

E. F. ESPÉRANDIEU.
Tricycle.

No. 226,504.

Patented April 13, 1880.

Fig. 1.

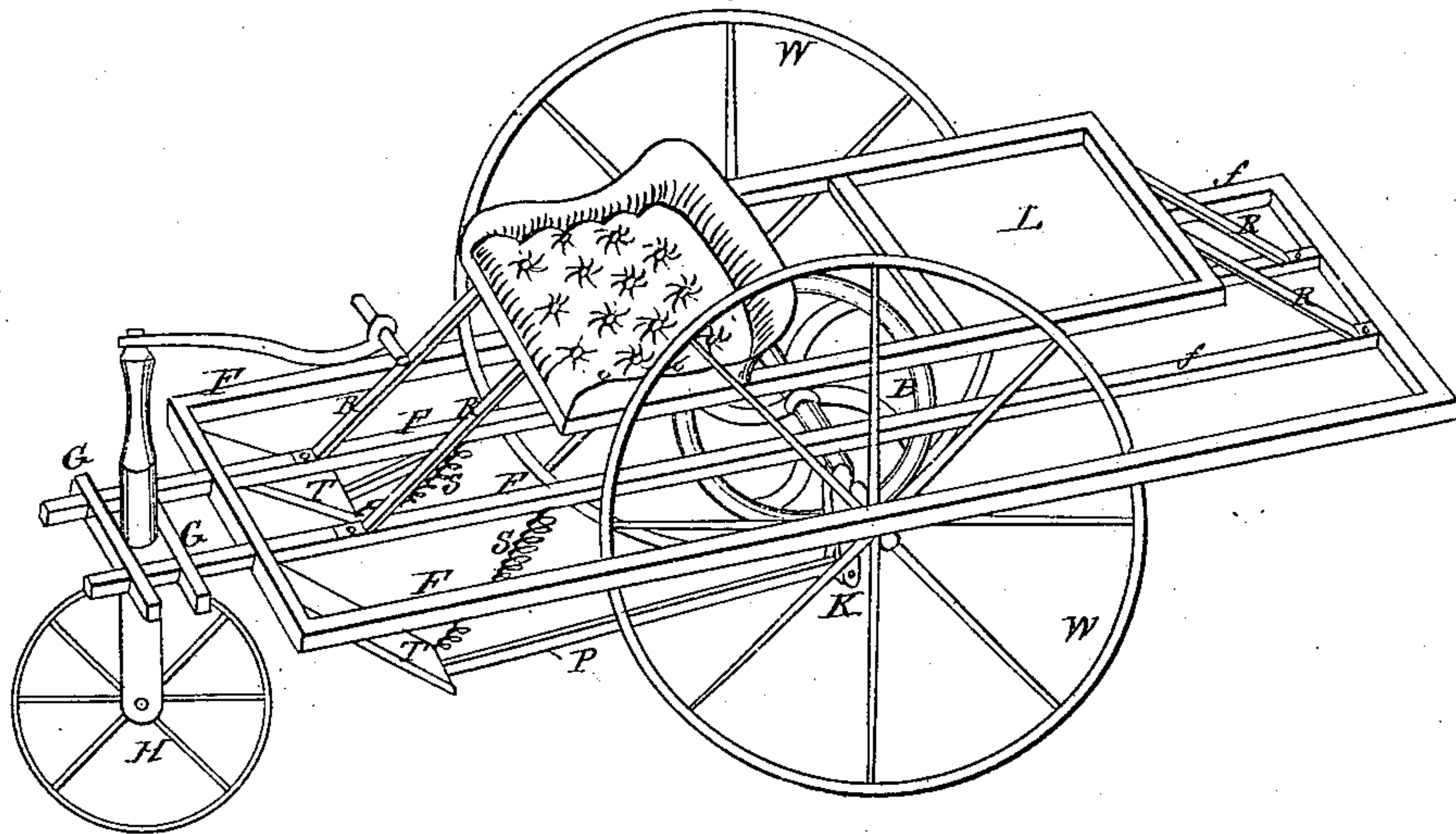
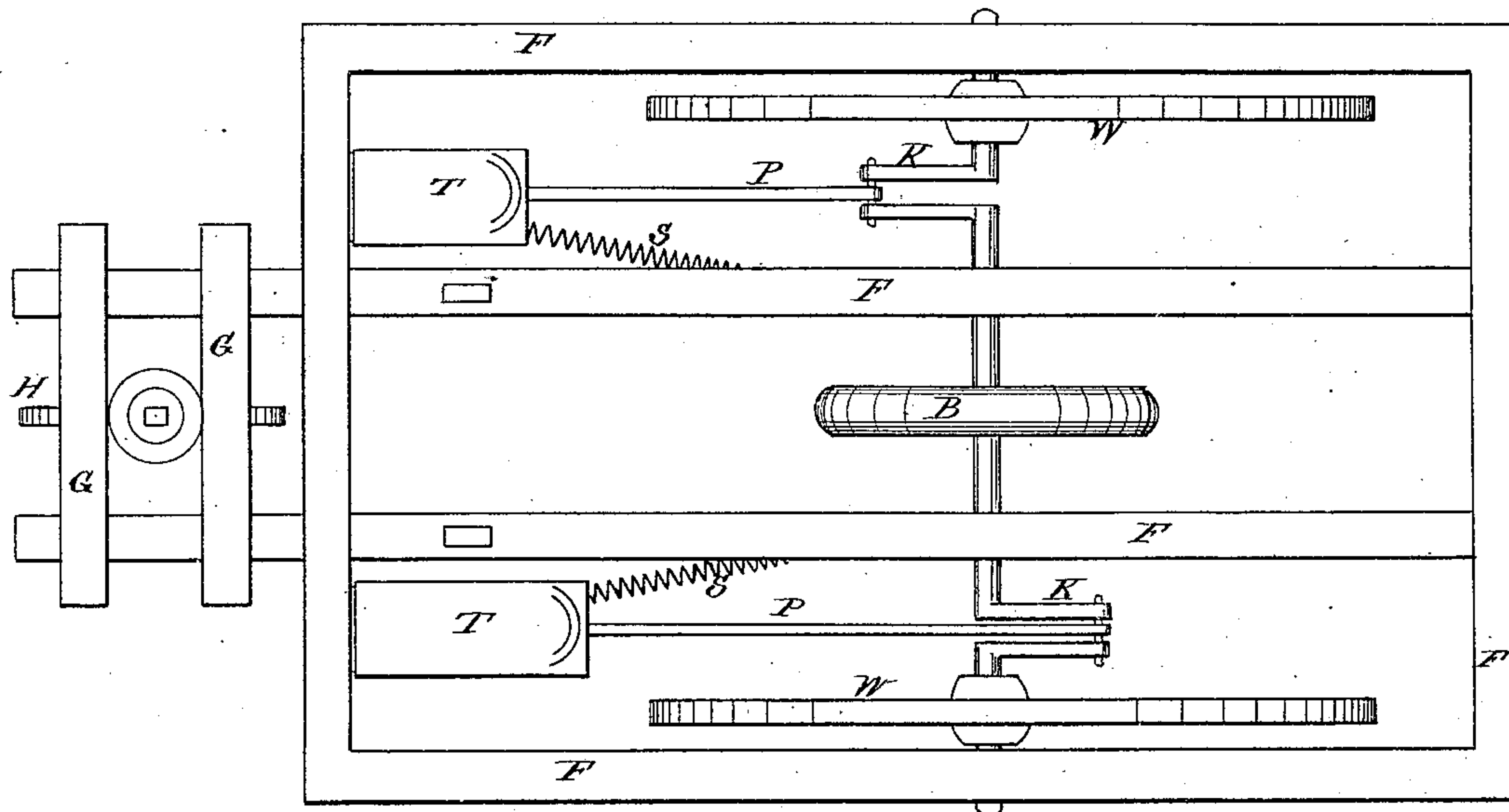


Fig. 2.



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TRICYCLE.

SPECIFICATION forming part of Letters Patent No. 226,504, dated April 13, 1880.

Application filed January 8, 1880.

To all whom it may concern:

Be it known that I, EMILE F. ESPÉRANDIEU, of Nashville, in the county of Davidson and State of Tennessee, have invented a new and Improved Tricycle; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention has for its object to produce a velocipede of the tricycle class which shall be adapted for carrying packages, merchandise, or any articles of light weight, and which may be propelled by working swinging treadles having springs that aid in moving them backward.

The construction and arrangement of parts are as hereinafter described and claimed, and as shown in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved tricycle, and Fig. 2 a plan view of the main frame and the propelling mechanism of the machine.

The skeleton-frame F of the body of the tricycle is supported by two driving-wheels, W, and a front steering-wheel, H. The vertical shaft of the latter is journaled in a forward extension, G, of frame F, and has an arm attached for use in turning the wheel, and thereby guiding the vehicle.

The wheels W are keyed fast on the axle, having two cranks, K K, which are placed at an angle of about forty-five degrees to each other in a radial direction.

A heavy balance-wheel, B, is placed on the middle portion of the crank-shaft, for the purpose of rendering the operation of the crank and propulsion of the tricycle as steady and uniform as practicable.

The operator sits on a seat at the front of the platform L and propels the tricycle by

working the treadles T, which are connected with the crank K by means of rods P. The treadles are hinged to the front portion of frame F, and the rods P are hinged to their lower ends. The operator places a foot on each treadle, and by alternating the pressure on them gives them a swinging movement, which imparts rotation to the axle, and thereby, also, to the driving-wheels W, and thus propels the tricycle.

Springs S are attached to the lower ends of treadles T to retract them or swing them backward after each forward movement. This greatly relieves the operator and lessens his fatigue, since he is required to make little or no exertion to raise his limbs.

The platform L is supported on frame F by means of legs R, and has a raised edge, so that it is adapted for receiving and holding articles of merchandise, packages, or other things of light weight and small bulk. The tricycle is thus made a convenient means for easy and speedy transportation or delivery of goods.

I do not claim, broadly, the combination of retracting-springs with levers for operating a velocipede; but,

Having thus described my invention, what I claim is—

The improved tricycle formed of the main frame F G and the seat and platform L, or supplementary frame mounted thereon, the transporting-wheels W, the axle, and steering-wheel H, the treadles T, hinged as specified, and having the springs S and rods P attached, as shown and described.

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Witnesses:

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