

952,533.

Figure 1 consists of five sub-diagrams labeled (a) through (e), each showing a different mechanical assembly. (a) shows a shaft with a pulley and a belt. (b) shows a shaft with a pulley and a belt. (c) shows a shaft with a pulley and a belt. (d) shows a shaft with a pulley and a belt. (e) shows a shaft with a pulley and a belt.

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PICKER-STRAP FOR LOOMS.

952,533.

Specification of Letters Patent. Patented Mar. 22, 1910.

Application filed May 22, 1909. Serial No. 497,636.

To all whom it may concern:

Be it known that I, NAPOLEON LEMAIRE, of Taunton, in the county of Bristol and Commonwealth of Massachusetts, have invented an Improved Picker-Strap for Looms, of which the following is a specification.

The objects attained by my invention are (1) the increased facility of attaching and detaching the cushion described in my Patent #648,150, of Apr. 24, 1900, (2) lessening the liability of said cushion being displaced by loosening of the bolt at its lower end, (3) eliminating all possibility of wrinkling of said cushion, (4) increased stability of the cushion-holder, (5) increased ease and elasticity of operation.

My invention consists in the novel construction and arrangement of parts, as set forth in the following description, reference being had to the drawings appended hereto, in which similar characters refer to corresponding parts in all the figures.

Figure 1 is a side elevation of one form of my improved picker-strap, and Fig. 2 is a top plan view of the same. Fig. 3 is an enlarged side elevation of the cushion-holder J in Fig. 1 and Fig. 4 is an end elevation of the same. Fig. 5 is a side elevation of another form of my invention and Fig. 6 is a top plan view of the same. Fig. 7 is an end elevation of the cushion carrier in Figs. 5 and 6.

In Fig. 1, A¹ and A² represent two strips or wires, (preferably steel, although wood or other suitable substance may be used, alone or in combination,) upon one end of which is secured a hub B, lined with a bushing of leather, pulp or other suitable material adapted to deaden impact. Through this hub extends an axle D, which may be fastened in any convenient way to the picker-shaft of a loom. The purpose of the bushing C is to deaden the impact of members B and D upon each other, and thus increase the elasticity and smoothness of running and decrease noise. In Figs. 5 and 6, a similar object is attained by bolting a cylindrical block of leather, or other suitable material represented by E between the ends of strips A⁴ and A⁵ by bolt F, block E acting as an axle for eye G on arm H, which is fastened to the picker-shaft of the loom. At the opposite ends of strips A¹ and A² is a cushion-holder J, preferably made in the form hereinafter described, and may either be cast in

one piece or stamped from sheet metal and riveted together.

In Fig. 3, being an enlarged form of J in Fig. 1, 1 is the body of the cushion-holder, having a shoulder 2 integral therewith, projecting from the concave side of 1 and having its top and bottom flat. A screw-bolt 3 passes vertically through this shoulder, so placed that its square head 4 has one side resting in parallelism against the wall of 1, so that head 4 cannot revolve. From the top of 1 project laterally lugs 5, notched underneath at 6 and from the bottom of 1 are corresponding lugs 7 similarly notched at 8, the space between lugs 5 and 7 being just sufficient to allow the passage there-through of strips A¹ and A². From one of lugs 7 an arm 9 extends downward being bent at right angles at 10 and having a horizontal pin 11.

Between the outer end of pin 11 and the lug 7 nearest it is a space sufficient to allow the passage of a strip of leather, (see K, Fig. 1) which forms the cushion of the picker-strap. By means of this construction, I have greatly increased the facility with which the cushion-strips K can be attached or detached, as all that need be done now when attaching the cushion is to loop a strip of leather and slide it around pin 11, and then fasten the ends of it to the picker-stick L. In my present invention, also, there is no bolt and nut securing cushion K to holder J to jar loose and thus let cushion K become displaced. Still another advantage accruing from forming cushion K by passing a single strap around a pin is lessening the liability of wrinkling the cushion. In the course of long service, the layer of cushion next the picker-stick is rolled out so that it becomes longer than the layers behind it, and since, in my former invention, both ends of the cushion were fixed by bolts or screws, the layer nearest the picker-stick would wrinkle and buckle up, but by my improved method this uneven lengthening is provided for, as the strip of leather K is free to move on pin 11. The lower surface of 1 is cut obliquely, as at 12, to allow cushion K to lie snugly against the convex surface of holder J. A flat clamp 13, with ends bent down to embrace the top of strips A¹ and A² is pierced by bolt 3 and is clamped onto strips A¹ and A² by tightening nut 14, thus raising shoulder 2 and so tilting cushion-

holder J that lugs 7 bite into the under side and lugs 5 into the upper side of strips A¹ and A². All danger of the carrier J slipping laterally or rotatably on strips A¹ and A² is thus obviated. The cushion K, of leather or other suitable material, is looped around pin 11, in the manner shown in Fig. 1, so that two thicknesses thereof pass upward between the convex side of holder J and picker-stick L, the ends of K being fastened to L by a screw M or similar means.

A different form of cushion-holder, embodying the same advantages, is shown in Fig. 5, in which strips A¹ and A² are slotted, as at N and a cushion-carrier P is slidably mounted therein, thus affording opportunity of adjusting the picker-stick at will. Cushion-holder P, see Fig. 7, consists of a block of leather, wood, or other suitable material, 15, inserted between A¹ and A², through which passes a bolt 16, having on one end a nut 17 and on the other a broad head 18. Between head 18 and strip A¹ a plate 19 is securely clamped by tightening nut 17. Plate 19 has at its lower end a horizontal pin 20 fixed thereto, similar to and for the same purpose as pin 11 in Figs. 3 and 4. Plate 19 has a horizontal extension or lug 21 at its top, which extends over and snugly fits the upper surface of strip A¹, and a similar lug 22 engages the bottom of A¹ (see Fig. 7), so that plate 19 is held fixed at the proper angle to strip A¹, and at the same time kept from sliding in slots N by tightening nut 17. This form of carrier is designed to afford additional cushioning where the picker-stick strikes the picker-strap, thus insuring great ease and elasticity of operation.

An alternative method of regulating the length of the picker-strap is shown in Figs. 5 and 6. Between the ends of A¹ and A² is inserted one end of a flat plate A³, in which there is a longitudinal slot S having scalloped edges T, and its other end is fastened by bolt R between strips A¹ and A², which form a continuation of the picker-strap. Bolt W passes through holes in the ends of strips A¹ and A² and through slot S, enmeshing in the scallops T, and thus when nut Y is tightened, all possibility of slipping is eliminated.

Having described my invention, what I claim as new and desire to secure by Letters Patent is,—

1. In combination, a picker strap composed of strips comprising a frame, a carrier mounted thereon, a pin having one end free attached to said carrier and lying below and transversely to said strips, a picker stick, and a strip of material looped around said pin, passing double between the carrier and the picker stick and fastened to said picker stick, as and for the purpose described.

2. In a picker strap, the combination of strips comprising a frame, a cushion holder, having a shoulder integral therewith, slidably mounted on said frame by means of lugs, and a clamp having for members said shoulder, a plate resting upon said frame, and a bolt and nut connecting said shoulder and plate, as and for the purpose described.

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