

D. WARREN.
Car Coupling.

No. 24,420.

Patented June 14, 1859.

Fig. 1.

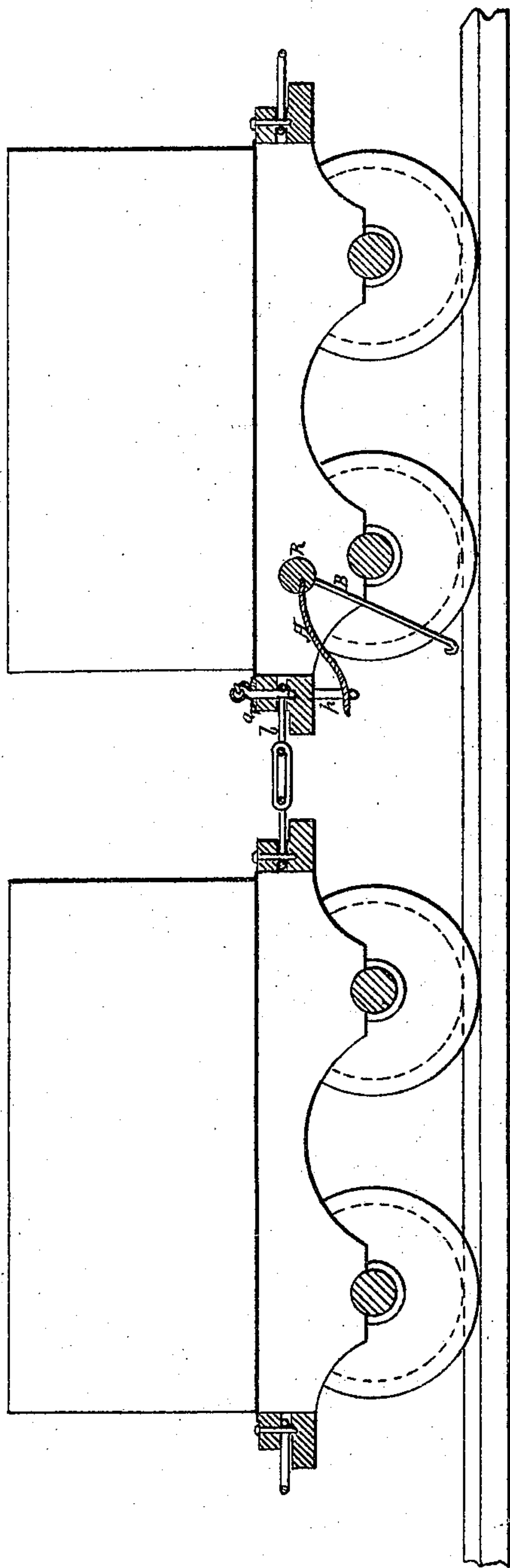


Fig. 3.

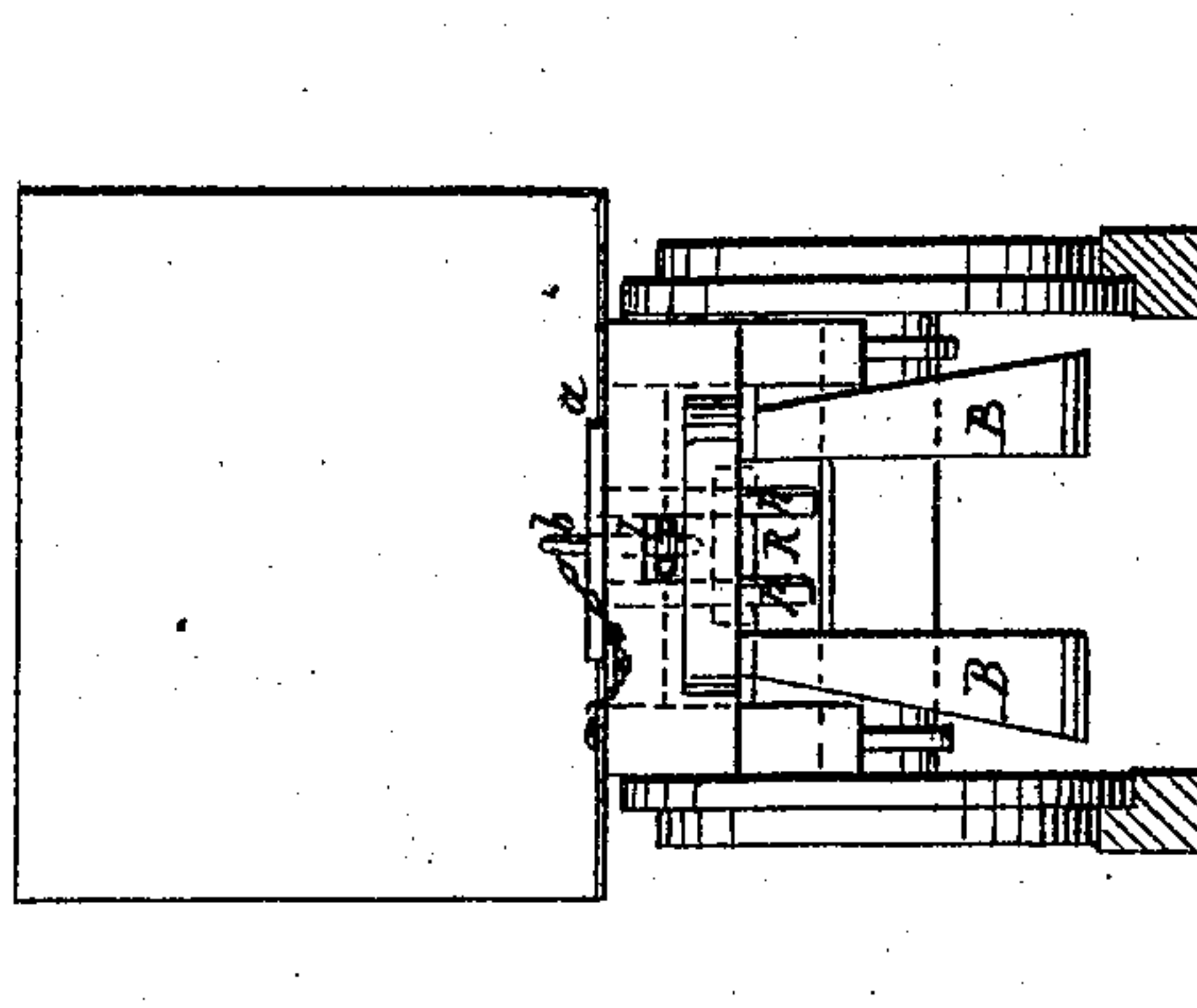
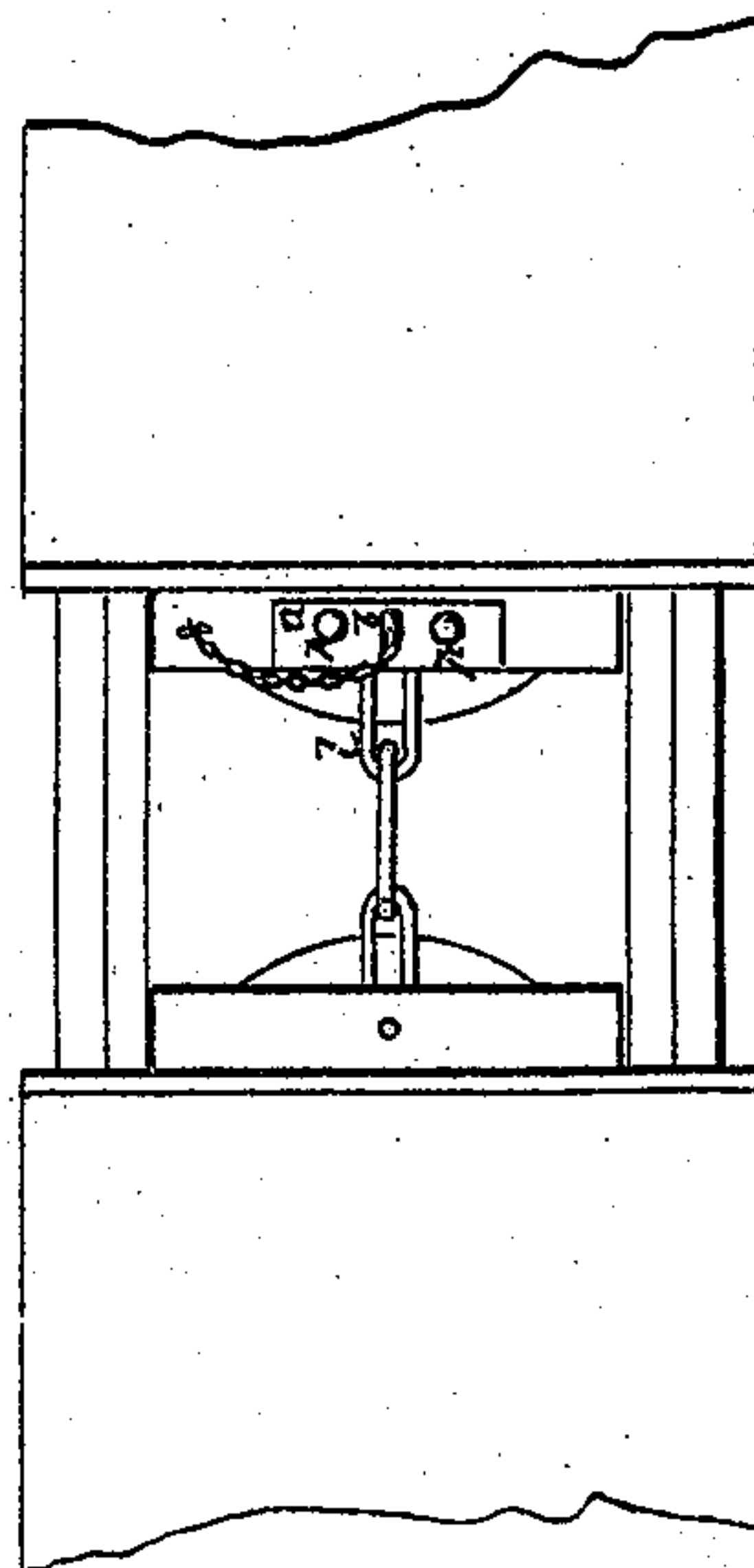


Fig. 2.



UNITED STATES PATENT OFFICE.

DAVID WARREN, OF GETTYSBURG, PENNSYLVANIA.

RAILROAD-CAR COUPLING.

Specification of Letters Patent No. 24,420, dated June 14, 1859.

To all whom it may concern:

Be it known that I, DAVID WARREN, of Gettysburg, in the county of Adams and State of Pennsylvania, have invented a new and useful Improvement in Self-Acting Railroad-Car Couplings; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, forming part of this specification, in which—

Figure 1 is a longitudinal, vertical section through the axis of coupling bolts, showing two cars connected by my coupling. Fig. 2 is a top view showing same. Fig. 3 is an end elevation of one car with my coupling.

Similar letters denote the same part.

The nature of my invention consists in the employment of a rock-shaft beneath one of the trucks, to which are attached depending arms, which by contact with the rails in event of the departure of the car from the same, will turn the shaft, and lift the other arm connected, as will be described, with the coupling bolt, so as to separate the cars.

In the drawing R is the rock shaft, from which run the guards B B (Figs. 1 and 3). A is an arm of this rock shaft on which rests the pins *p p* secured to the plate *a*; so that as this arm is turned upward the plate *a* will be lifted. The coupling bolt *b* rests on this plate *a*; consequently when plate *a* is raised, bolt *b* is lifted clear of link *l* and the cars are disconnected.

This apparatus is brought into use when by the running of the car from the track, guard B strikes the ground on rail. Arm A is then thrown upward, and link *l* disengaged from bolt *b* as above set forth.

It will be understood that the plate *a* is adjustable, and may be removed and its position changed in a moment of time. When the cars are moving in one direction the plate is placed on the rear platform of each car—the front platform being provided simply with the ordinary pin and not with a plate. When the direction of the cars is changed, a corresponding change is made in the plate *a*, unless the cars are turned around. One plate is provided for each car and this plate as above stated must always be on the rear platform when the cars are in motion. With this arrangement if any intermediate car of a train runs off of the track it disconnects immediately from those cars which are behind but is held securely by those which are before, so that it cannot fall or roll over a bank or precipice.

I am aware that there have been modes used for disconnecting the cars when they run off of the track, hence I do not wish to lay a claim broadly to all of the parts herein used.

I claim—

The arrangement of the adjustable plate *a*, as constructed, with the pin *b*, arm A, rock shaft R, and guards B, when the same are operated and used substantially in the manner and for the purpose herein set forth.

In testimony whereof, I have hereunto signed my name before two subscribing witnesses.

DAVID WARREN.

Witnesses:

GEO. PATTEN,
JOHN S. HOLLINGSHEAD.