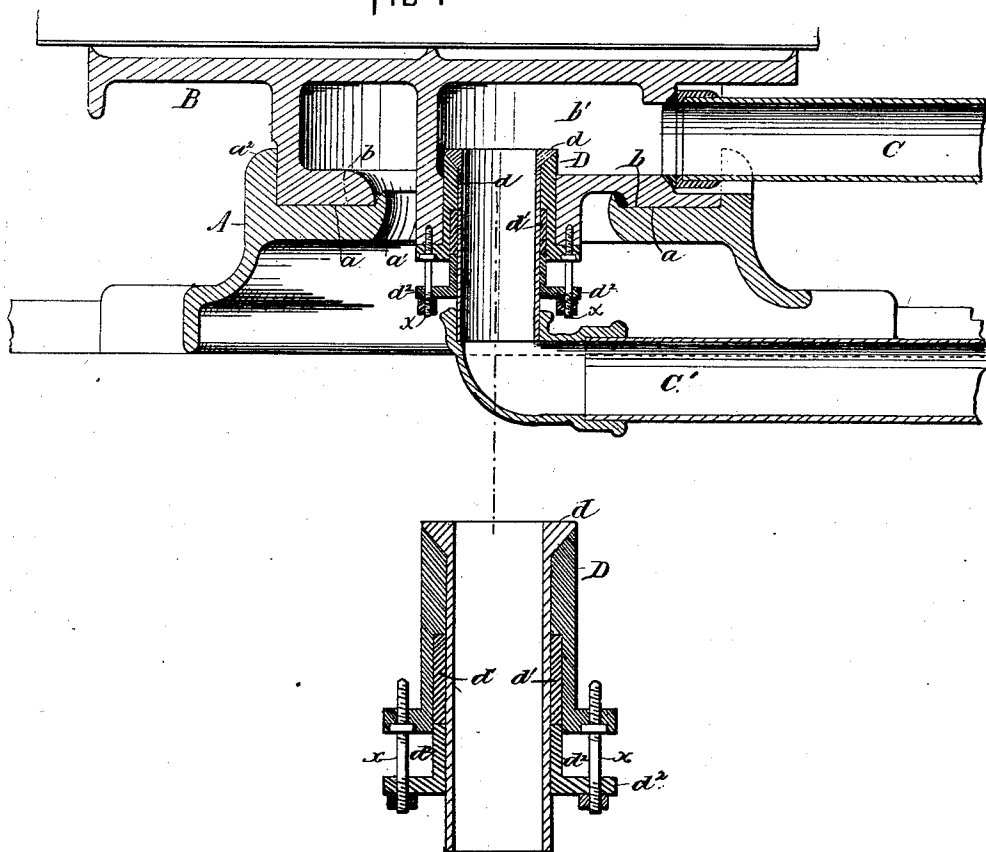


W. MASON.
Locomotive Truck-Engines.

No. 156,031.

Patented Oct. 20, 1874.

FIG 1



Witnesses;

Harry C. Clark.

H. C. Matthews.

Inventor;

William Mason

by H. W. Beadle & Co.

Attys,

W. MASON.
Locomotive Truck-Engines.

No. 156,031.

Patented Oct. 20, 1874.

FIG 2.

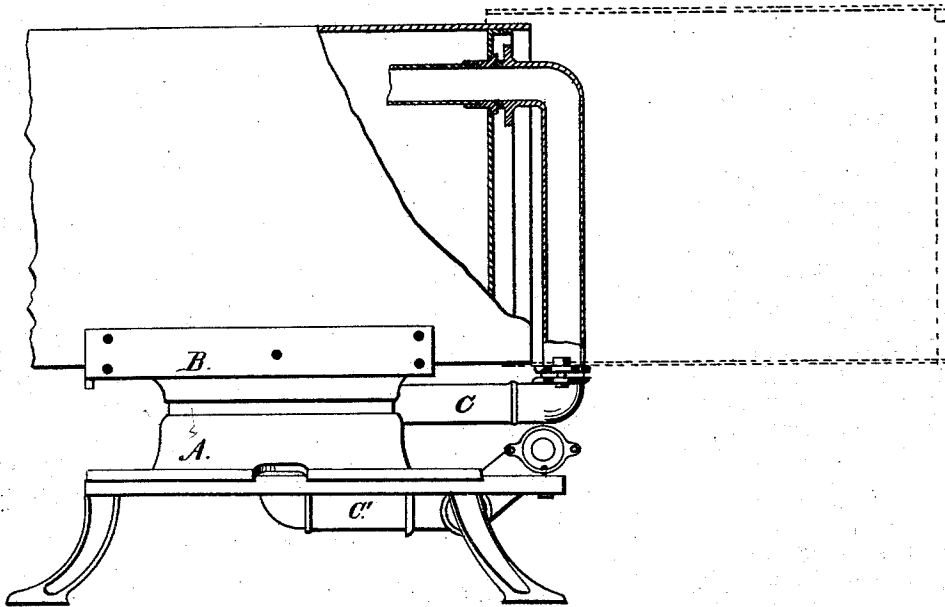
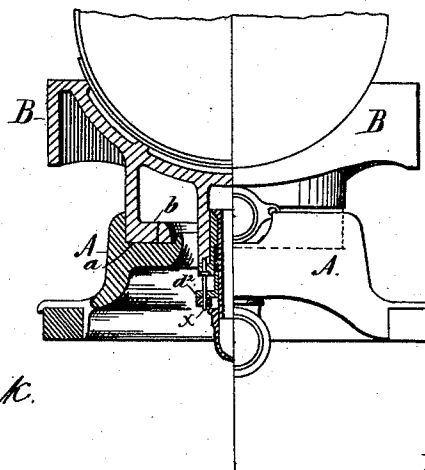


FIG 3.



Witnesses.

Navy & Clark.
H. C. Matthews.

Inventor.

William Mason.
By H. W. Beadle & Co.
Atty's.

UNITED STATES PATENT OFFICE.

WILLIAM MASON, OF TAUNTON, MASSACHUSETTS.

IMPROVEMENT IN LOCOMOTIVE-TRUCK ENGINES.

Specification forming part of Letters Patent No. **156,031**, dated October 20, 1874; application filed September 14, 1874.

To all whom it may concern:

Be it known that I, WILLIAM MASON, of Taunton, in the county of Bristol and State of Massachusetts, have invented new and useful Improvements in Locomotive-Truck Engines; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to double-truck engines, having the boiler and trucks adapted to move independently of each other, and has for its object the conveying of steam from the boiler of the locomotive to the steam-chests upon the independently-moving truck; and consists in adapting the pivot-bearings of the truck and boiler to receive the ends of two independent pipes for conveying steam, and in uniting the ends by a swivel-joint of peculiar construction, as will be fully described hereinafter.

In the drawings, Figure 1 represents a sectional elevation of the swivel-joint and its connections; Fig. 2, a side elevation, showing the parts as applied to the truck and boiler; and Fig. 3, a front elevation, partly in section.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction and manner of operation.

A represents a circular casting, strongly supported upon the truck and provided with the bearing-surface *a* and inner and outer flanges *a*¹ *a*², as shown. B represents the casting, adapted to support the boiler, which is provided with the bearings *b*, adapted to turn freely upon the face *a* of the casting A. The casting B is provided also with a passage, *b'*, adapted to receive at one end the discharge end of the pipe C, which communicates with the interior of the boiler, and at the other the joint which connects it to the pipe upon the truck. C' represents the pipe

upon the truck, which opens at one end, by means of truck-pipes, into the steam-chests upon each side, and at the other into the intermediate joint, which unites it to the passage *b'*.

The joint is constructed in the following manner: D represents a suitable cylinder, of proper anti-friction metal, suitably secured within the lower opening of the passage *b'* by means of screws, as shown. *d* also represents a cylinder, adapted to fit within the cylinder D, which is provided at the upper end with the beveled-edged flange, adapted to rest upon the corresponding edge of cylinder D, its lower end being rigidly secured to pipe C, as shown. *d*¹ represents an intermediate packing, held in the recess of cylinder D by means of the ring *d*² and the double screws *x x*, as shown.

The operation will be readily understood from the foregoing description.

The boiler and truck are adapted to move independently of each other by means of the pivot bearings *a b*. The steam is conveyed from the boiler to the steam-chest upon the truck by means of the pipes C C' and the intermediate joint, the cylinder *d* of which revolves freely within the cylinder D, without permitting the escape of steam.

The described combination is exceedingly simple, but well adapted for the purpose for which it is designed.

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

The combination of the casting A B, the pipes C C', and the intermediate joint D *d*, as described.

This specification signed and witnessed this 22d day of August, 1874.

WM. MASON.

Witnesses:

BENJ. DEAN,

AUGUSTUS ANDREWS.