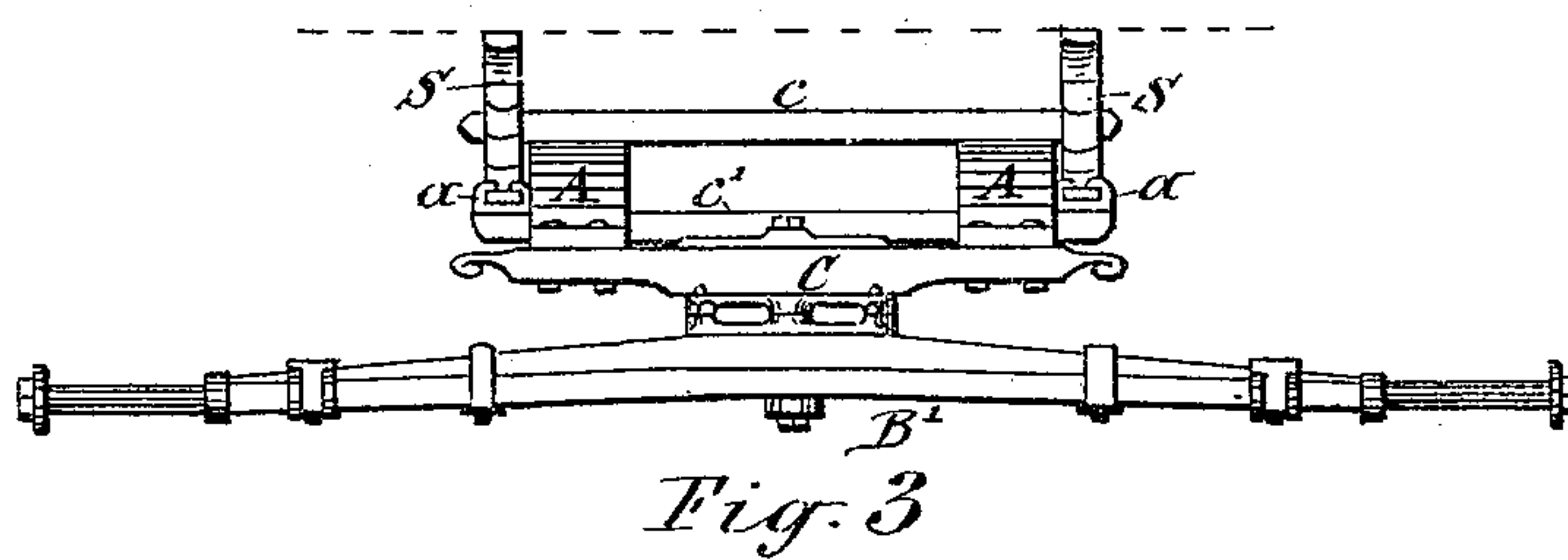
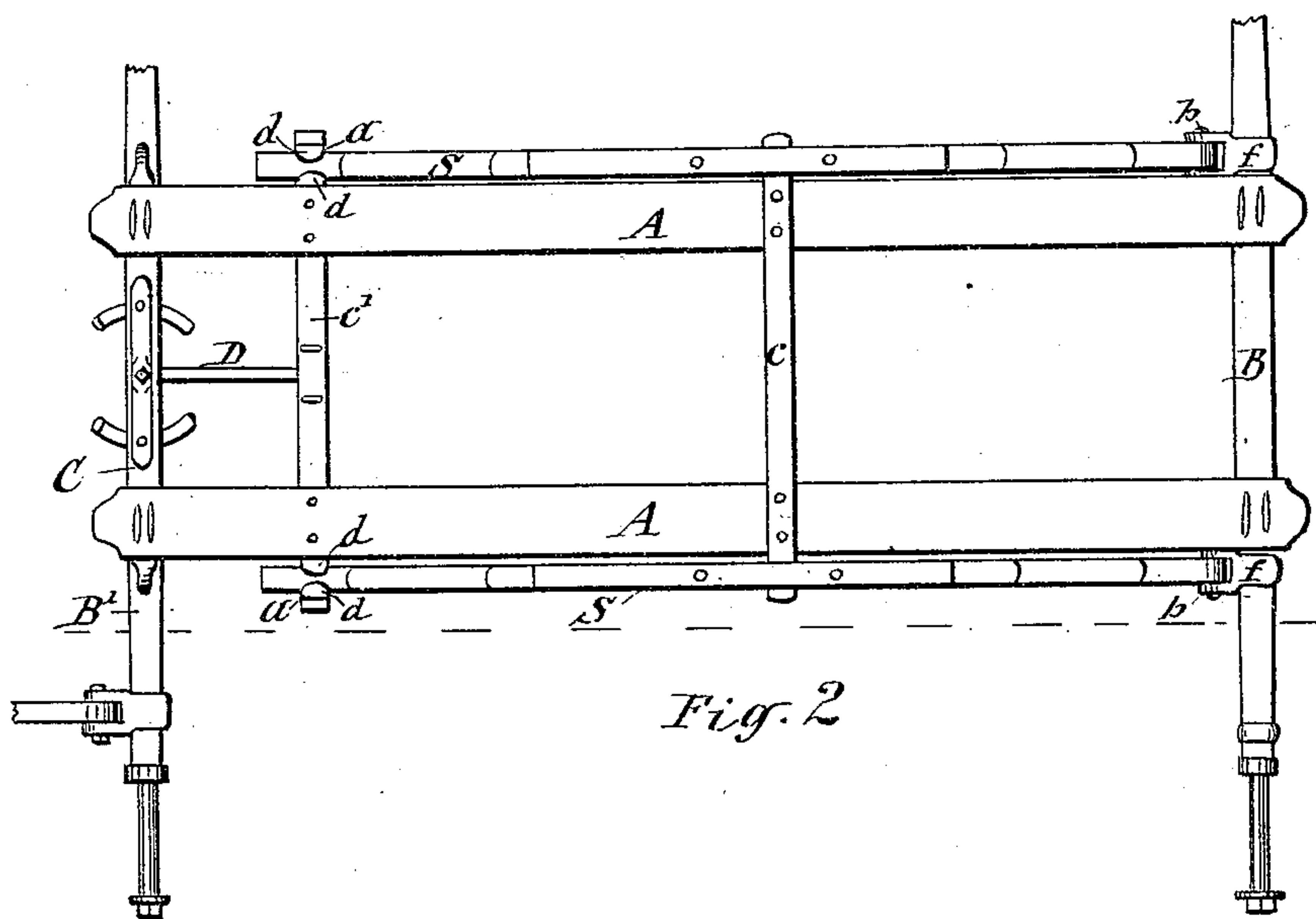
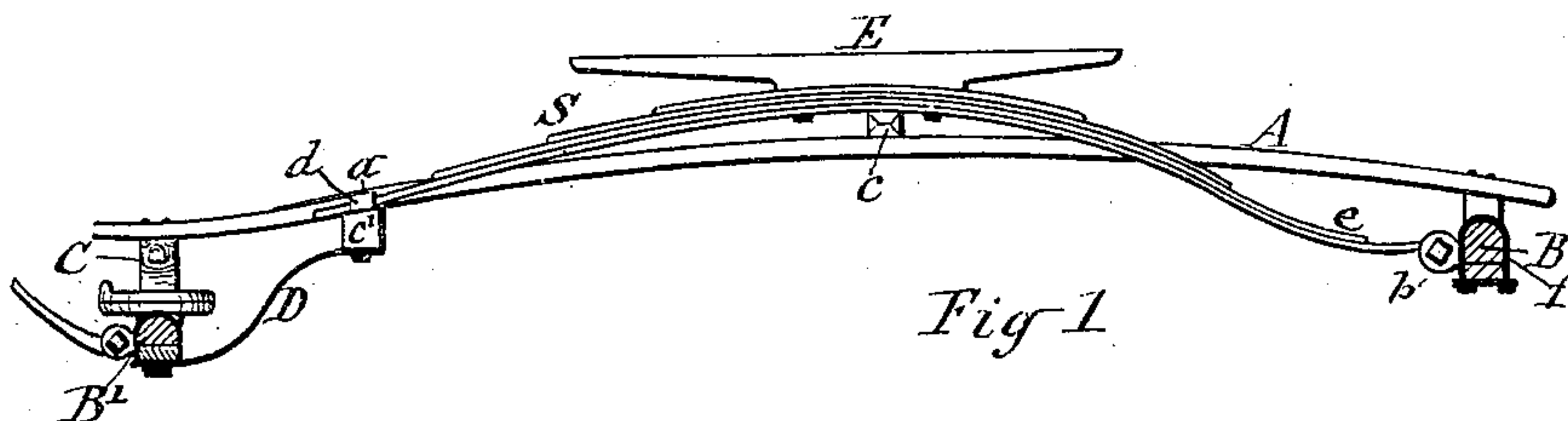


(No Model.)

L. M. FITCH.
BUCKBOARD WAGON.

No. 270,879.

Patented Jan. 16, 1883.



WITNESSES—

.....C. H. Duell.....
.....Wm. C. Raymond.....

INVENTOR—

Lauren M. Fitch
per Duell, Laess & Hey
his Atty.—

UNITED STATES PATENT OFFICE.

LAUREN M. FITCH, OF ROME, NEW YORK, ASSIGNOR OF ONE-HALF TO
MOSES M. DAVIS, OF SAME PLACE.

BUCKBOARD-WAGON.

SPECIFICATION forming part of Letters Patent No. 270,879, dated January 16, 1883.

Application filed March 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, LAUREN M. FITCH, of Rome, in the county of Oneida, in the State of New York, have invented new and useful Improvements in Buckboard-Wagons, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention consists in an improved combination and arrangement, with a buckboard for wagons, of side springs designed to more effectually prevent the lateral rocking or swaying of the wagon-body and equalize the motion of the same, all constructed and combined as hereinafter fully described, and specifically set forth in the claim.

In the annexed drawings, Figure 1 is a side view of my invention; Fig. 2, a top view, and Fig. 3 a front view, of the same.

Similar letters of reference indicate corresponding parts.

A A denote the buckboards, connected to the hind axle, B, and to the head-block C of the forward axle, B', in the usual manner.

c is a cross-bar secured to the top of the buckboards intermediately of their length, preferably somewhat back of the center thereof, as shown.

c' is another cross-bar, attached to the under side of the forward portion of the buckboards, and having extended from its center to the under side of the forward axle, B', a brace, D, which is connected with the lower extremity of the king-bolt.

S S represent the side springs, which I apply on the top of the ends of the cross-bar c, and connect their rear end to ears b on a clip, f, secured to the rear axle, B, said end of the springs being provided with an eye, which is inserted between the ears b, and coupled thereto by a bolt passing horizontally through said parts, thereby allowing said springs to freely vibrate vertically. The forward end of the springs S rest on bearings a a, secured to the ends of the cross-bar c', before described, said bearings being provided with lips d d, which embrace the edges and top of the springs, so as to allow them the requisite longitudinal movement on the bearings without vertical

play and consequent rattling of the same. A bolster, E, secured to the top of the central portion of the springs, supports the body of the vehicle. By connecting with the rear axle, B, the springs S S, arranged in relation to the central and forward portion of the buckboards in the manner described, the strain is divided between the springs and buckboards and transmitted by them to a great extent independently of each other. Furthermore, by extending the spring to the rear axle, the length of said spring is increased and greater elasticity of the same obtained.

In order to compensate at the rear end of the springs for the extra elasticity afforded to the forward end thereof by its connection with the buckboard, and thus to equalize the motion of the springs, I form the rear end of said springs with a downward deflection or reverse curve, e, as shown in Fig. 1 of the drawings, thus giving that portion of the spring increased elasticity.

I am aware of the employment of side springs in connection with buckboards in various ways; but in no instance have I found the combination and arrangement of side springs connected to the hind axle and passing over a cross-bar on top of the central portion of the buckboard, and resting with their forward end on a cross-bar secured to the under side of the buckboard, which combination constitutes an improvement over all prior devices, in that it throws the springs into a rearwardly-inclined position, and thereby transmits the greater portion of the weight of the body onto the rear end of the springs and directly onto the hind axle, and at the same time gives the springs the requisite arch form to afford ample vertical play and the desired stability.

Having described my invention, what I claim is—

In combination with the buckboards A A, the cross-bar c, applied to the top of the buckboards intermediately of their length, the cross-bar c', secured to the under side of the forward portion of the buckboards, the bearings a, attached to the ends of the cross-bar c', and provided with lips d d, and the springs S, passing over the cross-bar c, and having their rear

ends formed with the reverse curve *e*; and coupled or hinged on the rear axle, B, and their forward end resting on the bearings *a*, substantially as described and shown.

5 In testimony whereof I have hereunto signed my name and affixed my seal, in the presence of two attesting witnesses, at Syracuse, in the

county of Onondaga, in the State of New York, this 15th day of March, 1882.

LAUREN M. FITCH. [L. S.]

Witnesses:

M. M. DAVIS,
C. H. DUELL.