

N. W. HUBBARD.

Velocipede.

No. 87,936.

Patented March 16, 1869.

Fig. 1.

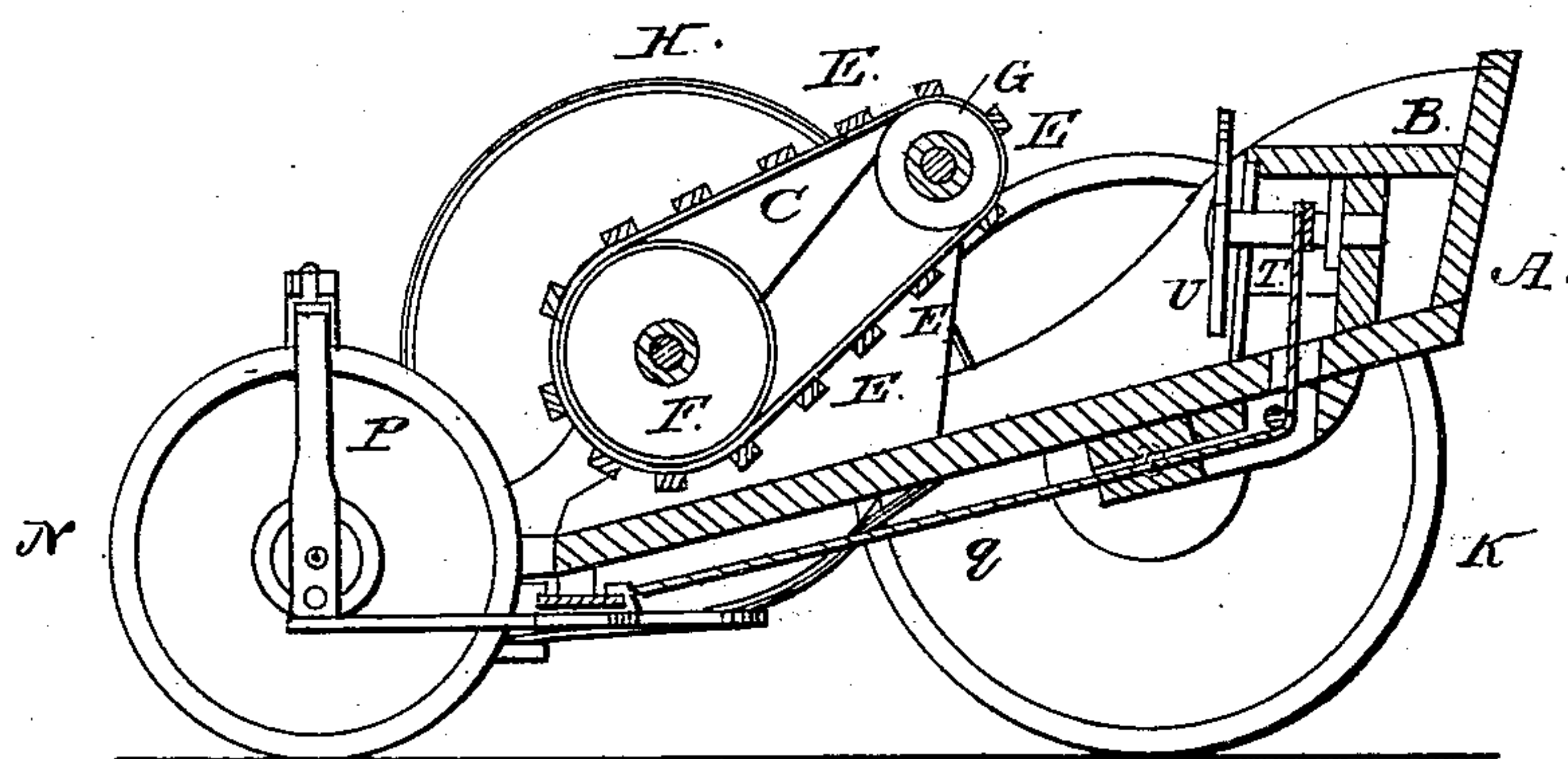


Fig. 2.

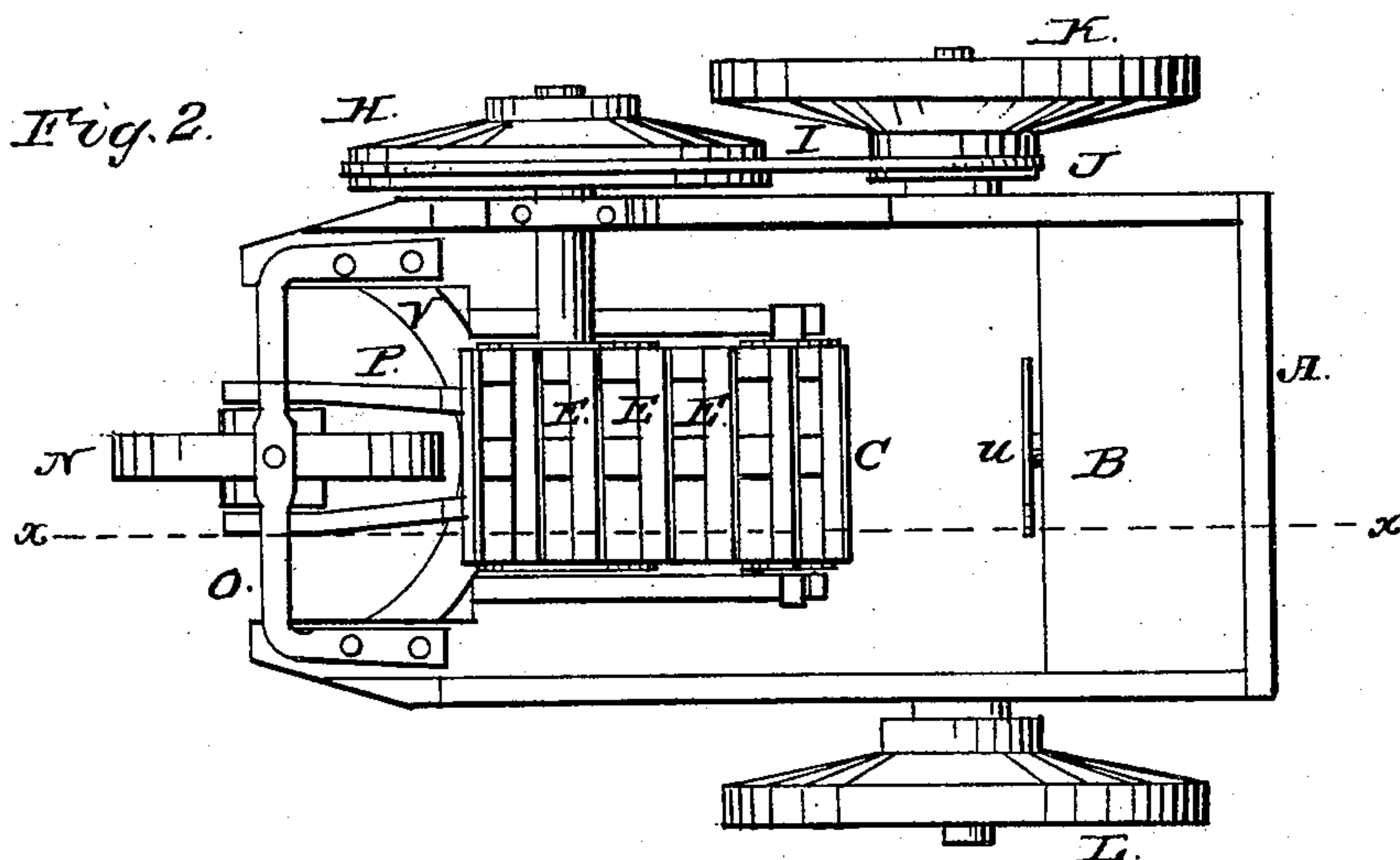
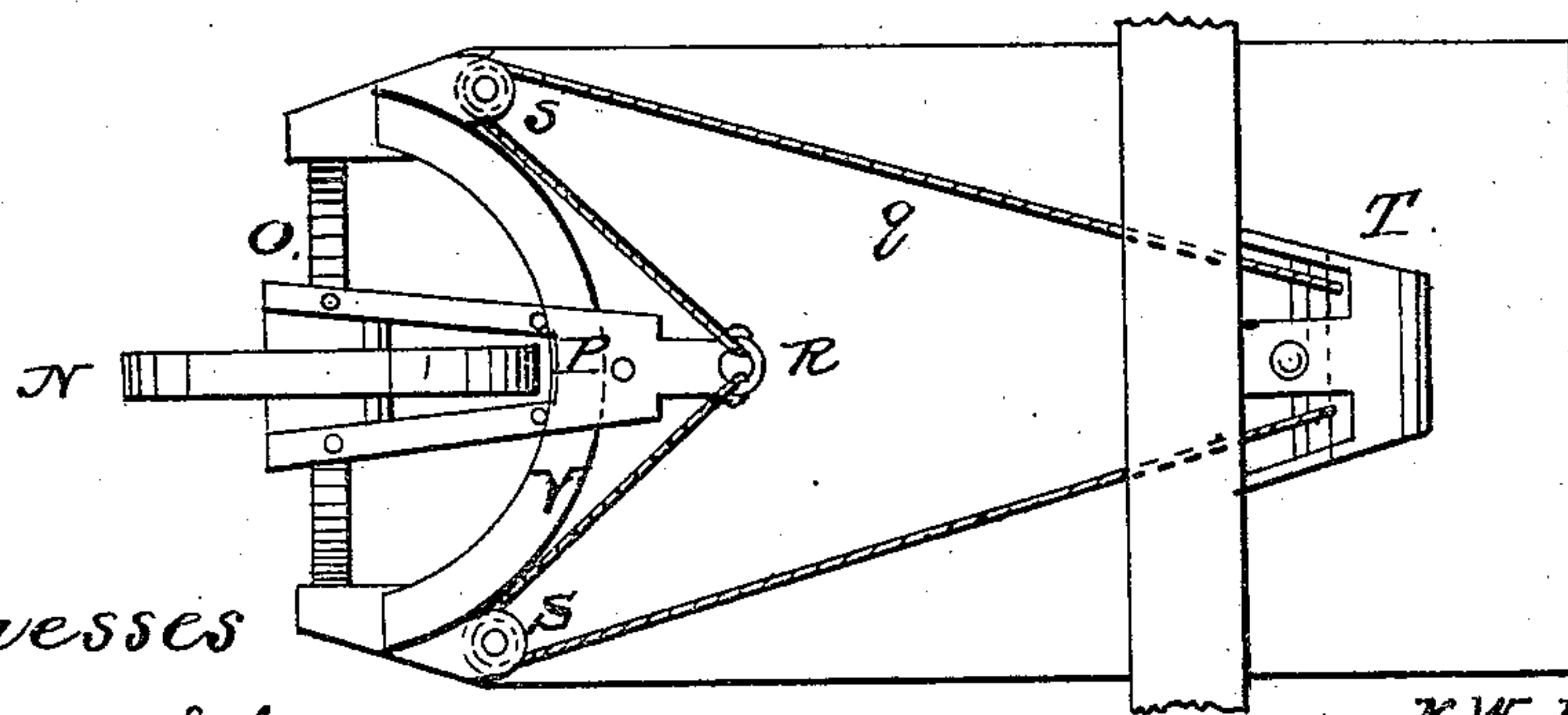


Fig. 3.



Witnesses
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United States Patent Office.

N. W. HUBBARD, OF NEW YORK, N. Y.

Letters Patent No. 87,936, dated March 16, 1869.

IMPROVEMENT IN VELOCIPEDES.

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, N. W. HUBBARD, of the city, county, and State of New York, have invented a new Improvement in Velocipedes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to new and important improvements in velocipedes, and in machines for transmitting power, or producing motion for other purposes, and consists in an endless belt or chain, and imparting motion thereby, for driving traction-wheels, as will be hereinafter more fully described.

In the accompanying sheet of drawings—

Figure 1 represents a vertical sectional elevation of the machine through the line *xx* of fig. 2.

Figure 2 is a top or plan view.

Figure 3 is a view of the bottom, or under side of the machine.

Similar letters of reference indicate corresponding parts.

A is the frame, or body of the machine.

B is the seat.

C is the endless chain or belt, which is revolved by the operator, by pressing with his feet against the cross-slats, E, of the chain, as he sits in the seat.

Two persons may operate on the chain at the same time.

A hook or hooks may also be used by the operator for pulling on the chain, while he pushes with his feet.

The chain is confined on the revolving drums F and G, the former being of greater diameter than the latter, for giving the under side of the chain the proper position to be operated on with the feet.

To the shaft of the large drum F, the pulley H is attached, from which motion is imparted by the belt, or band I, to the small pulley J, on the inside of the traction-wheel K.

The axle is fixed to the body A, on which the other wheel, L, simply revolves, while it bears its portion of the weight.

N is the steering-wheel, which is supported in a frame, from the arch O, at the forward end, on a swivel, or pin, so that it may be readily turned, for guiding or steering the machine.

P is the frame in which the wheel is confined.

Q represents the steering-cord, the ends of which are attached to the back end of the frame, as seen at R, after being passed round the fixed pulleys S S.

The cord is then carried back, under the body A, and confined to the windlass T, beneath the seat B.

U is the windlass-wheel, which, it will be seen, is always at the command of the operator.

The frame P traverses back and forth, on the semi-circular plate V, as the wheel is turned, by turning the windlass, the arrangement being similar to that of the steering-apparatus of a steamboat.

It will be seen that the operator is placed in a natural and easy attitude, so that great power may be communicated with little physical exertion.

Having thus described my invention,

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

The arrangement of the endless belt C, having the cross-slats E, the drums F G, of unequal diameter, pulley H, band I, pulley J, steering-wheel N, arched frame O, semicircular plate V, frame P, steering-cord Q, windlass T, windlass-wheel U, and the double-seated frame A, all constructed and operating as described, for the purpose specified.

The above specification of my invention signed by me, this 9th day of February, 1869.

N. W. HUBBARD.

Witnesses:

FRANK BLOCKLEY,
E. GREENE COLLINS.