8273X

The specification to this patent is not in print.

E. L. Miller.

Car Propeller.

No. [illegible] Patented Jun. 19, 1854.

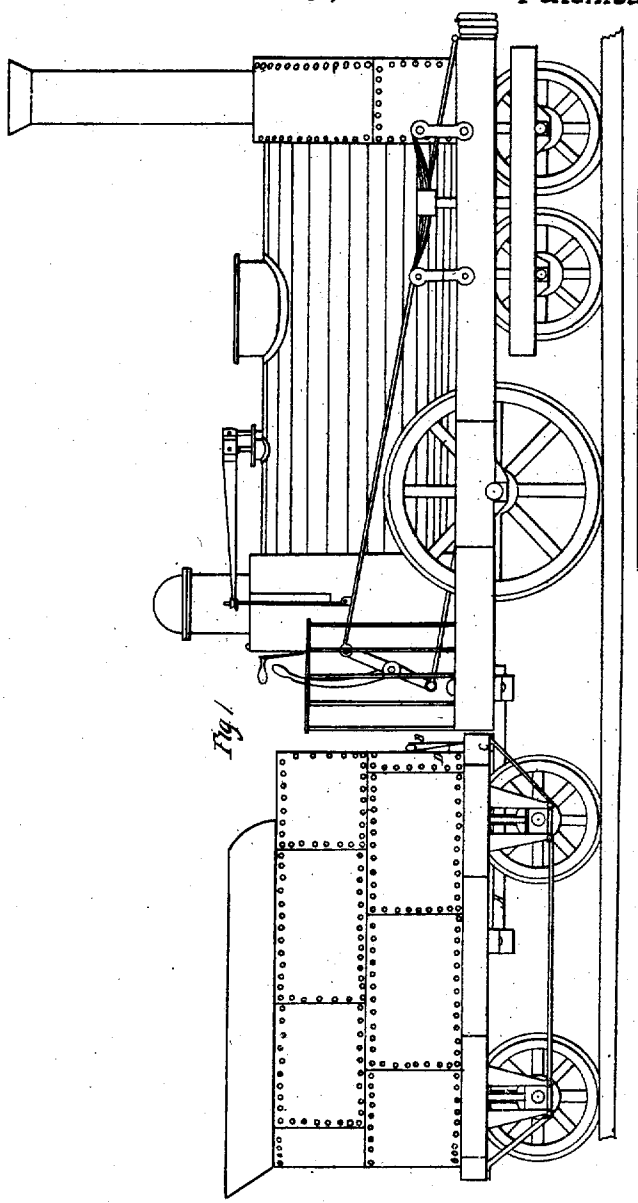


Fig. 1.

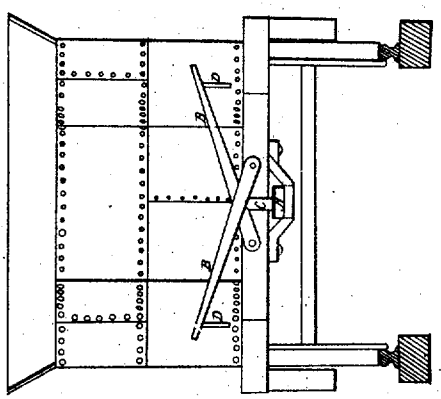


Fig. 2.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

June 19. 1834 8273X 449.

Ezra L. Millw of Charleston South Carolina

Letters Patent

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Ezra L Millw himself of his improvement in the mode of increasing the adhesion of the driving wheels of the Locomotive Steam Engine.

To all to whom these presents shall come.

Be it known that I Ezra L Millw of the City and District of Charleston State of South Carolina have invented a new and useful mode of increasing the adhesion of the driving wheels of the Locomotive Steam Engine on Rail Roads by using the tender car next the Engine for the purpose of adding weight to the driving Wheels of the Engine at such times only as a greater adhesion is required than the weight would give which it would be practicable to carry as a fixed weight on those wheels without injury to the road. At the points of starting and on the ascents where increased adhesion is required. I attach part of the weight of the Car or tender which is next the engine to the end of the frame of the Engine next the driving wheels which may be done by means of a lever. screw. wedge or pulley. and detach it again when the increased adhesion is no longer necessary. The mode which I have used and found to answer perfectly in practice is simply to connect the car or tender next the Engine to the Engine by a strong iron bar. or lever one end of which is bolted to the under side of a cross timber in the frame of the Car or tender. a little back of the centre and which lever extends under the frame of the tender to the end of the frame of the Engine and into the iron which together with the draw bar secures it to the Engine. Transversely to this lever. I attach to the end of the tender next the Engine two levers. so that their fulcrums shall be six or eight inches on each side of the main lever. or draw bar. These levers have a jaw or pivot five or six inches in length directly over the main lever and should be about 4 1/2 feet in length. When the increased adhesion is wanted. the Engineer has only to place his foot upon the ends of those levers and press them in to a hook or groove for that purpose on the corner post of the tender and a portion of the weight of the Car or tender next the Engine is thus thrown upon the driving wheels of the Engine. and when the increased adhesion

is no longer wanted. The weight is detached by simply loosing the ends of the levers. What I claim as my invention is the making use of the tender next the Engine for the purpose of increasing the adhesion of the driving wheels of the Locomotive Steam Engine at those points where more adhesion is required than the weight would give which it is eligible to carry as a fixed weight on those wheels whether the same be effected in the mode above described or any other which attains the same end.

Witnesses
Walter Clarke
Wm Bayliss

Ezra L. Miller

Drawing

(585 words)