CLAIMS

1. A dental implant fixture, comprising:

a cylindrical body;

a wide groove formed in a portion of a periphery of the body adjacent to a distal end of the body; and

at least one narrow groove formed in a portion of the periphery adjacent to a basal end of the body,

the at least one narrow groove including

a first bottom,

a first side wall connecting to one end of the first bottom, the first side wall being nearer the distal end, and

a second side wall connecting to another end of the first bottom, the second side wall being nearer the basal end,

wherein the first side wall is spaced more from a first reference plane extending through the first bottom and perpendicular to a central axis of the body as the first side wall is more away from the first bottom,

the second side wall extends parallel to the first reference plane or is spaced more from the first reference plane as the second side wall is more away from the first bottom, and

in a section parallel to the central axis, the first side wall and the first reference plane form an angle α that is larger than an angle β formed by the second side wall and the first

reference plane,

wherein in the section, an opening of the at least one narrow groove has facing edges one of which is adjacent to the second side wall and is curved outward.

2. The dental implant fixture according to claim 1, wherein the second side wall extends parallel to the first reference plane.

3. The dental implant fixture according to claim 1 or claim 2, wherein in the section, the first side wall is longer than the second side wall.

4. The dental implant fixture according to any one of claims 1 to 3, wherein in the section, a first junction connecting the first bottom and the first side wall is nearer the central axis than a second junction connecting the first bottom and the second side wall.

5. The dental implant fixture according to any one of claims 1 to 4, wherein in the section, the first bottom is curved inward.

6. The dental implant fixture according to any one of claims 1 to 5, wherein in the section, the first bottom has an arc shape that is curved inward and has a center nearer the central axis than a first straight line and is nearer the basal end than a second straight line, where the first straight line connects facing edges at an opening of the at least one narrow groove, and the second straight line extends through a middle point of the first straight line and is perpendicular to the central axis.

7. The dental implant fixture according to any one of claims 1 to 6, wherein in the section, the at least one narrow groove has a groove width larger than a groove depth at an opening.

8. The dental implant fixture according to any one of claims 1 to 7, wherein the at least one narrow groove includes a first narrow groove and a second narrow groove that are spaced from each other.

9. The dental implant fixture according to any one of claims 1 and 3 to 8, wherein the wide groove includes

a second bottom,

a third side wall connecting to one end of the second bottom, the third side wall being nearer the distal end,

a fourth side wall connecting to another end of the second bottom, the fourth side wall being nearer the basal end,

wherein the third side wall is spaced more from a second reference plane extending through the second bottom and perpendicular to the central axis as the third side wall is more away from the second bottom,

the fourth side wall extends parallel to the second reference plane when the second side wall extends parallel to the first reference plane,

the fourth side wall is spaced more from the second reference plane as the fourth side

wall is more away from the second bottom when the second side wall is spaced more from the first reference plane as the second side wall is more away from the first bottom, and

in a section parallel to the central axis, the third side wall and the second reference plane form an angle γ that is larger than an angle δ formed by the fourth side wall and the second reference plane.

10. The dental implant fixture according to any one of claims 1 to 9, wherein

the wide groove and the at least one narrow groove extend helically.

11. The dental implant fixture according to claim 10, wherein

in a boundary between the wide groove and the at least one narrow groove, a portion of the wide groove adjacent to the basal end and a portion of the at least one narrow groove adjacent to the distal end extend parallel to each other.

12. The dental implant fixture according to claim 11, wherein

the portion of the wide groove and the portion of the at least one narrow groove extend parallel to each other and partially merge with each other.

13. The dental implant fixture according to claim 11 or claim 12, wherein

the portion of the wide groove and a reference line parallel to the central axis form an angle $\theta 1$ that is larger than an angle $\theta 2$ formed by the reference line and the portion of the at least one narrow groove.

14. The dental implant fixture according to claim 13, wherein

the angle θ1 and the angle θ2 are acute angles.

15. The dental implant fixture according to any one of claims 11 to 14, wherein the portion of the wide groove has a groove depth that is smaller toward the basal end, and

the portion of the at least one narrow groove has a groove depth that is larger toward the basal end.

16. The dental implant fixture according to any one of claims 11 to 15, wherein an end of the at least one narrow groove adjacent to the basal end is nearer the distal end than a bone edge line of the periphery adjacent to the basal end.

17. The dental implant fixture according to claim 16, wherein the end of the at least one narrow groove adjacent to the basal end is near the bone edge line.

18. A dental implant, comprising:

a dental implant fixture according to any one of claims 1 to 17; and

a structural component attached to the basal end of the body of the dental implant fixture.