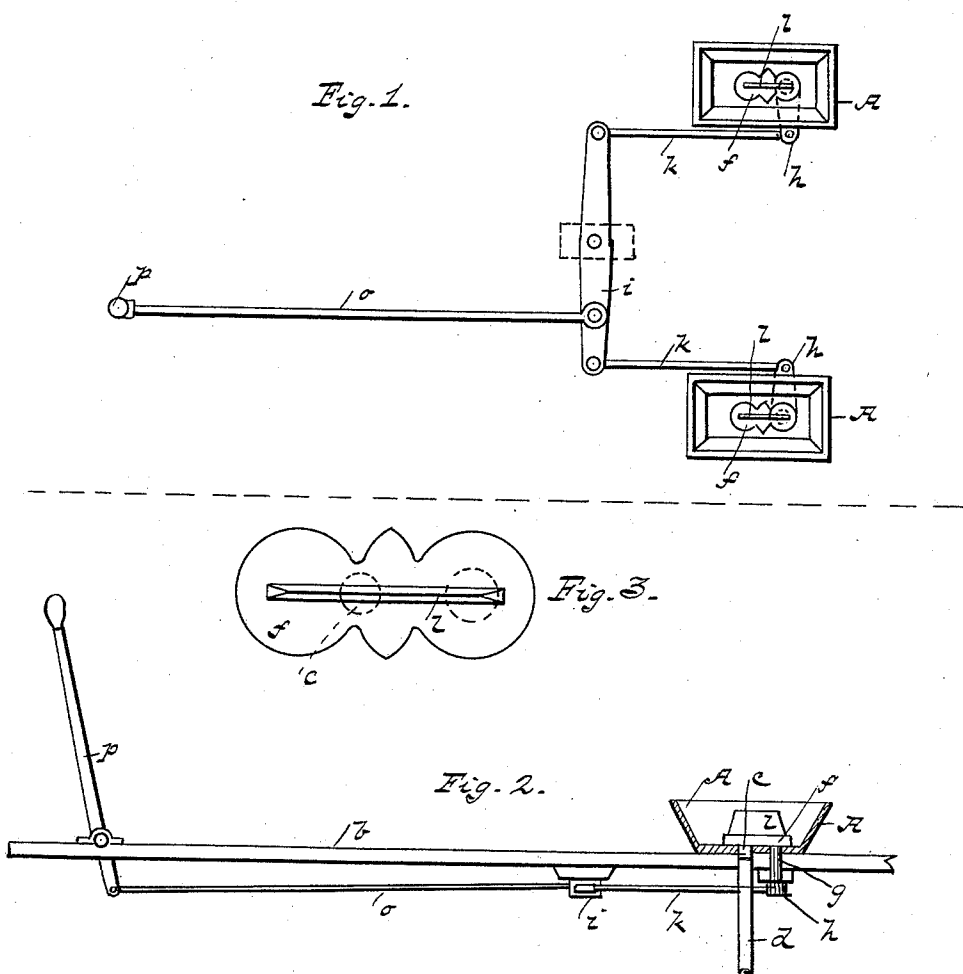


(No Model.)

E. W. DAVIS.
SAND BOX FOR RAILWAY CARS.

No. 409,602.

Patented Aug. 20, 1889.



Witnesses:
H. E. Harrison.
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Attest.

UNITED STATES PATENT OFFICE.

ELI W. DAVIS, OF PITTSBURG, PENNSYLVANIA.

SAND-BOX FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 409,602, dated August 20, 1889.

Application filed March 11, 1889. Serial No. 302,866. (No model.)

To all whom it may concern:

Be it known that I, ELI W. DAVIS, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Sand-Boxes for Railway-Cars; 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an apparatus for distributing sand on railway-rails; and it consists in two bins or boxes placed on the floor of the car, having a pipe leading downwardly therefrom to the rails, and suitable mechanism for regulating and controlling the flow of sand through the same, together with certain other details of construction and combination of parts, as will be fully described hereinafter.

In the accompanying drawings, Figure 1 is a plan view of my improved sanding apparatus detached from the car and constructed in accordance with my invention. Fig. 2 is a side elevation of the same, partly shown in section, the better to show its working parts. Fig. 3 is an enlarged plan view of one of the valves.

To put my invention into practice with a railway-car, I provide two boxes or bins A, and attach the same to the floor *b* in a position over each rail of the track. In the base of each of these bins A is an opening *c*, having a pipe or tube *d* leading therefrom, and their lower extremity is close to the rails. Over these openings *c* is a valve *f*, having a downwardly-projecting stem *g*, to which is affixed a short crank *h*. These valves *f* are so placed over the openings *c* that by moving the same about their pivotal points *g* the openings *c* will be more or less uncovered to admit of the sand

in the bins to enter the pipes *d*. At a suitable point beneath the floor *b* of the car and extending across the same is pivoted a lever *i*, which is connected to the cranks *h* by suitable rods *k*. Attached to this lever *i* is a rod *o*, which extends beneath the floor of the car to the point at which the driver, gripman, or operator stands, and at that point is connected to an upwardly-extending lever *p*.

On the top of each of the valves *f* is secured an upwardly-extending flange *l*, which, when the valves *f* are moved, agitates the sand and prevents the same from forming an arch over the openings *c*.

This sanding device is operated by a movement of the lever *p*, which moves the valves *f* from side to side about their pivotal point. These bins A are provided with a floor or bottom which is water-tight and will not admit moisture to dampen the sand.

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

In an apparatus for the purpose described, the combination consisting of the two bins A, each provided with a pipe leading from its base, the valves *f*, for covering the openings *c*, the cranks *h*, attached to the said valves *f*, the lever *i* and connecting-rods *k*, and the hand-lever *p* and connecting-rod *o*, and the upwardly-extending flange *l*, attached to the valves *f*, for the purpose of agitating the sand in the bins A, substantially as and for the purpose described.

In testimony that I claim the foregoing I hereunto affix my signature, this 27th day of February, A. D. 1889.

ELI W. DAVIS. [L. s.]

In presence of—

C. C. LEE,
M. E. HARRISON.