Sept. 19, 1950 A. H. NORMANDIN 2,523,052

COASTER WITH DETACHABLE SKI RUNNER

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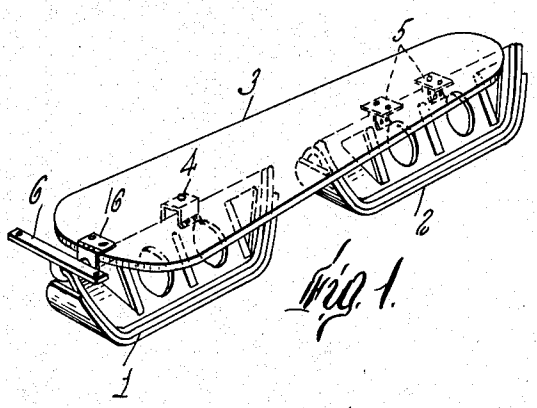


Fig. 1.

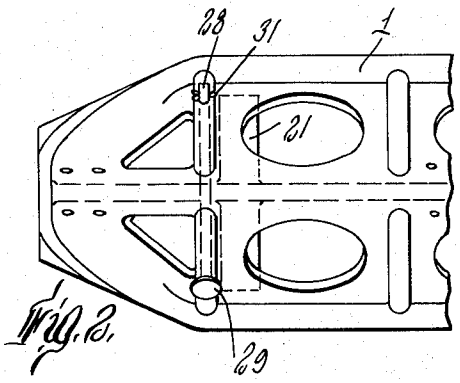


Fig. 2.

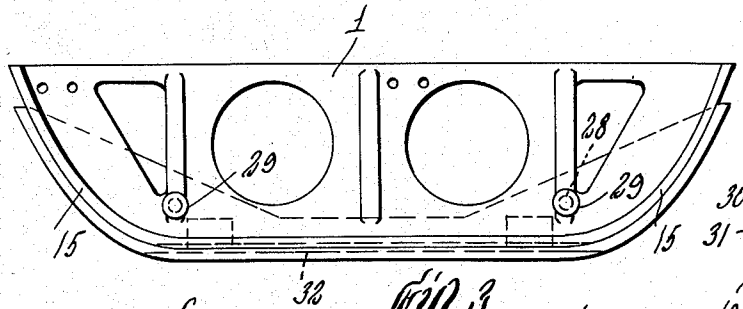


Fig. 3.

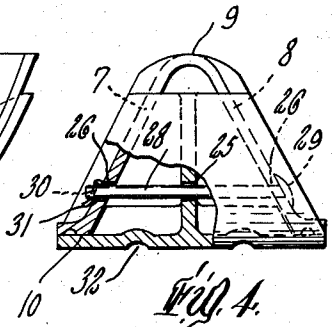


Fig. 4.

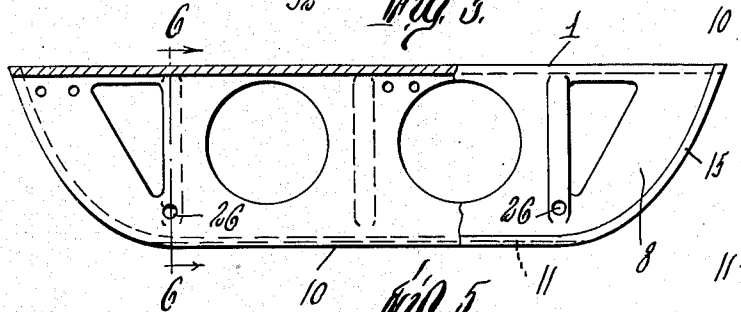


Fig. 5.

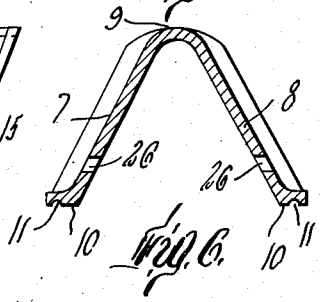


Fig. 6.

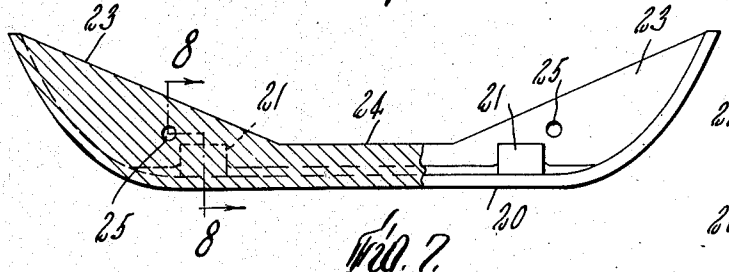


Fig. 7.

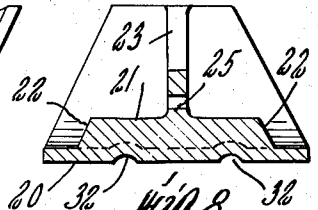


Fig. 8.

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COASTER WITH DETACHABLE SKI RUNNER

Alfred H. Normandin, Natick, Mass.

Application August 18, 1948, Serial No. 44,903

2 Claims. (Cl. 280—28)

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This invention relates to coasters, and more particularly to coasters of the type shown in my application for United States Letters Patent Serial No. 752,174, filed June 3, 1947, for Coaster. This coaster includes a pair of sled members, each being of inverted V formation and presenting a pair of laterally spaced parallel runner elements along opposite edges, each of these runner elements being relatively narrow and curved upwardly toward each other at opposite ends.

In accordance with the present invention a detachable ski simulating runner may be attached to each sled bridging and secured to both of its runners, thus presenting a broad runner surface well adapted to support the coaster on soft snow.

When the coaster is to be used on a harder surface, these ski runners may be removed, whereupon the spaced runners of the sled are in position to support the coaster.

For a complete understanding of this invention, reference may be had to the accompanying drawings in which

Figure 1 is a perspective view of the coaster showing the ski runners attached.

Figure 2 is a fragmentary top plan view of one of the sleds showing the ski runner in position thereon.

Figure 3 is a side elevation of one of the sleds with ski runner attached.

Figure 4 is an end elevation of the same with parts broken away and in section.

Figure 5 is a side elevation of the sled, the ski runner being removed.

Figure 6 is a sectional view on line 6—6 of Figure 5.

Figure 7 is a view partly in side elevation and partly in central vertical section of the ski runner.

Figure 8 is a detail sectional view on line 8—8 of Figure 7.

Referring to the drawings, particularly Figure 1, the coaster as shown comprises a pair of spaced sleds 1 and 2 supporting a board or platform 3. The forward sled is pivoted to the platform as on the pivot 4 in order to provide means for steering the coaster and the rear sled 2 is preferably rigidly secured to the platform 3 at spaced points as shown at 5.

The forward sled 1 has its forward end provided with a steering bar 6 to facilitate steering the coaster. Each of the sleds is of inverted V formation, having a pair of side walls 7 and 8 downwardly and outwardly inclined from a central apex portion 9 and terminating at their lower ends in a pair of parallel spaced runners

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10. These runners may be provided with longitudinal grooves 11 in their lower faces. The forward, and preferably also the rear ends, of both sleds are upwardly turned as at 15 so that the runners in the up-turned portions incline inwardly toward each other as they approach the apex 9. The forward end of the platform 3 may be provided with a pivoted and notched element 16 which may be lowered to engage the forward upper portion of the steering sled in order to lock it against steering when this is desired. These spaced parallel sled runners are relatively narrow and thus will not support the coaster on light snow. To provide for better support under these conditions these runners may be bridged by a ski runner shown detached in Figures 7 and 8. It is formed with a tread portion 20 of a width to bridge across the sled runners 10 and curved upwardly and narrowed at its ends to conform to the contours of the end portions of the sled runners. Intermediate to these ends, it is provided with upwardly extending elements 21 having inclined outer faces 22 arranged to engage between the inner faces of the sled runners 7 and 8, thus locating the ski runner with its tread portion in bridging relation to the sled runners. It is also provided adjacent to its ends with a web 23 which preferably extends from the upper ends of the ski runner downwardly inclined toward a central extension 24 of the web so that the web is continuous from end to end of the ski runner. At suitable points the ski runner web 23 is provided with transverse perforations 25 which are arranged opposite to perforations 26 through the runners 7 and 8, so that these runner and web openings are in alinement with each other. Means such as bolts 28 may be inserted through these mating perforations, each bolt 28 being provided with a head 29 at one end and a transverse perforation 30 at its opposite end for the reception of a cotter pin 31. These bolts 28 act to removably retain the ski runners in position on the sled runners when this is desired, but by removing the cotter pins 31, it is an easy matter to remove the bolts 28, thus to detach the ski runners when it is not desired to use them.

It will thus be seen that the ski runners provide means for properly supporting the coaster on loose snow and by removing these ski runners, the coaster is provided with runners adapted to support it for operation on a harder sliding surface.

As shown the lower face of the ski runner may be provided with longitudinal grooves 32 which

aid in gripping the loose snow for steering purposes and tend to prevent side slip.

From the foregoing description of an embodiment of this invention, it should be evident to those skilled in the art that various changes and modifications might be made without departing from its spirit or scope.

I claim:

1. In combination with a sled member of inverted V formation having a pair of spaced parallel runners, the ends of said runners being curved upwardly and inclined inwardly toward each other, of a ski runner bridging said sled runners and matingly curved upwardly and narrowing at its ends, said ski runner having parts engaging the inner walls of said sled member for locating the ski runner with respect to said sled runners, and means for removably securing said ski runner to said sled member.

2. In combination with a sled member of inverted V formation having a pair of spaced parallel runners, the ends of said runners being curved upwardly and inclined inwardly toward each other, of a ski runner having a tread portion bridging said sled runners and matingly curved upwardly and narrowing at its ends, said ski runner having upwardly extending elements intermediate its ends having inclined outer faces engageable between the inner faces of said sled runners, and with a web having a central portion and inclined end portions extending from the central portion to the ends of said ski runner, said web having holes therethrough and said sled runner having holes alined with said web holes, and fastening means extending through said web and sled runner holes to secure said ski runner to said sled member.

ALFRED H. NORMANDIN.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
83,339	Thurston	Oct. 20, 1868