(No Model.) 2 Sheets—Sheet 1.

A. A. AGÜERO.

PANORAMIC CABINET.

No. 536,592. Patented Apr. 2, 1895.

Fig. 1.

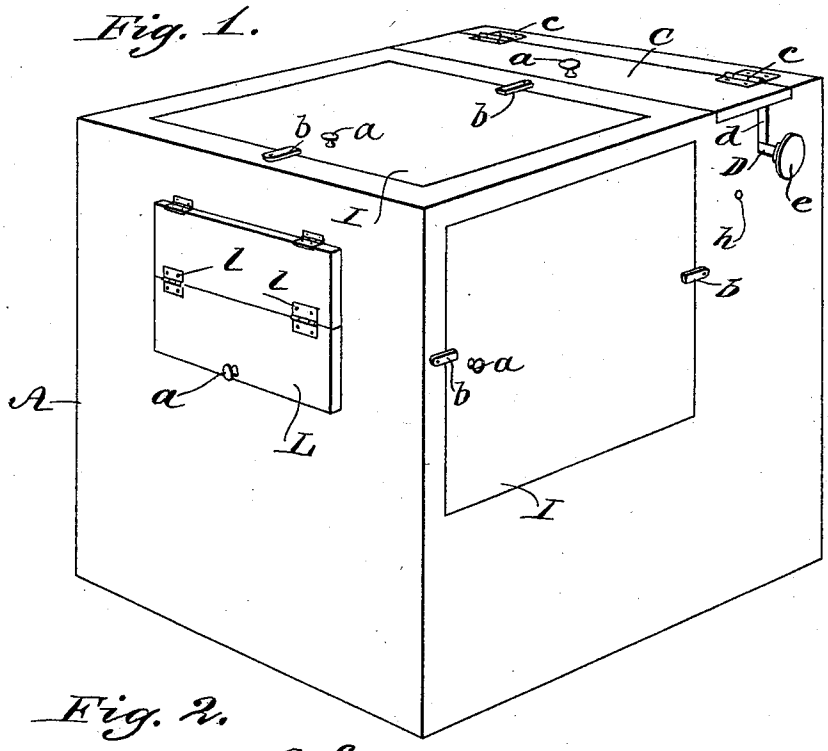
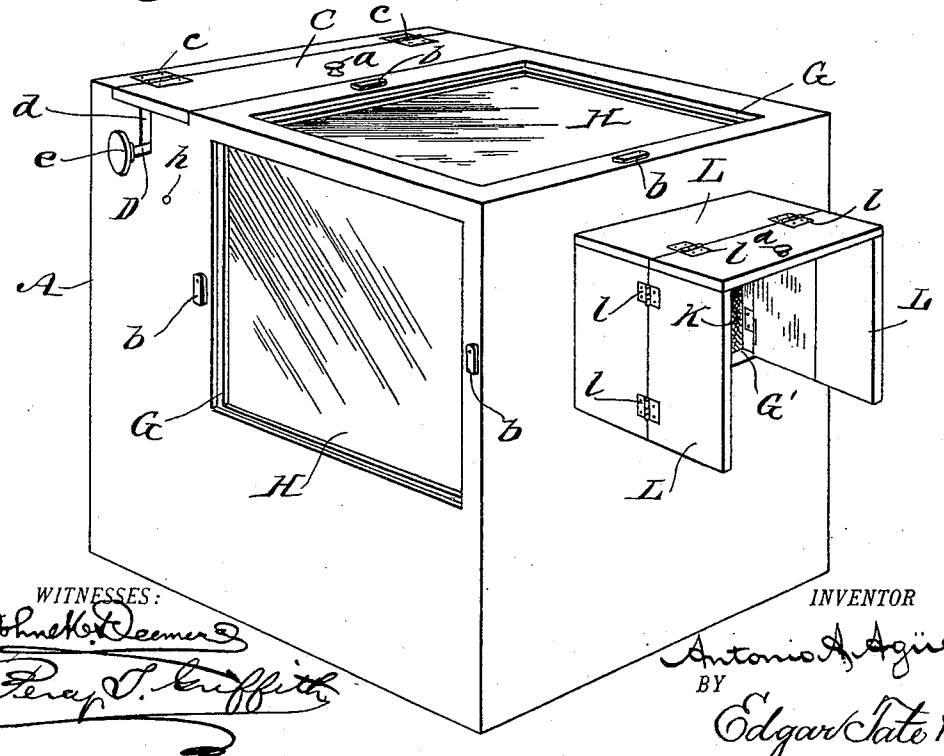


Fig. 2.



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(No Model.) 2 Sheets—Sheet 2.

A. A. AGÜERO.

PANORAMIC CABINET.

No. 536,592. Patented Apr. 2, 1895.

Fig. 3.

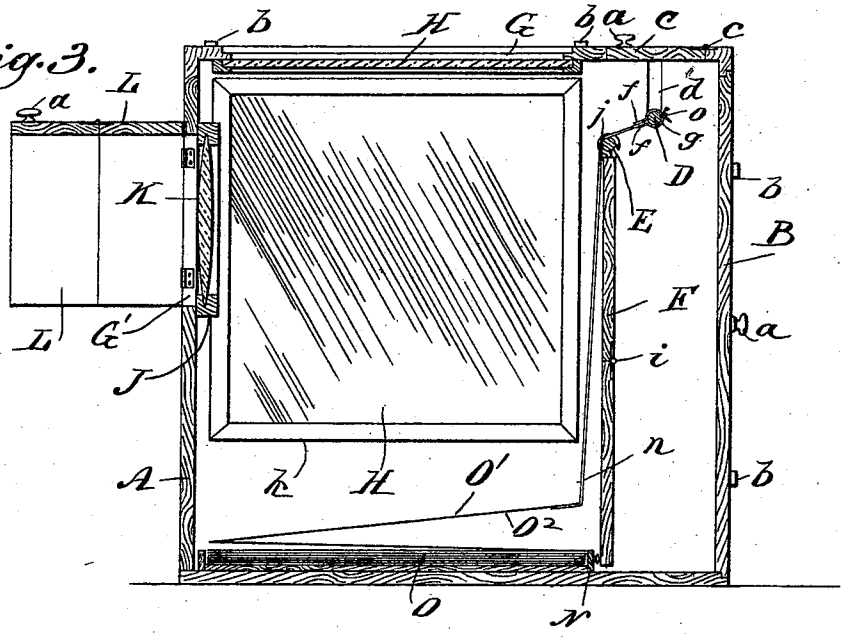
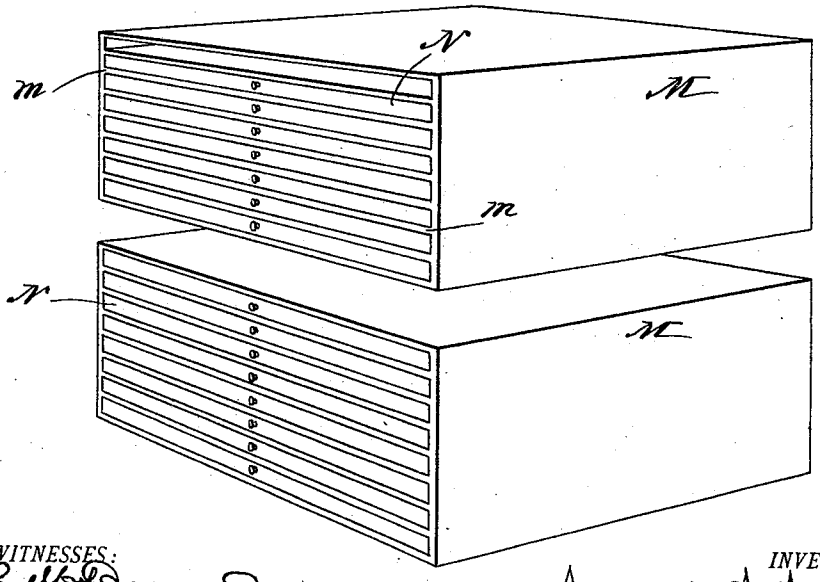


Fig. 4.



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ANTONIO A. AGÜERO, OF NEW YORK, N. Y.

PANORAMIC CABINET.

SPECIFICATION forming part of Letters Patent No. 536,592, dated April 2, 1895.

Application filed June 16, 1894. Serial No. 514,779. (No model.)

To all whom it may concern:

Be it known that I, ANTONIO A. AGÜERO, a citizen of the United States, and a resident of New York, county of New York, and State of New York, have invented a certain new and useful Improvement in Panoramic Cabinets, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts in all the figures.

This invention relates to panoramic exhibiting cabinets and has for its object to provide a device of this character by means of which any number of views or representations of persons, objects or places may be successively brought before a lens or other magnifier through which the representations may be seen by the eye, an essential feature of the invention being the provision of means whereby the pictures or photographs are on the one hand brought before the lens in uninterrupted succession and at the same time present a perfectly straight and uncurved surface.

A secondary object of the invention is to provide means for insuring sufficient yet not a brilliant light, and also for regulating the extent or direction from which the same falls upon the picture; a still further object of the invention being to provide a shutter or shade for the lens which shall not only protect the eyes from the outside light and thereby enable a more perfect view to be had, but will also be adjustable to permit of the picture being seen from a greater or less distance according to the condition or character of the eyes and in addition to be capable of folding against the side of the box.

I also claim as an advantage of my invention that I provide one or more cabinets of drawers which receive a strip of photographs therein, which will fit within the box when not in use and which may be separately withdrawn and placed at the bottom of the exhibiting cabinet, and the pictures detachably secured to the operating roller of the device, whereby the series of photographs may be brought before the lens rapidly and satisfactorily; and lastly I claim as new mounting representations of objects upon both sides of the strip and making the operating roller reversible to display first one face and then the other.

The invention consists in the novel inventive construction and arrangement of parts necessary to effect the above-mentioned and other desirable results as hereinafter fully described and claimed.

In the accompanying drawings, forming part of this specification, in which like letters of reference designate corresponding parts throughout, Figure 1 is a perspective view of a device embodying my invention, the same being completely closed and not in use. Fig. 2 is a similar view of the same with the lids or shutters removed and the shade opened out to the utmost. Fig. 3 is a longitudinal vertical section taken through the exact center of the device as shown in Fig. 2. Fig. 4 is a perspective view of the drawer cabinets containing the various photographs or other views.

In the practice of my invention, I construct a box A, herein shown rectangular in form, but which may be made of any desired shape, size or material, wood being preferable as to the latter. At the rear of the device the same is apertured throughout a majority of its area and closed by means of a door B, provided with a knob or handle *a*, and fitting tightly in the rear of the device to exclude the light therefrom, this door being secured in place by any desired means, but preferably removably by means of the buttons *b* shown in Fig. 3.

Upon the top of the box toward the rear thereof is a lid C, provided with a knob *a*, and hinged to the box A by means of hinges *c*. In the sides of the box beneath this lid are formed vertical slots *d*, curved at the bottom, in which is removably inserted a roller D, having disks *e* rigidly secured to each end thereof, the said disks serving as handles to rotate the said roller.

The roller D is provided with longitudinal flanges or lips *f*, projecting therefrom, these being preferably arranged by securing upon the roller a metallic casing *g*, the ends of which are turned radially thereto to form the flanges *f*, which said flanges are adapted to clasp the end of the panoramic or photographic strip and are therefore preferably of spring metal.

Forwardly of the roller D and somewhat below the level of the same is a roller E, having its bearings in the sides of the box at *h*. This roller E has depending therefrom a screen F, jointed vertically by means of a hinge *i* which secures the two sections thereof together, and thus enables the said screen to be folded, or partially raised, to insert the photograph drawers into the cabinet. The screen is suspended from the roller E by means of the hooks *j*.

Upon the top and the sides of the box A forwardly of the screen F, are formed windows or apertures G, preferably square in contour and having secured at the interior of the same sheets or panes of stained glass H, which are held immovably in position by means of the strips or flanged frame work *k*, secured to the box at the inside thereof and extending over the edges of the panes H. By securing stained glass in these apertures G, I permit the entrance of sufficient light into the cabinets and at the same time render such light subdued and less violent than the direct rays, thereby heightening the natural effect and appearance of the photographs exhibited. Each of these apertures G is covered by a lid or shutter I, which is of such depth and size as to be countersunk in the frame of the box in order that the surface thereof may be smooth, even and uninterrupted. These shutters, which are wholly removable from the apertures G, are provided with knobs *a* and are secured to the box by means of the buttons *b* at each side thereof.

In the front wall of the box approximately near the top thereof I form an opening G′, behind which is secured a frame J, having mounted therein a magnifying lens K, the said lens being of substantially equal size with the opening G′. Above the opening G′ at each side thereof, I hinge the swinging shades or shutters L, which are adapted to fold, the side shades into the opening G′ one above the other, and the upper shade downwardly over the two side shades. This upper shade is provided with a knob *a* by means of which it is opened, and all three of the said shades are formed in two or more sections and joined together at the center by means of hinges *l* which permit of the free sections being folded outwardly upon the others, thereby rendering the whole shade capable of extending forwardly to the full extent, as shown in Fig. 2, or of being decreased one half in its forward projection, according to the distance from the lens which it is most convenient for the operator to maintain his eyes, thus adapting the device to near-sighted or far-sighted persons.

Within the interior of the box A, when not in use, I place the photograph holding cabinets M, which comprise rectangular bodies intervened at intervals by lateral partitions *m*, the spaces formed thereby having placed therein drawers N, in each of which is deposited a strip O of any desired material, having photographed, or otherwise represented on each of its faces O′ O^2, a plurality of views, the photographs of each strip or series preferably representing a number of objects of common association. The photographs are either taken or reproduced upon the strip O, or the said strip may have the photographs mounted thereon.

The strip O is folded longitudinally upon itself as shown in the sectional view Fig. 3, and to the upper end of each strip, I secure, preferably upon the under surface thereof, a sheet of cloth, rubber, leather or other fabric *n*, of a length considerably greater than one of the photographs or folded sections thereof, which said sheet of fabric extends upwardly around the roller E and is inserted between the flanges *f* upon the roller D. The sheet may also be secured by attaching cords or ribbons *o* to either side thereof, which said ribbons are tied around the roller D.

The operation of the device will be readily apparent from the foregoing description, taken in connection with the accompanying drawings. It being desired to use the machine, the rear door B is removed and the folding screen F swung upwardly, the cabinets M then being removed from the box A. Any desired one of the drawers N is removed from the holder M and placed in the bottom of the cabinet in front of the screen F, which is then dropped, and by completely shutting off the light from the rear, renders it unnecessary to secure the door B in place after each insertion of a drawer. The sheet *n* which is secured to the upper end of the series or strip O is then passed upwardly around the roller E and between the jaws of the roller D as before described, and further secured by the ribbons *o* if desired. This being effected, the shades L are opened out to the desired extent, the side shades serving as supports for the top shade, and one, two, or all of the shutters I are withdrawn to permit the light to enter through the windows G. According as the light comes from the sides or the top of the device or obliquely, it is determined which shutter or shutters to remove; in the daylight, for example, all three shutters being withdrawn, and where a gas-jet or other artificial or purely local light is employed, but two shutters being removed, these being the ones adjacent to the light, the third shutter serving as a screen. The disks *e* are then taken in the hands and the roller D actuated through their agency to wind the strip *n* thereon and draw the first section of the series of photographs O upwardly till the top thereof is on a level with the roller E, when the said photograph will rest perpendicularly with the upper end thereof in alignment with the lens K. The roller D being further rotated by means of the disks *e*, the photograph commences to be wound thereon and the strip O being pliable, the portion thereof below the roller D will depend in an exactly perpendicular position and the whole surface thereof be clearly presented to view, whereas, were

these photographs exhibited upon a roller, however deep, the top and bottom thereof would, by reason of the curvature of the photograph's surface, be blurred or exaggerated in outline. Means may also be provided for maintaining the bottom of the strip in alignment with the top, though the pliability of the strip would effect this ordinarily. The roller D is rotated until the whole series of photographs or other representations O have been successively brought in alignment with the lens K, whereupon the lid C is raised, the roller D removed from the slots *d* and reversed or turned upside down, and the roller being then rotated as before, the photographs will commence to unwind, and the surface O′ of the strip having first been exhibited, upon the unwinding of the roller the surface O^2 will be presented to view. It will be observed that by the form, arrangement, and journaling of the roller, to render the same reversible, the hinging or folding of the photographs, and the employment of the auxiliary or friction roller E, the photographs will, upon such reversed rotation of the roller D, automatically fall into the drawer evenly and regularly, thereby enabling the photographs to be seen as clearly as when winding up the roller D, it being evident that this could not be effected except with the aid of these elements of my invention or their equivalents. The photographs having been unwound, the drawer is then removed and another substituted, the strip thereon being attached to the roller D in like manner. Should it be desired to substitute a second set of photographs after viewing one side of the first, the lid C is raised and the roller, with the photographs wound thereon, removed, the said photographs then being rapidly unwound from the roller and folded to fit within the drawer. The fastening of the sheet *n* of each strip of photographs to the roller is also facilitated, and best accomplished, by raising this lid C and lifting the roller wholly or partially out, thereby avoiding the necessity of effecting the attachment from the rear while the roller is in place and consequently apt to turn or spin around when it is endeavored to insert the sheet between the flanges *f* or tie the ribbons thereto.

By the use of my invention I am able to combine in one exhibiting apparatus a large number of views without the loss of space usual with the present instruments known as "graphoscopes," where single photographs mounted on cardboard are placed upon the easel behind the lens, this being best evidenced by the fact that in a working apparatus having a maximum dimension of thirty inches, there are confined in the drawer cabinets and successively exhibited in but very little time approximately two thousand separate views of various places. Furthermore, my invention is of equal value for exhibiting in parlors evenings, by reason of the arrangement of the shutters, which render the device operative with a gas-jet or light of similar character; and the further advantages of the invention, such as the regulability of the light, the subduing and softening thereof by the stained glass, and the adjustability of the shade and consequently of the focus, are such as will be readily appreciated.

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

1. In a panoramic cabinet having a lens therein, a shade comprising three rigid shutters pivoted at the top to fold downwardly and at the sides to fold inwardly, each of the said shutters being formed in two or more jointed sections adapted to be folded to regulate the projection of the shade, substantially as shown and described.

2. In a panoramic cabinet, the combination, with an exhibiting box having a lens therein, of a plurality of repositories therein and removable therefrom, each of the said repositories having a strip therein with representations upon the face thereof, the said strip being folded longitudinally, and means for bringing each section of the strip vertically in alignment with the lens, substantially as shown and described.

3. A panoramic cabinet, comprising a box having a removable door in the rear thereof, a screen in front of the said door, a roller mounted in the box near the top toward the rear thereof, and adapted to be removed therefrom and reversed, a lens in the front of the box near the upper portion thereof, a collapsible and adjustable shutter in front of the said lens, windows in the top and sides of the box, shutters closing the windows and wholly removable therefrom, a plurality of repositories adapted to fit within the cabinet and to be withdrawn therefrom through the door, a strip in each of the said repositories having representations of objects on both faces thereof, the said strip being folded longitudinally, a sheet secured to the upper end of the strip, and means for detachably securing the said strip to the operating roller, substantially as shown and described.

4. A panoramic cabinet, consisting of a box having a door removably secured to the rear thereof, slots in the sides of the box opening at the top, a roller journaled in the said slots and adapted to be removed therefrom and reversed, longitudinal flanges upon the roller, and handles at each end thereof without the box, a lid hinged above the roller, a roller journaled forwardly and below the first, a jointed and folding screen suspended therefrom, an opening in the front of the cabinet, a lens secured upon the inside of the same behind the opening, shutters hinged above and at each side of the lens, adapted to fold, the top downwardly and the sides inwardly, each of the said shutters being formed in two or more sections jointed by hinges whereby the outer sections fold upon the inner sections, openings in the top of the box between the lid and the front thereof, openings in the

sides of the box adjacent to the lens, glass panes upon the inside of the box behind each of the openings, shutters countersunk in the openings and wholly removable therefrom, catches securing the said shutters, one or more drawer cabinets in the box having a plurality of drawers therein and removabe therefrom, a strip in each of the said drawers having representations of objects upon both faces thereof, the said strip being folded longitudinally, a sheet secured to the end of each strip adapted to fit within the flanges upon the operating roller and be brought vertically in alignment with the lens by the rotation thereof, and cords or ribbons upon the sheet to secure the same to the roller, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 15th day of June, 1894.

ANTONIO A. AGÜERO.

Witnesses:
PERCY T. GRIFFITH,
L. KAUFMAN.