CLAIMS

1.An elevator, comprising:

a car (1), and a car frame (2) with a lower beam (20) on which the car (1) is placed, and

a vibration damping device (3), which absorbs vibration transmitted to the car (1) and is arranged between a bottom (10) of the car (1) and the lower beam (20) of the car frame (2),

wherein the vibration damping device (3) includes two layers of rubber monomers (30a, 30b) overlapped one above the other,

in the vibration damping device, for each layer of the rubber monomer (30a, 30b), an upper metal plate (31a, 33b) and a lower metal plate (32a, 4b) are provided in a manner of sandwiching this rubber monomer,

the upper metal plate (31a) of the upper layer rubber monomer (30a) is joined to the bottom (10) of the car (1) in a manner of overlapping one above the other,

the lower metal plate (32a) of the upper layer rubber monomer (30a) is joined to the upper metal plate (33b) of the lower layer rubber monomer (30b) in a manner of overlapping one above the other, and

the lower metal plate (34b) of the lower layer rubber monomer (30b) is joined to the lower beam (20) of the car frame (2) in a manner of overlapping one above the other,

the upper metal plate (31a) of the upper layer rubber monomer (30a) has a first protruding part (311a) extending outward more than this rubber monomer (30a),

the lower metal plate (32a) of the upper layer rubber monomer (30a) has a second protruding part (321a) extending outward more than the first protruding part (311a),

the lower metal plate (34b) of the lower layer rubber monomer (30b) has a third protruding part (341b) extending outward more than this rubber monomer (30b),

the upper metal plate (33b) of the lower layer rubber monomer (30b) has a fourth protruding part (331b) extending outward more than the third protruding part (341b), and

the joining is to fasten the first protruding part (311a) and the bottom (10) of the car (1), fasten the second protruding part (321a) and the fourth protruding part (331b),

and fasten the third protruding part (341b) and the lower beam (20) of the car frame (2) by means of bolts, respectively.

2. The elevator according to claim 1, wherein,

there are two lower beams (20) of the car frame (2) arranged in parallel, and the vibration damping device (3) is arranged separately for each of the lower beams (20).

3. The elevator according to claim 1, wherein,

the elastic coefficient of the rubber monomer ranges from 100 to 200 kg/mm, and

the two-layer rubber monomers as an entirety have a coefficient of elasticity ranging from 50 to 100 kg/mm.