

Walking Robot

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The invention relates to a walking robot with central support and two synchronously moving legs, which finds application in the study of hard-to-reach terrains as a means of transportation in undefined environments. The walking robot consists of a central support (1) to which a housing (2) with a vertical axis of rotation is mounted and a horizontal shaft (3a) is mounted to it, to which two symmetrical parallel arms (3b and 3c), in the free ends of which two feet are housed (4 and 4a) the axis of the rotation of these feet (4 and 4a) being mutually coaxial and parallel to the axis of the shaft (3a). Two rollers (5 and 5a) are mounted on the horizontal shaft (3a) and are fixed to the housing (2) and by means of straps or threads or chains (6 and 6a) respectively connected to a second pair of rollers (7 and 7a), which are supported in the axis of rotation between the arms (3b, 3c) and the feet (4, 4a), the second pair of rollers (7a and 7a) being fixed to the feet (4, 4a). All rollers have the same diameters. The motor (8) is immovably attached to the housing (2) and its rotor is connected by means of a third roller (9), a chain or belt or a thread (10) to the central roller (11) fixed to the central support. A second rotary engine (12) is also fixed to the housing (2) and its rotor is connected to the horizontal shaft (3a) by means of a fourth roller (13) chain or belt (14) with a fifth roller (15). A third rotary motor (17) is fixed to the housing (2) and its rotor is connected by means of a seventh roller (18), belt or chain (19) with an eighth roller (20) fixedly connected to a second central support (16).

