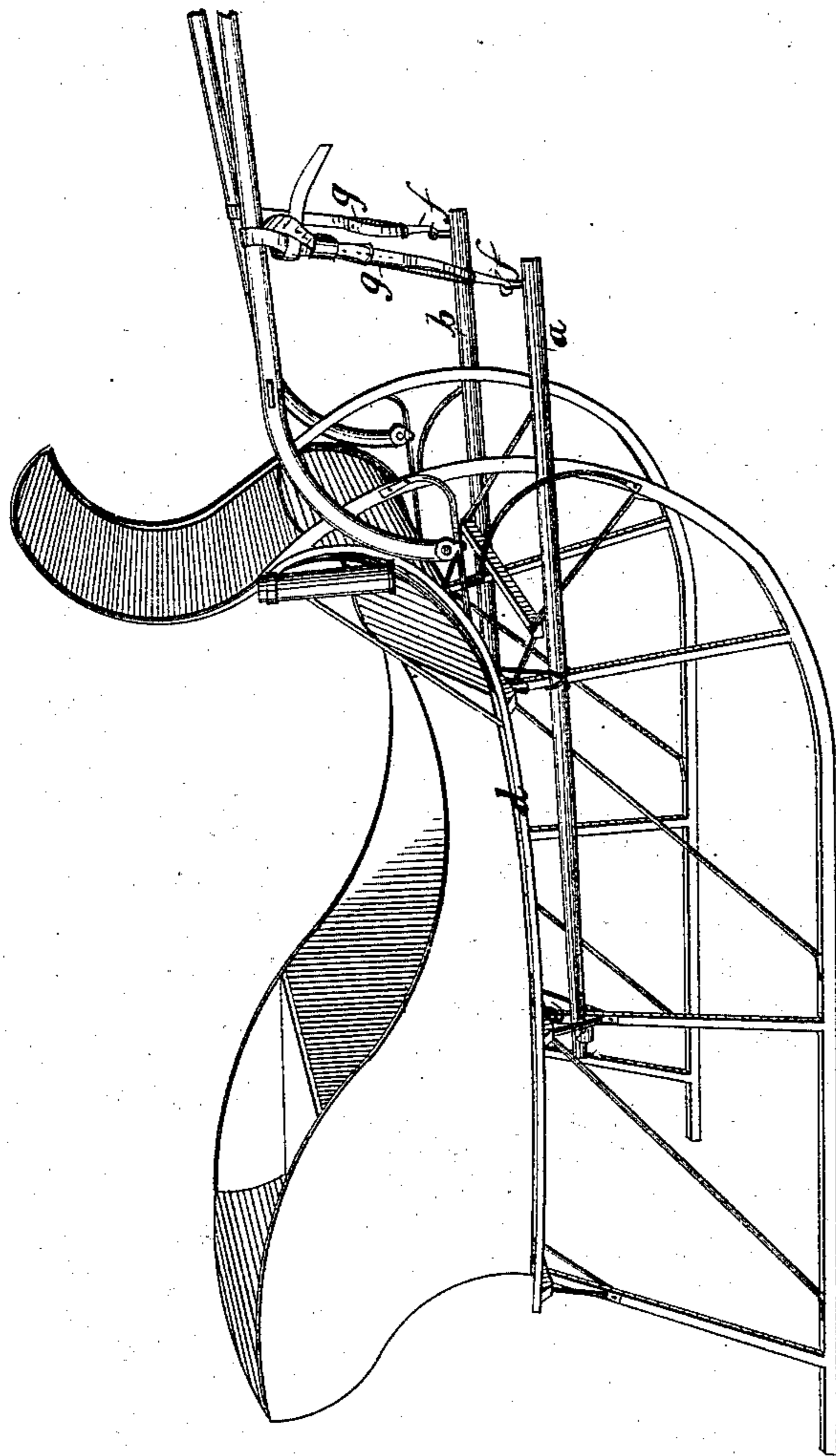


C. T. CHASE.  
Sleigh.

No. 215,571.

Patented May 20, 1879.



Attest.,  
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# UNITED STATES PATENT OFFICE.

CHARLES T. CHASE, OF THOMASTON, MAINE.

## IMPROVEMENT IN SLEIGHS.

Specification forming part of Letters Patent No. **215,571**, dated May 20, 1879; application filed February 24, 1879.

*To all whom it may concern:*

Be it known that I, CHARLES T. CHASE, of Thomaston, Knox county, Maine, have invented an Improvement in Sleighs, of which the following is a specification.

My invention relates to sleighs and similar vehicles which move upon runners, and are used chiefly to carry persons.

It consists of a device for holding up the forward part of the sleigh and throwing the weight thereof upon the horse when the said forward part is moving over a depression on the roadway.

It is well known to those living in parts of the country where snows of considerable depth lie upon the ground during the winter that the roadways are frequently cut by the repeated action of the runners of passing sleighs or other vehicles into sharp depressions. As sleighs have been heretofore made, the shafts are hinged to the runners, braces, or some convenient part of the structure, and are free to move up or down, which free movement is, to a certain extent, necessary. A result of this hinged connection, however, is, when the sleigh is drawn over a roadway cut or gouged with depressions, as heretofore described, that the forward part of the sleigh pitches with more or less violence forward and downward into the depression, and the runners, as they rise out of said depression, strike the opposite incline and are thrown up, while the rear falls into the depression. This imparts a motion to the sleigh exceedingly unpleasant to the rider, fatigues the horse by the violence of the backward jerks occasioned by the impact of the forward part of the runners against the snow as they rise out of the depression, and frequently causes some part, either of the harness or sleigh, to break.

I have entirely overcome these difficulties by a simple device, which is clearly illustrated in the accompanying drawing, which shows a perspective view of an ordinary sleigh with the device attached thereto.

To the frame-work of the sleigh, on each side, I secure a bar, preferably of some light and strong wood, the forward ends of which bars project beyond the runners and underneath the shafts. The end of the bar on each side I attach to the shaft above it by a strap

or any equivalent flexible connection. The bar should be firmly attached to the sleigh, and both the bars and the strap-connections should be of strength sufficient to suspend from the shafts the weight of the forward part of the sleigh and its proportion of the load.

In the drawing I have shown the bars *a b* connected to the posts of the sleigh on the outside, and just underneath the ends of the beams *c e*. The ends project in front of the upper part of the runners, and are connected to the shafts by the straps *g g*. These straps have a clip on the lower end for ready attachment to the end of the bar.

It is obvious that the position of the bar may be changed and the modes of connection varied without departing from the spirit of my invention, which includes as the essential idea the suspension of the forward part of the sleigh from a point on the shafts a little in advance of the hinged connection of said shafts, so that when the sleigh passes over a sharp depression the forward part will be upheld by the shafts and prevented from sinking into said depression.

Where the shafts are pivoted to the sleigh considerably in rear of the upright part of the runners, it may be practicable to carry the strap *g* back diagonally to some point on the said vertical parts, and in this way form a secure connection.

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

1. The combination, with the thills of a sleigh, of an elastic attachment connected to such sleigh at a point below the thills, and a flexible connection between the said elastic attachment and the thills, for the purpose of supporting the sleigh, substantially as set forth.

2. The bars *a b*, attached to the sides of the sleigh and combined with the straps and shafts, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHAS. T. CHASE.

Witnesses:

W. M. WILSON,  
J. H. H. HEWETT.