(No Model.) 2 Sheets—Sheet 1.

J. M. ALFORD.

CASE FOR MAPS.

No. 533,262. Patented Jan. 29, 1895.

Fig. 1.

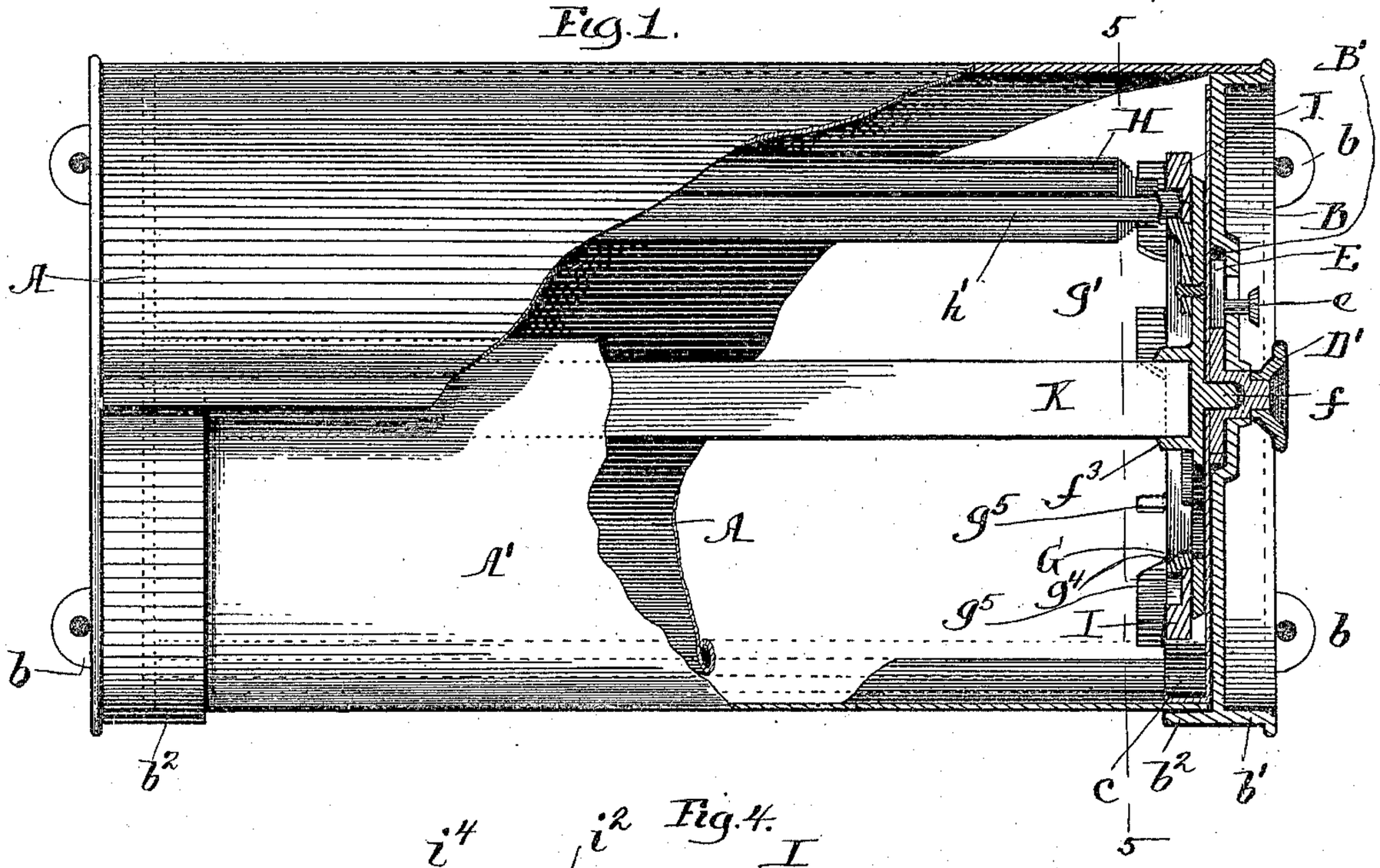


Fig. 4.

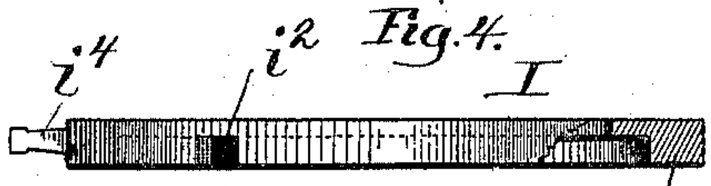


Fig. 2.

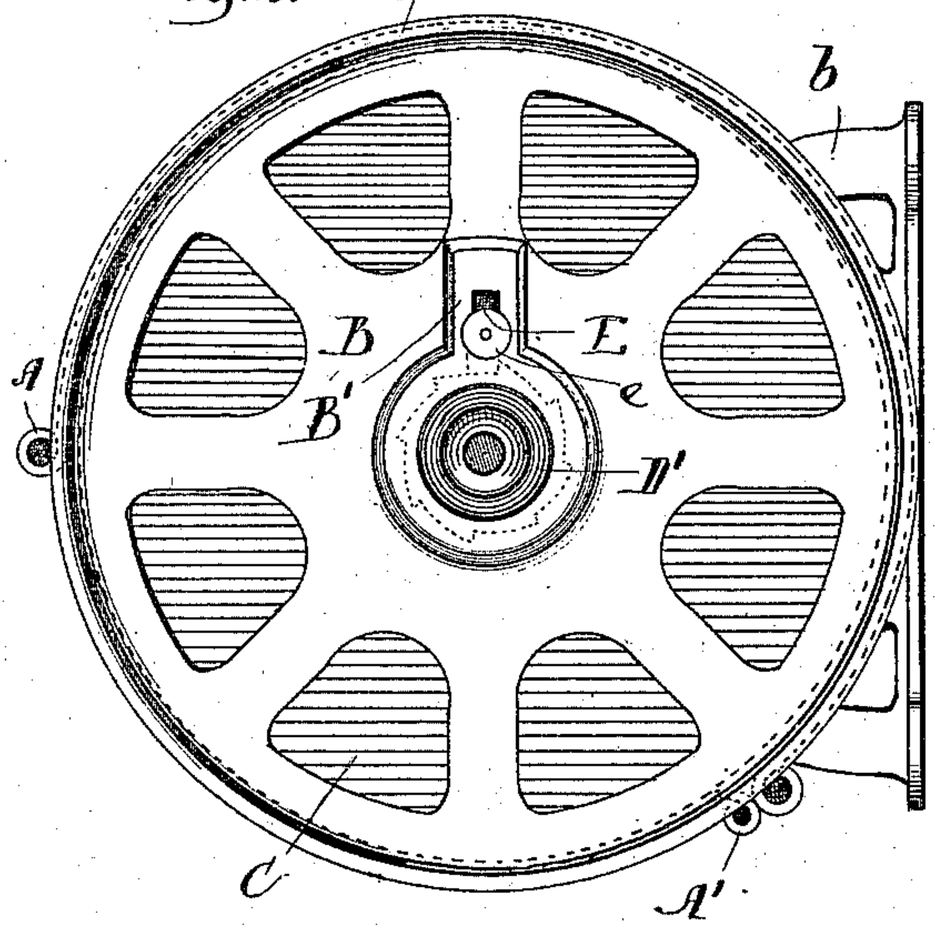
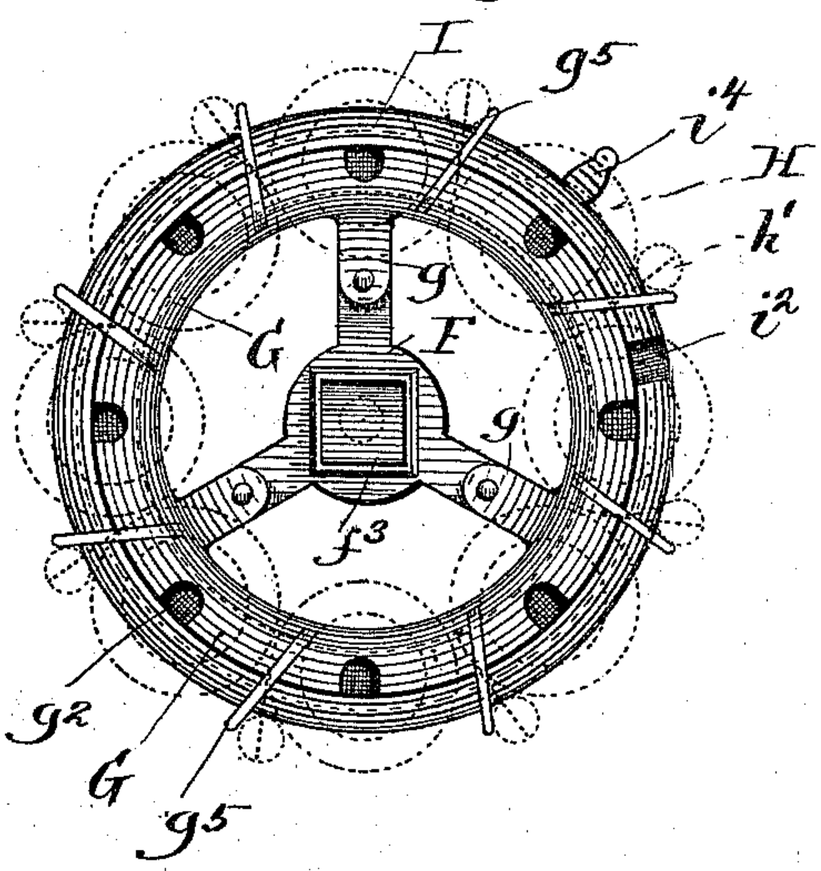


Fig. 3.



Witnesses:
Fred Gerlach
Alberta Adamick

Inventor:
J. M. Alford
By Peirce & Fisher
Attorneys.

(No Model.) 2 Sheets—Sheet 2.

J. M. ALFORD.

CASE FOR MAPS.

No. 533,262. Patented Jan. 29, 1895.

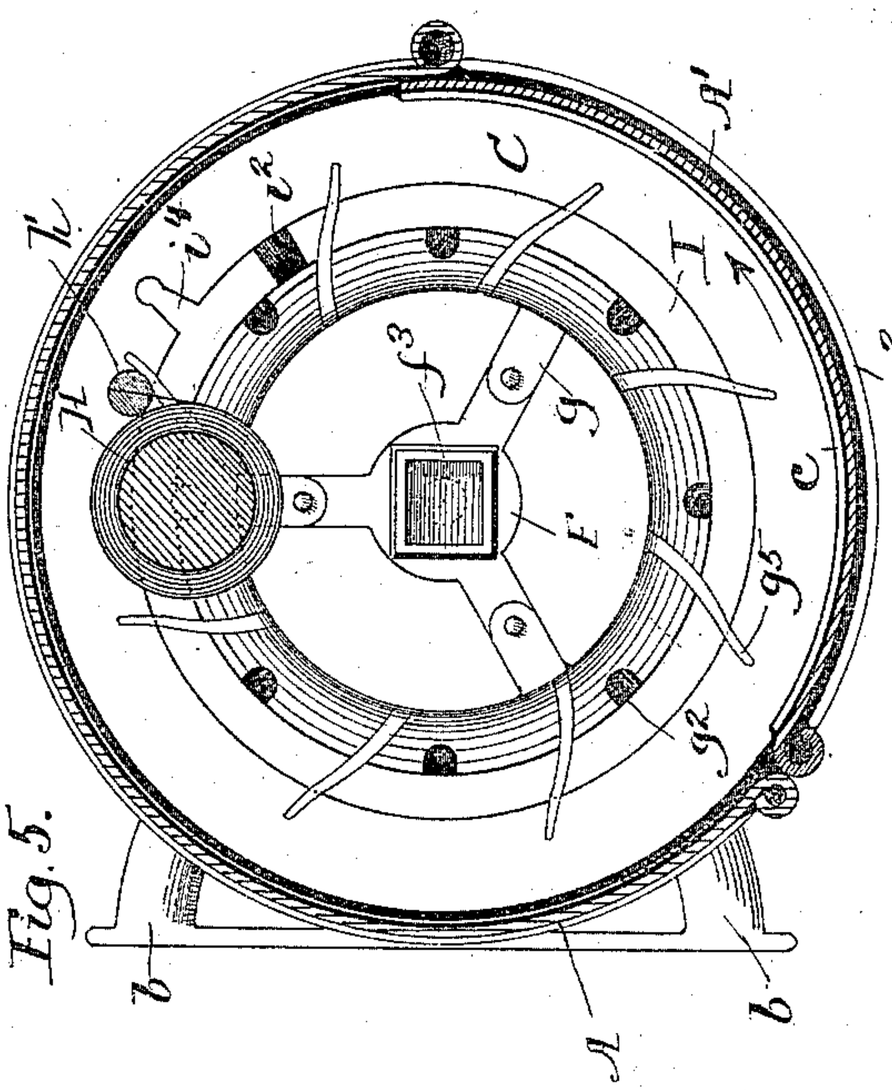


Fig. 5.

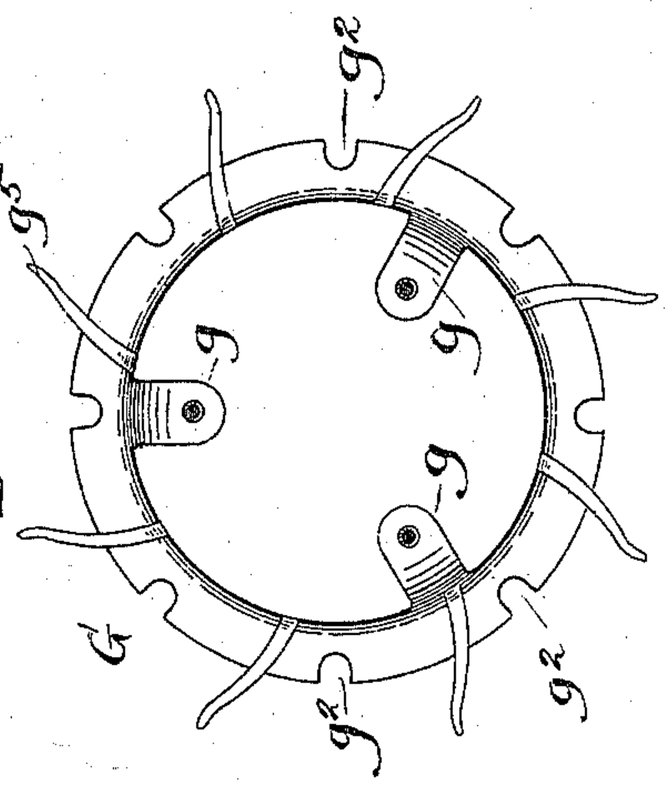


Fig. 8.

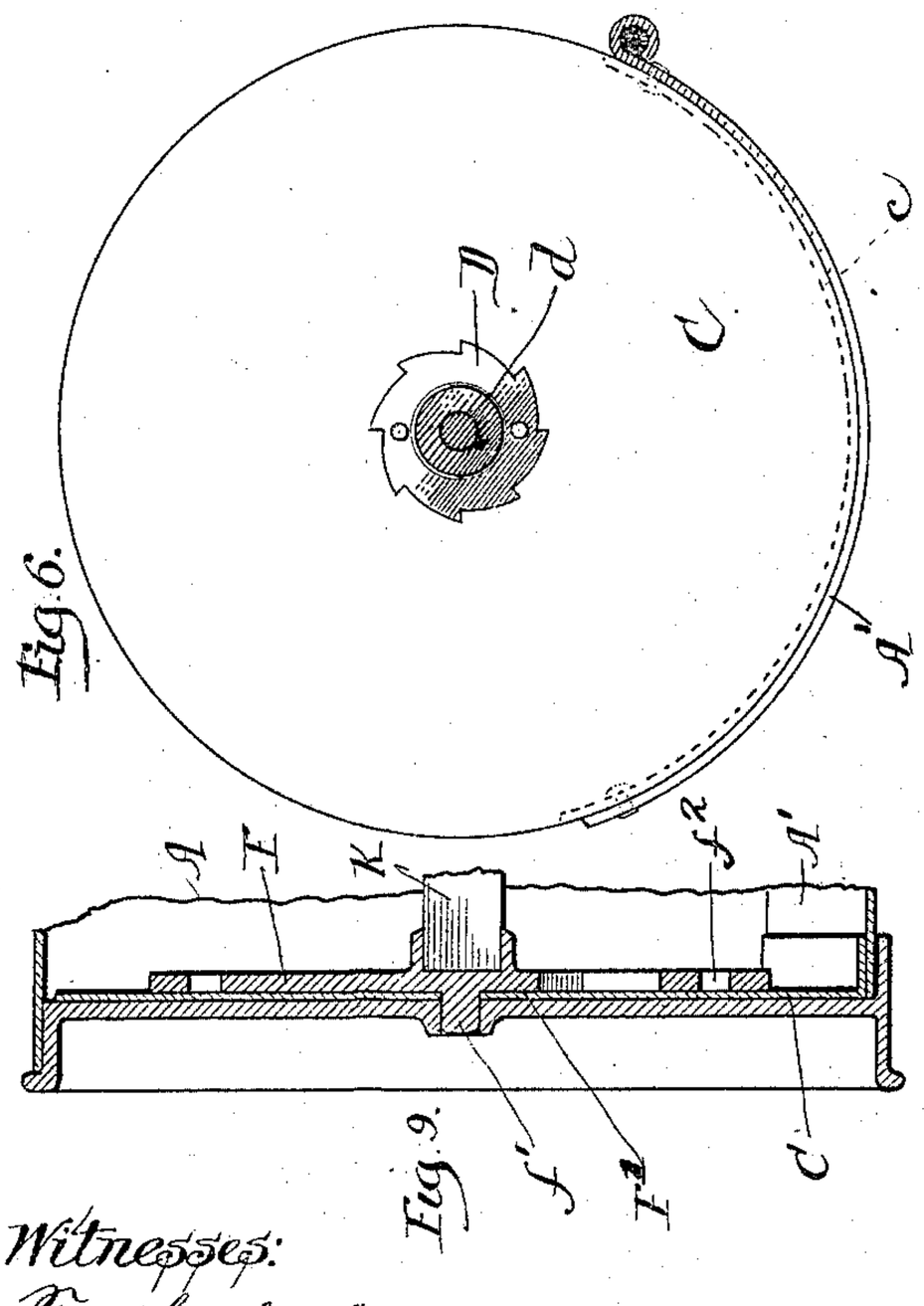


Fig. 6.

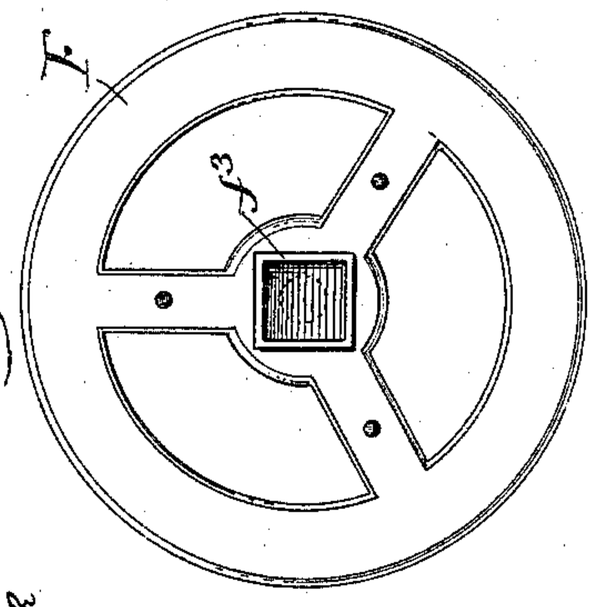


Fig. 7.

Fig. 9.

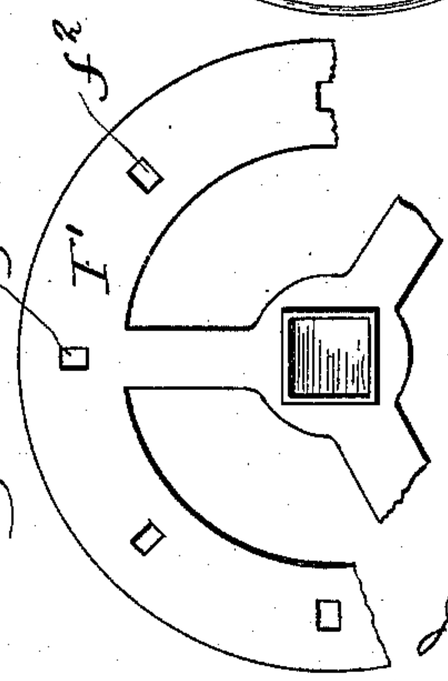


Fig. 10.

Witnesses:
Fred Gerlach
Alberta Adamick.

Inventor:
J. M. Alford
By Peirce & Fisher
Attorneys.

UNITED STATES PATENT OFFICE.

JOHN M. ALFORD, OF CHICAGO, ILLINOIS, ASSIGNOR TO RICHARD S. KING, OF SAME PLACE.

CASE FOR MAPS.

SPECIFICATION forming part of Letters Patent No. 533,262, dated January 29, 1895.

Application filed May 14, 1894. Serial No. 511,276. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. ALFORD, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Cases for Maps and other Articles, of which I do declare the following to be a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My present invention has for its object to provide an improved construction of case or holder whereby maps, charts, rolls of wall paper, samples of window-shades or the like may be held in convenient manner for exhibiting the same and whereby these articles, when not in use, may be securely protected against exposure to dust or the like.

With this object in view my invention consists of the various novel features of construction hereinafter described, illustrated in the accompanying drawings and particularly pointed out in the several claims at the end of this specification.

Figure 1 is a view partly in front elevation and partly in vertical section through a case or holder embodying my invention. Fig. 2 is a view in end elevation. Fig. 3 is an inner face view of the revoluble frame whereby the rolls containing the individual maps or other articles are sustained. Fig. 4 is a detail view of the retaining ring whereby the rolls are held in position upon the roll-carrying frame or wheel. Fig. 5 is a view in central vertical section on line 5—5 of Fig. 1. Fig. 6 is a view in side elevation showing one of the end disks to which the movable portion of the cover is attached and showing the ratchet wheel connected to said disk. Fig. 7 is a detail view in side elevation, (looking from the inside,) of the spider wheel whereto the journal ring is secured. Fig. 8 is a detail view in side elevation of the journal ring forming part of the roll carrying frame. Fig. 9 is a view in vertical section through the left-hand end of the case. Fig. 10 is a detail face view of a portion of the revoluble roll carrying frame at the left-hand end of the case.

A designates the main body of the case or cover that will be attached by suitable brackets *b* to the wall or in any convenient position, these brackets *b* being preferably formed in one piece with the head-plates or castings B. Each of the head plates B is preferably formed with the open spaces as shown, in order to lighten the structure and each of these plates B is formed also with a rim *b'* upon which the end of the cover A is fixed, as shown more particularly in Figs. 1 and 9 of the drawings. The head plate B is provided with the inwardly extending rim b^2 that overlaps the movable section A' of the inclosing casing or cover. This movable section A' is connected (see Fig. 1) to an inwardly turned flange *c* of each of the end plates or disks C that fit within the cover adjacent to the head plate B. (See Figs. 1 and 6.) To the outer face of one of the disks C is connected a ratchet wheel D from which extends a hollow boss *d* that is journaled within suitable holes formed centrally of the head plate B, and to the reduced end of the boss *d* is fixed the hand-wheel D' whereby the turning of the disks C that sustain the movable section A' of the casing can be readily effected.

Within one of the head plates B is formed an off-set chamber B' to receive a pawl or dog E that will engage the ratchet wheel D and serve to hold the movable section A' of the casing or cover in any position to which it may be turned and a stud or finger piece *e* attached to this pawl permits it to be lifted from engagement with the ratchet wheel when the movable section A' of the cover is to be closed. Thus, if the cover be assumed to be in the closed position seen in Fig. 5 of the drawings and it is desired to open this cover more or less, this can readily be done by merely turning the hand-wheel D' or by otherwise shifting the movable section of the cover in the direction of the arrow, Fig. 5, and when the cover has thus been turned it will be retained against backward movement by reason of the engagement of the pawl E with the teeth of the ratchet wheel D. Into the hollow boss *d* at one end of the case extends a journal pin *f* that projects from the spider wheel F of the roll carrying frame at the adjacent end of the case. At the left-hand end of the case the disk C is provided with a central perforation through which extends the pintle *f'* that projects from the plate or wheel F^2, this pintle

being journaled within a suitable bearing formed centrally of the adjacent head plate of the case as seen in Fig. 9 of the drawings.

I prefer to employ spider wheels F and F' because of their lightness, although obviously it is not essential that the wheels should be thus formed, since solid wheels might be used. To the spider wheel F is connected the notched ring G (see Fig. 8), this ring G being preferably furnished with arms g whereby it may be conveniently attached by screws or rivets g' to the arms of the adjacent spider wheel F. The periphery of this notched ring G is formed with a series of notches g^2 that serve as journal bearings for the pintles or journals h that project from each of the rollers H on which the individual maps or similar articles are held. The notched ring G is preferably formed with a peripheral groove g^4 wherein will fit the inwardly projecting portion of the retaining ring I (see Figs. 1 and 4), this ring I being thus held in place by the spider wheel F and by the notched ring G. The retaining ring I has its overhanging portion i' furnished with a single notch or groove i^2 (see Fig. 5) so that when this retaining ring is turned to bring the groove i^2 opposite either of the notches g^2 of the wheel G, as can be conveniently done by providing the retaining ring with a projecting arm i^4, if desired, the pintles or journals h of the rollers H can be readily set in place within the notched ring, or can be removed therefrom.

The wheel F' at the left-hand end of the case is furnished preferably with square openings or seats f^2 to receive the corresponding square pintles at the adjacent ends of the rollers H and at this end of the case it is not necessary that a retaining ring should be employed since when the pintle at the opposite end of any roller is lifted from the notched wheel F the pintle of such roller can be removed readily from the seat f^2 of the wheel F'.

The rollers H are preferably self-acting spring rollers such as are commonly used in window shades and in order to limit the movement of these rollers and so prevent the unwinding of the springs I furnish suitable stops g^5 preferably projecting from the notched wheel G in position to engage the cross-bars h' attached to the end of each map or like article that is wound upon the rollers H. (See Fig. 5.) In order to connect together the two ends of the roll carrying frames so as to insure their unison movement, I prefer to provide the spider wheel at each end of the casing with a socket f^3, preferably of polygonal shape into which will fit the end of the longitudinal rod or bar K, and by this means the unison movement of the roll carrying frames at each end of the casing will be secured.

From the foregoing description it will be seen that by turning the retaining ring I so that the groove i^2 in this ring will be brought successively opposite the notches g^2 of the wheel G, the rollers H can be readily set in position, it being understood of course that the pintles at the opposite ends of the rollers have been set within the square notches f^2 of the plate F', and the rollers H will be held in position against accidental displacement by the retaining ring I. If the parts be assumed to be in the position shown in Figs. 1 and 5 of the drawings, at which time the inclosing casing is tightly closed, and it is desired to exhibit any particular map or like article, it is only necessary to turn the hand-wheel D' in order to raise the movable section A' of the cover by turning it upward as indicated by the arrow in Fig. 5 of the drawings. The roll carrying frame will then be turned until the desired map or like article is brought to the lowermost position and the cross-bar h' of this map is drawn downward. The pawl E will hold the movable section A' of the cover in the position to which it has been raised but if desired this pawl may be lifted and the cover allowed to drop by gravity until it closes down against the face of the map and thus protects the maps within the interior of the casing against access of dust or the like thereto.

While my invention is primarily designed as a convenient means for holding and exhibiting maps, it will be readily understood that it can be used with advantage for window-shades, wall-paper samples or samples of cloth, silk, or the like. I do not wish therefore that the invention should be restricted either in its uses or that it should be restricted to the precise details of construction above set out, since these manifestly may be varied within wide limits by the skilled mechanic without departing from the spirit of the invention.

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

1. In an apparatus of the character described, the combination of a revoluble frame having supports at each end for the journals or pintles of a series of rollers, of a retaining ring revolubly mounted with respect to one of said supports, said retaining ring being provided with an opening to permit the withdrawal of the rollers, substantially as described.

2. In an apparatus of the character described, the combination with a suitable support or casing of a revoluble frame mounted therein, said frame having at its opposite ends the wheels F and F', a notched ring G connected to said wheel F, a retaining ring I for closing the notches or seats in said notched ring, said retaining ring I being revolubly mounted upon said notched ring G, substantially as described.

3. In apparatus of the character described, the combination with a suitable support or casing of a revoluble frame mounted within said support or casing, said frame being provided at its ends with rings or wheels fur-

nished with seats or notches for the pintles of the rollers whereby the maps or like articles are sustained and being provided also with suitable stop arms to limit the movement of said rollers and a suitable retaining ring for holding said wheels in place within the revoluble frame, substantially as described.

4. In apparatus of the character described, the combination with an inclosing casing A, of a cover A′ for closing the lower portion of said casing, suitable disks or plates connected to the ends of said cover and whereby it is pivotally sustained, a check wheel or ratchet wheel connected to one of said disks or plates and a pawl for engaging said ratchet wheel in order to hold said cover in raised position, and suitable means for releasing said pawl, substantially as described.

5. In apparatus of the character described, the combination of an inclosing casing A, head plates B having flanges *b′*, to which said inclosing casing is connected, said head plates being provided also with brackets *b*, a vibrating cover A′ for closing the lower part of said casing, suitable plates or disks C to which said cover A′ is connected, a revoluble frame mounted within said casing, the journals of said frame serving as supports whereon the said disks C are pivotally mounted, substantially as described.

6. In apparatus of the character described, the combination with a suitable support or casing of a revoluble frame mounted therein, said frame comprising suitable wheels at its opposite ends provided with seats or notches to receive the pintles of rollers H, and a suitable bar K extending between and connecting the opposite ends of said revoluble frame, substantially as described.

JOHN M. ALFORD.

Witnesses:
GEO. P. FISHER, Jr.,
ALBERTA ADAMICK.