(No Model.)

T. M. RICHARDS.

REVERSIBLE TOBOGGAN SLIDE.

No. 512,326. Patented Jan. 9, 1894.

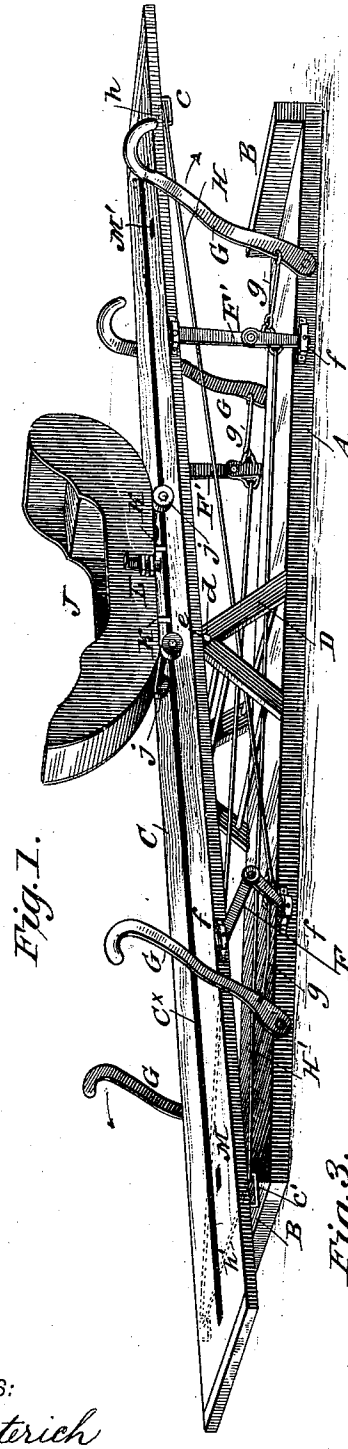

Fig. 1.

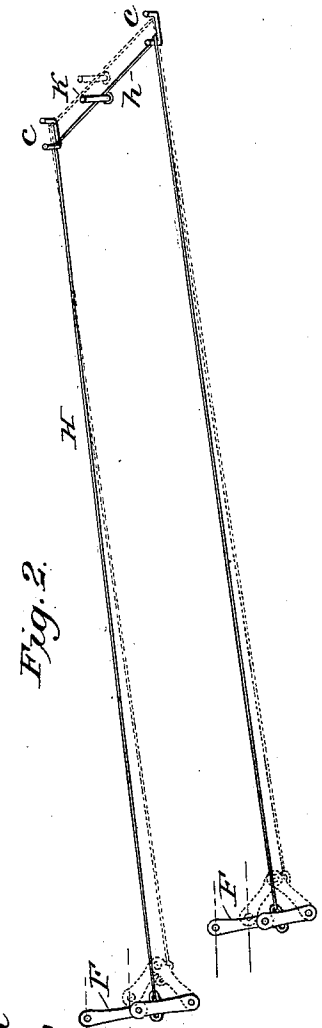

Fig. 2.

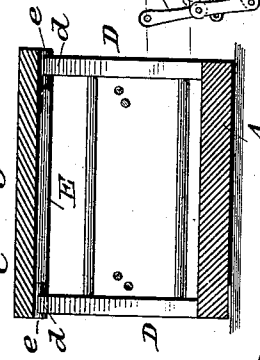

Fig. 3.

WITNESSES:

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THOMAS M. RICHARDS, OF EBENSBURG, PENNSYLVANIA.

REVERSIBLE TOBOGGAN-SLIDE.

SPECIFICATION forming part of Letters Patent No. 512,326, dated January 9, 1894.

Application filed May 2, 1893. Serial No. 472,728. (No model.)

To all whom it may concern:

Be it known that I, THOMAS M. RICHARDS, residing at Ebensburg, in the county of Cambria and State of Pennsylvania, have invented a new and Improved Reversible Toboggan-Slide, of which the following is a specification.

My invention relates to toboggan slides and it refers more particularly to a slide of this character especially adapted for children's use, and it has for its object to provide a slide simple and inexpensive in its construction, effective for its desired purpose, which can be used in a room, and which can be set or manipulated by a small child, and while capable of producing the exciting and enjoyable toboggan slide sensation will be entirely free from danger.

To these ends the invention consists in the peculiar combination and novel arrangement of parts, all of which will be hereinafter described in the specification and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved slide apparatus. Fig. 2 is a detail view, illustrating the toggle lever releasing device hereinafter particularly referred to, and Fig. 3 is a detail transverse section illustrating the slide or platform support.

My improved apparatus comprises a base board A, which in practice may be from six to twenty feet long, at the ends of which are arranged transversely across the top, straps B, B, which form the stops or bottom supports for the slide platform C. This platform as will be noticed by reference to Fig. 1, is of a somewhat greater length than the base board and is centrally fulcrumed or pivoted in the upper or socket ends *d* of truss supports D, a cross piece E having journals *e*, being preferably secured on the under side of the platform C, and such journals seated in the upper ends of the supports D as clearly shown in Fig. 3. This platform C is further connected to the base board A, near its opposite ends, by means of toggle or knuckle arms F, the ones at the front end being somewhat shorter than those at the rear end, for a purpose presently explained. These arms F it should be stated, have in practice the usual rule joint connection, whereby they are capable of bending out in one direction and are held from movement in the opposite direction, when moved to their vertical position, and the free ends of such arms are pivoted in bails *f f* on the sides of the board as shown.

Hand levers G are pivoted to the base board A, and arranged in front of the arms F, their upper ends extending up above the platform C while the lower ends are connected by a flexible cord or chain *g* with one, (preferably the lower) of the arms F, said levers being connected to the arms F in such a manner that when they are swung in the direction indicated by the arrows they will serve to draw the arms F to their vertical position.

Near each end of the platform C on its under side, is arranged a pair of guide bails *c c'* in which are held to slide the transverse members *h h'* of the oppositely movable tripper or pull bars H H' the arrangement and operation of which will be clearly understood by reference to Fig. 2. It should be stated however that such trippers are arranged to operate to trip the levers F, which form, as it were, the lifters. To this end, the free ends of rods H are secured to the lower arms F at a point opposite to their connection with the levers G. The platform C has a central longitudinal slot or way $C^{\times}$ which extends nearly from end to end thereof.

J indicates the car which may be of any ordinary construction, preferably as shown, the support or carriage wheels *j j* of which straddle the slot $C^{\times}$. This car is held from leaving the platform C by guard pieces K, K, which project down from the bottom of the car through the slot $C^{\times}$, as clearly shown in the drawings. At one side the car is provided with a slide bolt L which is adapted to engage either one of the sockets M M', at opposite ends of the platform C.

The manner in which my improved apparatus operates is best explained as follows: It will be noticed that when the platform C is inclined as in Fig. 1 the bar *h'* of the tripper H' will be at the inner edge of the bails *c'*, while the bar *h* of the tripper H will be at the outer edge of the bails *c;* in this position the lever arms F will be bent inward, while the longer arms F are extended, such adjustment of the lever arms F, elevating the rear end of the platform C, while its front end is at its lowermost position and resting on the

front cross piece B. Now as the car J descends, as it nears the end of the slot $C^{\times}$ its front guard finger K will engage the arm h' and thereby pull upon the tripper rods H' and thereby double up the long lever arms F', and in consequence lower the rear end of the platform. The occupant of the car by then pulling inward on the adjacent hand levers G will straighten the levers F and thereby raise the front end of the platform C, while the rear end will remain down, against the rear stop B, effecting thereby a reverse incline. It will be noticed that as the finger pieces engage the bars $h\,h'$, and as such bars have a limited movement, they (the bars) will serve as bumpers, to relieve the shock incident to the stoppage of the car at the end of each slide.

It is obvious that in the practical construction suitably arranged spring buffers may be employed to overcome the shock at the end of the movement of the car.

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

1. A reversible toboggan slide, comprising a base or support, a platform pivoted midway on such support, toggle levers connecting the opposite ends of the said platform with the base, and hand levers pivoted at their lower ends to the base, and connected with the toggle levers, substantially in the manner and for the purpose described.

2. In an apparatus as described, in combination, a base board or support, a platform centrally pivoted thereon, toggle arms connecting the opposite ends of the platform with the base support, the car movable on the platform and tripper rods connected to the toggle arms, and arranged to be engaged by the car, and moved to trip such toggle arms substantially in the manner and for the purposes described.

3. In an apparatus as described, the combination with the base A, and the tilting platform C mounted thereon, said platform longitudinally slotted as at $C^{\times}$, of the toggle arms F, F, the tripper rods H, H, the levers G, pivoted to the base A and secured to the arms F, and car J, having guard pieces K, K, projected through the slot $C^{\times}$, said pieces adapted to engage the tripper rods H, H, when the car reaches the end of each movement, substantially as and for the purpose described.

4. The combination of the base A, having cross strips B, B, at its ends, the platform C, longitudinally slotted as at $C^{\times}$, and having lock notches M, M', the bails $c\,c'$, secured at opposite ends of such platform, the tripper rods H, H', having their cross arms movable in such guides, the toggle arms F, the handle levers G, the car J, having guard fingers projecting through slot $C^{\times}$ and the lock or detent L, all arranged substantially as shown and for the purpose described.

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

THOMAS M. RICHARDS.

Witnesses:
W. R. THOMPSON,
E. J. LUTHER.