

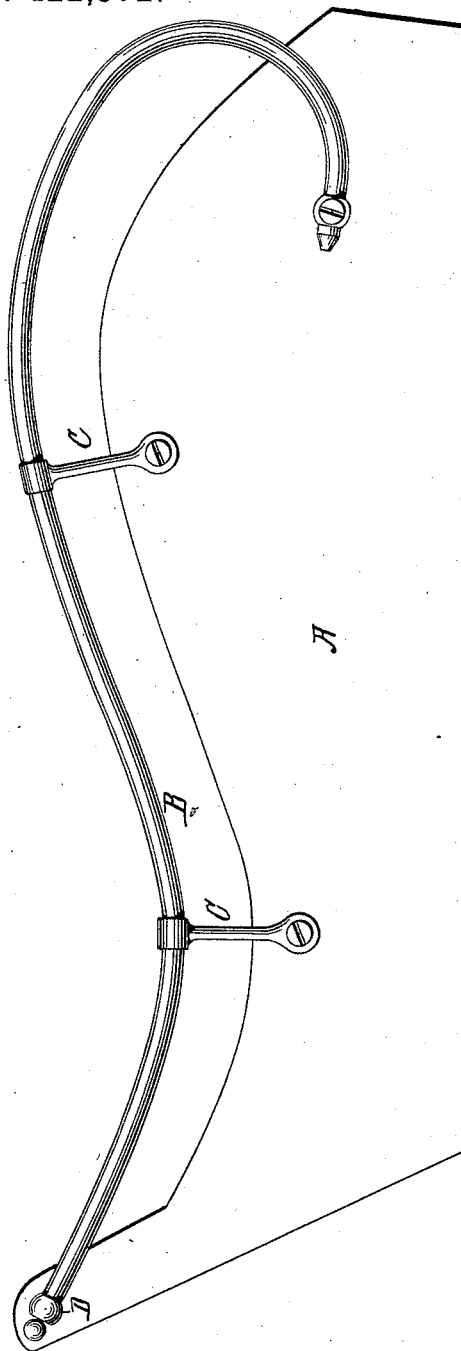
(No Model.)

G. S. CALDWELL.  
HAND RAIL FOR SLEIGHS.

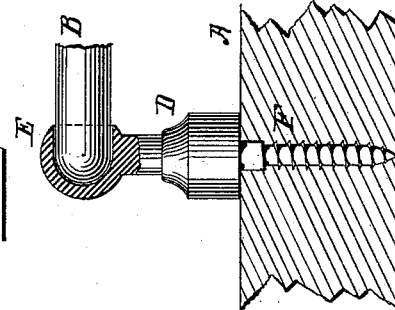
No. 422,372.

Patented Mar. 4, 1890.

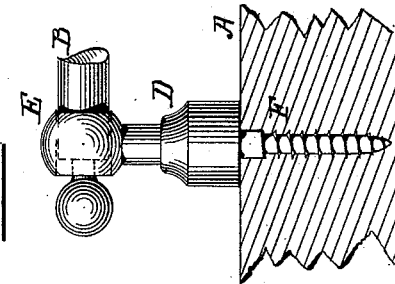
*Fig. 1.*



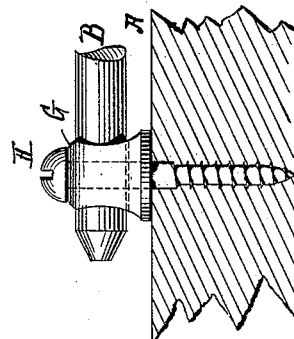
*Fig. 2.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

GEORGE S. CALDWELL, OF AUBURN, NEW YORK.

## HAND-RAIL FOR SLEIGHS.

SPECIFICATION forming part of Letters Patent No. 422,372, dated March 4, 1890.

Application filed December 2, 1889. Serial No. 332,200. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE S. CALDWELL, of Auburn, Cayuga county, New York, have invented a new and useful Improvement in Hand-Rails for Sleighs, of which the following is a specification.

My invention relates to the curved metal hand-rail commonly employed on sleighs and cutters, and more particularly to the construction of the devices for holding said rail in place.

In the accompanying drawings, Figure 1 is a side elevation of a side of a sleigh, showing my improved hand-rail in place. Fig. 2 is an enlarged detail view showing the device for securing the upper end of the rail. Fig. 3 is a similar view showing the device for securing the lower end of the rail. Fig. 4 is a modification of the device represented in Fig. 2, in which the end of the rail is received in a socket and does not go through the supporting-post.

Similar letters of reference indicate like parts.

A represents the side of the cutter or sleigh, and B represents the wire rail applied thereto. Said rail is supported at its middle portion by brackets C, secured to the side A, through which brackets the rail B passes. These brackets may be of any convenient shape or form.

D is a post having a head E, in which head there is an opening which receives the upper end of the rail B. At the lower end of said post is provided a screw F, which enters the side of the sleigh and secures the post thereto. In Fig. 2 the opening in the head E of the post D extends entirely through it, and the end of the rail B, passing through said opening, terminates in a ball or other ornamental figure. In the modification of this device shown in Fig. 4 the head E is made cup-shaped and the end of the rail B rounded to fit in said cup as in a socket.

G is the post which receives the lower end of the rail B. This post has a transverse opening through which the rail passes, as

shown in Fig. 3; also in said post is a vertical aperture which receives the screw H. The said screw passes down through the post G and through an opening in the end of rail B and enters the side A of the sleigh, so that the effect of the screw H is to fasten the rail B and post G tightly together and to secure both to the side A.

By the above-described construction I attach the rail to the side of the sleigh in a very neat, simple, and strong manner, and also in a way which is comparatively inexpensive by reason of the few fastening-pieces required.

I claim—

1. In combination with the side of a conveyance—such as a sleigh—a rail having an aperture near one extremity, a post having a transverse opening and receiving one end of said rail therein, a second post having a vertical and a transverse opening and receiving in said latter opening the other end of said rail, and a screw or bolt passing through the said vertical opening in said last-named post, the aperture in said rail, and uniting said post and rail to said side, substantially as described.

2. In combination with the rail B, the post G, having an opening receiving said rail, and the screw H, passing through said post and said rail, substantially as described.

3. The combination of the rail B, post D, post G, and screw H, the said post D receiving one end of said rail, the said post G the other end, and the screw H passing through the post G and rail B, substantially as described.

4. The combination of the rail B, supporting-brackets C, post D, post G, and screw H, the said post D receiving one end of said rail, the said post G the other end, the brackets C supporting the middle portion of said rail, and the screw H passing through the post G and rail B, substantially as described.

GEORGE S. CALDWELL.

Witnesses:

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