No. 648,150. Patented Apr. 24, 1900.

# N. LEMAIRE.

## PICKER STRAP FOR LOOMS.

(Application filed Jan. 23, 1899.)

(No Model.)

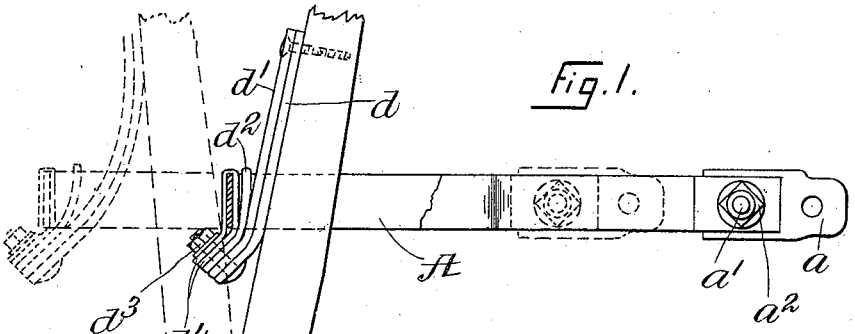


Fig. 1.

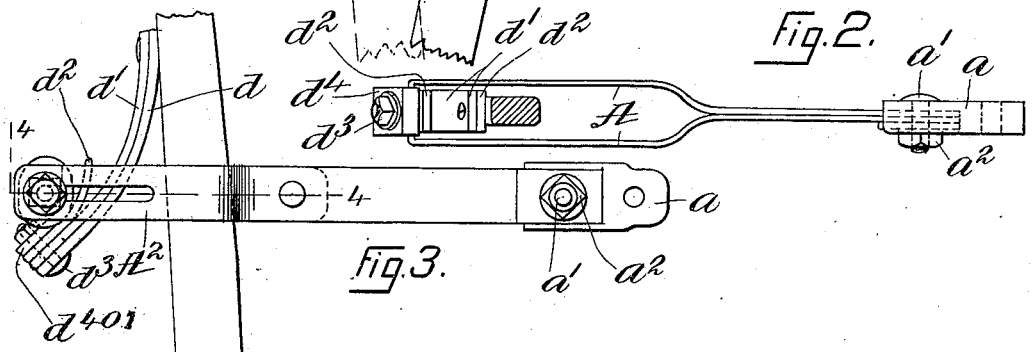


Fig. 2.

Fig. 3.

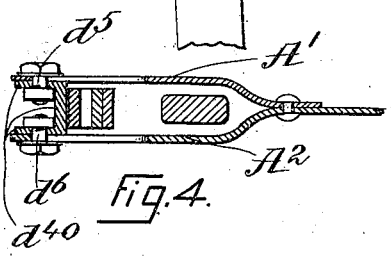


Fig. 4.

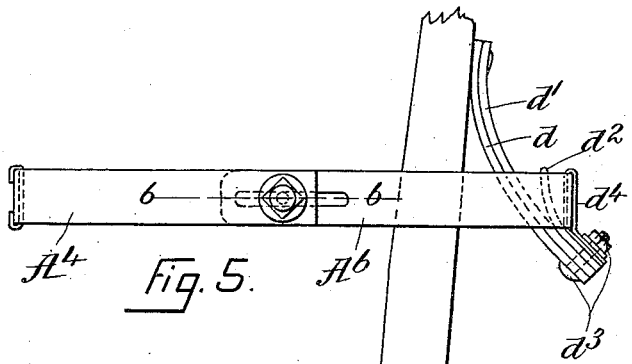


Fig. 5.

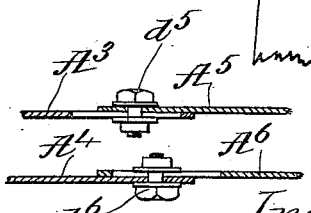


Fig. 6.

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# UNITED STATES PATENT OFFICE.

NAPOLEON LEMAIRE, OF TAUNTON, MASSACHUSETTS.

## PICKER-STRAP FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 648,150, dated April 24, 1900.

Application filed January 23, 1899. Serial No. 703,076. (No model.)

*To all whom it may concern:*

Be it known that I, NAPOLEON LEMAIRE, of Taunton, in the county of Bristol and State of Massachusetts, have invented an Improved Picker-Strap for Looms, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation of one style of my improved picker-strap. Fig. 2 is a plan of Fig. 1. Fig. 3 is an elevation, and Fig. 4 a section on line 4 4 of Fig. 3, of the cushion end of another style. Fig. 5 is an elevation, and Fig. 6 a section on line 6 6 of Fig. 5, of a third style.

In my Patent No. 581,482, dated April 27, 1897, I have described a picker-strap of my invention composed mainly of strips of metal to take the strain and of cushions through which the strain is transmitted; and my present invention relates to picker-straps of that class; and it consists, first, in a new plan of cushioning, and, secondly, in a new plan of providing for adjustment, as I will now describe more fully with reference to the drawings.

In Fig. 1 the strip A of metal is secured to the casting $a$ by the bolt $a'$ and nut $a^2$, and as casting $a$ engages a stud, which is adjustable on the arm of a rock-shaft in the loom, commonly called the "picker-shaft," this style of my picker-strap does not require to be adjustable and embodies the first feature only of my present invention—namely, the cushion formed of strips of leather or similar material—for although leather is better than any other material which I have tried, yet "rubber belting," so called, answers well, as does also a considerable number of strips of thick duck, which not only serve as a cushion, but are also connected to the picker-strap and the picker-stick B. This cushion, as shown in Figs. 1 and 2, is composed of three strips $d$ $d'$ $d^3$, and I prefer that two of them, $d$ and $d'$, should be longer than the third, $d^3$, as shown; but the essential matter is that the strips forming the cushion should be clamped together at one end only, so that when the loom is in operation the strips composing the cushion are moved relatively to one another, except where they are clamped together by the bolt and nut $d^3$, by which they are held to the holder $d^4$, which connects the cushion with metal strip A. This relative motion of the strips forming the cushion keeps life in the cushion and makes it much more desirable and effective, and a cushion on this principle is the main feature of my present invention. Fig. 1 shows the cushion compressed.

In many kinds of looms it is necessary that the length of the picker-strap shall be adjustable, and in Figs. 3 and 4 I have shown the cushion-holder $d^{40}$ as adjustable by means of two slots in metal strips A' $A^2$ and a pair of bolts and nuts $d^5$ $d^6$, one clamping one plate of holder $d^{40}$ to one strip and the other the other plate of holder $d^{40}$ to the other strip $A^2$. This contrivance not only enables me to make the holder $d^{40}$ much lighter, but it also stands very much better, for I have discovered that owing to the sudden and rapidly-repeated strains to which the picker-strap is subjected it is practically very difficult, if not impossible, to preserve the adjustment if a single bolt and nut be used, the bolt extending through both slots. This plan of clamping, whereby each slotted strip is clamped independently of the other, is a matter of prime importance in the adjustment of picker-straps made mainly of metal and is shown in Figs. 5 and 6 as connecting strips $A^3$ $A^4$ with strips $A^5$ $A^6$ in that style of my picker-strap in which the adjustment is made between two strips and two other strips instead of between the two plates of the holder and two strips; but the principle is the same in both—that is, the cushion-holder $d^{40}$ of Figs. 3 and 4 is bifurcated to form two plates, and these two plates are connected by a cross-piece, the two plates and the cross-piece of holder $d^{40}$ forming together the bifurcated end piece of the picker-strap, while in Figs. 5 and 6 the forks $A^5$ $A^6$ are connected to form a staple, the body of which extends through holder $d^4$, this staple and the holder forming together the bifurcated end piece of the picker-strap.

In Figs. 3 and 4 the cushion-holder $d^{40}$ is formed with a downwardly-extending tongue $d^{401}$, which is integral with the cross-piece of cushion-holder $d^{40}$, to which tongue the resilient straps are connected at a point beneath the cross-piece proper which connects the two plates.

What I claim as my invention is—

1. In combination a picker-strap; a picker-

stick; and a cushion interposed between the end cross-piece of the picker-strap and the picker-stick adapted to hold the picker-strap suspended on the picker-stick, said cushion comprising one or more strips of tough resilient sheet material fastened at its lower end to the cross-piece of the picker-strap at a point below said cross-piece and connected at its other end to the picker-stick above the picker-strap all substantially as and for the purpose specified.

2. A picker-strap comprising a frame made up of two slotted side strips of sheet metal and a bifurcated end piece connected by independent bolts and nuts, one bolt and nut clamping one side strip of sheet material to one fork of the end piece, and the other bolt and nut clamping the other side strip of sheet metal to the other fork of the end piece, substantially as described.

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