

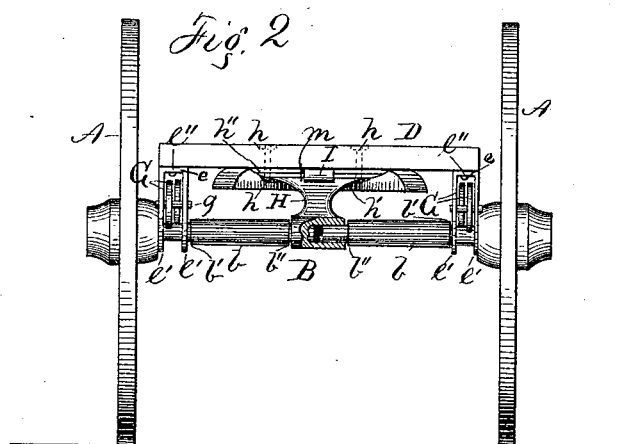
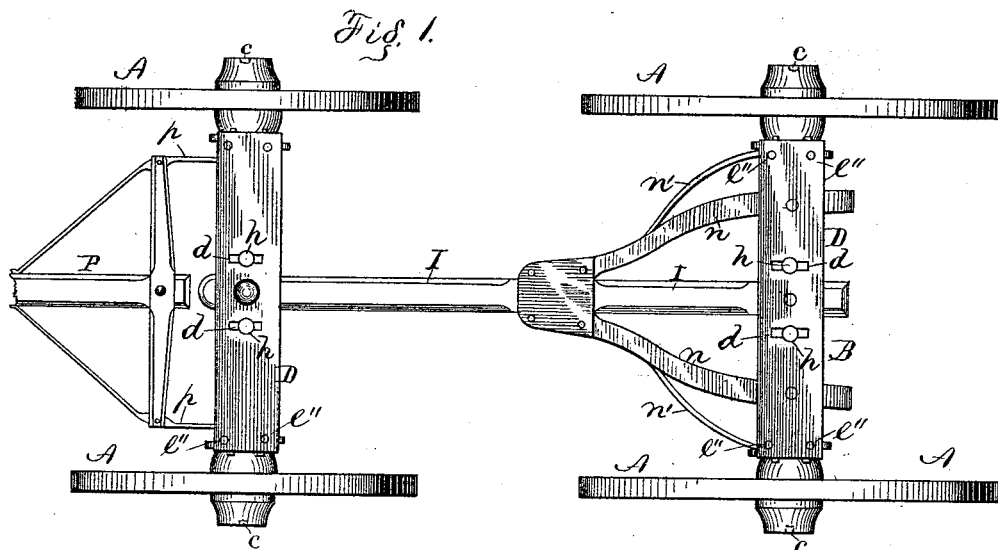
(No Model.)

2 Sheets—Sheet 1.

E. A. HILL.  
WAGON RUNNING GEAR.

No. 346,284.

Patented July 27, 1886.



Witnesses:  
G. R. Richards,  
M. J. Harbeck.

Inventor:  
Edward A. Hill,  
By W. B. Richards,  
His Atty.

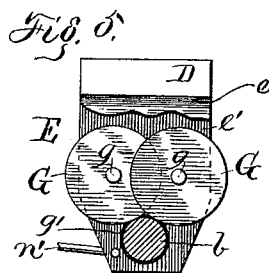
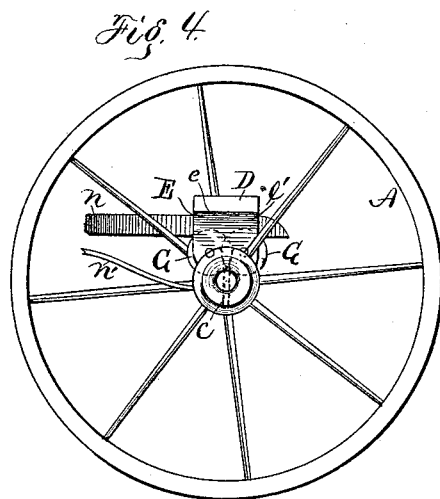
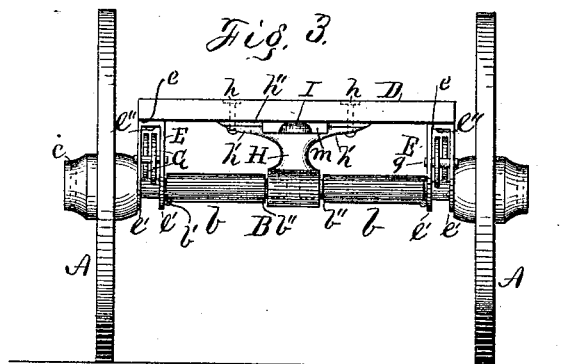
(No Model.)

2 Sheets—Sheet 2.

E. A. HILL.  
WAGON RUNNING GEAR.

No. 346,284.

Patented July 27, 1886.



Witnesses:  
G. R. Richards,  
M. F. Hallett

Inventor:  
Edward A. Hill,  
By W. B. Richards,  
his Atty

# UNITED STATES PATENT OFFICE.

EDWARD A. HILL, OF KEITHSBURG, ILLINOIS.

## WAGON RUNNING-GEAR.

SPECIFICATION forming part of Letters Patent No. 346,284, dated July 27, 1886.

Application filed June 26, 1885. Serial No. 169,859. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD A. HILL, a citizen of the United States, residing at Keithsburg, in the county of Mercer and State of Illinois, have invented certain new and useful Improvements in Wagons, of which the following is a specification.

This invention relates to improvements in wagons; and it consists in constructions and combinations hereinafter described and claimed.

The principal object of my invention is to produce a wagon adapted for carrying very heavy loads with less draft than usual.

In the accompanying drawings, which illustrate my invention, Figure 1 is a top plan, Fig. 2, a rear elevation, of the rear axle and wheels and adjacent parts, partly broken away; Fig. 3, a front elevation of the forward axle and adjacent parts; Fig. 4, a side elevation of the rear parts; Fig. 5, a side elevation, partly broken away, of the housing for the roller-bearings.

Referring to the drawings by letters, the same letter indicating the same part in the different figures, letters A represent the wheels, which may be of any ordinary construction, and may be fixed to the ends of the sections *b* of the divided axles B by pins *c*, or in any other desired manner.

D D are the bolsters. To each end of each bolster D is fixed a housing, E. Each housing E consists of a part, *e*, from which two sides, *e' e'*, project downwardly, and is secured to the bolster by bolts *e''*, which pass through the part *e* and the bolster. The sides *e'* are provided with suitable bearings for the axles *g* of the rollers G, and are also provided with holes *g'*, through which the divided axles loosely pass in such manner that the rollers G will form the bearings for the bolster on the axle, and so as to permit of adjusting the divided axles, as hereinafter described. The divided axles are either reduced in diameter at their outer ends, or otherwise provided with shoulders *b'*, which rest against the housings E and hold the sections of the axles in place against outward endwise movement.

The inner ends of the sections *b* of the divided axles have bearings in pendants H, one of which is secured to the under side of each bolster D by bolts *h*, which pass through holes in the flanges *h'* of the pendants, and through slots *d* in the bolsters, as shown at Fig. 1.

The pendants may thus be adjusted forward or rearward to adjust the sections of the axle, and thereby adjust the gather of the wheels to suit greater or lesser dishing thereof. Plates *h''* are placed, as required, between the pendants H and the bolsters, for the purpose of adjusting the inner ends of the sections of the axles higher or lower, to thereby adjust the wheels vertically to suit greater or less dishing. The inner ends of the sections of the axles have shoulders *b''*, which rest against the pendants H, and thus prevent inward endwise movement of said sections. The forward and rear pendants H are provided with recesses *m*, through which the ordinary reach or coupling pole, I, passes, and in which it is bolted, as desired.

The rear housings E are braced by braces *n'*, which extend to and are connected with the hounds *n*. The tongue P is hinged by its extended hounds *p* to the forward housings E. Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a wagon, in combination, bolster D, housings E, with friction-rollers G, journaled therein, divided axle B, and pendants H, adjustable by means of bolts *h* and slots *d*, substantially as and for the purpose specified.

2. In a wagon, in combination, bolster D, housings E, with friction-rollers G, journaled therein, divided axle B, and pendants H, adjustable forward, backward, and vertically, substantially as and for the purpose specified.

3. In a wagon, in combination, the bolsters D, housings E, with friction-rollers G, journaled therein, and with holes for the divided axles B, and pendants H, adjustable, as described, substantially as and for the purpose specified.

4. In a wagon, in combination, the bolsters D, housings E, with friction-rollers G, journaled therein, pendants H, adjustable, as described, divided axles B, hounds *n*, reach I, and tongue P, hinged to the forward housing, E, substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD A. HILL.

Witnesses:

FREDERICK A. WILLOUGHBY,  
H. M. RICHARDS.