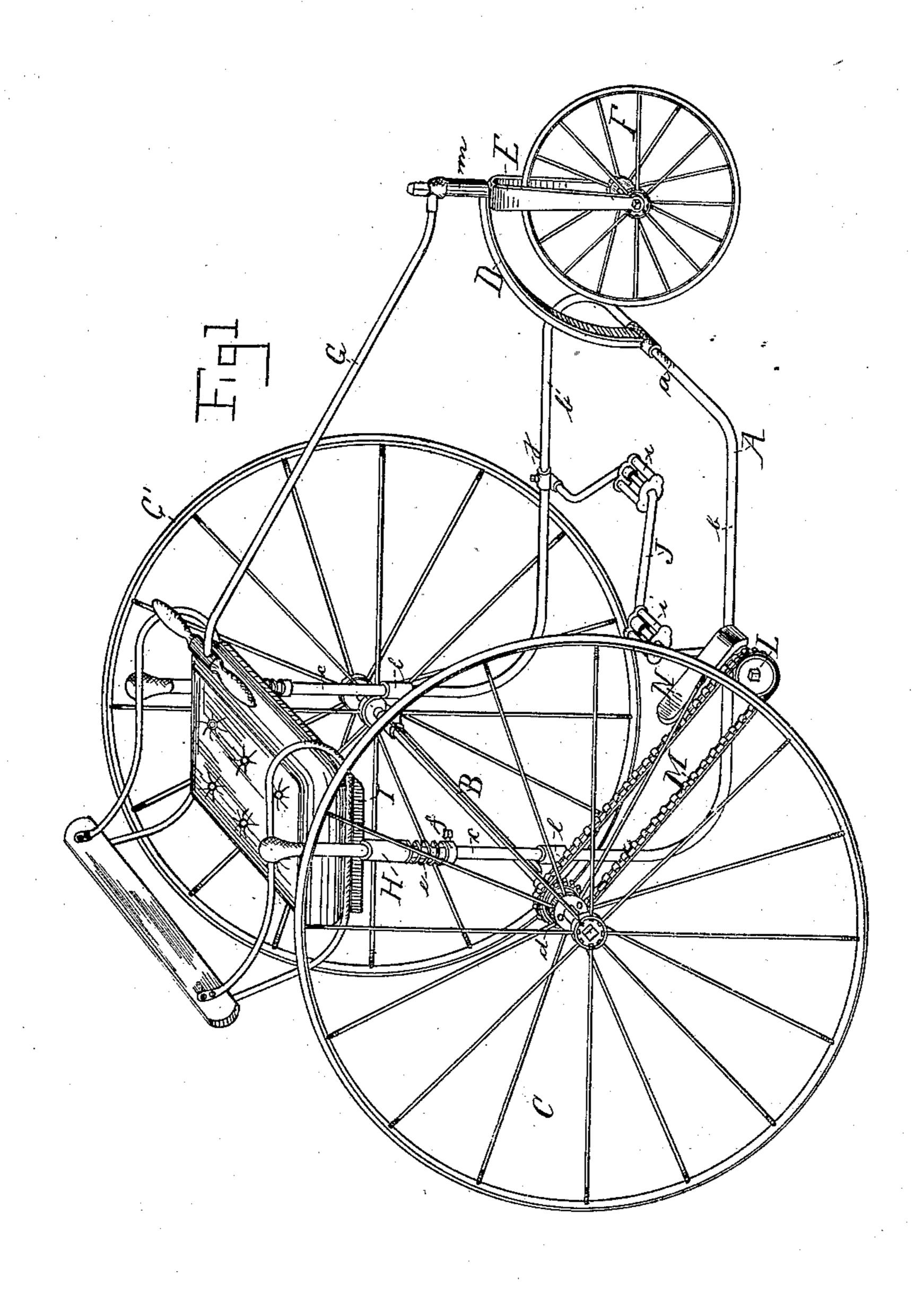
O. UNZICKER. VELOCIPEDE.

No. 257,415.

Patented May 2, 1882.



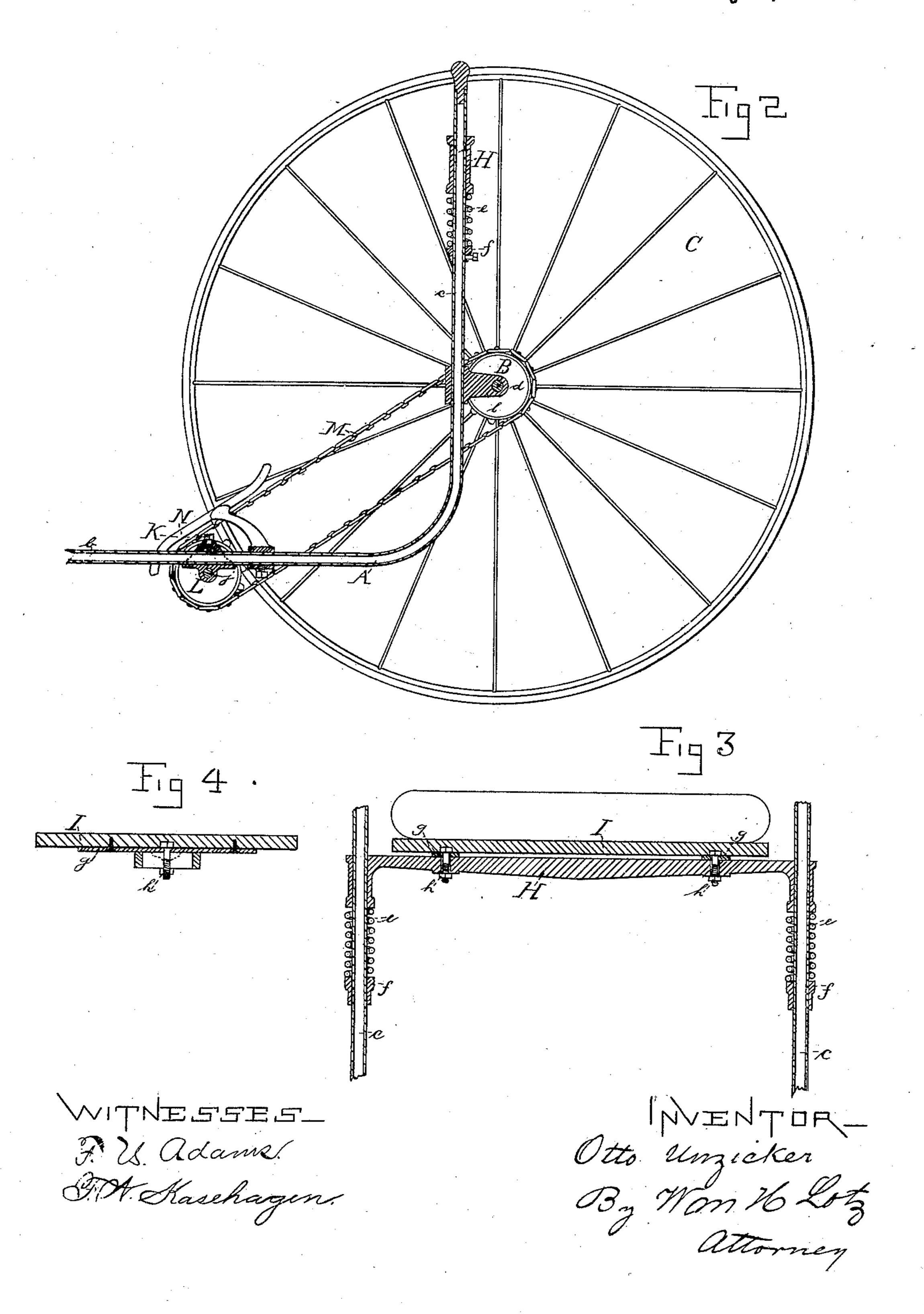
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United States Patent Office.

OTTO UNZICKER, OF CHICAGO, ILLINOIS, ASSIGNOR TO ADOLPH SHOENINGER, OF SAME PLACE.

VELOCIPEDE. .

SPECIFICATION forming part of Letters Patent No. 257,415, dated May 2, 1882.

Application filed January 18, 1882. (No model.)

To all whom it may concern:

Be it known that I, Otto Unzicker, of Chicago, in the county of Cook and State of Illinois, have invented a certain new and use-5 ful Improvement in Velocipedes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a to part of this specification.

The nature of my invention relates to velocipedes of the style known as "tricycles;" and it is my object to produce such a vehicle that is propelled by the feet and steered by one 15 hand, and can be used by males and females, and can be adjusted to be suitable for an in-

fant or adult.

Therefore my invention consists in the devices and combination of devices hereinafter 20 described, and pointed out by the claims.

In the accompanying drawings, Figure 1 represents a perspective view of the tricycle; Fig. 2, a longitudinal vertical section through one side of the frame; Fig. 3, a vertical cross-25 section through the center of the standard portions of the frame and through the scat, and Fig. 4 a cross-section of the seat-board and fastening for the same.

Like letters represent corresponding parts

30 in all the figures.

A denotes the frame, composed of a single piece of wrought-iron pipe or tube, that is bent horizontally to the shape of the letter U, with both shanks bent again at about their middle, 35 so as to form two parallel standards that are rectangular with the U-shaped frame. The front or connecting portion of this frame A, I have marked a, the horizontal portion of the two shanks b, and the standards c.

B is the axle, journaled in boxes l, which have each a sleeve formed to one end, that is passed over the standard c of frame A, and is rigidly secured in its position by a rivet passed

through the sleeve and standard.

CC' are the two main wheels. The wheel C is rigidly mounted upon one end of axle B, and has a sprocket-wheel, d, secured upon or against the inward end of its hub, and the wheel C' is fitted loose upon the opposite end of said axle | ably secured upon the portion b of frame A,

B, so that both wheels can turn at a different 50 velocity, or one can turn while the other one

is not moving.

Upon the middle of the front portion, a, of frame A is sleeved and rigidly secured an arcshaped bracket, D, having a vertical hub, m, 55 formed to its forward end. Through this tube is passed the pivotal shank of the bifurcated standard E, in which the steering-wheel F is pivoted.

To the upper or projecting end of the piv- 60 otal portion of the standard E is secured the arm G, having a cross-handle, by which the direction of the wheel F can be regulated, and the vehicle can be steered to follow the in-

tended course.

H is a cross-bar having tubular ends rectangular to said bar. These tubular ends are passed over both standards c of frame A, so as to slide vertically thereon, and are supported upon coiled springs e, also passed over the 70 standards c, and resting upon collars f, that can be adjusted to a higher or lower position by set-screws. By the very simple arrangement of cross-bar H, springs e, and adjustable collar f it will be seen the seat has not only 75 an elastic support, but it can be varied as to height for accommodating different size persons.

The seat-board I is secured upon the cross-bar H by two saddle-plates, g, and bolts h, and this 80 seat-board is provided with a back-support and side rails, in the manner of a sulky-seat, and is to be provided with a cushion.

J is a double crank having pivotal pedals i, and being pivoted in journal-boxes j, that have 85 sleeves which are passed over the portions bof frame A, and are adjustably secured thereon by set-screws k.

Upon one projecting end of the crank-shaft J is mounted a sprocket-wheel, L, so as to be 90 in line with sprocket-wheel d of wheel C, and an endless chain, M, is stretched over both these sprocket-wheels L and d, that will transmit the motion from the crank-shaft J to wheel C.

A guard-plate or fender, N, having a sleeve or clamp formed to one end, so as to be adjust-

covers the sprocket-wheel L and protects it against injury, or that the dress of a girl or lady riding upon the tricycle may not come in contact, to be soiled or to be caught between 5 the chain and wheel.

Such a velocipede or tricycle is easy to handle without much practice, gives a comfortable seat to the person occupying it, allows ready adjustment of the seat vertically for dif-10 ferently-sized persons, and for keeping the chain taut, and will permit the turning of short curves.

The top ends of frame-standards c may be provided with ornamental knobs, and the wheels 15 may have rubber tires to make their movements noiseless and to increase the traction of the drive-wheel.

The whole construction of the vehicle is such that with the least weight of material the great-20 est strength is obtained, and that its shape

and appearance is light and pleasing.

Instead of making the lever G rigid with the end of the bifurcated standard E, it may be connected thereto by a universal or swivel 25 joint, in a manner that by a torsional movement of the lever G the wheel F can be turned to follow either direction.

What I claim is—

1. A tricycle composed of frame A, consist-30 ing of a single piece of tubing horizontally bent into U shape, a b, and having standards e e, axle B, journal-boxes l, having a sleeve at one end to adapt the same to pass over said standards c, wheel C, rigidly mounted upon one end 35 of the axle, and having sprocket wheel d, wheel C', fitted loosely upon the other end of said axle, crank-shaft J, having sprocket-wheel L, and endless chain M, arc-shaped bracket D,

having vertical hubm, bifurcated pivotal standard E, steering-wheel F, cross-bar H, having 40 tubular ends to adapt the same to be passed over the standards c, coiled springs e, adjustable collars f, and seat I, secured to said crossbar H, substantially as and for the purpose set forth.

2. The combination of the frame A, having standards c, cross-bar H, having end hubs to adapt the same to be passed over said standards c, seat-board I, secured to said cross-bar supporting springs e, and adjustable collar f, 50 all constructed and arranged substantially as

shown and described.

3. The combination, with the frame A, having standards c, brackets l, sleeved upon said standards and forming the journal-boxes for 55 axle B, drive-wheel C, with sprocket-wheel d, rigidly secured thereon, and wheel C', loosely pivoted thereon, of the double-crank shaft J, pivoted in journal-boxes j, also sleeved upon such frame A, and adjustably secured thereto 60 by set-screws k, of a sprocket-wheel, L, mounted upon the end of such crank-shaft, and of an endless chain, M, stretched over both sprocketwheels L and d, all substantially as set forth.

4. In a tricycle, the guard-plate or fender 65 N, having a sleeve or clamp formed on one end, to adapt the same to be adjustably secured to the frame A, substantially as and for the

purpose set forth.

In testimony that I claim the foregoing as my 70 invention I affix my signature in presence of two witnesses.

OTTO UNZICKER.

Witnesses:

F. W. KASEHAGEN,