figures of the drawing.

1, is an ordinary brake-head adapted to be pivoted by a bolt to a brake-beam.

2, is a brake-shoe secured to the brake-head by a screw bolt 3, or in any other suitable manner.

4, is a sand conduit preferably composed of cast metal and having its upper extremity flared or of hopper shape in order that it may receive the end of a discharge pipe 6, leading from the sand dome, or if desired the upper end of the conduit 4, may be connected with the sand dome by any suitable flexible connection. The conduit 4, at its lower extremity is curved toward the brake shoe as clearly illustrated at Fig. 1, and may if preferred be provided with a flexible foot piece 7, in order that the sand passing through the conduit may be delivered close to the point of contact between the wheel and rail.

At a point above the locality of the screw bolt 3, which secures the brake-shoe to the brake-head the conduit 6, projects as shown at 9, to constitute a bearing surface for a suitable set screw or bolt 10, by which the conduit is held in fixed relation with the brake-head 1, to prevent vertical or vibrative movement of the conduit with respect to the same.

The sides of the conduit are formed flat to lie between and to contact with ribs 12, on the interior of the brake-head in order that no sidewise movement of the conduit with reference to the same can take place, so that when the conduit has been secured in position by the set screws or bolts 10, it bears a fixed and practically integral relation with the brake-head and brake-shoe and vibrates with the same.

It will also be apparent that the conduit 6, may be readily removed when necessary or desirable, by first releasing the brake-head 1, from the brake-beam and then loosening the set screw 10, whereupon the brake-head is free to be removed in a rearward direction.

The conduit 6, may be cast integral or if desired it may be cast in two parts as indi-

cated by the line *c-d* in Fig. 4, secured together by screws 11, or in any other desired manner.

While I have shown and described the sand conduit as provided with a flexible float secured thereto and may prefer this construction, as one means of directing the sand close to the point of contact between the wheel and the rail, it will be obvious that inasmuch as the brake-head and sand conduit are secured in fixed relation with one another and must necessarily move as a unitary structure, the lower extremity of the conduit may be extended and curved forwardly to any desired extent without in any manner effecting the movement of the brake-head and brake-shoe or subjecting the sand conduit to damage.

From the construction shown and described it will be readily understood that my improved sanding apparatus is extremely simple and economic of construction and readily applied and removed when necessary.

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

1. In a track sanding apparatus, in com-

bination with the brake head adapted to be secured to the brake shoe and brake beam and formed with a central vertical passage and open rearwardly, a sand conduit located within the open passage in the brake-head and removably secured therein by set screws in each side of the brake head, substantially as hereinbefore set forth.

2. In a track-sanding apparatus such as described, a sand conduit composed of two longitudinal sections separably secured together, and removably secured in a fixed relation with the brake head, substantially as hereinbefore set forth.

3. In a track-sanding apparatus such as described, a sand-conduit located within the brake-head and removably secured in fixed relation with the brake head, and provided with a flexible foot extension, substantially as hereinbefore set forth.

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

ISAAC A. GIBBS.

Witnesses:

LAWRENCE S. DAVIS,
P. H. NUKER.