

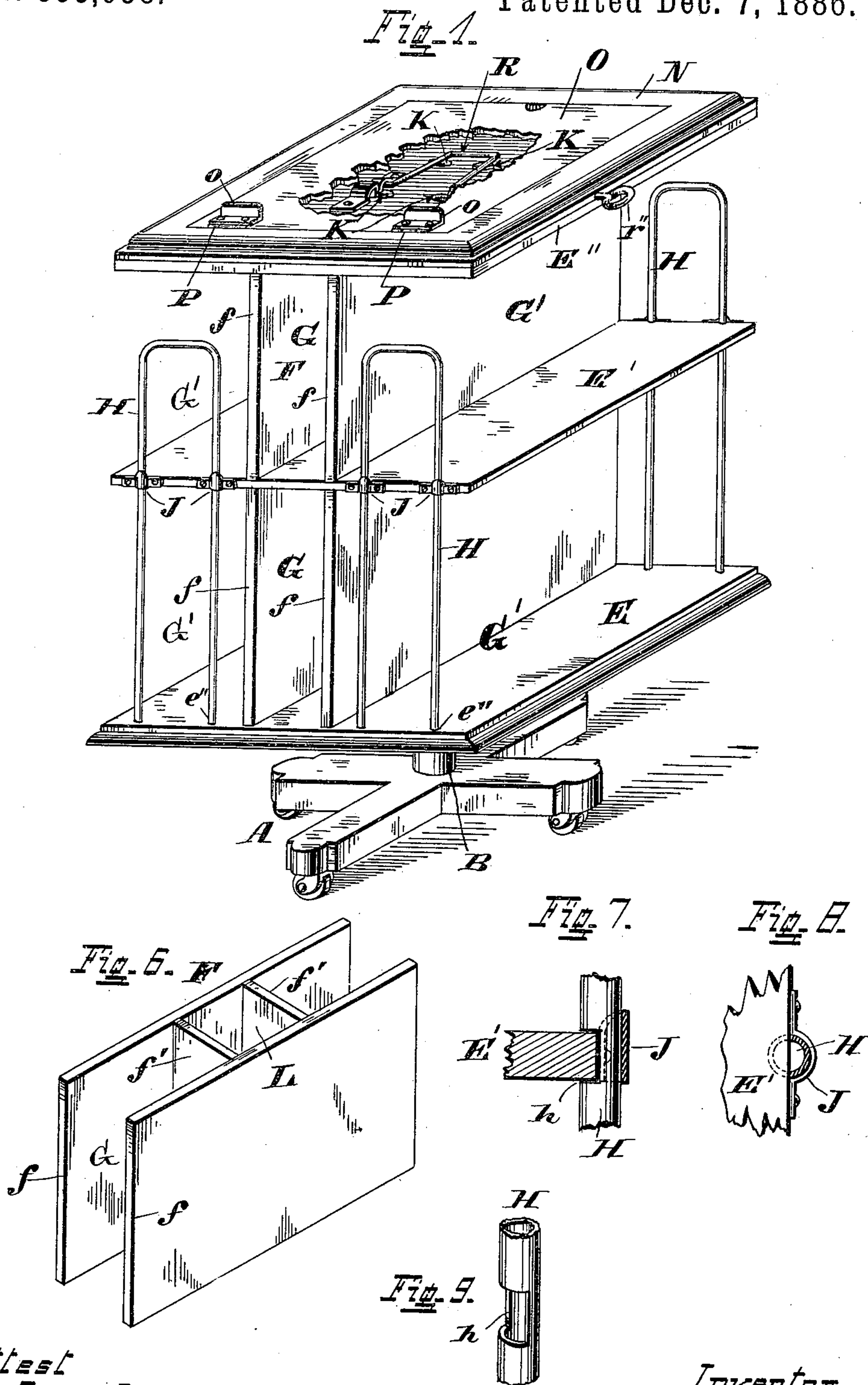
(No Model.)

2 Sheets—Sheet 1.

G. V. NAUERTH.  
REVOLVING BOOK CASE.

No. 353,958.

Patented Dec. 7, 1886.



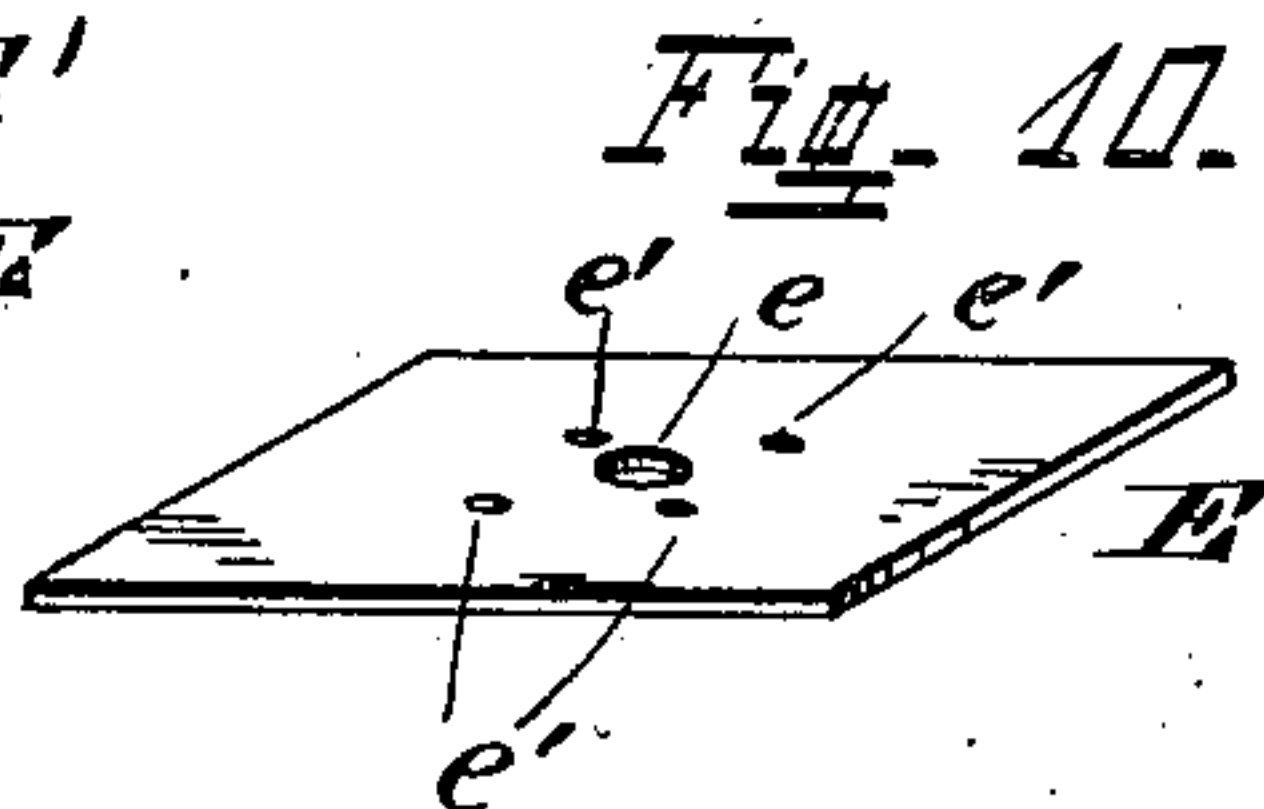
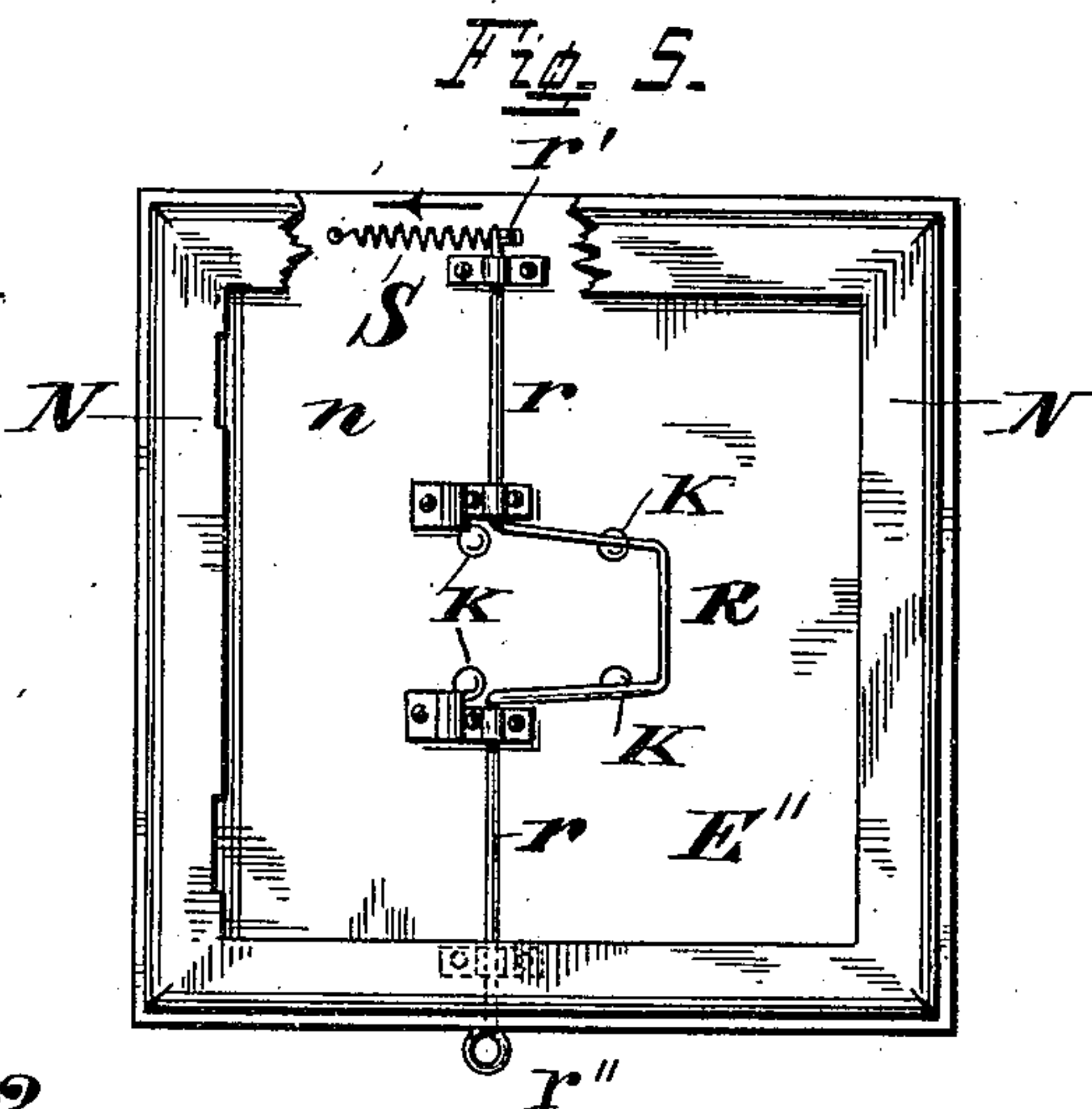
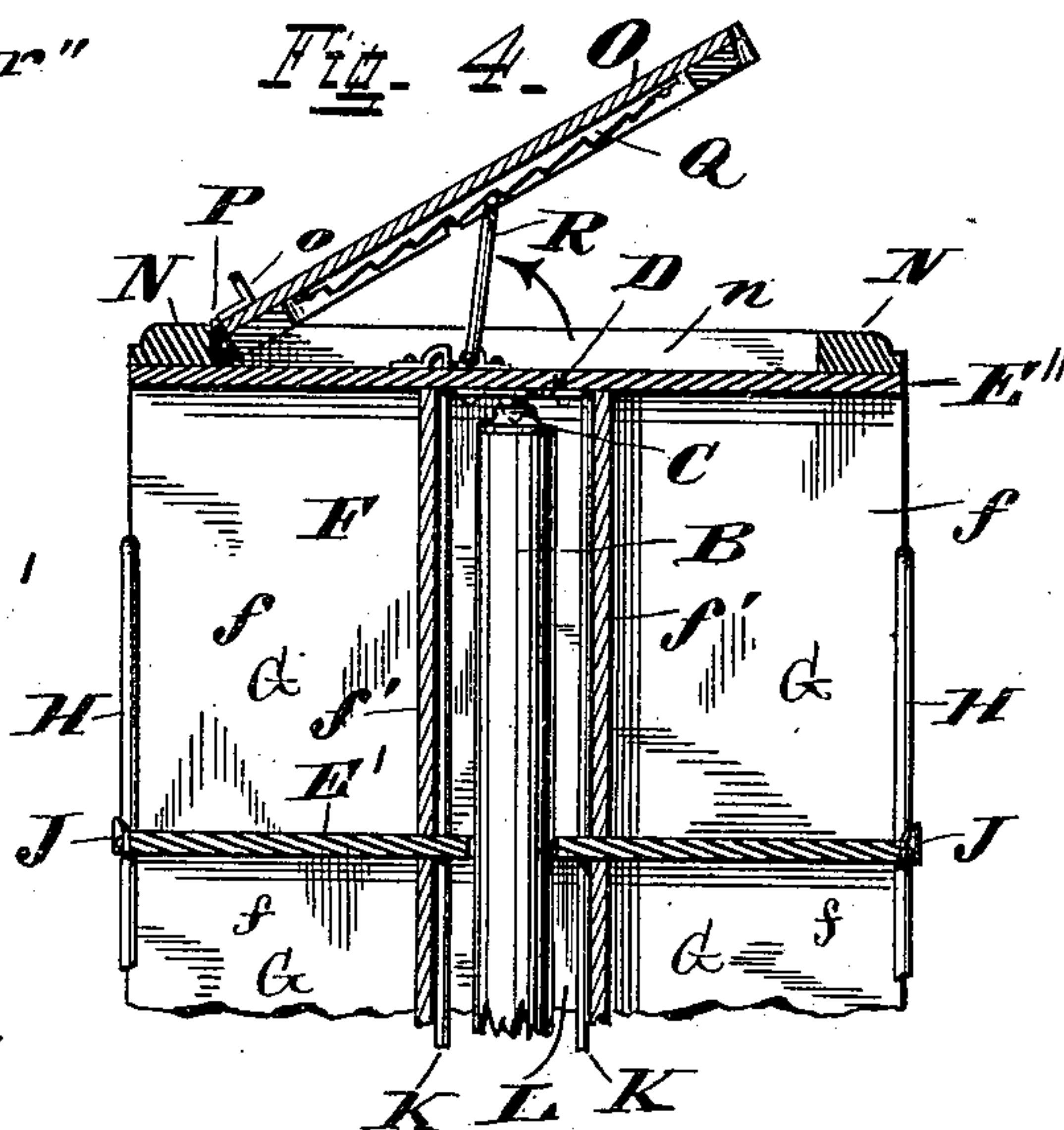
Attest  
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F. A. Spengel

Inventor  
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by Knight Bros. Attys.

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# UNITED STATES PATENT OFFICE.

GEORGE V. NAUERTH, OF CINCINNATI, OHIO.

## REVOLVING BOOK-CASE.

SPECIFICATION forming part of Letters Patent No. 353,958, dated December 7, 1886.

Application filed November 16, 1885. Serial No. 182,940. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE V. NAUERTH, of Cincinnati, Hamilton county, Ohio, have invented new and useful Improvements in Revolving Book-Cases, of which the following is a specification.

The class of revolving book-cases to which my invention relates is that illustrated by the subject-matter of Patent No. 317,175, granted to me May 5, 1885.

The objects of my present invention are, first, to enable the guards shown in the above patent for retaining the books from endwise displacement on the shelves to also operate to assist the quadruplex vertical partitions therein shown in supporting the shelves; second, to enable the book-rest on top of the case to be automatically retained at any angle to which it may be raised, and to be easily released when desired so as to allow it to fall into the horizontal position, and also to enable such falling to take place without violent concussion against the case-top; and, third, by modifying the form of the aforesaid quadruplex vertical partitions to adapt the case for holding pamphlets, periodicals, and other unbound matter in addition to bound books. To attain these several objects, the guards are provided with notches or recesses, which receive and serve to support the edges of the shelves. The hinged leaf of the book-rest is provided with a prop, which is pivoted in the top of the case and is acted on by a spring, so that when the leaf is raised said prop is forced into engagement behind one or other of a series of teeth on the bottom of said leaf. From such engagement it may be released by slightly lifting the leaf and then turning back the spring-prop, which is provided with a handle for that purpose, when the leaf may be allowed to fall by its own weight, being prevented from striking against the top of the case by falling into a closely-fitting recess, the air in which on being thus compressed acts as an effectual pneumatic cushion. The quadruplex vertical partitions are each formed of four rectangular boards, of which two wide boards are placed parallel and form at their middle portions two sides of a central square well, and are connected by two narrow boards, which form the other two sides of said well.

In the accompanying drawings, Figure 1 is a perspective view of a revolving book-case embodying my invention. Fig. 2 is a vertical section of the same on the line 2 2 in Fig. 3. Fig. 3 is a horizontal section on the line 3 3 in Fig. 2. Fig. 4 is an axial vertical section of the top part of the case. Fig. 5 is a top view without the book-rest leaf, part of the wood-work being broken away to expose the prop-spring. Fig. 6 is a perspective view of one of the quadruplex vertical partitions. Fig. 7 is a vertical, and Fig. 8 a horizontal, section showing the mode of supporting the edge of the shelf in the notch of the guard. Fig. 9 is a perspective view of a notched or recessed portion of one of the guards. Fig. 10 is a representation to a reduced scale of any one of the shelves below the top one.

A represents a base or tripod, from which rises vertically a round post or standard, B, bearing on its top a socket, C, for a stud, D, that projects downward from the uppermost of a series of shelves, boards, or floors, E E' E'', of which all below the top one, E'', have a central orifice, *e*, for said post, and of which all have four smaller orifices, *e'*, for as many tie-bolts, hereinafter described. Interposed between said shelves are vertical partitions F, each partition being composed of four rectangular boards, of which two boards, *f*, are comparatively wide, and extend parallel to one another clear across the shelf, forming at their middle portions two walls of a square central well, L, and being connected by two narrow boards, *f'*, which constitute the other walls of the said well. The space between any two shelves is thus divided into four compartments in addition to the square central well, L—namely, two narrow compartments, G, whose backs are constituted by the narrow boards *f'*, and which are open in front and inclosed between the wide boards *f*, and two other compartments, G', whose backs are constituted by the boards *f*, and which are open in front and also at the ends, except a partial closure at each end by an open metallic guard, H, preferably of the represented inverted U form, that occupies staples J in the edges of the intermediate shelf or shelves, E', and pits *e''* in the upper surface of the bottom shelf or floor, E.



Nicks or notches *h* in the sides of the U-formed metallic guards receive and support the contiguous edges of the intermediate shelf or shelves.

5 The shelves *E E' E''* and interposed partitions *F* are fastened rigidly together, so as to be supported and to be capable of turning as a whole on the stud *C* by means of four vertical rods or tie-bolts, *K*, which, traversing  
10 the holes *e'* in the shelves just inside the four corners of the well *L*, are fastened and drawn taut by nuts *M* on their lower extremities, so as to hold all the parts of the revolving member immovably in their proper relative posi-  
15 tions and to prevent lateral as well as vertical displacement of said parts.

It will be seen that each shelf, except the top and the bottom one, is not only supported by the vertical boards constituting the parti-  
20 tions, but is sustained at eight places in the notches of the metallic guards, which are thus made to subserve a double purpose. The load is by this means distributed over the whole fabric and each shelf is compelled to coact with  
25 every other in mutual support. The narrow inclosures *G*, included between the wide boards *f*, form convenient receptacles for magazines, pamphlets, and unbound matter generally.

The described location of the tie-bolts *K* in  
30 the frame-work of the case insures their complete concealment by the well-walls and the leaf of the adjustable book-rest now to be described.

Secured to the top of the uppermost shelf  
35 is a marginal bead, *N*, that forms a rectangular recess, *n*, for a correspondingly-formed leaf, *O*, which is at one edge thereof secured by hinges *P* to the said bead. Upon the under surface of the leaf *O* is a rack, *Q*, which,  
40 when said leaf is lifted by its free edge, receives in one or other of its indentations a spring-prop, *R*, which constitutes a double crank or U-formed bend of an axle, *r*, which occupies journal bearings on the top shelf and  
45 is provided at one end with an arm, *r'*, to which is attached one end of a spiral spring, *S*, whose other end is fastened to the top shelf, so as to give to the prop *R* a tendency to move in the direction of the arrow. The other end  
50 of the axle *r* is prolonged beyond the top shelf and provided with a handle, *r''*, for convenient manipulation of the prop—as, for example, when it is desired to close or depress the leaf *O* the latter is sufficiently lifted with  
55 one hand to liberate the prop from the rack, while with the other hand upon the handle *r''* the prop is lowered to the desired position and the leaf then suffered to drop into the corresponding position. If, on the contrary,  
60 it be desired to bring the leaf to a more ele-

vated slope, it is merely necessary to elevate the leaf to the desired position, and the spring of the prop automatically raises it to the corresponding position, so as to maintain the leaf in the new position. Should it be wished  
65 to bring the leaf to the horizontal or completely-closed position, it is merely necessary to momentarily slightly lift the free edge of the leaf, then to completely retract the prop, and, finally, to let go of the leaf, when, whether  
70 loaded or not, it drops without noise or concussion into the closely-fitting recess *n*, the momentarily-imprisoned air under the rapidly-falling leaf constituting an effectual pneumatic cushion.

The hinged edge of the leaf or book-rest *O*  
75 may have any suitable projections, *o*, which may serve the several purposes of preventing a dictionary or other heavy book from slipping off the said leaf, and of stops to prevent  
80 the leaf from being swung too far beyond the vertical position.

I claim as new and of my invention—

1. A revolving book-case body consisting  
85 of a bottom shelf, *E*, top shelf, *E''*, intermediate shelf, *E'*, interposed quadruplex partitions *F*, each formed of wide rectangular vertical boards *f*, parallel to each other, extending from side to side of the body, and narrow vertical boards *f'* between the wide boards form-  
90 ing wells *L*, and narrow compartments *G*, bolts *K*, by which the shelves and partitions are locked together, and the guards having recesses *h*, occupied by the contiguous edges of the intermediate shelf, substantially as set  
95 forth.

2. A revolving book-case body having a top, *E''*, provided with a marginal bead, *N*, forming a recess, *n*, and a book-rest, *O*, having projections *o*, hinged by the upper cor-  
100 ners of its lower edge to the upper rear edge of the bead and seating on the top within the recess, the bead fitting the rest closely, providing a pneumatic cushion for the rest, substantially as set forth.

3. A revolving book-case body having a top, a book-rest hinged to the top provided with a rack on the back thereof, a shaft formed with a double crank, arm, and handle constituting a prop that engages the rack-  
110 teeth, and a spring pulling the arm of the shaft toward the rest when released, substantially as set forth.

In testimony of which invention I hereunto set my hand.

GEORGE V. NAUERTH.

Witnesses:

CHAS. E. PRIOR,  
A. P. KNIGHT.