

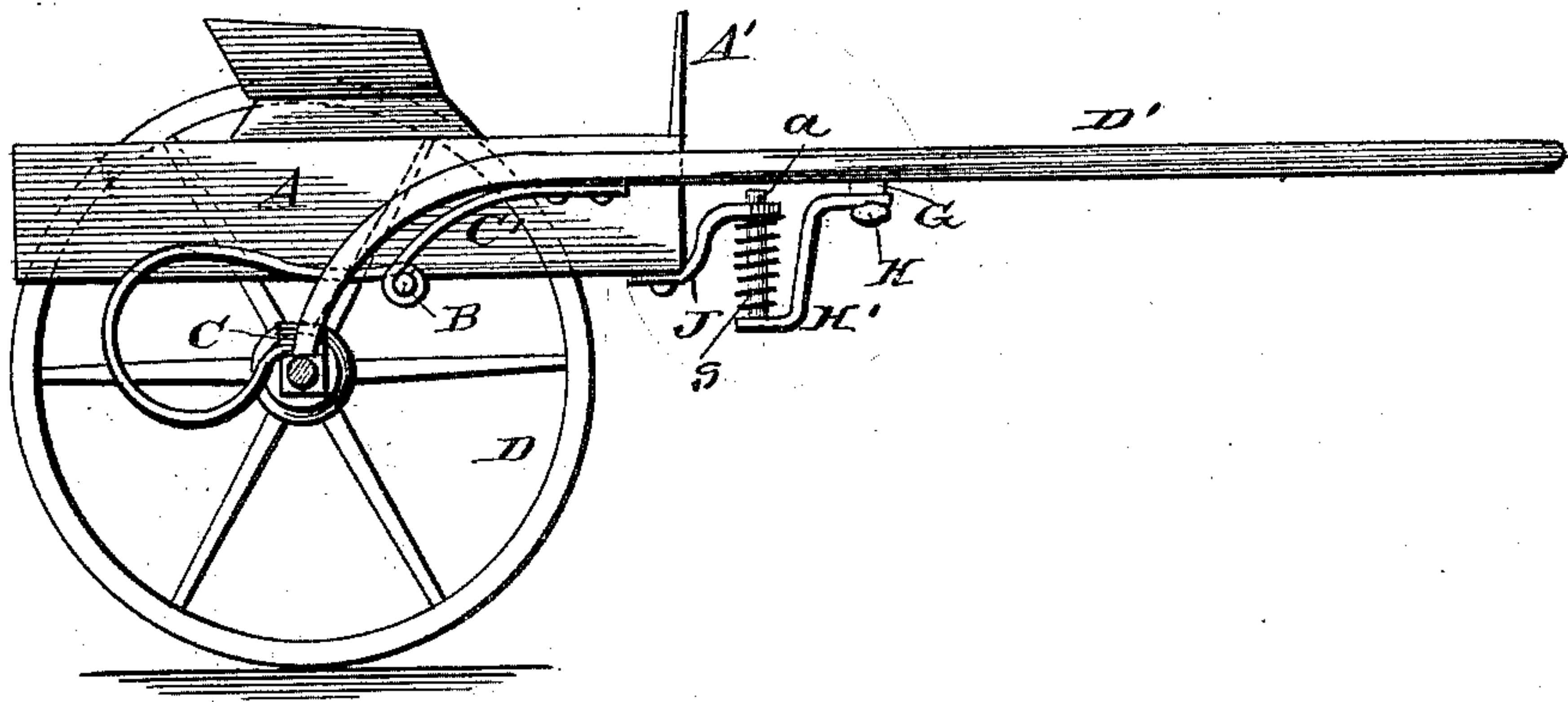
(No Model.)

W. M. BUCHNAN.  
TWO WHEELED VEHICLE.

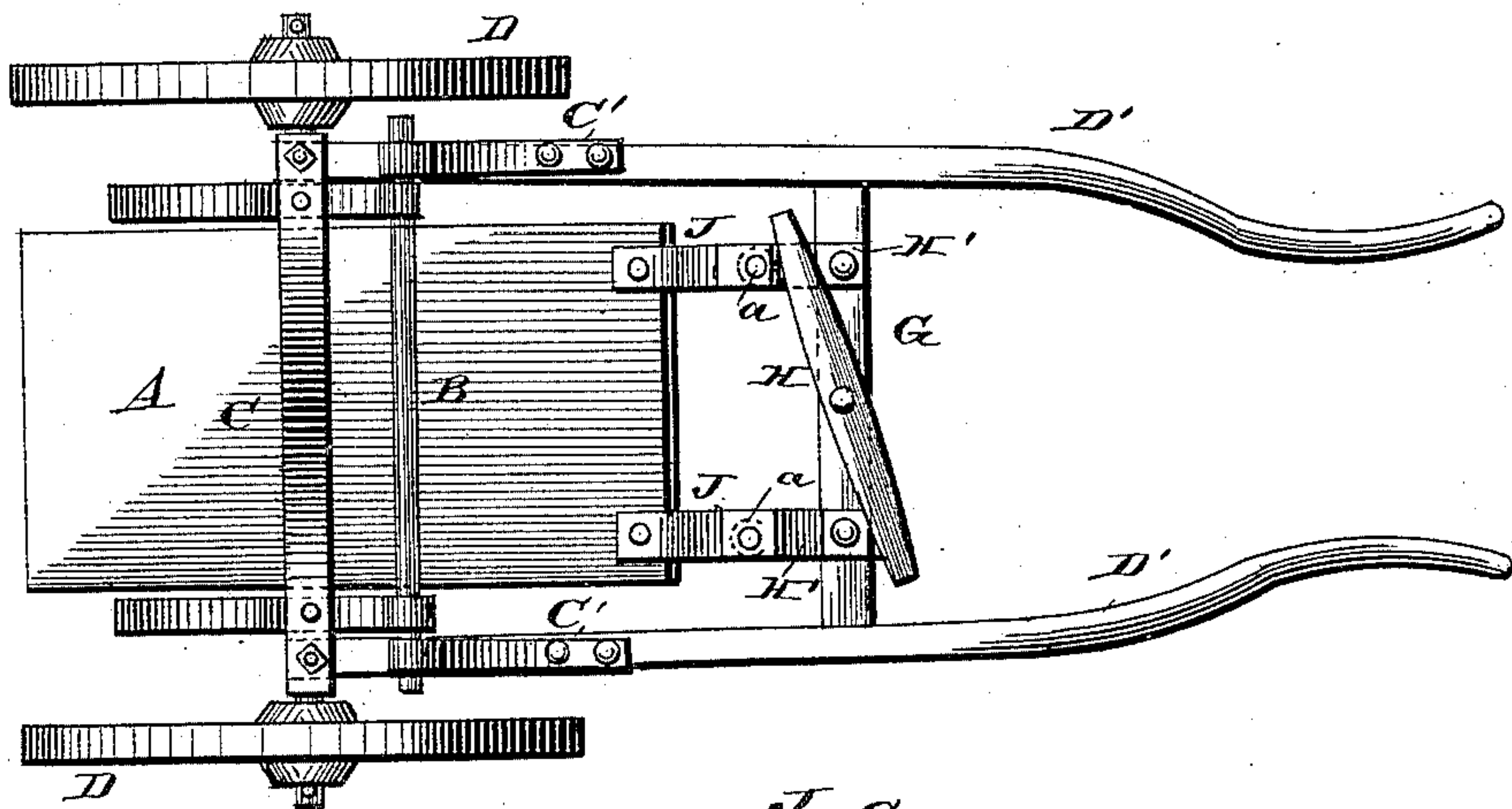
No. 299,339.

Patented May 27, 1884.

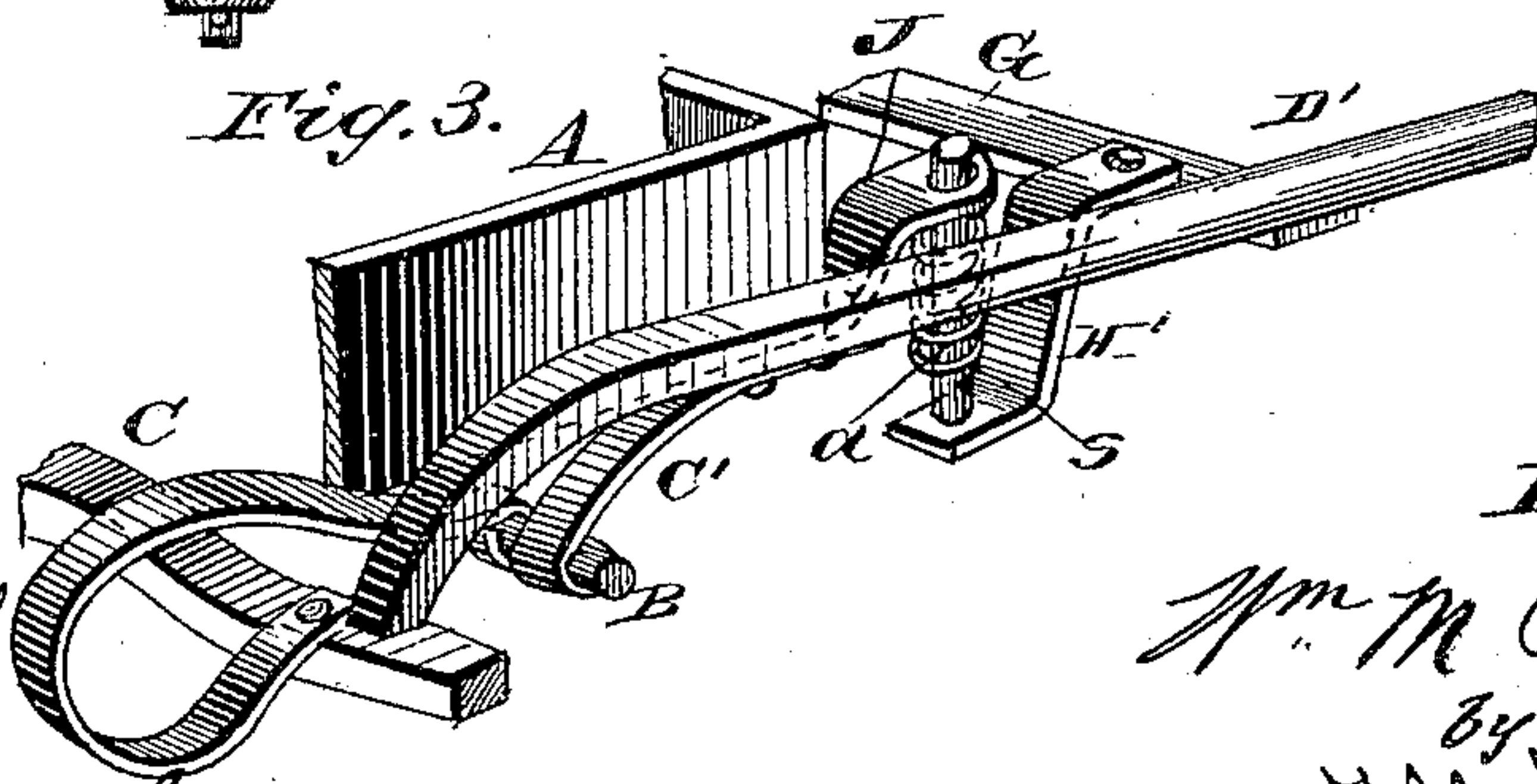
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses:

*Philip C. Distard*

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# UNITED STATES PATENT OFFICE.

WILLIAM M. BUCHNAN, OF COLUMBIA, TENNESSEE.

## TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 299,339, dated May 27, 1884.

Application filed September 20, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, W. M. BUCHNAN, of Columbia, in the county of Maury and State of Tennessee, have invented certain new and useful Improvements in Two-Wheeled Vehicles; 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 part of this specification, in which—

Figure 1 is a side view of my improved two-wheel road-buggy. Fig. 2 is a bottom view of the same. Fig. 3 is a perspective view.

This invention relates to two-wheel road-buggies; and it consists in certain novel improvements in road-buggies whereby they are made very strong, durable, and easy-riding, as will be fully understood from the following description when taken in connection with the annexed drawings.

A designates the box or body of the vehicle, which is made rectangular in form, and is known as a "piano-box." This box is provided with a dash-board, A', and also with side and back plates, which, with a seat-plate, form the driver's seat. Transversely across the bottom of the box A is a bar, B, which is rigidly attached to the said box. This bar is in front of an arched axle, C, on the arms of which are two wheels, D D.

C' C' are springs, the front ends of which are rigidly secured to the bottom of thills D' D', and the rear ends are pivoted to the bar B. It will be observed that the forward attachment and elastic bearing B of the box is in front of the axle. Posterior to this elastic attachment I use the well-known "C-springs;" but I may use springs of other form. The C-springs which I use, and which are shown in the drawings, Fig. 1, have their lower ends rigidly secured to the axle of the aforesaid two wheels D D, and their upper ends are looped on the bar B. Now, it will be observed that the main support of the driver is in advance of the axle of the transporting-wheels, and that such support is elastic independently of the C-springs above explained. The thills are rigidly connected to the axle and bowed at their ends, in the usual well-known manner.

G designates the cross-bar of the thills, below which is a single-tree, H, or its equivalent.

The front of my box is sustained in the following manner: To the bottom of the front

portion of the box I rigidly secure two goose-necks, J J, having eyes vertically through their front ends. To the cross-bar G of the thills I rigidly secure angle-irons H' H', from the stirrups of which rise pins a, which are fixed to said stirrups. Surrounding these pins a are helical springs s. The said pins are adapted to receive the eyes of the goose-necks, which eyes are of such size as will allow free vertical play. If desired, nuts, pins, or their equivalents may be applied to the upper ends of said pins above the eyes of the goose-necks, for the purpose of preventing any casual displacement.

It will be observed that I not only support a box or body on springs connected directly to the axle, but that I connect the upper ends of the springs loosely to a bar which is rigidly connected to the body of the vehicle, and that this bar is connected to the thills by means of auxiliary springs. It will also be seen that my "square box" is supported in front on helical springs which have their bearing directly on the cross-bar of the thills.

It will also be observed that the weight of the driver, when in his seat, is forward of the axle. Finally, it will be observed that I have a forward springy movement and a rear duplex springy movement by reason of the combination of the two mainsprings and their auxiliaries.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a road-vehicle, of the body A, mounted on a transverse bar, B, forward of the axle C, to which the thills are rigidly attached, and the springs C' C', to which the ends of the cross-bar are pivotally attached, substantially as and for the purposes specified.

2. The combination, in a road-wagon, of the body A, mounted on a transverse bar, B, the axle C, and thills D', the springs C' C', goose-necks J, the springs S, and the pins a, and supporting angle-irons H', all arranged substantially as specified.

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

WILLIAM M. BUCHNAN.

Witnesses:

WILLIAM O. WITHERSPOON,  
T. F. FLEMING.