C. D. LE GRAND.
Buckboard-Wagon.

No. 197,735. Patented Dec. 4, 1877.

Fig. 1

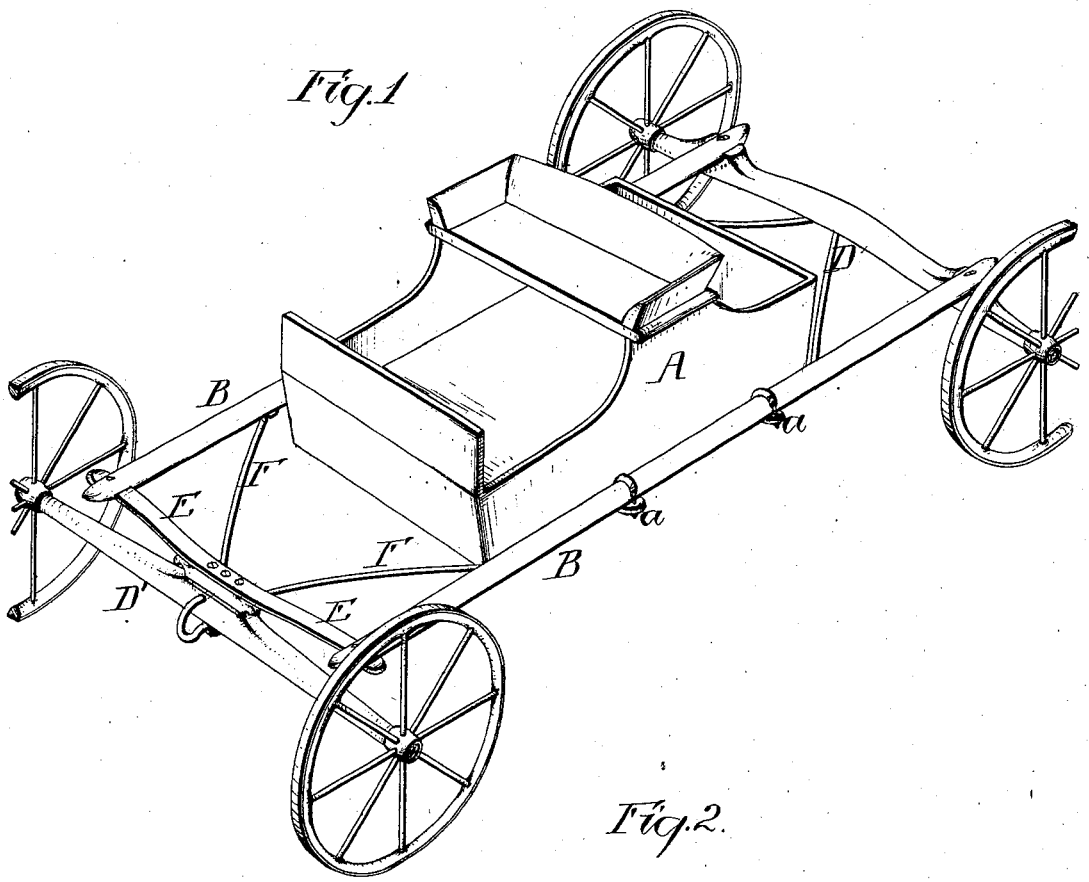
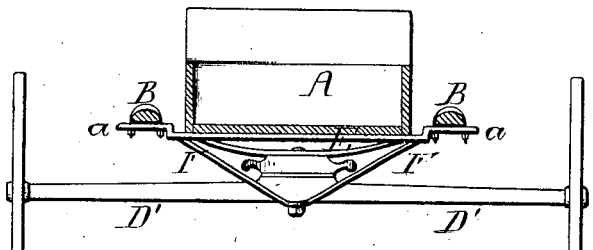


Fig. 2.



Witnesses
Harry A. Crawford.
Harry Smith

Inventor
Charles D. Lelgrand
by his Attorneys.
Houston Bros

UNITED STATES PATENT OFFICE.

CHARLES D. LE GRAND, OF WILKESBARRE, PENNSYLVANIA.

IMPROVEMENT IN BUCKBOARD-WAGONS.

Specification forming part of Letters Patent No. **197,735**, dated December 4, 1877; application filed October 16, 1877.

To all whom it may concern:

Be it known that I, CHARLES D. LE GRAND, of Wilkesbarre, Pennsylvania, have invented a new and useful Improvement in Buckboard-Wagons, of which the following is a specification:

The object of my invention is to construct a buckboard-wagon, which, while sufficiently rigid to resist the strains to which it is subjected, will be lighter and cheaper, and will have a more yielding and elastic body and seat than usual. This object I attain in the following manner, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved buckboard-wagon, and Fig. 2 a transverse section, looking toward the front end.

In ordinary buckboard-wagons in which the body A is carried by a floor or platform resting at the ends directly upon the front and rear axles, the body, when the wagon is in motion, is constantly jolted and jarred, rendering the occupants uncomfortable. This objection has been overcome to some extent by inserting a spring between the front end of the platform and the axle, or by supporting the body of the wagon upon transverse strips secured to longitudinal side bars, which rest at front and rear upon springs secured to the front and rear axles. But both of these plans are objectionable—the former because it increases the weight and cost of the wagon, and the latter because it is not well calculated to resist the rough usage to which the wagons are subjected by the mountain travel for which they are particularly intended.

In my improved wagon the body A is supported by transverse strips *a a*, secured to the bottom of said body, and attached at the outer ends to longitudinal side bars B B, the rear ends of the latter resting directly upon the rear axle D, but being supported at the front by a half-spring, E, secured to the front axle D′.

In order to stiffen the structure at the front end, and prevent the pull upon the front axle from being communicated to the side bars solely through the medium of the half-spring E, a brace, F, extends from the center of the front axle to a point some distance from the front end of each of the bars B.

It will be seen that the side bars B and transverse strips *a* form a body-supporting structure which is light and cheap; and, owing to the intervention of the half-spring E between the front end of the same and the axle, is more elastic than a floor or platform resting directly upon the axles, while at the same time the use of the said half-spring, in combination with the brace F, renders the vehicle sufficiently rigid to resist the rough usage to which it is subjected.

I do not desire to claim separately either the body-supporting structure shown, or the use of a spring between the front axle and the front end of a body-supporting structure; but,

I claim as my invention—

The combination, in a buckboard-wagon, of the body A with the transverse strips *a* secured to longitudinal side bars B, the latter resting at the rear upon the axle D, and at the front upon the opposite ends of the half-spring E secured to the front axle, to which the bars B are also connected by means of a brace, F, all substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES DRAKE LE GRAND.

Witnesses:

MONTVILLE YOUNG,

JACOB BATT.