

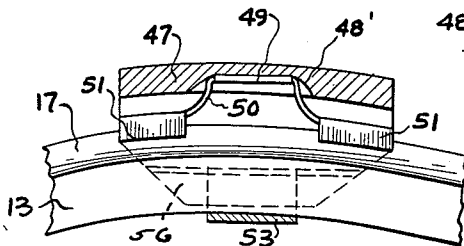
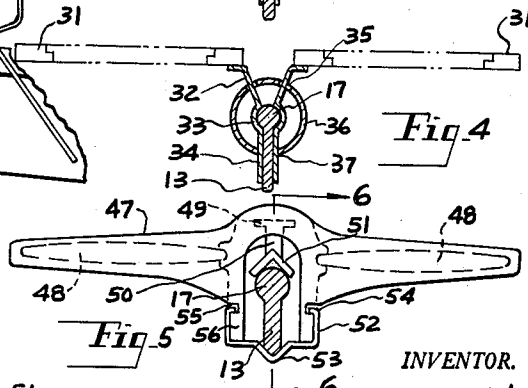
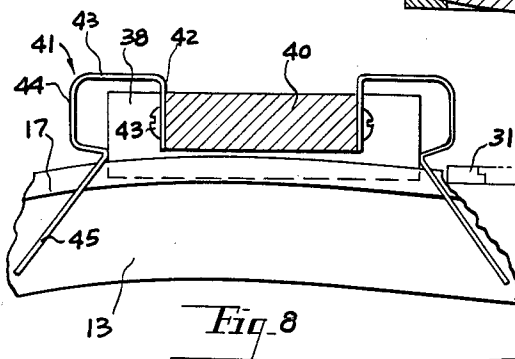
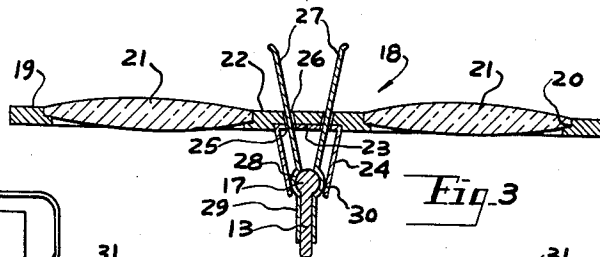
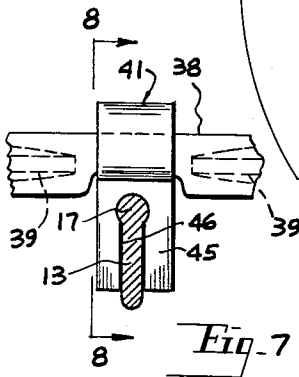
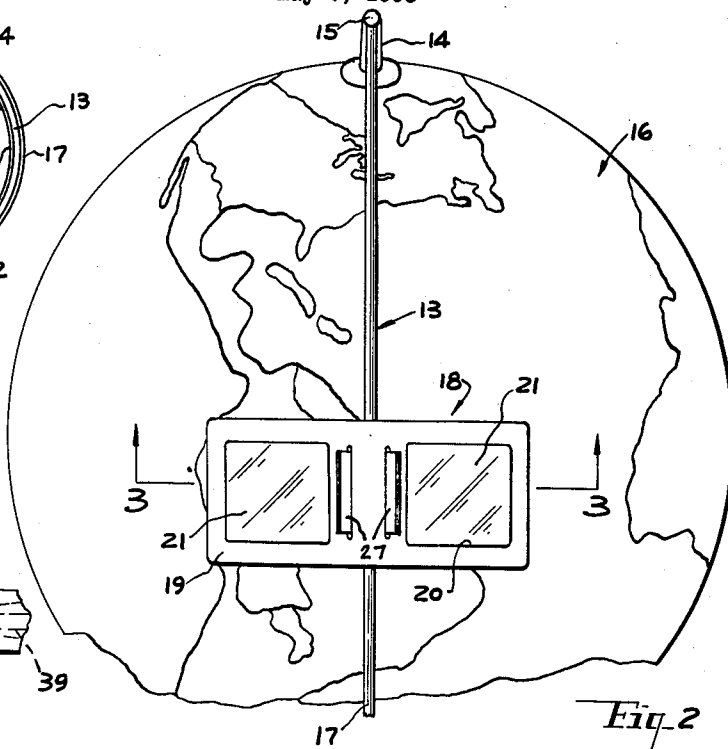
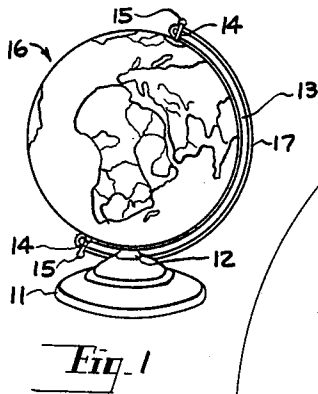
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MAGNIFYING ATTACHMENT FOR A WORLD GLOBE

Filed May 9, 1958



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MAGNIFYING ATTACHMENT FOR A WORLD GLOBE

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1 Claim. (Cl. 35—46)

This invention relates to world globes and more particularly to the use of a magnifier slidably and retainingly positioned with respect to the globe and relative to which substantially all areas of the globe may be moved for obtaining a magnified image thereof, as desired.

It is the object of the present invention to provide in conjunction with the meridian support for the globe, whether it be a half meridian or a full meridian, a magnifying means which is slidably mounted upon the meridian and which incorporates clamping means to permit sliding movements of the magnifying means and for securing the same in adjusted position with respect to surface portions of the globe.

It is a further object herein to provide a magnifying means which is adjustably clamped onto and arranged transversely for the meridian support of the globe and which carries suitable lenses arranged in spaced relation to the globe surface.

It is the further object of the present invention to provide a magnifying means for a world globe together with clamping means for adjustably mounting said magnifying means, which clamping means cooperatively and retainingly engage the meridian so as to be self-supporting and securable thereon.

These and other objects will be seen from the following specification and claim in conjunction with the appended drawing in which:

Fig. 1 is a perspective view of a world globe to which the present invention is adapted.

Fig. 2 is a fragmentary side elevational view thereof showing the mounting of the present magnifying means upon the meridian support, on an enlarged scale.

Fig. 3 is a section on an enlarged scale taken on line 3—3 of Fig. 2.

Fig. 4 is a similar view of a slightly different form of clamp mounting.

Fig. 5 is a similar view of still another form of clamp mounting for the magnifying means.

Fig. 6 is a fragmentary section taken on line 6—6 of Fig. 5.

Fig. 7 is a fragmentary similar view of still another form of magnifying means mounting.

Fig. 8 is a fragmentary section taken on line 8—8 of Fig. 7.

It will be understood that the above drawing merely illustrates preferred embodiments of the invention and that other embodiments are contemplated within the scope of the claim hereafter set forth.

Referring to the drawing, Fig. 1 illustrates a conventional type of pedestal base 11 having a central support 12 adapted to cooperatively and retainingly receive a portion of the upright arcuate semi-meridian 13. It is contemplated that a full meridian extending throughout 360 degrees can be employed and similarly secured within support 12.

The upright semi-meridian 13 has a pair of aligned bearings 14 positioned through opposing positions there-

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of receiving journal supports 15 for swivelly mounting world globe 16 on its polar axis in a conventional manner.

Meridian 13 has formed upon its outer peripheral edge the enlarged bead 17 which provides the mounting means for the magnifier hereafter described.

As shown in Fig. 2, such magnifying means generally indicated at 18 transversely spans meridian 13 and is adjustably secured thereon by a suitable clamping device by which the magnifying means may be slidably adjusted throughout substantially the length of meridian 13.

The magnifying means includes elongated housing 19 which may be of metal or plastic and which has one or more transverse apertures 20 of predetermined shape defining supporting ledges of similar shape for receiving the magnifier lenses 21 which are immovably secured in position.

Said housing includes the central body 22 shown in Fig. 3 which has an undercut slot 23 for supportably receiving the top of flexible clamp 24 whose bifurcated ends extend over opposite sides of bead 17 of meridian 13.

The bight or top surface of clamp 24 has formed there-through a pair of parallel slots 25 registering with corresponding elongated slots 26 in housing 19 adapted to receive the extensions 27 which project above lens housing 19 to permit manual disengaging or loosening of the clamp with respect to the meridian as desired and to facilitate adjustment of the lens housing over portions of said meridian.

Extensions 27 terminate within clamp 24 in a pair of opposed arcuate grips 28 which cooperatively extend over outer surface portions of bead 17 and terminate in the elongated depending gripping plates 29 which cooperatively and retainingly yet slidably engage opposing surface portions of meridian 13 below bead 17.

Lower portions of the inverted U-shaped clamp element 24 resiliently, operatively and retainingly engage arcuate grips 28 at points 30 for maintaining the same as well as plates 29 in securing engagement with meridian 13.

Accordingly the magnifying assembly 18 is fixedly clamped upon meridian 13 transversely thereof as shown in Figs. 2 and 3. Upon a slight compression of members 27 towards each other, slightly loosening the clamping means, said assembly is capable of manual sliding movement as desired over arcuate surface portions of said meridian.

The inherently resilient clamp assembly including parts 28—29 renders the magnifying assembly self-supporting and self-securing wherever it is adjusted.

The lenses 21 are closely spaced with respect to surface portions of the world globe 16 to act as an effective magnifier for portions of the globe throughout its entire surface, inasmuch as the globe is rotatable on its polar axis and as the magnifying assembly is slidably adjustable over meridian 13.

It is contemplated that this meridian may extend throughout 360 degrees and that in that case the magnifying assembly may be moved throughout the larger portion of 360 degrees. One lens and a corresponding holder may be employed, if desired.

A slightly different form of magnifying assembly is shown in Fig. 4, wherein a pair of horizontally disposed apertured lens housings 31 are arranged in opposed relation transversely of and upon opposite sides of meridian 13 with their inner edge portions secured to the upstanding and outturned extensions 32 of the bead engaging grips 33.

These grips, as in Fig. 3, likewise terminate in the opposed meridian gripping plates 34 which extend upon opposite sides of meridian 13. Portions of the grips 33 which merge with elements 32 extend upwardly through

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elongated slots 35 formed through the cylindrically shaped clamp 36, so that in effect the grips including elements 32—33—34 are partially nested within and through resilient clamp 36.

The free end portions 37 of clamp 36 operatively and retainingly engage opposite sides of the gripping plates 34 for frictionally securing and retaining the clamp assembly with respect to meridian 13 and its bead 17.

At the same time, manual tilting upwardly of outer portions of the lens housings 31 will tend to partially release the gripping elements 33—34 from the meridian to permit sliding adjustment of the complete assembly thereover.

Figs. 7 and 8 illustrate a slightly different form for mounting the lens assembly which includes the transversely arranged lens mounting body 38 fragmentarily shown in Fig. 7 and adapted to supportably receive a pair of lenses 39 fragmentarily shown.

The central portion 40 of lens housing 38 overlies and spans transversely a portion of meridian 13 and its adjacent bead 17 and is adjustably secured thereon by a pair of longitudinally spaced clamping elements 41, best illustrated in Fig. 8. Each of the clamping elements has a downturned leg 42 secured upon an end of the central body 40 by fastener 43. Leg 42 terminates in the horizontal extension 43 and the downturned member 44 whose lower end is bifurcated at 45 and interiorly formed at 46 so as to resiliently and retainingly engage meridian 13 and adjacent bead 17, as shown in Fig. 7. By this construction members 44 are adapted to resiliently maintain themselves upon the meridian 13 in the position shown, and may be adjusted thereon.

Still another form of magnifying lens assembly is illustrated in Figs. 5 and 6 wherein the transversely arranged housing 47 for lenses 48 carries upon its central slotted undersurface as at 48' the transverse bracket 49 which is suitably secured thereto. Bracket 49 at its opposite ends has a pair of downturned supports 50 which terminate in the longitudinally aligned inverted V-shaped channels 51 which engage bead 17 of meridian 13 to provide a sliding support for the magnifying assembly.

A resilient clamp means is provided for securing lower portions 56 of housing 47 which overlie side portions of meridian 13, as shown in Fig. 5. For this purpose resilient spring clamp 53 extends under and is so formed as to cooperatively and retainingly engage the opposite margin of meridian 13, and laterally thereof terminates in the upwardly extending plates 52 whose intumed ends 54 cooperatively and retainingly nest within longitudinal slots 55 formed in opposite side portions 56 of housing 47.

By this construction the magnifying assembly is resiliently and retainingly supported upon meridian 13 and its associated peripheral bead 17.

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While several preferred means have been illustrated and described by which the magnifying assembly may be adjustably secured to the meridian support for the world globe, it is contemplated that equivalent clamping structures may be employed for the same purpose.

The present application refers to the arcuate support 13 for the world globe as a meridian, meridian means, or as a semi-meridian means.

This meridian means represents the arcuate support 13 shown in Fig. 1 which may extend as shown throughout 180 degrees, commonly referred to as the semi-meridian, or may be in a form extending throughout 360 degrees, commonly referred to as a full meridian.

Having described my invention, reference should now be had to the claim which follows:

I claim:

In a world globe journaled on its polar axis within an upright meridian means, a support engaging said meridian means, and magnifying means slidably and adjustably mounted upon said meridian means projecting laterally thereof overlying a surface portion of said globe, said magnifying means being slidable in arc over substantially the length of said meridian means, said globe being rotatable relative to said magnifying means adapted to register substantially all its surface with said magnifying means, said meridian means including a continuous marginal bead, the mounting of said magnifying means including a resilient inverted U-shaped clamp outwardly of said meridian means with its free ends extending past the sides of said bead adjacent thereto, an apertured housing extending transversely of and across said meridian means mounted on and secured to said clamp, a pair of upright irregularly shaped gripping plates interposed between and engaged by the ends of said clamp engaging opposite sides of said meridian means and bead, and manual release arms respectively joined to and extending upwardly and outwardly from the upper ends of said gripping plates loosely through apertures in said clamp and housing and diverging thereabove, said magnifying means including lens means mounted within the opposite sides of said housing.

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