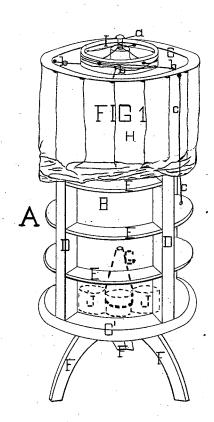
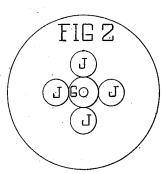
J. J. CRANDALL. Book-Cases.

No.161,669.

Patented April 6, 1875.





WITNEBSEB Robert Carr CAT Walter

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UNITED STATES PATENT OFFICE.

JOHN J. CRANDALL, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN BOOK CASES.

Specification forming part of Letters Patent No. 161,669, dated April 6, 1875; application filed October 15, 1874.

To all whom it may concern:

Be it known that I, JOHN J. CRANDALL, of the city and county of Philadelphia, and State of Pennsylvania, have invented an Improved Book-Case, of which the following is a specification:

The invention consists of a vertical cylindrical revolving book-case, together with a drop-curtain, as hereinafter shown and described.

Figure 1 is a perspective view, in which the curtain is shown party raised, to show the construction of the book-case. Fig. 2 is a plan view, showing the shank on which book-case turns, and the arrangement of the friction-rollers.

A is a book-case, which is cylindrical in form, vertical in position, and revolving or turning when in operation. It is composed of the cylindrical hub or center B, to which are fitted the top and bottom or end caps C C' between which are placed the vertical radial partitions D. E are shelves placed horizontally between the radial partitions. They are at suitable distances apart, and extend from the periphery of the hub B to at or near the outer edges of the radial partitions. F is a tripod or stand for carrying the book-case. It has a shank, G, dotted lines, Fig. 1, which takes into a socket formed in the lower end of the hub B. The book-case A revolves or turns around the shank. The stand F and the shank G, while they serve to carry and center the book-case, also serve to preserve its

vertical position. To ease the friction of the book-case and the shank, friction-rollers J, Fig. 2, are arranged around the shank. His a curtain for inclosing the book-case. It consists of any suitable pliable material or fabric. It is raised and lowered by means of a pulleywheel, I, which turns on a stud, a, projecting from the upper cap C of the book-case. It can be grooved like a sheave-pulley, and easily rotates in a horizontal plane on its stud. Around this pulley pass a number of cords, b, the ends of which pass through guide rings or loops of the curtain, and are attached to its bottom edge. Thus constructed, the curtain is raised and lowered by means of an operating-string, c, of the pulley I, which, when drawn or eased, either winds or unwinds the cords attached to the bottom ends of the curtain, and thereby raises or lowers it.

I am aware that cords and pulleys have been used for operating mosquito-nets applied to beds.

I claim as my invention—

A revolving book-case, A, in combination with the curtain \mathbf{H} , pulley \mathbf{I} , and the cords b c, as shown and described.

In testimony whereof I hereunto sign my name in presence of two subscribing witnesses.

JOHN J. CRANDALL.

Witnesses:

FRANCIS D. PASTORIUS, JAMES MARTIN.