and is formed on the base end side close to the second steel pipe pile,

wherein in the plurality of outer fitting stepped sections, the outer fitting valley section is formed so that the plate thickness thereof increases the closer an outer fitting stepped section is to the first steel pipe pile,

wherein in the plurality of inner fitting stepped sections, the inner fitting valley section is formed so that the plate thickness thereof increases the closer an inner fitting stepped section is to the second steel pipe pile,

wherein in a state where the inner fitting end section is inserted into the outer fitting end section, rotated relative to the outer fitting end section, and fitted thereto, an inner fitting tip surface on a tip side of the inner fitting end section and a surface that faces the inner fitting tip surface are separated from each other by a predetermined separation distance D,

wherein the total area of tension-side abutting surfaces that are made to bear tensile forces among abutting surfaces that abut against each other between the plurality of outer fitting stepped sections and the plurality of inner fitting stepped sections is equal to or smaller than the summed area of the area of an outer fitting tip surface on a tip side of the outer fitting end section that bears compressive forces and the total area of compression-side abutting surfaces that bear compressive forces, and

wherein in the inner fitting peak sections of the inner fitting stepped section closest to the tip side of the inner fitting end section, when a protruding height in a direction approaching the second axial center is defined as h (mm) and a length in an extending direction of the second axial center is defined as l (mm), the predetermined separation distance D (mm) is set so as to satisfy the following Expression (1).

$$D \geq (h^2 + l^2)^{0.5} - 1 \qquad \text{Expression (1)}$$

2. The joint structure for a steel pipe pile according to Claim 1,

wherein the total area of the tension-side abutting surfaces is equal to or smaller than the total area of the compression-side abutting surfaces.

3. The joint structure for a steel pipe pile according to Claim 1,

wherein either the protruding heights of the inner fitting peak sections in the plurality of inner fitting stepped sections or the protruding heights of the outer fitting peak sections in the plurality of outer fitting stepped sections are approximately equal to each other.

4. The joint structure for a steel pipe pile according to any one of Claims 1 to 3,

wherein the facing surface of the inner fitting tip surface is an outer fitting base end surface on the base end side of the outer fitting end section.

5. The joint structure for a steel pipe pile according to any one of Claims 1 to 3,

wherein the facing surface of the inner fitting tip surface is an end surface of the first steel pipe pile.