What is claimed is:

1. A suspension mechanism for mounting a motor of a railway train, comprising a connector adapted to be connected to a bogie frame, a safety pin (2) mounted on the connector and arranged horizontally, and a cantilever (3);

wherein one end of the cantilever (3) is adapted to be connected to a motor (5), another end of the cantilever (3) is movably connected to the safety pin (2) and is movable in a length direction of the safety pin (2), and the safety pin (2) is provided with an elastic position-limiting piece (4) for limiting a moving range of the cantilever (3),

wherein the connector comprises two connecting plates (1) arranged in parallel, a front side edge of each of the two connecting plate (1) is adapted to be connected to the bogie frame, two opposite positioning holes are provided on the two connecting plates (1), respectively, and two ends of the safety pin (2) are mounted in the two positioning holes, respectively, and

characterized in that ~~the~~each connecting plate (1) is vertically arranged and P-shaped, a right angle portion at a side, facing the motor (5), of ~~the~~each connecting plate (1) is smoothly transitioned to form a cambered edge, and the safety pin (2) is arranged at a head portion, having a large width, of the connecting plate (1).

~~2. The suspension mechanism for mounting the motor according to claim 1, wherein the connector comprises two connecting plates (1) arranged in parallel, a front side edge of each of the two connecting plate (1) is connected to the bogie frame, two opposite positioning holes are provided on the two connecting plates (1), respectively, and two ends of the safety pin (2) are mounted in the two positioning holes, respectively.~~

~~3. The suspension mechanism for mounting the motor according to claim 2, wherein the connecting plate (1) is vertically arranged and P-shaped, a right angle portion at a side, facing the motor (5), of the connecting plate (1) is smoothly transitioned to form a cambered edge, and the safety pin (2) is arranged at a head portion, having a large width, of the connecting plate (1).~~

~~4~~2. The suspension mechanism for mounting the motor according to claim ~~3~~1, wherein an end, close to the safety pin (2), of the cantilever (3) is provided with a connecting hole horizontally penetrating an end portion of the cantilever (3), a penetration direction of the connecting hole is perpendicular to an extension direction of the cantilever (3), the connecting hole is sleeved on the safety pin (2), and in clearance fit with the safety pin (2).

~~5~~3. The suspension mechanism for mounting the motor according to claim ~~4~~2, wherein the cantilever (3) is sleeved on the safety pin (2); in a radial direction perpendicular to the length direction of the safety pin (2), the cantilever (3) comprises an inner ring and an outer ring, the inner ring is in clearance fit with the safety pin (2) through the connecting hole, and the outer ring is connected to the motor (5).

~~6~~4. The suspension mechanism for mounting the motor according to any one of claims ~~2~~ 1 to ~~5~~3, comprising two elastic position-limiting pieces (4) sleeved on two ends of the safety pin (2), respectively, end portions of the two elastic position-limiting pieces (4) are fixedly connected to inner side plate surfaces of the two connecting plates (1), respectively, and the end portion of the cantilever (3) is located between the two elastic position-limiting pieces (4) and is spaced apart from the two elastic position-limiting pieces (4).

~~7~~5. The suspension mechanism for mounting the motor according to claim ~~6~~4, wherein each of the two elastic position-limiting pieces (4) comprises a mounting seat fixedly connected to the inner side plate surface of the connecting plate and a spring arranged in the mounting seat and sleeved on the safety pin (2), and a bottom surface of the mounting seat is provided with a through hole for the safety pin (2) to penetrate.

~~8~~6. The suspension mechanism for mounting the motor according to claim ~~7~~5, wherein an end away from the mounting seat of the spring is provided with an end cover, and the end cover is provided with a through hole for the safety pin (2) to penetrate.

~~9~~7. The suspension mechanism for mounting the motor according to claim ~~8~~6, wherein the mounting seat is connected to the connecting plate (1) by bolts.

~~10~~8. The suspension mechanism for mounting the motor according to claim ~~9~~7, wherein the end cover is a rubber cover.

~~11~~9. A railway train, comprising a bogie frame and a suspension mechanism for mounting a motor connected to the bogie frame, wherein the suspension mechanism is the suspension mechanism for mounting the motor according to any one of claims 1 to ~~10~~8.