O. T. Gleason.

Velocipede.

No. 77,478. Patented May 5, 1868.

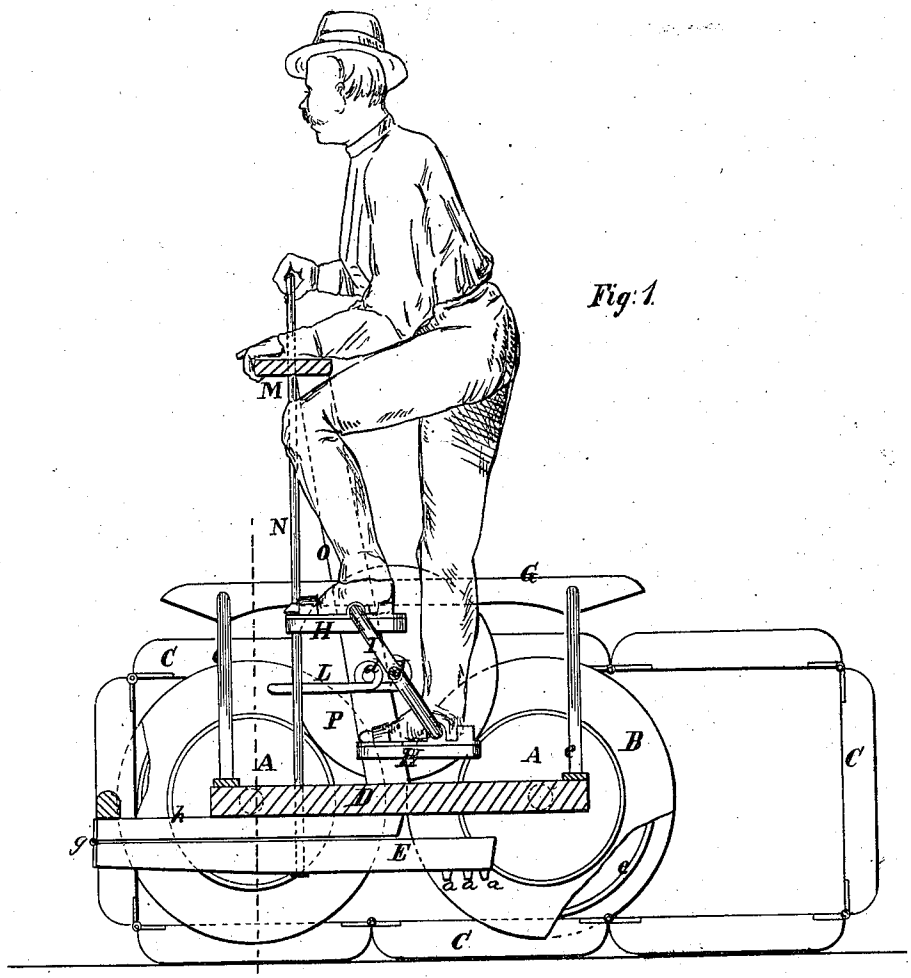


Fig: 1.

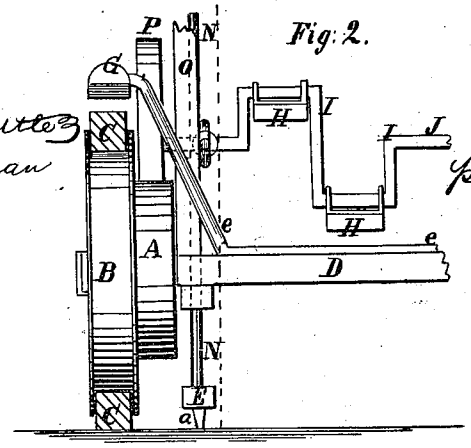


Fig: 2.

WITNESSES.

W. C. Aslikeitter

Wm A Morgan

INVENTOR.

O. T. Gleason

per Munn & Co

attorneys

THE NORRIS PETERS CO., WASHINGTON, D. C.

United States Patent Office.

O. T. GLEASON, OF FARMINGTON, MAINE.

Letters Patent No. 77,478, *dated May* 5, 1868.

IMPROVED VELOCIPEDE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, O. T. GLEASON, of Farmington, in the county of Franklin, and State of Maine, have invented a new and improved Velocipede; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a sectional elevation of my improved velocipede, the section being taken through the line *x x* of fig. 2.

Figure 2 is a detail view of one wheel and the crank from a sector, through the line *y y*, fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to obtain locomotion by the direct application of the weight of the operator to the crank of the driving-shaft, together with other devices, which will hereinafter be fully set forth.

In the accompanying plate of drawings, the frame or platform of the machine is shown at D.

The running-wheels are provided with interior friction-bosses or wheels A, which are in contact with the driving-wheels P, as shown.

The driving-wheels are at the extremity of a shaft, J, which latter is bent to form a double crank, I, as shown.

The shaft of the driving-wheels has its bearings in levers L, which are pivoted to stud-pins *d*, projecting from the uprights *o*, which latter arise from the platform D.

The opposite ends of the levers L are connected with rods N, the friction of which will be afterwards shown.

The treadles H are hung on the cranks, as shown, and the operator, steadying himself by the cross-piece M of the uprights O, propels the machine by revolving the shaft J.

The faces of the bosses A and of the drive-wheel P are covered with any roughened material, as roughened leather, to insure their effective operation.

An endless track, composed of the hinged parts C C C, as shown, loosely close each of the two wheels on a side, and are kept in proper position by means of the flanges B of the rolling wheels as shown.

By this means the track is laid in front of the wheels, and passes over from the rear of the same in an endless belt, as shown.

The guide-rails G are supported above the traction-wheels, by means of arms *e*, as shown, and prevent the jointed track from leaving the flanges.

The levers E having cogs *a a a*, are hinged at *g* to a cross-piece, *i*, supported from the platform D by arms *h*, projecting from the platform, as shown.

There are two of these levers, one at each side of the platform, and their function is to alter the direction of the velocipede, by being thrust down by the rods N, which latter pass upward through the cross-piece M, and are manipulated by the person actuating the machine.

The rods N being also connected with the bearing-levers L, the driving-wheel P of the same side is lifted from contact with the bosses A A of the traction-wheels, whereby the machine turns readily upon the still wheels, as will be obvious.

When a level pavement is available, or the ordinary road is of sufficient evenness, the jointed track may be dispensed with, and the traction-wheels used directly upon the ground or pavement.

In this case the flanges B being disks of sheet metal, attached by means of bolts to the traction-wheels, are readily removed.

I claim as new, and desire to secure by Letters Patent—

1. The combination of four traction-wheels, each having a friction-boss, A, with the friction driving-wheels P, shaft J, double crank I I, and treadles H H, all substantially as shown and described, and for the purpose set forth.

2. The lever-bearings L, rods N, and steering-levers E, all constructed and operating together, substantially as shown and described, and for the pnrpose set forth.

O. T. GLEASON.

Witnesses:

PETER K. OAKES,

M. F. GLEASON.