

A. C. FRENCH.  
 Portable Folding Shelves.

No. 198,454.

Patented Dec. 25, 1877.

Fig. 1

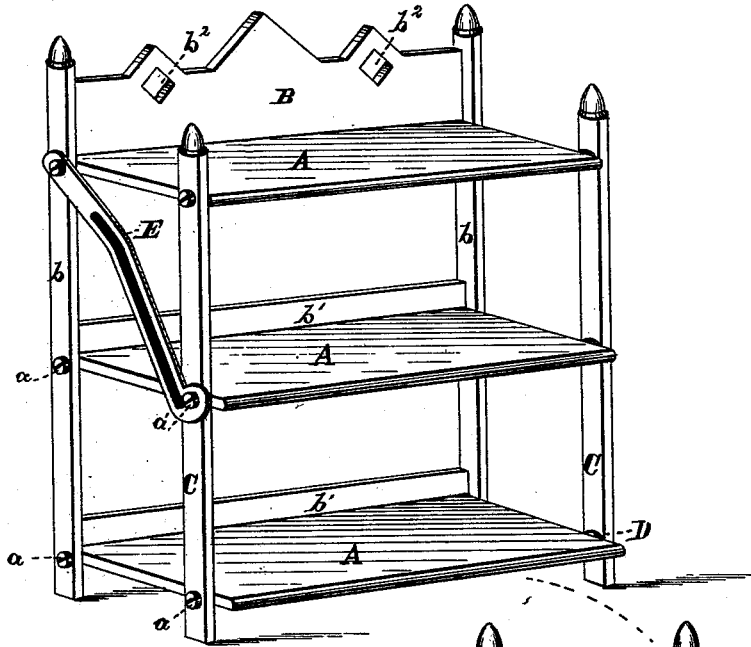


Fig. 2

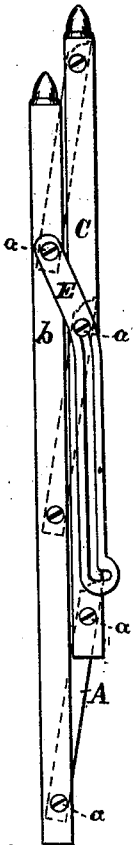
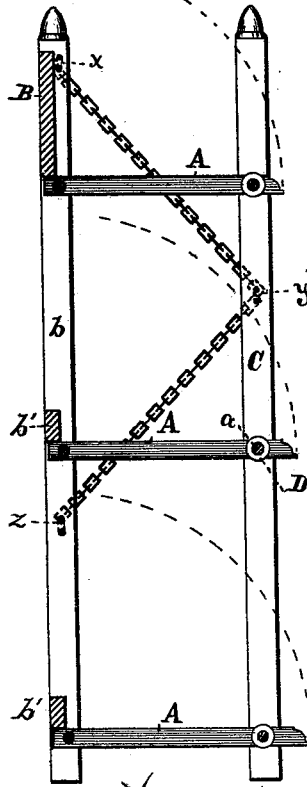


Fig. 3



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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN PORTABLE FOLDING SHELVES.

Specification forming part of Letters Patent No. **198,454**, dated December 25, 1877; application filed May 14, 1877.

*To all whom it may concern:*

Be it known that I, ALONZO CURRIER FRENCH, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Portable Folding Shelves; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

In the drawing, Figure 1 is a perspective. Fig. 2 is a side elevation, and Fig. 3 a vertical section from front to back.

The nature of my invention relates to a series of shelves so connected together that the entire structure can be folded closely together or hung against the wall, or it may stand on a horizontal plane, as occasion may require.

It consists, in the main, of two or more shelves pivoted to a back piece, and having the front parts of said shelves connected, also by pivots, to suitable connecting-posts, so that all the shelves will fold or unfold simultaneously.

Among the advantages I claim for this invention may be mentioned the great convenience in folding the shelves quickly and compactly for purposes of shipping or moving and storing the same; also, in the saving of lumber, as will be readily perceived from the drawing, as all essential parts are straight cuts, and mostly of such sizes and shapes as to enable the manufacturer to utilize the waste from the factory.

In construction my invention is as follows: A A are shelves, consisting of rectangular boards; B, the back, which continues downward in the form of corner-posts *b b*, connected by pieces *b<sup>1</sup> b<sup>1</sup>*; but these parts may all be made of one board, if desired. C C are the front connecting-posts. The shelves are pivoted at their two rear corners to the posts *b b*, and at the two front corners to the posts C C,

by means of screws *a a'*. The washer D, of any suitable material, is inserted between the ends of the shelves and the posts *b* and C, in order to make a more complete joint, and to prevent defacing the parts which act against each other, the screws *a* passing directly through the center of washer D.

At E is a slotted brace, the slot at the lower end making a short turn. One of the pivot-screws, *a*, passes through the upper end of the brace, while a second screw, *a'*, passes through the slot of the brace. This brace, when pushed down in the lock at *a'*, holds the shelves unfolded, so that the structure will stand firmly, while at the same time it acts as a suspender when the structure is hung on nails or screws against the wall, for which purpose the two holes *b<sup>2</sup>* are provided.

A similar brace is also to be placed at the other end, opposite to the one shown in the drawing.

Other suspension-braces may be used, such as chains, straps, or cords. In that case the chain is started and fastened permanently at a point, as at *x*, then at *y*, where it is made detachable, and ending at *z*, where it is again permanently fastened. In this way a double brace is secured by means of a pliable object, as a chain or cord.

The operation of my improvement is obvious from the foregoing description.

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

A series of shelves, A A, pivoted at the rear to the back B *b b<sup>1</sup>*, and connected in front to the posts C C, combined with the slotted braces E E, or their equivalent, in the manner and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ALONZO CURRIER FRENCH.

Witnesses:

T. VAN KANNEL,  
L. PREHN.