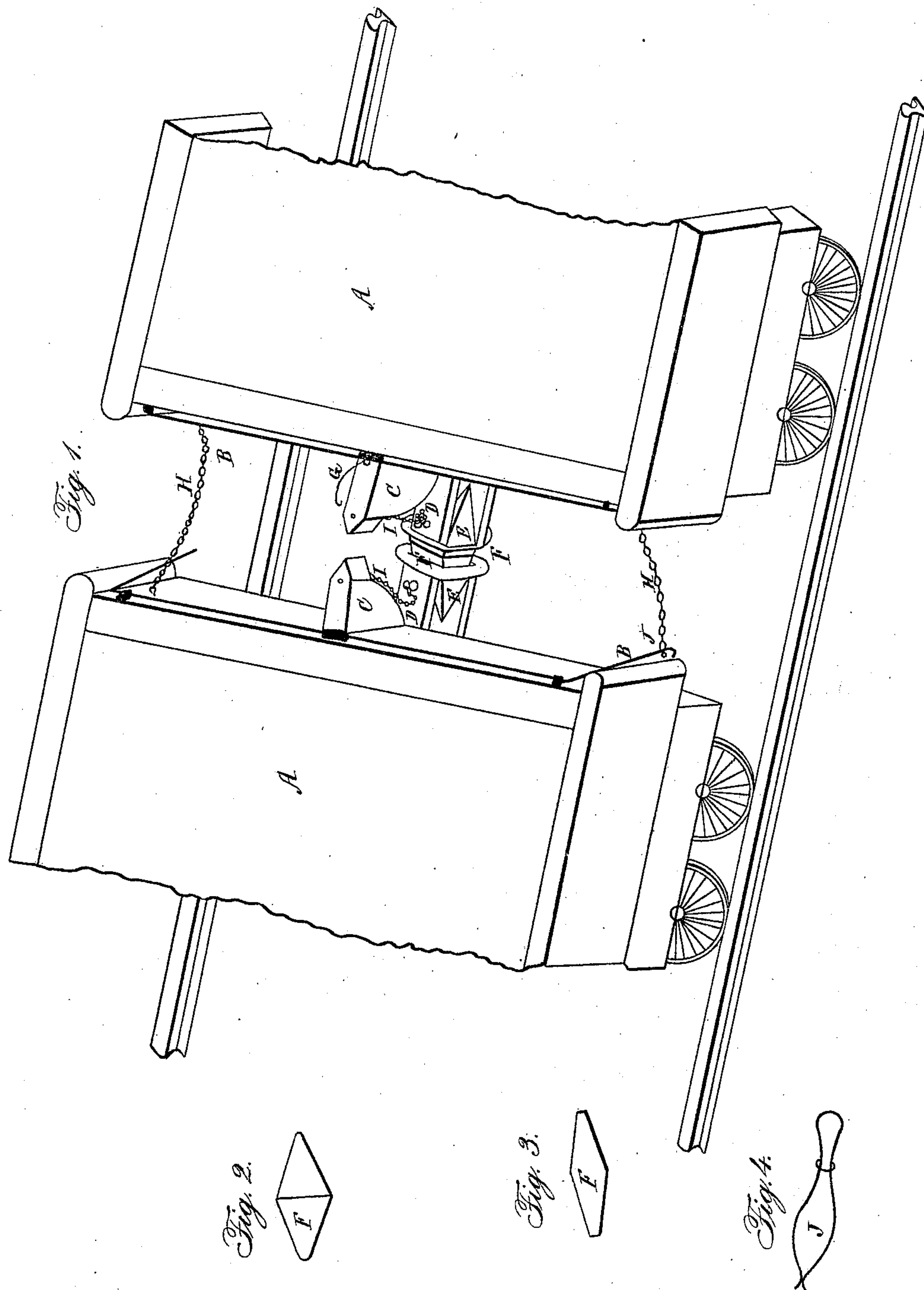


G. YATES.  
Car Coupling.

No. 24,422.

Patented June 14, 1859.



Witnesses:

Wm. Connet R.  
Charles Hitchum.

Inventor:

Gilbert Yates.

# UNITED STATES PATENT OFFICE.

GILBERT YATES, OF WEST DRESDEN, NEW YORK.

## CAR-COUPLING.

Specification of Letters Patent No. 24,422, dated June 14, 1859.

*To all whom it may concern:*

Be it known that I, GILBERT YATES, of West Dresden, in the county of Yates and State of New York, have invented an Improved Car-Coupling; and I do hereby declare that the following is a full and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, is a perspective view of the coupling attached to two transverse sections of cars. Fig. 2, is a bird's-eye view of the coupling link. Fig. 3, is a side view of the same link. Fig. 4, is a view of the spring clasp.

The letters of reference refer to the same parts in each figure.

A, and A, are the end sections of two railroad cars placed on rails to show the application of my invention.

B, and B, are rods of iron extending nearly across the ends of the cars with each end bent downward one end made plain or straight, the other being bent so as to form a hook to receive and hold the chain H. These rods are secured to the cars by supports that will allow the rods to turn while at the center of these rods and directly above the coupling pins are attached the parts C, and C, so that when the rod is actuated by hand or by the chains the parts C, will be turned upward.

C, and C, are of triangular shape, their upper portions being made pointed or wedge shaped to prevent their being broken by the cars being run too rapidly together, and they are also firmly attached to the rods B, and B, and are furthermore provided with circular grooves on their peripheries to prevent the chains I, and I, from getting off their faces when actuated, thereby causing the coupling pins to be raised in a perpendicular direction.

D, and D, are coupling pieces of the ordinary construction except the parts designated by E, and E, which should be made of the same shape as the ends of the link F.

F, is the coupling link, made in shape as represented in Figs. 2, and 3, with a bar

in the center to prevent the sides being straightened by pulling, the size of the links for common use being about fourteen inches long and four by six inches in the center. When thus constructed they need not be handled when coupling cars, since by means of their peculiar shape each link will when put into one coupling piece as far as it is intended to go, stand on a line with the other coupling piece and will readily enter it without assistance.

G, is a handle attached to the upper part of C, and is used to raise the coupling pin by the operator while standing on the platform.

H, and H, are chains of ordinary construction, one end of each being firmly attached to the cars, the other end terminating with a clasp as represented in Fig. 4. This clasp is put on the hook of one end of the parts B, and the length of the chain is made so that it will not pull upon the parts B, while the cars are running on the ordinary curves of the road, which however it will do when the cars are thrown from the track or out of their proper direction. In this case it will draw the downward ends of the parts B, outward and upward thereby drawing out the coupling pin and disconnecting the coupling pieces.

I, and I, are small chains attached to the coupling pins at one end, the other end is attached to the parts C, and C. The length of the chains must be such that when the parts C, and C, are turned upward they will draw the coupling pin so far upward that the coupling link will be released.

J, is a spring clasp made as represented by Fig. 4, and is of sufficient strength to hold onto the downward parts of the rods B, and B, with sufficient force to pull the coupling pin out and then when pulled with more force allow the clasp to let loose without breaking it.

To use my invention put the coupling link into one of the coupling pieces of one car, then take hold of the downward part of the rod B, and turn it upward, thereby raising the coupling pin up, then run the cars together and then let loose the rod and



the coupling pin will drop into its place and the cars will be coupled together.

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

5 The combination of the chains H, H, clasps J, J, with the bent and lifting rods B, B, grooved parts C, C, and chains I, I,

arranged in relation to each other substantially in the manner and for the purposes set forth.

GILBERT YATES.

Witnesses:

WM. COMSTUK,  
CHARLES KETCHUM.