

(No Model.)

A. PESENECKER.

VELOCIPÈDE.

No. 296,776.

Patented Apr. 15, 1884.

Fig. 1.

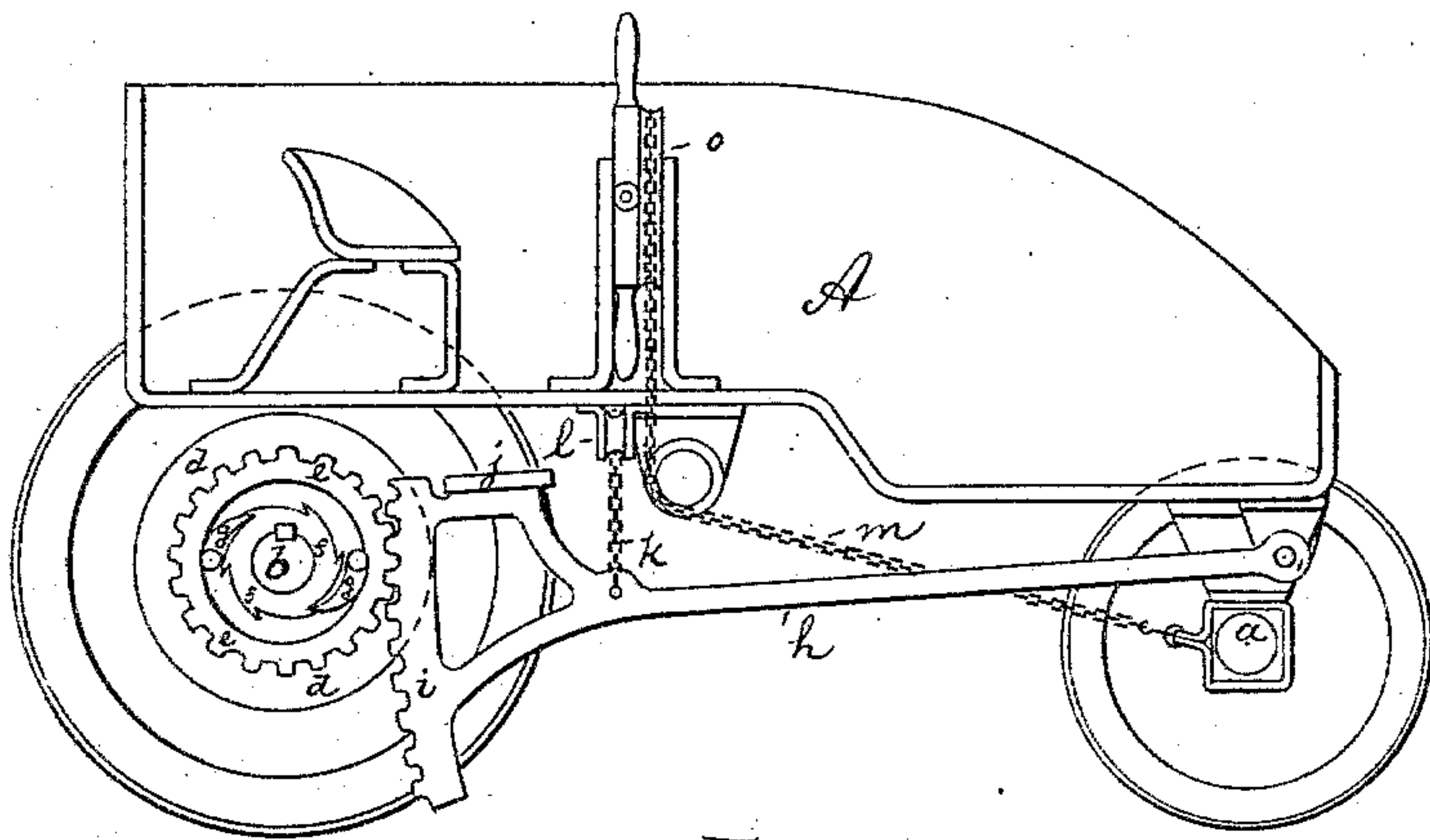


Fig. 2.

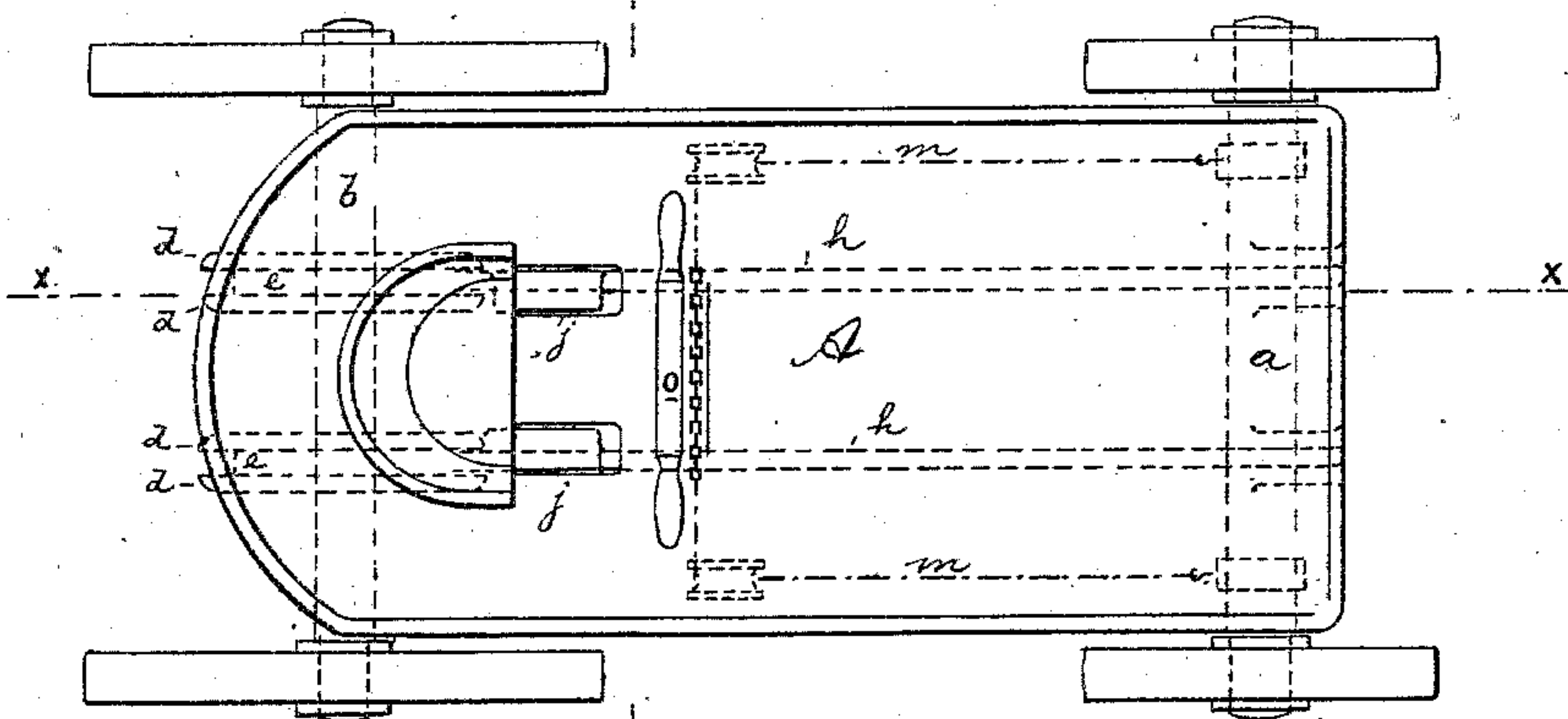


Fig. 3.

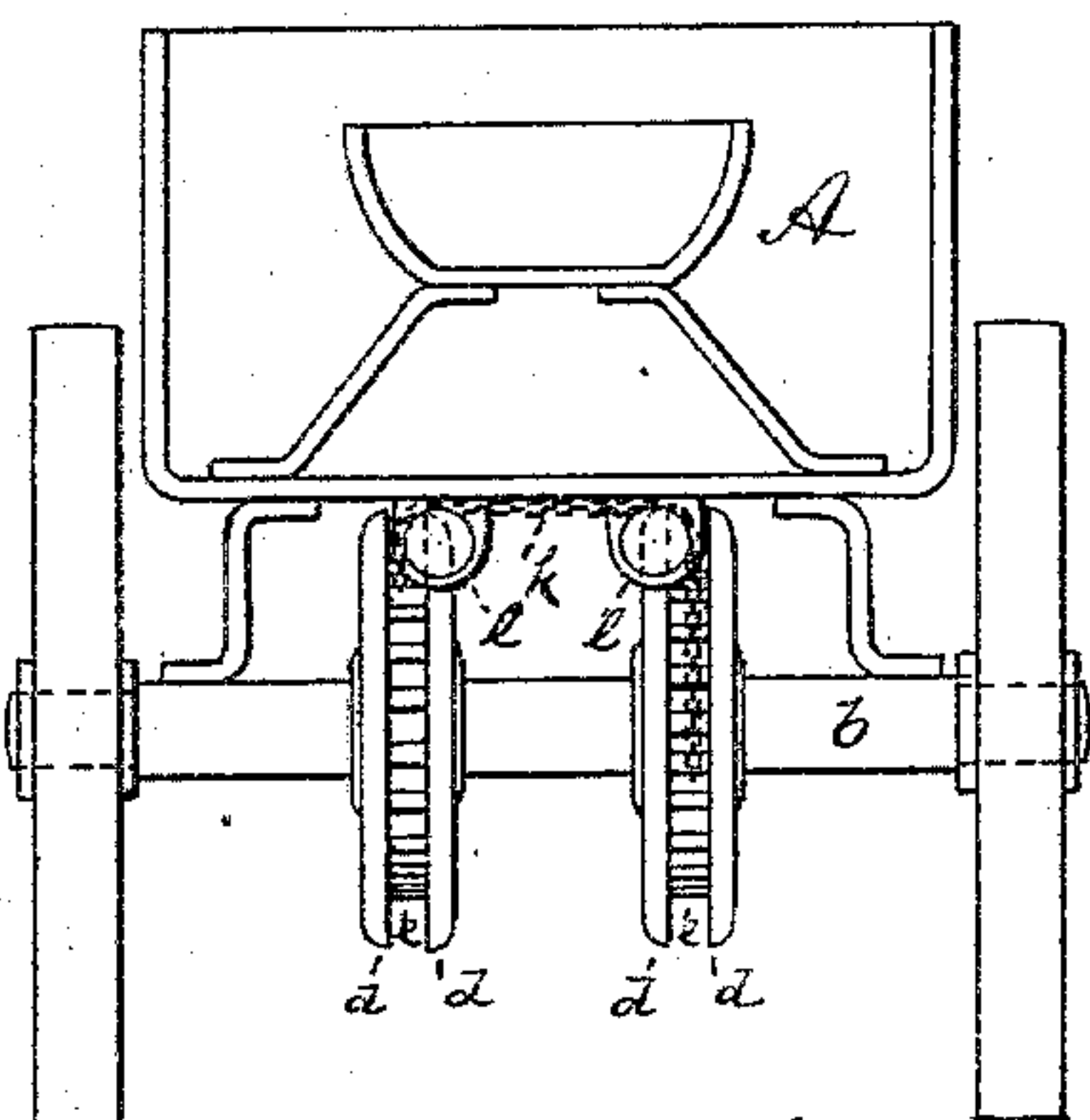


Fig. 5.

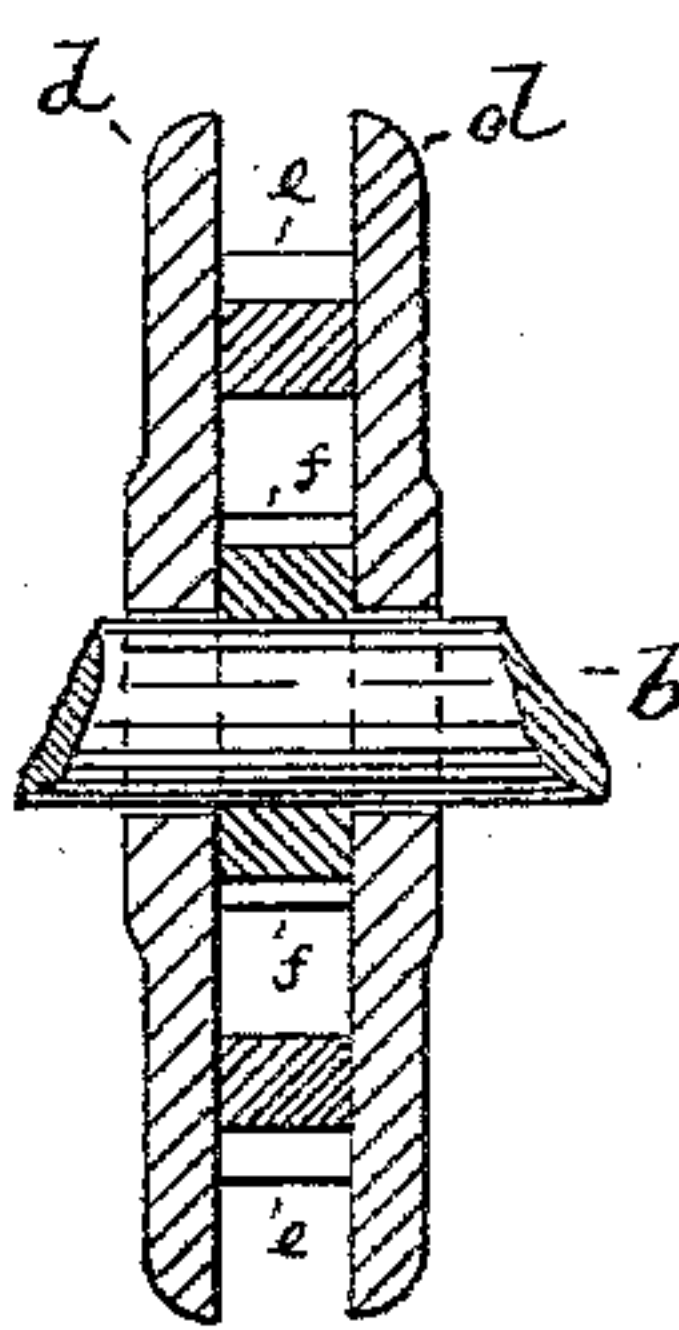
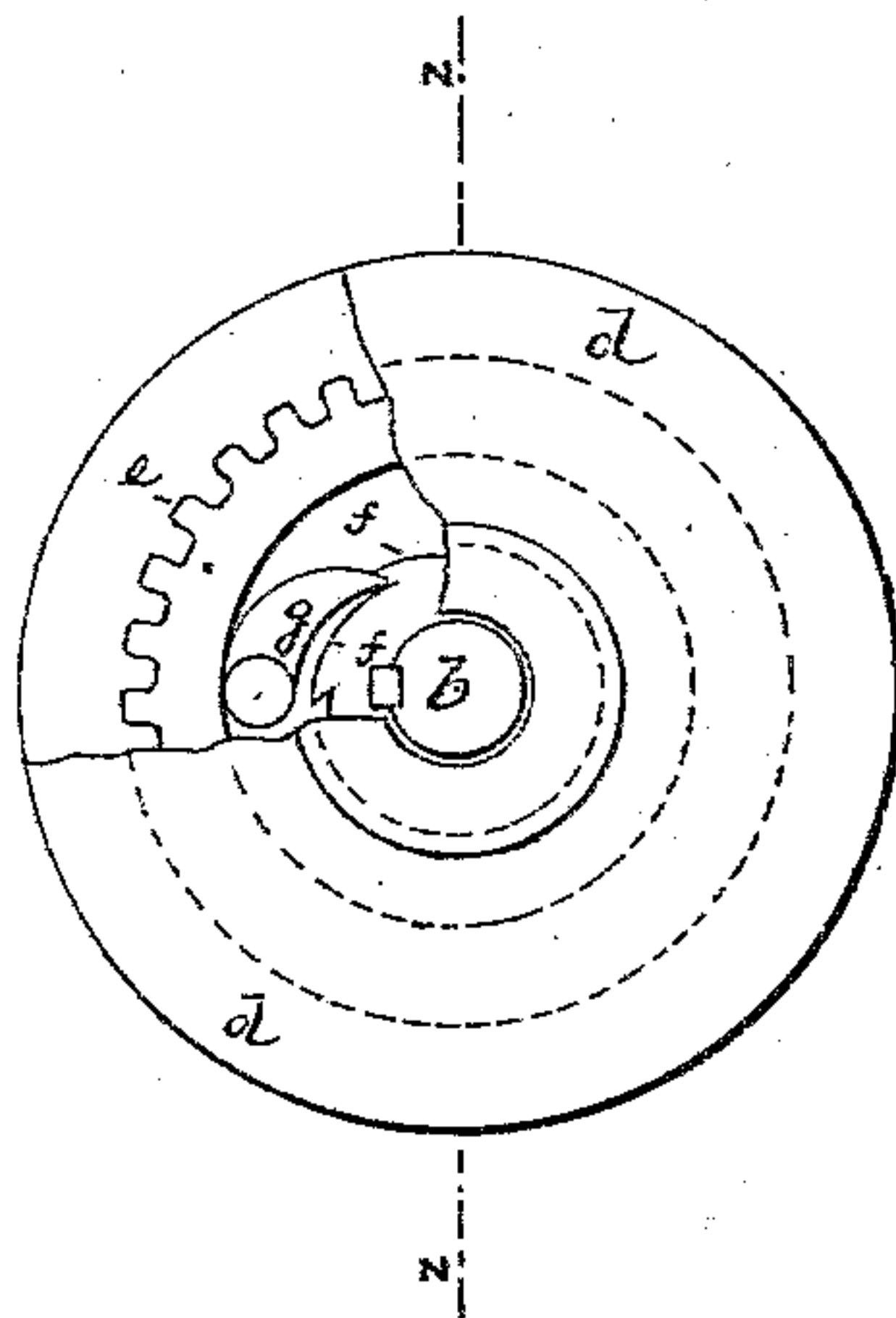


Fig. 4.



WITNESSES

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VELOCIPED.

SPECIFICATION forming part of Letters Patent No. 296,776, dated April 15, 1884.

Application filed September 7, 1883. (No model.)

To all whom it may concern:

Be it known that I, ALBERT PESENECKER, of the city of New York, county and State of New York, have invented a new and Improved Vehicle, of which the following specification is a full, clear, and exact description.

This invention relates to an improved vehicle which is propelled and steered by its occupant.

The invention consists, principally, of the combination, in a velocipede, of ratchet-wheels rigidly secured to rear axle, with loose annular cog-wheels, and disks fastened to both sides of cog-wheels, and with foot-levers engaging said cog-wheels.

The invention also consists in the details of improvement hereinafter more fully pointed out.

In the accompanying drawings, Figure 1 is a longitudinal vertical section of my improved vehicle on the line *x x*, Fig. 2. Fig. 2 is a top view of the same; Fig. 3, a vertical transverse section on the line *y y*, Fig. 2. Fig. 4 is a detail side view of the mechanism for transferring motion from the foot-levers to the wagon-axle, and Fig. 5 a transverse central section on line *n n*, Fig. 4.

Similar letters of reference indicate corresponding parts in all the figures.

The letter *A* represents the body of the vehicle, *a* being the front and *b* the rear axle.

Upon the axle *b* turn loosely two pairs of disks or cheek-pieces, *d d*.

e e are two annular cog-wheels situated, respectively, between each pair of disks *d*, and rigidly fastened to and connecting the same. The disks *d* project beyond the circumference of the cog-wheels *e*, so as to protect them from dirt or injury.

Between each pair of disks *d d*, and concentric to and within the annular cog-wheel *e*, is rigidly fastened around axle *b* a ratchet-wheel, *f*, which is engaged by one or more pawls, *g*, pivoted to the inner side of one of the disks *d*. It will be seen that when the disks *d* and cog-wheels *e* are revolved forward, the pawls *g* will engage the ratchet-wheels *f* and cause them to likewise revolve forward, and thereby to turn the axle *b*. When, however, the wheels *e* are revolved backward, the pawls *g* will not engage the teeth of the ratchet-wheels *f*, and consequently no motion will be imparted to axle *b*.

Motion is imparted to the cog-wheels *e* as follows: *h h* are two levers, pivoted near the front of the carriage, parallel to each other, and terminating each in a toothed segment, *i*, which engages the teeth of the cog-wheel *e*. Each lever *h* is forked near its end, as shown, and is provided with a foot-rest, *j*, on its upper edge. *k* is a chain running transversely across the bottom of the carriage-body, over friction-rollers *l l*, and connecting the levers *h*. The operator, seated near the back of the carriage, steps alternately upon the foot-rests of the levers *h*. When he steps upon the right lever and forces said lever down, the chain *k* will be drawn up at the left side, and thereby draw the left lever, *h*, up with it, and vice versa. In this way the operator will alternately lower and raise the levers *h*, and thereby revolve the cog-wheels *e* forward and backward; but the cog-wheels *e* will, when revolving forward, by pawls *g*, as heretofore described, revolve ratchet-wheels *f* forward, and thereby propel the carriage. Inasmuch as one of the wheels *e* will always revolve forward, continuous forward motion is imparted to the carriage.

The steering of the vehicle is effected by a chain, *m*, attached near the two ends of the front axle, *a*, and running over a steering-wheel, *o*, in front of the driver's seat. Of course the bottom of the carriage-body is slotted above each foot-rest *j*, so that the operator's feet can reach the same.

I claim as my invention—

1. The combination, in a velocipede, of axle *b*, having ratchet wheels *f* rigidly secured thereto, with the loose annular cog-wheels *e* and disks *d*, fastened to both sides of cog-wheels, and having pawls *g*, and with the foot-levers *h*, engaging cog-wheels *e*, substantially as specified.

2. The combination of axle *b*, ratchet-wheels *f*, cog-wheels *e*, disks *d*, and pawls *g*, with the foot-levers *h*, and with the chain *k*, connecting the foot-levers and passing over friction-rollers *l*, substantially as specified.

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Witnesses:

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