May 2, 1967 H. NEUMAIER 3,316,941

HARNESS STRAP FOR LOOMS

Filed May 9, 1963

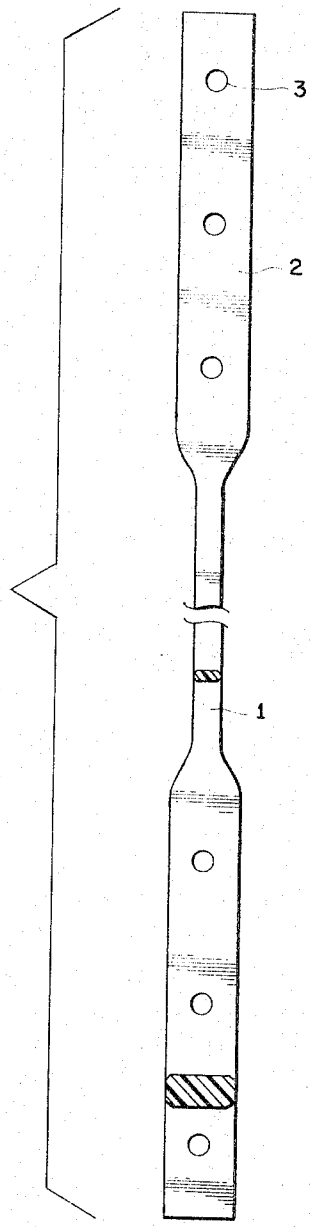


FIG. 1

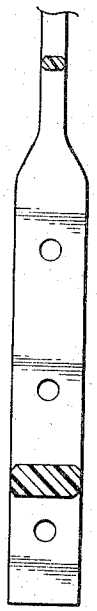


FIG. 2

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HARNESS STRAP FOR LOOMS

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The present invention relates to harness straps for looms. Harness straps for looms have heretofore been produced in most instances of leather. Such straps, however, have the drawback that when working on a loom over a period of time such straps lengthen and cause disorders for which reason the straps have to be readjusted. Furthermore, the life of such harness straps is frequently affected by the tearing of the holes with which such harness straps are provided in order to be able to suspend the same.

It is, therefore, an object of the present invention to provide a harness strap for looms which will overcome the above mentioned drawbacks.

It is another object of this invention to provide a harness strap for looms which will obviate the above mentioned undesired lengthening and will also obviate the tearing of the holes.

These and other objects and advantages of the invention will appear more clearly from the following specification in connection with the accompanying drawing, in which:

FIGURE 1 shows a plan view of a harness strap according to the invention.

FIGURE 2 shows a fragmentary view of a modified form of the invention.

The above mentioned drawbacks have been overcome by the harness strap according to the present invention which is characterized primarily in that the central portion intermediate of the harness strap which passes over rollers consists of stretched synthetic material, whereas the outer portions of the strap consist of non-stretched synthetic material. As synthetic material may be used any stretchable material for instance polyethylene or polyamide. High molecular low pressure polyethylene with a molecular weight of 1 million has proved particularly advantageous for said central or intermediate section.

With a thus designed harness strap, the stretched central portion has an elastic elongation or stretch only but has no permanent elongation. The outer portions may, in view of the fact that by the design according to the present invention, material is saved, be dimensioned considerably stronger so that they will not tear at the holes. Due to the stretching operation, the thin and flexible central portion will have the same strength as the considerably wider outer portions. Harness straps according to the present invention have a considerably longer life than heretofore known harness straps. Moreover, a harness strap according to the present invention can very economically be produced inasmuch as it requires less material and less labor than a harness strap which is made of the same material by a chip-removing operation.

The harness strap according to the invention as shown in the drawing comprises a stretched central portion 1 and outer portions 2 which are provided, in a manner known per se with holes 3 for purpose of suspending the strap and are non-stretched. As shown in the drawing, the harness strap has a rectangular cross section with rounded edges, and thus forms a one-piece harness trap.

It is, of course, to be understood that the present invention is, by no means, limited to the particular construction shown in the drawing but also comprises any modifications within the scope of the appended claims.

What I claim is:

1. A one-piece harness strap for looms, which comprises: two outer sections of non-stretched synthetic material and an intermediate section interconnecting said two outer sections and integral therewith, said intermediate section consisting of synthetic material stretched within its elastic limit only, said outer and intermediate sections being of the same synthetic material and forming a single integral unitary entity with each other.

2. A harness strap for looms according to claim 1, in which said intermediate section consists of high molecular low pressure polyethylene with a molecular weight of 1 million.

3. A harness strap for looms according to claim 1, which has a rectangular cross section with chamfered edges.

4. A harness strap for looms according to claim 1, which has a rectangular cross section with rounded edges.

5. A one-piece harness strap according to claim 1, in which said intermediate section has been stretched to such an extent that it has an elastic elongation only.

References Cited by the Examiner

UNITED STATES PATENTS

271,629	2/1883	Haley	156—229
1,537,881	5/1925	Reynolds et al.	139—88
1,672,505	6/1928	Stocker	139—88
1,678,544	7/1928	Whitaker	139—88
2,052,285	8/1936	De Rabot	156—229
2,475,588	7/1949	Bierman.	
2,700,398	1/1955	Green	139—88
3,019,486	2/1962	Stinson	264—291
3,022,541	2/1962	Passley et al.	264—291
3,067,484	12/1962	Rasero et al.	139—161

FOREIGN PATENTS

567,192	10/1958	Belgium.
837,594	6/1960	Great Britain.
881,756	11/1961	Great Britain.

OTHER REFERENCES

Textile Industries, volume 125, No. 12, November 1961, page 59.

Textile Industries, volume 125, No. 12, November 1961, page 172.

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