(No Model.)

W. G. SHEPARD.

TOBOGGAN.

No. 359,406. Patented Mar. 15, 1887.

Fig. 1

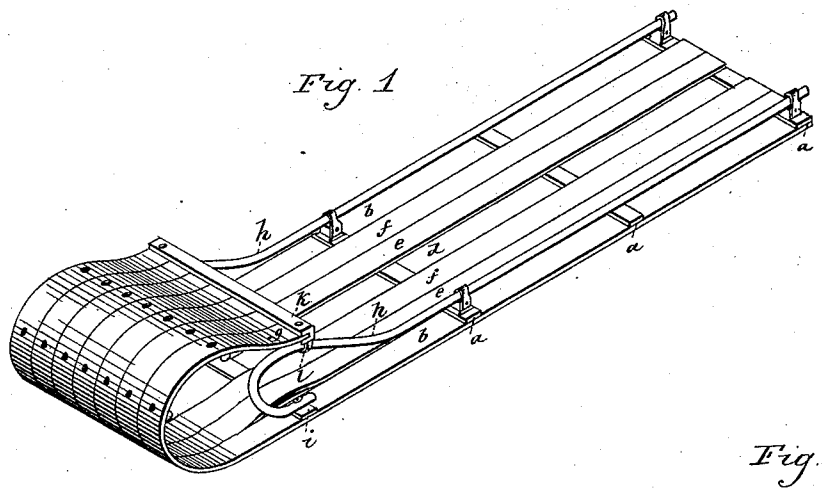


Fig. 3

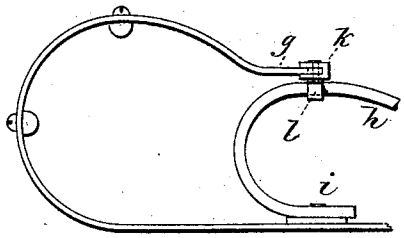


Fig. 2

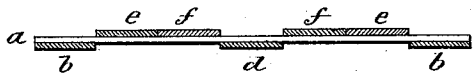
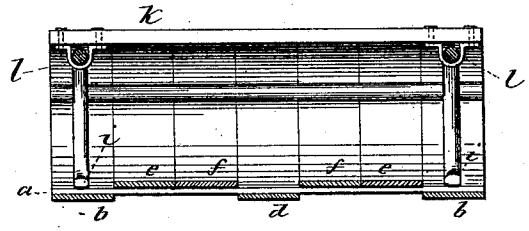


Fig. 4



Witnesses:
J. N. Shumway
Fred C. Earle

Webster G. Shepard,
Inventor
By Atty
Wm. C. Earle.

N. PETERS. Photo-Lithographer. Washington. D. C.

UNITED STATES PATENT OFFICE.

WEBSTER G. SHEPARD, OF NEW HAVEN, CONNECTICUT.

TOBOGGAN.

SPECIFICATION forming part of Letters Patent No. 359,406, dated March 15, 1887.

Application filed February 3, 1887. Serial No. 226,351. (No model.)

To all whom it may concern:

Be it known that I, WEBSTER G. SHEPARD, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Toboggans; and I do hereby declare the following, when taken in connection with accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of the toboggan complete; Fig. 2, a transverse section; Fig. 3, a side view of the forward portion, illustrating the method of securing the forward end of the bottom to the guards; Fig. 4, a transverse section directly in rear of the connection between the turned-over end and the bottom.

This invention relates to an improvement in the vehicles commonly called "toboggans."

In the usual construction of this class of vehicles it is composed of a series of flat longitudinal strips of hard wood, secured together by several transverse cleats upon the upper surface of the strips, the forward ends of the strips curved upward to give a runner shape and turned backward. On each side is a longitudinal guard-rail, which extends forward beneath the turned-over ends. These guards are made fast to the transverse cleats, and the turned-over end is secured to the guard-rail by a flexible tie of some kind, usually cord or chain, which extends from the said turned-over ends down to the guard-rails. The strips which form the bottom or body of the toboggan present a flat plain surface upon the under side, so that the entire width of the toboggan is exposed to the surface over which it slides, creating a very considerable amount of friction, which tends to impede the progress of the toboggan.

The object of my invention is to reduce the friction of the toboggan in running, and also to directly connect the guards and turned-over ends, which latter improvement greatly strengthens the toboggan and holds the forward end in proper shape.

Under my improvement the body of the toboggan is composed of strips of thin hard wood, such as usually employed in the construction of toboggans. These strips are usually seven in number; but instead of arranging them all beneath the transverse cleats *a*, as in the usual construction, I arrange a part of the strips beneath the cleats and the remainder above, as seen in Fig. 2. I prefer to secure the outer strips, *b b*, and the center strip, *d*, beneath the cleat, as seen Fig. 2, and the intermediate strips, *e f*, upon each side of the center, I secure to the upper side of the cleats, so that a clear space is left upon the under side between the outer strips and the center strip; but at the front, above the bend, I prefer to bring them all into the same plane and outside the cleat, as seen in Fig. 3, so that over the rounded front end the strips will appear flush with each other. Thus under this construction there will be but three-sevenths the friction opposed to the running of the toboggan that there would be with all the seven strips fixed to the under side of the cleats; hence a correspondingly-increased velocity will be attained in the running of my improved toboggan.

In making the bend of the strips at the forward end I curve the strips up over and backward; but instead of turning the extreme ends down toward the bottom, I turn them upward into a plane substantially parallel with the plane of the bottom, as seen at *g*. The guards *h* are arranged one at each side, raised from the bottom of the toboggan, as usual; but instead of running the forward ends of the guards straight and parallel with the bottom, I curve the forward ends upward to meet the ends of side strips, and thence bend them downward and backward, bringing the extreme ends *i* upon the forward cleat, as seen in Figs. 1 and 3. The ends of the several strips are secured to a cleat, *k*, and this cleat *k* is connected directly to the guards by clips *l*, as seen in Fig. 3. These clips embrace the guards at the bend, but so as to leave sufficient freedom for the working of the ends of the strips. The clips are made from metal, of a loop-like shape, as seen in Fig. 4, so as to slide easily on the guard.

By this construction a very firm connection is made between the ends of the strips and the guards, which insures holding the strips in their proper curve or bend, and with no liability to displacement, as must always be the case with the usual flexible connection, and

the guards, rising at the front to meet the ends of the strips, afford a greater side protection for the garments and the feet than does the straight low guard.

I claim—

1. A toboggan composed of several narrow longitudinal strips, said strips curved upward and over at the forward end to give the runner shape, combined with transverse cleats to secure the strips together, a portion of the strips secured beneath the cleats and the remainder of the strips above the cleats, substantially as described.

2. A toboggan having its forward end curved upward and backward over the bottom, a guard on each side, curved upward at its forward end to meet the curved forward end of the bottom, the said guard curved downward at its extreme forward end and secured to the bottom, the said turned-over end of the body secured by clips directly to the guards, substantially as described.

WEBSTER G. SHEPARD.

Witnesses:
FRED C. EARLE,
J. H. SHUMWAY.