CLAIMS

1. A fixed structure of load detectors of an elevator, for fixing the load detectors that detects the load of a car, characterized in that, the fixed structure of the load detectors of an elevator comprises:

an I-shaped member, which is fixed across the upper surface of a mechanical beam in a machine room of the elevator, two parallel plates of the I-shaped member being perpendicular to the extension direction of the mechanical beam, and an intermediate plate of the I-shaped member being parallel to the extension direction of the mechanical beam, the two load detectors being respectively fixed to the upper surfaces of the two parallel plates in such a manner that the long sides are parallel to the two parallel plates of the I-shaped member; and

a rope hitch plate for setting elevator rope head rods, the rope hitch plate being fixed to the two load detectors in such a manner that the two load detectors are sandwiched between the two parallel plates of the I-shaped member at both ends and the rope hitch plate.

2. The fixed structure of the load detectors of an elevator as claimed in claim 1, characterized in that,

the length of the rope hitch plate in the direction perpendicular to the extension direction of the mechanical beam is consistent with the length of the two parallel plates of the I-shaped member in the direction perpendicular to the extension direction of the mechanical beam.

3. The fixed structure of the load detectors of an elevator as claimed in claim 1, characterized by further comprising,

anti-tip bolts located at the corners of the rope hitch plate, the anti-tip bolts penetrating through and connecting the rope hitch plate and the parallel plates, wherein the top end of the anti-tip bolt on one side of the rope hitch plate is separated from the upper surface of the rope hitch plate by a gap, and when the

rope hitch plate falls, the said top end is in contact with the upper surface of the rope hitch plate, thereby preventing the rope hitch plate from further falling.

4. The fixed structure of the load detectors of an elevator as claimed in claim 3, characterized in that,

the top end of the anti-tip bolt exposed from above the rope hitch plate is a bolt head, and a gasket is fixed at the bolt head, wherein the gasket is separated from the upper surface of the rope hitch plate by the said gap, and the outer diameter of the gasket is larger than the inner diameter of a mounting hole of the rope hitch plate penetrated by the anti-tip bolt.

5. The fixed structure of the load detectors of an elevator as claimed in claim 3 or 4, characterized in that,

the gap is 10 mm or less.

6. The fixed structure of the load detectors of an elevator as claimed in claim 3 or 4, characterized in that,

a shank of the anti-tip bolt is separated, by a second gap, from the hole wall of the mounting hole of the rope hitch plate penetrated by the anti-tip bolt.

7. The fixed structure of the load detectors of an elevator as claimed in claim 6, characterized in that,

the second gap is in the range of 4mm - 6mm.

8. The fixed structure of the load detectors of an elevator as claimed in claim 3 or 4, characterized in that,

a nut is installed on the shank of the anti-tip bolt exposed from below the I-shaped member, to prevent the anti-tip bolt from escaping from the I-shaped member.

9. The fixed structure of the load detectors of an elevator as claimed in claim 3 or 4, characterized in that,

a second gasket is fixed on the shank of the anti-tip bolt located between the rope hitch plate and the I-shaped member, wherein there is a gap between the second gasket and the lower surface of the rope hitch plate, and the outer diameter of the second gasket is larger than the inner diameter of the mounting hole of the rope hitch plate penetrated by the anti-tip bolt.

10. The fixed structure of the load detectors of an elevator as claimed in claim 9, characterized in that,

the gap between the second gasket and the lower surface of the rope hitch plate is 10 mm or less.

11. The fixed structure of the load detectors of an elevator as claimed in claim 1 or 2, characterized in that,

the rope hitch plate is provided with holes on the front and back sides relative to the extension direction of the mechanical beam respectively, for mounting the elevator rope head rods in a penetrating mode.

12. The fixed structure of the load detectors of an elevator as claimed in claim 1 or 2, characterized by further comprising,

jacking bolts penetrating the rope hitch plate, the rope hitch plate being jacked up by rotating the jacking bolts.

13. The fixed structure of the load detectors of an elevator as claimed in claim 12, characterized in that,

the jacking bolts are located closer to the center of the rope hitch plate than the load detectors.

14. A load detection unit of an elevator, characterized by comprising:

the fixed structure of load detectors of an elevator as claimed in any one of claims 1 to 13; and

two load detectors for detecting the heavy load of the car.