

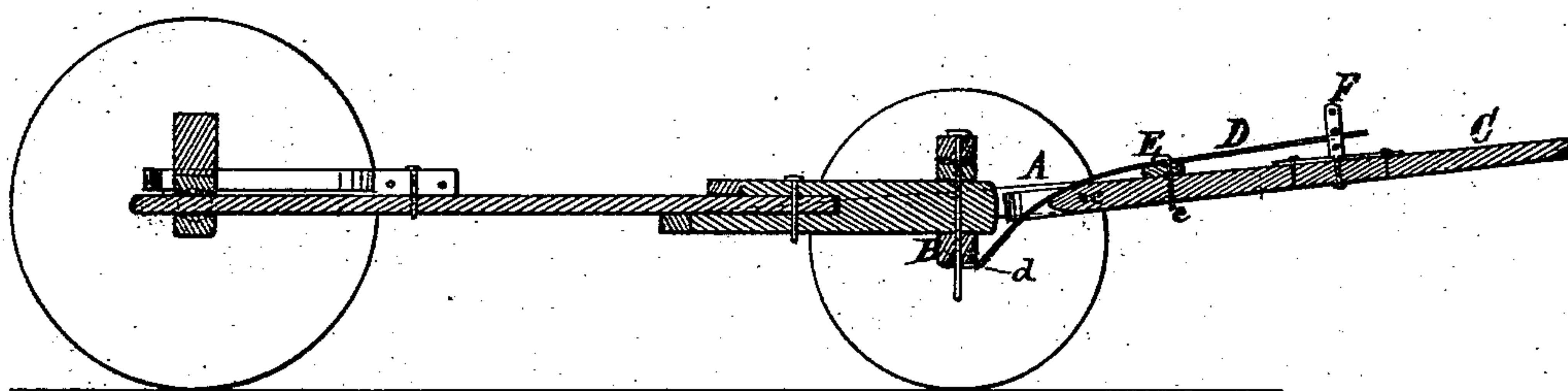
N. A. DeLong. Wagon Tongue Support.

84682

84682

PATENTED

DEC 8 1868



Witnesses,

*Joel Peyton
John J. Chiu*

Inventor,

*N. A. DeLong,
by his atty
W. D. Baldwin
per Peyton*

United States Patent Office.

N. A. DE LONG, OF NEW SCOTLAND, NEW YORK.

Letters Patent No. 84,682, dated December 8, 1868.

WAGON-TONGUE SUPPORT.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, N. A. DE LONG, of the town of New Scotland, in the county of Albany, and State of New York, have invented a new and useful Improvement in Wagon-Tongue Supports, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, which makes part of this specification, and which represents a vertical longitudinal section through a wagon, to which my improvement is applied.

The hounds A are secured to the axle B in the usual way.

The tongue C plays vertically in the hounds on a pivot, c.

A plate spring, D, is bolted underneath the axle, to the king-bolt d, and extends upward over the tongue, as shown in the drawing.

The bolt e of the double-tree E passes through this spring, near its middle.

The forward end of the spring is slotted, and embraces a standard, F, on the tongue. This standard has a series of holes in it, in one of which a pin is placed to regulate the tension of the spring.

In operation, the spring relieves the horses' necks

from the weight of the tongue, and yet leaves it free to play up and down within certain limits.

The tongue, it will be observed, has four points of support, namely, the axle, the rear end of the tongue, the double-tree, and the standard F. I can thus secure the desired results by using a light spring.

It is obvious that by making a slot in the spring, where it receives the king-bolt, it can be adapted to a sliding tongue.

I am aware that the tongues of vehicles have been sustained by springs, of a construction different from mine. I do not, therefore, broadly claim supporting a tongue by a spring.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the tongue and axle with the slotted adjustable plate-spring, embracing the standard F, and having four points of support, as and for the purpose set forth.

In testimony whereof, I have hereunto subscribed my name.

Witnesses:

ANTHONY MURPHY,
JOHN M. AUSTIN.

N. A. DE LONG.