(Model.)

M. E. McMASTER.

FOLDING BOOK AND PAPER RACK.

No. 313,223. Patented Mar. 3, 1885.

Fig. 2.

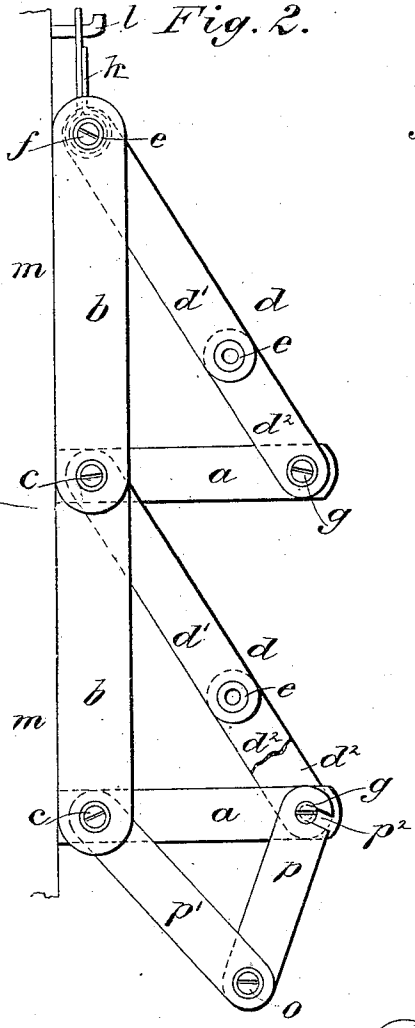


Fig. 1.

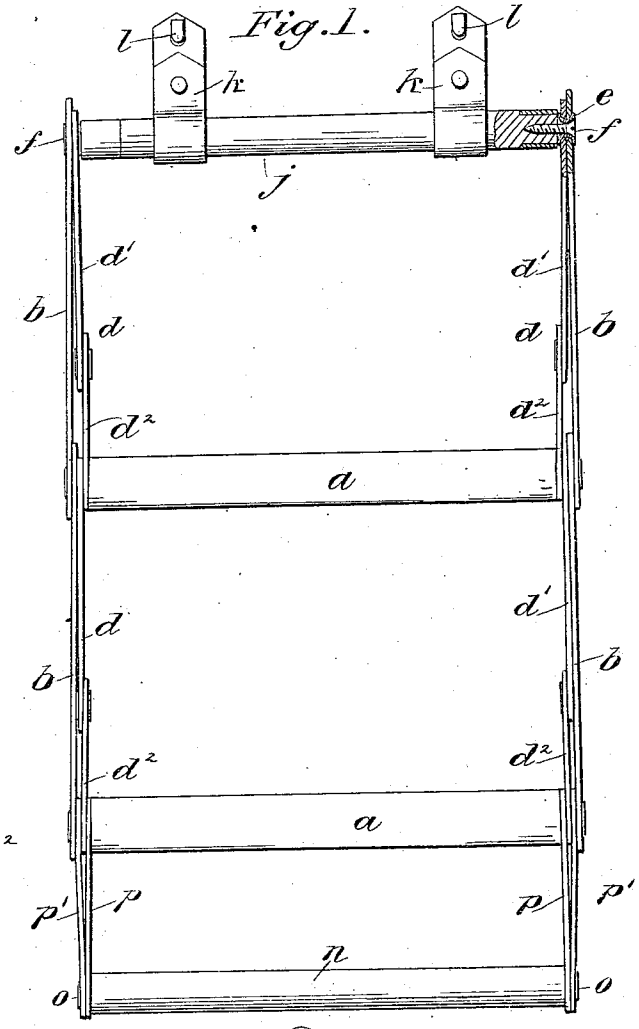


Fig. 4.

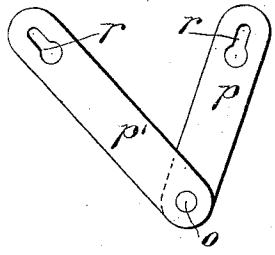


Fig. 3.

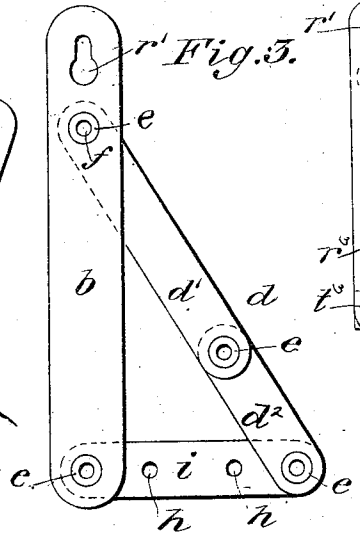
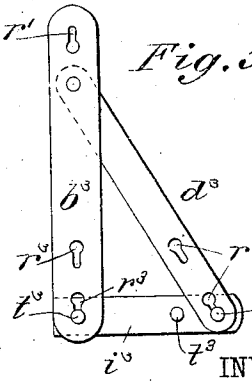


Fig. 5.



WITNESSES:

Jolner & Reemer

C. Sedgwick

INVENTOR:

M. E. McMaster

BY Munn & Co

ATTORNEYS.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

MARION E. McMASTER, OF SHELBYVILLE, MISSOURI.

FOLDING BOOK AND PAPER RACK.

SPECIFICATION forming part of Letters Patent No. 313,223, dated March 3, 1885.

Application filed February 11, 1884. (Model.)

To all whom it may concern:

Be it known that I, MARION E. McMASTER, of Shelbyville, in the county of Shelby and State of Missouri, have invented a new and Improved Folding Book and Paper Rack, of which the following is a full, clear, and exact description.

The object of my invention is to provide an improved book and paper rack of simple, strong, inexpensive, and durable construction.

The invention consists in special constructions of the supporting end brackets of the shelf or shelves, and in their combination with the shelves to permit all to be folded together compactly when out of use.

The invention consists, also, in an arrangement of a paper-rack below the shelf or shelves of the book-rack, and in special constructions of the paper-rack brackets for its support from the book-shelf pivots.

The invention consists, also, in various other details of construction and combinations of parts of the rack, all as hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of my improved folding rack, partly broken away. Fig. 2 is a side elevation of the same, partly broken away. Fig. 3 is a side elevation of a shelf-bracket having a lower cross-bar for attachment of the shelf. Fig. 4 shows a modified construction of the paper-rack bracket, and Fig. 5 is a side elevation of a modification of the shelf-bracket as arranged for adjusting the shelf as to height.

I make my folding rack of a shelf, *a*, held at each end by brackets consisting of an upright rear piece or plate, *b*, to which the rear portion of the end of the shelf is pivoted at *c*, and a front inclined brace-plate, *d*, which consists preferably of two plates, *d' d²*, the plate *d'* being pivoted to the plate *b* by an eyelet connection, *e*, which joins them securely and affords a passage for a pin or screw, *f*, which holds the jointed top of the bracket. The lower plate, *d²*, is pivoted to plate *d'* preferably by an eyelet connection, *e*, and a rivet passed through the parts; or the eyelet or rivet may alone be used, and at its lower end plate *d²* is pivoted on a pin, stud, or screw, *g*, which enters the end of the shelf *a* near its front edge. If desired, the shelf *a* may be held to the end brackets by screws or pins passed through holes *h* in a plate, *i*, connected pivotally at both ends to the lower ends of plates *b* and *d²* by eyelets *e*, through which the pivots *c* and *g* may pass into the ends of the shelf, thus giving the shelf a direct support from the brackets between the outside pivots, *c g*, by the pins in the holes *h*.

To support the rack, I provide a cross-bar, *j*, ferruled at the ends, and into which the pivot pins or screws *f* are passed after the eye plates or clips *k* are slipped on the bar *j*, said clips being apertured for passage over any suitable nails or screws, *l*, from which the rack is suspended by the clips from or on the face of a wall, *m*, or other support, against which the rear edges of the bracket-plates *b* and shelf *a* rest, as in Fig. 2.

I make the paper-rack of a bar, *n*, pivoted at *o* at each end to the crossed or overlapped lower ends of two plates, *p p'*, which are held at their upper ends to the shelf *a* by the pivots *c g*, as at the lower part of Fig. 2, and I prefer to connect the plate *p* to pivot *g* by an open hook-slot, *p²*, to allow said plate *p* to be readily disconnected from pivot *g* at each side of the rack for folding the bar *n* back or down flat in line with the plates *b;* but, if desired, the plates *p p'* may connect with the pivots *c g* by slots *r*, Fig. 4, enlarged at the lower ends to slip over the heads of the pivots, and then lodge behind the heads at the narrow parts of the slots. More than one bar *n* may be used, if desired. The joint of the plates *d'* and *d²* with each other is so located with relation to the width of the shelf *a* and the length of the plates *b* that the shelf may be folded up on its pivots *c* in line with the side plates, *b*, the plates *d' d²* at the same time folding upon each other and in line with the parts *a b*, as will readily be understood, thereby permitting the book-rack to be folded compactly, and the paper-rack may be folded flat upon the book-rack at either side, the whole making a small package, easily stored away or transported from place to place, and the complete rack may quickly be set up for use when desired.

A valuable feature of my improvement is that but a single rack-shelf *a* may be used, and

either with or without the paper-rack bar *n*, and that, as an increasing library shall require, extra shelves *a* may be added by connecting the overlapped ends of their plates *b d'* by the pivots *c* of the shelf above, which secures the several hanging shelves together in a simple and substantial manner, two of such shelves *a* being shown in the drawings with the paper-rack hung from the lower one.

Should it be desired to hang the rack in a recess just wide enough for the rack, the plates *b* may be extended above the pivot-point at *f* and have a slot, *r'*, enlarged at one end (see Fig. 3) to allow the plates *b* at each side to be sprung over the heads of nails or screws entering the slots to support the rack from the side walls of the recess.

In Fig. 5 the shelf-bracket is shown made of three parts or plates, b^3 d^3 i^3, the latter having headed studs t^3 to engage with slots r^3 at different levels in parts b^3 d^3, so that the shelves connected with the opposite plates i^3 may be adjusted higher or lower with relation to the adjacent shelves of the rack to vary their distance apart to accommodate volumes of different heights, as will readily be understood. This bracket (shown in Fig. 5) can readily be dismembered for packing away flat with the shelves when required.

I prefer to make the bracket-plates of metal, of suitable width and thickness to give the required strength, and the plates may be finished or ornamented in any preferred way.

Washers may be inserted at the joints of the brackets with the shelves to prevent undue wear of the shelves and give more room for the folding together of the parts of the brackets.

Constructed as described the rack is simple, strong, durable, inexpensive, and practical for its purposes.

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

1. The combination, with supports, a shelf pivoted to said supports, and jointed braces pivoted to said supports, and to the outer edge of the shelf, of the bar *n*, and the plates *p p'*, secured at each end to the pivots of the shelf and pivoted to the ends of the bar *n*, substantially as herein shown and described.

2. The combination, with supports, a shelf pivoted to said supports, and braces pivoted to said supports and to the outer edge of the shelf, of the bar *n*, and the plates *p p'*, secured at each end to the pivots of the shelf and pivoted to the ends of the bar *n*, the plate *p* being provided with a slot, p^2, at its upper end, substantially as herein shown and described.

3. A book-rack bracket constructed with a rear plate, *b*, provided with the slot *r'*, in its upper end, an inclined front brace-plate, *d*, consisting of two parts, *d' d²*, jointed to each other, and at *f* to the plate *b*, and a lower plate, *i*, jointed to the plates *b* d^2, substantially as shown and described.

MARION E. McMASTER.

Witnesses:
JOSEPH S. TODD,
MADISON H. BUTLER.