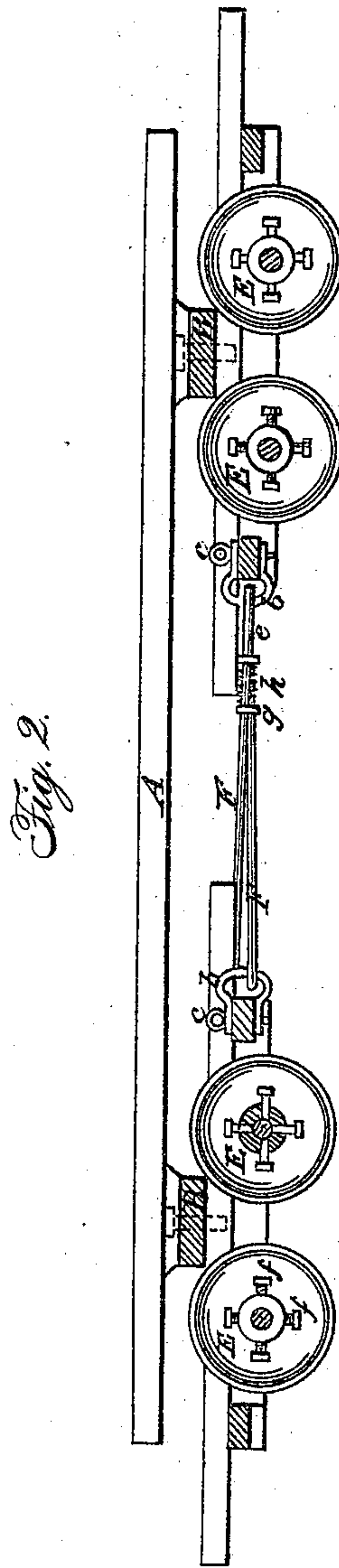
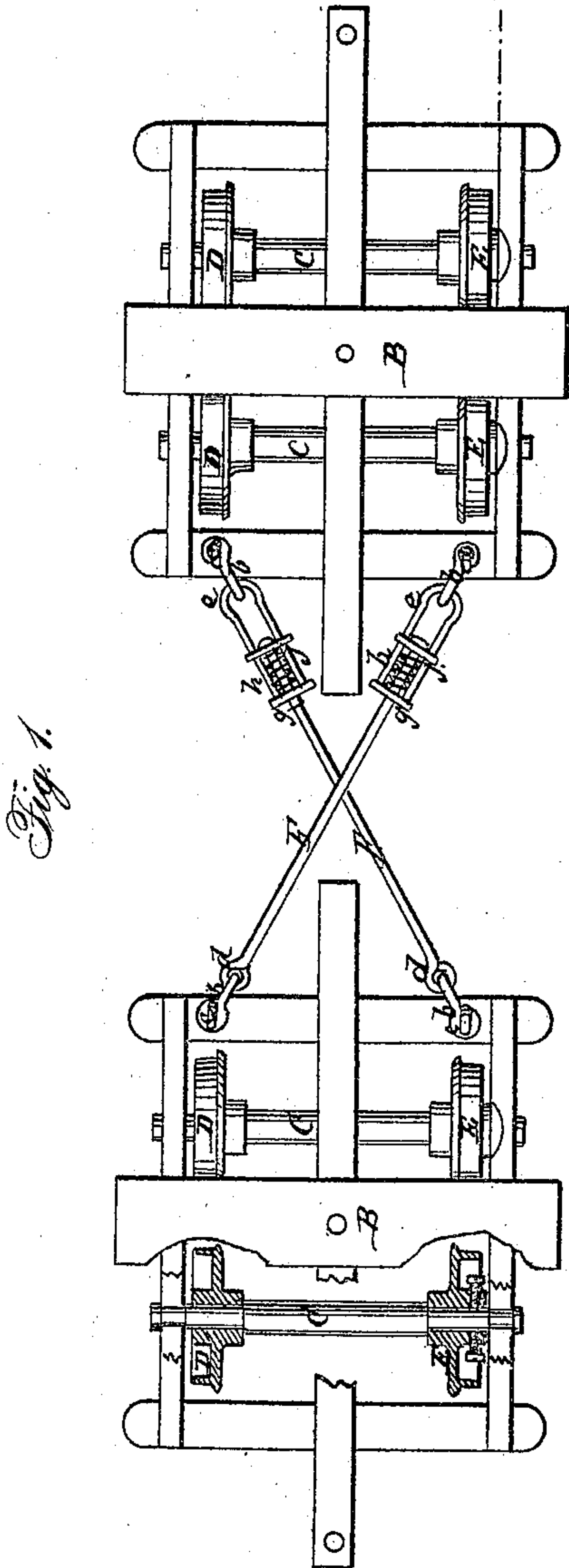


T. WILSON.
Car Truck.

No. 34,544

Patented Feb. 25, 1862.



Witnesses:

J. W. Coombs.
G. W. Reed.

Inventor:

Thomas Wilson.
per Munn & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

THOMAS WILSON, OF SILVER CREEK, ILLINOIS.

IMPROVEMENT IN RUNNING-GEAR FOR RAILROAD-CARS.

Specification forming part of Letters Patent No. 34,544, dated February 25, 1862.

To all whom it may concern:

Be it known that I, THOMAS WILSON, of Silver Creek, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in the Running-Gear of Railroad-Cars; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a plan of a pair of car-trucks showing my improvements. Fig. 2 is a longitudinal section of the same, taken at the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in the manner of connecting a set of car-trucks together in combination with the independent movement of the car-wheels, whereby the friction in turning curves or switches and the consequent wear and tear of the rails is greatly reduced and a gentle and easy motion given to the cars which neither alone will effect.

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

A represents the car-body, supported near each end upon the cross-beams B B, which are securely fastened on the side and center pieces of the truck-frames midway of their length. The car-body is connected in the center of the cross-beams B B by a king-bolt, (shown in dotted lines in Fig. 2,) so as to allow the trucks to have independent lateral movement.

C C are the axles of the trucks fitted at their ends in journal-boxes attached outside of the wheels to the under side of the side pieces of the truck-frame.

The truck-wheels on each of the axles are fitted so as to have movement independent of each other, one wheel D of each being rigidly secured to its respective axle and the other E fitted loosely on the opposite end of the axle, so as to revolve independent therewith.

In the outer hub of each of the loose wheels four holes *i i* are made at right angles to each other and have fitted in them set-screws *f f*. These holes are for the purpose of conveying oil to lubricate the axle or journal of the loose wheel, and are intended to be filled with some material, such as cotton or wool saturated with

oil. The holes being at right angles to each other, there must always be one in a proper position to be filled with oil when the car is stationary.

The trucks are connected together by diagonal rods F F, attached to the inner end beams of the truck-frames by half ring-bolts *b b*, and secured by pins *c c*, passing vertically through them and through the end beams. The diagonal rods F are connected to the half ring-bolts at one end by an eye *d* and at the opposite end by a stirrup-strap *e*. The end of the rods opposite of the eyes pass through the center of the flat end *g* of the stirrups and through a movable bar *j*, fitted to slide back and forth on the parallel sides of the stirrup, and has a nut on its outer end. A spiral spring surrounds each of the rods between the flat end of the stirrup and movable bar, and acts to keep the rods under constant tension. Both trucks are thus steadied, being kept in constant communication, and the movement of one is transferred to the other. Any number or any size or form of springs may be employed between the connections of the two trucks.

By connecting the trucks of railroad-cars together in the manner above described with the loose wheels, all jarring attendant upon entering switches or turning curves is avoided and the shaking motion of the car greatly reduced, besides requiring very much less power to round curves than when connected together in the ordinary way.

Having thus described my invention, I do not claim, broadly, connecting the trucks of railroad-cars together with diagonal rods, as I am aware that such has been done before; nor do I claim, broadly, the use of independent car-wheels; but

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

The employment of tension-springs between the trucks and their connecting-rods, in combination with independent wheels, substantially as and for the purpose herein shown and described.

THOMAS WILSON.

Witnesses:

JARED SHEETZ,

G. W. SICKAFOOSE.