

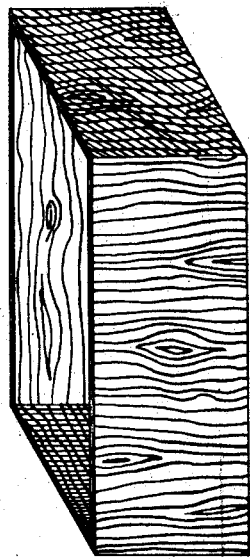
*F. Wm. Fiedner's Improv<sup>d</sup> in the Manufacture of Boxes, by gluing together thin wooden veneers or sheets so that the grain of the wood shall cross each other.*  
*No. 46,097. Patented May 31, 1865.*

*Fig. 2.*

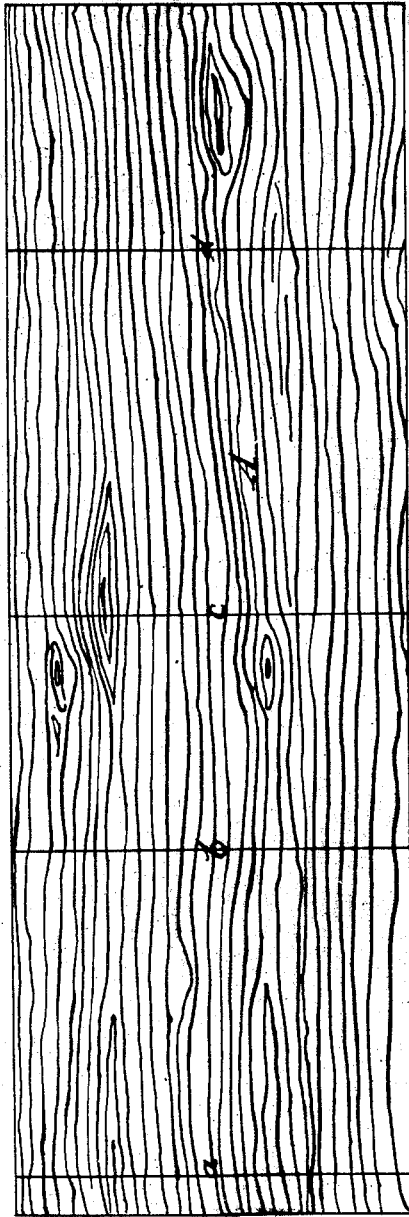


*Two thick masses of wood being by other means secured, as at *a* & *b*, the grain of the sheet cross.*

*Fig. 3.*



*Fig. 1.*



*Inventor:*  
*F. Wm. Fiedner*

*Witnesses:*

*J. D. Hall*

*Wm. Fiedner*

# UNITED STATES PATENT OFFICE.

FREDERICK W. FLIEDNER, OF NEW YORK, N. Y.

## IMPROVEMENT IN THE MANUFACTURE OF BOXES.

Specification forming part of Letters Patent No. **46,097**, dated January 31, 1865.

*To all whom it may concern :*

Be it known that I, FRED. W. FLIEDNER, of the city, county, and State of New York, have invented a new and useful Improvement in the Manufacture of Boxes, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a portion of a sheet of wood prepared for the manufacture of boxes. Figure 2 is a perspective view of the body of a box prepared according to this invention. Fig. 3 is a transverse section of the same.

Similar letters of reference indicate corresponding parts.

This invention relates particularly to an improvement in that class of boxes which have heretofore been made of pasteboard and are used in mercantile houses and trades of almost every kind, under the name of paper-boxes.

The high price of paper and of pasteboard has made it desirable to find some other cheaper material which can be worked in the same manner as pasteboard, and this object has been accomplished by the present invention, which consists in the employment or use in place of pasteboard of sheets of wood prepared by gluing or pasting two or more thicknesses of veneers, one on the other, the grain of one veneer being made to run crosswise to the grain of the other, until a sheet is obtained similar in size to the sheets of pasteboard as used in the manufacture of boxes, in such a manner that said sheet of wood can be marked off, folded, and cut up for a number of boxes precisely in the same manner as pasteboard.

A represents a sheet of wood prepared by pasting or gluing two veneers one on the other, the grain of one veneer being made to run in a horizontal and the grain of the other in a vertical direction. This sheet is marked off as shown by the lines *a b c d*. It is cut partially through, following those lines so that it will readily fold as shown in Fig. 3, and it

is fastened together as shown in the figure. After this operation has been accomplished the folded sheet is brought under a knife of the proper construction and cut up in pieces of sufficient height each for the body or for the cover of a box, as the case may be.

By preparing sheets of wood as substitutes for the sheets of pasteboard now used in the manufacture of what is known by the trade as "paper-boxes," I am enabled to produce boxes cheaper than they can be made at present from pasteboard, and the use of this substitute is rendered practicable, whereas, if the wood should be prepared and marked off for each separate box, the cost of manufacturing such boxes would be so great that the same could not compete with ordinary paper-boxes, even at the present high price of pasteboard.

I am aware that veneers have been used for manufacturing boxes, but, as above remarked, the manufacture of such boxes is impracticable, because they cost too dear and cannot be sold side by side with ordinary paper-boxes, but by preparing sheets of wood as substitute for sheets of pasteboard this difficulty has been obviated, and my boxes can be manufactured with the same facility and at the same expense as ordinary paper-boxes, and at the present high price of pasteboard I am enabled to produce my boxes cheaper than they can be produced from pasteboard.

I do not claim as my invention the use of veneers in the manufacture of boxes, for such are used in various ways, as described, for instance, in the patent of John Sperry, November 3, 1863; but

I do claim as new and desire to secure by Letters Patent—

The use in the manufacture of boxes of sheets of wood, prepared substantially as described, as substitute for the sheets of pasteboard now used in the manufacture of paper-boxes.

F. W. FLIEDNER.

Witnesses:

WM. F. MCNAMARA,  
C. L. TOPLIFF.