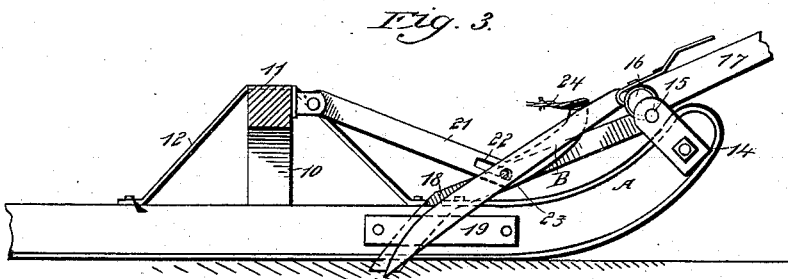
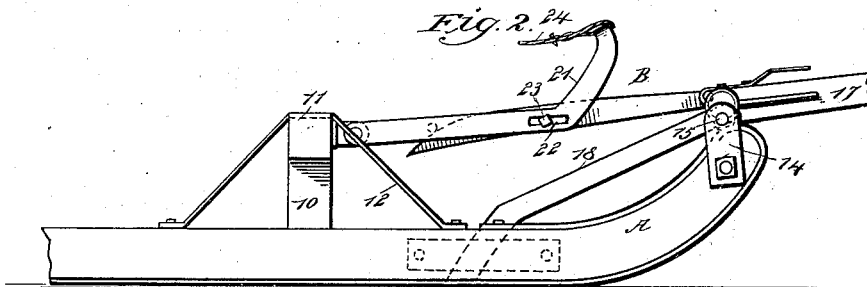
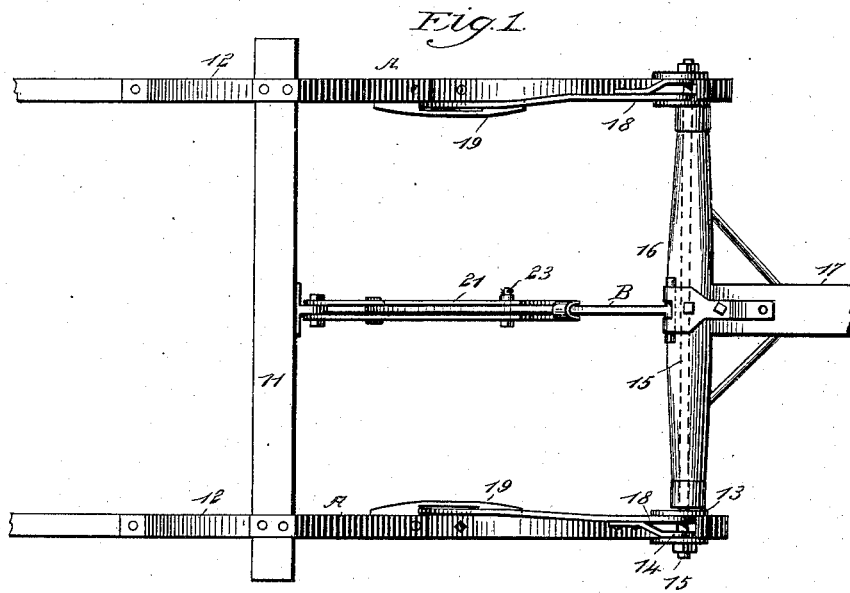


(No Model.)

A. MECHAM.
SLEIGH BRAKE.

No. 553,417.

Patented Jan. 21, 1896.



WITNESSES:

Edward C. Rowland.
Frederick A. Ken.

INVENTOR

A. Mecham

BY

Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ADELBERT MECHAM, OF EDINBURG, NORTH DAKOTA.

SLEIGH-BRAKE.

SPECIFICATION forming part of Letters Patent No. 553,417, dated January 21, 1896.

Application filed May 16, 1895. Serial No. 549,551. (No model.)

To all whom it may concern:

Be it known that I, ADELBERT MECHAM, of Edinburg, in the county of Walsh and State of North Dakota, have invented a new and useful Sleigh-Brake, of which the following is a full, clear, and exact description.

My invention relates to an improvement in sleigh-brakes, and it has for its object to provide a brake which will be an improvement upon that for which Letters Patent were issued to me March 19, 1895, No. 536,036, providing a means whereby the brakes may be strengthened and whereby also the drag-bar may be lifted from the ground conveniently and expeditiously when it is necessary to back the sleigh.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a plan view of a sleigh having the improvement applied. Fig. 2 is a side elevation thereof, illustrating the drag-bar together with the brakes in their upper position; and Fig. 3 is a view similar to Fig. 2, in which the brakes and drag-bar are in operation.

In carrying out the invention the runners A may be of any approved construction, and are provided with the usual knees 10 connected by cross-bars 11 and supported by braces 12. Links 13 and 14 are pivoted upon the forward end of each runner, one at the inner and the other at the outer side thereof, and the said links extend upward beyond the upper edge of the runners, as shown in Figs. 2 and 3. A shaft 15 is pivoted in the upper ends of the links 13 and 14 of the runners, and upon this shaft the cross-head 16 of the pole 17 is secured when a pole is used, and when shafts are employed they are connected also with the said cross-head.

A brake-bar is employed for each runner, and each of said bars at its upper or forward end is bifurcated, as shown at 18 in Fig. 1, being pivoted at the bifurcated end on the shaft 15. The brake-bars are carried downward and rearward, being given a quick de-

scent at their rear extremities, where they are made to pass through guides 19 secured to the inner faces of the runners, and each brake-bar is made to terminate at its lower end in a brake-shoe, which may be made as wide and as strong as may be found needful.

By making the upper ends of the brake-bars bifurcated, instead of making the bars at this point of a thickness equal to the space between the links, they are lightened at that point, and economy in the metal used is also obtained.

The brake-bars 18 are automatically applied the moment that the team backs—as, for example, when they are descending a hill—and the moment that the team reaches level ground and pulls forwardly the brake-bars will be removed from braking engagement with the snow.

A drag-bar B is pivoted to the center of the cross-head 16 at the back. This drag-bar is given somewhat of a curve in a downwardly direction, being sharpened at its lower extremity in order that it may enter the ground, and normally this drag-bar will rest upon the surface over which the sleigh is passing. Therefore in the event the sleigh is being drawn up a hill and the team should stop, the drag-bar entering the surface over which the sleigh is traveling will hold said sleigh stationary.

When it is desired to back the sleigh, or to raise the drag-bar from the ground for other purposes, the drag-bar and brake may be both simultaneously carried to elevated position through the medium of an angle-lever 21. This lever is preferably fulcrumed upon the front cross-bar 11, and while connected at its forward upwardly-extending end is otherwise in two members, the drag-bar passing between said members, and at the junction of the two sections of the said lever 21 a longitudinal slot 22 is made, in which a bolt 23 has play, secured to the drag-bar. A chain or cable 24 is attached to the upper end of the lever and made to pass over a suitable guide-pulley on the sleigh and connected with a hand-lever or its equivalent. It is therefore evident that when the chain or cable 24 is slackened, the drag-bar will gravitate downward to the position shown in Fig. 3, and that by drawing upon the cord or cable 24 the lever

21 will be raised, carrying with it the drag-bar, and at the same time the upward movement of the drag-bar will cause the cross-head 16 to be forced forwardly and the brakes 5 raised from braking position.

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

1. The combination, with sleigh runners 10 and the crosshead, of the drawbar having pivotal connection with said cross-head, the brake-bars having pivotal connection with the cross-head, and the lever having a slotted pivotal connection with the drawbar and a 15 pivotal connection with a portion of the sleigh,

whereby the drawbar and the brake-bars may be simultaneously lifted, substantially as specified.

2. The combination, with a sleigh runner, of the links pivoted to the forward end of 20 the runner, a shaft pivoted in the upper ends of the links, the brake-bar having the bifurcate upper end between said links and pivoted on the shaft, and the guide on the runner through which the brake-bar extends, 25 substantially as specified.

ADELBERT MECHAM.

Witnesses:

C. BUCK,
JOE CHRISIE.