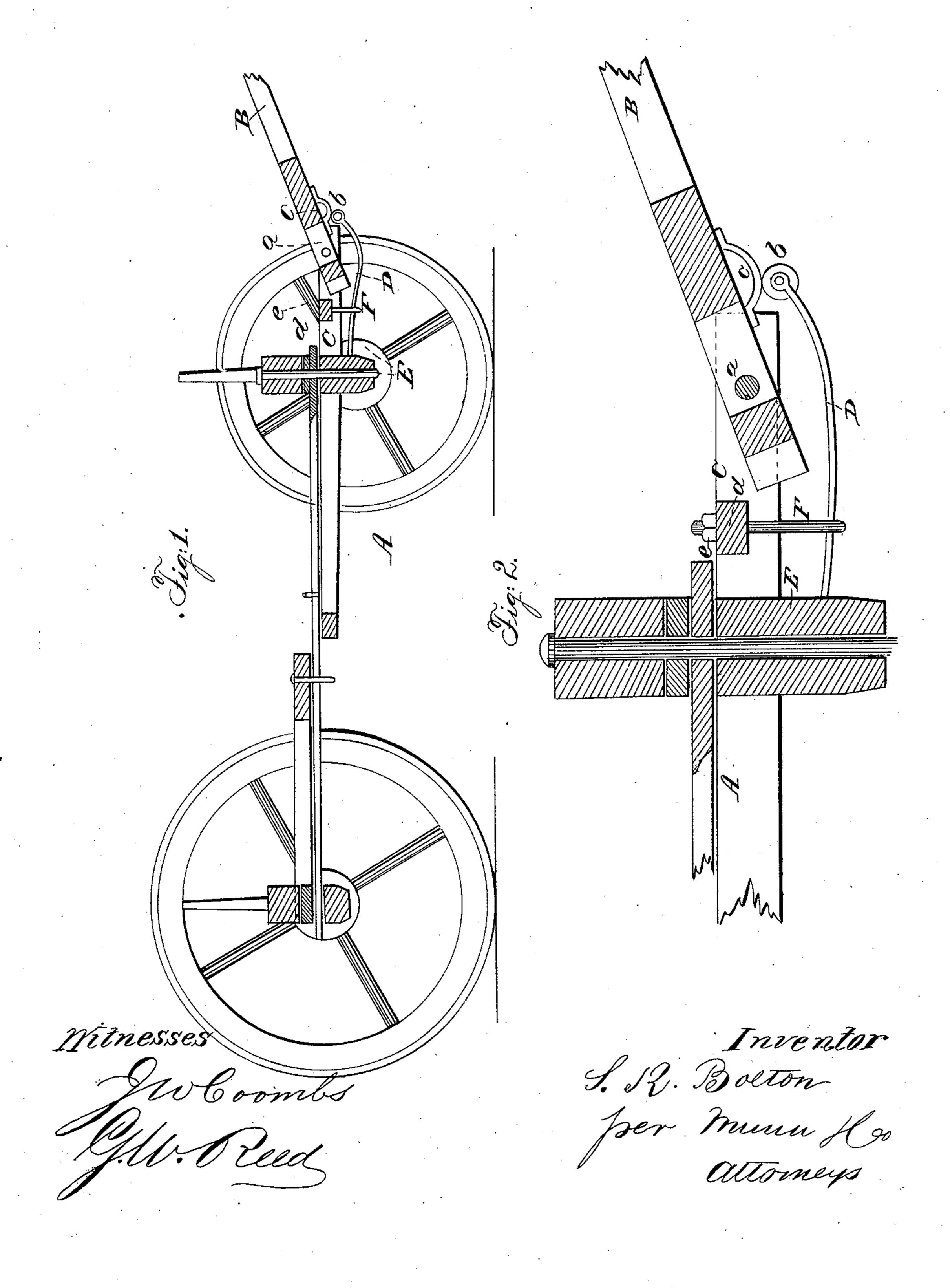
S. R. BOLTON.

Wagon-Tongue Support.

No 42.830.

Patented May 24, 1864.



United States Patent Office.

S. R. BOLTON, OF PRESCOTT, WISCONSIN.

IMPROVEMENT IN WAGONS.

Specification forming part of Letters Patent No. 42,830, dated May 24, 1864.

To all whom it may concern:

Be it known that I, S. R. Bolton, of Prescott, in the county of Pierce and State of Wisconsin, have invented a new and useful Improvement in Wagons; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a sectional side elevation of this invention. Fig. 2 is a similar view of my device for supporting the draft-pole, in a larger scale than the previous figure.

Similar letters of reference in both views

ind cate corresponding parts.

The object of this invention is a device capable of raising and sustaining the draft-pole or tongue of a vehicle in any desired position so as to relieve the draft-animals of the weight of said tongue.

The nature of my invention and its peculiar construction and advantages will be readily understood from the following description.

A represents a wagon or vehicle of any desired construction. The draft-pole B is connected to the hounds C by means of a pivot or bolt, a, in the usual manner, so that the same can be turned up or down in a vertical

plane without obstruction.

In order to relieve the draft animals of the weight of the tongue, a spring, D, is firmly secured to the front axle, E. This spring is curved, as clearly shown in the drawings, and its front end is armed with a roller, b, which bears on the surface of the semicircular plate c, that is secured to the under side of the tongue. By means of this semicircular bearing-plate the tongue can be brought to almost any position either up or down without in any manner injuring the spring which supports it, and it equalizes the power of the spring and

allows the tongue to accommodate itself readily to the motions of the draft-animals or to the inequalities of the ground. The friction between the front end of the tongue and the bearing-plate is reduced to a minimum by the application of the roller b, and the tongue rises and falls without subjecting the draft-animals

to any perceptible strain.

The spring D is supported by a stirrup, F, which is suspended from the cross-bar d, connecting the hounds. The ends of this stirrup are provided with screw-threads, and they pass freely through suitable poles in said cross bar, being retained by nuts e. By turning these nuts up or down the stirrup is lowered or raised, and the power of the spring or the strain exerted by the same on the tongue can thereby be regulated at pleasure. By these means the power of the spring can be readily accommodated to the weight of the tongue which it is intended to sustain. The stirrup may, however, be attached to the draftbolt or rod, which runs through the hounds and tongue, and it may be provided with a clamp to hold the spring.

I do not claim, broadly, as my invention the use of a spring or equivalent device for sustaining and raising a tongue; but

What I do claim, and desire to secure by

Letters Patent, is—

The combination of the curved spring D, friction-roller b, semicircular bearing plate c, and adjustable stirrup F, all applied and operating in connection with the axle E, hounds and tongue B, as and for the purpose shown and described.

S. R. BOLTON.

Witnesses:

H. A. ZAY, J. C. BUTTON.