CLAIMS

1. A column-pile connecting method for connecting a pile and a column together, wherein the pile is a steel pipe having an open upper end, and the column is made of steel and including a lower end portion inserted and placed in an upper end portion of the pile, the pile and the column are connected together via a projecting member projecting laterally at the lower end portion of the column and a hardening material poured into a space between the column and the pile, and the pile and the column are connected together in a state that a column center of the column and a pile center of the pile are positioned out of horizontal alignment, the method comprising

creating a gap between a projecting portion, the projecting portion being on a side most adjacent to an inside surface of the pile, of the projecting member and the inside surface of the pile by performing a shape-changing work on the projecting member or changing a position where the projecting member is placed to the column.

2. The column-pile connecting method according to claim 1, wherein

the projecting member is a base plate projecting laterally and coaxially with the column center of the column on a lower end surface of the column, and

the method further comprising boring a vertically-extending through hole in a center portion of the base plate to enable pouring the hardening material from above to below the base plate through the through hole.

3. The column-pile connecting method according to claim 1,

wherein

the projecting member is a base plate projecting laterally and coaxially with the column center of the column on a lower end surface or at its vicinity of the column, and

the method further comprising creating a chipped-off portion by cutting a part of the projecting portion on the side most adjacent to the inside surface of the pile of the base plate to create a gap between the chipped-off portion and the inside surface of the pile.

4. The column-pile connecting method according to claim 3, further comprising providing a laterally-projecting protruding rib on an outer peripheral surface of the column immediately above the chipped-off portion.

5. The column-pile connecting method according to claim 1, wherein

the projecting member is protruding ribs projecting laterally from an outer peripheral surface of the column, and

the method further comprising creating a gap between each of the ribs and the inside surface of the pile by providing the ribs on the lower end portion of the column in a plurality of rows apart from each other in the vertical direction.

6. A column-pile connecting structure for connecting a pile and a column together, wherein the pile is a steel pipe having an open upper end, and the column is made of steel and including a lower end portion inserted and placed in an upper end portion of the pile, the pile and the column are connected together via a projecting member

projecting laterally at the lower end portion of the column and a hardening material poured into a space between the column and the pile, the structure comprising:

an out-of-horizontal-alignment arrangement of a column center of the column and a pile center of the pile; and

a projecting portion, the projecting portion being a part of the projecting member on a side most adjacent to an inside surface of the pile, creating a gap between the projecting member and the inside surface of the pile.

7. The column-pile connecting structure according to claim 6, wherein

the projecting member is a base plate projecting laterally and coaxially with the column center of the column on a lower end surface of the column, and

the base plate includes a vertically-extending through hole in a center portion of the base plate, the through hole allowing pouring the hardening material from above to below the base plate through the through hole.

8. The column-pile connecting structure according to claim 6, wherein

the projecting member is a base plate projecting laterally and coaxially with the column center of the column on a lower end surface or at its vicinity of the column, and

the base plate includes a chipped-off portion in a part of the projecting portion on the side most adjacent to the inside surface of the pile such that a gap is created between the chipped-off portion and the inside surface of the pile.

9. The column-pile connecting structure according to

claim 8, further comprising a laterally-projecting protruding rib on an outer peripheral surface of the column immediately above the chipped-off portion.

10. The column-pile connecting structure according to claim 6, wherein

the projecting member is protruding ribs projecting laterally from an outer peripheral surface of the column, and

the ribs are provided on the lower end portion of the column in a plurality of rows apart from each other in the vertical direction, creating a gap between each of the ribs and the inside surface of the pile.