is located midway between said two parallel edges, said centerline being inclined at an oblique ramp angle with respect to said plate longitudinal direction and defining a ramp direction,

wherein, proceeding from a center said centerline of said ramp surface perpendicular to said ramp direction, on each side of said planar ramp surface, said ramp surface adjoins respective planar first surfaces distinct from said ramp surface,

wherein said respective first surfaces adjoin respective planar second surfaces distinct from said first surfaces,

wherein said respective second surfaces adjoin respective planar third surfaces distinct from said second surfaces,

wherein said ramp surface and said first surfaces and said second surfaces and said third surfaces in combination engage and capture a geometric feature of said mechanism while permitting sliding of said geometric feature relative to said planar ramp surface along said ramp direction,

wherein said first plate has a centrally located first opening therethrough and said second plate has a centrally located second opening therethrough and wherein a window region of space connecting said first opening and said second opening is not crossed by any object extending within said window region continuously from a proximal edge of said window region to a distal edge of said window region, and

wherein the mechanism has a locking reception configuration at a proximal terminal end of the mechanism, the device further comprising a locking element, wherein at least part of the radial perimeter of the locking element is surrounded by at least part of the remainder of the device prior to a locking by the locking element.

13. The device of claim **12**, wherein said respective first surfaces are substantially parallel to each other.

14. The device of claim **12**, wherein said respective second surfaces are substantially coplanar with each other.

15. The device of claim **12**, wherein said respective second surfaces are substantially parallel to said planar ramp surface.

16. The device of claim **12**, wherein said respective third surfaces are substantially parallel to each other.

17. The device of claim **12**, wherein said oblique ramp angle ramp direction with respect to said plate longitudinal direction forms a ramp angle in the range of 15 degrees to 75 degrees.

18. The device of claim **12**, wherein the locking element is configured to fit into the locking reception configuration such that the locking reception configuration prevents rotation of the locking element.

19. The device of claim **12**, wherein the locking element is completely recessed within the locking reception configuration.

20. The device of claim **12**, wherein the locking element is completely received by the locking reception configuration.

21. The device of claim **12**, wherein the outer surface of the locking element is smooth.

22. An implantable orthopedic device, comprising:

a first plate, having an outward-facing surface facing away from said device and an inward-facing surface opposed to said outward-facing surface, and having a plate longitudinal direction;

a second plate opposed to said first plate; and

a mechanism located between said first and second plates, said mechanism being capable of causing relative motion of said first and second plates toward or away from each other,

wherein said first plate comprises, on said inward-facing surface of said first plate, a planar ramp surface bounded by two edges that are parallel to each other and generally coplanar with said plate longitudinal direction, said planar ramp surface having a ramp direction centerline midway between said two parallel edges, said centerline inclined at an oblique ramp angle with respect to said plate longitudinal direction and defining a ramp direction,

wherein, proceeding from a center said centerline of said planar ramp surface, perpendicular to said ramp direction said centerline planar ramp surface, on each side, said planar ramp surface adjoins respective first side surfaces distinct from said planar ramp surface,

wherein said respective first said surfaces adjoin respective planar second surfaces distinct from said first side surfaces, said respective planar second surfaces being parallel to said planar ramp surface,

wherein said respective second surfaces adjoin respective third surfaces distinct from said second side surfaces,

wherein said planar ramp surface and said first side surfaces and said second surfaces and said third surfaces in combination engage and capture a geometric feature of said mechanism while permitting sliding of said geometric feature relative to said planar ramp surface along said ramp direction,

wherein said first plate has a centrally located first opening therethrough and said second plate has a centrally located second opening therethrough and wherein a window region of space connecting said first opening and said second opening is not crossed by any object extending within said window region continuously from a proximal edge of said window region to a distal edge of said window region, and

wherein the mechanism has a locking reception configuration at a proximal terminal end of the mechanism, the device further comprising a locking element configured to rotate with respect to the first plate and the second plate, wherein at least part of the radial perimeter of the locking element is surrounded by at least part of the remainder of the device prior to a locking by the locking element.

23. The device of claim **22**, wherein said respective first side surfaces are planar and parallel to each other.

24. The device of claim **22**, wherein said respective third side surfaces are planar and parallel to each other.

25. The device of claim **22**, wherein the locking element is configured to fit into the locking reception configuration such that the locking reception configuration prevents rotation of the locking element.

26. The device of claim **22**, wherein the locking element is completely recessed within the locking reception configuration.

27. The device of claim **22**, wherein the locking element is completely received by the locking reception configuration.

28. The device of claim **22**, wherein the outer surface of the locking element is smooth.

* * * * *