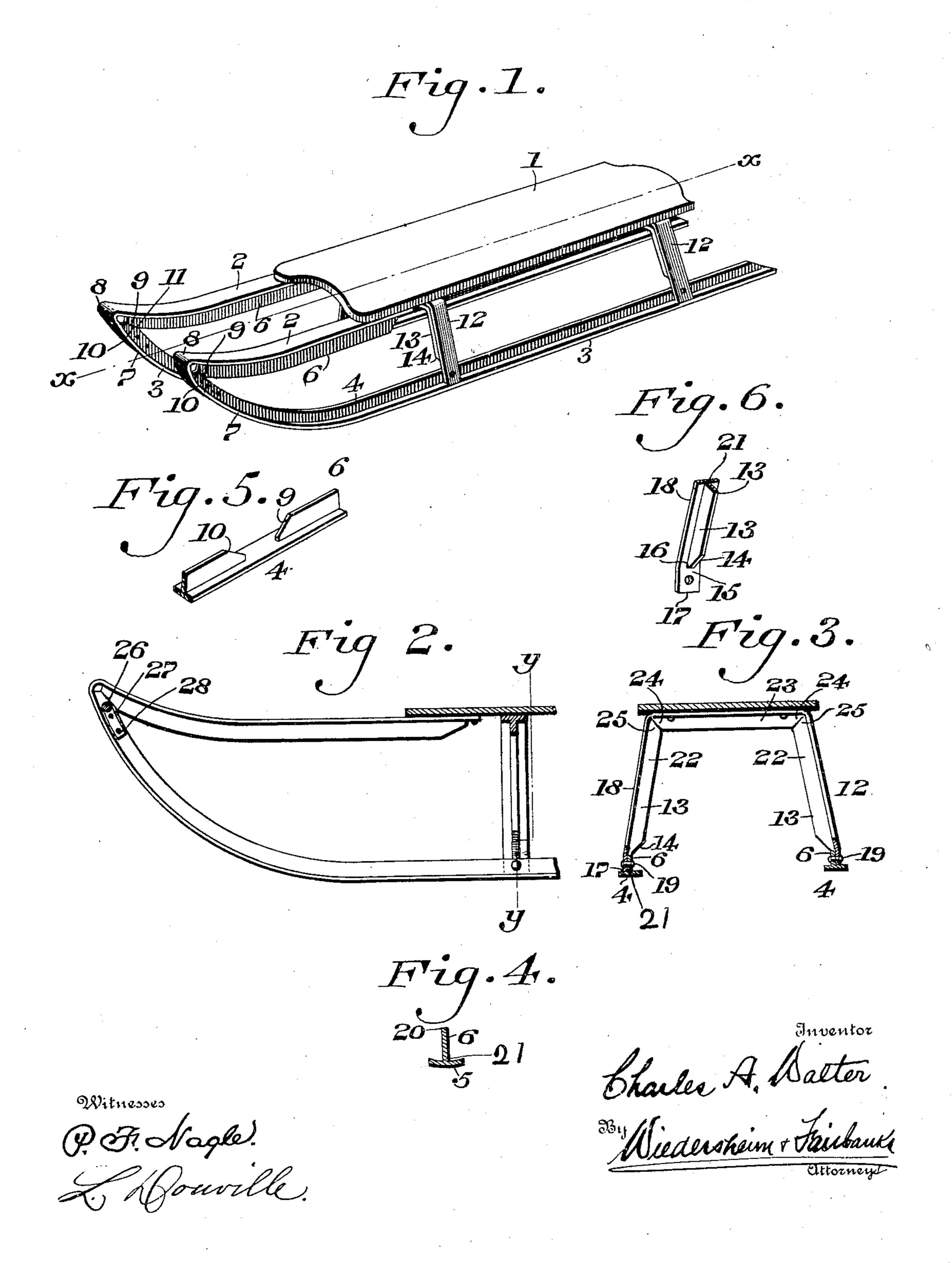
## C. A. WALTER. SLED.

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## United States Patent Office.

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## SLED.

SPECIFICATION forming part of Letters Patent No. 792,368, dated June 13, 1905.

Application filed October 25, 1904. Serial No. 229,991.

To all whom it may concern:

Be it known that I, Charles A. Walter, a citizen of the United States, residing at Duncannon, in the county of Perry, State of Pennsylvania, have invented a new and useful Sled, of which the following is a specification.

My invention relates to a sled, and is more particularly intended for that type of sleds intended for coasting purposes, although it may manifestly be used in sleds of any type.

The object of my invention is to increase the strength and at the same time improve the appearance.

A further object of my invention is to stiffen the front of the sled, supporting the top upon the runner by a novel construction.

A further object of my invention is to stiffen a sled-brace particularly at the point of attachment to the runner.

A further object of my invention is to improve the joint between the brace and runner.

Figure 1 is a perspective view of a "jumper" embodying my invention with the front bar removed for clearness of illustration. Fig. 2

25 is a broken longitudinal section on line xx of Fig. 1, but including the front bar omitted therefrom. Fig. 3 is a section upon line yy of Fig. 2. Fig. 4 is a modified form of runner. Figs. 5 and 6 are broken perspective views of the front before bending and of the brace, respectively.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings, 1 designates the 35 top or seat of a sled, which is secured to rearward extensions 2 2 from the front end of the runners 3 3. These extensions and runners are formed in a single piece upon each side from T-steel, having base 4. (Shown as flat 4° in all of the figures excepting Fig. 4, in which it is shown in curved form at 5.) A central | web 6, extending from flange 4, stiffens the bars and at the same time forms a ready means of attachment for the braces and supports the 45 top at the front bend, as hereinafter described. The runners are upwardly curved at 77 in the usual manner. At the point at which the bends 8 8 are to take place the central flange 6 is cut away in the form shown in Fig. 5, so 1

that the portion actually bent consists of the 50 flange 4 in each case. Web 6 is so shaped at 9 10 that when the bend is completed these edges coöperate to support the rearward extension at 9 upon the upper part of the runner at 10, a single point of contact 11 being 55 of advantage, but full contact of the parts preferable.

The seat is secured to the runners at another point or at other points by means of a brace or braces 12, also preferably formed of 60 T-steel and having web 13 partially cut away at 14 and wholly removed at 15, leaving a shoulder 16, adapted to make contact with the top of the web 6 at the same time that the end 17 of the flange 18 touches the flange 4. This 65 extension of the flange 18 beyond the point where web 13 is entirely removed makes it possible to secure this flange 18 against the outside of the flange 6 by means of rivets 19 or any other suitable fastener in the manner 70 illustrated, so that the weight upon the sled is supported by flange 4 and web 6. The neutral axis of the T-steel lies in the web 6 at a point between the flange 4 or 5 and the edge 20, passing through a point 21 and in line 75 with the web 6 in the position shown. This T-steel being supported in line with this axis has no tendency to bend by reason of longitudinal strain thereon, and the legs 22 of the brace may be made so nearly perpendicular 80 as to remove danger of spreading of the sled and bending the joint from this cause. The bend in the T-steel by which the legs are united to the central bar 23 may be made so gradually as not to require the removal of 85 material or may be formed, as shown in Fig. 3, by the removal of a portion of web 13 along lines such that the edges of the remaining parts will meet at 24 25, as shown.

Between the upper front portions of the 90 runners I attach a cross-bar 26 to web 6 by means of strip 27 and bolts or rivets 28.

It will be evident that various changes may be made by those skilled in the art which will come within the scope of my invention, and 95 I do not, therefore, desire to be limited in every instance to the exact construction herein shown and described.

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

Patent, is—

1. In a sled, an upwardly-curved runner of T-section lacking the web at the upper extremity thereof and an integral rearward extension, the upper portion of the runner and the front portion of the extension coöperating adjacent their junction to form a support for the latter.

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2. In a sled, the combination of a T-shaped runner and a transverse T-shaped brace secured by its flange to the outer side of the runner-web and having the web of the brace extending inwardly against the top of the 15 flange.

CHARLES A. WALTER.

Witnesses:

B. STILES DUNCAN,

P. F. Duncan.