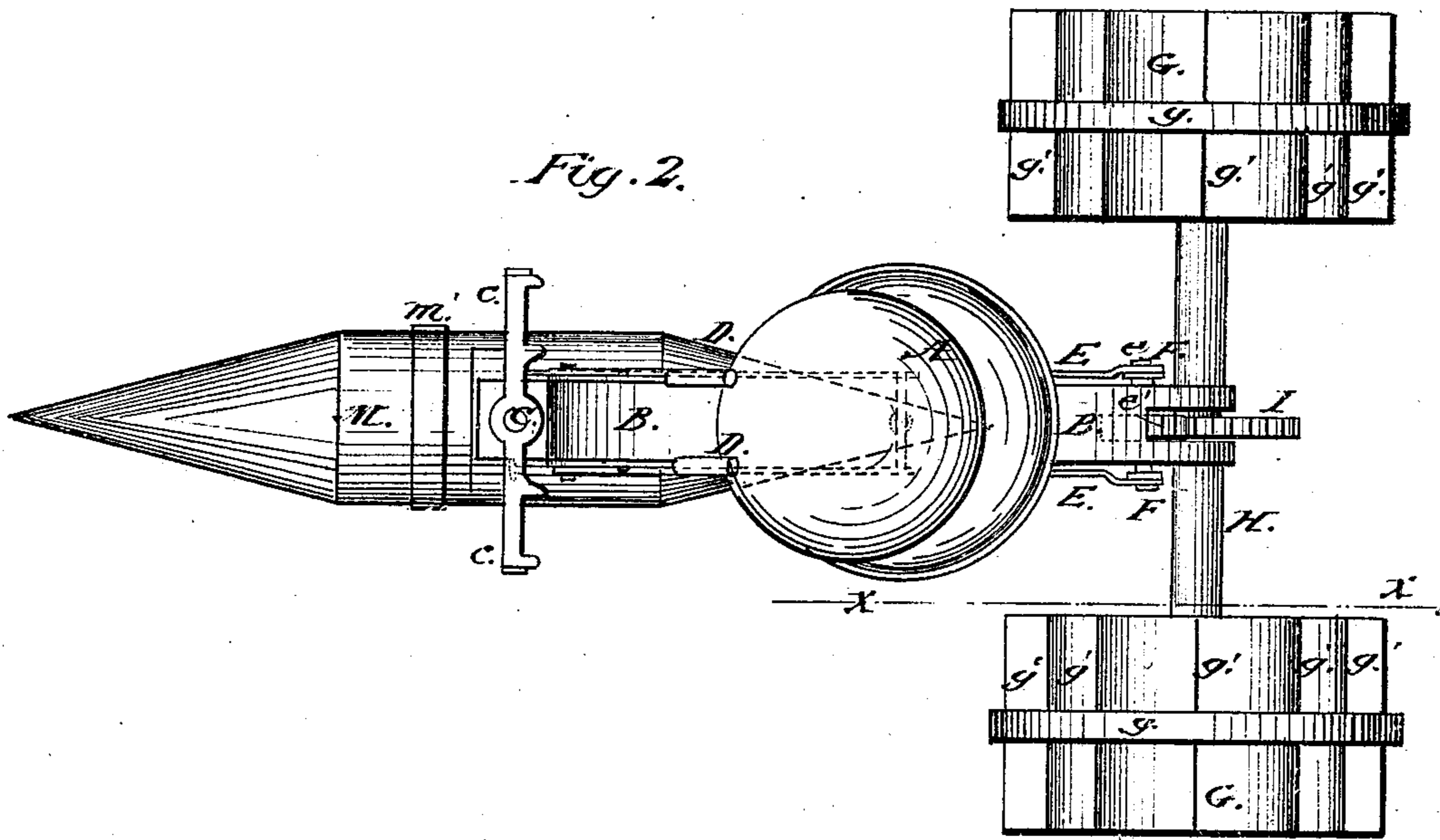
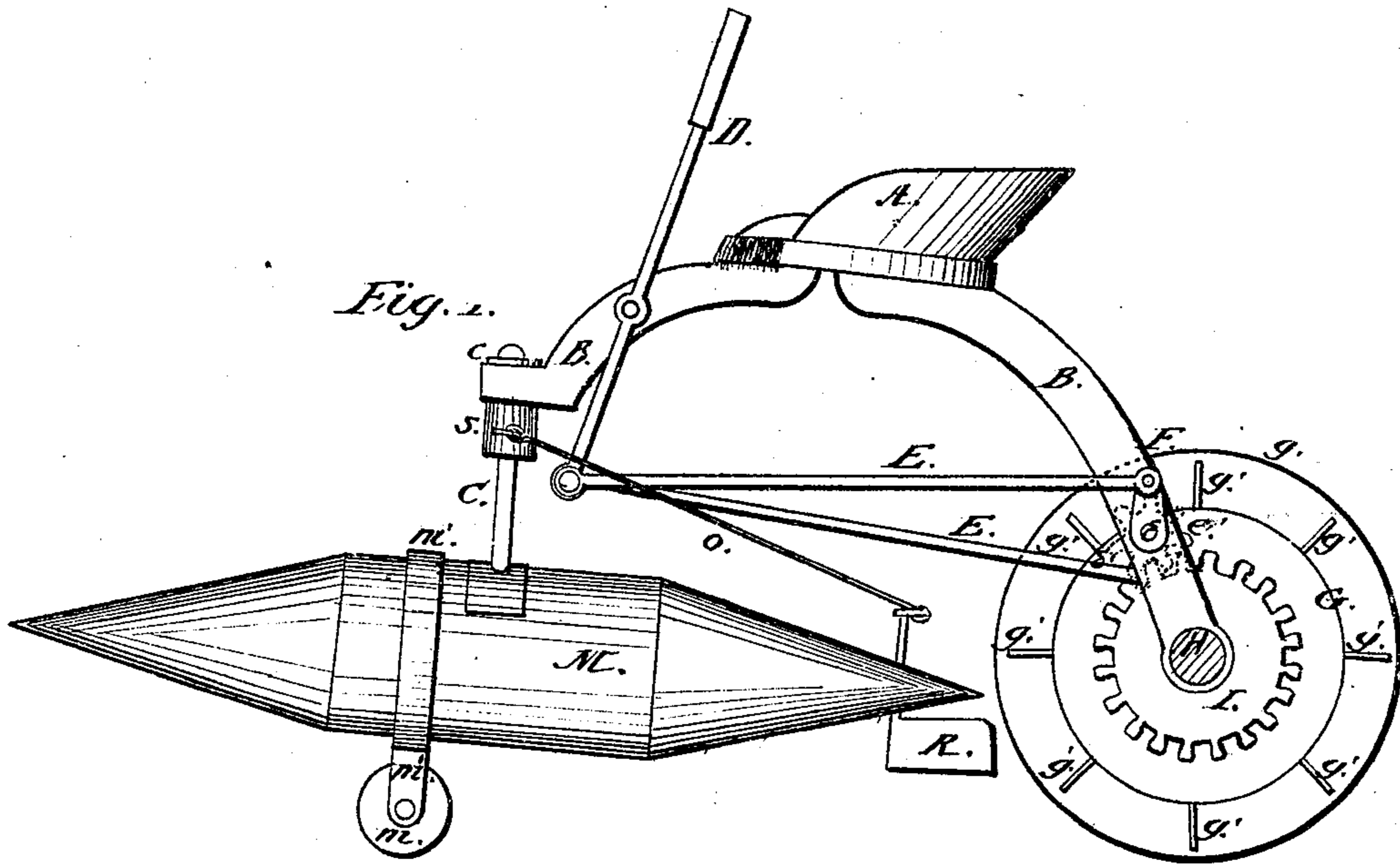


D. J. Farmer.
Water Velocipede.

N^o 92,808.

Patented Jul. 20. 1869.



Witnesses;
A. A. Pettit
J. C. Kerson

Inventor;
D. J. Farmer
by H. H. H.
Attorneys.

United States Patent Office.

DAVID J. FARMER, OF WHEELING, WEST VIRGINIA.

Letters Patent No. 92,808, dated July 20, 1869.

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, DAVID J. FARMER, of Wheeling, in the county of Ohio, and State of West Virginia, have invented a new and improved Velocipede; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a longitudinal vertical section through line *x x* of fig. 2.

Figure 2 is a top view.

The object of this invention is to provide for the public a velocipede, designed for use ordinarily on land, but capable of running equally well on water, so that when the rider arrives at a lake, river, or other sheet of water, he can ride directly on to it and across it, in that manner, without the necessity of dismounting or stopping to effect any change in his vehicle.

In the drawings—

- A is the seat;
- B, the reach or arched beam supporting the seat;
- C, the vertical standard, connected with the forward end of the reach and serving, by means of handles or pedals *c c*, to steer the carriage;
- D D, the working-levers;
- E E, pitmen, connecting the levers to the cranks of the working-shaft;
- F F, the cranks;
- e*, the working shaft, carrying a small gear-wheel, *e'*;
- G G, the draught-wheels;
- H, the axle of said wheels; and
- I, a large gear-wheel, attached to said axle, and operated by the levers D D, through the medium of the rods E E, cranks F, and gear-wheel *e'*.

The wheels G G are designed to work equally well on land or water, and to be in themselves floats which serve to support the carriage in the water.

To this end they are constructed in the form of hollow cylinders of any required size, and of any suitable material, such as sheet-metal, wood, &c., and are provided with one or more circumferential flanges, *g*, together with projecting radial paddles or buckets, *g'*.

When running on land, the wheels bear on the flanges *g g*.

When running on water, these flanges serve as keels to prevent slip, and the buckets propel the vehicle in the ordinary manner.

The lower end of the steering-rod or standard C is rigidly attached to a hollow cigar-shaped float, M, which rests on a truck or roller, *m*, the latter being attached to it by a strap, *m'*, or by any other suitable means.

A rudder, R, may be provided at the rear end of the float, its tiller-arms or cross-head being connected, by cords or chains *o o*, to the fixed and immovable socket *s*, of the standard C.

By this means a change of position in the float M will throw the helm to one side or the other, although the ropes themselves are fastened to the rigid piece *s*, and thus either the float alone, or the combined float and rudder, may be employed to control the course of the velocipede.

The float M may be made of some solid light material, such as cork, if preferred, and may be made stationary, and the tiller-ropes attached directly to the pedals or cross-heads *c c*, so as to steer the vehicle by means of the rudder alone.

I do not intend to claim broadly a velocipede provided with the hollow wheels and float; but having thus described my invention,

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

1. The wheels G G, when constructed in the form of a hollow cylinder, having the circumferential flanges *g g* and the radial flanges *g' g'*, substantially as and for the purpose set forth.

2. A float, M, arranged in relation to the standard C and the rear-wheels G G of a velocipede, substantially as and for the purposes set forth.

3. The combination of a rudder, R, with float M, and treadles or cross-head *c*, substantially as and for the purpose set forth.

4. The arrangement of the rudder R, wheel *m*, float M, standard C, socket *s*, and ropes *o o*, substantially as and for the purpose described.

5. The combination of float M, wheel *m*, standard C, reach B, levers D, rods E, cranks and gear-wheels F & I, axle H, and wheels G G, when constructed to operate together, substantially as and for the purposes set forth.

DAVID J. FARMER.

Witnesses:

N. K. ELLSWORTH,
CHAS. A. PETTIT.