G. W. WADE.

STEAM ROAD-WAGON.

No. 189,977. Patented April 24, 1877.

Fig. 2.

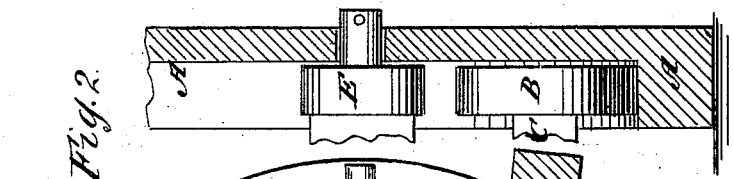
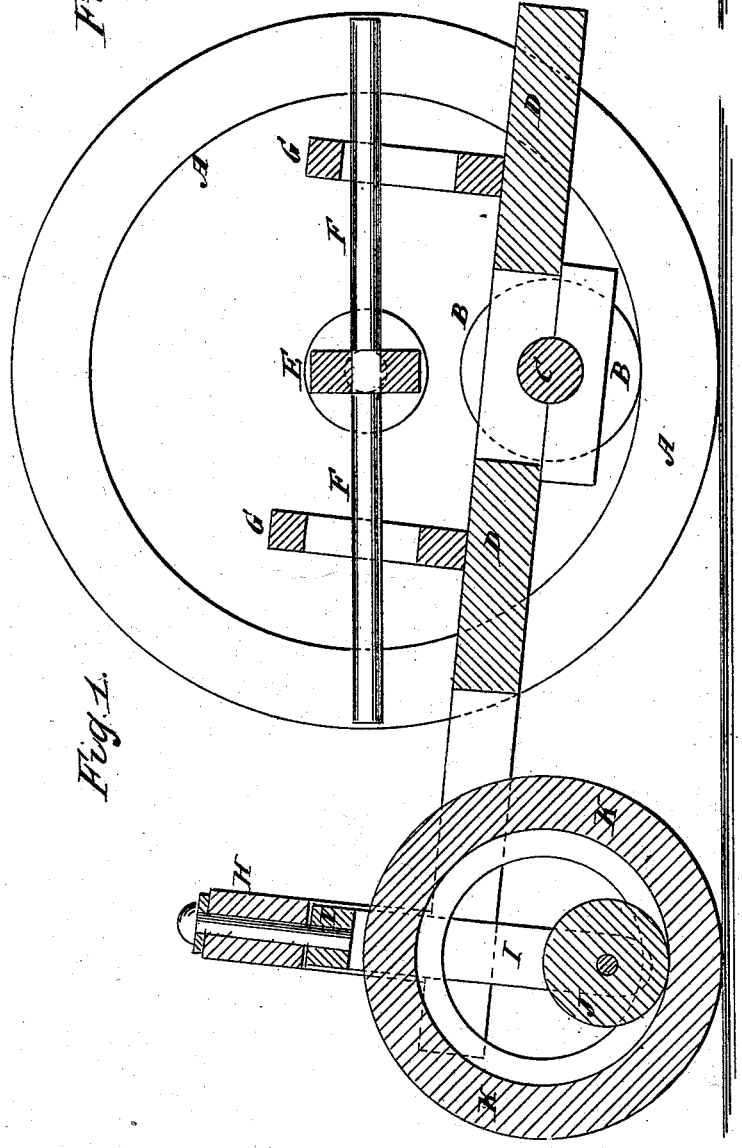


Fig. 1.



WITNESSES:

E. Wolff

J. H. Scarborough

INVENTOR:

G. W. Wade

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

GEORGE W. WADE, OF CLAM LAKE, MICHIGAN.

IMPROVEMENT IN STEAM ROAD-WAGONS.

Specification forming part of Letters Patent No. **189,977**, dated April 24, 1877; application filed March 3, 1877.

To all whom it may concern:

Be it known that I, GEORGE WILLASON WADE, of Clam Lake, in the county of Wexford and State of Michigan, have invented a new and useful Improvement in Steam Road-Wagon, of which the following is a specification:

Figure 1 is a vertical longitudinal section of one of my improved machines. Fig. 2 is a detail cross-section of a part of one of the track-wheels, showing a drive-wheel in place upon it.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved steam-wagon which shall be so constructed that it may be used upon ordinary roads, and which will easily pass over obstructions.

The invention will first be described in connection with the drawings, and then pointed out in the claim.

A are the track-wheels, which are made large, and with wide flanges upon the inner sides of their rims, to serve as tracks for the small driving-wheels B to run upon, so that the machine may lay its own track as it advances.

The driving-wheels B are rigidly attached to the ends of the shaft or axle C, so as to be revolved by the revolution of said shaft or axle C, which revolves in bearings attached to the platform D, and is designed to be driven by a steam-engine placed upon the said platform D.

The track-wheels A are kept from spreading by an axle, E, the journals of which pass through the hub of the said wheels A.

To the axle E is attached a rod or bar, F, the ends of which pass through slots in the standards G, attached to the platform D. The rod F and standard G serve as a reach to keep the wheels A always parallel with the platform D, while allowing said wheel and platform to move forward and back upon each other within the limits fixed by the standards G.

With this construction, as power is applied to the axle C, the wheels B roll forward upon the flanges of the wheels A, and are all the time rolling up a slight inclined plane. Should the track-wheels A, or either of them, strike an obstruction, they will stop, while the wheels B will roll up a steeper inclined plane until the center of gravity has passed the point of resistance, when the wheels A will gently tilt over the obstruction, and the wagon will pass on without jar.

To the forward end of the platform D is attached an upright frame, H, to the top bar of which is swiveled a frame, I.

To the lower part of the swiveled frame I is pivoted a small wheel, J, which rolls in a groove in the inner surface of the ring K. The wheels K J operate in regard to obstructions in the same way as the wheels A B, and are designed to be turned, to guide the wagon, by means of ropes or chains and a steering-wheel, in the same manner as a ship's rudder is turned.

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

The combination of flanged track-wheels A, shaft C, having wheels B, the axle E, having rod F, the platform having slotted standards G, frames H I, having wheel J, and the track-wheel K, all constructed and arranged as shown and described, to form a steam road-wagon.

GEORGE WILLASON WADE.

Witnesses:

FRANK D. WADE,

DELOS B. SMITH.