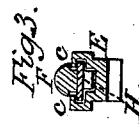
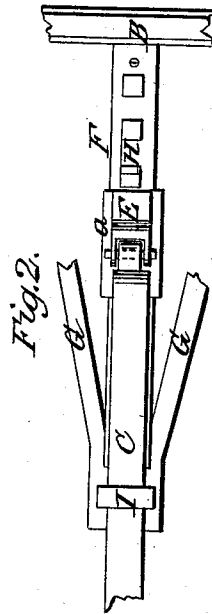
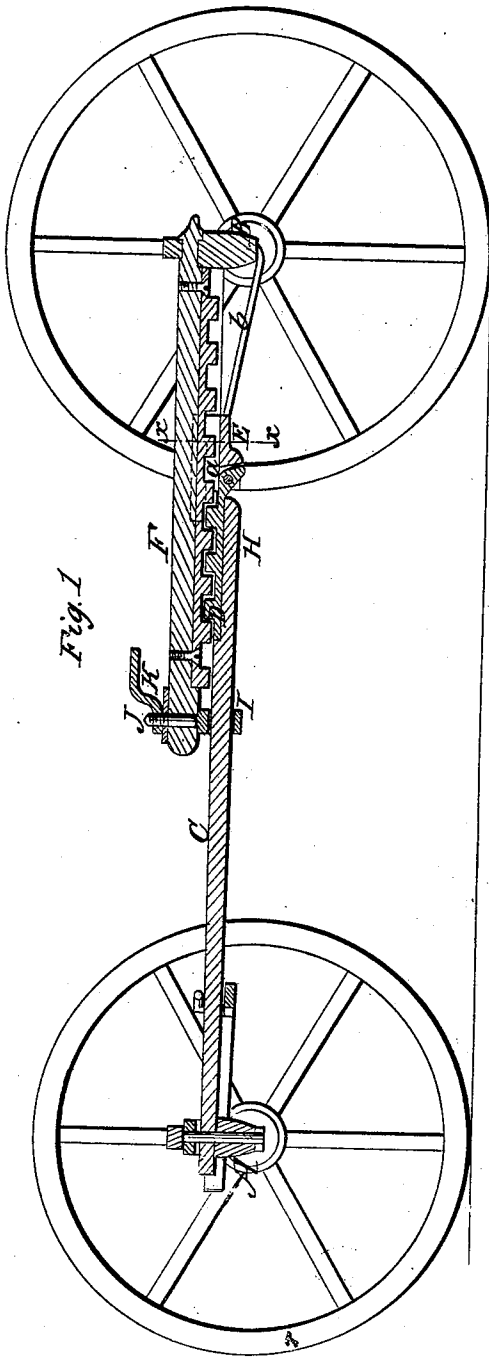


E. WILSON.  
Running-Gear.

No. 13,690.

Patented Oct. 16, 1855.



# UNITED STATES PATENT OFFICE.

EDWIN WILSON, OF PRATTSBURG, NEW YORK.

## EXTENSION-REACH FOR CARRIAGES.

Specification of Letters Patent No. 13,690, dated October 16, 1855.

*To all whom it may concern:*

Be it known that I, EDWIN WILSON, of Prattsburg, in the county of Steuben and State of New York, have invented a new and Improved Extension-Reach for Vehicles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a vertical longitudinal section of my improvement, the plane of section being through the center. Fig. 2, is an inverted plan of ditto. Fig. 3, is a transverse section of ditto (*x*), (*x*), Fig. 1, showing the plane of section.

Similar letters of reference indicate corresponding parts in the several figures.

The nature of my invention consists in the peculiar manner of connecting the reach with the center piece of the hounds which are attached to the back axle.

In Fig. 1, A, represents the front axle of a vehicle; B, the back axle. C, is the reach the front end of which is attached to the front axle, in the usual manner. The back part of the reach has a cogged bar D, attached to its upper surface, said bar having a slide E, connected to its outer end by a hinge or joint (*a*).

F, represents the center piece of the hounds G, which are attached to the back axle B. These hounds are constructed in the usual way. The back ends of the hounds G, are fitted upon the upper edge of the back axle, and braces (*b*) are secured to the under side of the axle, and to the under side of the hounds, see Fig. 1.

The under side of the center piece F, has a cogged bar H, attached to it as shown in Figs. 1 and 2. The sides of the cogged bar H, extends a short distance beyond each side of the cogs as shown in Fig. 2, and the slide E, has recesses (*c*), in its inner sides, in which recesses the sides or edges of the cogged bar H, fit, see Fig. 3.

I, is a clasp which has a screw rod J, attached to its upper end, said screw rod

passes through the end of the center piece F, of the hounds and has a nut K, upon it above the center piece.

The reach C, passes through the clasp I, and the cogs on one bar fit between the cogs on the other, the clasp I, and slide E, keeping the cogs geared or fitted into each other.

By the above arrangement it will be seen that the reach C, cannot move horizontally from the center piece F, of the hounds in consequence of the cogged bars H, D, and the cogs cannot become loosened or ungeared from each other in consequence of the clasp I, and slide E.

In case the reach requires to be either extended or shortened, the center piece F, is raised by unscrewing the nut K, and the cogged bars are then ungeared and the slide E, may be moved outward or inward on the center piece F, to the desired point and the clasp I, again screwed up to the center piece F. The joint (*a*), in the slide E, allows the center piece F, of the hounds to rise.

This improvement is extremely simple, and the reach may be extended or shortened in a moment of time and with the greatest facility. The reach also is strong, much more so than the ordinary ones which are weakened by bolt holes made through it in order to render it capable of being extended. The back axle also is kept in proper position, and is not allowed to turn or cant inward as is the case with the ordinary reach, in consequence of the sagging or depression of the reach at its center, or where it is connected to the center piece of the hounds.

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

Connecting the reach C, to the center piece F, of the hounds G, by means of the cogged bars H, D, slide E, and clasp I, constructed and arranged substantially as herein shown and described.

EDWIN WILSON.

Witnesses:

J. C. WYKOFF,  
J. R. SELOVE.