

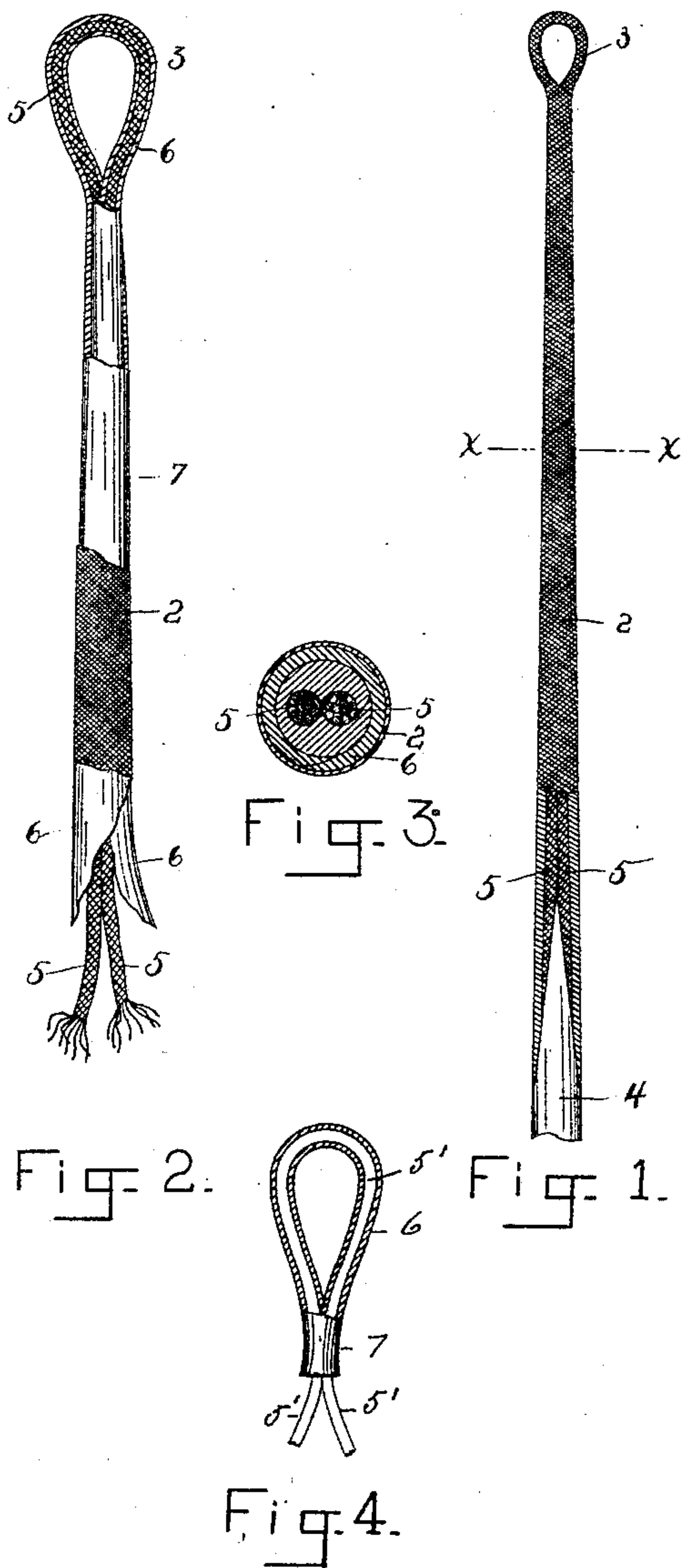
(No Model.)

H. MULLEN.

WHIP.

No. 353,371.

Patented Nov. 30, 1886.



WITNESSES:

Fred W. Hersey.

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UNITED STATES PATENT OFFICE.

HENRY MULLEN, OF WESTFIELD, MASSACHUSETTS.

WHIP.

SPECIFICATION forming part of Letters Patent No. 353,371, dated November 30, 1886.

Application filed July 12, 1886. Serial No. 207,743. (No model.)

To all whom it may concern:

Be it known that I, HENRY MULLEN, a citizen of the United States, residing at Westfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Snapper-Loops for Whips, of which the following is a specification.

This invention relates to improvements in the construction of snapper-loops for whips, the object being to provide whips with such loops, which, owing to their peculiar construction, possess such strong qualities as render their durability equal to that of the whip-stock itself; and the invention consists in the employment of the peculiar material composing the core of the loop and its construction and embodiment in the end of the whip, all as hereinafter fully described, and set forth in the claim.

In the drawings forming part of this specification, Figure 1 is a side elevation, partly in section, of the loop end of a whip having a loop thereon constructed according to my invention. Fig. 2 is a similar view to Fig. 1, excepting that the loop portion of the whip is shown with the plaiting or outer covering removed, and with the covering of the loop-center shown in section, whereby the latter is exposed to view in the loop. Fig. 3 is a transverse section on the line *x x*, Fig. 1, and Fig. 4 illustrates a loop-center composed of a single wire, instead of a series of wires.

In the drawings, 2 is the tip of the whip, at the end of which is formed the snapper-loop 3, to which the snapper or a short lash is attached in the ordinary manner, and 4 in Fig. 1 indicates the upper wedge-shaped end of a bone or rattan center of the whip-stock just below the tip portion of the whip.

The above-mentioned loop-center, which constitutes the essential feature of the within-described improvements, is indicated by the figure 5, and consists of a cord made from a series of fine wires made from iron, preferably, which are either braided or twisted together, the strands of said metallic-cord center being shown in Fig. 2.

Preparatory to forming the snapper-loop 3 of the whip, the piece of wire-braided cord, which is to form the center thereof, is en-

veloped, preferably, in a strip of soft leather, 6, although other similar material may be employed, and a sufficient portion of the said enveloped metallic cord is plaited to form the loop, and said plaited portion is then bent to the form of the latter, as shown, and the ends thereof are brought together against the wedge-shaped end of the bone or rattan center piece, 4, and then from the loop downward the whip-tip 2 and the stock below the latter are plaited in the usual manner. When the ends of the loop part of the whip are brought together at the wedged end of the center piece, 4, as aforesaid, they and their said envelope of leather are cemented to said center piece and to each other, and are, before being plaited, wound with the usual under covering, 7, which is cemented thereto, as is common in constructing whips.

As a result of the above-described construction, that portion of the whip above the center piece, 4, constituting the whip-tip having the loop integral therewith, is firmly united to the whip-stock, and by reason of the flexible qualities of the said loop-center 5, which are imparted to the latter by the series of small metallic wires of which it is composed, it may be bent frequently in any direction laterally without danger of breaking it, and for the same reason the loop itself possesses such characteristics of strength and flexibility as conduce to render it so strong and durable that it cannot be broken by the strain of the lash or snapper, however violently the latter may be operated.

If preferred, a single soft wire, 5', as shown in Fig. 4, may be employed for the loop-center, instead of the metallic cord 5, above described, with nearly the same advantages as are obtained from the use of the latter.

What I claim as my invention is—

As an improved article of manufacture, a whip having a lash-loop consisting of several wires having their ends secured in the tip of the whip, the latter and said loop having a suitable covering, substantially as set forth.

HENRY MULLEN.

Witnesses:

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