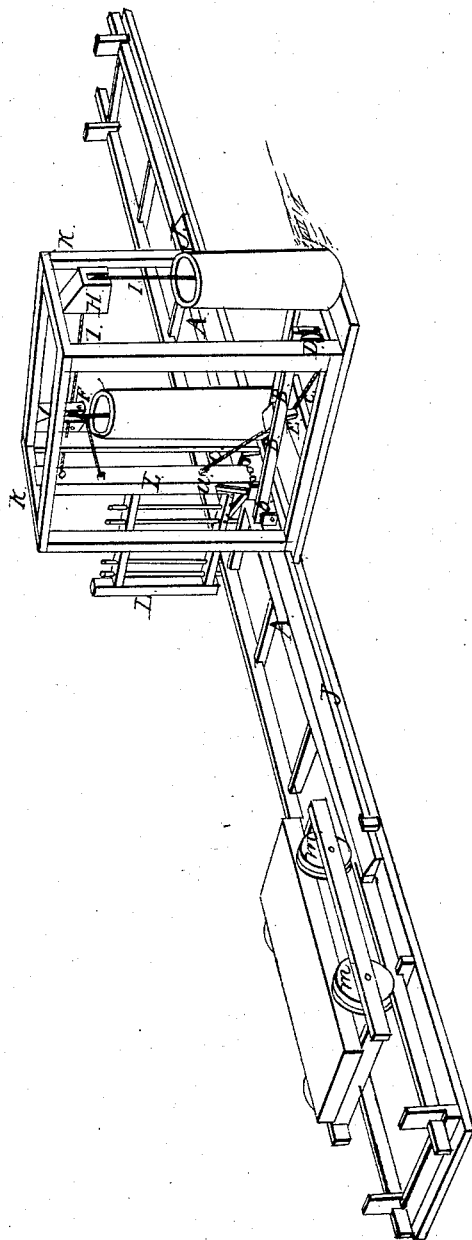


D. Green.

Railroad Gate.

N^o 895.

Patented Aug. 25, 1838.



UNITED STATES PATENT OFFICE.

DAVID GREEN, OF GREENFIELD, NEW YORK.

APPARATUS FOR PREVENTING CATTLE FROM GETTING ONTO RAILROADS.

Specification of Letters Patent No. 895, dated August 25, 1838.

To all whom it may concern:

Be it known that I, DAVID GREEN, of Greenfield, in the county of Saratoga and State of New York, have invented a new and useful mode of preventing cattle and other animals from getting onto railroads and also to prevent them from getting into other roads or inclosures; and I do hereby declare that the following is an exact description.

The nature of my invention consists in attaching to a railroad the lever A A, (see drawing) parallel to railroad and at right angles to lever B B, to which it is firmly attached at point (C) a gate L L, which is opened by car wheels M M, bearing on A A, which moves down and raises the long part of B B, hung at point (b) which draws on cord C C C, passing under pulleys D and E attached to gate at point (a) and draws gate back near pulley (E). Pulley F takes effect by cord G G, a short distance before gate arrives at or near pulley E, pulley H, by cord I I, at a less distance and prevents a part of its concussion and assists gate to return to its position on railroad. Protection J J, protects lever A A, and supports railroad. Safety frame K K, should protect most of machinery.

Length of A A, and also when A A, be elevated should be sloped from top rail at each end toward center in proportion to greatest velocity run on railroad where it may be applied. A A, should be elevated toward center when gate be shut in proportion to length of lever B B. It should be beveled from top of protection and rail to its top (when gate be shut) to prevent friction when moving down and to insure its returning to its former position, when it is down it bears on ties of road or pieces attached for that purpose. Its ends are prevented from rising above railroad by protection. A A, may be made of iron or wood. When made of iron it may be composed of pieces connected with screws or bolts or by any other means by which it may be most firmly attached or made of one piece. When constructed of wood there may be plates of iron attached to top, sides and bottom or only on top side or bottom as the case may require making it sufficiently strong and preventing its springing in a horizontal or vertical direction.

Lever B B, is permanently attached to A A, at point (C) at right angles and has

a fulcrum or bolt through it and is hung in an iron or timber post fastened to ties of board or timber placed for that purpose at a sufficient distance from connection to raise the longer part of B B. When car passes on to A A, a rope or chain is attached at or near the end of the longer part of B B, which passes under pulleys D and E, thence to point (a) in back part of gate and draws gate open when car bears on A A. B B may be made of wood or iron.

Protection J J should be the largest at ends by taking out a piece from side nearest road and near ends to center, or attaching pieces to the above named side at ends leaving space in width between protection and rail sufficient for A A, to move in and of less length than lever A A, to receive the ends of A A, sufficient to prevent the lower part of A A from rising above railroad. The parts of protection that receive the ends of A A, should be sloped from top to bottom toward ends, and A A, should be similarly sloped from points on top where protection projects to ends, so as to admit of A A being sufficiently elevated, or lever A A may have at the above named points near the ends pieces taken out to the ends and near its bottom and also protection should have similar pieces taken out from bottom near the top to admit of the afore named points rising to surface of roads. When A A, be elevated, protection should be firmly attached at ends to sill of rail road and also to ties of road by gains being cut or bolts or iron knees bolted on to ties to secure protection from springing laterally. Protection may touch outside of A A, when A A be elevated and lie level with rail road. It may be made of wood and have wear irons attached to inside to prevent friction when A A moves down and serve to direct A A in its movement.

Gate may be made and braced in any of the approved modes of making and bracing gates except its back must be higher and wider than fore part, to admit of fore part passing through its place. It must be hung on a fulcrum or bolt near the bottom of gate of sufficient length to admit of bracing gate from toward each end of bolt. It should be hung a sufficient distance from rail road in safety frame and made long enough to leave space for car to pass through when gate be open.

Two gates may be applied to rail road in-

stead of one and hung as the above mentioned gate a sufficient distance from road at each side of road and but half as long as the above named gate and meet in center of road when shut with the aforementioned machinery attached to each side of road to effect their opening and shutting.

Cords over pulleys F and H, by the effect of their weights lessen the concussion when gate goes back insures its shutting and prevents a part of its concussion in shutting and assists in giving first impulse to open when shut. Pulleys may be made of iron or wood and move in blocks to keep cords in their proper places.

The above mentioned gate or gates may be applied to other and common roads with the aforementioned machinery by placing

lever A A, in a groove or by having A A, made larger than said groove, and when elevated touch under side of said groove or timbers that said groove is constructed with, which common carriage wheels may be conducted in. Safety frame K K, should be inclosed leaving space for gate and lever G G, to move in.

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

The application of the afore mentioned gate or gates and machinery to railroads other roads and places where they may be used.

DAVID GREEN.

Witnesses:

AARON ANTHONY,
WM. ANTHONY.