No. 869,596. PATENTED OCT. 29, 1907.

L. THERRIAULT.

SLED.

APPLICATION FILED AUG. 10, 1906.

Fig. 1.

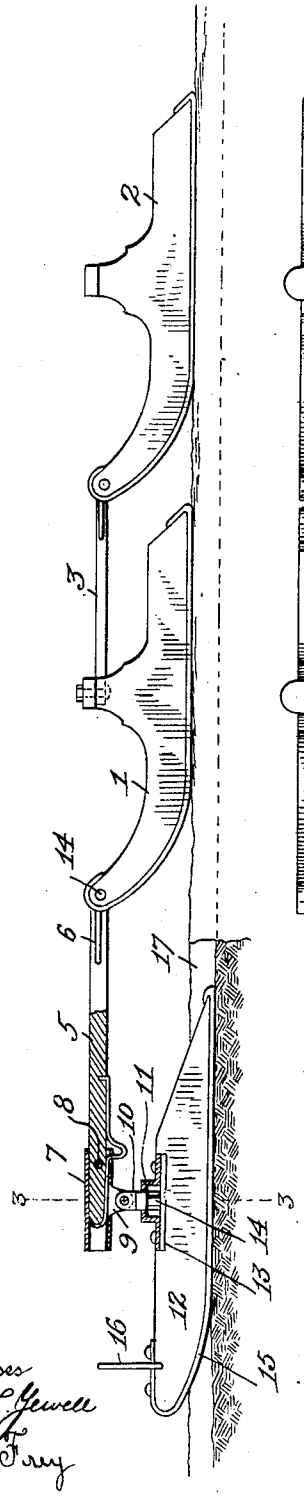



Fig. 2.

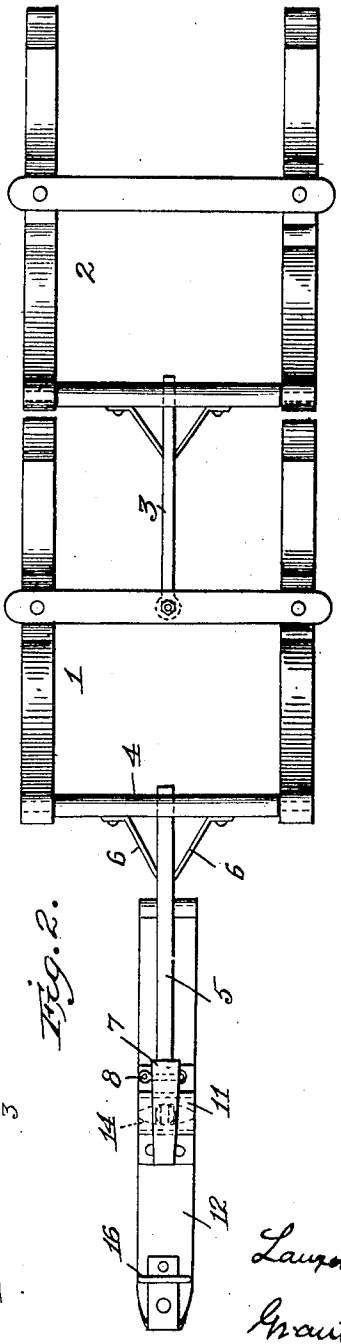
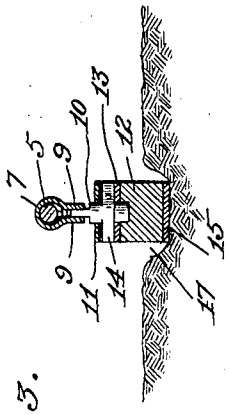



Fig. 3.




Witnesses
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# UNITED STATES PATENT OFFICE.

LAWRENCE THERRIAULT, OF MISSOULA, MONTANA.

## SLED.

No. 869,596. Specification of Letters Patent. Patented Oct. 29, 1907.

Application filed August 10, 1906. Serial No. 329,995.

*To all whom it may concern:*

Be it known that I, LAWRENCE THERRIAULT, a citizen of Canada, and resident of Missoula, in the county of Missoula and State of Montana, have invented certain new and useful Improvements in Sleighs, of which the following is a full, clear, and exact description, such as will enable those skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

The invention relates to improvements in sleighs of that description which are formed of two bob-sleds coupled together so as to be relatively movable. It more particularly relates to means for guiding such sleighs as to adapt them to logging purposes.

It consists in the novel construction, combination, and arrangement of parts, such as will be hereinafter fully described, pointed out in the appended claims, and illustrated in the accompanying drawings.

In the drawings, in which similar reference characters designate corresponding parts, Figure 1 is a side elevation, partly in section, of a sleigh embodying the invention. Fig. 2 is a plan view. Fig. 3 is a cross sectional view.

The main part of the sleigh comprises the front and rear bob-sleds 1 and 2 respectively, coupled together by the reach 3. The latter is pivotally connected to both sleds so that they can move independently of each other to a limited extent. Between the ends of the runners of the forward sled 1 is pivoted the cross-bar 4 to which is attached the pole 5 and held by the braces 6. The pole has a free movement vertically, but cannot move horizontally. On the front end of the pole 5 is the removable cap 7, which is held in place by the removable bolt 8. On the under side of the cap are the lugs 9 between which is pivoted the upper end of the pintle 10. The lower end of the pintle is journaled in the bracket 11 on the runner 12. Interposed between the bracket 11 and the runner 12 is the wearing plate 13 on which the lower end of the pintle bears. On the lower end of the pintle is the cross-piece 14 in the socket formed by the bracket and wearing plate. The cross-piece holds the pintle in the bracket. The front and rear faces of the cross-piece are curved so that the pintle has a limited rotatable movement in the bracket. The runner is provided with the usual shoe 15 and on its forward end is the bail 16 by means of which it can be attached to means for drawing the same when detached from the pole.

In mountainous countries it is the general practice to provide chutes for transporting logs. These chutes are of costly construction and are in constant need of repairs; also, they cannot be depended upon as the logs often jump from the same in their descent. By means of the present invention it is proposed to provide a steering mechanism so that sleighs, without the use of draft animals, can be used for carrying logs and the use of chutes thereby avoided.

In operating the device a road is made on an incline so that the sleigh and its load will be propelled by gravity. In the middle of the road, as at 17, a guiding groove is formed. In this groove the steering runner 12 travels and guides the sleigh so that the latter keeps to the road. As the runner is on the forward end of the pole it has considerable leverage to turn the forward sled and consequently the groove need not be very deep to hold the runner to its course. The limited rotatable movement of the pintle 10 in the bracket 11 permits a sufficient lateral movement of the runner to accommodate any unevenness in the groove. Also the pivotal connection between the pintle and the cap 7 permits the runner to rock should it strike any roughness in the bottom of the groove. The pivotal connections between the pole with the runner and the runner at its forward end and with the front sled at its rear end permits the front sled and runner to rock without interfering with each other. The sleigh is loaded in the usual manner and it is started down the inclined road. The steering runner traveling in the groove guides the sleigh in its descent so that it holds to the road. When the sleigh reaches the lower end of the road it is unloaded and it is returned to the upper end of the road by draft animals or other means. Before the sleigh starts on its return trip the runner is detached by withdrawing the bolt 8 and removing the cap from the end of the pole. By means of the bail 16 the runner can be attached to the rear of the sleigh for the return trip.

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

1. In a sleigh, front and rear sleds coupled together so as to be relatively movable, a pole pivoted to the front sled, a cap removably mounted on the forward end of said pole, and a steering runner pivoted to said cap and operating to travel in a groove to guide the sleigh.

2. In a sleigh, a sled, a pole on said sled, a cap removably mounted on said pole, a steering runner, a bracket on said runner, and a pintle rotatable in said bracket and pivoted to said cap.

3. In a sleigh, a sled, a pole on said sled, a cap on said pole, a steering runner, a bracket on said runner, and a pintle hinged to said cap and rotatable in said bracket.

4. In a sleigh, front and rear sleds coupled together so as to be relatively movable, a pole pivoted to the front sled, a cap on said pole, a steering runner, a bracket on said runner, a pintle hinged to said cap and rotatable in said bracket, and a cross-piece on said pintle and movable in said bracket to a limited extent to limit the rotation of the pintle.

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

LAWRENCE THERRIAULT.

Witnesses:
GEORGE WILLETTE,
NARCISSE TRAMBLAY.