CLAIMS:

1. A heat exchanger comprising:

a fin group; and

a tube group which is mounted to and penetrates through the fin group and through which a heat exchange medium flows to exchange heat with air for air conditioning, wherein

the fin group includes plate fins each of which is shaped as a flat polygonal plate having corners including a first corner whose internal angle is an acute angle and each of which includes first and second sides and forming the first corner, the plate fins being arranged such that respective plate surfaces of the plate fins face one another across gaps through which the air for air conditioning passes and such that the air for air conditioning flows in a first direction along the first side,

the tube group includes heat transfer tubes each of which extends in the first direction and meanders in such a manner as to cross the first direction,

each of the heat transfer tubes includes fin-mounted portions spaced in a direction along the first side and a direction along the second side, the fin-mounted portions being mounted to and penetrating through the fin group at locations in the fin group, and

the fin-mounted portions mounted to each of the plate fins are arranged such that between first fin-mounted portions adjacent to one another in the first direction, there are second fin-mounted portions adjacent to the first fin-mounted portions in a direction extending along the plate surface of the plate fin and orthogonal to the first direction,

on each of the plate fins, the second fin-mounted portions are offset from the first fin-mounted portions in the direction orthogonal to the first direction and are located between the first fin-mounted portions in the first direction,

the plate fins are arranged such that the first corner of each of the plate fins is located towards upstream in the first direction,

the second side of each of the plate fins is located below the first side thereof in a gravity direction and slopes downward in the gravity direction from upstream to downstream in the first direction,

each of the heat transfer tubes has a cross-section whose outer peripheral shape is elliptical, and

the heat transfer tubes are arranged such that a major axis of the elliptical shape of the cross-section extends in the first direction.

2. The heat exchanger according to claim 1, wherein

the plate fins are quadrilateral, and

in each of the plate fins, an internal angle of a second corner opposite to the first corner is an acute angle.

3. The heat exchanger according to claim 1 or 2, wherein the internal angle of the acute-angled corner is in a range of 20° to 40°.

4. The heat exchanger according to any one of claims 1 to 3, further comprising at least one protrusion on a portion of each of the plate fins, wherein

the portion of each of the plate fins is located between two of the fin-mounted portions that are adjacent to each other in a second direction crossing the first direction, and

the at least one protrusion guides a flow of the air for air conditioning such that the flow of the air moves along outer peripheries of the two fin-mounted portions so as to surround outer peripheral surfaces of the two fin-mounted portions.

5. The heat exchanger according to claim 4, wherein

the at least one protrusion is a bridge lance that is integral with a corresponding one of the plate fins and that is formed by slitting and raising the portion of the corresponding plate fin into the shape of a bridge.

6. The heat exchanger according to claim 4 or 5, wherein

there is a gap between the at least one protrusion and each of the two fin-mounted portions adjacent to each other in the second direction.

7. The heat exchanger according to any one of claims 4 to 6, wherein

the at least one protrusion is a strip-shaped protrusion extending in the second direction.

8. The heat exchanger according to any one of claims 4 to 7, wherein

the at least one protrusion includes protrusions located between the two fin-mounted portions adjacent to each other in the second direction, and

the protrusions are arranged in the first direction.

9. The heat exchanger according to claim 8, wherein

the protrusions have different lengths, and

the farther from a line drawn between the two fin-mounted portions adjacent to each other in the second direction the protrusion is, the longer the protrusion is.

10. The heat exchanger according to claim 8 or 9, wherein

each of the protrusions includes opposite first and second ends,

the first ends of the protrusions are located along the outer periphery of one of the two fin-mounted portions adjacent to each other in the second direction, and

the second ends of the protrusions are located along the outer periphery of the other of the two fin-mounted portions adjacent to each other in the second direction.