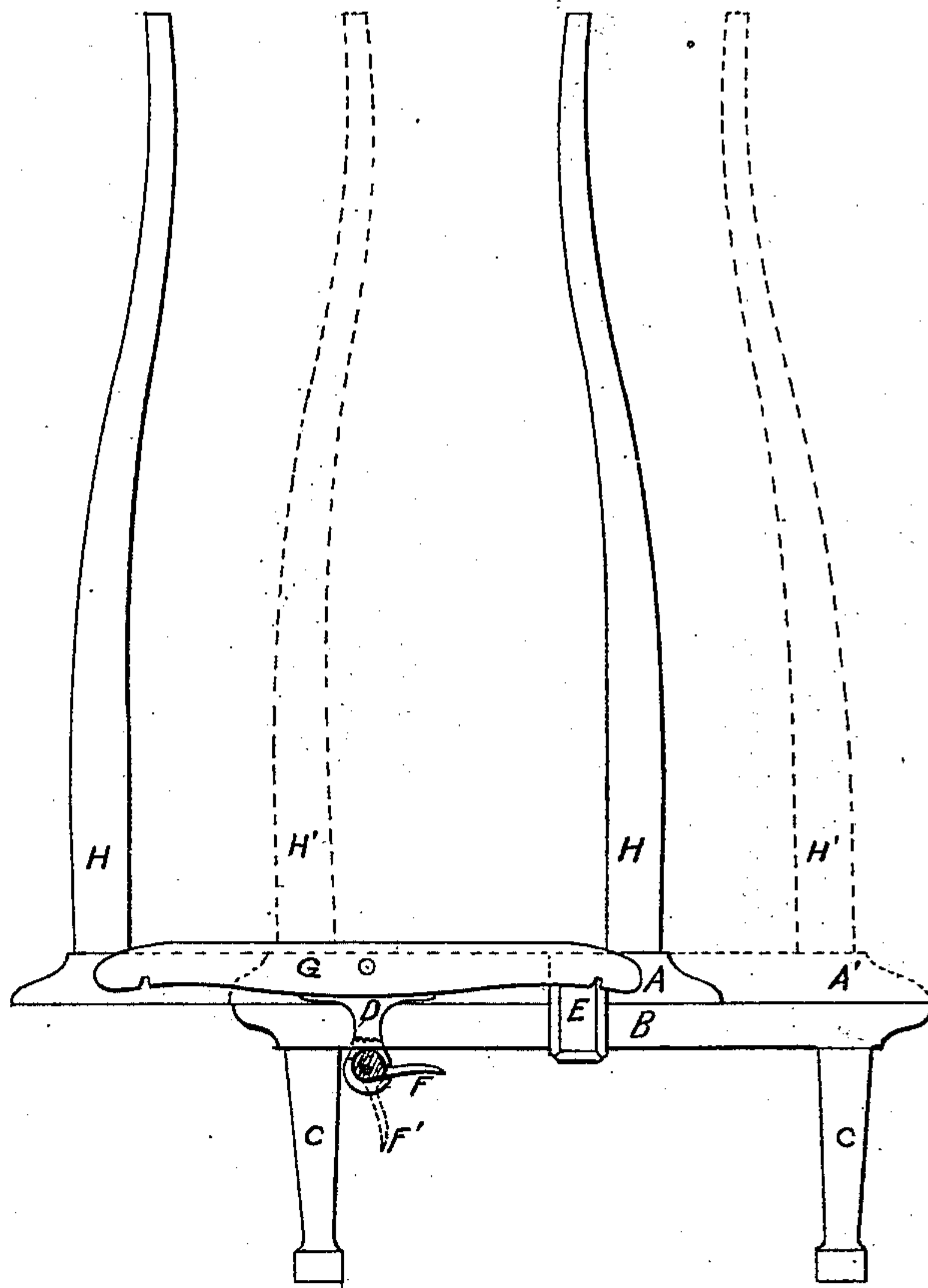


W. ATKINSON.

Adjustable Shaft for Sleighs.

No. 212,085.

Patented Feb. 11, 1879.



WITNESSES

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INVENTOR

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# UNITED STATES PATENT OFFICE.

WILLIAM ATKINSON, OF SYRACUSE, NEW YORK.

## IMPROVEMENT IN ADJUSTABLE SHAFTS FOR SLEIGHS.

Specification forming part of Letters Patent No. **212,085**, dated February 11, 1879; application filed December 14, 1878.

*To all whom it may concern:*

Be it known that I, WILLIAM ATKINSON, of Syracuse, county of Onondaga, State of New York, have invented a certain new and useful Improvement in Adjustable Shafts for Cutters or Sleighs; and I declare the following to be a full and complete description of the same, so as to enable any person skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in shafts for cutters and sleighs, in which means are provided for adjusting the shafts so as to bring the horse either directly in front or to one side of the cutter, as desired for use in crowded thoroughfares of cities or upon country roads, obviating entirely the use of auxiliary devices for this purpose.

To this end my invention consists in a cutter-shaft constructed in two parts, one of which is provided with curved shanks, terminating in a coupler for securing to the cutter or sleigh. At the other extremity of the curved shanks the two parts join together, and are sustained and operated by clip-clamps embracing the frame or divided draw-bar.

It will be seen that this construction dispenses with the use of shifting cross-bars attached to the sleigh-irons as well as extra cross-bars, and removes all obstacles to attaching horses close up to the cutter, and at the same time permits a free action of the hind legs in traveling close to the cutter, whether directly in front or on the side.

For a more specific description of my invention, reference is had to the accompanying drawing, forming a part of this specification, like letters indicating corresponding parts, in which the figure is a plan view of the improved shafts detached from the cutter.

The letters H H C C represent my improved shafts, constructed in two sections or parts, each section being framed to the divided draw-bar A B. The two parts of the draw-bar are provided on their inner sides with plain parallel faces, permitting them to fit snugly together, and they form the draft-bar of the shafts and support the whiffletree-bar.

The shanks or butts of the shafts are shown at C C, and curve upward to the part B of the draft-bar, thereby providing a clear space for the movement of the hind legs of the horse when attached to the cutter.

The shanks C C terminate in couplers, by means of which the shafts are attached to the cutter-irons on the outer sides of the sleigh-runners.

The two sections of the shafts are securely retained by means of clips or clamps D E, which are bolted to the part A and embrace the part B, leaving play enough to move the outer section of the shafts from directly in front to the side of the cutter, as desired. A cam, F, pivoted to the clip D, retains the section at the desired point.

It will be observed that the clip-iron D, secured at the center of the part A of the draw-bar, forms a strong and durable bearing for the whiffletree-bolt. The clip E acts as a guide, facilitating the operation of the parts and steadying them.

It will also be apparent that this construction of the shafts obviates the use of shifting cross-bars attached to the sleigh-irons, and allows the horse to be hitched close to the cutter, as is desirable when "Portland" or other light styles of cutters are used.

I am aware that various devices in shifting cross-bars are in use for shifting the entire shafts from in front to the side; but these devices have proved objectionable, for the reason that, being attached rigidly and directly to the sleigh-irons, they impede the movement of the horse's feet, and thereby necessitate the attachment of the horse some distance out from the sleigh, and are utterly impracticable for light cutters used in speeding or fancy driving. My device differs from these in being made in two parts, bringing the division up out of the way of the horse's feet by means of the curved shanks, and in making the two parts adjustable, as hereinbefore described.

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

The adjustable shafts for cutters, constructed in two sections framed to the divided draw-bar A B, the inner section curved upward to the part B, and the two sections sustained and operated by the clips D E and cam F, all combined and arranged as herein specified and described, for the purpose set forth.

WM. ATKINSON.

In presence of—

J. NEAL PERKINS,  
HOMER WESTON.