(No Model.)

S. H. ANDERSON.

SLED BRAKE.

No. 343,356. Patented June 8, 1886.

Fig: 1.

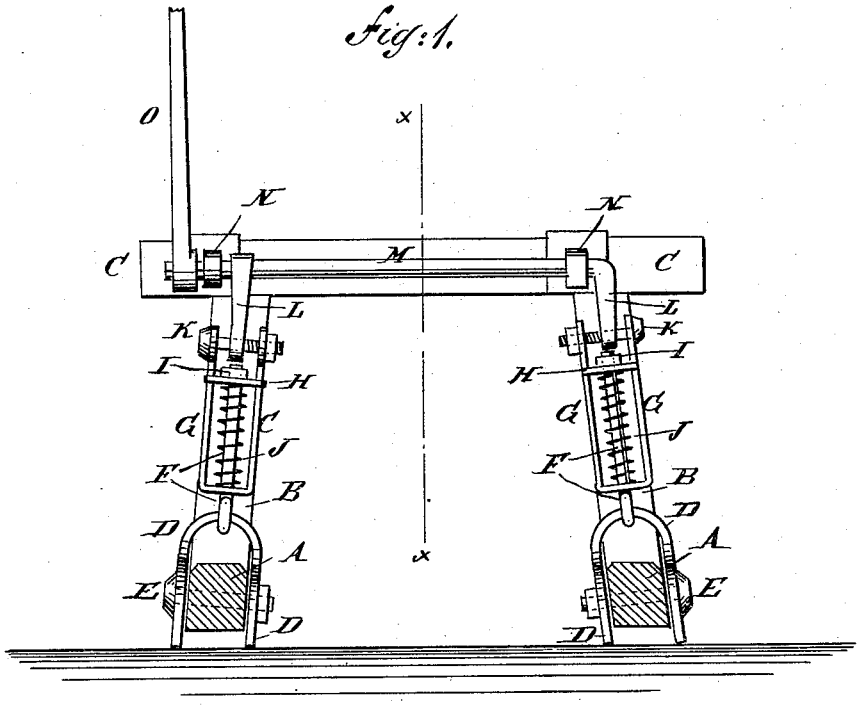
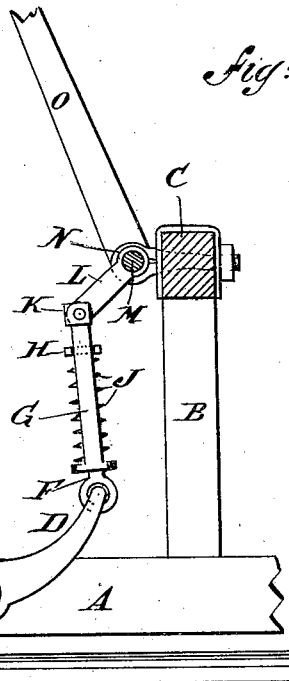


Fig: 2.



WITNESSES:

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SLED-BRAKE.

SPECIFICATION forming part of Letters Patent No. 343,356, dated June 8, 1886.

Application filed April 15, 1886. Serial No. 198,964. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL H. ANDERSON, of Maddensville, in the county of Huntingdon and State of Pennsylvania, have invented certain new and useful Improvements in Sled-Brakes, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a sectional rear elevation of a sled to which my improved brake has been applied. Fig. 2 is a sectional side elevation of a part of the same, taken through the line *x x*, Fig. 1.

The object of this invention is to provide sled-brakes constructed in such a manner that they can be readily used for checking the advance of sleds, and also to hold the sleds from running back when the team is stopped upon an upgrade, and which shall be simple in construction and readily operated, and will pass an obstruction without breaking the brake mechanism.

The invention consists in the construction and combination of the various parts of the sled-brake, as will be hereinafter fully described.

A represents the runners, B the knees, and C a beam, of a sled.

D are the brake-dogs, which are made U-shaped and of such a width as to receive the runners A between their arms. The brake-dogs D are made of such a length that when hinged to the runners A by bolts E, passing through their arms and through the said runners, their bends can be swung down so low as to raise the ends of their said arms above the faces of the runners. To allow this movement to be made without making the dogs too long, the bends of the said dogs can be curved upward slightly, as shown in Fig. 2.

The bends of the brake-dogs D pass through the eyes of eyebolts F, which pass through holes in the bends of the stirrups or clevises G, through holes in the washers H, and have nuts I screwed upon their ends.

The washers H have grooves in their ends, to receive and slide upon the arms of the stirrups G. Upon the eyebolts F, between the bends of the stirrups G and the washers H, are placed spiral springs J. The ends of the arms of the stirrups G are hinged by bolts K to the ends of arms L, formed upon or rigidly attached to the shaft M. The shaft M rocks in the eyes of eyebolts N, or other bearings, attached to the beam C, and to one of its ends is attached a lever, O, by means of which the brake mechanism is operated to apply the brake. With this construction, when the lever O is operated the bends of the dogs D are raised, which lowers the ends of the said dogs, and thus brings the said ends into contact with the roadway over which the sled is moving.

When the sled is moving forward and the brake is applied, the ends of the dogs D drag along the surface of the roadway, and thus check the advance of the said sled.

When the sled is stopped upon an upgrade and allowed to move back a little as the brake is applied, the rearward pressure forces the ends of the dogs into the roadway, so that the sled will be held from moving backward and the team can be allowed to rest.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with the runners A and the beam C of a sled, of the U-shaped dogs D, hinged to the said runners, the eyebolts F, connected with the said dogs, the stirrups G, placed upon the said eyebolts, the springs J, and washers H, engaging with the said eyebolts and stirrups, the shaft M, having arms L, connected with the said stirrups, and the lever O, attached to the said shaft, substantially as herein shown and described, whereby the ends of the dogs will be projected to engage with the roadway by operating the said lever, as set forth.

SAMUEL H. ANDERSON.

Witnesses:
ROBERT G. ASHTON,
MARY E. BALINGER.