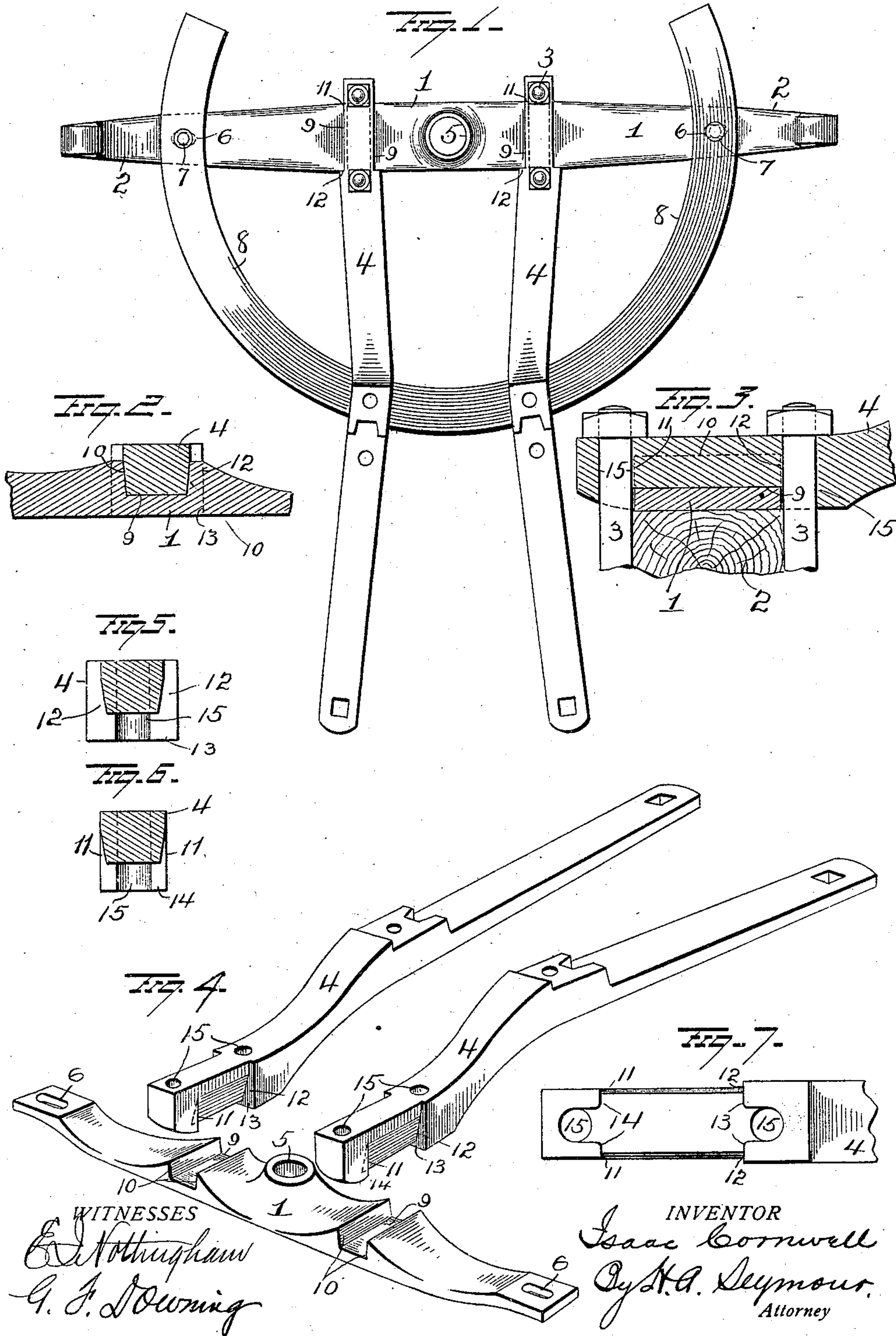


I. CORNWELL.  
 VEHICLE GEAR.  
 APPLICATION FILED APR. 13, 1908.

903,176.

Patented Nov. 10, 1908.





# UNITED STATES PATENT OFFICE.

ISAAC CORNWELL, OF NORTHUMBERLAND, PENNSYLVANIA.

## VEHICLE-GEAR.

No. 903,176.

Specification of Letters Patent.

Patented Nov. 10, 1908.

Application filed April 13, 1908. Serial No. 426,840.

*To all whom it may concern:*

Be it known that I, ISAAC CORNWELL, of Northumberland, in the county of Northumberland and State of Pennsylvania, have  
5 invented certain new and useful Improvements in Vehicle-Gears; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it  
10 appertains to make and use the same.

My invention relates to an improvement in vehicle gear, the object being to provide improved means for securing the reach irons to the head block plate, whereby all the strains  
15 fall on abutting shoulders of the two parts, and not on the clips connecting the reach irons, head block and head block plate, and my invention consists in the details of construction as will be more fully described and  
20 pointed out in the claims.

In the accompanying drawing, Figure 1 is a bottom plan view showing the parts connected. Fig. 2 is a view in section in the direction of the length of the plate through the  
25 plate and iron. Fig. 3 a view in section through the same parts taken in the direction of the length of the reach iron. Fig. 4 is a view in perspective of the parts detached, and Figs. 5, 6 and 7 are views showing the  
30 details of construction.

1 represents the head block plate resting against the lower face of the head block 2, and secured thereto by the U-shaped clips 3 which latter hold the reach irons 4 in contact  
35 with the head block plate 1. This head block plate is provided with a king bolt opening 5, and at its ends with holes 6 through which the bolts 7 pass to secure the fifth wheel member 8 to the head block, the  
40 said bolts assisting the clips 3 in securing the head block plate to the head block.

The plate 1 is provided on its lower face with the transverse recessed seats 9, located on opposite sides of the king bolt opening.  
45 These seats are flat from end to end and side to side, and the side walls or shoulders 10 thereof are slightly inclined downwardly and outwardly as shown. The upper face of the front ends of the reach irons 4 are recessed to  
50 form the shoulders 11 and 12, the former of which bear against the front edge of the plate 1, and the latter against the rear edge, the fit being sufficiently close to prevent any endwise movement of the iron on its seat in  
55 the plate 1. The sides of the reach irons 4

intermediate the shoulders 11 and 12, are slightly tapered outwardly from the top down, so as to conform to the cross section of the recessed seats 9 in the head block plate 1, and thus fit within the seats with a wedging  
60 action, which results in a close fit and prevents any independent movement of the connected parts.

The reach bars are provided with the shoulders 13, which bear against the rear  
65 edge of the plate 1, and is also provided with the shoulders 14 which bear against the front edge of said plate, and which assist in taking care of the forward pull on the reach bars. The reach bars are each provided  
70 with holes 15 located in planes in front of and behind the plate 1 for the passage of the securing clips 3, which as before explained, secure the reach irons to the head block plate, and assist in securing the latter to the  
75 head block.

By constructing the plate and irons with the recessed seats and shoulders as described, the connection between the parts is practically as rigid in the direction in  
80 which strains are applied to the several parts, as an integral structure would be, and by making the irons separate from the plate, I materially simplify the method and the cost of manufacture.  
85

It is evident that many slight changes might be resorted to in the relative arrangement of parts shown and described without departing from the spirit and scope of my invention hence I would have it understood  
90 that I do not wish to confine myself to the exact construction and arrangement of parts shown and described, but,

Having fully described my invention what I claim as new and desire to secure by  
95 Letters-Patent, is:—

1. The combination with a head block plate having recessed seats, the side walls of the latter being inclined downwardly and outwardly, of reach irons having sections  
100 shaped to conform to the seats and provided with right angled shoulders engaging the head block at the front and at the rear of said seats, and means for securing the plate and irons together.  
105

2. The combination with a head block having recessed seats the side walls of which are inclined downwardly and outwardly of reach irons having sections shaped to conform to the seats and provided with shoul-  
110

ders engaging the front and rear ends of the  
seats at both sides of the latter and also with  
shoulders at right angle to the side shoulders  
for engaging the front and rear edges of the  
5 plate adjacent to the seats and means for  
securing the plate and irons together.

In testimony whereof, I have signed this

specification in the presence of two sub-  
scribing witnesses.

ISAAC CORNWELL.

Witnesses:

CHAS. H. DODGE,  
ELSIE McNALLY.