

(No Model.)

2 Sheets—Sheet 1.

J. GIBBONS.
BICYCLE.

No. 313,490.

Patented Mar. 10, 1885.

Fig. 2

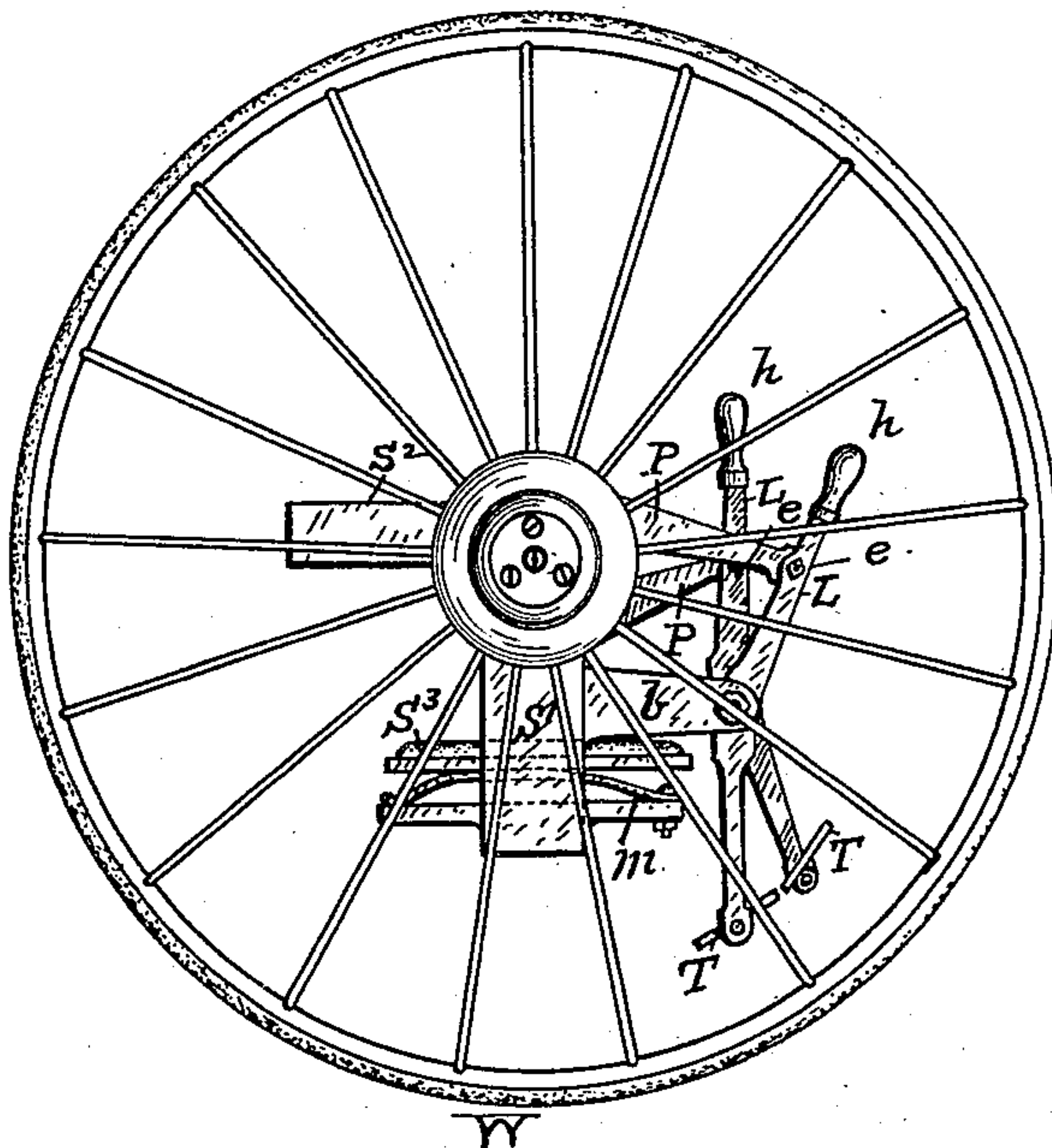
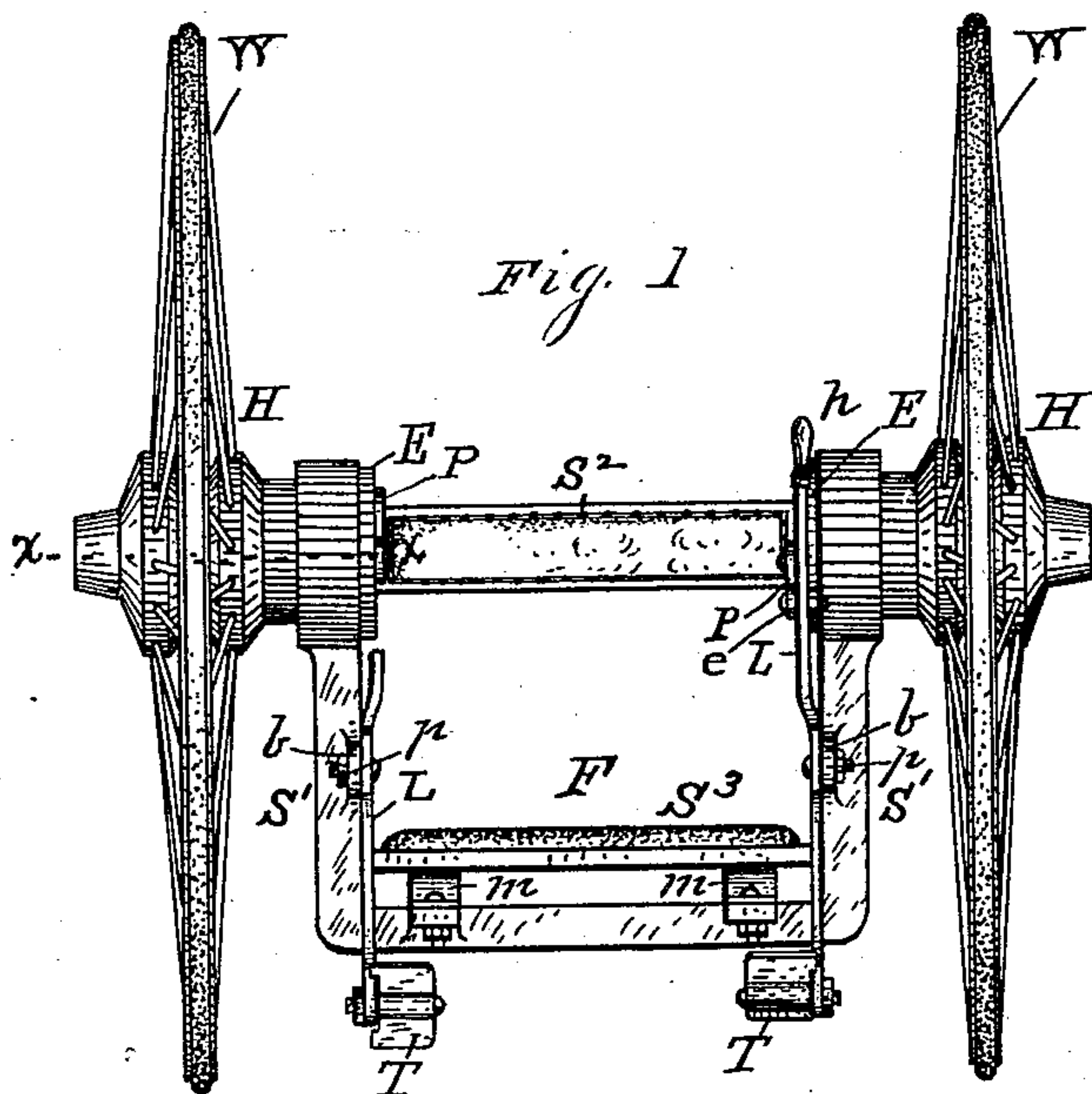


Fig. 1



WITNESSES:

Stanley M. Holder.

Charles S. Brintnell

INVENTOR

John Gibbons

BY

W. C. Taggart

ATTORNEY

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Fig. 3

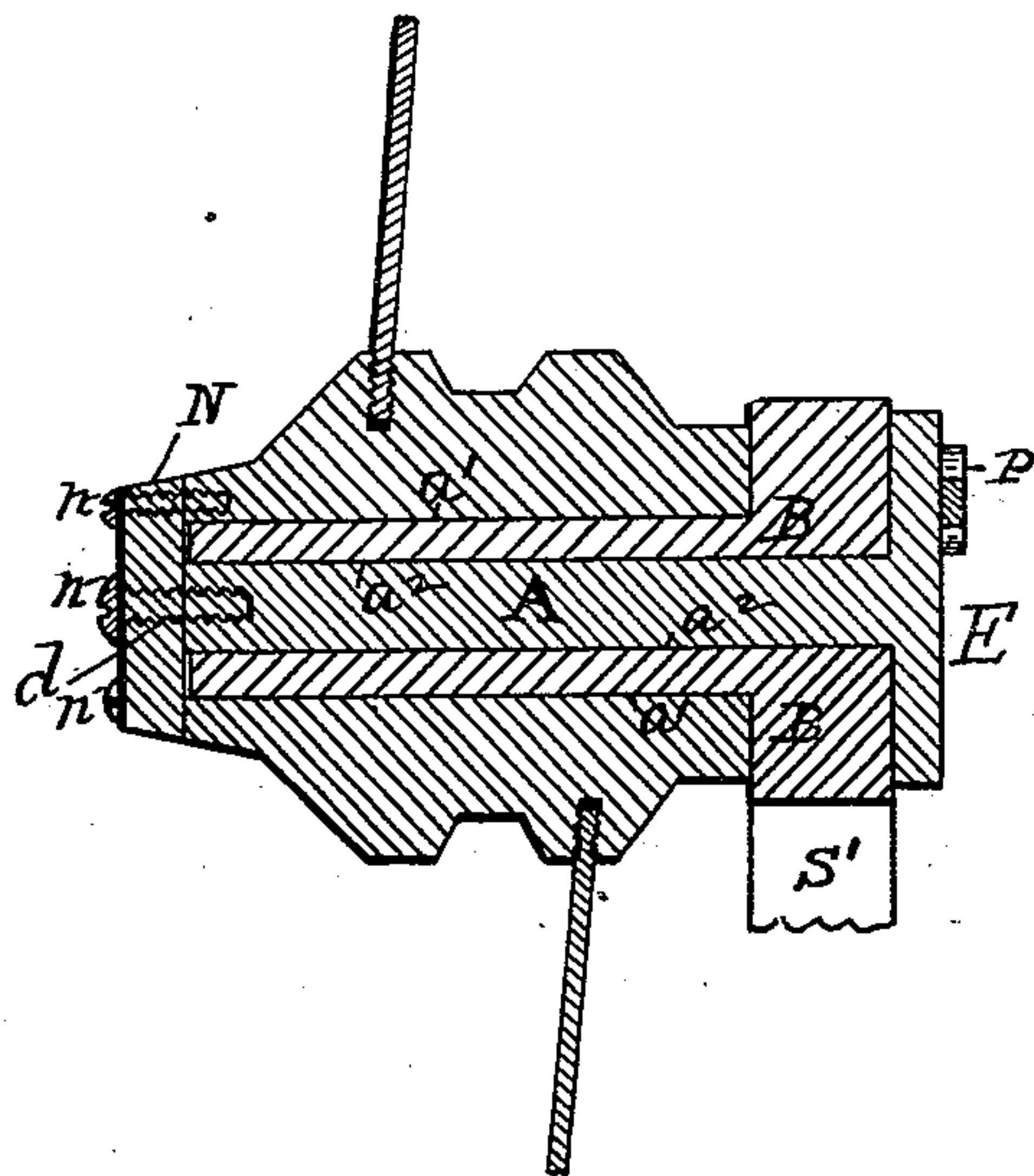
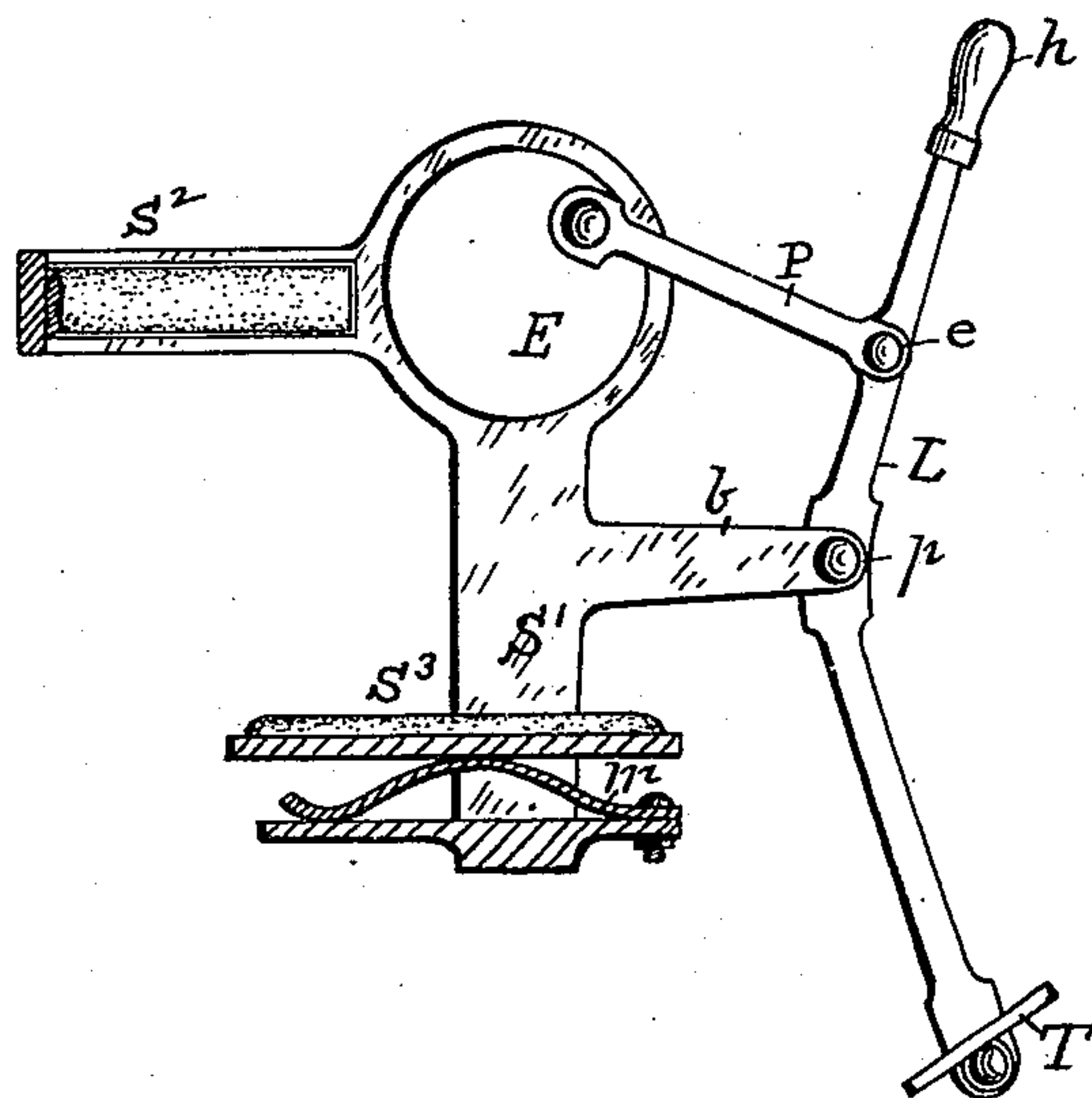


Fig. 4



WITNESSES:

Stanley M. Holden.

Charles S. Buntrell

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UNITED STATES PATENT OFFICE.

JOHN GIBBONS, OF WEST TROY, NEW YORK, ASSIGNOR TO THE MENEELY
HARDWARE COMPANY, OF SAME PLACE.

BICYCLE.

SPECIFICATION forming part of Letters Patent No. 313,490, dated March 10, 1885.

Application filed October 30, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN GIBBONS, of the village of West Troy, county of Albany, State of New York, have invented a new and useful
5 Improvement in Bicycles, of which the following is a specification.

My invention relates to bicycles; and my invention consists, as will be more fully detailed hereinafter in connection with its illustration, in the combination, with two wheels
10 of equal size having their axles in line and arranged to turn with the wheels, of a seat-frame having an axle-bearing at each side for one of said wheels, with the seat for the rider
15 arranged to hang in said frame below the wheel-axles, and a pivoted treadle and lever attached to a flange on the inner side of each of the axles for turning the latter and connected wheels.

20 The object of my invention is to produce a bicycle adapted to be run at a high rate of speed, with a seat for the rider below the axle.

Accompanying this specification, to form a part of it, there are two plates of drawings,
25 containing four figures illustrating my invention, with the same designation of its parts by letter-reference used in all of them.

Of these illustrations, Figure 1 shows a front elevation of my improved bicycle. Fig. 2
30 represents a side elevation of the same mechanism. Fig. 3 is a longitudinal vertical section taken on the line *xx* of Fig. 1. Fig. 4 is a side elevation of one side of the seat-frame and adjoining parts, taken on the inner face
35 of the same.

The several parts of the apparatus are designated by letter-reference, and the function of the parts is described as follows:

40 The letters *W* indicate the wheels of the device, of which there are two of equal size, arranged side by side.

The letters *H* designate the hubs of the wheels, and *A* the axles of the latter.

The letters *B* indicate the axle-bearings,
45 which are formed with and so as to form a part of the seat-frame *F*, the latter being made with the seat-sides *S'*, the seat-back *S''*, and the seat proper, *S'''*.

The letters *L* designate levers, of which

there is one at each side of the seat, each of 50 which is provided at its lower end with a treadle, *T*, and at its upper end with a handle, *h*.

The letters *b* designate an arm that is projected frontwardly from each side of the seat-frame, and to which arm, at *p*, each of the levers *L* is pivoted. 55

The letter *E* indicates a flanged wheel so arranged on the inner end of each of the axles *A* as to turn with the latter. 60

The letter *P* designates a pitman or crank-arm, which at each side of the seat and at each of the outer ends, *e*, of the said pitmen are pivoted to one of the levers *L*, with each of the inner ends of the pitmen pivoted at *e* to 65 the inner face of one of the flanged wheels *E*, near the perimeter of the latter; and the letter *m* indicates a spring under the seat proper.

The bearing *B*, it will be seen, is annular in form, having an outer bearing-face, *a'*, for the 70 inner face of the hub, and an inner face, *a''*, for the outer face of the axle, the axle when being actuated by the pitman-connection with the flange-wheel *E* turning in the bearing-face *a''*, and the hubs turning on the outer face of 75 the bearing *a'*, the axle *A* of each wheel and its hub being connected at *d* by means of screws *n* in the hub-cap *N*. The seat proper thus made and arranged is between the wheels, being sufficiently below the axles to sustain 80 the weight of the rider at a point where it will not be tilted by the motion of the wheels, where it is adapted to swing for adjustment, and be easily accessible.

The actuating-power to move the bicycle 85 may come from the hands or feet, or both combined when a rapid direct motion is required.

The bicycle is guided by the handles *h*, and the means which their connection gives them for checking the velocity of either of the wheels 90 to thus cause a deflection to the right or left from the moving line of direction as may be required.

The bicycle thus constructed may be turned around pivotally on a line corresponding to 95 the vertical axis of either wheel by operating alone the treadle of the opposite wheel.

Having thus described my invention, what

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

1. In a bicycle, the combination of two wheels of equal size, arranged side by side, and, 5 each wheel connected to move with its axle, a rider's seat that is pendent from the side bearings of the latter and arranged below the said axles, an annular bearing for each hub and axle, made as shown, and a flange-wheel 10 on the inner end of each axle constructed to move with the latter and adapted to receive a crank-arm or pitman, substantially in the manner as and for the purposes set forth.

2. In a bicycle having two wheels of equal 15 size arranged side by side, with an intermediately-placed seat that is below the wheel-axles, the combination of the annular bearings a' and a^2 , formed in and at the sides of the seat-frame, the axles A and hub H, connected 20 to move together, as shown, and the flange-wheel E, arranged on the inner end of each of the said axles and adapted to receive a crank-arm or pitman, said parts being constructed and arranged to operate substantially in the 25 manner as and for the purposes set forth.

3. In a bicycle having two wheels of equal size arranged side by side, with an intermediately-placed seat that is below the wheel-axles, the combination of the bearings a' and a^2 for each wheel, the axles A and hubs H, 30 constructed to move together, the flange-wheels F, arranged on the inner ends of each of the said axles, the treadle-levers L L, each pivoted to an arm on the seat-frame, and the pitmen P P, each connecting one of the treadle-levers 35 with the perimeter of one of the said flange-wheels, the said parts being constructed and arranged to operate substantially in the manner as and for the purposes set forth.

Signed at the city of Troy, New York, this 40 2d day of October, 1884, in the presence of the two witnesses whose names were by them hereto written.

JOHN GIBBONS.

Witnesses:

CHARLES S. BRINTNALL,
FRED W. SWETT.