

L. A. ROBERTS.
LOCOMOTIVE-TRUCK.

No. 172,176.

Patented Jan. 11, 1876.

Fig. 1.

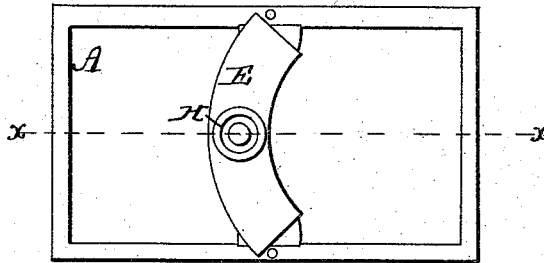


Fig. 2.

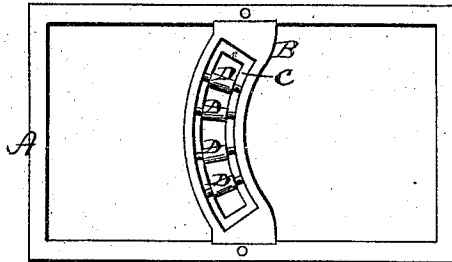


Fig. 4.

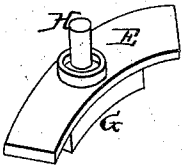


Fig. 3.

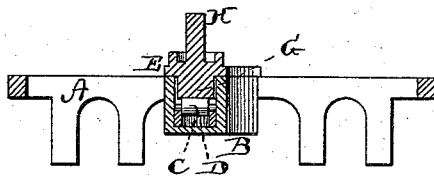
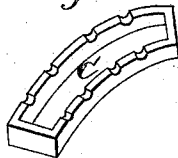


Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE.

LEWIS A. ROBERTS, OF HYDE PARK, PENNSYLVANIA.

IMPROVEMENT IN LOCOMOTIVE-TRUCKS.

Specification forming part of Letters Patent No. **172,176**, dated January 11, 1876; application filed November 5, 1875.

To all whom it may concern:

Be it known that I, LEWIS A. ROBERTS, of Hyde Park, in the county of Luzerne and in the State of Pennsylvania, have invented certain new and useful Improvements in Locomotive-Trucks; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to locomotive-truck frames; and it consists in the construction and arrangement of a device to be used in the place of the swing-beams now used, for admitting of a certain degree of play or lateral motion, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a plan view of the main truck of a locomotive embodying my invention. Fig. 2 is a similar view with the top box removed. Fig. 3 is a longitudinal vertical section through the line *xx*, Fig. 1. Figs. 4 and 5 are detached views of parts of my invention.

A represents the main truck of a locomotive, in which is fastened a box, B, made in the form of the arc of a circle. In this box is placed a correspondingly-shaped frame, C, having suit-

able notches in its upper edge to receive the journals of a series of rollers, D D, placed on radial lines, as shown in Fig. 2. E is a curved plate, having a curved or segmental block or projection, G, on its under side, which rests on the rollers D D, and moves on the arc of a circle from side to side. From the center of the plate E projects a pin, H, which is to be fastened onto the cross-brace which is on the main frame of the locomotive either by riveting or by other suitable means.

The ordinary swing-beams, as now used on locomotives, are very expensive, and are often the cause of throwing the locomotive off from the track when coming around a short curve. My device obviates these difficulties, and is simple, cheap, and durable.

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

In a locomotive-truck frame, the segmental frame C, with rollers D placed within and inclosed by the segmental box B, in combination with the covering-plate E, having block G on its under side, resting on the rollers, and the central pin H on its upper side, all as and for the purpose herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 18th day of October, 1875.

L. A. ROBERTS.

Witnesses:

D. M. JONES,
G. B. CARSON.