Claims

1. An apparatus for ~~securing~~ providing a secure male-female connection, comprising:

   (a) a female connector comprising a securing actuator section displaceable therewithin;

   (b) a male connector comprising at least one anchoring ledge;

   ~~(c) one or more anchoring ledges; and~~

   (~~d~~c) said securing actuator section comprising at least one rotatable gear having one or more sprockets and a void portion, said void portion being configured to receive therewithin, through a gap formed in said at least one rotatable gear, said at least one anchoring ledge, said at least one rotatable gear being configured to rotate and change an orientation of the gap with the anchoring ledge received within the void portion, thereby locking the anchoring ledge therewithin.

~~2. Apparatus according to claim 1, wherein said rotatable gear comprises or has attached a void portion suitable to house an anchoring ledge provided opposite to it.~~

~~3. Apparatus according to claim 2, wherein a gap is formed in the gear such that the void section is provided with an opening the orientation of which changes with the rotation of the gear.~~

~~4. Apparatus according to claim 2, comprising at least one or more sprockets peripherally arranged around the gear.~~

~~5. Apparatus according to claim 1, wherein the at least one or more rungs are formed on the female connector.~~

~~6. Apparatus according to claim 1, wherein the at least one or more rungs are formed on the male connector and is suitable to move relative to the gears when the male connector slides inside the female connector.~~

~~7. Apparatus according to claim 5, wherein at least one rail or guide is formed on the interior of the female connector.~~

~~8. Apparatus according to claim 6, wherein a track is provided between a rail or guide and one or more rung(s), along which a gear may travel longitudinally.~~

~~9. Apparatus according to claim 1, comprising two of each of anchoring ledges, ladder and rotatable gear.~~

~~10~~2. Apparatus according to claim 1, wherein each of the female connector ~~section~~ and the male connector is coupled to an element of a fluids-transfer system.

~~11~~3. Apparatus according to claim 1, wherein one or both of the female connector ~~section~~ and the male connector are integral part of an element of a fluids-transfer system.

~~12~~4. Apparatus according to claim 1, wherein the female connector ~~section~~ is connected to one of the following:

(a) a syringe;

(b) a female luer or luer-lock port or a male luer or luer-lock port;

(c) tubing; and

(d) a spike.

~~13. Apparatus according to claim 1, wherein the female connector section is connected to a female or male luer or luer-lock port.~~

~~14. Apparatus according to claim 1, wherein the female connector section is connected to tubing.~~

~~15. Apparatus according to claim 1, wherein the female connector section is connected to a spike.~~

~~16~~5. Apparatus according to claim 1, wherein the male connector is connected to one of the following:

(a) a vial adaptor;

(b) a spike;

(c) a female luer or luer-port or a male luer or luer-lock port; and

(d) tubing.

~~17. Apparatus according to claim 1, wherein the male connector is connected to a spike.~~

~~18. Apparatus according to claim 1, wherein the male connector is connected to a female or male luer or luer-lock port.~~

~~19. Apparatus according to claim 1, wherein the male connector is connected to tubing.~~

~~20~~6. Apparatus according to claim 1, wherein ~~the~~ an axis around which the at least one rotatable gear rotates is essentially perpendicular to ~~the~~ a plane in which lies ~~the~~ another axis along which the female and male connectors slide.

~~21~~7. An element of a fluids-transfer system coupled, or otherwise connected to, ~~a female~~the connector ~~section~~ as claimed in claim 10.

~~22~~8. An element of a fluids-transfer system ~~coupled, or otherwise connected to, a male connector~~comprising the apparatus as claimed in claim 1, wherein the fluids-transfer system is one of:

(a) a drug transfer system;

(b) a syringe adaptor; and

(c) a tubing system.

~~23. A drug-transfer system, comprising apparatus as claimed in claim 1.~~

~~24. A syringe adaptor, comprising apparatus as claimed in claim 1.~~

~~25. A tubing, comprising apparatus as claimed in claim 1.~~

~~26~~9. Apparatus according to claim 1, wherein the at least one rotatable gear is a component of a mechanism that comprises at least one of the following:

(a) two rungs and one sprocket;

(b) at least one indentation suitable to be engaged by a rung;

(c) a rung which is adapted to be engaged by two sprockets; and

(d) a rung adapted to engage an indentation.

~~27. Apparatus according to claim 1, wherein the rotatable gear mechanism comprises at least one indentation suitable to be engaged by a rung.~~

~~28. Apparatus according to claim 1, wherein the rotatable gear mechanism comprises a rung which is adapted to be engaged by two sprockets.~~

~~29. Apparatus according to claim 1, wherein the rotatable gear mechanism comprises a rung adapted to engage an indentation.~~

~~30. Apparatus according to claim 1, wherein the anchoring ledges are provided on the male connector and the rotating gears are located on the female connector.~~

~~31. Apparatus according to claim 1, wherein the anchoring ledges are provided on the female connector and the rotating gears are located on the male connector.~~

~~32. Apparatus according to claim 1, wherein the rotatable gear is rotatably attached to an axis positioned at a radial distance from the center axis of said gear.~~

10. A connector for providing a secure male-female connection in a fluid-transfer system, the connector comprising:

at least one rotatable gear comprising a void portion configured to receive therewithin, through a gap formed in said at least one rotatable gear, at least one anchoring ledge associated with another connector of the fluid-transfer system, said at least one rotatable gear being configured to rotate and change an orientation of the gap with the anchoring ledge received within the void portion, thereby locking the anchoring ledge therewithin.