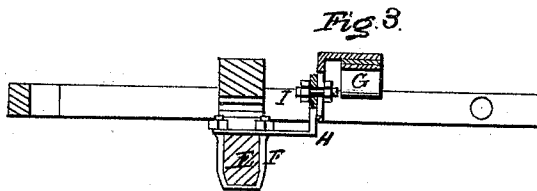
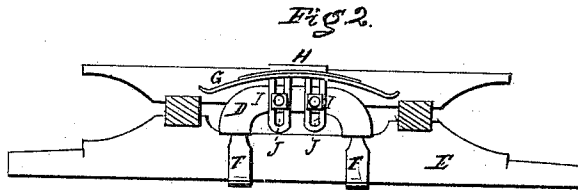
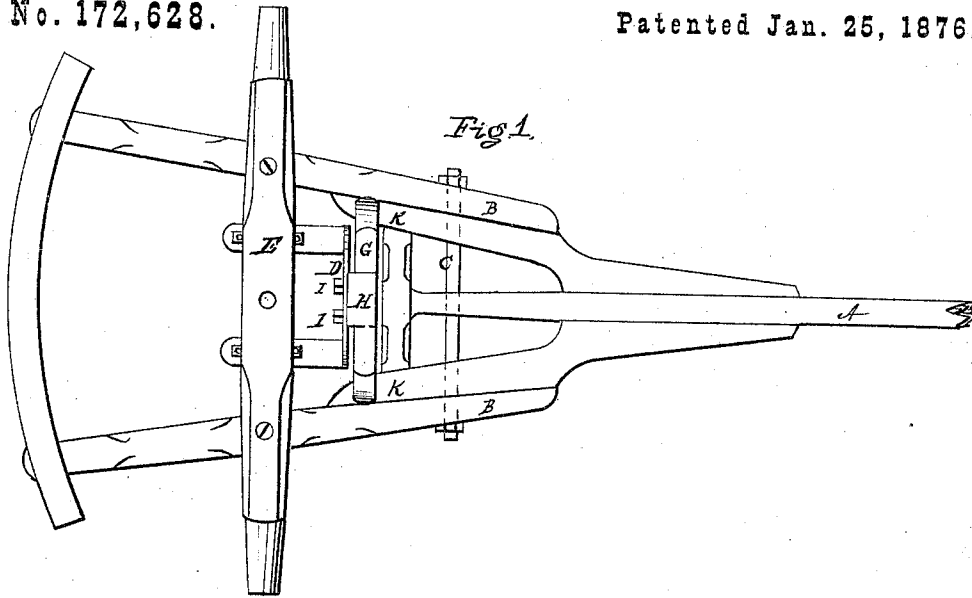


C. HOTZ.
TONGUE-SUPPORT.

No. 172,628.

Patented Jan. 25, 1876.



Witnesses:
L. B. Townsend
Mell H. Moxon

Inventor:
Christoph Hotz
per atty.
A. H. Evans & Co.

UNITED STATES PATENT OFFICE

CHRISTOPH HOTZ, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN TONGUE-SUPPORTS.

Specification forming part of Letters Patent No. **172,628**, dated January 25, 1876; application filed December 15, 1875.

To all whom it may concern:

Be it known that I, CHRISTOPH HOTZ, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Limber-Pole Stiffeners for Wagons; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a plan view of a wagon-pole and its fastenings, showing an application of my improved pole-stiffener. Fig. 2 is an elevation of the front axle and the pole-stiffener attachments; and Fig. 3 is a sectional view of Fig. 2, taken through line *x x*.

The object of my invention is to remove the weight and strain of the limber-pole, as heretofore constructed, from the necks of the animals employed in drawing the wagon; and to this end my invention consists of an adjustable spring or springs applied to the rear end of the limber-pole, to balance the weight and counteract the strain at the front end thereof, as will hereinafter more fully appear.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it with reference to the accompanying drawing and the letters of reference marked thereon.

The tongue A is secured between the front ends of the hounds B B by the queen-bolt C, and articulates thereon in the usual manner. A stirrup, D, is secured to the axle E by clips F F, and extends forwardly to near the rear end of the tongue A. A spring, G, is rigidly secured to a slotted angle-piece, H, and the latter is secured by bolts I I, passed through its slots J J, to the stirrup D. The spring G comes directly over the rear end of the tongue A, its ends bearing upon the rear ends of the braces K K. The spring G may be adjusted vertically by means of the slots J J and bolts I I, to cause the front end of the tongue to be elevated or depressed, as may be desired, in order to properly balance the weight and counteract the strain upon the pole.

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

In combination with the limber-pole or tongue A of a wagon, the adjustable spring G H and the stirrup D, secured to the axle E, substantially as and for the purposes set forth.

CHRISTOPH HOTZ.

Witnesses:

PETER SCHUTTLER,
FR. W. WOLF.