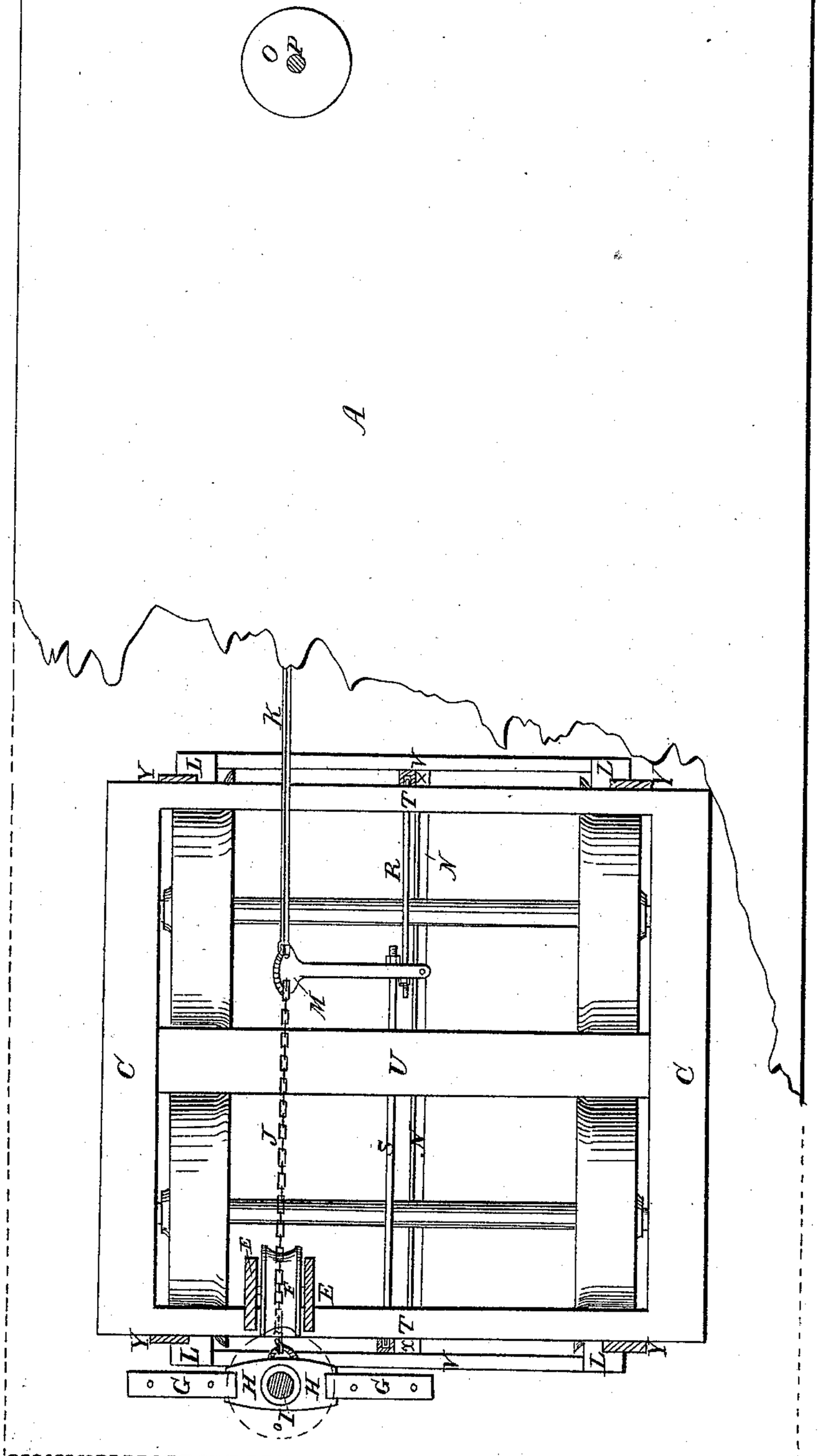
3 Sheets—Sheet 1.

J. W. RICE.

Car Brake.

No. 21,086. Patented Aug. 3, 1858.

Fig. 1



Plan

Inventor
John W. Rice

3 Sheets—Sheet 2.

J. W. RICE.

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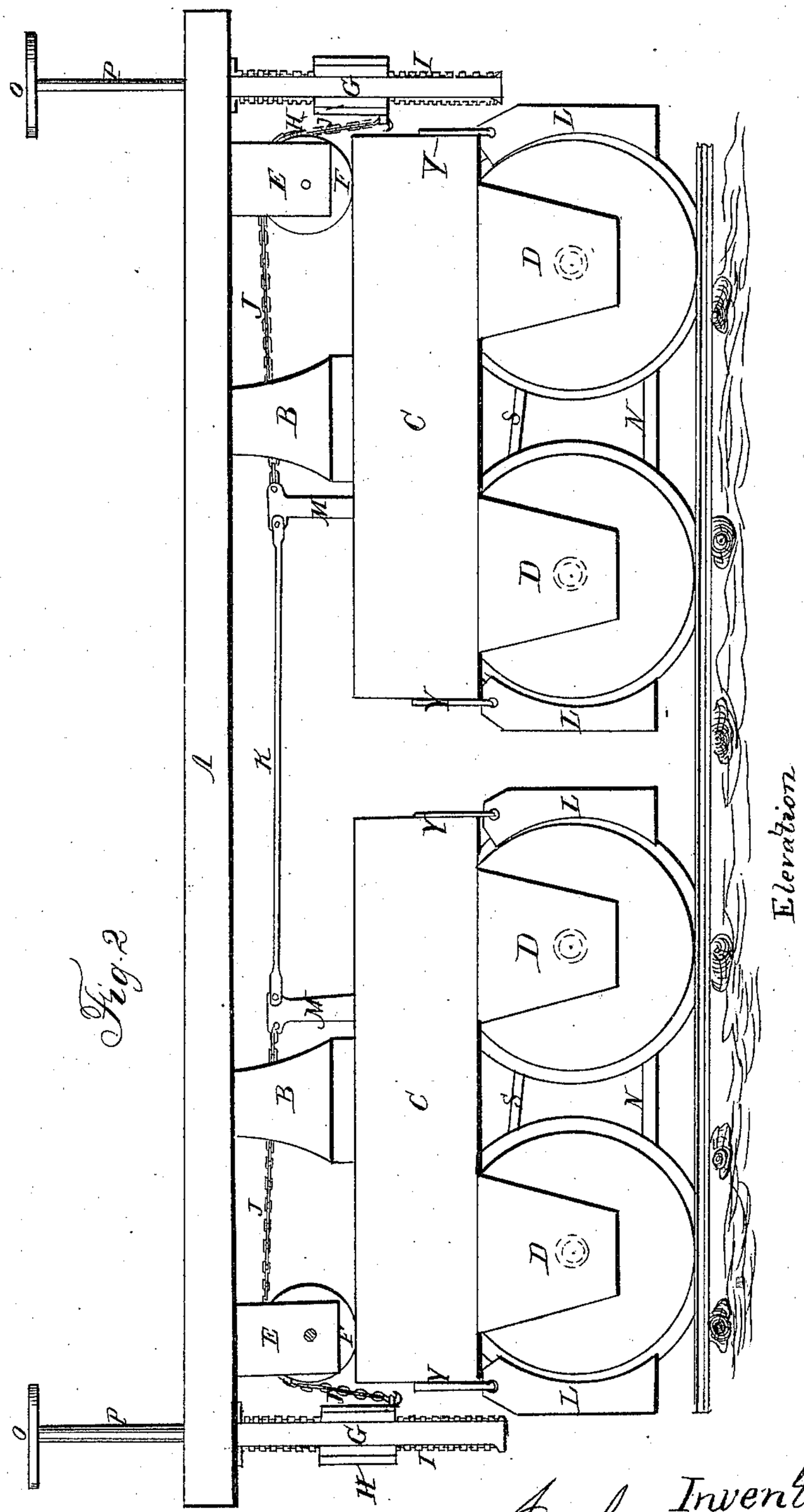

Fig. 2

Inventor.
John. W. Rice

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Car Brake.

No. 21,086.

3 Sheets—Sheet 3.

Patented Aug. 3, 1858.

Fig 4

Section

Fig 3

End view.

Inventor

John W. Rice

UNITED STATES PATENT OFFICE.

JOHN W. RICE, OF SPRINGFIELD, MASSACHUSETTS.

BRAKE FOR RAILROAD-CARS.

Specification of Letters Patent No. 21,086, dated August 3, 1858.

To all whom it may concern:

Be it known that I, JOHN W. RICE, of Springfield, in the county of Hampden, in the State of Massachusetts, have invented a new and useful Improvement in Railroad-Car Brakes; and I do hereby declare 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.

The nature of my invention consists in doing away with a multiplicity of levers, pulleys, ratchets, dogs, &c., that are usually used in applying a double-action brake from either end of the car to railroad cars, by means of my new arrangement of parts or new combination, which is the fulcrum pieces (X, X), and the connecting bar (N, N) and rods (S, R), playing through and against the double fulcrum lever (M), and the double fulcrum lever (M), and the chain (J) and pulley (F), showing the connection of the power between the leverage and the screw or revolving inclined plane (I), and the connecting rod, (K).

I give four views by the drawing, not with the intention to instruct how to make the trucks as that is generally a uniform matter, but to show my arrangement of parts and how the power is applied &c., to the brakes in so clear and distinct a manner that any ordinary mechanic skilled in the art could readily proceed and accomplish the work of applying my brake to railroad cars without any difficulty.

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

Figure 1, is the plan or top view, with the top of the car cut off, as shown by the crooked line in order to show the top view of one truck and the application of my invention. Fig. 2 is a side elevation showing the application of the brake and how the power is applied. Fig. 3 is an end view showing very plainly the screw or revolving inclined plane power and how applied. Fig. 4 is a sectional view showing very plainly the brakes, (L, L) and how all the power is applied to the brakes, &c.

All of the corresponding letters in the different views belong to the same thing, as, (A, A) &c., is the top or platform to the car; (B, B,) &c., is the standard between the platform and truck; (C, C,) the side pieces to the truck; (D, D,) the jaws; (E, E,) the standard to the pulley (F. F.); G, G,) the guides to the nuts (H, H,); (I, I,) the screw that plays in the nut (H); (J, J,) and K, the chain and rod that connects the levers (M, M,), and nuts (H, H,); (L, L) the brakes; (M, M,) the double fulcrum levers; (O, O,) the balance wheel to the brake rods; (P, P,) the brake rods; (Y, Y) the hangers to the brakes; (R, S.) the rods that play through and against the double fulcrum lever; (T, T,) end pieces to the truck; (U, U,) rocker beams to the truck; (V, V,) the brake beam; (W,) a spring to the brake beam; (X, X,) the fulcrum pieces to the brake rods, attached to the brake beams; (Y, Y) hangers to the brakes.

Having thus fully described the nature and the construction of my invention, I wish to be distinctly understood as I have had very extensive experience in brakes that I claim nothing in the idea of brake rods, levers, pulleys, &c., as they have all been used since railroading commenced; but it will readily be perceived that I have a new arrangement or combination of parts which is more simple in its construction and more effectual in its operation than anything that has yet been used.

What I claim as new and desire to secure by Letters Patent is—

1. The nut (H) and screw (I,) and its arrangement when used for braking railroad cars, substantially as described.

2. I claim my new combination, viz., the bar (N, N) extending from one brake to the other the double fulcrum lever (M) and the rods (S, R) playing through and against the double fulcrum lever (M,) and the arrangement of the chain (J) and pulley (F) when used in combination with each other; and operating substantially as described.

In testimony whereof I hereunto set my hand.

JOHN W. RICE.

Witnesses:

E. BEACH,

E. W. BOND.