April 2, 1940. F. S. BARTLETT 2,195,553

SNOW VEHICLE

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Fig. 1.

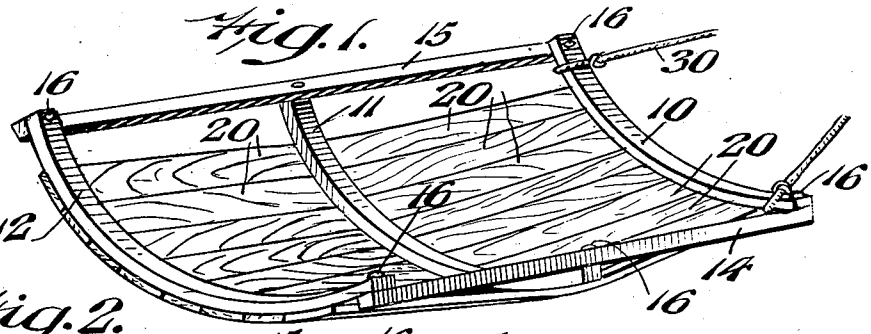


Fig. 2.

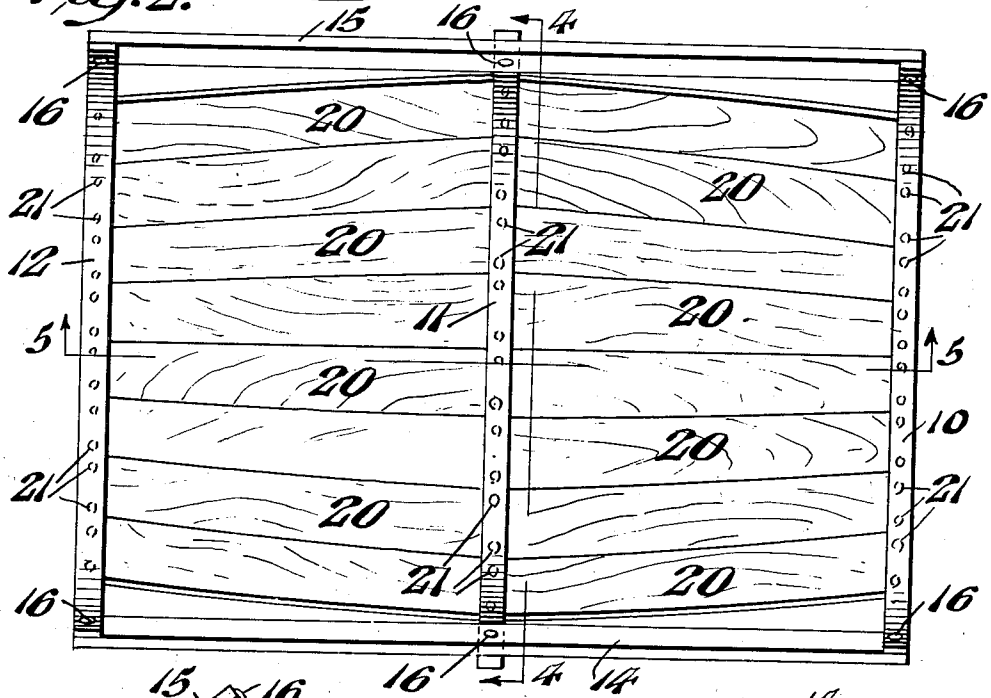


Fig. 3.

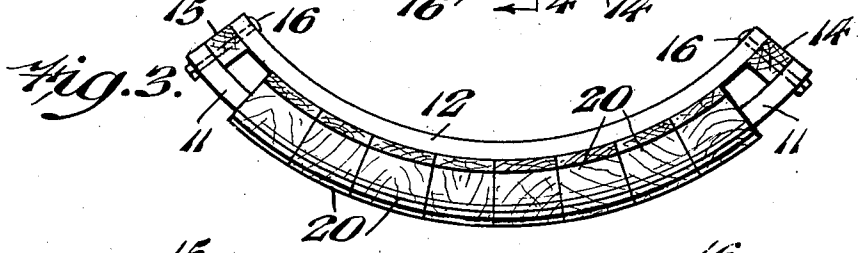
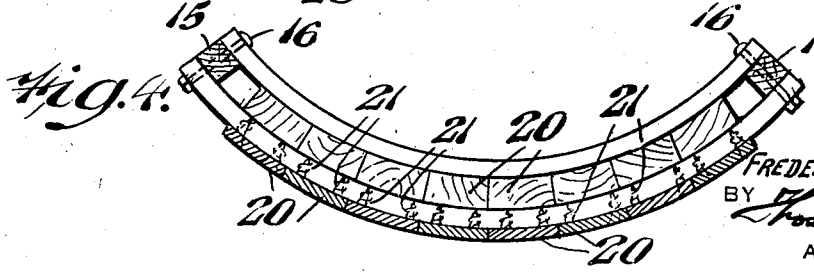


Fig. 4.



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Fig. 5.

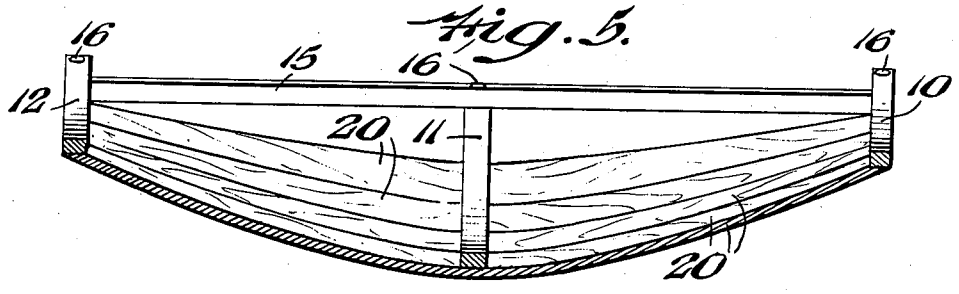


Fig. 6.

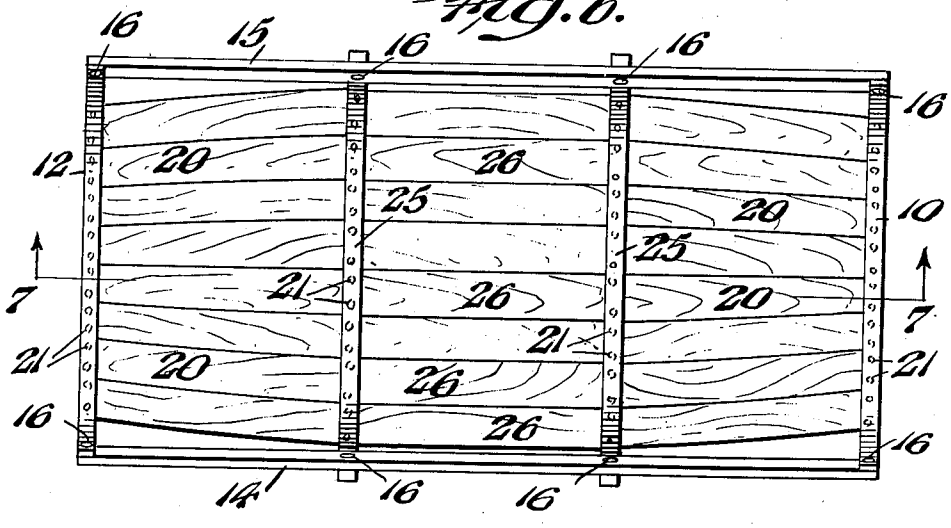
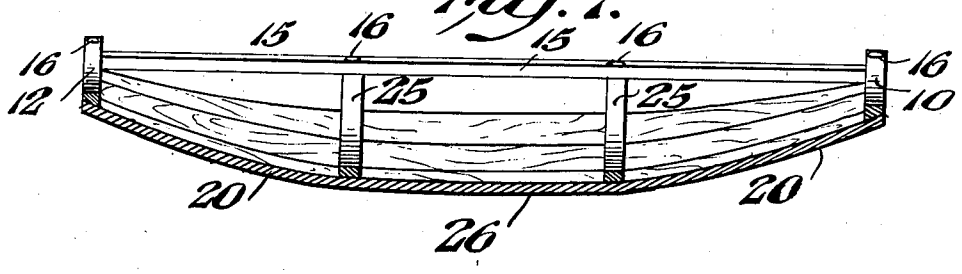


Fig. 7.



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SNOW VEHICLE

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Application March 4, 1938, Serial No. 193,904

2 Claims. (Cl. 280—18)

This invention relates to snow vehicles and more particularly to a vehicle adapted to be drawn by hand over level or uphill terrain and to be ridden downhill by a seated operator.

A primary object of the invention is to provide a novel snow vehicle for use in sport or recreation and also capable of use practically.

A more specific object of the invention is to provide a snow vehicle having a large snow bearing surface but one in which, when ridden, the line between stability and lack of stability is more finely drawn than it is in snow vehicles heretofore known. When drawn by hand, however, the vehicle is characterized by a lightness of draft and considerable stability.

Other objects and advantages of the invention will be apparent from the following claims, specification and drawings in which:

Fig. 1 is a perspective view of an embodiment of the invention;

Fig. 2 is a plan view thereof;

Fig. 3 is an end elevation of the embodiment of the invention shown in Figs. 1 and 2;

Figs. 4 and 5 are vertical sectional views taken on the lines 4—4 and 5—5 respectively of Fig. 2;

Fig. 6 is a plan view of a modified form of the invention; and

Fig. 7 is a vertical sectional view taken on the line 7—7, Fig. 6.

Referring first to the embodiment of the invention shown in Figs. 1 to 5 inclusive the vehicle may be considered as formed of a frame and cover slats or staves, all preferably of wood. The frame primarily is composed of three cross members 10, 11 and 12, lying in spaced parallel planes and each preferably shaped as the arc of a circle. Preferably also the two opposite end members 10 and 12 are arcs of circles of equal diameters and are of equal length. The intermediate frame 11 preferably is the arc of a circle of larger diameter than the arcs of the other two transverse members. Longitudinal members or rails 14 and 15 preferably are parallel and lie in parallel planes at right angles to the planes of the transverse members 10, 11 and 12. Each of the rails 14 and 15 may be secured to each of the transverse members, as by bolts 16, preferably with the under face of each of the rails secured to the upper face of the mesial transverse member 11 and with their upper faces secured to the lower faces of each of the end transverse members 10 and 12. From a consideration of the above description and of the drawings it will be obvious that a trussed frame is presented which will support a covering that is convex both laterally and longitudinally of the structure.

The frame preferably is covered by or carries a multiplicity of slats, 20, of the barrel stave type, i. e., with their longitudinal axes arranged in parallelism but being slightly wider mesially than at their distal portions. Each of the staves 20 are connected to each of the transverse members 10, 11 and 12 as by screws 21 shown in dotted lines. In positioning the slats 20 they preferably are placed in close juxtaposition with their inner faces abutting the outer faces of each of the transverse members but with the longitudinal edges of the two outer slats spaced from the rails 15. Thus a smooth bearing surface is obtained and at the same time room in left for the hands of the operator to grasp the rails at any desired position.

In the embodiment of the invention shown in Figs. 6 and 7 all elements are similar to those so far described and are similarly designated except that in place of the single mesial transverse member 11 two spaced members 25 are substituted and the proportions of the vehicle lengthened longitudinally so that it may carry two passengers of normal size instead of one as is contemplated of the structure first described. When this construction is used the two central transverse members 25 may be of equal convexity and the slats 20 partially flattened out therebetween as at 26.

Either of the embodiments of the invention above described preferably should be sufficiently light in weight to be readily carried by hand but also the cross members 10 and 12 are sufficiently sturdy so that a rope 30 may be connected thereto to drag the vehicle over the snow if it is desired to put a load on it.

The invention as above described provides a snow contacting surface that is convex whether longitudinally or transversely considered and one in which the line between stability and ease of control is very close to the border of instability and lack of control when the vehicle is ridden down hill. Thus a vehicle is provided in which skill and luck both enter into its successful operation. On the other hand for practical use, when drawn by hand, tension on the drawing rope causes the vehicle to move along a straight line, the large bearing surface prevents the load from breaking through snows where a vehicle of the sled type would break through and the convex shaping reducing friction in the type of snows where a toboggan is ordinarily used.

Various modifications may be made in the above described embodiment of the invention

without departing from the spirit and scope thereof as set forth in the following claims.

I claim as my invention:

1. A snow vehicle comprising a frame including in substantial parallelism a multiplicity of transverse members and two spaced marginal longitudinal members, said longitudinal members being connected at their ends with their upper surfaces abutting the end transverse members and connected intermediate their ends with their under surfaces abutting the intermediate transverse members.

2. A snow vehicle comprising a frame including in substantial parallelism a multiplicity of transverse members; two spaced marginal longitudinal members, said longitudinal members being connected at their ends with their upper surfaces abutting the end transverse members and connected intermediate their ends with their under surfaces abutting the intermediate transverse members; and a multiplicity of surfacing members connected to the under sides of said transverse members.

FREDERIC S. BARTLETT.