

Lower limb rehabilitation device consists of a support, a guide, a movable carriage, and supports for the thigh, lower leg, and foot. The guide, the lower longer element, and the vertical shorter element form a triangular bracket, the guide consists of two parallel tubes, and within the triangular bracket, the length ratio of the lower longer element to the vertical shorter element is 2:1. The triangular bracket is designed to move vertically along a support consisting of upper and lower plates and two parallel vertical elements, which have holes for locking screws that secure the triangular bracket to the support. Device is equipped with an electrical pulse generator attached primarily to the upper plate, while the lower plate is secured to the floor. The triangular bracket is designed to rotate on the upper locking screw and lower into a position where the guide is inclined at an angle of 65–75 degrees relative to the floor, with the lower element of the triangular bracket sliding between the parallel support elements, and a carriage is slid onto the guide, which contains two short tubes, on which, on the left and right sides, two plates with holes in the center are secured, in which a carriage bushing is secured with an axle inserted into it, which, on at least one side, has a hexagonal shape outside the carriage bushing and whose diameter does not exceed the diameter of the bushing. The axle is equipped with two circular brake elements that fit together with their grooved surfaces, behind the second brake element are a spring, a locking nut, and a removable telescopic lever. The first braking element is fixed in place on the bushing, while the second element is mounted via its hexagonal hole onto the hexagonal extension of the axle and is designed to rotate with it, and is simultaneously designed to move along the shaft and press against the first braking element with its grooved surface under the pressure of a spring mounted on the shaft between the second braking element and the locking nut, with the ability to adjust the spring's pressure on the second braking element, and a fixed telescopic lever is also secured on the shaft on the side opposite the removable telescopic lever. Both levers are designed to perform rotational movements in both forward and reverse directions, and the removable telescopic lever is designed to be repositioned from a counter-rotating position to a position parallel to the non-removable telescopic lever. At the ends of both levers are two pedals with straps to secure the feet to the pedals, and the length of each telescopic lever can be adjusted using symmetrically positioned locking screws to change the amplitude of the pedal rotations, and the carriage has a locking screw to secure it on the guide in positions closest to, intermediate, or farthest from the user, wherein a vibration device is mounted on the upper ends of the movable carriage's plates, on which a spring-loaded support for placing the foot, lower leg, and thigh, which is equipped with two removable soft solution-absorbing electrodes connected by flexible wires to an electrical pulse generator.