the processor is configured to transform each of values detected by the horizontal displacement detection sensor into the respective axial loads.

6. The load measurement apparatus according to any one of claims 3 to 5, further comprising:

a radial load measurement unit mounted to a truck frame or each of the bearings and configured to measure a radial load applied to each of the bearings,

wherein the processor obtains each of wheel loads applied to the rail from each of the wheels based on the measured radial load.

7. The load measurement apparatus according to ~~any one of~~ claims ~~3 to~~ 6, the railcar further including an axle box housing the bearing and an axle spring mounted between the axle box and a truck frame,

wherein the radial load measurement unit has a vertical displacement detection sensor configured to detect a vertical displacement of the axle spring, and

the processor is configured to transform each of values detected by the vertical displacement detection sensor into the respective wheel loads.

8. A railcar comprising the load measurement apparatus