CLAIMS

1.

A traveling vehicle system comprising:

a track including a first track extending along a first direction, a second track extending along a second direction different from the first direction, and a connection track adjacent to the first track in the first direction, adjacent to the second track in the second direction, and placed with a gap with respect to each of the first track and the second track; and

a ceiling traveling vehicle traveling along the track,

the track having:

a first guide face provided along the first track; and

a second guide face provided along the second track, and

the ceiling traveling vehicle including:

a traveling wheel rolling on the first track, on the second track, and on the connection track;

a main body placed below the track;

a coupler coupling a wheel shaft of the traveling wheel and the main body to each other and passing through the gap when the traveling wheel rolls on the connection track;

a direction changer switching between a first state in which the traveling wheel rolls on the first track, and a second state in which the traveling wheel rolls on the second track, by turning the coupler about a turning axis with respect to the main body; and

a guider provided in the coupler, moving along the first guide face in the first state, and moving along the second guide face in the second state,

the connection track having:

a first connection guide face provided at a same height and in a same direction as the first guide face and a second connection guide face provided at a same height and in a same direction as the second guide face; and

a continuous face making the first connection guide face and the second connection guide face continuous with each other,

a trajectory when the guider is turned being present inside the ceiling traveling vehicle in a plan view with respect to the turning axis, and

the guider is turned around the connection track.

2. The traveling vehicle system according to claim 1, wherein

the first guide face is a side face of the first track, and

the second guide face is a side face of the second track.

3. The traveling vehicle system according to claim 1 or 2, wherein

the guider is placed at a height between the wheel shaft of the traveling wheel and the main body, and

the first guide face and the second guide face are placed at a height between the wheel shaft of the traveling wheel and the main body.

4. The traveling vehicle system according to any one of claims 1 to 3, wherein the guider is a guide roller capable of rolling when coming into contact with the first guide face or the second guide face.

5. The traveling vehicle system according to any one of claims 1 to 4, wherein the main body is rectangular when viewed in an axial direction of the turning axis of the coupler and has the traveling wheel, the coupler, the direction changer, and the guider at each of four corner parts.

6. The traveling vehicle system according to claim 5, wherein a spacing between two of the guiders arranged in a traveling direction of the ceiling traveling vehicle is different from a spacing between two of the gaps adjacent to each other in the first direction or the second direction