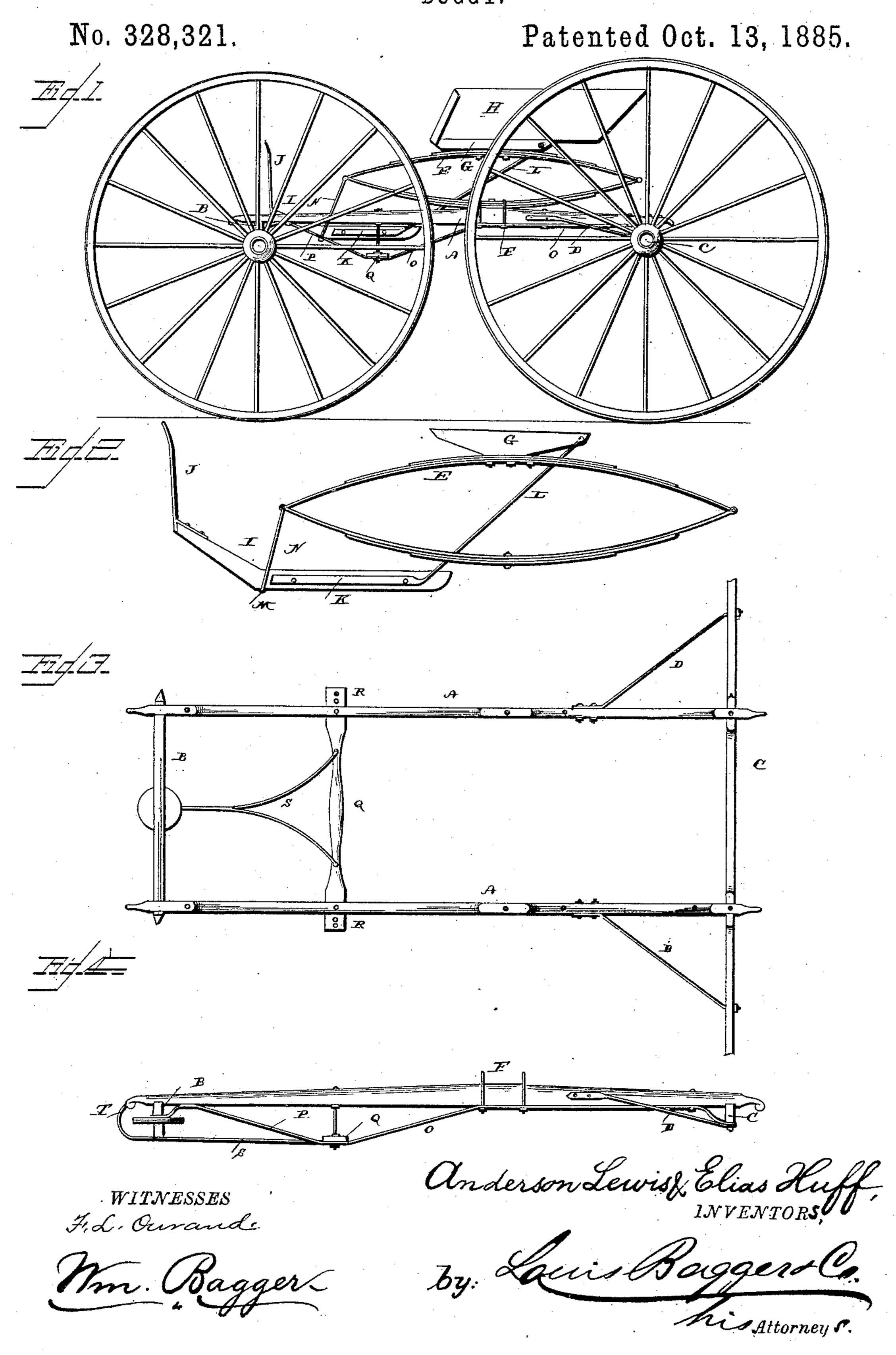
A. LEWIS & E. HUFF.

BUGGY.



United States Patent Office.

ANDERSON LEWIS AND ELIAS HUFF, OF KERNERSVILLE, NORTH CAROLINA.

BUGGY.

SPECIFICATION forming part of Letters Patent No. 328,321, dated October 13, 1885.

Application filed August 31, 1885. Serial No. 175,797. (No model.)

To all whom it may concern:

Be it known that we, Anderson Lewis and ELIAS HUFF, both residents of Kernersville, in the county of Forsyth and State of North 5 Carolina, have invented certain new and useful Improvements in Buggies; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which 10 it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side view of a buggy, the run-15 ning-gear of which embodies our improvements. Fig. 2 is a side view showing the spring, spring-bar, and the foot-board connected with the same. Fig. 3 is a plan view of the side bars with their attachments, the 20 springs and their attachments having been removed; and Fig. 4 is a side view of one of the side bars with its attachments.

The same letters refer to the same parts in all the figures.

This invention relates to running-gear for buggies and other similar light vehicles; and it has for its object to make a very light and durable running-gear, which shall also be simple and inexpensive, and which shall possess 30 in a superior degree that springiness and elas-

ticity which is so greatly to be desired in this class of vehicles.

With these ends in view the invention consists in the improved construction, arrangement, and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A A designate the side bars, which are connected at 40 their front ends by the bolster B, and at their rear ends by the rear axle, C, the ends of which latter are connected with the side bars in the usual manner by means of diagonal forwardly-extending braces D D.

E E designate the springs, which are elliptical springs of ordinary construction, and secured to the side bars in the usual manner by means of clips F. The springs support the spring-bars G, which in turn support the bug-50 gy-seat H.

rate from the seat, and the front end of which has the dash J. To the ends of the foot-board are secured the strengthening plates K, from the rear ends of which braces L extend diagonally in a rearward and upward direction to the rear ends of the spring-bars G, with which they are pivotally connected. The under side of the foot-board is provided with bearings for a transverse shaft, M, the ends of which are provided with cranks N, extending in an upward direction and connected pivotally with the front ends of the springs. The transverse shaft M might be dispensed with, however, and the arms or cranks N be pivoted directly to the ends of the foot-board.

The under sides of the side bars are provided with braces or trusses O O, extending from the clips F to near the front ends of the said side bars, with which they are connected by the brace-rods or truss-rods P. Said trusses support the transverse step-bar Q, the ends of which are constructed with the steps R.

S is the safety-hook, the front end of which is attached to the front axle, as will be seen at T in Fig. 4 of the drawings, and the rear end of which is bifurcated and attached to the step-bar, as shown clearly in Fig. 3.

The operation and advantages of this invention will be readily understood by those skilled { in the art to which it appertains without requiring any extended explanation. When the seat of the vehicle is depressed by the weight of the person or persons occupying the same, the foot-board will be forced or caused to 8 swing in a downward and forward direction. The braces L and the arms or cranks N serve to brace the springs and to equalize the pressure upon the same. The general construction is exceedingly light and durable, and the invention may be manufactured at a moderate expense.

Having thus described our invention, we claim and desire to secure by Letters Patent of the United States—

1. In a running-gear for vehicles, the combination of the side bars, the springs mounted on the same and supporting the spring-bars, the seat secured on the said spring-bars, the foot-board arranged between the side bars, the I strengthening-plates secured to the ends of I is the foot-board, which is entirely sepa- I the foot-board and having upwardly and rearwardly extending braces connected pivotally to the rear ends of the spring-bars, and the cranks or pivoted arms connecting the footboard with the front ends of the springs, all arranged and operating substantially as and for the purpose herein shown and specified.

2. In a running gear for vehicles, the combination, with the side bars, of the bridge braces or trusses attached to the under sides of and near the front ends of the same, the transverse step-bar supported upon the said trusses, and the vertical truss-rods or braces connecting the trusses with the under sides of the side bars, substantially as and for the purpose

herein shown and specified.

3. In a running-gear for vehicles, the combination of the side bars connected by the rear axle and by the front bolster, the trusses upon the under sides of said side bars, the step-bar supported upon the said trusses, and the bifurcated safety-hook, the rear end of which is attached to the said step-bar, and the front end of which is attached to the front axle, substantially as and for the purpose set forth.

4. The herein-described running-gear for vehicles, comprising the side bars, the springs mounted on the same and supporting the spring-bars, the seat mounted on the latter, braces connected pivotally with the rear ends 30 of the seat-bars and connecting the latter with the foot-board, pivoted arms or cranks connecting the latter with the front ends of the springs, trusses upon the under sides of the side bars, the step-bar supported upon the 35 said trusses, and the safety-hook connecting the said step-bar with the front axle, all arranged and operating substantially as and for the purpose herein shown and specified.

In testimony that we claim the foregoing as 40 our own we have hereunto affixed our signa-

tures in presence of two witnesses.

ANDERSON LEWIS. ELIAS HUFF.

Witnesses:

C. H. PRESNELL, J. R. STUART.

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