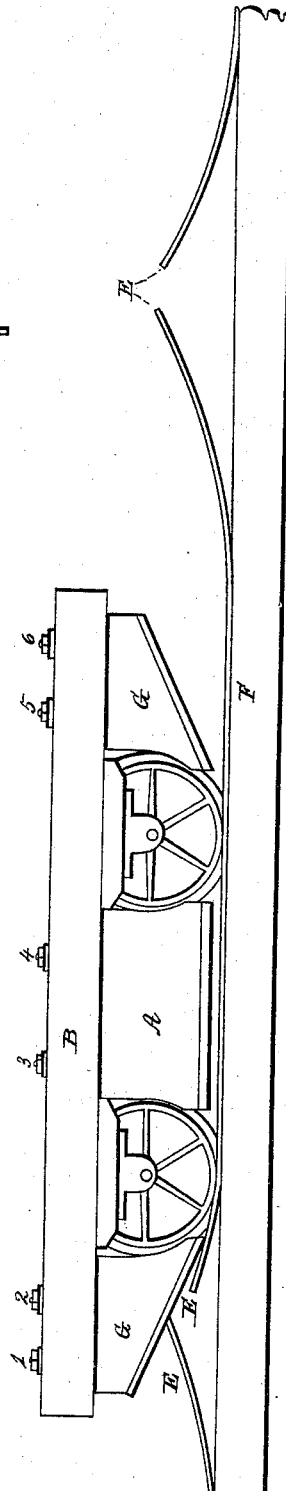
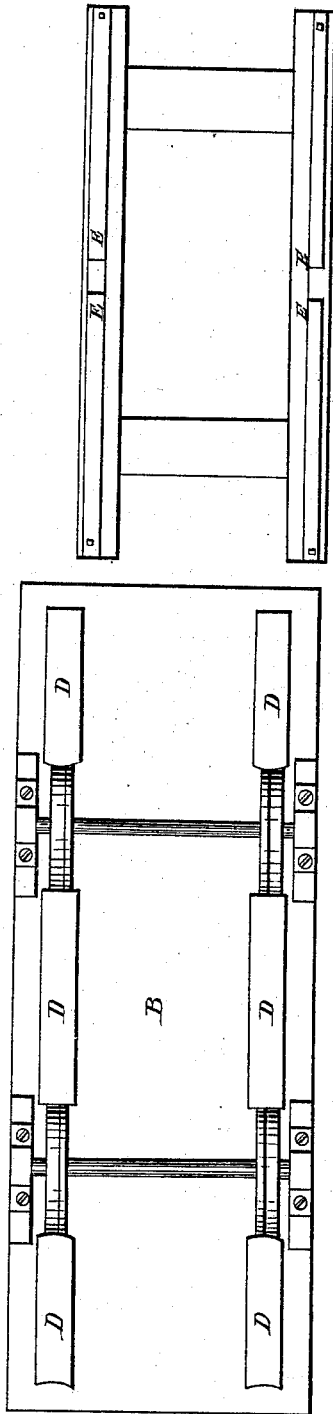


E. TOLLES.
Car-Track Clearer.

No. 3,450.

Patented Feb. 20, 1844.



UNITED STATES PATENT OFFICE.

ELISHA TOLLES, OF NEW YORK, N. Y.

RAILROAD-CAR TO PREVENT ACCIDENTS FROM WHAT ARE CALLED "SNAKE-HEADS."

Specification of Letters Patent No. 3,450, dated February 20, 1844.

To all whom it may concern:

Be it known that I, ELISHA TOLLES, of the city and State of New York, have invented a new mode of constructing Railroad-Cars to Prevent Accidents from What are Termed "Snake-Heads" and for other Purposes, on Railroads; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists of the following described apparatus which I term concave safety fenders. Between the wheels of the car and directly over each track and in a line with the same I place bars of wrought or cast iron or any suitable material of proper width and thickness, say three eighths of an inch more or less, and of a width greater than the thickness of the wheels by say two inches more or less, as shown at A, in the accompanying drawing. Said bars I attach firmly to the bottom of the car B. After making them concave on the under surface as seen at D, for the purpose of keeping the "snake head" E, in its proper place, viz., in a line with the track F, while being forced down by the bar

to its place on the track of the road. The bars I make fast to the bottom of the cars by bolts, marked from 1 to 6 on each side, or by any method that may be preferred. The space between the ends of the car and the wheels is furnished in the same manner with this exception that the bars are placed in an angle G, governed by the distance from a point near the periphery of the wheel and within the distance from the rail to the bottom of the end of the car. The space between the central bars and the bottom of the cars I fill with wood or cast iron open work of strength sufficient to sustain the cars.

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

The application to rail road cars, of concave bars attached to the bottoms of each car for the purpose of preventing accidents from "snake heads" and broken wheels, and so forth.

ELISHA TOLLES.

Witnesses:

WM. H. JENNISON,
HARRY HUNT.