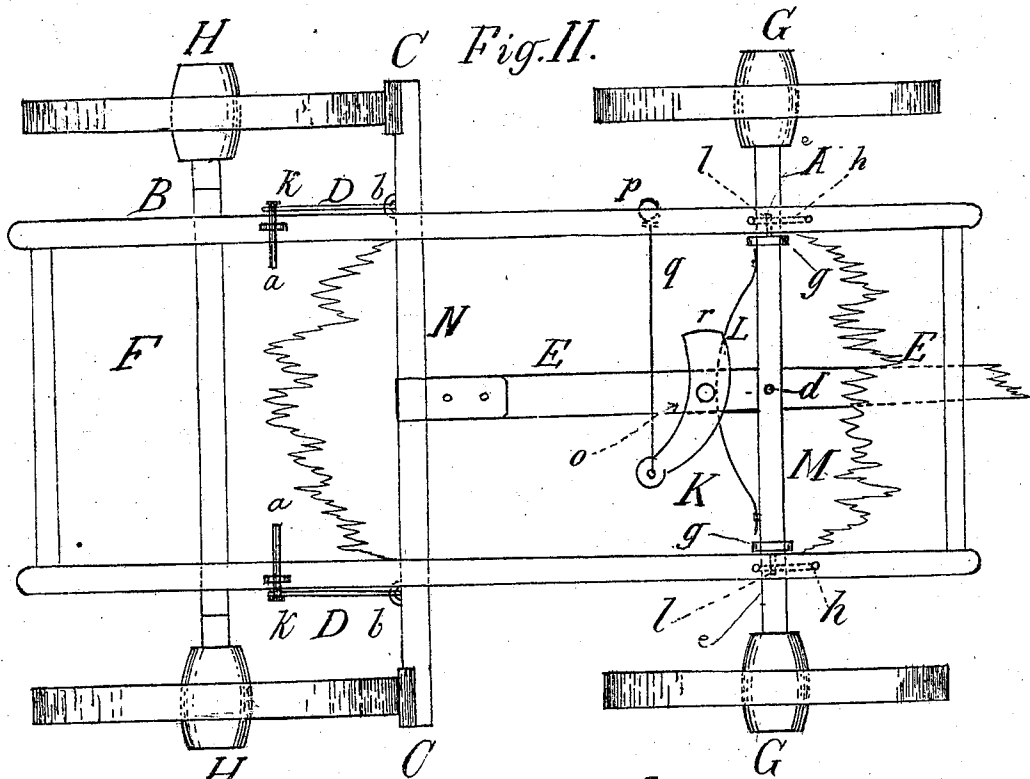
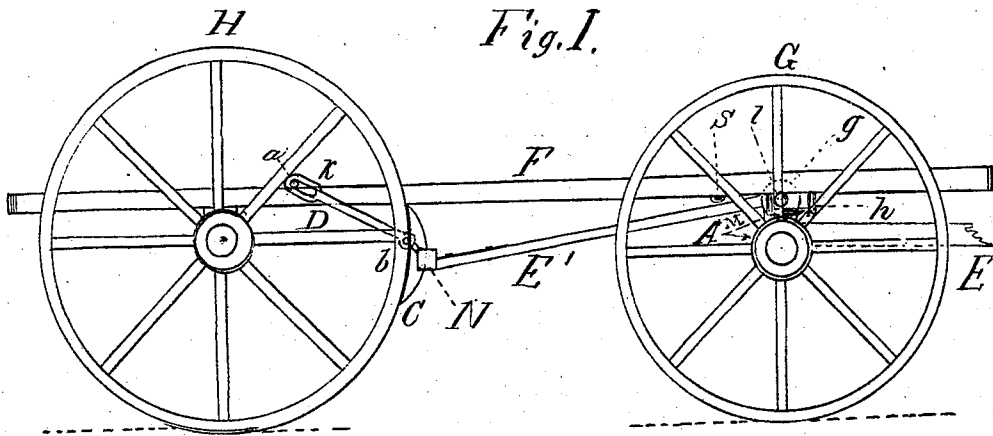


No. 119,524.

Patented Oct. 3, 1871.

Chas. M. Lufkin's Improved Wagon Brake.

Witnesses:

Matthie C. Lufkin
Eva. M. Briggs

Inventor,

Chas. M. Lufkin.

UNITED STATES PATENT OFFICE.

CHARLES M. LUFKIN, OF UNITY, NEW HAMPSHIRE.

IMPROVEMENT IN WAGON-BRAKES.

Specification forming part of Letters Patent No. 119,524, dated October 3, 1871; antedated September 25, 1871.

To all whom it may concern:

Be it known that I, CHARLES M. LUFKIN, of Unity, in the county of Sullivan and State of New Hampshire, have invented a new and useful Improvement in Wagon-Brakes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing making a part of this specification, in which—

Figure 1 is a side sectional view of my invention. Fig. 2 is a plan or top view of the same with a section of the body detached.

Similar letters of reference indicate corresponding parts in both figures.

This invention consists in attaching a brake to a wagon in such a manner that the brake is forcibly applied to the wheels by means of the momentum of the wagon when the team holds back in descending a grade, and when it draws the brake is removed from the wheel, as herein fully shown and described. The object of this invention is to obtain a self-acting wheel-power brake to assist the team when descending a hill.

To enable those skilled in the art to fully understand my invention, I will proceed to describe it.

E represents the pole to which the team is attached. A the forward axle; G G, the forward wheels, the axle A being connected with the body F by means of a pivot-bolt, *d*, rocker M, gudgeons *e e*, friction-rollers *g g*, and guide-staples *h h*; and the body F is connected with the axle B to which the wheels H H are attached. The rub-blocks C C are firmly attached to the cross-bar N, which is suspended from the pivots *a a* on the body F by the suspension-rods D D, which are slotted at the upper end *k* and jointed at the lower end *b* to the cross-bar N, so as to admit of the adjustment of C C to the wheels H H. The cross-bar N is jointed to the reach E' in such a manner as to admit of the adjustment of the rub-blocks C C to the wheels H H when operating, and when drawn off to assume a proper position relative to that of the wheels H H. The reach E' is firmly attached to the rocker M, so as to retain it in its proper position. At the ends of the rocker M are placed gudgeons *l l*, upon which the friction-rollers *g g* are placed, and on which the body F freely moves backward and forward, the guide-staples *p p* being sufficiently wide to admit of the proper movement of the gudgeons *l l*, which pass loosely

through them. The button K is attached to body F by means of a bolt or standard, *o*, upon which it freely moves, and when turned across the body at right angles it allows the rocker M to slide back, so as to apply rub-blocks C C to the wheels, as herein fully described; but when it is desired to prevent the brake from operating the rod *q* should be drawn in end through the loop *s* by means of the ring *p*, which turns the button K around, so that the end *r* will rest against the rocker M, holding it in drawing position. The spring L is attached at its ends to the rocker M, and in the middle it rests against the standard *o*, thereby keeping the rocker M forward in the guide-staples *h h*, so as to prevent the rub-blocks C C from dropping upon the wheels H H in passing over rough surfaces. This arrangement is such that when the team draws the rocker M is drawn forward to the front side of the guide-staples *h h*, and the rub-blocks C C are drawn forward so as to clear the wheels H H; but when the wagon is descending a grade, and the team is holding back, the rocker is moved back so as to apply the rub-block C C to the wheels H H, and the motion of the wheels carries them downward; and being hung within the periphery of the wheels the pressure of the rub-blocks is increased by their own motion. When the wagon is standing still and the team is backed up the rub-blocks C C are applied to the wheels, and by them in their backward motion carried up against the body, and the suspension-rods D D, being slotted at their upper ends *k k*, slide backward on the pivots *a a*, thereby relieving the wheels of the pressure of the brake to such an extent that the wagon is easily backed when unladen without turning the button K.

I do not claim attaching a brake to a wagon, for that is an old and well-known device; but

I do claim as new, and desire to secure by Letters Patent—

The combination of a movable rocker, M, gudgeons *e e*, rollers *g g*, guide-staples *h h*, reach E', cross-bar N, rub-blocks C C, suspension-rods D D, pivots *a a*, spring L, loop *s*, rod *q*, bolt *o*, and button K, the whole constructed and arranged substantially as and for the purpose set forth.

CHAS. M. LUFKIN.

Witnesses:

MATTIE E. LUFKIN,
EVA M. BURGE.