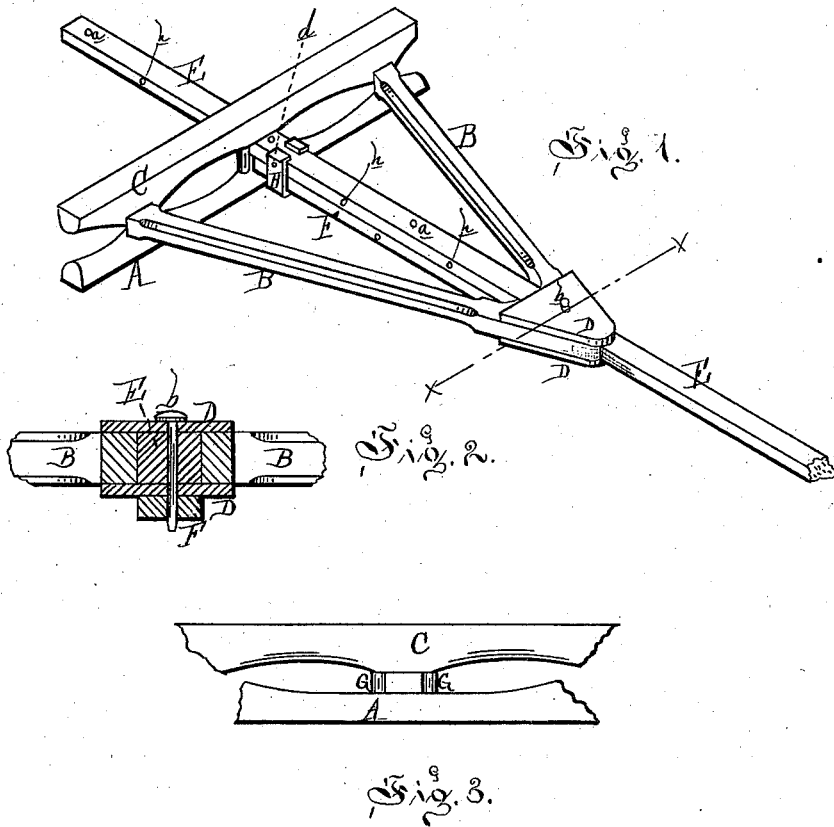


A. J. BEACH.  
Running-Gear for Wagon.

No. 199,610.

Patented Jan. 29, 1878.



Attest:  
H. L. Aulls  
R. A. Sprague

Inventor:  
A. J. Beach  
By Atty  
R. A. Sprague

# UNITED STATES PATENT OFFICE.

ALLEN J. BEACH, OF LINDEN, MICHIGAN.

## IMPROVEMENT IN RUNNING-GEARS FOR WAGONS.

Specification forming part of Letters Patent No. **199,610**, dated January 29, 1878; application filed November 1, 1877.

*To all whom it may concern:*

Be it known that I, ALLEN J. BEACH, of Linden, in the county of Genesee and State of Michigan, have invented an Improvement in Running-Gears for Wagons, of which the following is a specification:

The nature of this invention relates to new and useful improvements in that part of running-gear for wagons known as the "reach;" and the invention consists in the novel construction and arrangement of the various parts, as more fully hereinafter described.

Figure 1 is a perspective view of my improvement, looking at the top. Fig. 2 is a cross-section at the line  $x x$  in Fig. 1, and Fig. 3 is a rear elevation.

Like letters indicate like parts in each figure.

In the drawings, A represents the axle, with the hounds B secured between the axle and the bolster C. The front ends of the hounds are rigidly secured between two metallic plates, D, one above and the other below, and so arranged as to allow the extension-reach E to have a longitudinal reciprocating motion between the plates and the front ends of the hounds, as shown in Fig. 2. F is the stationary part of the reach, rigidly secured at the front end to the under side of the lower plate D, and the opposite end to the axle. In the drawings this stationary portion of the reach is shown below the extension-reach for convenience. If desired, it may be placed on top, or in any other preferred position, without prejudice to the spirit of my invention. G represents two post-supports between the axle and bolster, between which the rear end of the extension-reach may pass, and which will act as guides and braces to the reach when projecting to the rear of the axle. This ex-

ension-reach is provided with a series of holes,  $a$ , by means of which and the bolt  $b$ , passing through suitable holes in the plates D, the reach may be extended or shortened, as desired.

A metallic guide-clip, H, secures the extension and stationary reaches together, as shown, and this guide-clip is adjustable by means of the bolt  $d$  and series of lateral holes  $h$  in the extension-reach. This clip should be adjusted with each extension or shortening of the reach E, so that it will rest against the front of the axle, to act as a stop and brace, to render the device more firm when in use.

By the method I have adopted of securing the front ends of the hounds together, so that these ends not only form the sides of the slide through which the extension-reach passes, but also so that they butt against the sides of said reach, they are relieved from a large portion of the torsional strain to which they are subjected when the wagon is in operation when they are secured above or below the extension-reach.

I am aware of the device patented to A. B. Wroth on the 7th day of March, A. D. 1876, and numbered 174,610, and disclaim the invention described by him.

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

The combination, with the axle A, bolster C, and hounds B, of the stationary part F, the sliding reach E passing between the axle and bolster, the metallic plates D, and the adjustable clips H, all constructed and arranged substantially as described and shown.

ALLEN J. BEACH.

Witnesses:

H. S. SPRAGUE,  
R. A. SPRAGUE.