

An elevator without counterweight, in which elevator the elevator car is guided by guide rails and suspended by means of diverting pulleys on hoisting ropes so that the elevator has rope portions of the hoisting ropes going upwards and downwards from the elevator car and a number of diverting pulleys in the upper and lower parts of the elevator shaft. The elevator has a drive machine placed i n the elevator shaft and provided with a traction sheave. The elevator has a compensating device acting on the hoisting ropes for equalizing and/or compensating the rope tension and/or rope elongation. Diverting pulleys are mounted on the elevaor car near two side walls, and the rope portions from the traction sheave, from the diverting pulleys in the lower part of the elevator shaft and from the diverting pulleys in the upper part of the elevator shaft to the diverting pulleys mounted on the elevator car extend in a substantially vertical direction, and the rope portions connecting the rope portions from one side of the elevator car to its other side are rope portions between the diverting pulleys mounted near different side walls on the elevaor car.