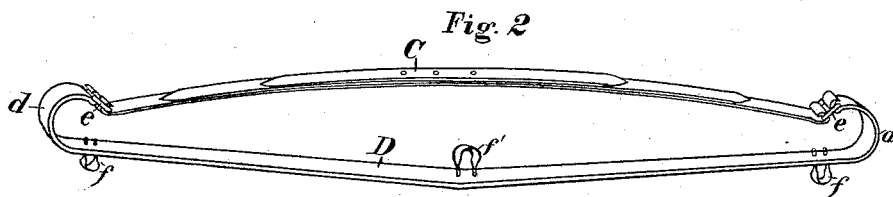
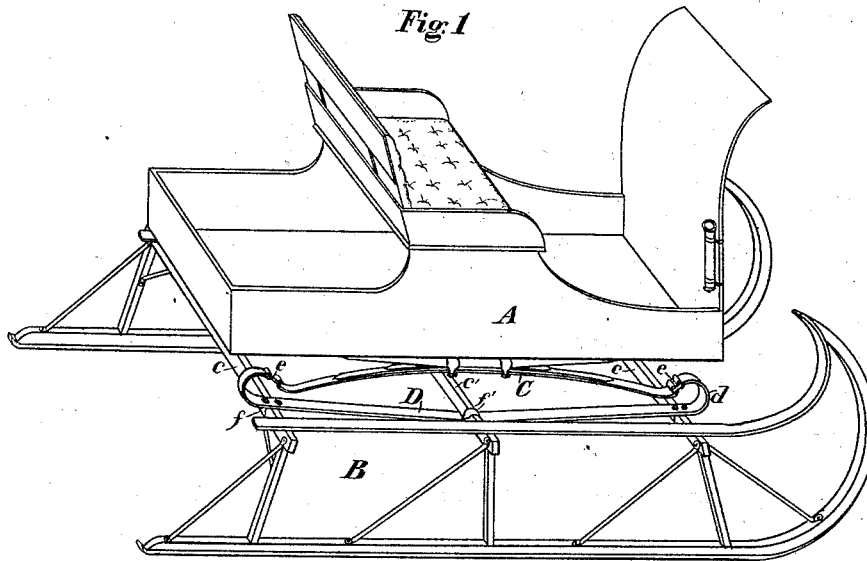


(No Model.)

W. F. MATHEWS.
SLEIGH.

No. 422,958.

Patented Mar. 11, 1890.



Witnesses

J. H. Bacon.
James E. Kennedy

Inventor

William F. Mathews

By an Attorney

P. M. J. Landers

UNITED STATES PATENT OFFICE.

WILLIAM F. MATHEWS, OF PLYMOUTH, MAINE, ASSIGNOR OF ONE-HALF TO
ABEL P. JEWETT, OF SAME PLACE.

SLEIGH.

SPECIFICATION forming part of Letters Patent No. 422,958, dated March 11, 1890.

Application filed December 30, 1889. Serial No. 335,439. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. MATHEWS, a citizen of the United States, residing at Plymouth, in the county of Penobscot and State of Maine, have invented a new and useful Improved Sleigh; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in that class of sleighs known as "jumpers," which are composed of sleigh-runners constructed to sustain and be attached to a carriage-body. The particular portion which my invention is designed to improve is the connection between the said carriage-body and sleigh-frame, by means of which the usual side springs may be retained, and thus produce a low and easy-riding vehicle.

Throughout the description reference is made to the accompanying drawings, forming part of the specification, in which—

Figure 1 represents an isometric view of a "jumper-sleigh" provided with my attachment. Fig. 2 shows a similar view of my invention with fastening-clips and side spring attached.

Similar letters of reference represent correspondingly like parts throughout both figures.

The object of my invention is to improve the manner of attaching carriage-bodies to sleigh-runners in that class of sleighs called "jumpers," by constructing an improved connection whereby the side springs can be retained and firmly fastened to the sleigh-frame in such manner as to improve and strengthen the latter, as will hereinafter be fully described.

Referring to Fig. 1 of the drawings, A represents a carriage-body having the side springs C attached in the usual manner.

B is the sleigh-frame, to which the body A is to be confined by means of my invention, which I will now describe, as follows:

A long flat metal rod D, preferably of steel, is fastened to the sleigh-frame B by means of clips $f f'$, passing around the cross-bars $c c'$, extending through holes drilled in the rod D and having nuts turned upon their

projecting ends. This rod D, which I will now term a "truss-hanger," is secured to the cross-bars $c c'$, near their ends, directly under the side spring C, and it extends over the top of the two outer cross-bars $c c$ and under the center cross-bar c' . The ends of the truss-hanger D are bent upward beyond their confinement with the outer cross-bars into a semicircular form, and terminate in small hooks adapted to receive and retain the usual coupling-links $e e$, which latter connect the ends of the truss-hanger with the ends of the spring C. By means of the coupling-links $e e$ better action is obtained from the side springs with less strain upon the vehicle, as will hereinafter be explained. Near the opposite ends of the cross-bars $c c'$, upon the opposite side of the sleigh-frame, a second truss-hanger constructed in the same manner is attached to the spring upon that side in exactly the same way as hereinbefore described. Thus the body A is completely attached to the sleigh-frame in a firm and rigid manner.

The principle of my device is as follows: Weight within the body A compresses the side spring C, which latter in bending presses outward against the curved ends $d d$ of the truss-hanger, and produces a longitudinal strain upon the latter. As the truss-hangers D are confined to the tops of the outer cross-bars and extend under the center cross-bar, they form complete trusses which receive the downward pressure of the body A and transform it into a longitudinal strain evenly distributed along the sleigh-frame. They also by being continuous rods confined to each cross-bar prevent the latter from spreading, and consequently lengthen the life of the sleigh.

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

1. An improvement in sleighs, consisting of a truss-hanger adapted to connect the side springs of a carriage-body to a sleigh-frame, and composed of a continuous metal rod fastened to the upper surface of the two outer cross-bars, passing under the center cross-bar, and having its ends curved upward and terminating in hooks adapted to receive and re-

tain the spring coupling-links, substantially as shown and described.

2. An improved sleigh, consisting of the combination of a carriage-body having side
5 springs attached and a sleigh-frame having usual cross-bars, with a truss-hanger for connecting the two, and consisting of a metal rod confined to and extending over the outer cross-bars and under the central cross-bar,

and having its ends curved upward and provided with means for attaching the coupling-links of the springs, for the purpose described, and substantially in the manner shown. 10

WILLIAM F. MATHEWS.

Witnesses:

WALTER G. LUD,
BERT A. BENNETT.