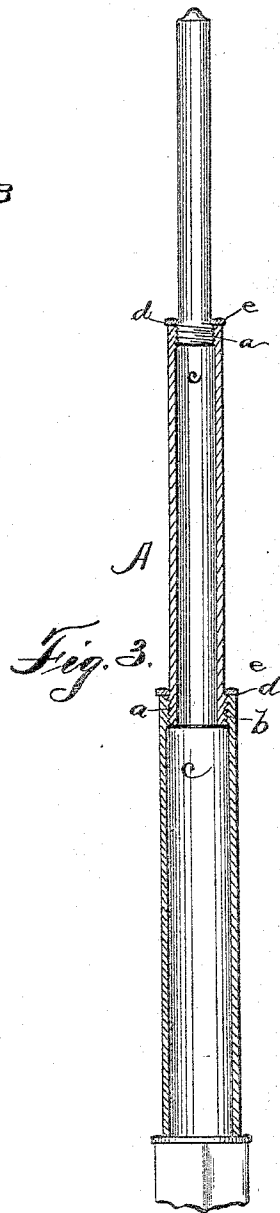
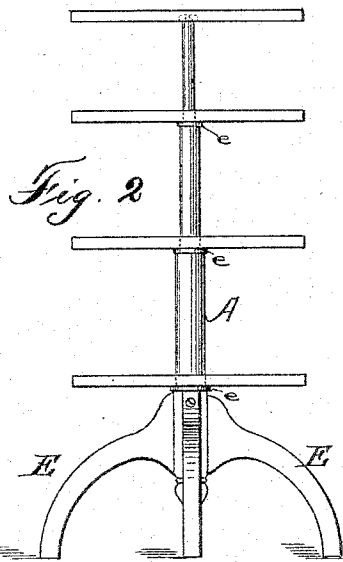
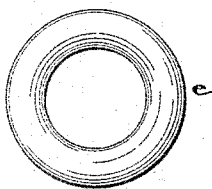
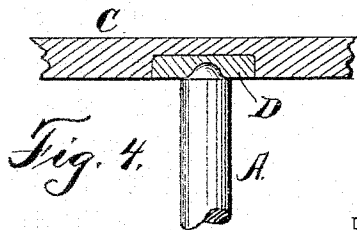
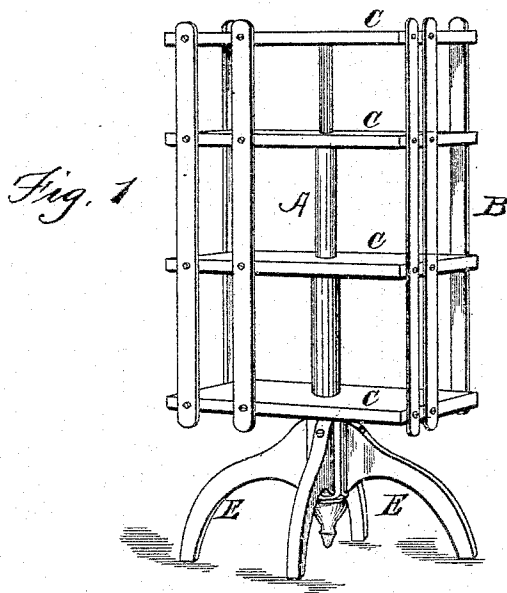


(No Model.)

W. F. BERGER.
REVOLVING BOOKCASE.

No. 491,277.

Patented Feb. 7, 1893.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM F. BERGER, OF MORAVIA, NEW YORK.

REVOLVING BOOKCASE.

SPECIFICATION forming part of Letters Patent No. 491,277, dated February 7, 1893.

Application filed April 13, 1892. Serial No. 428,938. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. BERGER, of Moravia, in the county of Cayuga, in the State of New York, have invented new and useful
5 Improvements in Revolving Bookcases, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to revolving, portable
10 book-cases.

My object is to provide a revolving book-case which may be readily rendered portable, by constructing it in knock-down shape, applicable to be readily put together whenever
15 desired: cheap, durable in construction and of great utility.

My invention consists first, in constructing the central spindle telescopic, so that it may be readily taken apart, so as to occupy a
20 minimum amount of space; and second, in providing the various shoulders upon the shaft with rings, vitrified or otherwise, for the purpose of facilitating rotation; and in the several other novel features of construction and operation hereinafter described and which are specifically set forth in the claim
25 hereunto annexed. It is constructed as follows, reference being had to the accompanying drawings, in which

30 Figure 1, is a side elevation of the book-case, complete. Fig. 2, is a side view of the book-case, having the vertical slats removed. Fig. 3, is a vertical section of the spindle. Fig. 4, is a view of the upper end of the spindle, showing its engagement with the top shelf
35 of the case. Fig. 5, is a view of one of the rings which set upon the shoulder of the spindle.

40 A—, is the spindle having its lower sections constructed hollow, as shown, and provided at their upper inner ends with threads —a— adapted to engage with the external thread —b— upon the end of the section. The interior of each of the sections is a little larger,
45 as shown at —c—, than the exterior of the succeeding section, so that when the sections are screwed in, they will all drop down into the interior of the base section. It will, therefore, be observed that I am able to collapse a
50 spindle of any length into the length of its lower section, as above specified. The top of each section, except the upper one, forms a shoulder as shown at —d—, upon which I

place rings —e— either of glass, other vitrified material or case-hardened steel which
55 serve to facilitate the rotation of the case —B— which is constructed with horizontal shelves —C— resting upon the rings upon the shoulders of the spindle, as above set forth.

60 The upper spindle is preferably constructed conical upon its upper end, and is adapted to engage with the case, which is provided with vitrified or steel plate —D— in the lower face of the upper shelf, provided with a recess of substantially the same form as the
65 upper end of the spindle upon which it is adapted to rotate.

The spindle —A— is mounted upon feet —E— which may be provided with suitable
70 casters in the ordinary way.

It will be observed that this case may be readily and easily shipped in knock-down form by first removing the feet —E— from the spindle, then removing the vertical slats
75 from the shelves —C—, then removing the shelves and finally telescoping the spindle —A— when the entire case may be packed to occupy the minimum amount of space in shipping, storage, &c.

80 Having described my invention, what I claim is:

In the revolving book case the combination with the hollow spindle, constructed in sections, and the upper end of each section, except the upper one, being threaded internally,
85 and the lower end of each section except the lower one, threaded externally, each upper section adapted to slide into the lower section when unscrewed at their ends, said sections
90 having shoulders upon their upper ends and rings adapted to rest upon said shoulders; shelves having central openings adapted to rest upon said rings, the upper section of said spindle being rounded or cone shaped, and
95 adapted to rotate within the recess of the plate "D," and the plate "D" secured to the lower face centrally of the upper shelf as set forth.

In witness whereof I have hereunto set my
100 hand this 7th day of April, 1892.

WILLIAM F. BERGER.

In presence of—

HOWARD P. DENISON,
J. FITCH WALTERS.