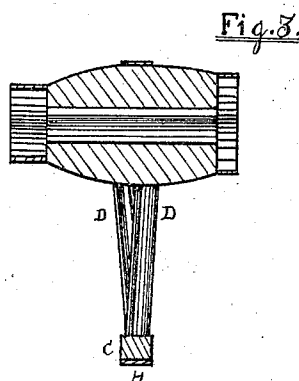
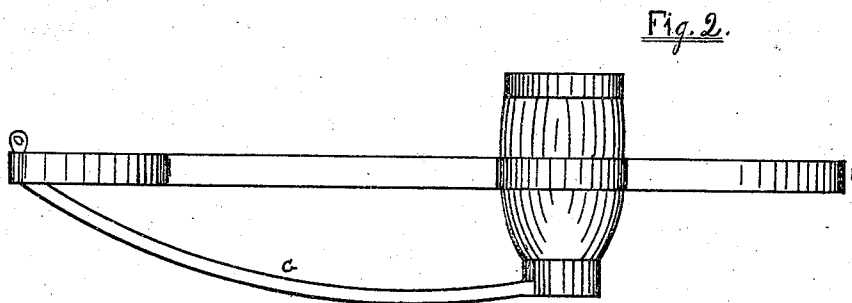
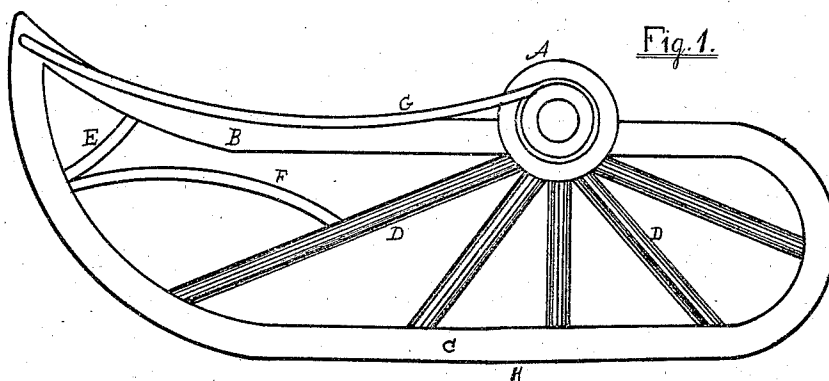


C. CHENETTE.
Sleigh Runners.

No. 134,977.

Patented Jan. 21, 1873.



WITNESSES:

Wm. Anderson.
Thos. Jewell

INVENTOR:

Christophe Chenette
By his Attorney J. Dennis Jr

UNITED STATES PATENT OFFICE.

CHRISTOPHE CHENETTE, OF MANCHESTER, NEW HAMPSHIRE.

IMPROVEMENT IN SLEIGH-RUNNERS.

Specification forming part of Letters Patent No. 134,977, dated January 21, 1873.

To all whom it may concern:

Be it known that I, CHRISTOPHE CHENETTE, of Manchester, Hillsborough county, in the State of New Hampshire, have invented certain new and useful Improvements in Sleigh-Runners to be applied to the axles of carriages; and I hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawing forming part of this specification.

The nature or essence of my invention consists in the particular construction, combination, and arrangement of devices, forming the improvements in sleigh-runners to be applied to the axles of carriages, described in the following specification and represented in the accompanying drawing.

In the accompanying drawing, Figure 1 is a side elevation of a sleigh-runner with my improvements. Fig. 2 is a plan or top view; and Fig. 3, a vertical section on the line $z z$ of Fig. 1.

In the above-mentioned drawing, A is a hub, made of wood and hooped at each end, and mortised on one side to receive the end of the rail B, which is inserted in it, and extends forward and is bent up, as shown in Fig. 1, and fastened to the fore end of the sole B of the runner, which is turned up and joined to it. There is a series of arms or spokes, D D, inserted in the lower side of the hub A, and set bracing, as shown in Fig. 3, to make the runner stiff sidewise. These spokes are tenoned at their outer ends and inserted in the sole C, which is bent around in the form shown, and its rear end turned forward and inserted in the back side of the hub A. The brace E is inserted between the fore end of the sole C and the rail B, and the brace F between the sole C and the forward spoke D, and both as shown in the drawing. The guard G is fastened to the forward end of the sole C and rail

B and to the band on the outer end of the hub, and the fore end of the guard is perforated for a chain to connect it to the thill or some other part of the carriage to prevent the fore end of the runner from turning under in deep snow or cradle-holes in the road or path.

The rear end of the guard may be bent and perforated, so as to be fastened on the end of the axle, if preferred that way.

The tire H of the runner should be made to completely surround it and pass across the hub, and fastened to the rail and sole by bolts and screws.

This runner is to be applied to the axle of a carriage when the wheel is removed, so that the carriage may travel on runners instead of wheels.

What I claim as my invention and improvement in sleigh-runners to be applied to the axles of carriages is—

1. The sole C of the runner extended up, around, and over at the rear end, and inserted in the hub A of the runner, substantially as described.

2. The guard G, extending from the fore end of the runner to the outer end of the hub or axle, substantially as described.

3. In combination with the sole C, rail B, and hub A, the hoop-tire H extending entirely around the runner and hub, substantially as described.

4. In combination with the rail and sole, the braces E and F, arranged substantially as described.

5. In combination with the hub A and sole C, the spokes D D, set bracing between the hub and sole, substantially as described.

CHRISTOPHE CHENETTE.

Witnesses:

B. P. CILLEY,
E. P. RICHARDSON.