

(No Model.)

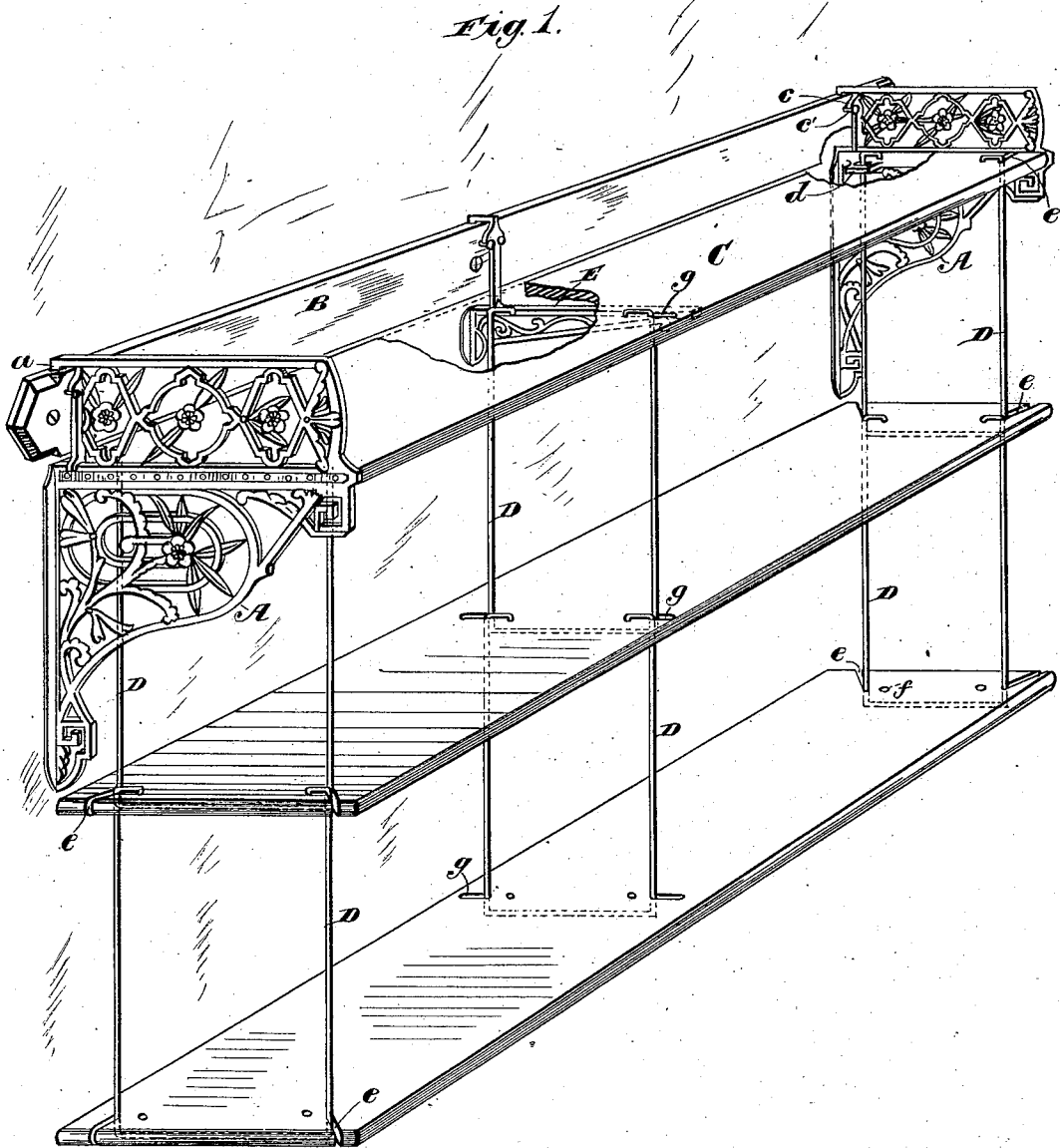
2 Sheets—Sheet 1.

A. LOOMIS.

WALL BRACKET EXTENSION SHELF.

No. 293,894.

Patented Feb. 19, 1884.



WITNESSES  
*Robert Everett,*  
*J. A. Rutherford*

INVENTOR  
*Arthur Loomis.*  
By *James L. Norris.*  
Attorney

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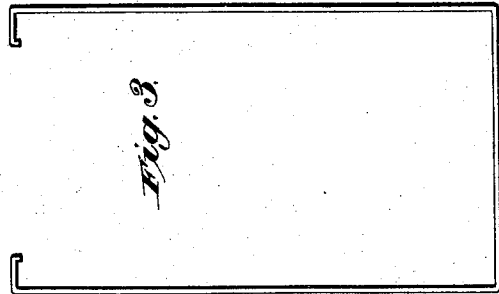
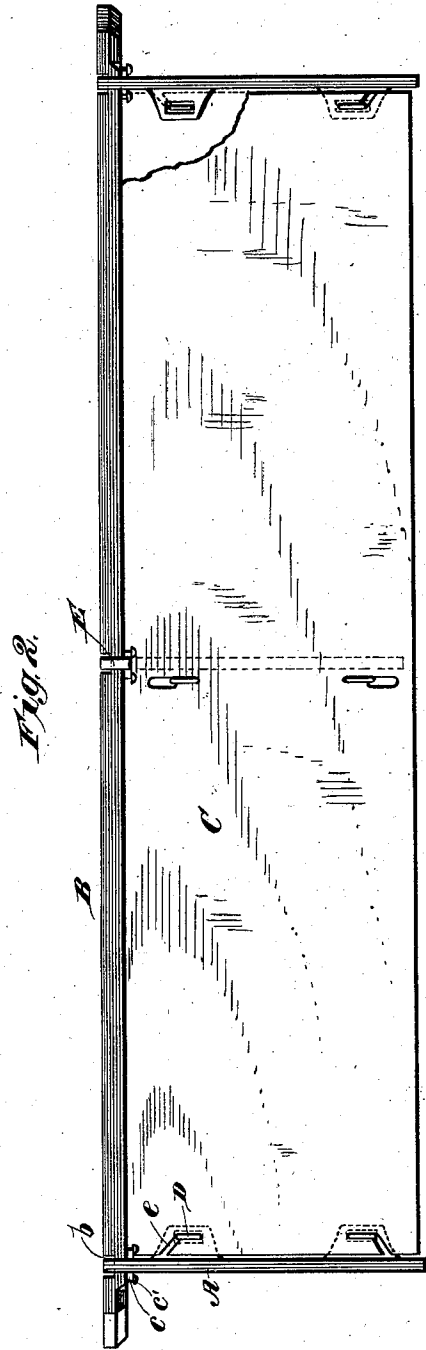
2 Sheets—Sheet 2.

A. LOOMIS.

WALL BRACKET EXTENSION SHELF.

No. 293,894.

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WITNESSES  
*Robert Emmett,*  
*J. A. Rutherford*

INVENTOR  
*Arthur Loomis.*  
By *James L. Norris,*  
Attorney

# UNITED STATES PATENT OFFICE.

ARTHUR LOOMIS, OF JEFFERSONVILLE, INDIANA.

## WALL-BRACKET EXTENSION-SHELF.

SPECIFICATION forming part of Letters Patent No. 293,894, dated February 19, 1884.

Application filed June 16, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR LOOMIS, a citizen of the United States, residing at Jeffersonville, Clark county, Indiana, have invented new and useful Improvements in Wall-Bracket Extension-Shelves, of which the following is a specification.

My invention relates to wall-bracket extension-shelves, and has for its object the production of such a device the several parts of which can readily and easily be put together and taken apart, and when united will brace and support one another and form a substantial support for books, papers, and other articles; and it consists in the construction of the bracket, the shelves, and the suspending wires or rods, and also in the combination of the said several parts, as hereinafter particularly described.

In the accompanying drawings, Figure 1 is a perspective of the hanging shelves with parts broken away. Fig. 2 is a plan view of a part of a shelf, and Fig. 3 a detached view of one of the suspending wires or rods.

In the drawings, the letter A indicates the end brackets, which may be of the design shown or any other design, and as plain or ornamental as desired, and are formed at their upper rear ends with downwardly-projecting or overhanging hooks *a*, which are designed to enter sockets *b*, made in the top face of a horizontal strip, B, which is secured by screws or other suitable fastenings to the wall or other support. The end brackets are further formed with shoulders *c* on the rear vertical web of the bracket, as shown, against which the heads of screws *c'*, entering the strip B, may be brought to bear, if that additional security be thought advisable. At the inside faces of the brackets, at the point where the ends of the shelves will come, and preferably near the ends of the brackets, there are formed inwardly-projecting lugs *d*, which are designed to fit against the under side of the shelf C, so as to support the same, and they are slotted for the passage of the suspending wires or rods D. These wires or rods are bent to form two arms, connected together at their lower ends, and formed with hooks at their upper ends, and are passed into slots *e*, made in the ends of the shelf and extending diagonally inward toward the center of the shelf. The hooked ends of

the wires or rods pass through the slots in the lugs on the brackets, as well as through the slots in the shelf, and the points of the hooks enter perforations *f*, made in the top face of the shelf therefor, so that the shelf is bound between the lugs and the hooks of the wires or rods. The lower shelves, of which there may be any number, are constructed the same as the top shelf, and each one is suspended by the wire or rod extending down from the shelf above, the arms of said wires or rods entering the slots in the shelf, and the connecting part of the rods bearing against the bottom face of the shelf, so as to support the shelf, while the hooked ends enter the same slots and their points the perforations, so that each shelf is bound or clamped both on its top and bottom face by the suspending means, and also by the same means prevented from slipping endwise from the wires or rods.

If desired, the shelves may be supported between their ends, so as to prevent sagging, by one or more brackets, E, constructed in all essentials like brackets A, except that the inwardly-projecting slotted lugs may be omitted, and instead thereof the top face of the bracket caused to bear against the bottom face of the shelf. The suspending wires or rods will be the same as those used at the ends of the shelves, and they will be passed through elongated slots *g*, made in the shelves, and will be attached, and will operate to bind and support in the same manner as when used at the ends.

The device is susceptible of unlimited extension and contraction with very little labor and at the expenditure of very little time, and a shelf can be added or taken away without disturbing the others and without leaving wires extending, only to be unsightly and in the way.

The distance between the shelves can be regulated by substituting wires or rods of the desired length.

What I claim is—

1. The combination of supporting-brackets having laterally-projecting shelf-supporting lugs provided with slots, a shelf having its ends supported by the lugs, suspending-wires passing through the shelf and the slots in the lugs, and having their upper ends hooked to clamp the upper shelf between the lugs and

the upper ends of the wires, and a shelf suspended by the lower portions of the wires, substantially as described.

2. The combination of a horizontal strip, supporting-brackets having hooks engaging with the strip and provided with laterally-projecting slotted lugs, a shelf supported at its ends by the lugs, a suspending-wire having its upper end passing through the slotted lugs and the shelf and secured on the latter to clamp it on the lugs, and a shelf suspended by the lower portions of the wires, substantially as described.

3. The combination of supporting-brackets having laterally-projecting shelf-supporting lugs, a shelf having its ends supported by the lugs, suspending-wires passing through the shelf, and having hooks at their upper ends secured upon the upper surfaces of the shelf, and a shelf suspended by the lower portions of the wires, substantially as described.

4. The combination of supporting-brackets having inwardly-projecting slotted lugs and overhanging hooks, a horizontal bracket-supporting strip with which the hooks engage, a shelf having its ends resting on the slotted lugs, suspending-wires passing through the shelf and the slotted lugs, and having their upper ends provided with hooks resting upon the upper surface of the shelf to clamp the latter on the lugs, and a shelf suspended by the lower portions of the wires, substantially as described.

5. The combination, in wall-bracketshelves, of supporting-brackets having inwardly-projecting slotted lugs, a series of shelves having their ends provided with slots open at one end, and the upper shelf having its ends arranged on the lugs, and suspending-wires passing through the slots in the respective shelves and the slots in the lugs, and having their upper ends provided with hooks resting upon the upper surface of the shelf to clamp the latter on the lugs, substantially as described.

6. The combination, in a wall-bracket shelf, of a horizontal strip, supporting-brackets having laterally-projecting slotted lugs at their sides and downwardly-projecting hooks at one end to engage over the upper edge of the strip, a top shelf having its ends resting on the lugs, suspending-wires carrying a shelf at their lower ends, and having their upper ends passed through the slots in the lugs and attached to the top shelf to clamp the latter on the lugs, suspending-wires detachably secured to the ends of the shelf, suspended from the wires connected to the top-shelf, and a shelf detachably supported by the said detachable wires, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ARTHUR LOOMIS.

Witnesses:

HENRY POLLOCK,

MARY B. ONGLEY.