longitudinally disposed thereon. A second tube 2 may be fitted to or sleeved over the first tube 1. The second tube 2 may, on its exterior or outer tube surface, form a corresponding groove 21 to the at least one rib 11. As the first tube 1 correspondingly move with respect to the second tube 2, the at least one rib 1 may define a movement along the groove 21.

[0037] In another embodiment, the use of the at least one rib 1 and the groove 21 may be exchanged. For example, in one embodiment, the first tube 1 may, instead of the at least one rib 1, include a groove whereas the second tube 2 may include a corresponding at least one rib for the groove.

[0038] In existing art, when the first tube and the second tube are moving against one another, due to the forces applied, the first tube and the second tube may be rotated.

[0039] In the present embodiment, when the first tube 1 is moving relative to the second tube 2, the groove 21 may limit or define movement of the rib 1. By defining or limiting the movement, the movements between the first tube 1 and the second tube 2 may be more defined or limited to a linear movement.

[0040] In embodiments as illustrated in FIG. 2, the second tube 2 includes a cap structure 5 on a distal end of the second tube 2. The rib or the groove is disposed on the cap structure 5. The cap structure 5 may include an end plate with an opening formed therethrough. The end plate can be configured to abut the distal end of the second tube 2. The cap structure 5 can be configured such that no portion of the first tube 1 passes through the opening of the end plate into an interior of the second tube 2 when the first tube 1 and the second tube 2 are

joined. Cap structure 5 may include a sidewall connecting with the end plate along the circumference of the end plate.

[0041] Through the cap structure 5, when the rib or the groove may be damaged from use, the cap structure 5 may quickly and conveniently replaced without interfering the use of the tubes, which may be part of a photographic support, such as a tripod or monopod.

[0042] In a further embodiment, the cap structure 5 may be sleeved or fitted to the second tube 2. A portion or part of the first tube 1 may match to a portion or part of the cap structure 5 by a set of an opening 6 on the first tube 1 and a protrusion 7 on the cap structure 5. This may ensure the stability of connection between the first tube 1 and the cap structure 5.

[0043] In another embodiment, a portion or part of the second tube 2 may match to a portion or part of the cap structure 5 by a set of a protrusion 7 on the first tube 2 and an opening 6 on the cap structure 5.

[0044] According to an embodiment as shown in FIG. 3, the first tube 1 may be mounted or fitted with a tightening element 8. The use may use tightening element 8 to tighten or decrease movement when the first tube 1 is connected to the second tube 2.

[0045] In a further embodiment, the tightening element 8 may include an inner adapter 81 having a substantially cone shape disposed on the exterior or outer surface of the first tube 1. The inner adapter 81 may include threads on its outer or exterior surface. The tightening element 8 may also include an outer adapter 82 and the outer adapter 82 may be connected to the inner adapter 81 via the

CLAIMS

What is claimed is:

1. An anti-rotation structure for a photographic equipment that includes a leg with a first tube and a second tube, said anti-rotation structure comprising:

an end cap configured to engage a distal end of the second tube, the end cap comprising:

an end plate with an opening formed therethrough, wherein the end plate configured to abut the distal end of the second tube;

a side wall connecting with the end plate along the circumference of the end plate;

wherein the side wall comprises at least one slit extending axially;

wherein the at least one slit corresponds in size to a rib disposed at an interior surface of the first tube of the leg such that the rib moves along the at least one slit when the first and second tubes are joined to one another;

wherein the at least one slit is communicative with the opening on the end plate; and

wherein no portion of the first tube passes through the opening into an interior of the second tube when the first and second tubes are joined to one another.

2. The anti-rotation structure of claim 1, wherein the opening is formed at center of the end plate of the end cap.

3. The anti-rotation structure of claim 1, wherein the end cap further comprising a protrusion on the side wall, wherein the protrusion matches to a tube opening on the second tube.

4. The anti-rotation structure of claim 1, wherein the opening is formed near the circumference of the end plate of the end cap.

5. The anti-rotation structure of claim 1, wherein the at least one slit extends to the end plate with a cut.

6. An anti-rotation structure for a photographic equipment that includes a leg with a first tube and a second tube, said anti-rotation structure comprising:

an end cap configured to engage a distal end of the second tube, the end cap comprising:

an end plate with an opening formed therethrough, the end plate configured to abut the distal end of the second tube;

a side wall connecting with the end plate along the circumference of the end plate;

wherein the side wall comprises at least one protrusion extending axially;

wherein the at least one protrusion corresponds in size to a bore disposed at a side wall of the second tube of the leg such that the at least one protrusion fits into the bore when the first and second tubes are joined to one another; and

wherein no portion of the first tube passes through the opening when the first and second tubes are joined to one another.

7. The anti-rotation structure of claim 6, wherein the opening is formed near the circumference of the end plate of the end cap.

8. The anti-rotation structure of claim 6, wherein the end cap further comprising a slit extending axially along the side wall, wherein the slit defining a sliding path for a rib on an interior wall of a first tube.

9. The anti-rotation structure of claim 6, wherein the opening is formed near center of the end plate of the end cap.

10. The anti-rotation structure of claim 8, wherein the slit extends to the end plate with a cut.

11. A leg of a photographic support structure comprising:

a first tube including a first defining structure disposed axially on its interior surface;

a second tube fitting to the first tube;

an anti-rotation structure abutting a distal end of the second tube;

wherein the anti-rotation structure comprising:

an end plate with an opening formed therethrough, wherein the end plate configured to abut the distal end of the second tube;

a side wall connecting with the end plate along the circumference of the end plate;

wherein the side wall comprises a corresponding structure for receiving the first defining structure extending axially along the side wall;

wherein the first tube moves relative to the second tube along the corresponding structure of the anti-rotation structure and the first defining structure when the first and second tubes are joined to one another;

wherein the corresponding structure is configured to be in communication with the opening on the end plate; and

wherein no portion of the first tube passes through the opening into an interior of the second tube when the first and second tubes are joined to one another.

12. The leg of the photographic support structure of claim 11, further comprising a tightening element for connecting the first tube and the second tube, wherein the tightening element comprises an inner adapter with threads on a portion of its exterior surface disposed on an exterior surface of the first tube; and an outer adapter connecting to the inner adapter via the threads of the inner adapter.

13. The leg of the photographic support structure of claim 12, wherein the inner adapter comprises a substantially cone shape.

14. The leg of the photographic support structure of claim 13, wherein a narrower circumference of the inner adapter is positioned toward the anti-rotation structure.

15. The leg of the photographic support structure of claim 12, further comprising a locking ring disposed on the outer adapter, wherein the locking ring prevents the anti-rotation structure separating from the second tube when the anti-rotation structure moves to a position of the locking ring.

16. The leg of the photographic support structure of claim 11, wherein the corresponding structure extends to the end plate with a cut.

17. The leg of the photographic support structure of claim 11, wherein the first defining structure comprises a first rib.

18. The leg of the photographic support structure of claim 11, wherein the anti-rotation structure further comprising a protrusion on the side wall, wherein the protrusion matches to a tube opening on the second tube.

19. The leg of the photographic support structure of claim 11, wherein the anti-rotation structure further comprising a side wall opening on the side wall, wherein the side wall opening matches to a tube protrusion on the second tube.

20. The leg of the photographic support structure of claim 11, wherein the opening is formed either at center of the end plate or near the circumference of the end plate of the end cap.