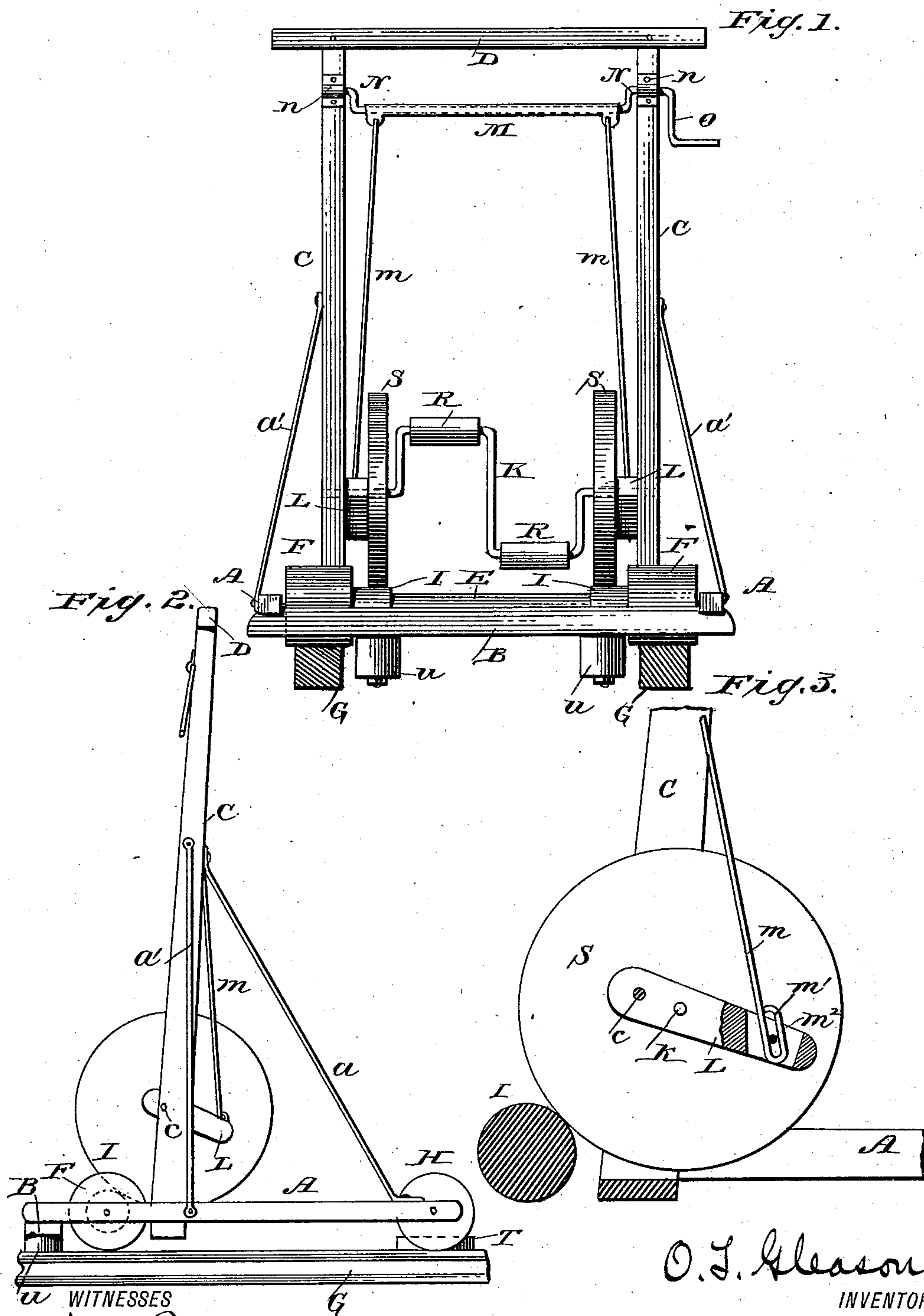


(No Model.)

O. T. GLEASON.  
VELOCIPÈDE.

No. 289,907.

Patented Dec. 11, 1883.



WITNESSES

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# UNITED STATES PATENT OFFICE.

ORVILLE T. GLEASON, OF TEMPLE, MAINE.

## VELOCIPEDÉ.

SPECIFICATION forming part of Letters Patent No. 289,907, dated December 11, 1883.

Application filed October 5, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, ORVILLE T. GLEASON, a citizen of the United States, residing at Temple, in the county of Franklin and State of Maine, have invented certain new and useful Improvements in Velocipedes, of which the following is a specification, reference being had therein to the accompanying drawings.

10 My invention has relation to velocipedes, and more particularly to that class intended to run on a wooden track; and its object is to provide a vehicle whereby a man can rapidly propel himself from one point to another on the track with a minimum expenditure of energy; and to that end the novelty consists in the construction of the same, as will be hereinafter more fully described, and particularly pointed out in the claims.

20 In the accompanying drawings similar letters of reference indicate like parts of the invention.

Figure 1 is a rear elevation of my improved velocipede; Fig. 2, a side elevation, and Fig. 3 a detail view of the driving-wheel and connected mechanism.

A B is the base-frame, and C C the uprights, connected at their tops by the cross-bar D.

30 *a a* are forward braces, and *a' a'* the side braces, of the standards or uprights C C.

E is a shaft extending transversely, and having its ends journaled in the frame A A. This shaft is provided with broad-faced traction-wheels F F, which support the main weight of the machine upon the rails G G.

40 H H are similar, though narrower-faced, wheels, mounted in the forward end of the frame, and likewise run upon the rails to support that end of the machine. The shaft E is provided with friction-wheels I I, secured thereto—one on each side of the machine—adjoining the traction-wheels F F.

45 K is a double-crank shaft mounted in the levers L L, which are secured to the standards C C at their fulcrum-points *c c*, and to the free ends of these levers are attached the pitmen *m m*, which extend upward and are secured to a sleeve, M, upon the shaft N. This shaft N is mounted in bearings *n n* in the standards C C, and one end is bent to form a crank-handle, O. The crank-shaft K has

pedals R R, for the feet to rest upon, and it is likewise provided with two driving-wheels, S S, the peripheries of which come into contact with the friction-wheels I I upon the shaft E. It will thus be seen that if an operator place his feet upon the pedals R R and support himself by holding onto the cross-bar D, the motion which he imparts to the shaft K is communicated by the driving-wheels S S to the friction-wheels I I, and through the shaft E to the traction-wheels F F, which rest upon the rails, and the machine will be propelled in proportion to the velocity with which the crank-shaft K is rotated.

65 T T are vertical guide-rollers, mounted in the forward end of the frame, at a right angle to the supporting-wheels H H, and serve to keep said wheels in proper place upon the rails.

70 U U are smaller guide-rollers, similarly mounted at the rear of the machine, and are intended to keep the traction-wheels F F in place when the machine is rounding a short curve or is being run backward; and to facilitate this these guide-wheels U U are mounted a little farther from the traction-wheels F F than is the case with reference to the forward guide-rollers, T T, and the supporting-wheels H H.

80 The lower ends of the pitmen *m m* have slots *m'*, in which the pin *m<sup>2</sup>* plays, and this arrangement allows for the variation of the periphery of the driving-wheels from wear and tear and other causes.

85 In going down grade, or after the machine acquires a certain velocity, the operator raises the handle O to bring it up against the cross-bar D. This raises the levers L L, shaft K, and driving-wheels S S, the latter being released from the friction-wheels I I. Consequently no motion is communicated to the driving mechanism, and the operator is resting during this time. When the speed slows down, the handle O is lowered again to bring the driving-wheels in contact with the friction-wheels I I, and the machine may be propelled as before.

95 Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—



1. The combination, with the shaft E, having friction-wheels I I, of the double-crank shaft R, provided with driving-wheels S S, and journaled in the levers L L, substantially  
5 as set forth.

2. The combination of the driving mechanism mounted in the levers L L with the pitmen *m m*, sleeve M, and shaft N, having handle O, as set forth.

In testimony whereof I affix my signature in the presence of two witnesses.

ORVILLE T. GLEASON.

Witnesses:

ABBIE J. SAWYER,  
MATTIE B. OAKES.