

Title (en)

Mechanism for forming a shed, weaving loom equipped with such a mechanism and method of selecting the mobile hooks of such a mechanism

Title (de)

Mechanismus zur Bildung des Webfachs, mit einem solchen Mechanismus ausgestattete Webmaschine und Verfahren zur Auswahl der beweglichen Haken in einem solchen Mechanismus

Title (fr)

Mécanisme de formation de la foule, métier à tisser équipé d'un tel mécanisme et procédé de sélection des crochets mobiles d'un tel mécanisme

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Application

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Priority

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Abstract (en)

The mechanism for forming a shed (7) on a jacquard weaving loom useful in carpet and velvet, comprises movable hooks (13) between a position of upper and lower dead points. The hooks are moved by a knife (14), and are immobilized by a selector device. The hooks comprise a body (20) equipped by a nozzle (202) to give a support on the corresponding knife, and a flexible harness fixed on the body with possibilities of relative clearance and to interact with a retained lever so that a selection lever form a rail for sliding a portion of an elastic harness. The mechanism for forming a shed (7) on a jacquard weaving loom useful in carpet and velvet, comprises movable hooks (13) between a position of upper and lower dead points. The hooks are moved by a knife (14), and are immobilized by a selector device. The hooks comprise a body (20) equipped by a nozzle (202) to give a support on the corresponding knife, and a flexible harness fixed on the body with possibilities of relative clearance and to interact with a retained lever so that a selection lever form a rail for sliding a portion of an elastic harness when the hook reaches a vicinity of upper dead point in which the retained lever belongs to the selector device. A component (FA+ FB + FC) is parallel to a displacement direction of the movable hooks of the resultant efforts (RA, RB, RC) applied on the flexible harness when the harness comes in contact with the rail at the vicinity of upper dead point of its trajectory and at starting point of its descending displacement. The selection lever is directed downwards. The rail extends according to its average direction which makes an angle of 8-15[deg] with respect to the displacement direction of the hook, and is equipped with undulations. The rail is in a tangential curved form, which makes an angles of 8-12[deg] in relation to the displacement direction of the hook. The average direction of lower and upper rails form a first and a second angle with the displacement direction of the hook respectively. The first angle has a value of 5-12[deg], and the second angle has a value of 7-15[deg]. Independent claims are included for: (1) a weaving loom; and (2) a process of selecting a movable hooks for forming a shed on a jacquard loom.

Abstract (fr)

Dans ce mécanisme (7) des crochets mobiles comprennent un corps (20), pourvu d'un bec (202) destiné à venir en appui sur le couteau correspondant (14), et une lame flexible (21) fixée sur le corps avec possibilité de débattement relatif et destinée à interagir avec un levier de retenue (16) appartenant au dispositif de sélection. Le levier de sélection (16) forme une rampe (313) de glissement d'une portion (214) de la lame élastique (21) lorsque le crochet (13) est déplacé au voisinage de sa position de point mort haut. La rampe de glissement (313) du levier de sélection (16) est conformée de telle sorte que la composante (F A + F B + F C) parallèle à la direction (X-X') de déplacement du crochet (13) de la résultante des efforts (R A , R B , R C) s'appliquant sur la lame flexible (21) lorsque celle-ci est en contact avec la rampe (313), au voisinage du point mort haut de sa trajectoire et au début de son mouvement de descente (F 14), est dirigée vers le bas.

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- [DA] EP 1413657 A1 20040428 - STAUBLI LYON [FR]
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