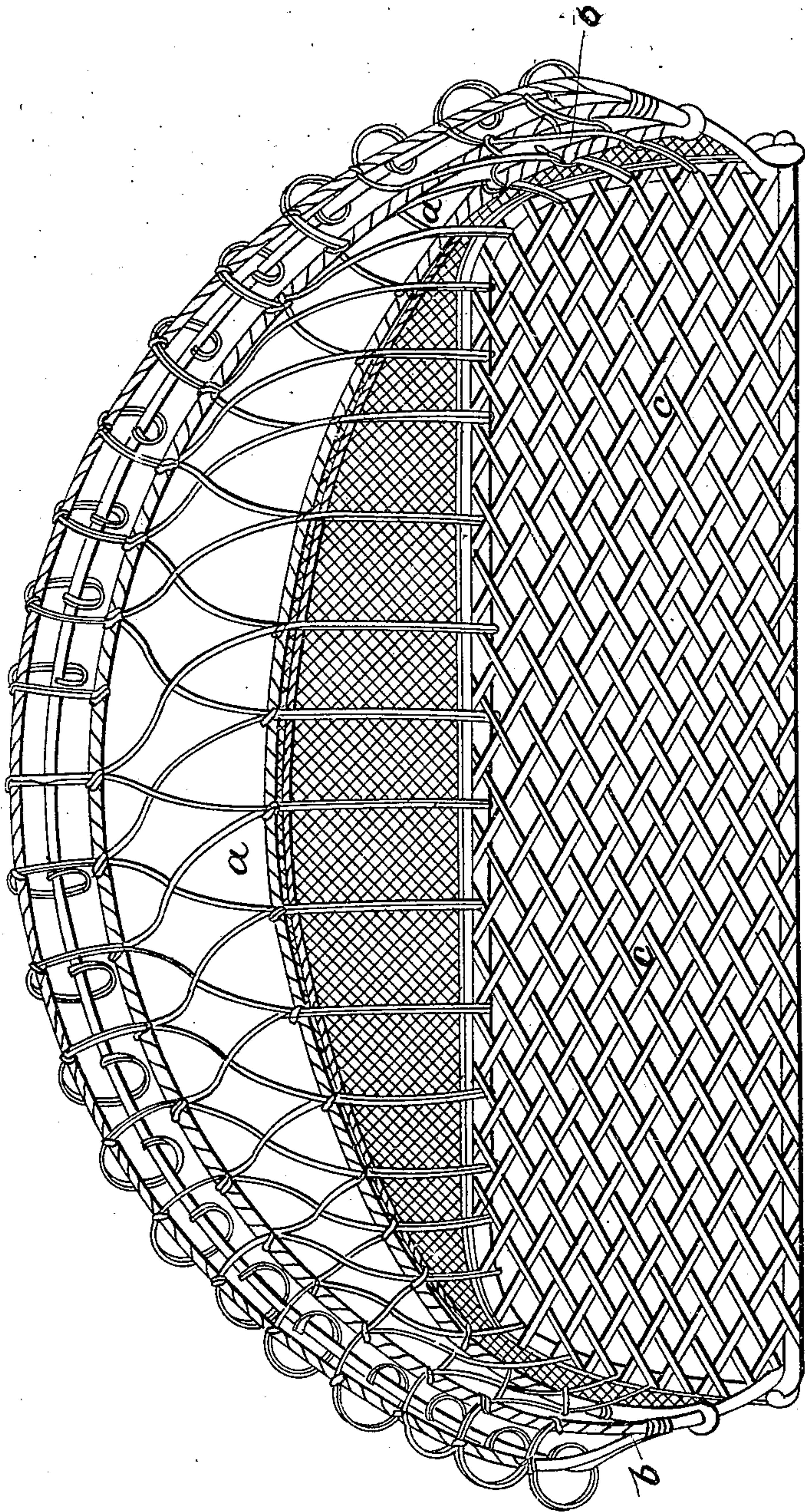


TOPLIFF & TUNNINGTON.

Carriage Seat.

No. 52,094.

Patented Jan'y 16, 1866.



WITNESSES

*Wm. T. Green*  
*Wm. C. Lynn*

INVENTORS

*John O. Topliff*  
*Thos. Tunnington*  
*By *Wm. C. Lynn* & Co.*  
*attorneys*



# UNITED STATES PATENT OFFICE.

JOHN A. TOPLIFF AND THOMAS TUNNINGTON, OF ELYRIA, OHIO.

IMPROVED MODE OF MANUFACTURING ARTICLES OF WOVEN WIRE.

Specification forming part of Letters Patent No. 52,094, dated January 16, 1866.

*To all whom it may concern:*

Be it known that we, JOHN A. TOPLIFF and THOMAS TUNNINGTON, of Elyria, in the county of Lorain and State of Ohio, have invented new and useful Improvements in the Manufacture of Wire-Netting; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention consists in subjecting to any of the well-known and generally-practiced galvanizing processes any and all articles which are now or may be hereafter manufactured of wire-netting, whether having large or small meshes, and of whatever size of wire, the object of which is to thus cause the various wires, at their crossing and interlocking points with each other, to be firmly united or soldered together, as it were, whereby great strength, rigidity, and stiffness is given to the wire-netting, increasing its value and usefulness in a large degree.

Among the many articles to which our present improvements may with great advantage be applied may be here mentioned the bodies of carriages, especially those for children's use, and also carriage-seats and the arms and backs thereof, the wire-netting being made into the proper shape to give strength and rigidity to them, ash and coal screens, &c.; and it may be here remarked, in connection with the above, that wire-netting work thus galvanized can be in a great many cases substituted for "wicker and cane work," so called, with advantage.

In accompanying plate of drawing our improvements are illustrated by a drawing of a seat suitable for carriages, which seat is entirely made of wire-netting, or, in other words,

of wire woven or twisted in any proper manner into the general form or shape shown, the back *a* and arm portions *b b* of the seat being bent over into a scroll form, so as to give strength thereto. The seat thus made of wire is then subjected to any of the well-known galvanizing processes, which, as is manifest, causes the wires forming the seat, at their various joints and points of intersection with each other, to be thus, as it were, soldered and united together, which increases the strength of the seat in a great degree and imparts stiffness and rigidity thereto.

To prevent the cushion from slipping on the carriage-seat we find it desirable to crimp the wires constituting such portion of it as the cushion rests upon.

Although we have described our improvements as applied to a carriage-seat, we wish it to be distinctly understood, as was before stated herein, that they can be applied to other and various purposes, some of which were enumerated, and therefore we do not limit ourselves to any one particular article or device.

We claim as new and desire to secure by Letters Patent—

The application to woven, twisted, or other "wire work or netting," so called, of any of the ordinary galvanizing processes, substantially as and for the objects specified.

The above specification of our invention signed by us this 9th day of October, A. D. 1865.

THOMAS TUNNINGTON.

J. A. TOPLIFF.

Witnesses for Thos. Tunnington:

EDWIN WRIGHT,

C. W. JOHNSTON.

Witnesses to signature of J. A. Topliff:

ALBERT W. BROWN,

J. M. COVINGTON.