

Abstract

Provided is a weldless joint for piles, which is capable of achieving high flexural and shear strengths, and is also capable of providing a mechanism of transmitting rotational torque at the same time. A shear ring (31) is interposed between piles in shear ring fitting portions (30) formed in end fittings (12) of the piles, and the piles are joined together through fitting of recesses and projections so as to allow a moment of rotation to be transmitted therebetween. Arc-shaped plates (15) are used to fix the piles by being fitted over outer peripheries of the end fittings (12). A tapered dovetail groove (22) having a dovetail-groove-shaped cross-section is formed in an arc-shaped-plate interconnecting fitting (21) for connecting the arc-shaped plates together. An arc-shaped-plate interconnecting protrusion (20) is formed on an outer surface of each end portion of each of the arc-shaped plates so as to have a tapered dovetail shape fitted to the tapered dovetail groove (22). The arc-shaped-plate interconnecting protrusions (20, 20) are inserted into the tapered dovetail groove (22) so that adjacent arc-shaped plates (15) are connected together. Both end portions of the arc-shaped-plate interconnecting fitting (21) are screwed onto the adjacent arc-shaped plates (15).

