D. B. ROGERS.

RAILROAD CAR TRUCK.

No. 61,873. Patented Feb. 5, 1867.

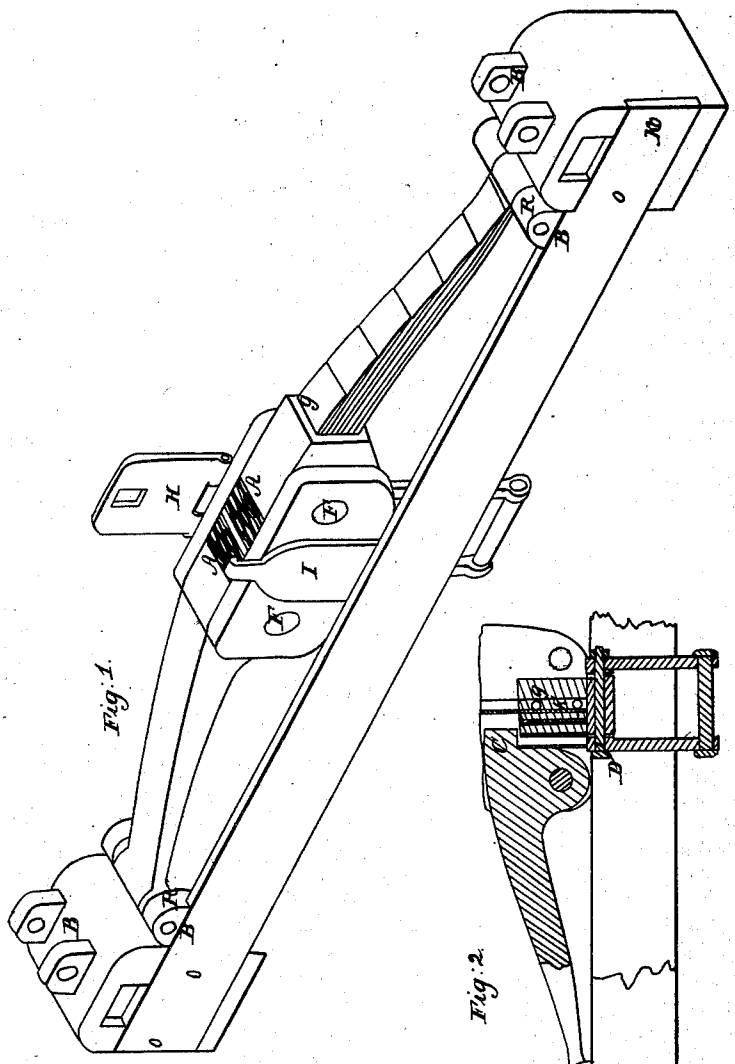

Fig. 1.

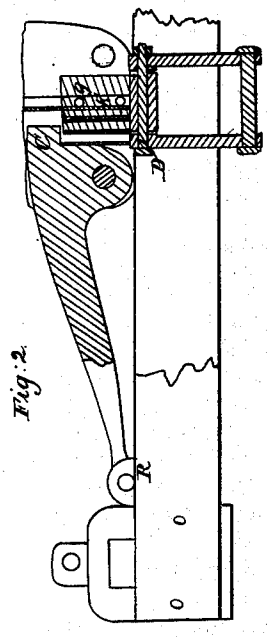

Fig. 2.

Witnesses;

John A. Shaw

Chas B. Shaw

Inventor;

David B. Rogers

United States Patent Office.

DAVID B. ROGERS, OF PITTSBURG, PENNSYLVANIA.

Letters Patent No. 61,873, *dated February* 5, 1867.

IMPROVED RAILROAD CAR TRUCK.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, DAVID B. ROGERS, of Pittsburg, in the county of Allegheny, and State of Pennsylvania, have invented a new and improved Mode of Constructing Railroad Car Trucks; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in, first, the constructing the frame; second, in constructing pedestal and arms, and of applying the springs.

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

Figure 1 is an isometrical elevation representing a side perspective view of a truck, in which are seen both the place and manner of applying the springs at the letter A; also how the whole is applied to the frame is seen at B.

Figure 2 is a half section opened, or the front of the pedestal taken off, by which is shown the form of the inner part of the jointed arm, as seen at C; also the manner of fastening the shackle to the pedestal, and is represented by the red-ink block, with a bolt passing through the lower end, to which the shackle or bolster-seat is hung, as seen at the letter D, and bolted through the pedestal, as seen at E.

In constructing my jointed arm pedestal, I take two plates of suitable dimensions, either cast or wrought, and drill holes at the proper places to receive a pin passing through the arm, as is seen at E, fig. 1, and other holes to bolt the two plates on to the shacke-block, as is shown in fig. 2, at E. I then bolt the two pieces together with the shackle-block between them, and running up far enough to form a seat for springs, as is seen at fig. 2, red block, the two plates projecting far enough each way from the red block to receive the jointed arm, as is shown in fig. 2, the dark representing one side of the pedestal, the red representing the block. In forming the jointed arm, I either bend a bar, or cast, after the form seen in fig. 2, either with solid arm or with socket, as is shown in fig. 2, at *g*, so as to receive quarter elliptic springs. In forming this arm, it will be seen that a projecting bearing is part of its form passing just above over the shackle-block and sets against the springs; this is seen in fig. 1, at A. H is a lid or cover to keep the springs from working up. I is a spring-catch to keep the lid shut. In constructing my truck-frame, I take two bars, four inches in width, half inch thick, and bolt them on to the outer and inner ends (or sides) of the journal-box, instead of the top and bottom, as is the usual way, by which I obtain as strong a truck with less labor and material, not being so liable to break the bolts, inasmuch as they pass through horizontally, as seen at K, the box having grooves to receive the bars. And as they are set edgewise, they are stronger with the same heft of iron than any now in use. Further, in forming my pedestal, I can cast it whole, with its necessary openings to receive the jointed arm.

Having described the construction of my invention, I now proceed to describe its operation. I contend that it will give an easy ride, because the action on the spring is so far from the blow or bearing point that the shock will be quite lost before it reaches the load, and more so because of the horizontal action on the pedestal spring; and if the quarter elliptic is used, it constitutes an equalizer, which always contributes to an easy ride. I think twenty-five per cent. may be saved for passenger cars, and thirty-three or more for freight. In applying my spring arrangement to the frame, I either set it on the top of the journal-box or at a near point thereto between the two side irons, as seen at R.

Claim.

I claim an improved car truck, to which is attached the spring *g*, or its solid counterpart, when the same is pivoted or otherwise applied at R, and its central connections controlled and supported by means of metallic springs, enclosed in a casing with the lid H and catch I, (or their equivalent,) to hold them in position, as and for the purpose herein described.

Also, in combination with the devices mentioned above, I claim the side-bars K, when bolted to either side of the journal-box vertically, in the manner and for the purpose herein set forth.

DAVID B. ROGERS.

Witnesses:

JOHN A. STRAIN,

CHAS. B. STRAIN.