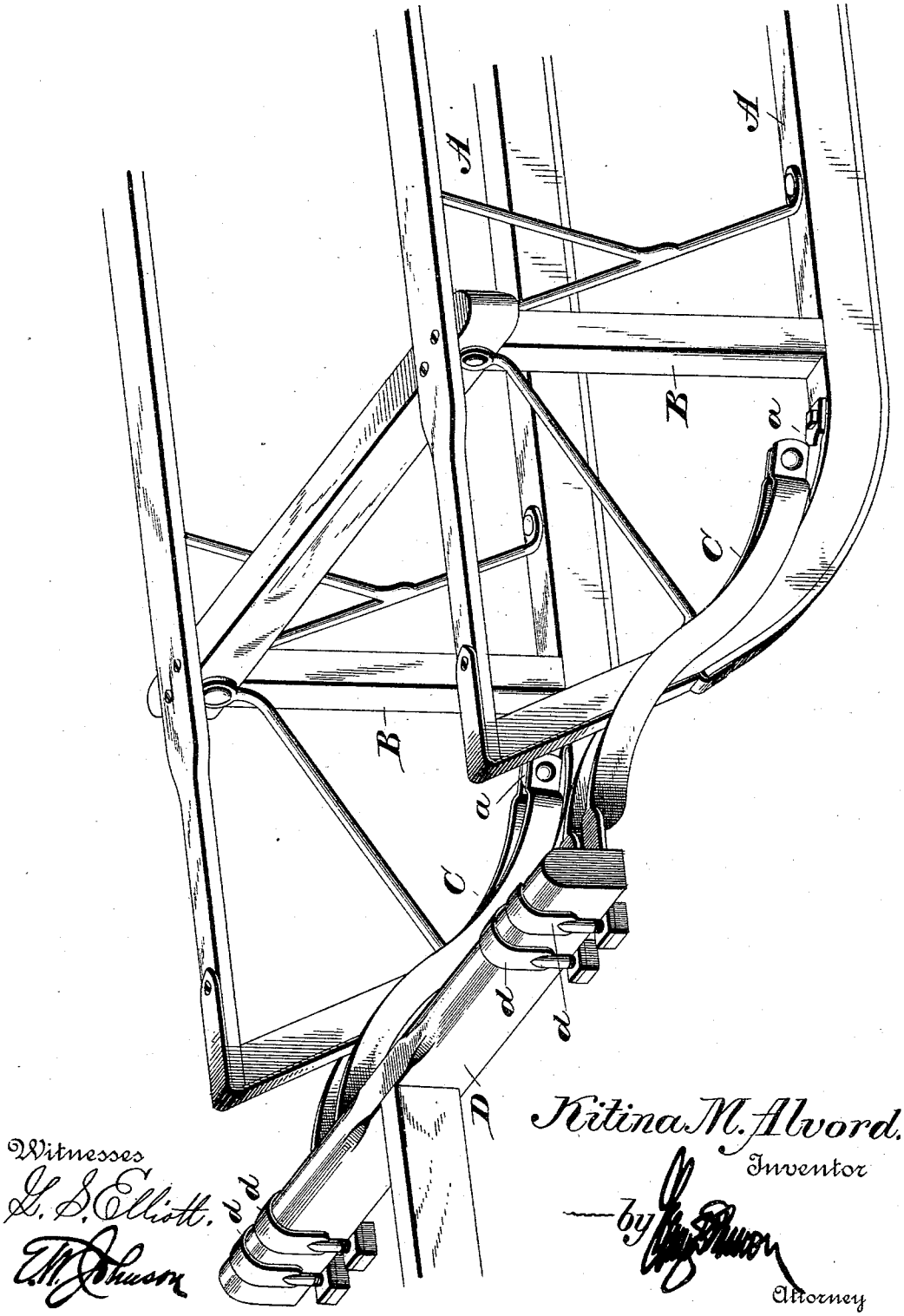
(No Model.)

K. M. ALVORD.

DRAFT ATTACHMENT FOR SLEIGHS.

No. 457,692. Patented Aug. 11, 1891.



Witnesses
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UNITED STATES PATENT OFFICE.

KITINA M. ALVORD, OF HUNTINGTON, MASSACHUSETTS.

DRAFT ATTACHMENT FOR SLEIGHS.

SPECIFICATION forming part of Letters Patent No. 457,692, dated August 11, 1891.

Application filed April 9, 1891. Serial No. 388,232. (No model.)

To all whom it may concern:

Be it known that I, KITINA M. ALVORD, a citizen of the United States of America, residing at Huntington, in the county of Hampshire and State of Massachusetts, have invented certain new and useful Improvements in Draft Attachments for Sleighs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in draft attachments for sleighs.

The object of the invention is to provide a draft attachment which is connected low down upon the runners, so that a direct pull can be obtained which will overcome and obviate the tendency to tilt the sleigh at its forward end, and thereby increase the draft as well as distribute the wear along the runners; and it consists in the construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawing, forming part of this specification, the figure is a perspective view showing my invention applied to a sleigh.

A A designate the runners of the sleigh, and B B the forward knees, the parts being braced to each other in the usual manner. The runners in front of the knees are provided with eye-plates *a*, the ends of which are forged and perforated for the reception of the securing-bolts. To the eye-plates are pivotally connected plates C C, the upper ends of which are bent horizontally and pierced for the reception of the ends of the clips *d*, which secure the draft-bar D to said plates. These plates C are preferably curved, as shown, and a pair are attached to each runner to embrace the same.

Heretofore it has been customary to secure the draft attachment to the upper portion of the runners, which has a tendency to tilt said runners and bring an undue amount of wear at their front portion, and also elevate the rear ends of the runners, so that but little weight would be sustained thereby. With my improved device the line of draft is brought low down and all tendency of the runners to tilt is obviated. Further, as the draft attachment is applied nearly on a line with the runners and not to the upwardly-curved portion of the same, there is not the same tendency to pull said upper portion out of shape. The draft attachment being pivoted to the runners, as shown, can accommodate itself to animals of different size.

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

1. A draft attachment for sleighs, consisting of a transverse draft-bar, plates C, rigidly secured thereto and pivotally connected to the upper edge adjacent to the front ends of the runners and rear of the upwardly-curved portion thereof, substantially as set forth.

2. In combination with a sleigh, eye-plates secured to the upper edge of the runners in rear of the upwardly-bent front portions, plates C, pivoted to said eye-plates and rigidly connected at their front ends to a draft-bar, substantially as set forth.

3. In combination with the runners A, eye-plates rigidly secured to the runners in front of the knees or standards B and rear of the upturned portions of said runners, curved plates C C, pivotally secured to each eye-plate by bolts, the front ends of said plates having horizontal portions with perforations, and clips *d d* for connecting the plates to a draft-bar, substantially as shown, and for the purpose set forth.

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

KITINA M. ALVORD.

Witnesses:

SCHUYLER CLARK,

GEORGE KRESS.