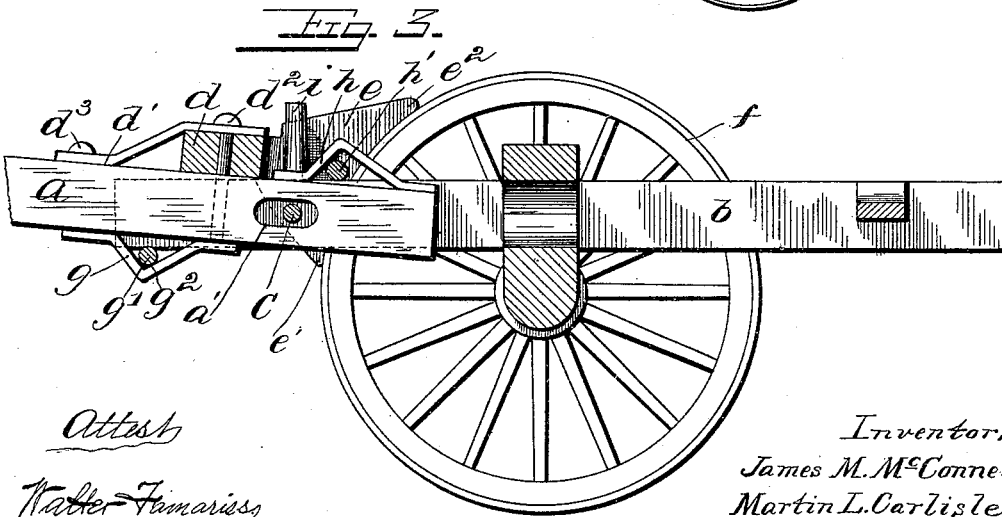
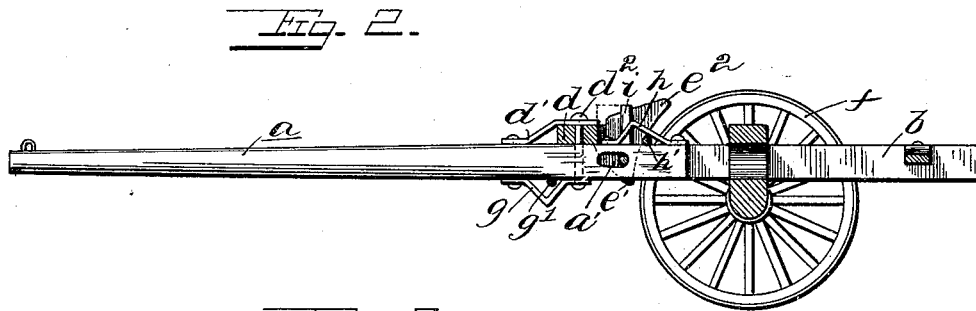
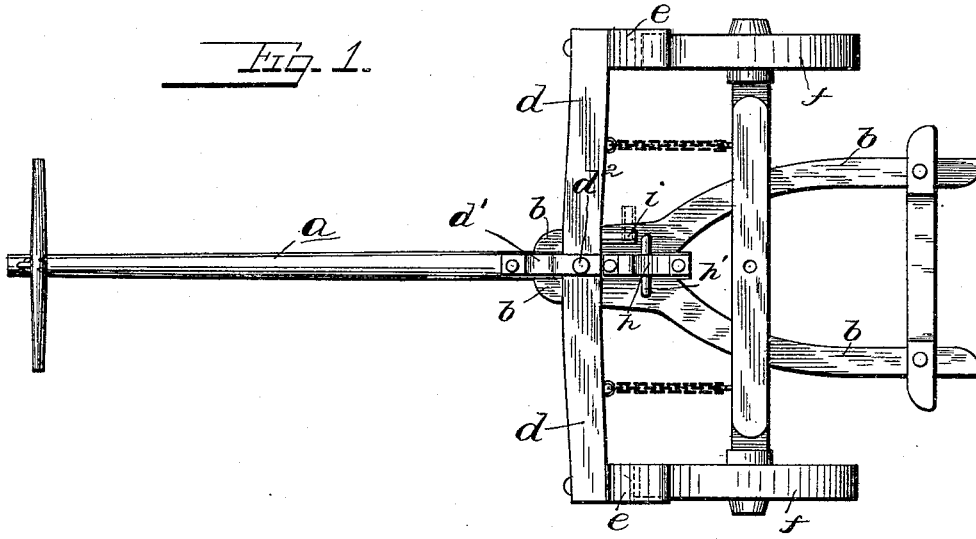


(No Model.)

J. M. McCONNELL & M. L. CARLISLE.
AUTOMATIC WAGON BRAKE.

No. 495,993.

Patented Apr. 25, 1893.



Attest
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UNITED STATES PATENT OFFICE.

JAMES MILTON McCONNELL AND MARTIN LUTHER CARLISLE, OF ANDERSON, SOUTH CAROLINA.

AUTOMATIC WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 495,993, dated April 25, 1893.

Application filed January 25, 1893. Serial No. 459,757. (No model.)

To all whom it may concern:

Be it known that we, JAMES MILTON McCONNELL and MARTIN LUTHER CARLISLE, citizens of the United States, residing at Anderson, in the county of Anderson and State of South Carolina, have invented certain new and useful Improvements in Wagon-Brakes; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Our invention has relation to "wagon-brakes;" and consists in the novel construction and arrangement of its parts, hereinafter set out in this specification and the claims thereto annexed.

The object of our invention is to furnish a wagon-brake which is automatic, simple, easily applied and compact without the inconvenience of much machinery.

In the accompanying drawings: Figure 1, is a top plan view of our invention. Fig. 2, is a longitudinal, sectional view of Fig. 1, showing the position of the tongue and various parts of the brake mechanism when the wagon is being drawn forward. Fig. 3, is a longitudinal sectional view of Fig. 1, enlarged, showing position of the tongue and the various parts of the brake mechanism when the wagon is being braked.

Our invention is described as follows: The tongue *a*, is provided with a longitudinal slot *a'*, so that it may move a distance of two or three inches back and forth between the front ends of the hounds *b*. Passing horizontally through the front ends of said hounds and the slot in said tongue is a rod *c*, secured in place at both of its outer ends. A double-tree *d*, is rigidly secured to the upper face of said tongue near its rear end and just in front of the slot *a'*, by a brace bar *d'*, and bolts *d''*, *d'''*. On each end of said double-tree is rigidly secured a brake shoe *e*, adapted to come in contact with the periphery of the wheels *f*, and brake them. Said brake-shoes are so secured to said double-tree that their lower ends *e'*, are much nearer the periphery of the

wheels than their upper ends *e''*, when said brake-shoes are standing in their normal position. To the under face of the tongue and just in front of the double tree is longitudinally secured a fulcrum, curved or V-shaped strap *g*, and to the lower face and front ends of the hounds is secured a cross rod *g'*, which passes through the opening left between the lower face of said tongue and said strap. To the upper face of the tongue and just in rear of the double-tree is longitudinally secured a curved or V-shaped strap *h*; to the upper face of said hounds and in rear of the double-tree is secured a rod *h'*, which passes through the opening left between the upper face of said tongue and said curved or V-shaped strap *h*. On the upper face of the hounds and some little distance in rear of the double-tree is pivoted a stop *i*. When the wagon is being drawn forward the draft is against the rear wall of the slot *a'*, in the tongue *a*, and on the cross-rod *c*, which work through said slot, and thus there is ordinarily no pressure on the lower V-shaped strap *g*, or cross-rod *g'*, nor upon the upper V-shaped strap *h*, nor the cross-rod *h'*. When the wagon is braked by the pressure being applied, either by the wagon going forward against the team, as down hill, or by the team pressing back, the front end of the tongue is thrown up by means of the breast straps, and immediately the draft against the rod *c*, ceases, and the pressure is immediately thrown on the cross-rod *g'*, and the under V-shaped strap *g*, at the fulcrum point *g''*; and as the tongue is slipped back a little by means of the pull on said breast-straps, the lower part *e'*, of the brake-shoes *e*, immediately comes in contact with the periphery of the wheels *f*, and then the whole shoe immediately sets down against the periphery of said wheel. This operation is performed by a very slight pressure or pull upward on the point of the tongue. As the tongue is quite long from the fulcrum point to its front end, the distance is quite short from said fulcrum point to the point that comes in contact with the periphery of the wheels, and thus the leverage power is very great.

The purpose of the pivoted stop *i*, is to brace the double-tree forward when desired,

as for instance, we desire to back the team on level ground or to prevent the brake-shoes from idling back against the wheels when the wagon is being drawn over slightly undulating ground.

Having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In combination with front running gear of a wagon the hounds *b*; the tongue *a*, having the slot *a'*, and adapted to move back and forth between the front ends of said hounds; rod *c*, passing horizontally through the front ends of said hounds and through the slot *a'*; fulcrum, V-shaped strap *g*, secured to the lower face of said tongue just in front of the double-tree *d*; rod *g²*, secured to the lower face of said hounds and passing through the space left between said lower face and said strap; double-tree *d*, rigidly secured to the upper face of said tongue just in rear of the fulcrum point of said strap *g*, and brake-shoes *e*, rigidly secured to each end of said double-tree, substantially as shown and described and for the purposes set forth.

2. In combination with the front running gear of a wagon the hounds *b*; the tongue *a*, having the slot *a'*, and adapted to work back and forth between the front ends of said hounds; rod *c*, passing horizontally through the front ends of said hounds and through the slot *a'*; fulcrum, V-shaped strap *g*, secured to the lower face of said tongue just in front of the double-tree *d*; rod *g²*, secured to the lower face of said hounds and passing through the space left between said lower face and said strap; double-tree *d*, rigidly secured to the

upper face of said tongue just in rear of the fulcrum point of said strap *g*; brake-shoes *e*, rigidly secured to each end of said double-tree; V-shaped strap *h*, secured to the upper face of said tongue just in rear of the slot *c*; and cross-rod *h'*, secured to the upper face of said hounds and passing through the space between the upper face of said tongue and lower face of said strap, all substantially as shown and described and for the purposes set forth.

3. In combination with the front running gear of a wagon the hounds *b*; the tongue *a*, having the slot *a'*, and adapted to work back and forth between the front ends of said hounds; rod *c*, passing horizontally through the front ends of said hounds and through the slot *a'*; fulcrum, V-shaped strap *g*, secured to the lower face of said tongue just in front of the double-tree *d*; rod *g²*, secured to the lower face of said hounds and passing through the space left between said lower face and said strap; double-tree *d*, rigidly secured to the upper face of said tongue just in rear of the fulcrum point of said strap *g*; brake-shoes *e*, rigidly secured to each end of said double-tree; and stop *i*, pivoted on the upper face of said hounds and adapted to brace said double-tree forward, substantially as shown and described and for the purposes set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

JAMES MILTON McCONNELL.
MARTIN LUTHER CARLISLE.

Witnesses:
W. H. FRIERSON,
J. BOYCE BURRIS.