

No. 731,925.

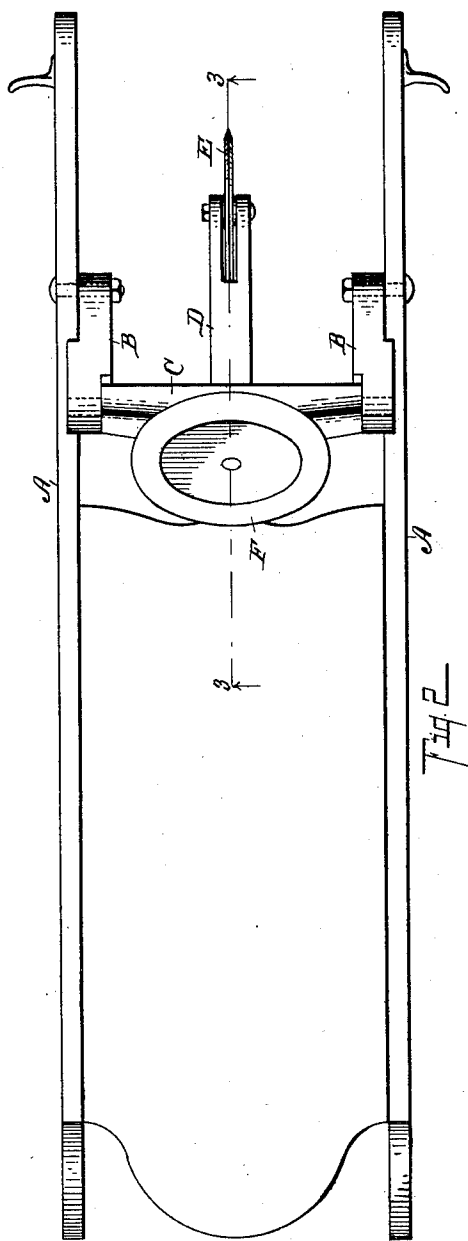
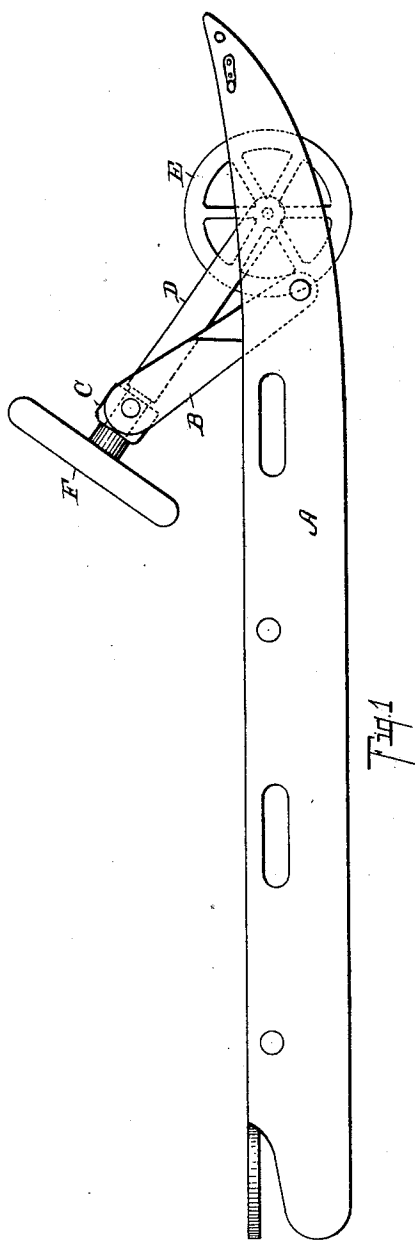
PATENTED JUNE 23, 1903.

W. A. MARQUA.  
SLED.

APPLICATION FILED MAR. 17, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses:

*Ethel A. Tiller*  
*Otto C. Earl*

Inventor,

*William A. Marqua*  
By *Frederick L. Chappell*  
Att'y.

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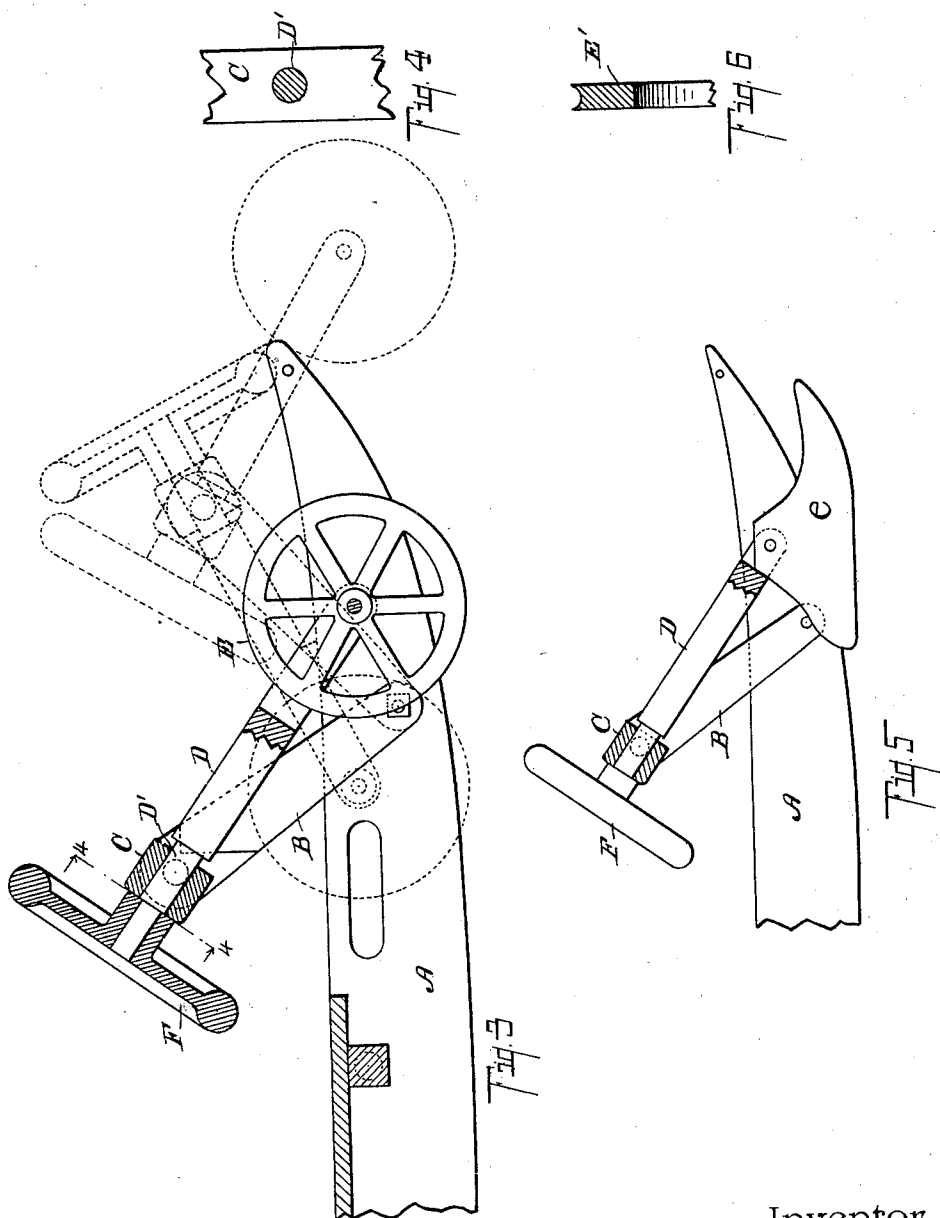
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2 SHEETS—SHEET 2.



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Att'y.

# UNITED STATES PATENT OFFICE.

WILLIAM A. MARQUA, OF CINCINNATI, OHIO.

## SLED.

SPECIFICATION forming part of Letters Patent No. 731,925, dated June 23, 1903.

Application filed March 17, 1903. Serial No. 148,188. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM A. MARQUA, a citizen of the United States, residing at the city of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Sleds, of which the following is a specification.

This invention relates to improvements in sleds.

It relates particularly to improvements in steering mechanisms therefor.

The objects of the invention are, first, to provide an improved steering mechanism by which a sled can be effectively guided without materially retarding the same; second, to provide an improved steering device for sleds which is easy to operate and attractive in appearance; third, to provide an improved steering device for sleds which can be operated by an inexperienced person without danger.

Further objects and objects relating to details of construction will definitely appear from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

The invention is pointed out in the claims.

A structure embodying the features of my invention is illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation view of a sled embodying my invention. Fig. 2 is a plan view of the same. Fig. 3 is a detail sectional view taken on line 3 3 of Fig. 2. Fig. 4 is a detail sectional view taken on line 4 4 of Fig. 3. Fig. 5 is a detail view of a modification, a runner *e* being substituted for the wheel E. Fig. 6 is a detail sectional view of a modified form of the wheel E, the rim of the same being grooved instead of blade-like.

In the drawings the sectional views are taken looking in the direction of the little arrows at the ends of the section-lines, and similar letters of reference refer to similar parts throughout the several views.

Referring to the lettered parts of the drawings, the sled is of the usual construction of coasting-sleds or may be of any desired construction.

Pivoted between the forwardly-projecting

sides of the runners A of the sled are links B. A cross-bar C is journaled in the upper ends of the links B. Supported by a suitable bearing on the cross-bar C is a shaft D. The shaft D preferably is bifurcated at its lower end to receive the steering-wheel E and is provided with a hand-wheel F at its upper end. The rim of the steering-wheel E is preferably formed comparatively sharp, so that it readily engages the snow or ice with very little pressure. It is evident that by means of the hand-wheel F the steering-wheel may be freely manipulated. The pivoted support for the steering-wheel E permits its complete adjustment, so that it readily passes an obstruction without any danger of throwing its rider. If desired, the steering-wheel may be placed in the forward position, as illustrated in Fig. 3, when the sled is to accommodate two or more persons.

In the modified construction shown in Fig. 5 a blade-like runner *e* is provided. This structure possesses many desirable features, but lacks many of the advantages of the steering-wheel E.

In the modified construction shown in Fig. 6 the rim E' of the steering-wheel is grooved instead of being thin. The wheel thus constructed has some advantage in being less liable to be unnecessarily forced into the snow, thereby causing the sled to swerve more than it was desired by the operator.

My improved steering device is economical to produce and may be attached to any of the ordinary coasting-sleds now in use. It is very efficient in use, as well as being attractive in appearance, and may be used by an inexperienced person with perfect safety. I have illustrated and described the same in the form preferred by me on account of the simplicity of construction, though I am aware that it is capable of considerable variation in structural details without departing from my invention.

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

1. The combination with a sled of links B B pivotally secured toward the forward end of the runners thereof; a cross-bar C pivotally supported on said links; a shaft D having a suitable hand-wheel supported in a suitable

bearing on said cross-bar; a steering-wheel E having a narrow rim carried by said shaft, all coacting for the purpose specified.

2. The combination with a sled of links B B  
5 pivotally secured toward the forward end of the runners thereof; a cross-bar C pivotally supported on said links; a shaft D having a suitable hand-wheel supported in a suitable bearing on said cross-bar; a steering-wheel  
10 carried by said shaft, all coacting for the purpose specified.

3. The combination with a sled of a pivoted cross-bar; a pivoted support therefor; a shaft carried by said cross-bar having a suitable

hand-wheel; a steering-wheel carried by said shaft, for the purpose specified. 15

4. The combination with a sled of a pivoted cross-bar; pivoted supports for said cross-bar; and a steering member pivotally supported on said cross-bar, for the purpose specified. 20

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

WILLIAM A. MARQUA. [L. S.]

Witnesses:

JOHN E. JONES,  
L. M. JONES.