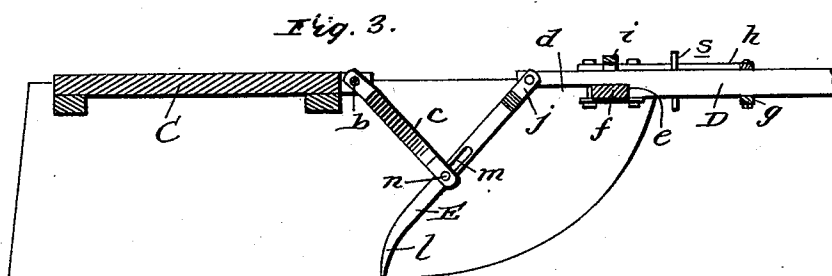
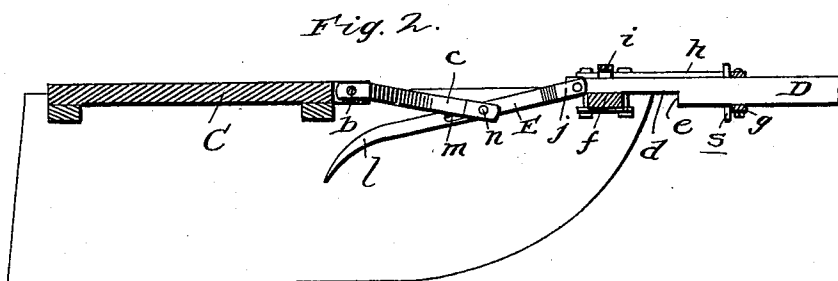
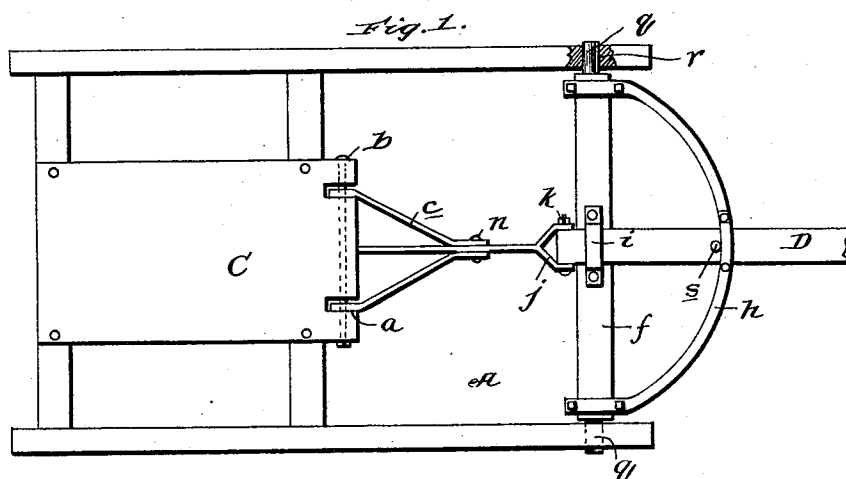


(No Model.)

I. E. MILLER.
SLED BRAKE.

No. 539,697.

Patented May 21, 1895.



witnesses:
C. H. Raeder
N. F. Matthews

Inventor
Ira E. Miller
By *James J. Sheehy*
Attorney

UNITED STATES PATENT OFFICE.

IRA E. MILLER, OF WALTON, NEW YORK.

SLED-BRAKE.

SPECIFICATION forming part of Letters Patent No. 529,697, dated May 21, 1895.

Application filed March 20, 1895. Serial No. 542,525. (No model.)

To all whom it may concern:

Be it known that I, IRA E. MILLER, a citizen of the United States, residing at Walton, in the county of Delaware and State of New York, have invented certain new and useful Improvements in Sleigh-Brakes; and I 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.

This invention relates to an improvement in sleigh brakes, and it has for its object to equip a sleigh at a comparatively small expense, with devices which will be very effective for the purposes designed and will serve as a brake and also as a means for attaching the draft beam to the frame.

Other objects and advantages will appear from the following description and claim when taken in connection with the annexed drawings, in which—

Figure 1 is a plan view of the sleigh with my improvements applied and parts of runners and draft-beam broken away. Fig. 2 is a side view, partly in longitudinal section, showing the brake or dog raised; and Fig. 3 is a similar view with parts broken away, showing the brake lowered and assuming a position which it occupies when the team has been stopped or backed.

Referring by letter to said drawings, A, indicates the frame of the sleigh which may comprise the runners, cross-bars and standards, all of the ordinary construction.

C, indicates the sand board which is secured in a horizontal position upon the rear and middle cross-bars of the frame. The sand board projects beyond the middle cross-bar as shown, and is recessed vertically at suitable points as shown at *a*. In these recesses are pivotally secured, by means of a bolt *b*, and a nut or the like, the inner ends of two metallic straps *c*, so that they may move freely on said bolt.

D, indicates the draft beam or tongue. This beam is cut away on its under side at its inner end as shown at *d*, so as to form a shoulder *e*, and this shoulder when the tongue or beam has been forced rearwardly to its fullest extent, will abut against the cross bar *f*, of the frame and thereby limit the downward movement of the point of the dog as will be

presently described. The tongue or beam passes through a guide *g*, in a curvilinear brace *h*, which is secured to the cross bar *f*, and the reduced or recessed end of said beam passes beneath a guide strap *i*, on the cross bar *f*.

E, indicates the dog. This dog is of a form substantially as shown, having its forward end forked as at *j*, where it is secured to the inner reduced end of the draft beam by means of a bolt *k*, or the like, and its opposite end is curved and tapered or pointed as shown at *l*. The dog is provided at an intermediate point in its length with an elongated slot *m*, and it is connected with the forward ends of the links or straps *c*, by means of a cross pin or bolt *n*. It will thus be seen that the draft beam is connected in a hinged or pivoted manner with the sand board of a sleigh frame, and it is connected in a similar manner with the dog. It will also be seen that when draft has been applied to the tongue or beam, and drawn outwardly as shown in Fig. 2, the dog or brake will be raised and remain so as long as the draft is continued. When the draft animals are stopped, the tongue or beam will immediately move rearwardly in its bearings and quickly throw down the dog into the position shown in Fig. 2. The shoulder *e*, striking against the cross bar *f*, will limit the movement of the dog so as to avoid any injury to the parts.

The cross bar *f*, is reduced at both ends as shown at *g*, and these reduced and rounded ends are let into round apertures *r*, in the runners so that said cross bar may be allowed a turning movement therein, thus permitting a free movement of the dog and tongue, and allowing the tongue to be raised and lowered at pleasure.

The tongue carries a stop pin *s*, which is designed to limit the forward movement thereof by striking the curvilinear brace *h*, when said tongue has been drawn forward to its fullest extent.

Having described my invention, what I claim is—

The combination with the sleigh frame and the sand board thereof recessed as described, of the cross bar journaled in the runners, the draft tongue or beam recessed on its under side at its inner end, and arranged in guides,

the dog, pivoted to the inner end of the draft beam and slotted at an intermediate point in its length and curved at its inner end, and the links pivotally connecting the dog through
5 its slotted portion to the sand board, and the curvilinear brace receiving the draft beam, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

IRA E. MILLER.

Witnesses:

H. S. SEWELL,
O. L. HITT.