

No. 837,438.

PATENTED DEC. 4, 1906.

S. W. WALKER.
SLED BRAKE.

APPLICATION FILED MAR. 22, 1906.

Fig 1

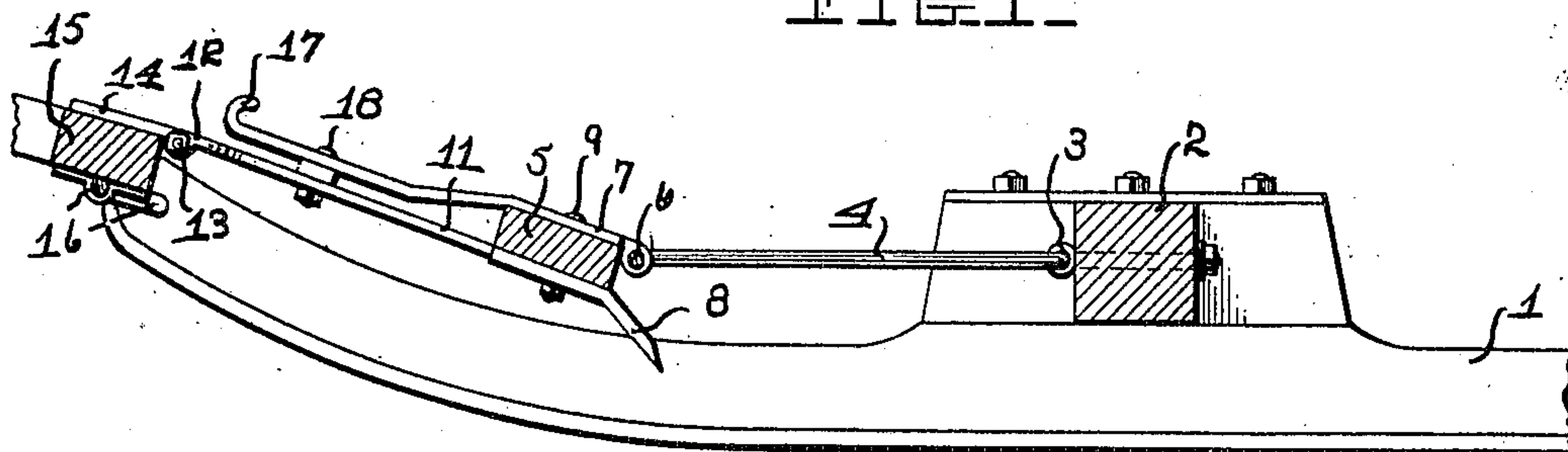


Fig 2

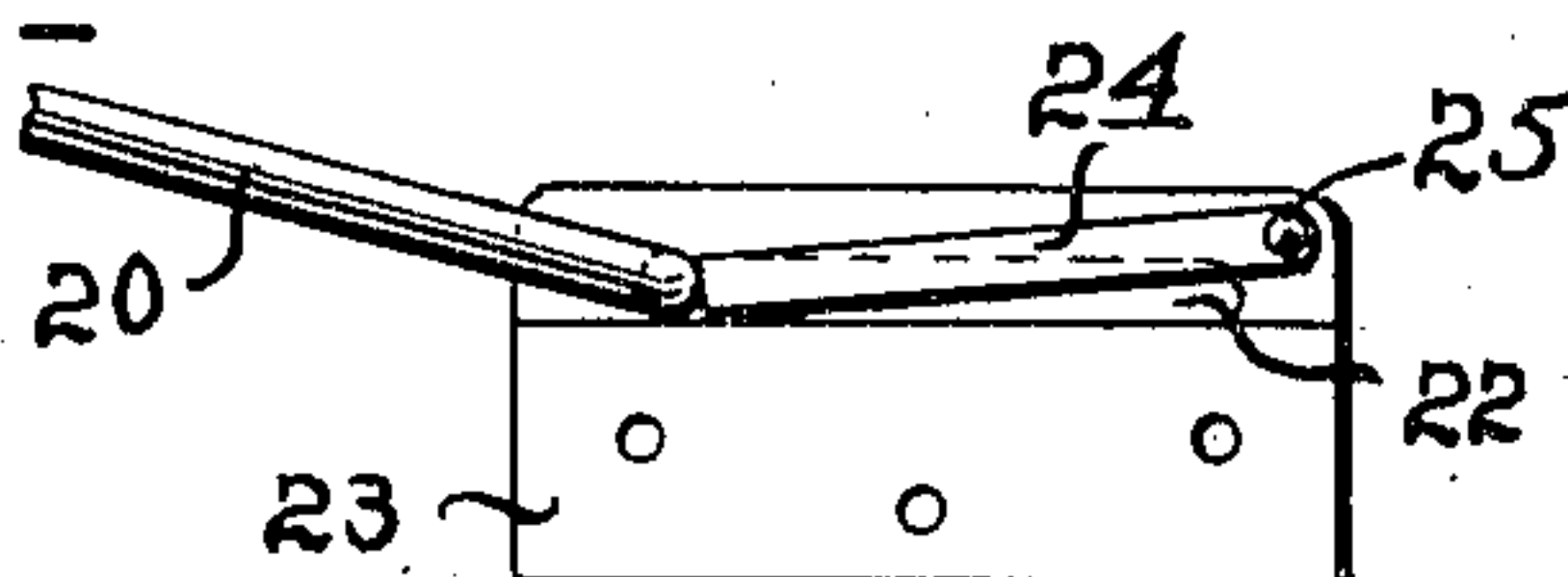
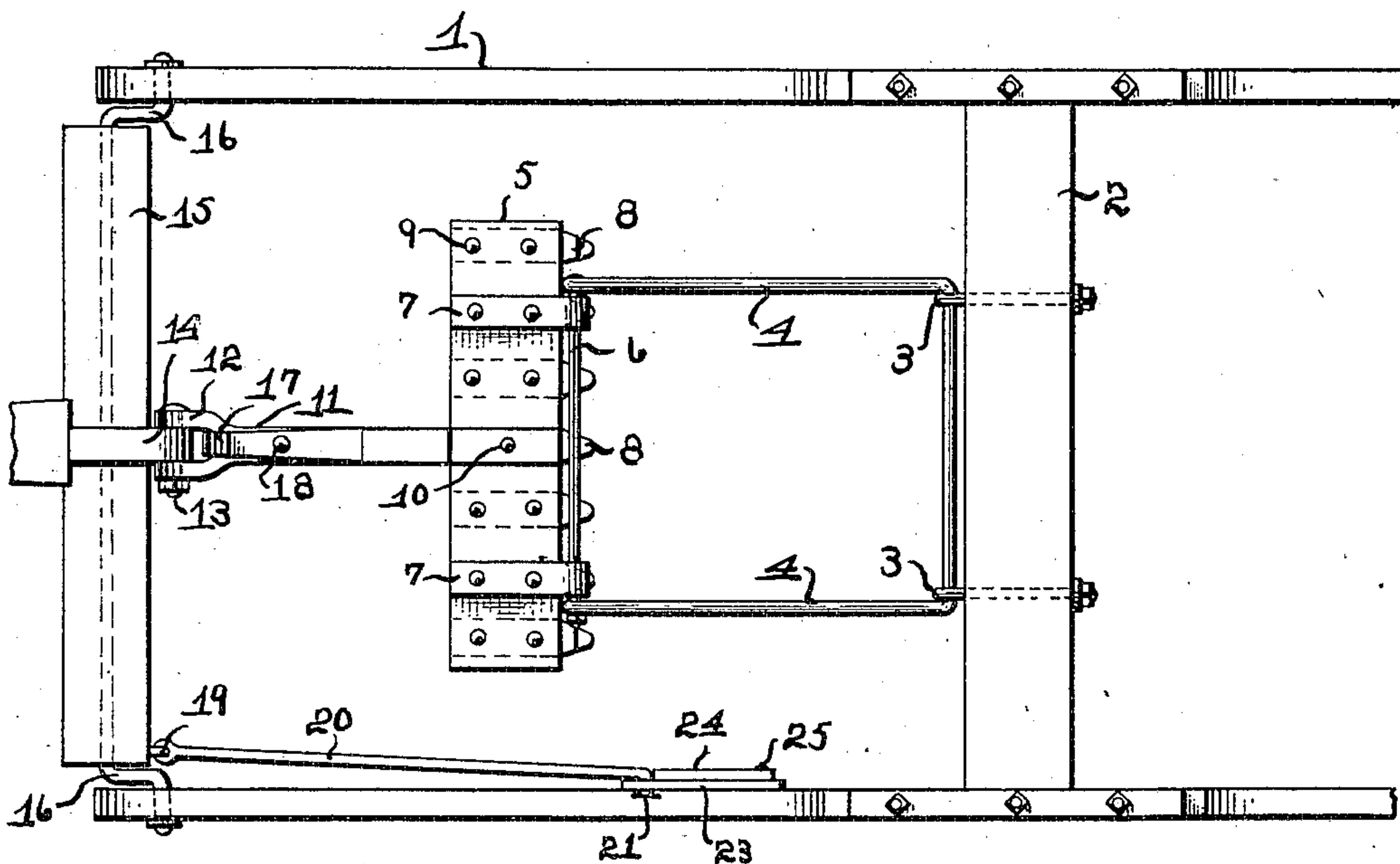


Fig 3



Witnesses

L. B. James
C. H. Griesbauer.

Inventor
Stephen W. Walker

by *A. B. Wilson & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

STEPHEN W. WALKER, OF ANSON, MAINE.

SLED-BRAKE.

No. 837,438.

Specification of Letters Patent.

Patented Dec. 4, 1906.

Application filed March 22, 1906. Serial No. 307,520.

To all whom it may concern:

Be it known that I, STEPHEN W. WALKER, a citizen of the United States, residing at Anson, in the county of Somerset and State of Maine, have invented certain new and useful Improvements in Sled-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 sled-brakes; and one of the principal objects of the same is to provide an automatically-operated brake for retarding sleds in descending hills to prevent the sled from sliding against the horses' feet or legs.

Another object is to provide a device of this character which will be connected to the draft devices of the sled, so that when the horses are pulling upon a level surface the brake will not drop to the ground, but when the horses set back, as in going down a hill, the brake will fall to an operative position.

Still another object is to provide means whereby the brake may be held up out of operative position when it is desired to back the sled.

These and other objects are attained by means of the construction illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal sectional view taken through a sled provided with my improved automatic brake. Fig. 2 is a detail side elevation of the latch and connecting-rod for rendering the device inoperative when desired, and Fig. 3 is a plan view of a sled provided with my automatic brake.

Referring to the drawings for a more particular description of my invention, the numeral 1 designates a sled, which may be of the usual or any preferred construction. Pivotally connected to the bolster 2 by eyebolts 3 is a bail 4, the ends of said bail being connected to a brake-bar 5 by means of a cross-rod or pintle 6. Said cross-rod passes through straps 7, secured to the bar 5, and said rod also passes through the ends of the bail 4.

The brake-bar 5 is provided with a number of brake-teeth or dogs 8, removably secured to said bar by means of bolts 9, and said teeth being bent downwardly, as shown in Fig. 1, and sharpened or provided with pointed ends, if desired. Connected to the brake-bar 5 by

means of a bolt 10 is a draft-bar 11, the front ends of which are bifurcated, as at 12, and connected by a pivotal joint 13 to a strap 14, said strap 14 being secured upon a rocking bar 15, provided with cranks 16 at its ends. Said cranks are mounted in the front ends of the runners of the sled. A draft-hook 17, formed on the end of a strap secured by the bolt 10 to the brake-bar and bolted at 18 to the draft-bar 11, serves as a convenient means for the attachment of the doubletree or draft chain.

Connected to an eyebolt 19 in one end of the rocking bar 15 is a connecting-rod 20, the rear end of which is bent at right angles, as at 21, and passed through a slot 22 in a plate 23, secured to one of the runners. A latch 24, pivoted at 25 to the plate 23, is adapted to be swung down to engage the bent end 21 of the connecting-rod 20 to lock the brake in an inoperative position. When the latch 24 is thrown backward to release the connecting-rod 20, the brake is rendered operative. The weight of the brake-bar and the teeth or dogs 8 will lower the brake when the horses set back, which would be the case when the sled is going downhill. When backing up the sled, the brake is not needed, and it is then thrown out of operation by means of the latch 24, as will be readily understood.

From the foregoing it will be obvious that my brake is automatic in its action and will be rendered operative when the sled is moving down a hill and there is danger of the sled running against the horses' heels.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention as defined by the appended claims.

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

1. An automatic brake for sleds comprising a brake-bar, a series of brake-teeth secured thereto, said brake-bar being pivoted to a bail, said bail being pivotally connected to the bolsters of the sled, a draft-strap secured to the brake-bar, a rocking bar to which said brake-bar is pivotally connected, cranks at the ends of said rocking bar, cranks being mounted in the front ends of the sled-runner, a draft-hook secured to the

draft-bar, and means to hold the brake up out of operative position, substantially as described.

2. In a brake for sleds, a rocking bar, a bail, a draft-strap, a brake-bar pivotally connected to the bail and rigidly connected to the draft-strap, said draft-strap being pivotally connected to the rocking bar, a connecting-rod pivoted to the rocking bar and having a rear end bent outward to engage a slotted plate, and a latch pivoted to said plate for locking the connecting-rod in position to prevent the rocking bar from operating, substantially as described.

3. In a sled-brake the combination of a rocking bar, a brake-bar connected thereto and adapted to drop by gravity into operative position, and means for holding said brake-bar in inoperative position comprising a rod connected with said rocking bar at one end and detachably engaging a plate on the sled-runner.

4. In a sled-brake; a rocking bar, a brake-bar connected therewith, and means for holding said brake-bar in inoperative position comprising a rod connected with said

rocking bar and detachably engaging a holding-plate, and means for locking said rod in engagement with said plate.

5. In a brake for sleds, a rocking bar, a brake-bar connected to said rocking bar, a connecting-rod pivoted to the rocking bar and having its rear end bent to engage a slotted plate, and a latch for locking the connecting-rod to said plate to prevent the rocking bar from moving.

6. An automatic brake for sleds comprising a brake-bar, a series of brake-teeth secured thereto, a draft-strap secured to the brake-bar, a rocking bar to which said brake-bar is pivotally connected, cranks at the ends of said rocking bar mounted in the front ends of the sled-runner, and a draft-hook secured to the draft-bar.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

STEPHEN W. WALKER.

Witnesses:

BERNARD GIBBS,
ORLANDO H. BRACKETT.