(No Model.) 2 Sheets—Sheet 1.

T. L. GOBLE.

VELOCIPEDE.

No. 390,662. Patented Oct. 9, 1888.

Fig. 1.

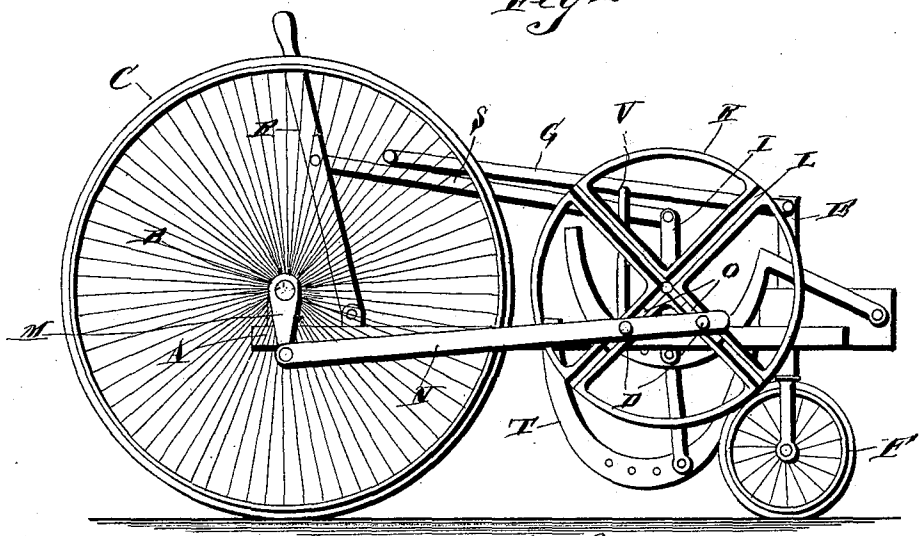
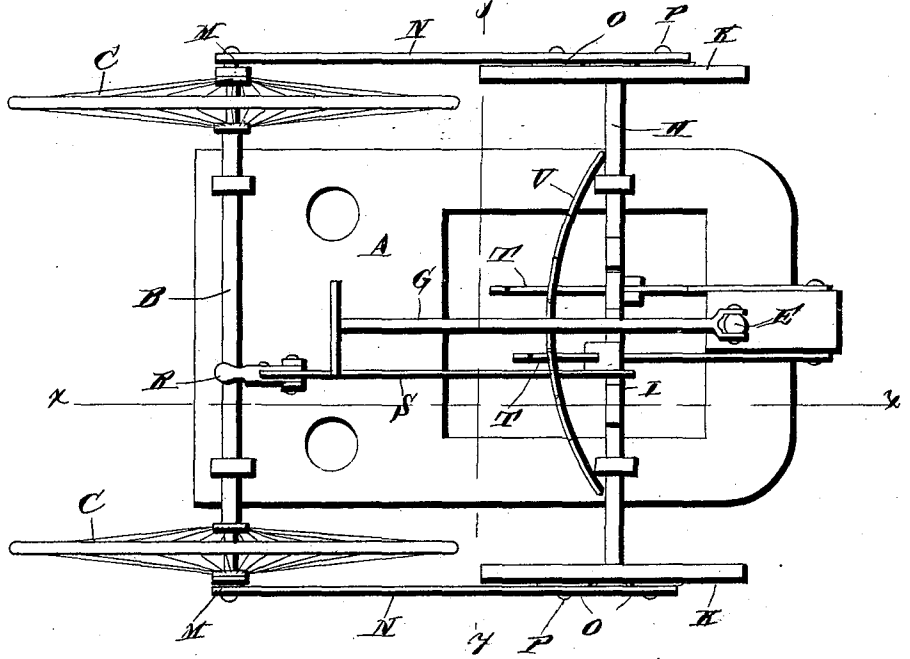


Fig 2.



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(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

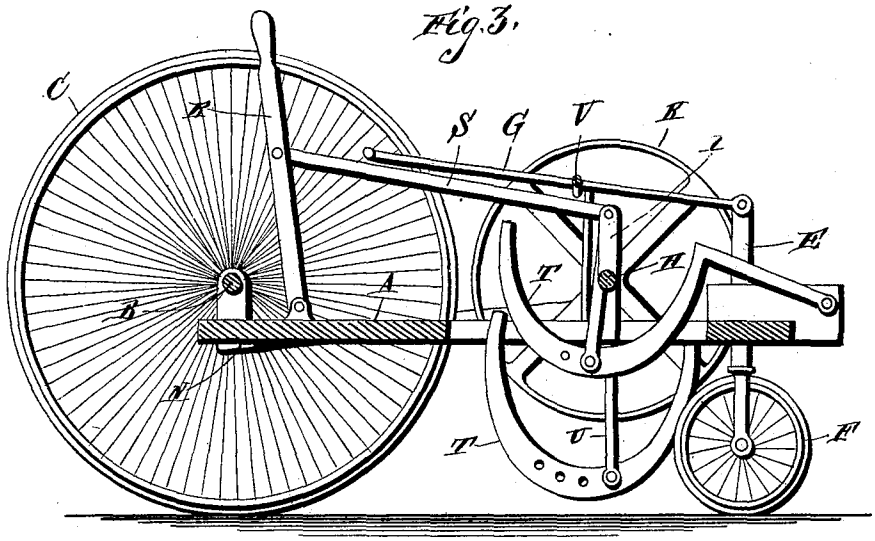

Fig. 4.

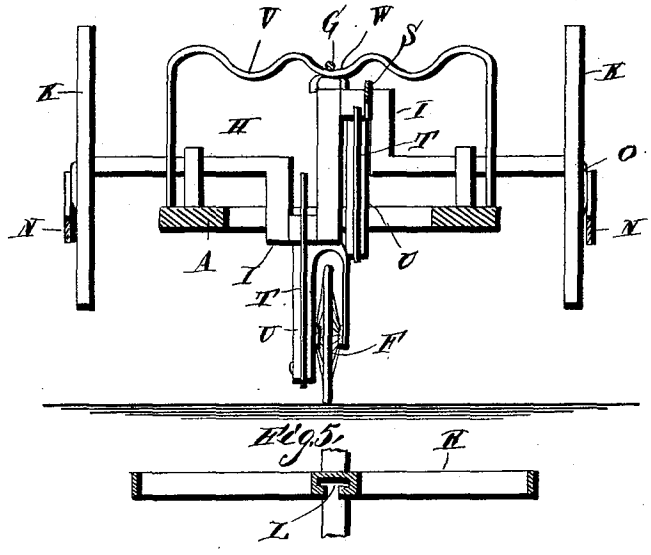

Fig. 5.

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UNITED STATES PATENT OFFICE.

TRUMAN LUTHER GOBLE, OF SAVONA, NEW YORK.

VELOCIPEDE.

SPECIFICATION forming part of Letters Patent No. 390,662, dated October 9, 1888.

Application filed June 13, 1888. Serial No. 276,924. (No model.)

To all whom it may concern:

Be it known that I, TRUMAN LUTHER GOBLE, a citizen of the United States, residing at Savona, in the county of Steuben and State of New York, have invented a new and useful Improvement in Vehicles, of which the following is a specification.

My invention relates to an improvement in vehicles, and especially velocipedes, hand-cars, and the like; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a side elevation of a vehicle provided with a power embodying my improvements. Fig. 2 is a top plan view of the same. Fig. 3 is a vertical longitudinal sectional view taken on the line *x x* of Fig. 2. Fig. 4 is a vertical transverse sectional view taken on the line *y y* of Fig. 2. Fig. 5 is a transverse section of the disk marked K, showing the T-shaped slot.

A represents the platform or body of the vehicle. B represents the axle at the rear end thereof, and provided with the wheels C.

E represents a vertical post or standard, which is pivoted in the front end of the body or platform, at the center of the same, has a guiding-wheel, F, mounted in the vertical slot in its lower end, and has an arm or tiller, G, flexibly jointed to its upper end.

H represents an operating-shaft, which is journaled in suitable bearings on the body or platform, near the front end thereof, the said shaft being provided at its center with cranks I, which extend in opposite directions. To the ends of the said shaft are secured wheels or disks K, and the said wheels or disks are provided on their outer sides with radial slots L, which are arranged at right angles to and bisect each other, the said slots being T shaped in transverse section, as shown in Fig. 5.

Each wheel C has a crank, M, the said cranks being arranged at right angles to each other, and connected to each of the said cranks is a pitman, N.

O represents slide-blocks, one pair of which is fitted in the slots L of the wheels or disks K, the said slide-blocks being T-shaped in transverse section, and thereby adapted to be retained in the said slots. Owing to the fact that the slots L are arranged at right angles to each other, it follows that the slide-blocks O are also arranged at right angles to each other, and the said slide-blocks are connected independently to the front ends of the pitmen by means of pivotal bolts or pins P.

R represents an operating-lever, which is fulcrumed at its lower end, near the rear end of the body or platform, and is connected to one of the cranks of the shaft H by means of a link, S, thereby adapting the said crank-shaft to be rotated by means of the said lever, as will be readily understood. This lever R and link S are to be employed when my improved mechanical power is used for propelling a hand-car; but when my improved mechanical power is used on a tricycle or other velocipede I propose to use a pair of pedal-levers, T, which are connected to the cranks I by means of links U.

I have herein illustrated both the hand-lever R and the pedal-levers; but it will be understood that in practice I do not propose ordinarily to use both of such levers, although the same may be done, if desired.

V represents a curved bar, which is arranged transversely over the body of the platform, at a suitable distance from the front end thereof, and is provided with a series of notches or recesses, W, which are adapted to receive the tiller G, and to support the same and enable the vehicle to be guided in any direction.

The operation of my invention is as follows: When the shaft H is rotated by means of the levers, the rotary motion of the wheels or disks K causes the slide-blocks O to operate the pitman N, so as to rotate the wheels C on the axle and thereby propel the vehicle, as will be readily understood.

Having thus described my invention, I claim—

In a vehicle, the combination of the shaft B, having the wheels C and cranks M, the shaft H, having the cranks I, extending in opposite directions, the disks K, attached to said shaft and having the bisecting radial guides, the slide-blocks in said guides, the pitman connecting said slide-blocks to the cranks M, the levers T, and the links U, connecting the same to the cranks I, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

TRUMAN LUTHER GOBLE.

Witnesses:

M. M. ORCUTT,

M. B. MALLORY.