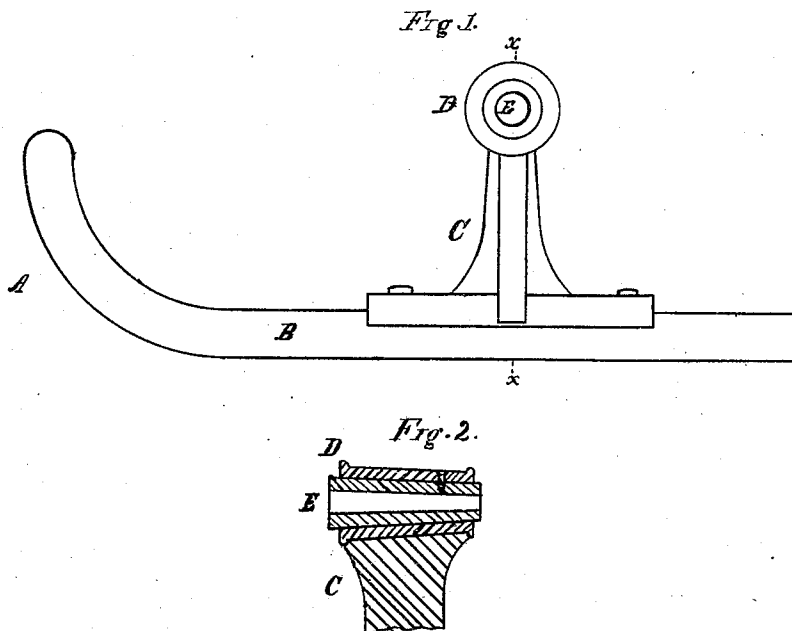


A. A. ABBOTT.
Sleighs.

No. 145,323.

Patented Dec. 9, 1873.



WITNESSES.

F. F. Warner
N. C. Gindley

INVENTOR.

Arthur A. Abbott

UNITED STATES PATENT OFFICE.

ARTHUR A. ABBOTT, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN SLEIGHS.

Specification forming part of Letters Patent No. **145,323**, dated December 9, 1873; application filed June 4, 1873.

To all whom it may concern:

Be it known that I, ARTHUR A. ABBOTT, of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Sleigh-Runner Attachments for Wheeled Vehicles, of which improvement the following is a full, clear, and exact description, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming a part of this specification, and in which—

Figure 1 represents a side elevation of an attachment of the class referred to provided with my improvement, and Fig. 2 a vertical cross-section in the plane of the line *x x* of Fig. 1.

Like letters of reference indicate like parts.

My invention relates to that class of sleigh-runners constructed for temporary attachment to the axle of wheeled vehicles in the place of the wheels.

Heretofore the runner-boxes in which the axle is journaled have been made of metal, and of various sizes, in order to adapt them to various axles, and for this reason manufacturers and dealers have either been obliged to keep a comparatively large assortment of runners, or to manufacture and sell them only after special orders have been received, or else the user has been obliged to fit the boxes to the axle on which they were to be arranged.

The object of my invention is to admit of all the runner-boxes being made of the same size, and of being readily and cheaply adapted to different axles; and to that end my invention consists in providing the runner-boxes with a wooden plug fitted therein, and either bored or not to receive the axle.

In the drawing, A represents a sleigh-runner attachment of the class above referred to. B is the runner. C is the knee, and D is the box which receives the axle. E is a wooden plug arranged in the box D, and fitted thereto, as shown. This plug is removable; but during transportation, and while the runner is being used, the plug is fastened to its box, in the manner shown, by means of a screw or pin, or other fastening.

It will be perceived, from the foregoing description, that all the runner-boxes may be made of the same size, and that the runners, when provided with the plug E, may be readily adapted to various vehicles.

The plug E may either be bored or not by the manufacturer. When bored, the bore in different plugs may vary in size, so that the dealers or manufacturers may deliver a set or more of runners adapted to the vehicle of the purchaser. When the plug is not bored, it is obvious that the purchaser may readily adapt it to receive the axle. By this means, only a comparatively small number of runners are required to be kept in store in order to meet the demands of the trade, the supply of plugs being sufficient to enable the seller to fill any order at once.

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

In combination with a sleigh-runner, a sleigh-knee, C, having box D, provided with plug E, substantially as and for the purpose set forth.

ARTHUR A. ABBOTT.

Witnesses:

N. C. GRIDLEY,
F. F. WARNER.