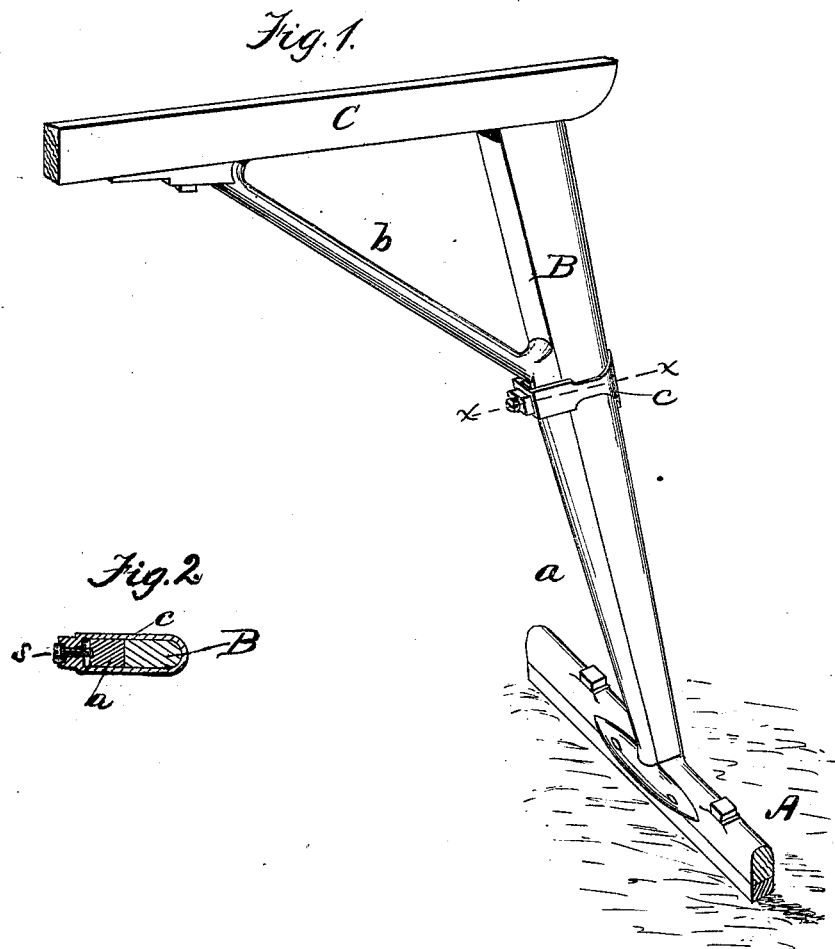


G. M. PROCTER.

ATTACHING BRACES TO SLEIGH-KNEES.

No. 186,017.

Patented Jan. 9, 1877.



Witnesses;
Gronville Lewis
J. M. Kenny.

Inventor
Geo. M. Procter.
By Hill, Ellsworth & Spear
His Atty.

UNITED STATES PATENT OFFICE.

GEORGE M. PROCTER, OF GORHAM, MAINE.

IMPROVEMENT IN ATTACHING BRACES TO SLEIGH-KNEES.

Specification forming part of Letters Patent No. 186,017, dated January 9, 1877; application filed May 17, 1876.

To all whom it may concern:

Be it known that I, GEORGE M. PROCTER, of Gorham, in the county of Cumberland and State of Maine, have invented a new and useful Improvement in Sleighs; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 represents a perspective view of my invention; and Fig. 2 a sectional view through the line *x x*, Fig. 1.

My invention relates to the attachment of braces to studs or posts in the frame of sleighs of the lighter kinds; and consists of a special construction and combination hereinafter fully set forth and particularly claimed.

In the drawing which accompanies this specification, A is a section of the runner; B, the post or stud; C, the beam resting thereon; *a*, the lower part of the brace fixed to the stud, and *b* the inclined portion, which braces the beam and stud.

It is well understood that the object aimed at in the construction of sleighs is to combine the greatest possible strength with the least possible weight. Heretofore the brace, which, for greater strength, is made to extend from the point of contact with the stud to the runner of the sleigh, has been fastened to the stud by rivets through both. This necessarily weakens both the iron and the wood by reason of the perforation, and that, too, at a point—that of the junction of the brace with the stud—where the greatest strength is needed. Attempt has been made to remedy this by a clip passing over the stud and brace and through ears on the latter, being held thereto by nuts on the threaded ends of the

clip. This, though it avoided the loss of strength by cutting the stud and brace, was clumsy in appearance and expensive.

I have attempted to remedy these defects in the following manner: Instead of a clip, or of bolts, I make a band in the manner shown in the drawing at *c*. This band is formed to fit the stud and brace, and on the inner side is made thicker, and has a threaded screw-hole, through which a set-screw, *s*, passes, the end of it resting in a small shallow hole sunk in the inside of the brace. I have represented the brace as made with a small square section for the better accommodation of the band, and a hole for the screw, the band being formed to correspond to the shape of the stud and brace.

The stud and brace being of tapering form, the band may be driven on with any desirable amount of force.

The band must be brought into such position that the hole in the band may come directly over that in the brace, when the screw is inserted, which tightens and holds the whole securely in place.

In other respects the stud and brace are of ordinary construction.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

An improvement in sleighs, consisting of the stud, the brace extending down along the stud, and the clip, embracing both at the point of juncture of brace and stud, and held in place by a set-screw, as shown and described.

GEORGE M. PROCTER.

Witnesses:

ANDREW JOHNSON.
LEMUEL A. REED.