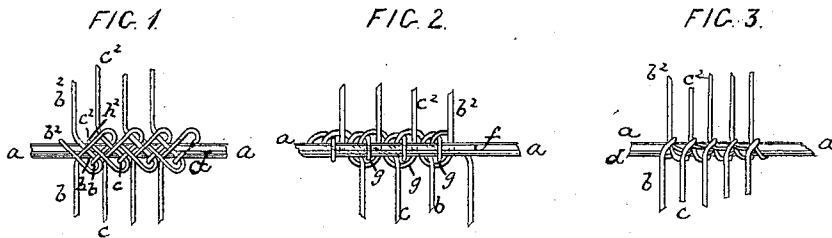


J. SLADDIN.
Loom-Harness.

No. 148,253.

Patented March 3, 1874.



WITNESSES:

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JOSEPH SLADDIN, OF LAWRENCE, MASSACHUSETTS.

IMPROVEMENT IN LOOM-HARNESS.

Specification forming part of Letters Patent No. **148,253**, dated March 3, 1874; application filed November 23, 1873.

To all whom it may concern:

Be it known that I, JOSEPH SLADDIN, of Lawrence, in the county of Essex and State of Massachusetts, have invented an Improved Loom-Harness, of which the following is a specification:

This invention relates to loom-harness made of continuous lengths of yarn from which the heddle-eyes are made, and then the yarn secured to the rig-bands, and more particularly it relates to harness formed as to its heddle-eyes, and the disposition of the heddle-yarns with regard thereto and the rig-bands, under an arrangement of mechanism substantially such as is described in the two reissued Letters Patent, (Divisions A and B,) dated August 8, 1871, numbers 4,509 and 4,510, and as is described in the application, bearing even date herewith, for Letters Patent of the United States on improvements in machines for making loom-harness.

The invention consists of a loom-harness which has its heddle-eyes made from continuous lengths of yarn, and has its heddle-yarns secured to the rig-bands by a looping of the heddle-yarns about the rig-bands, and an interlacement of such loops, the one with another, all as hereinafter described.

In the accompanying plate of drawings my improved loom-harness is illustrated by views showing the knitting or fastening of the harness-yarns to one rig-band, they being fastened to the other rig-band in a precisely similar manner, and between the two rig-bands carrying the heddle-eyes, as in all loom-harness made from continuous lengths of yarns.

In the several figures, the harness-yarns are represented as spread or flattened out at the one rig-band, and in all the figures but Figure 3, the interlacement of the heddle-yarns has been loosened to more fully illustrate the same.

a in the drawings represents a rig-band made of cord, as usual; *b b'*, the two lengths of yarn leading from a heddle to one rig-band, and *c c'* the two lengths of yarns leading from the next eye to the same rig-band. These lengths of yarns are continuous with each other, but at the rig-bands they are interlaced or interlooped with each other and with the rig-band, as shown. The harness-yarns are interlooped and interlaced with each other at the back *d* of the rig-band, (see Figs. 1 and 3,) and with the rig-band at its front side *f*, as shown at *g*, Fig. 2. The interlooping of the two lengths of the heddle-yarns at the back side of the rig-band is made by drawing the heddle-yarns, in loop form, under the rig-band, and there holding the loops on the needle-shank at the rear side of the rig-band, and then seizing and drawing the same lengths of heddle-yarn over the upper side of the rig-band, and through the loop of the yarn held, as stated, at the back side of the rig-band. The heddle-yarns thus drawn through the loop, as above stated, are then held in a loop form at the back side of the rig-band, and through this loop the two lengths *c c'* of the heddle-yarn, leading to the next heddle-eye, are then drawn, and so on for each succeeding two lengths of heddle-yarns. The interlacing of the harness-yarns with the rig-bands, as shown at *g*, is once for the two lengths of heddle-yarns leading to a heddle-eye, and this interlacement is produced by drawing the two lengths of the heddle-yarn over the rig-band, after they have been drawn under the rig-band, and interlooped at the back side of the rig-band, as above described. These lines *g*, in Fig. 1, extend from point *h* to point *h'*.

To knit the heddle-yarns to a rig-band, as above described, and shown in the drawings, I use a mechanism such as described and embraced in the application for Letters Patent hereinbefore referred to, and by a reference to such description the operation of the mechanism, as also the manner in which the harness-yarns are looped or interlaced with each other and the rig-bands, will be more fully understood.

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

As a new article of manufacture, loom-harness made of continuous lengths of yarns, and these yarns looped or interlaced with each other and the rig-bands, substantially as herein described and shown.

The above specification of my improved loom-harness signed by me this 15th day of October, 1873.

JOSEPH SLADDIN.

Witnesses:

J. P. McELROY,
A. H. NORRIS,