

George W. Fitts Guide Wheel for Vehicles.

117759

PATENTED AUG 8 1871

Fig. 1.

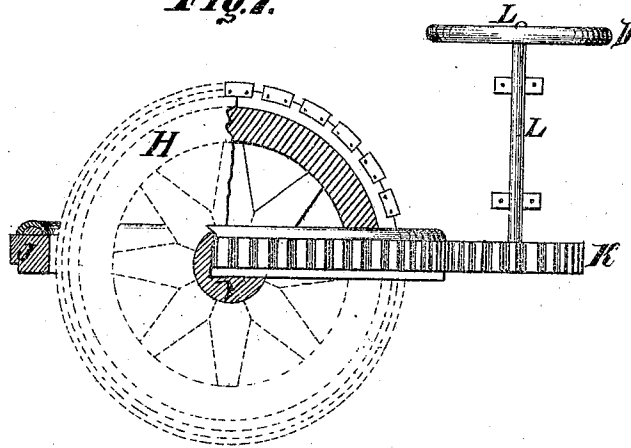
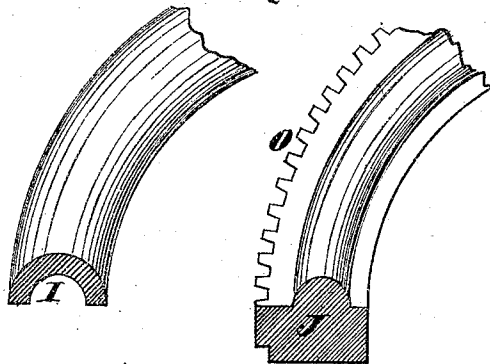


Fig. 2.



Witnesses:

Anna L. Fitts.
Benjamin W. Locke.

Inventor.

George W. Fitts.

UNITED STATES PATENT OFFICE.

GEORGE W. FITTS, OF OBERLIN, OHIO.

IMPROVEMENT IN STEERING APPARATUS FOR ROAD-STEAMERS.

Specification forming part of Letters Patent No. 117,759, dated August 8, 1871; antedated August 2, 1871.

To all whom it may concern:

Be it known that I, GEORGE W. FITTS, of the village of Oberlin, in the county of Lorain and State of Ohio, have invented a Guide-Wheel, of which the following is a specification:

The nature of my invention consists in the construction of a guide-wheel for vehicles, arranged in such a manner as to give direction and guidance to the vehicle to which it is attached.

H is the guide-wheel, revolving on an axle or shaft, V, which is securely bolted at the ends to each side of the convex circle J. J is a circle, with a convex upper surface, its circumference being provided with cog-teeth O. This circle surrounds the guide-wheel H, resting upon and bolted to the ends of the axle of the same. The convex surface of the circle J exactly fits the concave under surface of the circle I. I is a circle with a concave under surface exactly fitting over and resting on the convex surface of the circle J, permitting the same to revolve therein. To the upper surface of this circle the frame or body of the vehicle may be attached. Attached rigidly to the axle V and rising from each side of the

wheel H is a standard, which unite above the same and is connected with a swivel-joint, which is suspended from the vehicle over the same. This standard holds the two circles together and permits them to revolve one within the other. K is a pinion-wheel engaging with the cog-teeth of the circle J and fastened to the end of the shaft L, provided with the hand-wheel D for rotating it.

By rotating the pinion-wheel K the circle J and guide-wheel H are revolved. The circle J may be revolved by a band or belt, or by the shafts of a vehicle attached thereto, or by other means.

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

The steering apparatus, consisting of the concave circle attached to the frame, combined with the geared convex circle, the latter revolving within the former and having its axle attached thereto, substantially as described.

GEORGE W. FITTS. [L. S.]

Witnesses:

ANNA S. FITTS,
BENJAMIN W. LOCKE.