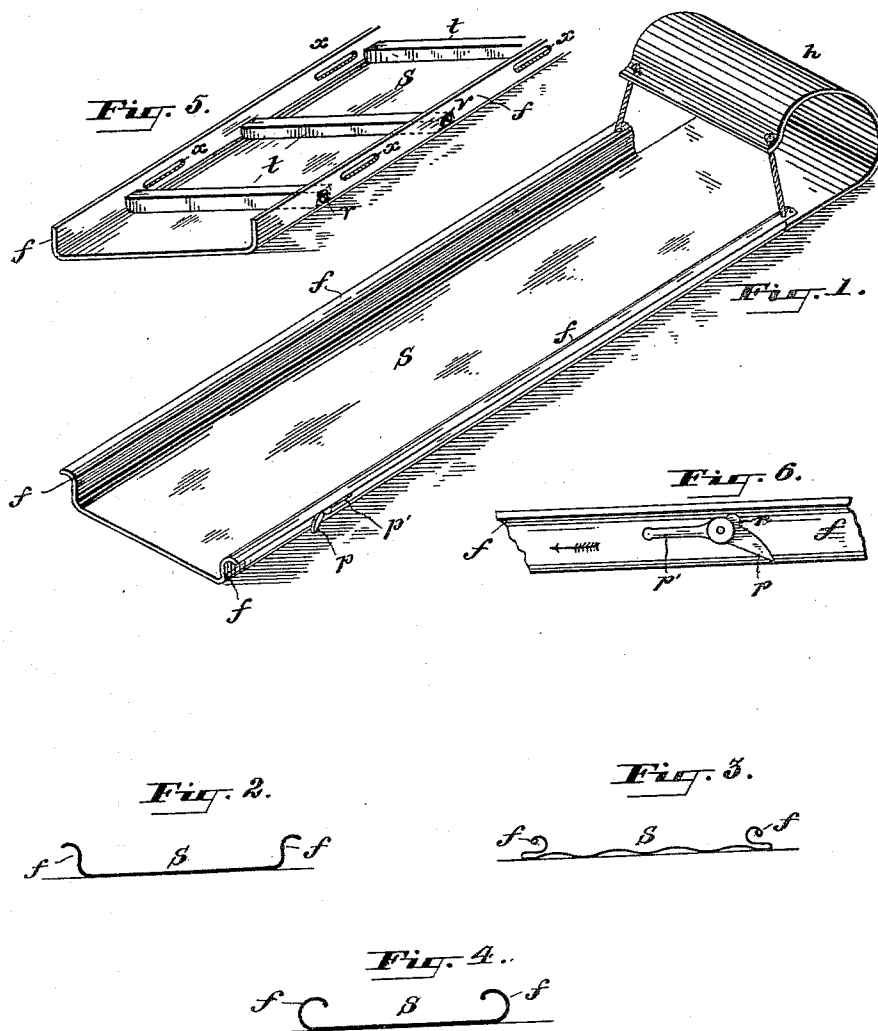


(No Model.)

J. PUSEY.
TOBOGGAN.

No. 359,741.

Patented Mar. 22, 1887.



WITNESSES:
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TOBOGGAN.

SPECIFICATION forming part of Letters Patent No. 359,741, dated March 22, 1887.

Application filed December 9, 1886. Serial No. 231,067. (No model.)

To all whom it may concern:

Be it known that I, JOSHUA PUSEY, a citizen of the United States, residing in the city and county of Philadelphia, and State of Pennsylvania, have invented certain new and useful Improvements in Toboggans, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, of which—

10 Figure 1 is an oblique perspective view. Fig. 2 is a transverse section. Fig. 3 is a similar section showing longitudinal corrugations and a modification of the lateral flanges or hand-holds. Fig. 4 is a like section showing
15 another modification of the form of said flanges, the same being turned up and inwardly. Fig. 5 is another modification of the flanges, the same being at right angles to the bottom or body of the toboggan, with longitudinal slots
20 for the hand-holes. This figure shows also the cross-slats which I sometimes use, as herein-after explained.

Like letters of reference, where they appear in the several figures, designate like parts.

25 My invention relates particularly to that variety of coasting or sledding vehicles known as "toboggans," which consist of a thin wooden board or a number of narrow boards or slats secured together and curled over at the front
30 end to form the "hood," side rails elevated above the top of the board being secured to the latter by thongs or otherwise, so as to serve as a hand-hold for the tobogganers.

As a toboggan slides with great speed over
35 a sometimes uneven surface and frequently strikes against obstructions, it is desirable that it should combine the qualities of strength, durability, and elasticity, together with lightness and smoothness in as high a degree as
40 possible.

It may also be added that it is desirable that a toboggan should be made of a material that is not liable to splinter or break into sharp-pointed pieces in case of accident or collision.

45 The main object of my present invention is to provide a toboggan that shall, while excelling in all these qualities, be simple and economical in construction, and one in which the usual nails or screws and thongs (which are
50 subjected to great strain and working) may be entirely dispensed with.

A minor feature of the invention has for its object to provide an improved device for preventing the toboggans from running backward down the trackway when used upon the
55 courses—such as described in my Letters Patent Nos. 318,025 and 318,026, both dated May 19, 1885; also to provide a ready means for guiding and "braking" the toboggans.

The improvement consists, first, in a toboggan constructed of paper or paper-board made
60 hard and compact, and also practically waterproof.

It consists, secondly, in a toboggan having its sides turned up to form stiffening-flanges,
65 which serve at the same time for a hand-hold for the occupants of the toboggan, the entire toboggan being composed of an integral sheet of compacted waterproofed paper or paper-board, or similar strong and elastic material
70 adapted to be molded or compressed into shape.

It consists, thirdly, in a toboggan formed of a sheet of compacted water-proof paper or paper-board, or similar material, corrugated
75 longitudinally, so as to stiffen the toboggan, and at the same time present less frictional surface to the trackway than if the same were plane.

It consists, fourthly, in the combination,
80 with a toboggan, of a gravity-operated pawl, pivoted to the side of the toboggan and adapted to prevent the latter from running backward, as hereinbefore stated, said pawl being also provided with a handle, by which the pawl
85 may be depressed so as to be brought to bear forcibly against the trackway, and thus guide the toboggan, as hereinafter specified.

It consists, finally, in certain minor details of construction, that will be hereinafter pointed
90 out.

In carrying out my invention in its simplest form I take a plain sheet, of about the usual length of a toboggan, and, say, about a quarter-inch thick, and, say, twelve to twenty-four
95 inches wide, of compacted paper or paper-board waterproofed throughout by means of rosin or other suitable substance adapted for the purpose, with which the paper is impregnated. This sheet I turn up at the forward
100 end to form the usual hood, *h*, of the toboggan.

Any suitable hand-hold may be secured to the lateral edges of the sheet. In order, however, to provide such hand-hold as an integral part of the said sheet *S*, I pass the latter, while in suitably soft or plastic condition, between dies or rollers, or other devices, which will form flanges *f*, Figs. 1 and 2, projecting up and beyond the top of the sheet, which flanges, it will be seen, serve as a convenient hand-hold for the occupants of the toboggan. Being elevated above the surface of the latter—that is, above the trackway—the fingers, which grasp underneath the outwardly-projecting part of said flange, are prevented from coming into contact with the trackway. These flanges serve, also, to stiffen the toboggan. As it is not necessary that the part of the sheet forming the hood *h* should be thus flanged, the flanges may be omitted therefrom, and especially as said flanges would interfere with the easy curling over to form the hood.

Instead of making the bottom or body of the toboggan a plain sheet, I sometimes prefer to mold or compress the latter between suitable rollers or dies in a manner to corrugate the sheet longitudinally, as indicated by the cross-section, Fig. 3.

The form of the upturned flanges and hand-holds may be modified in numerous ways—as, for instance, in Fig. 4, wherein they are bent and curved inwardly; or, as in Fig. 5, wherein the flanges are simply turned straight up, and provided with longitudinal slots *a* for the hand, or through which ropes to form loops for holds may be passed or secured, if desired; or, (when the material will safely admit the requisite bending,) as in Fig. 3, wherein the side of the sheet is first bent inwardly on itself, then upward and curving outwardly, the outer side of the curve being sufficiently within the edge of the bottom of the toboggan, so that the hands grasping the curved flange will be protected in case the side edge of the toboggan should strike a raised obstruction or against the side of the usual chutes of artificial toboggan-slides.

In order to give to the seat a frictional surface, and thus better prevent the tobogganers from slipping, the top part of the sheet of paper-board, &c., may be roughened in any suitable manner; or slats *z*, Fig. 5, extending at intervals across the bottom or seat and having their ends secured to the lateral flanges by means of screws *v*, or otherwise, may be provided. These slats serve also to hold and stiffen said flanges.

Paper-board, when sufficiently hardened, compacted, and waterproofed, is well adapted for the construction of my improved toboggan, by reason of its capability of wearing smooth and the other qualities hereinbefore recited, and is desirable on account of its comparatively low cost.

In order to secure an automatic stop, to prevent the toboggan from running backward under certain circumstances, as hereinbefore

mentioned, and also to provide a handy brake or guide for the toboggan, I pivot on the outside of the vertical part of the flange *f*, Figs. 1 and 6, underneath the outwardly-projecting portion of the latter, a gravity-pawl, *p*, arranged and constructed as shown, so that while not interfering with the forward movement of the toboggan, yet the instant the latter starts to run backward the pawl is ready to drop and catch into the trackway, and thus check the backward movement of the toboggan. This pawl is also prevented from being turned too far forward by means of a forward projection, *p'*, thereon, which, impinging against the under side of the overhanging part of the flange, limits such forward motion or rotation of the pawl. The projection *p'* serves, also, as a handle for operating the pawl, so as to constitute a brake, if necessary, or a guide to alter the course of the toboggan. I provide one of the described devices on each side of the latter, located so as to be convenient to the steerer, and it is obvious that by pressing upward one of the handles, and thereby forcing down the end of the pawl against the surface of the trackway, the toboggan will tend to swing around toward that side.

It will be understood that in order that the pawl shall be at liberty to thus operate by gravity it is made heavier than the handle portion, so as to more than counterbalance the weight of the latter and the friction on its pivot. This device is also made, as seen in Fig. 6, so that the upper edge of the pawl, or a projection, *r*, thereon, shall stop against the under side of the projecting flange, so as to prevent the end of the handle (in case it should be accidentally pressed down) from extending below the bottom of the toboggan, and thereby be in danger of catching in the trackway.

I am aware of the fact that lever brakes and guides pivoted to the sides of toboggans and sleds are old; but the construction of these has been such that they were not adapted for the additional function of automatically preventing the toboggans or sleds from running backward under the circumstances hereinbefore recited.

I remark that the curl of the forward end of the sheet may be reversed—that is, so that the toboggan may run upon the flanges *f*, which would then form runners; or, if desired, the usual flexible runners or shoes of metal or wood may be applied to the bottom of the toboggan. It may be observed that the strength of the paper body obviates the necessity of the frame-work (or slats and cross-slats secured together) heretofore required in all toboggans with runners or shoes with which I am acquainted.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—
1. A toboggan made of compacted waterproofed paper or paper-board, substantially as and for the purpose set forth.

2. A toboggan consisting of the plane or

body portion and the upturned lateral flanges or hand-holds, all formed of an integral sheet of compacted and waterproofed paper, paper-board, or other similar material compressed or
5 molded into shape, substantially as and for the purpose set forth.

3. A toboggan formed of an integral longitudinally-corrugated sheet of compacted waterproofed paper, paper-board, or similar material, substantially as and for the purpose set
10 forth.

4. In combination with the toboggan formed of a sheet of paper, paper-board, or other similar material, and having the lateral flanges *f*,
15 the cross-slats *t*, having their ends secured to said flanges, substantially as and for the purpose described.

5. In combination with a toboggan having the upwardly and outwardly projecting flange, the lateral gravity-pawl pivoted beneath said
20 outwardly-projecting flange and provided with the handle or projection *p'*, adapted to impinge against the under side of the flange, and thereby limit the forward throw of the pawl,
25 substantially as and for the purpose specified.

In testimony whereof I have hereunto affixed my signature this 8th day of December,
A. D. 1886.

JOSHUA PUSEY.

Witnesses:

JNO. NOLAN,
FRANCIS S. BROWN.