H. L. B. Lewis.

Car Coupling.

No. 6,730. Patented Sept. 18, 1849.

Fig. 1.

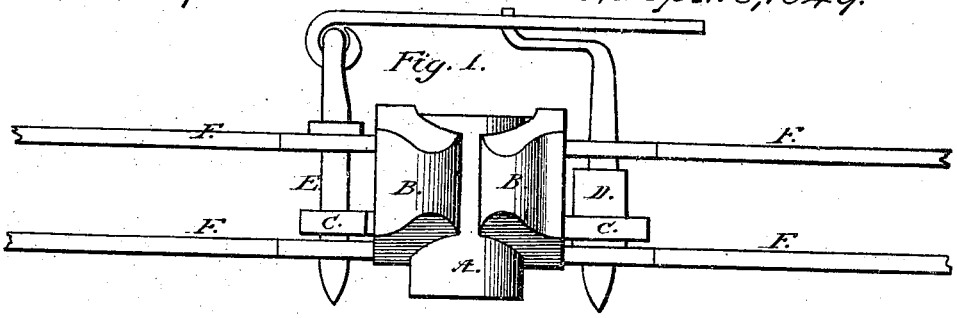


Fig. 2.

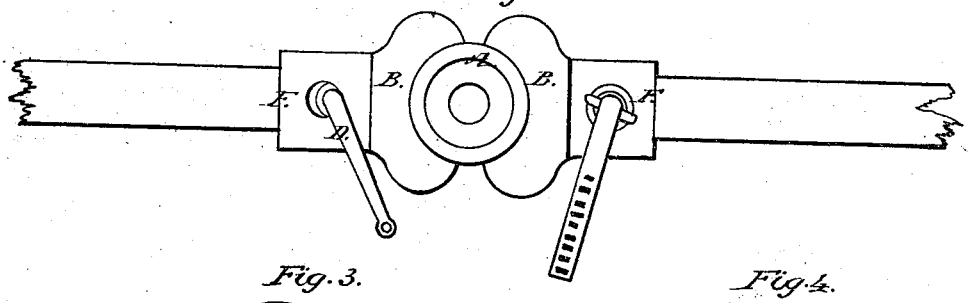


Fig. 3.

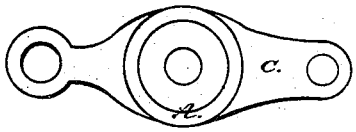


Fig. 4.

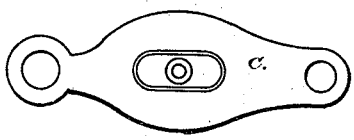


Fig. 5.

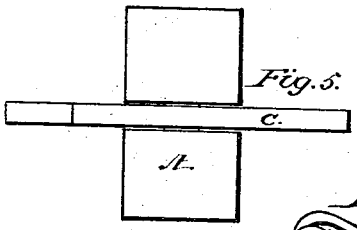


Fig. 6.

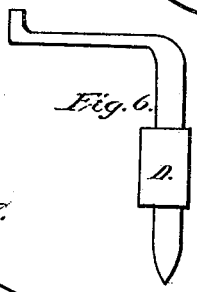


Fig. 7.

Fig. 8.

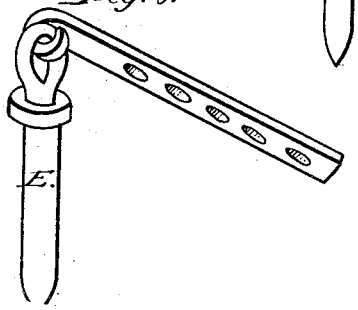


Fig. 9.

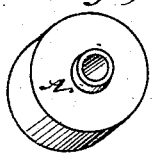
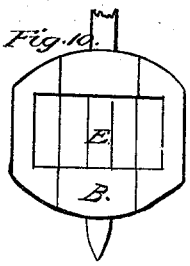


Fig. 10.



UNITED STATES PATENT OFFICE.

H. L. B. LEWIS, OF NEW YORK, N. Y.

COUPLING FOR CARS.

Specification of Letters Patent No. 6,730, dated September 18, 1849.

To all whom it may concern:

Be it known that I, H. L. B. LEWIS, of the county and State of New York, have invented a new and improved Mode of Coupling Railroad-Cars; and I hereby declare that the following is a full and exact description.

To enable others to make and use my invention I proceed to describe its construction and operation, reference being had to the drawings hereunto annexed and making part of this specification.

Figure 1 is a side elevation of the coupling in which A is a cylinder between the two buffer heads, B, which are of metal and hollowed out to fit the cylinder. C is the link which holds the cars together. D is an eccentric bolt for bringing the joint firmly up. E is the bolt at the other end of the link. F the parts extending under the body of the cars connected with the springs for avoiding concussion. Fig. 2 the top of the same. Fig. 3 top view of the link and cylinder. Fig. 4 the link—the elongated opening in which, wider than the bolt which connects the two parts of the cylinder, allows for the necessary change of position when the cars are turning a curve. Fig. 5 the link and cylinder—side view. Fig. 6 the eccentric bolt. Fig. 7 section of the same. Fig. 8 the bolt. Fig. 9 one of the parts of the cylinder—showing the projection which keeps the two parts separate so that they will not press upon the link. The two parts are connected by a bolt and screw. Fig. 10 the face of the buffer heads. The wide slot, in which is placed the link, allows for the vertical vibration of the cars.

The buffer heads, B, for this coupling are arranged in any suitable manner with regard to the spring, which obviates concussion. They are made of metal and hollowed out in the face so the cylinder will fit into the hollow.

The cylinder, A, is made in two parts, see Fig. 9. The link, Fig. 4, is laid upon it, Fig. 9—the other half of the cylinder is placed on it, and the two are bolted together and screwed fast. When thus arranged the link has a free motion laterally and longitudinally. When in use this link and cylinder are held attached to one of the buffer heads by the eccentric bolt, D. The other end of the link guides the cylinder to its place when the cars come together. The other bolt, E, being then put in, the cars are connected and the eccentric bolt, D, being turned and fastened in one of the holes of the rack or bar attached to E, Fig. 8, the joint is made firm. Arranged thus the cars have but two relative motions when under way—vertical to prevent damage to platforms, and curvature for turning the curves of the road. This joint effectually prevents the lateral motion of the cars, and thus avoids the danger of their running off the track, while the locomotive keeps its place. It lessens the injury to their running gear as well as to the rails and road bed, giving them an unusual degree of steadiness.

What I claim as my invention, and desire to secure by Letters Patent, is—

The connecting rail road cars by a joint—formed by the combination of the head pieces, B, with the cylindrical piece, A,—the joint being held together by the link and pins—C, D, E,—the whole constructed and arranged in the manner above described.

H. L. B. LEWIS.

Witnesses:

ELISHA WYLLY,

B. I. THEUS.