

Title (en)

Exercise and rehabilitation apparatus.

Title (de)

Gymnastiks- und Bewegungsvorrichtung.

Title (fr)

Appareil de gymnastique ou de rééducation musculaire.

Publication

EP 0148671 A1 19850717 (FR)

Application

EP 84402520 A 19841206

Priority

FR 8319877 A 19840105

Abstract (en)

1. Exercise or rehabilitation apparatus, in which an antagonistic effort is applied, by means of a supple wire, at any point of the organism of a patient, particularly on one of his/her limbs, comprising a guide rail (1) on which is slidably mounted a wire dispenser (2) comprising at least one grooved wheel mounted to rotate, whose axis is perpendicular to the longitudinal axis of the guide rail, the guide rail (1) being constituted by a hollow section presenting, on its lateral surface, a longitudinal slot through which the wire (3) emerges, means (2a) for immobilizing this wire dispenser (2) in any position along the rail (1), so as to make it possible to choose as desired the point (A) of application of the force of traction (F) exerted by the wire (3), and means (5) for exerting an adjustable traction on the wire (3) so as to be able to control as desired the force applied to the patient by the wire (3) on leaving the wire dispenser (2), characterized in that the wire dispenser (2) comprises, on the one hand, a pair of grooved wheels (6, 7) tangential to each other, mounted to rotate on the wire dispenser (2), inside the guide rail (1), with the axes of these two wheels perpendicular to the longitudinal axis of the guide rail (1), and, on the other hand, two tangential rollers (4, 4a) mounted to rotate, adjacent the guide slot and outside the guide rail (1) and whose axes are parallel to the longitudinal axis of the guide rail (1), the wire (3) coming from the traction means being deviated transversely towards the outside by passing between the two grooved wheels (6, 7), then through the two rollers (4, 4a), the adjustable traction means being mounted on an extreme part of the guide rail.

Abstract (fr)

Un appareil de gymnastique ou de rééducation musculaire, permet d'exercer un effort antagoniste au moyen d'un fil souple, en un point quelconque de l'organisme d'un patient notamment sur l'un de ses membres. Pour permettre de modifier très aisément le point d'application de la force et de contrôler électroniquement la tension du fil, l'appareil comporte un rail de guidage (1) sur lequel est monté à coulissement un distributeur de fil (2), des moyens (2a) pour immobiliser ce distributeur de fil (2) dans une position quelconque le long du rail (1), de manière à permettre de choisir à volonté le point (A) d'application de la force de traction (F) exercée par le fil (3), et des moyens (5) permettant d'exercer une traction réglable sur le fil (3) de manière à pouvoir contrôler à volonté la force appliquée au patient par le fil (3) à sa sortie du distributeur de fil (2).

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