(No Model.)

J. PUSEY.

TOBOGGAN.

No. 386,413. Patented July 17, 1888.

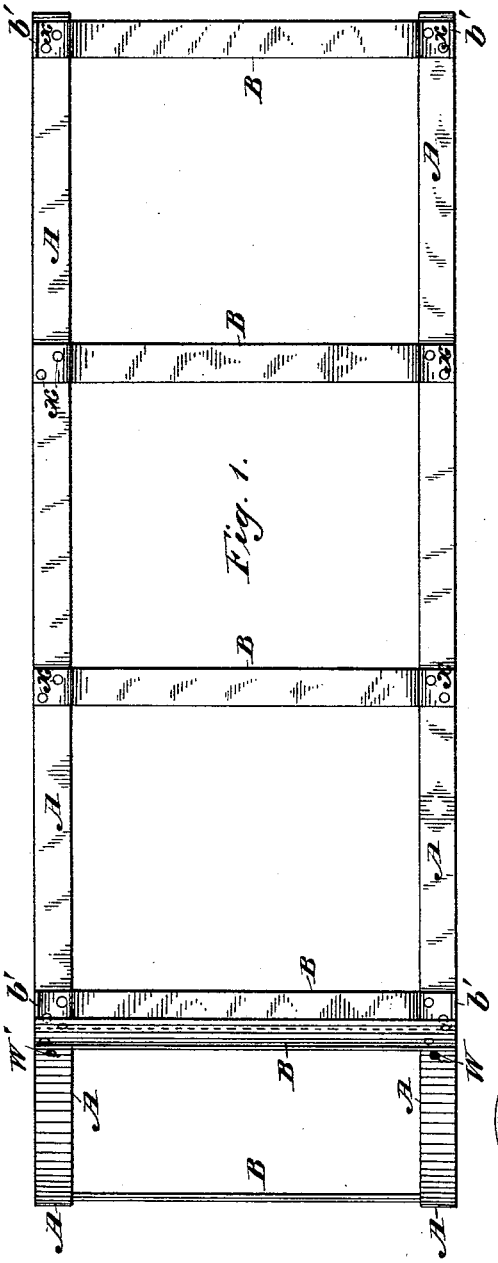

Fig. 1.

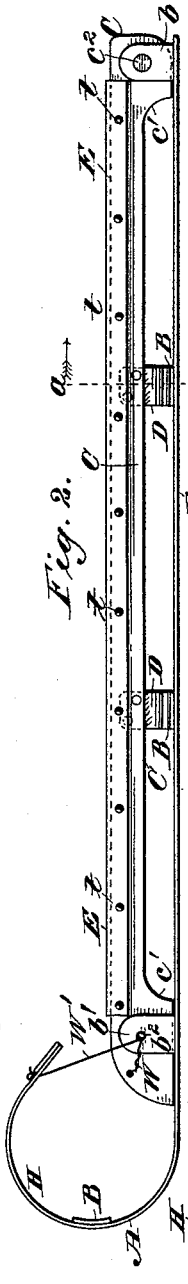

Fig. 2.

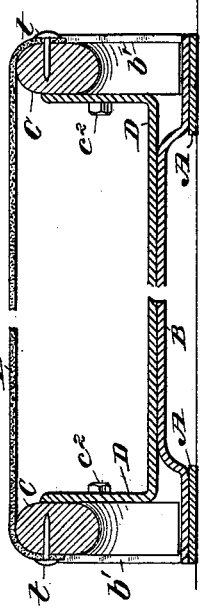

Fig. 4.

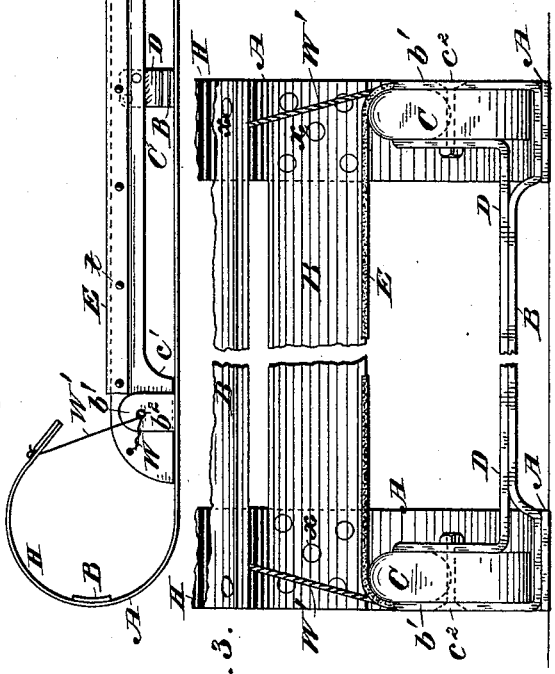

Fig. 3.

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TOBOGGAN.

SPECIFICATION forming part of Letters Patent No. 386,413, dated July 17, 1888.

Application filed August 11, 1887. Serial No. 246,659. (No model.)

To all whom it may concern:

Be it known that I, JOSHUA PUSEY, a citizen of the United States, residing at 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—

Figure 1 is a plan view with seat removed. Fig. 2 is a side elevation with seat in place. Fig. 3 is a rear end view, the "hood" being broken off at the top. Fig. 4 is a section on line *a b*, Fig. 2.

This invention relates to that class of coasting-vehicles known as "toboggans;" and it consists, first, in what may be termed a "skeleton toboggan," formed of two or more longitudinal flexible elastic or spring strips or runners of iron or steel turned up at the front, with similar cross-bars riveted or otherwise firmly secured to said runners, the parts of the cross-bars between the runners being bent up or arched above the level of the runners, so as to escape any ordinary obstructions upon the trackway, and also to secure a vertically and transversely elastic or springy connection, thereby forming a toboggan not only strong and light, but one possessing flexibility and resiliency practically in all directions, whereby it will adapt itself to the surface upon which it is running, and also, in a large measure, yield to, yet resist, sudden shocks to which a toboggan is liable. These are the primary objects of my invention.

The invention further consists in the combination, with a toboggan-body of the foregoing construction, of a combined seat and hand-rails, such as hereinafter described, composed of a frame-work of two flexible rails and cross-bars, to which rails is secured a flexible fabric extending across between the same, whereby the said frame-work, &c., may adapt itself to the movements or flexions to which the toboggan is subject when in use.

The invention consists, further, in an improved seat for toboggans, composed of an elastic frame-work, the sides of which are flexible hand-rails, to which is secured a flexible fabric—such as leather, canvas, carpeting, &c.—the same being, when in position, suspended over and above the bottom or body of the toboggan.

The invention relates, finally, to certain details of construction, which will be hereinafter fully described, and particularized in suitable claims.

The improvements relating to the said seat are applicable to the usual and well-known toboggans, and are not confined to the particular form of toboggan shown in the drawings.

Referring now to the drawings hereunto annexed, in which the same reference-marks always refer to the same or corresponding parts, A are two runners composed of elastic strips of iron or steel—say an eighth of an inch thick and one and a quarter inches wide, more or less—bent up at the forward end, like the hood of the ordinary toboggan. These runners are held in place—say fifteen or sixteen inches apart—by means of cross-bars B, also of elastic strips of steel similar to the runners, and which are fastened to the runners by rivets *x*, Fig. 1. These bars, excepting those across the hood, are in the first place bent up, as seen in Figs. 3 and 4, between the runners, so as to allow a considerable space—say two inches—between the under side of said bar and the surface upon which the runners rest, and also to secure an elastic arched connection between said runners. In the second place they, or rather, by preference, the first and rear ones on the plane portion of the runners, are made longer than the extreme width of the toboggan, and are bent up, as at *b'*, at right angles, so as to form a support or point of attachment, *b'*, for the usual hand-rails, or for the seat and hand-rails, such as hereinafter described. The latter (that is one form thereof) is constructed as follows: Two rails, C, preferably of hickory or other strong and flexible wood, are secured together by means of angle-bars D, which are bolted to rails C, thus forming a firm yet elastic frame-work whose width from outside to outside is somewhat less than that between the upturned ends of the cross-bars B, so as to fit between the same. I prefer to provide the rails with downward projections *c'*, and to pivotally secure the rear end of the frame-work to the rear one of the upturned ends of the cross-bars by means of a bolt, c^2, the front

end being held in place laterally by means of the upturned ends b' of the forward cross-bar, and vertically by means of a wire or cord, W, fastened in a hole, b^2, in said cross-bar. In this way the movement of the said frame-work will be largely independent of that of the toboggan, which, as previously stated, is flexible. The hood H may also be secured to said cross-bar by a wire or cord, W'.

The angle-bars D rest upon the bottom of the toboggan, or in the present instance upon the cross-bars B, as seen. To these side rails are fastened by means of tacks *t*, or otherwise firmly secured, a strip, E, of strong leather, canvas, carpeting, or like flexible material, (or it may be also elastic,) which is thus suspended over and above the bottom of the toboggan, as seen in Figs. 3 and 4. This constitutes a sufficiently soft, simple, and efficient seat for the tobogganers and one that may be made much more cheaply than the usual cushions. It is also capable of adapting itself to the various flexuous movements of the elastic skeleton. The corners of the tops of rails C are preferably rounded, as shown, the inner ones so that when the fabric sags down, as it will more or less, and thus tends to keep the tobogganers from sliding off laterally, no uncomfortable sharp edges are presented. It will be obvious, however, that the seat may be applied to the usual forms of toboggans, (and be sold separately therefrom,) such as the slat-toboggans, in which case it may be placed between and secured to the hand-rails thereof, or they may be removed, or the seat may be applied to the paper-board toboggans, such as described in my Letters Patent No. 359,741, issued March 22, 1887.

I am aware of the fact that coasting-vehicles with seats elevated above the runners, thus leaving a space between the under side of the seats and the surface beneath, are old; also, that a frame-work with a flexible fabric—such as carpeting, duck, &c., stretched across the same for seats or supports in connection with various articles—has long been used.

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

1. The herein-described skeleton toboggan, consisting of a frame-work composed of elastic runners formed of strips of steel or other suitable metal and the flexible elastic cross bars or strips secured thereto.

2. The combination, with a skeleton toboggan constructed of elastic runners and flexible elastic cross bars or strips secured thereto, of a yielding seat having a frame provided with elastic side rails which rest directly on the runners, substantially as described.

3. The combination of the skeleton toboggan consisting of the steel or iron runners and cross-bars secured thereto, the side rails, the angle-bars resting upon said cross-bars, and the flexible fabric secured to said side rails and suspended between the same, substantially as and for the purpose described.

4. As a new article of manufacture, a seat for toboggans composed of the flexible side rails, transverse connecting-bars provided with angular ends, the said angular ends being attached to the side bars, and the sheet of flexible fibrous materials secured to the tops of said side rails, substantially as described.

In testimony whereof I have hereunto affixed my signature this 5th day of August, A. D. 1887.

JOSHUA PUSEY.

Witnesses:
JNO. NOLAN,
FRANCIS S. BROWN.