

G. ARCHENBRON & W. SCHULE.

Fifth Wheels for Carriages.

No. 154,630.

Patented Sept. 1, 1874.

Fig. 1.

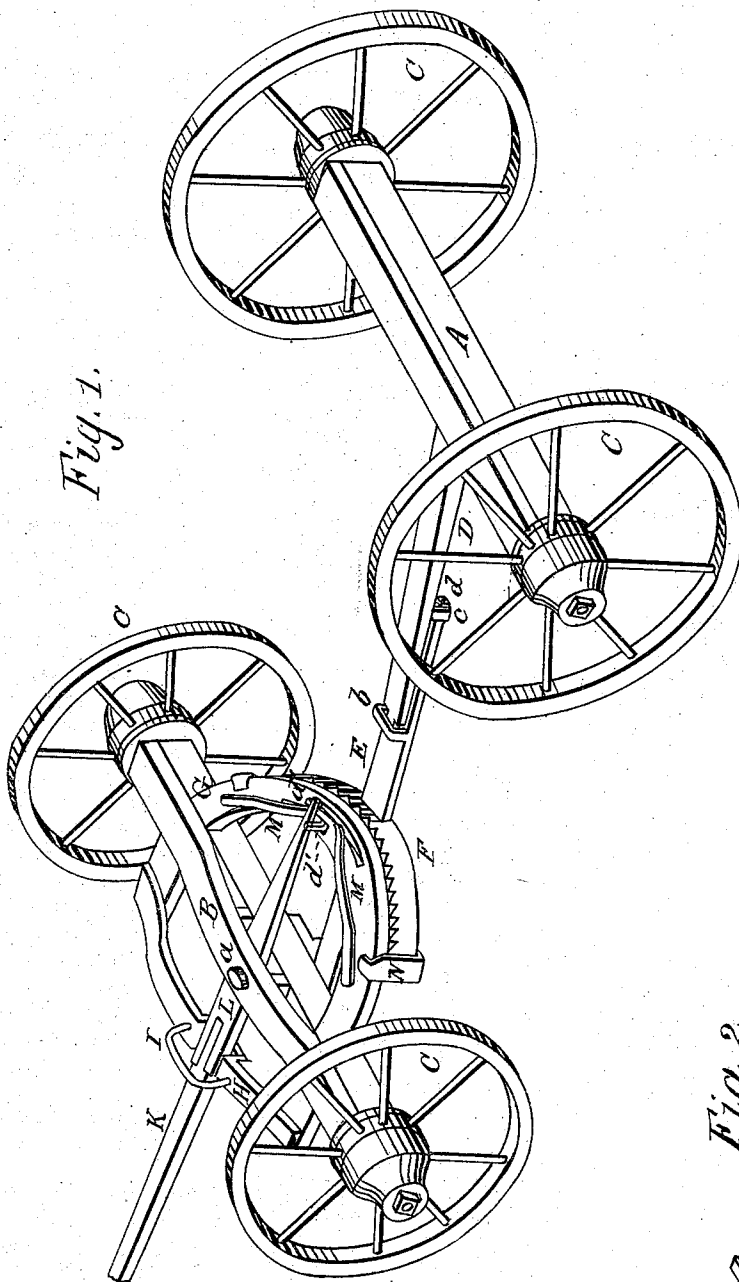
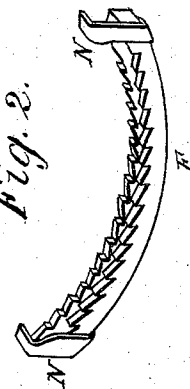


Fig. 3.

Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE ARCHENBRON AND WILLIAM SCHULE, OF WATERLOO, MICHIGAN.

IMPROVEMENT IN FIFTH-WHEELS FOR CARRIAGES.

Specification forming part of Letters Patent No. **154,630**, dated September 1, 1874; application filed February 16, 1874.

To all whom it may concern:

Be it known that we, GEORGE ARCHENBRON and WILLIAM SCHULE, of Waterloo, in the county of Jackson and State of Michigan, have invented new and useful Improvements in Wheeled Vehicles, of which the following is a specification:

The nature of this invention relates to certain improvements in that class of wheeled vehicles termed wagons, and it has for its object to so construct what is usually denominated the fifth-wheel or circle, that it will not allow the forward axle to so easily turn on the king-bolt when one of the forward wheels strikes some slight obstacle, thereby preventing the sudden jerking of the tongue to one side; to so construct the reach in two parts, that any one wheel may pass over a considerable obstacle without the usual tendency to strain or wrench the usual reach; and to so arrange the parts that the draft will be on forward axle instead of the tongue, the latter being used simply to guide the vehicle.

Figure 1 is a perspective view of my improved wagon. Fig. 2 is a similar view of the lower section of the circle, showing the double ratchet. Fig. 3 is a vertical longitudinal section through the reach, showing the manner of connecting the two sections together.

Like letters refer to like parts in each figure.

In the accompanying drawings, A represents the rear, B the front axle, and C the wheels. The reach is made in two sections, the section D being rigidly secured to the rear axle, and E being secured to the front axle by means of the king-bolt *a*, in the usual manner. The inner ends of the sections overlap each other, as shown, and terminate in a bolt on each, the bolt on the section D passing into an eye, *b*, rigidly secured to the top of the section E, while the bolt termination of the latter-named section passes through a similar eye, *c*, rigidly secured to the lower side of the section D, where it is secured by a nut, *d*, so that the two sections may have an axial movement, but cannot be drawn apart. Rigidly secured

to the section E of the reach, is the lower section F of the circle or "fifth-wheel." The upper face of this section is ratcheted or provided with two sets of teeth side by side, as shown, the teeth in one row pointing in the opposite direction of the other row. G is the upper section of the circle, rigidly secured to the front axle by bolts, and projecting in front of the axle, where the ends are tied together by the rigid bar H, to which the part I is secured. To this part the team is attached by the usual appliances. K is the tongue, pivoted to the bar L, the rear end of which terminates in a point between the two pawls *d'*, which are pivoted in suitable slots in the upper section of the circle, in such a manner that each one of said pawls will engage with one of the rows of ratchet-teeth on the face of the lower section of the circle. M are springs, secured in such a manner as to compel the pawls to engage with the ratchet-teeth. These pawls are shaped like bell-cranks, one arm of each projecting upward, as shown, on each side of the point of the bar L. The clips N hold the two sections of the circle together in the usual way. It will readily be seen that with this arrangement, ordinary obstructions in the way of the forward progress of one of the forward wheels will not cause it to deviate from a right line. Such deviation can only be had by moving the front end of the tongue to the right or left, as desired.

What we claim as our invention, and desire to secure by Letters Patent, is—

The sections F G, the former provided with ratcheted teeth, and the latter with pawls *d'*, and springs M, bar L, bar H, and part I, constructed and combined to operate substantially as and for the purposes specified.

GEORGE ARCHENBRON.
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Witnesses:

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