R. G. BRITTON.

SLEIGH-KNEES.

No. 180,535. Patented Aug. 1, 1876.

Fig: 1.

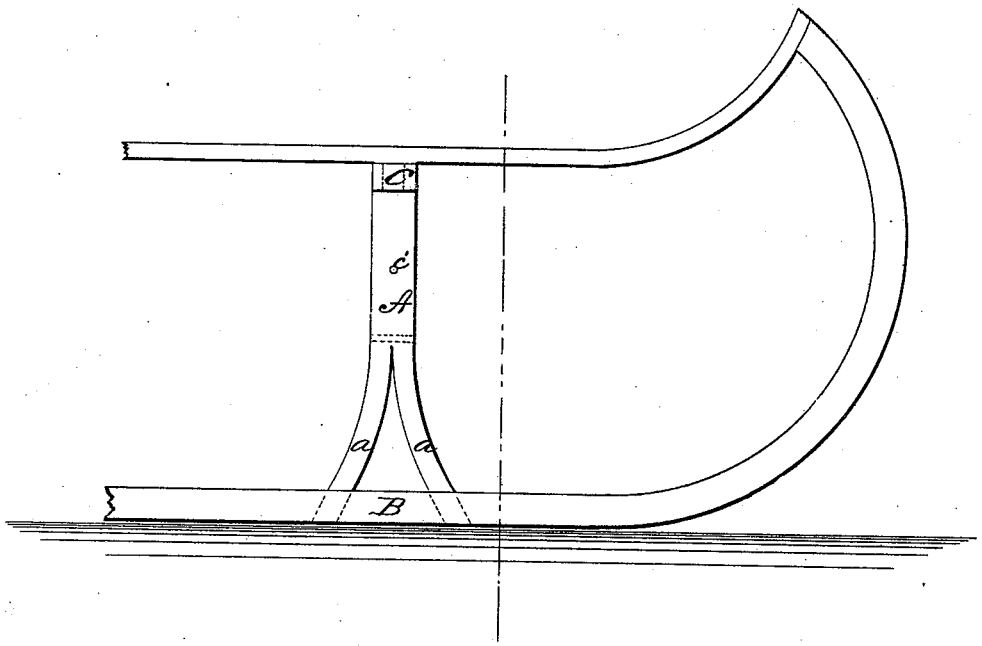
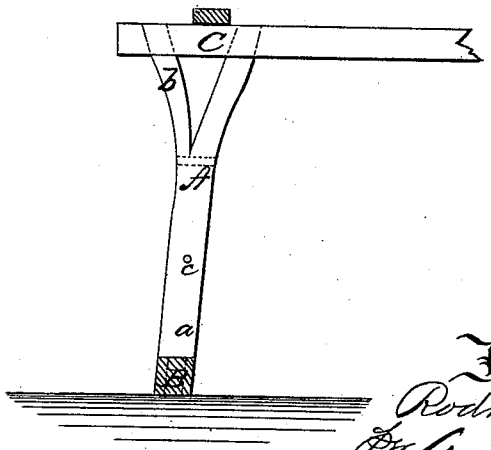


Fig: 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

RODNEY G. BRITTON, OF SPRINGFIELD, VERMONT.

IMPROVEMENT IN SLEIGH-KNEES.

Specification forming part of Letters Patent No. **180,535**, dated August 1, 1876; application filed June 28, 1876.

To all whom it may concern:

Be it known that I, RODNEY G. BRITTON, of Springfield, in the county of Windsor and State of Vermont, have invented a new and useful Improvement in Sleighs; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making part of this specification.

This invention is in the nature of an improvement in sleighs, sleds, &c.; and the invention consists in a sleigh or sled constructed with posts sawed and bent at their ends in different planes, forming, respectively, braces and supports for the runners and for the cross-beams, substantially as is hereinafter more particularly described.

In the accompanying sheet of drawings, Figure 1 is a side view of my invention; and Fig 2, a rear end view of same, partly in section.

Similar letters of reference indicate like parts in both figures.

As is well known, the weakest points in a sled or sleigh are at the junction of the posts with the runners and cross-beams, and to strengthen these weak points it is customary to use iron braces, which add not only to the cost of the sleigh, but add to its weight, and, in some instances, offer resistance to the free passage of the sleigh through the snow. To obviate these difficulties I construct my sleigh with the posts A with the lower end thereof, that is secured to the runner B, in the form of a double brace, *a a*. This is formed by sawing the end of the post upward any desirable length, steaming it, and spreading the ends open, as shown in Fig. 1. The upper end of the post A, or that end which is secured to the cross-beam C, is spread in like manner, forming braces *b b*, or, rather, forming one brace, *b*, which is bent outward from the post A, as shown in Fig. 2. This is accomplished by a saw-kerf made in the end of the post, but in a plane at right angles to the saw-kerf that is made in the lower end of the post, steaming the post, and bending out the brace *b*, as shown in Fig. 2. Suitable rivets *c c'* are passed through the post A to stay the upper end of the saw-kerf from splitting the post. The ends of the braces *a a*, as well as the brace *b* and the upper end of the post A, are then fitted in any desirable manner in suitable mortises or other holes formed in the upper edge of the runner B and the under side of the cross-beam C, thereby securing the posts to the sled or sleigh. The braces thus formed from the post itself not only afford greater stability than would otherwise be the case, but, since the post has two points of contact in the runner and two points of contact in the cross-beam, greater stiffness or firmness is afforded to the sleigh or sled to which such posts are attached.

It is obvious that, instead of spreading and bending the braces *b* and *a*, they may be sawed out of the ends of the posts; but this latter would be a more expensive method of producing the braces, though substantially the same in effect.

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

In a sleigh or sled, posts from which are bent braces in different planes, substantially as and for the purposes described.

RODNEY G. BRITTON.

Witnesses:

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