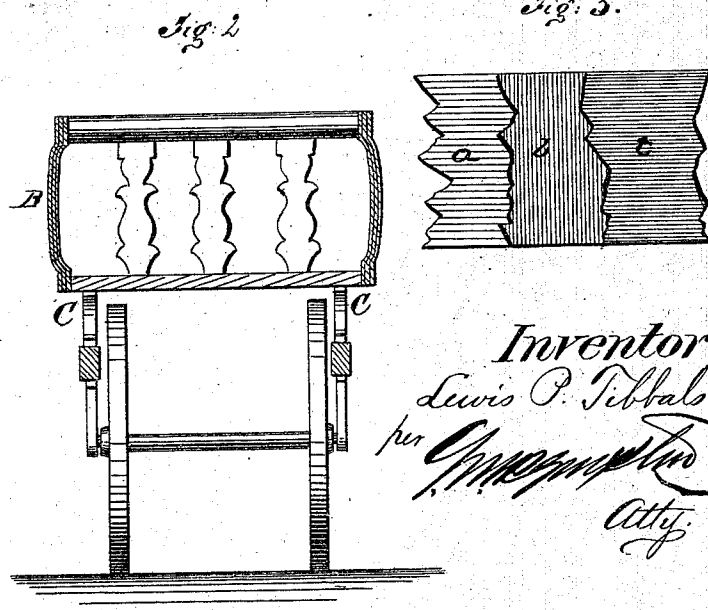
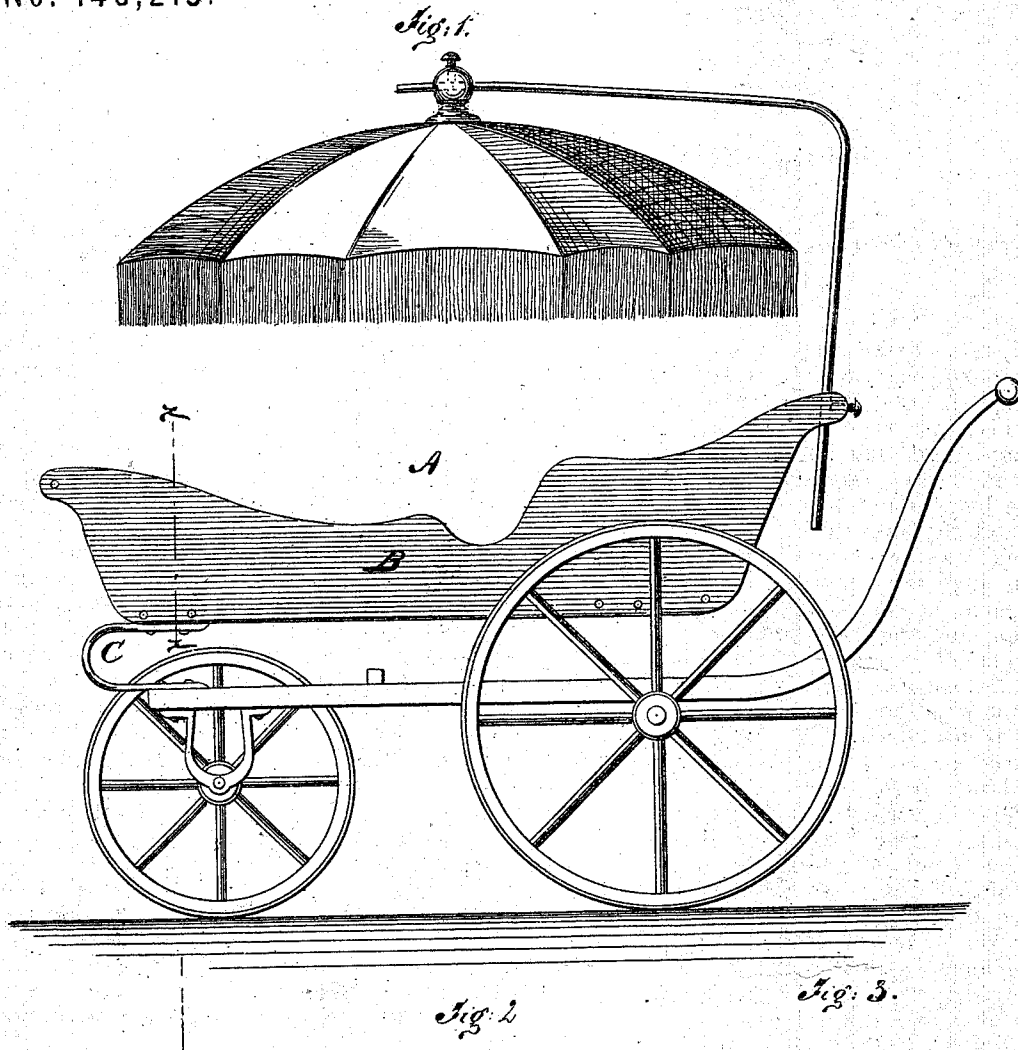


L. P. TIBBALS.
Children's Carriages.

No. 146,215.

Patented Jan. 6, 1874.



Witnesses:
M. Lovell
H. de Wittenberg

Inventor:
Lewis P. Tibbals
per *[Signature]*
Atty.

UNITED STATES PATENT OFFICE.

LEWIS P. TIBBALS, OF NEW YORK, N. Y.

IMPROVEMENT IN CHILDREN'S CARRIAGES.

Specification forming part of Letters Patent No. **146,215**, dated January 6, 1874; application filed November 10, 1873.

To all whom it may concern:

Be it known that I, LEWIS P. TIBBALS, of the city, county, and State of New York, have invented a new and Improved Child's Carriage; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

This invention is in the nature of an improvement in combined child's carriages and cradles; and the invention consists in a combined child's carriage and cradle, with the body thereof constructed of veneers, in combination with the supporting-springs, substantially as described.

In the bodies of children's carriages, supported only at the front ends, substantially as described in Letters Patent issued to George H. Mellen, on the 29th day of March, 1870, it is both difficult and expensive to construct the body of the carriage so that it shall have the proper weight for the supporting-springs. When the body is made of wood in the ordinary manner, to give it the necessary strength and stiffness, it necessarily adds to its weight so much as to require springs too stiff for the gentle rocking motion required; and if the body is made light enough for insuring the proper working of the springs, it is then not strong enough to be serviceable. To overcome this difficulty is the chief object of my invention.

In the accompanying sheet of drawings, Figure 1 is a side elevation, partly in section; Fig. 2, a cross-section taken in the line *xx*, Fig. 1; and Fig. 3 a section showing courses of veneers.

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

A represents a child's carriage, of the kind that embodies a carriage and cradle together, such as was patented by George H. Mellen, on the 29th day of March, 1870. The body B is constructed of two or more thicknesses of thin wood or veneer, *a*, *b*, and *c*, glued together in such manner as to cause the grain of one piece of wood to be at right angles to the grain of the other. The pieces of wood or veneer being thus glued together and placed under a suitable press and dried, an exceedingly light and strong material is formed, out of which may be constructed the sides and ends of the body B, or even the bottom, if necessary.

By this combination of lightness and strength a body is produced well adapted to the supporting-springs C, so that they be made as sensitive as desired.

Another advantage of making the body of the carriage as above described is, that its sides may be ornamented or bent to any desired form by pressure, and the cost of my carriage-body is very much less than the cost of the body constructed in the ordinary way; and by its use the cost of the supporting-springs is much lessened, since lighter springs may be used, and with far greater advantage than before.

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

The body of a child's carriage, made of two or more veneers of wood glued and pressed together, in combination with front supporting-springs, substantially as shown and described.

LEWIS P. TIBBALS.

Witnesses:

H. L. WATTENBERG,
G. M. PLYMPTON.