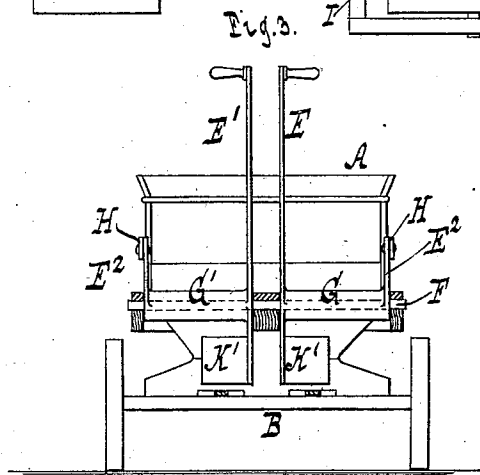
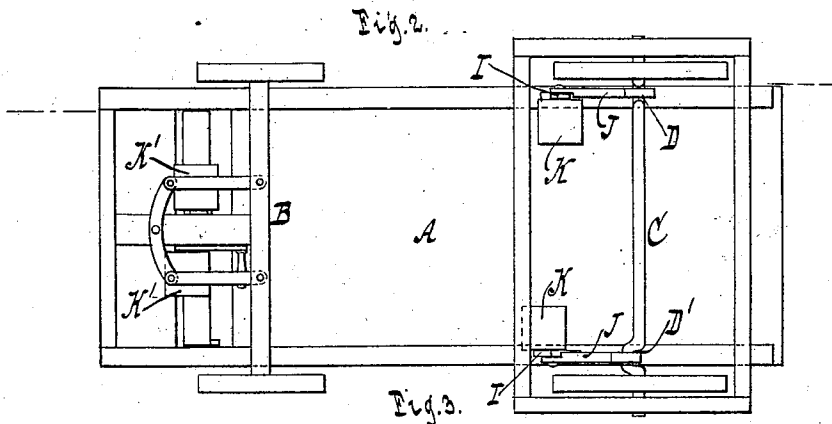
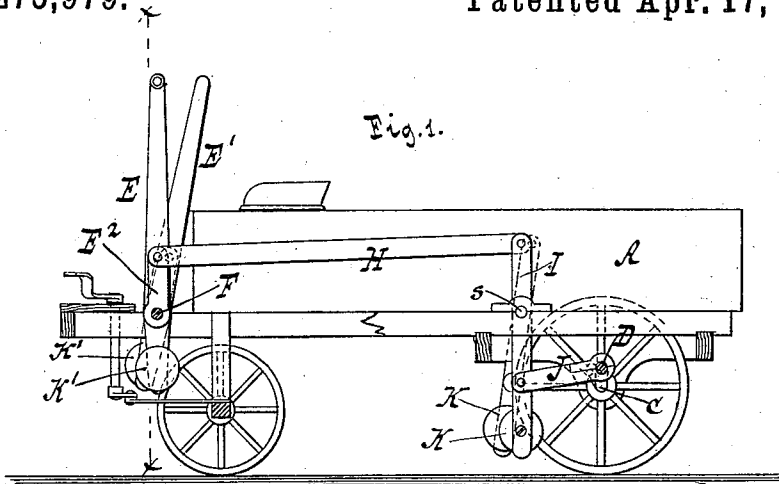


(No Model.)

H. BLUME.
VELOCIPEDE.

No. 275,979.

Patented Apr. 17, 1883.



WITNESSES:

Otto Stufeland
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INVENTOR

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UNITED STATES PATENT OFFICE.

HERMAN BLUME, OF NEW YORK, N. Y.

VELOCIPEDÉ.

SPECIFICATION forming part of Letters Patent No. 275,979, dated April 17, 1883.

Application filed February 13, 1883. (No model.)

To all whom it may concern:

Be it known that I, HERMAN BLUME, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Velocipedes, of which the following is a specification.

This invention relates to improvements in velocipedes; and it consists in weighting the hand-levers at the lower end, and combining therewith auxiliary levers, which also are weighted and form part of the connection between the hand-levers and the cranked axle, so that by the inertia of the levers, due to the weights, the motion of the parts is regulated or equalized.

This invention is illustrated in the accompanying drawings, in which Figure 1 represents a vertical longitudinal section. Fig. 2 is an inverted plan view. Fig. 3 is a vertical cross-section on the line *x x*, Fig. 1.

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

The letter A designates the body of the wagon, mounted on a forward axle, B, and rear axle, C, in any usual or suitable manner, the forward axle being connected with suitable steering-gear. Said rear axle is provided with two cranks, D D', to which are connected hand-levers E E', one to each crank, which are mounted loosely on a fixed shaft, F, arranged on the forward part of the vehicle.

In practice an oscillating motion is imparted to either of the hand-levers E E' to propel the vehicle, and in case the crank appertaining to the lever that is being operated should get on a dead-center the other crank may be actuated through the proper lever for keeping the vehicle in motion, due to the difference in the radius of the cranks, together with the independent arrangement of the levers.

The connection of the hand-levers E E' with the cranks D D' is effected in the following manner: Said levers are secured respectively to one end of a sleeve, G or G', which is fitted on the shaft F; and to the other end of which is secured an arm, E², connecting by means of a rod, H, with an auxiliary or supplemental lever, I, which in turn connects by a link, J, with the proper crank. The supplemental levers I have their fulcra on pivots *s*, mounted on suitable portions of the vehicle, and said levers, as well as the hand-levers E, are provided with weights K or K' at the lower end, so that when the levers are actuated their inertia due to the weights serves to regulate or equalize the motion which they perform, and by this means the propulsion of the vehicle is materially facilitated.

It should be understood that the weights K or K' can be applied to a vehicle having only one set of levers and one crank to the rear axle.

I am aware that a weighted lever has heretofore been used in a velocipede; and I do not claim such, broadly, as my invention.

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

The combination, with a wagon having a rear cranked axle, of a hand lever or levers weighted at the lower end, and a supplemental lever or levers, also weighted at the lower end, and connected both to the hand-levers and to the cranked axle, substantially as and for the purpose described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

HERMAN BLUME. [L. S.]

Witnesses:

W. HAUFF,
CHAS. WAHLERS.