

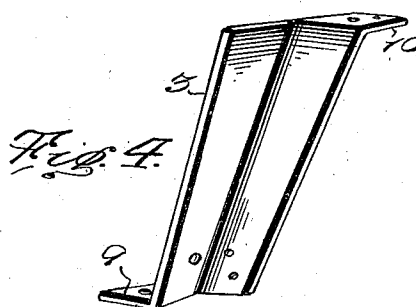
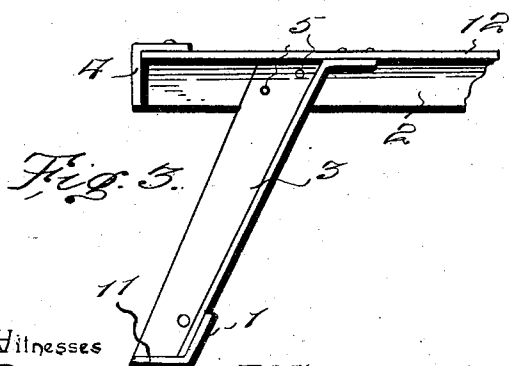
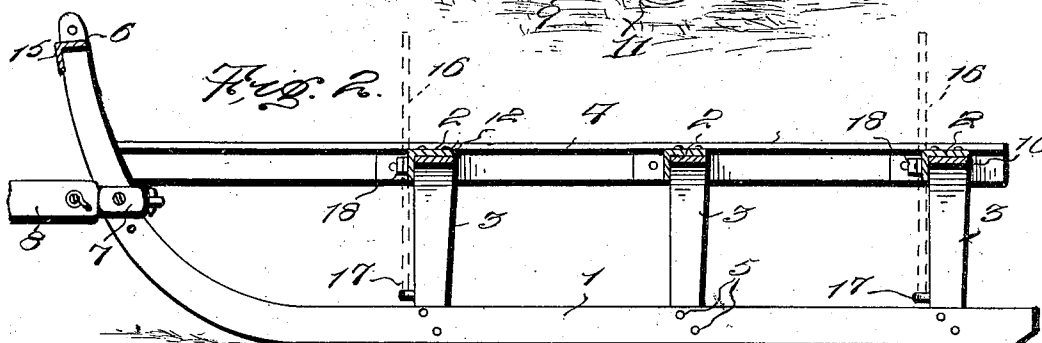
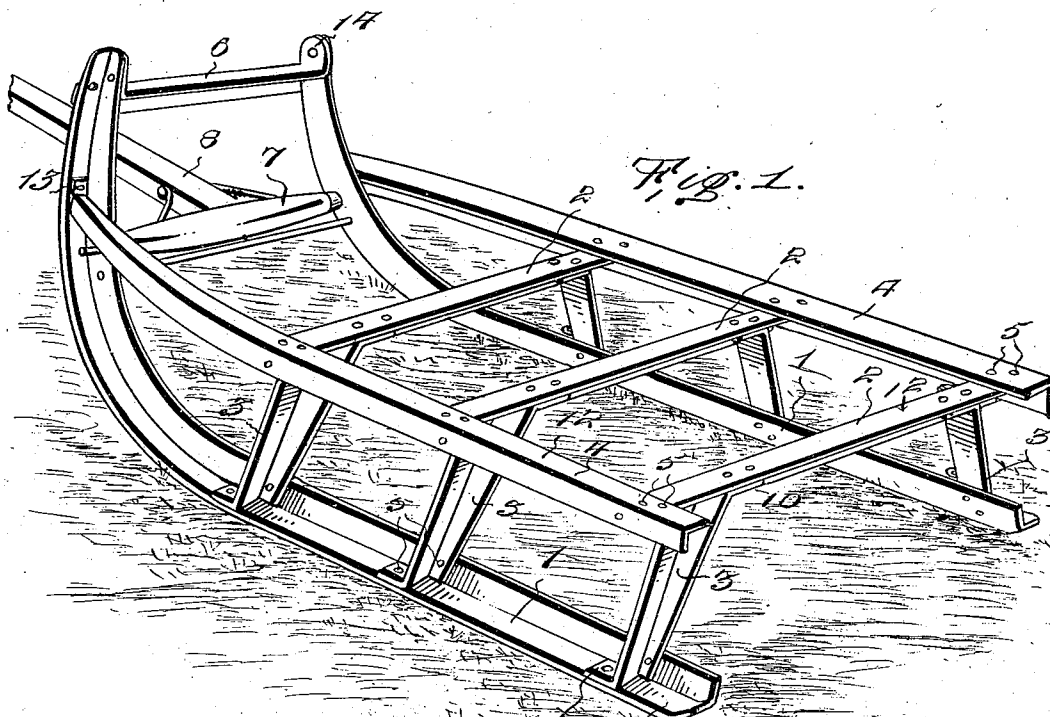
No. 703,914.

Patented July 1, 1902.

P. R. GWYN.
SLEIGH.

(Application filed Jan. 9, 1902.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

PETER R. GWYN, OF DELMONT, PENNSYLVANIA.

SLEIGH.

SPECIFICATION forming part of Letters Patent No. 703,914, dated July 1, 1902.

Application filed January 9, 1902. Serial No. 89,049. (No model.)

To all whom it may concern:

Be it known that I, PETER R. GWYN, a citizen of the United States, residing at Delmont, in the county of Westmoreland and State of Pennsylvania, have invented a new and useful Sleigh, of which the following is a specification.

This invention relates to sleighs.

The object is to present a sleigh-frame constructed wholly of metal which shall be but slightly heavier than an ordinary wood and iron frame, but which shall possess strength and rigidity far in excess of sleigh-frames generally in use.

With these and other objects in view as will appear as the nature in the invention is better understood, the same consists of the novel construction and combination of parts of a sleigh-frame, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like numerals of reference indicate corresponding parts, there is illustrated one form of embodiment of the invention capable of carrying the same into practical operation, it being understood that the elements therein exhibited may be varied or changed as to shape, proportion, and exact manner of assemblage without departing from the scope of the invention, and in the drawings—

Figure 1 is a view in perspective of a sleigh-frame characterizing this invention. Fig. 2 is a view in longitudinal vertical section. Fig. 3 is a fragmentary detail end view. Fig. 4 is a perspective detached detail view of one of the knees.

Referring to the drawings, 1 designates the runners; 2, the benches; 3, the knees, and 4 the fenders. All of these parts are to be made of L angle-iron and held assembled by bolts or rivets, (designated generally 5.) The runners are curved upward at their front in the usual manner and are held against spreading by a cross-brace 6, bolted or riveted to the terminals of the runners, and suitably connected with the front portion of the runners is a roller-hound 7, carrying a tongue 8. It will of course be understood that, if preferred, shafts may be connected with the runners, and, as this will be obvious, detailed illustration thereof is deemed unnecessary.

Each of the knees 3 is provided at its terminals with an outturned toe 9 and 10, respectively, the toe 9 being secured to the bottom flange 11 of the runner and the toe 10 to the top flange 12 of the bench, the said toes being disposed at right angles to each other to permit attachment to the parts described. The two flanges of the knee are shown herein as gradually widening toward the top thereof, and by this arrangement added strength is imparted to the knees; but it is to be understood that, if preferred, these flanges may be of the same width throughout their entire length and still be within the scope of the invention. The fenders 4 are secured to the outer ends of the benches, and the forward terminal of each is bolted or riveted to the bottom flange of the runner at 13, thereby operating firmly to brace the curved ends of the runners against yielding to the strain imparted thereto in the use of the sleigh. The cross-brace 6 has its terminals split and bent to form two toes, one of which, 14, is secured to the upper terminal of the runner and the other, 15, to the front portion of the said terminal, thereby serving to brace the runners firmly against any tendency to spread at those points.

In constructing a sleigh-frame according to the present invention the knees are riveted or bolted to the bottom and side flanges of the runners, and then the benches are rigidly assembled with the upper terminals of the knees in the manner described, after which the fenders are positioned upon the ends of the benches, and finally the cross-brace 6 is secured in place. The sleigh-frame thus presented is adapted for connection with an ordinary sleigh-body of the "cutter" or "basket" type. Should it be desired to employ the sleigh-frame for lumbering purposes or as a bob-sled, side stanchions 16 (indicated by dotted lines in Fig. 2) may be passed through keepers 17 and 18, carried, respectively, by the lower portion of the knees and the outer portion of the benches adjacent to the fenders, and as these stanchions may readily be removed it will be an easy matter to convert the structure from an ordinary bob-sled to a pleasure-sleigh merely by the addition of a body.

As the strength of angle-iron is well known,

it will readily be seen that a sleigh-frame constructed in the manner herein described will be light and exceedingly strong, and by the manner in which the parts are assembled it
5 will be thoroughly braced to meet strains both lateral and endwise.

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

- 10 1. A sleigh - frame comprising runners, benches and fenders rigidly assembled, and knees provided at each terminal with an out-turned toe, one of which is secured to the bottom flange of the runner and the other to
15 the under side of the benches, the flanges of the knees gradually increasing in width from the runners to the benches, all of the parts being constructed of L angle-iron, substantially as and for the purpose specified.

2. A sleigh-frame comprising runners having upturned ends connected by a cross-brace, fenders having one terminal secured to the upturned portion of the runners, benches secured to the fenders, and knees secured to the runners and to the benches, the flanges
25 of the knees gradually increasing in width from the runners to the benches, all of the parts of the structure being made of L angle-iron, substantially as and for the purpose specified. 30

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

PETER R. GWYN.

Witnesses:

THOMAS WADDELL,
H. C. WADDELL.