

W. F. SHERMAN.

METALLIC EYES FOR LOOM HARNESS.

No. 184,112.

Patented Nov. 7, 1876.

Fig. 1.

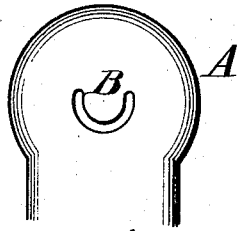


Fig. 2.

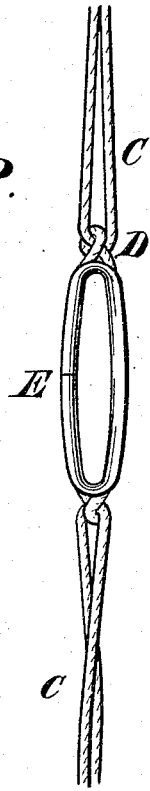


Fig. 3.

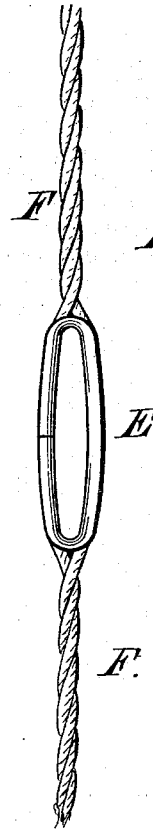
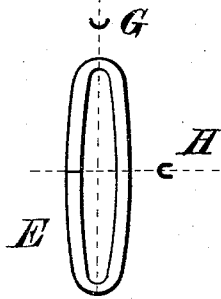


Fig. 4.



WITNESSES:

Edward H. Hill. }
Santiago Verdi }

INVENTOR:

Wm. F. Sherman.
BY HIS ATTY:
J. G. Arnold

UNITED STATES PATENT OFFICE.

WILLIAM F. SHERMAN, OF FALL RIVER, MASSACHUSETTS.

IMPROVEMENT IN METALLIC EYES FOR LOOM-HARNES.

Specification forming part of Letters Patent No. 184,112, dated November 7, 1876; application filed August 4, 1876.

To all whom it may concern:

Be it known that I, WILLIAM F. SHERMAN, of Fall River, in the county of Bristol and State of Massachusetts, have invented an Improved Metallic Eye or Lining for Loom-Harness, of which the following is a specification:

My invention relates to lining the loops or eyes of the heddle or harness with a metallic lining whose edges are smooth and reflexed or turned over more or less onto the twine or material of which the harness is made.

Its nature is shown in the following description and accompanying drawings, in which Figure 1 shows a form of die adapted to give the desired U form to the stock or strips, and at the same time to round or smooth its edges; Fig. 4, the form of the lining as bent ready to be inserted; and Figs. 2 and 3, the same inserted in twine or wire ready for use.

The same letters indicate the same parts wherever they occur.

All the figures are made on an enlarged scale, Fig. 1 more so than the rest, showing the form at B of the stock when ready to bend into the oval form, as shown at E, Fig. 4.

The strips having been cut from any suitable metal, (I prefer what is known as five per cent. German silver, though any metal will answer that will keep its form smoothly without cracking in bending, and sufficiently hard to wear well,) they are drawn through the die A to give them the U form and also to smooth the outside edges. The die may be simply a smooth half-round hole, the spring and stiffness of the metal keeping it in full form. The strips are then cut into proper lengths and

bent into the form shown at E, Fig. 4, with the ends meeting on one side, the groove being on the outside. These linings or eyes are then inserted into the harness by putting them between two strands of twine or wire, and, by twisting on each side, as in Fig. 3 at F, retain them in place, or by knotting, (see Fig. 2,) or looping, or both, in the common way. The ends of the eyes are turned smooth, without cracks, the U form spreading a little, as seen at G, Fig. 4, H being the form of a section at the side, the harness, if made of twine, being finished with varnish in the usual way.

It is evident that two pieces might be used for each lining, making a joint on each side, or the form of the eye varied to suit its work, and in some cases it may be best to close the U on the twine or wire after inserting, which may be done by pressing with dies or rolls, and the joints may be soldered, if thought best.

I am aware that metallic lining for heddle-eyes has been made in the eyelet form, as shown in the patent of C. F. Judkins, granted February 18, 1851. This I do not claim.

I claim—

The oval-formed metal eye or lining for loom-harness, made of U-shaped strips, bent with their ends on the sides, in combination with the twine or wire surrounding the same, substantially as described.

WILLIAM F. SHERMAN.

Witnesses:

SANTIAGE VERDI,
J. G. ARNOLD.