

W. KEALY.
SLEIGH RUNNER.
APPLICATION FILED FEB. 8, 1911.

1,059,613.

Patented Apr. 22, 1913.

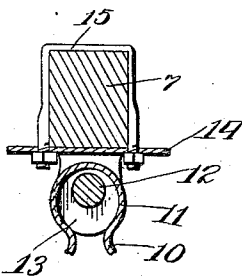
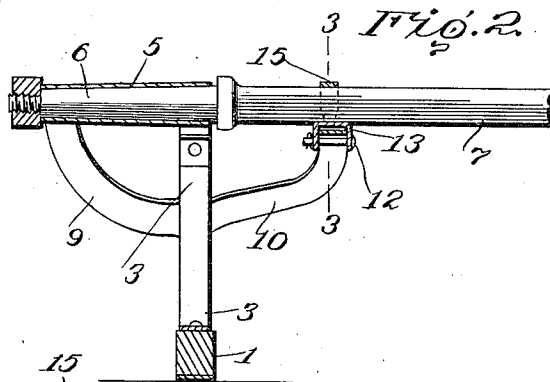
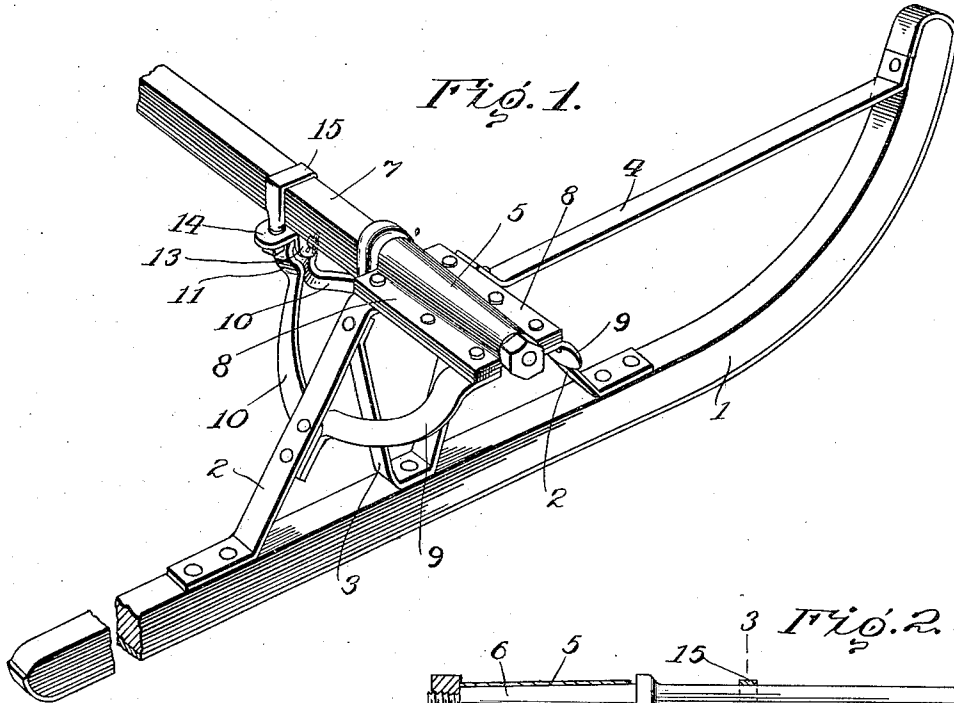


Fig. 3.

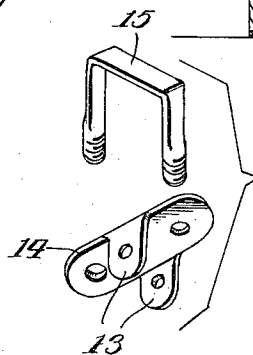


Fig. 4.

Witnesses
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WILLIAM KEALY, OF CHISHOLM, MINNESOTA.

SLEIGH-RUNNER.

1,059,613.

Specification of Letters Patent.

Patented Apr. 22, 1913.

Application filed February 8, 1911. Serial No. 607,307.

To all whom it may concern:

Be it known that I, WILLIAM KEALY, citizen of the United States, residing at Chisholm, in the county of St. Louis and State of Minnesota, have invented certain new and useful Improvements in Sleigh-Runners, of which the following is a specification.

This invention comprehends certain new and useful improvements whereby sleigh runners may be easily attached to the axles of wagons or other vehicles after the removal of the wheels, and the invention has for its primary object a simple and efficient construction of device of this character which will be strong and durable and so braced as to be well capable of withstanding heavy loads and the strains to which sleigh runners are necessarily subjected, the parts being so arranged that the load of the vehicle will be directly over the runner, and also so arranged that the runner will be permitted to have a slight play relative to the axle to which it is connected, whereby it will adapt itself to and compensate for the longitudinal tilting strains caused by striking a bump or uneven place in the road. And the invention also aims to generally improve this class of devices and to render them more useful and commercially desirable.

With these and other objects in view, as will more fully appear as the description proceeds, the invention consists of certain constructions, arrangements and combinations of the parts that I shall hereinafter fully describe and claim.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawing, in which:

Figure 1 is a perspective view of a sleigh runner embodying the improvements of my invention; Fig. 2 is a longitudinal sectional view of the runner; Fig. 3 is a detail transverse sectional view on the line 3—3 of Fig. 2; and Fig. 4 is a detail perspective view of a clip and its U-bolt that are used to fasten the runner attachment to the main portion of an axle.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawings by the same reference characters.

Referring to the drawing, the numeral 1 designates a sleigh runner which, of itself, may be of any desired construction and

shape, and 2 designates standards that are connected at their lower ends to the upper edge of the runner and that extend upwardly therefrom, converging upwardly toward each other, as clearly illustrated in Fig. 1. These standards are preferably reinforced by an inverted arch truss 3 connected at its ends to the standards near the upper ends of the latter and bolted or otherwise secured at an intermediate point to the runner 1. The foremost standard 2 is connected to the upper forward end of the runner 1 by a substantially horizontally extending stay brace 4.

A sleeve 5 consisting of upper and lower plates as shown, is mounted upon the spindle 6 of the axle 7, the plates forming said sleeve being formed with laterally projecting flanges 8 that are bolted together and to the upper ends of the standards 2, the sleeve projecting outwardly from the standards, whereby the weight of the vehicle body is supported directly over the runner. The outer end of the sleeve 5 is connected by lateral braces 9 with the respective standards 2 intermediate of the ends of the latter, and inner braces 10 are also secured, preferably at the same point, to the standards 2, curving inwardly and upwardly therefrom and joined together, preferably integrally in a transversely opening eye 11 designed to accommodate a pintle 12 which projects through the pintle ears 13 of a clip plate 14, the same lying underneath the substantially square portion of the axle 7, and being designed for attachment thereto by a U-bolt 15, as shown. It will be noted by reference to Fig. 2 that the ears 13 bear closely against the side edges of the brace member 11 at its inner upper end, and that the latter is prevented thereby from movement longitudinally of the axle, while free to move laterally of the axle to a limited extent. It will thus be understood that the runner, while effectually braced as against both lateral and breaking down strains or loads imposed upon the axle to which it is connected, will be permitted to have a slight tilting movement relative to the axle in a plane longitudinal of the vehicle, so that if the runner strikes any obstruction in the road, it will be permitted to give and not liable to become broken.

While the foregoing description and accompanying drawing disclose what I believe to be the preferred embodiment of my in-

vention, it is to be understood that the invention is not limited thereto, as various changes may be made in the construction, arrangement and proportions of the parts without departing from the scope of the invention as defined in the appended claim.

What I claim is:

A runner attachment comprising a runner proper, a standard mounted thereon, a sleeve mounted upon the standard, a brace attached at its ends to the standard and provided at a point intermediate its ends

with a bend forming an eye, a pintle received within the eye, a plate supporting the pintle, and means for securing the plate to an axle; the sleeve being adapted to receive the spindle of the axle.

In testimony whereof, I affix my signature in presence of two witnesses.

WILLIAM KEALY. [L. S.]

Witnesses:

A. McDONALD,

J. B. RAEKER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."