CLAIMS

1. A heat-transfer-tube support structure comprising: a heat-transfer-tube panel in which a plurality of fin-including heat transfer tubes extending in a vertical direction and having fins mounted on outer circumferential portions thereof are arranged in a staggered manner; and support members that bundle the fin-including heat transfer tubes in a horizontal direction, and that are provided in a plurality of stages at predetermined intervals in the vertical direction of the heat-transfer-tube panel; wherein:

the heat-transfer-tube support structure further comprises:

first reinforcing plates that are obliquely disposed in gaps between the fin-including heat transfer tubes;

second reinforcing plates that are obliquely disposed in the gaps between the heat transfer tubes so as to intersect the first reinforcing plates;

linking members through which one-end sides of the first reinforcing plates and the second reinforcing plates are fixed to the support members respectively; and

cylindrical protection members that surround the fin-including heat transfer tubes; and

the cylindrical protection members are fixed to the support members.

2. A heat-transfer-tube support structure according to Claim 1, wherein:

the first reinforcing plates and the second reinforcing plates are fixed to the support members through the linking members shared by the first reinforcing plates and the second reinforcing plates.

3. A heat-transfer-tube support structure according to Claim 1, wherein:

notches avoiding abutment against the cylindrical protection members are formed in either the first reinforcing plates or the second reinforcing plates.

4. A method for supporting a heat transfer tube, which method is performed on a heat recovery steam generator in which a heat-transfer-tube panel including a plurality of fin-including heat transfer tubes is provided and disposed inside a duct into which exhaust gas emitted from a gas turbine is made to flow, the fin-including heat transfer tubes extending in a vertical direction and having fins mounted on outer circumferential portions

thereof, the fin-including heat transfer tubes being arranged in a staggered manner with a plurality of rows and bundled in a horizontal direction by support members, the support members being provided in a plurality of stages at predetermined intervals in the vertical direction of the heat-transfer-tube panel, the method comprising the steps of:

mounting cylindrical protection members on each of the fin-including heat transfer tubes disposed in a row on a most upstream side of a gas flow in the heat-transfer-tube panel, so that the cylindrical protection members hold a corresponding one of the support members therebetween from above and from below respectively, and fixing the cylindrical protection members to the support members;

obliquely inserting first reinforcing plates into gaps between the fin-including heat transfer tubes;

obliquely inserting second reinforcing plates into the gaps so as to intersect the first reinforcing plates; and

fixing one-end sides of the first reinforcing plates and one-end sides of the second reinforcing plates to the support members through linking members respectively.