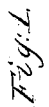


Patented Mar. 13, 1866.



Thomas Price
James H. Wilson

UNITED STATES PATENT OFFICE.

THOMAS PRICE AND JAMES H. WILSON, OF COVINGTON, KENTUCKY.

IMPROVEMENT IN SAND-BOXES FOR LOCOMOTIVE-ENGINES.

Specification forming part of Letters Patent No. 53,182, dated March 13, 1866; antedated March 5, 1866.

To all whom it may concern:

Be it known that we, THOMAS PRICE and JAMES H. WILSON, of the city of Covington, Benton county, State of Kentucky, have invented a new and useful Improvement in Sand-Boxes, of which the following is a full and clear description thereof, reference being had to the accompanying drawings.

My invention relates to sand-boxes, having one valve instead of two valves connecting with pipes leading to the forward face of the drivers attached to the locomotive.

Figure 1 is an external perspective view of our improvement. Fig. 2 is a sectional view taken through the sand-box and boiler. Fig. 3 is a sectional view through the sand-box, showing the valve open for the escape of the sand.

A is the boiler upon which our improved sand-box is secured. B is the sand-box, secured to the boiler in the usual manner. Passing transversely through said box is a rotating axle, *b*, which, through the agency of lever *g* and rod *c*, elevates or depresses the valve *d*, thus regulating the flow of sand through the two pipes *e e'*, which pass down upon each side of the boiler, conducting the sand forward of each wheel. The valve *d* is elevated or depressed by operating the cord *f*, attached to the lever *g*.

In the sand-boxes as now constructed two distinct openings, one upon each side of the

box connecting with the sand-pipes, are employed. By using but one general discharge, which may be closed by valve *d*, as shown in the accompanying drawings, a more equitable discharge is secured and less expense incurred in the construction of the box. To still further secure the ready flow of sand to the center of the box B, the bottom is made dishing, or with a semi-spherical concavity.

Still a very important advantage which our improved sand-box secures is an equal flow of sand to the front of each driving-wheel, thus insuring equal traction and obviating the unequal strain upon the machinery entailed by the use of the ordinary two-valved sand-box. When the unequal strain occurs the machinery is not only strained, but often the pins or cranks are broken.

From the great saving to the machinery, it is clear that our improvement will subserve great economy in the rolling-stock of railroads.

Having fully described our invention, we make the following claim:

The construction of a sand-box having an opening connecting with two pipes, *e e'*, said opening having a valve, *d*, all constructed as above described, and for the purpose set forth.

THOMAS PRICE.

JAMES H. WILSON.

Witnesses:

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