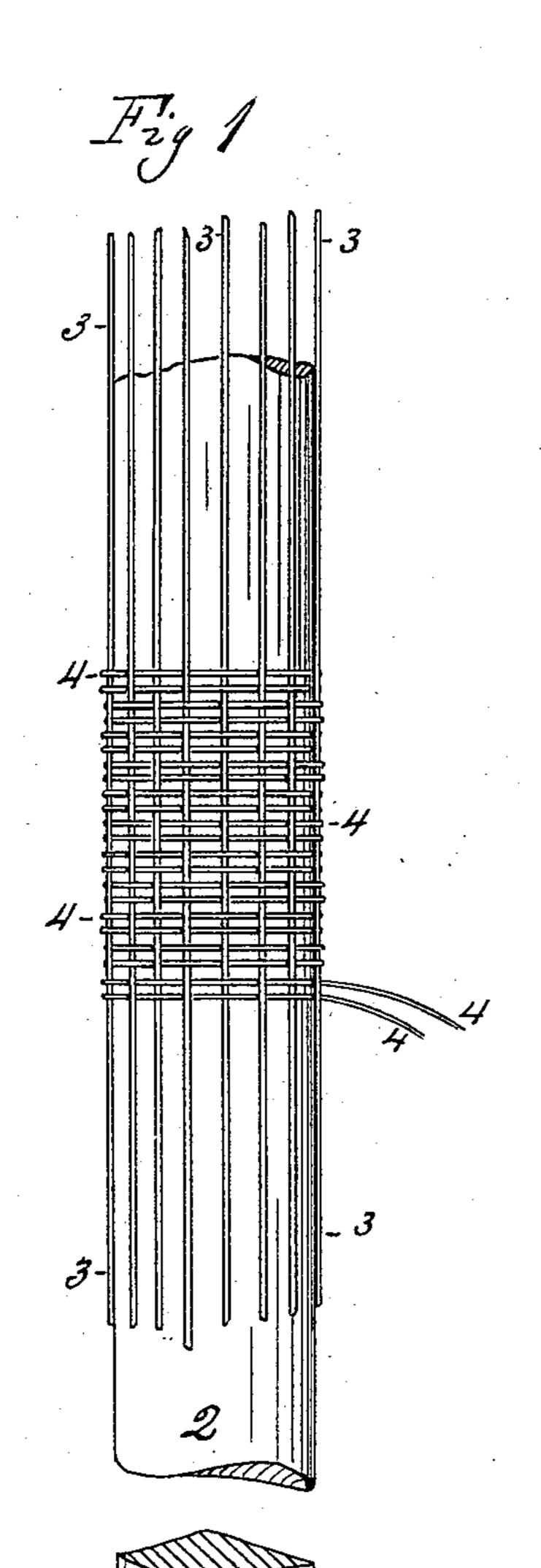
(No Model.)

H. MULLEN & J. NOBLE, Jr.

WHIP CORE.

No. 344,979.

Patented July 6, 1886.



WITNESSES:

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ATTORNEYS

United States Patent Office.

HENRY MULLEN AND JAMES NOBLE, JR., OF WESTFIELD, MASSACHUSETTS.

WHIP-CORE.

CPECIFICATION forming part of Letters Patent No. 344,979, dated July 6, 1886.

Application filed March 26, 1886. Serial No. 196,659. (No model.)

To all whom it may concern:

Be it known that we, Henry Mullen and James Noble, Jr., citizens of the United States, residing at Westfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Whip-Cores, of which the following is a specification.

This invention relates to improvements in whip cores, the object being to provide an improved core around which the outer portions of the whip are applied, consisting of the peculiar construction and combination of parts, hereinafter fully described.

In the drawings, forming part of this specification, Figure 1 is a side elevation of a portion of a whip-core (much enlarged) embodying our invention. Fig. 2 is a side elevation of a portion of a whip-core center of different form to that shown in Fig. 1.

In the drawings, 2 is the core-center, consisting of a strip of rawhide of suitable size and length, and either round, as shown in Fig. 1, or square in cross-section, as in Fig. 2. The 25 said rawhide center a is first made of the required diameter and length to fit it to be put into the whip, allowing sufficient, however, for the additional diameter which it will have when it shall have received the exterior cov-30 ering, hereinafter described, whereby great additional elasticity and strength are imparted thereto. The said exterior covering or envelope for the said rawhide center 2 consists of fine steel or brass spring-wire, which is ap-35 plied to or woven upon it by the usual plaiting-machine.

In the drawings, 3 indicates a series of said steel or brass or other wires having a spring quality, arranged around the center 2 on the surface thereof, running in a longitudinal direction and parallel with each other, or substantially so, and 4 indicates a series of inter-

lacing wires running around said center and running alternately over and under the said wires 3. The center 2 is covered from end to 45 end with the above described plaited-wire covering, the latter being woven tightly and firmly thereon, the said center while being so covered being held in the usual way in said plaiting-machine.

The above described disposition of the wires 3 and 4, whereby they are laid on and around the surface of the center 2, as shown in Fig. 1, is the preferable one, since by that means the wires 3 are brought to and secured in a longitudinal relation to the sides of the center, and thereby they best support it when it is bent in either direction; but, if desired, the plaited-wire covering may be applied in other well-known forms and serve approximately 60 the purpose of the wire covering shown in the drawings.

The above-described whip-core when finished and ready to be inserted in the center of a whip is of a long tapering form and of such 65 diameter that when the sidings and other coverings of the whip surround it the latter is of the usual proportions.

What we claim as our invention is—

1. A whip-core consisting of a rawhide co

1. A whip-core consisting of a rawhide center having a series of interlacing wires plaited thereon, substantially as set forth.

2. A whip-core consisting of a rawhide center having a wire covering woven thereupon, consisting of a series of wires arranged on its 75 surface and running longitudinally thereon, and a series of other wires running around said center and interlacing with said longitudinal wires, substantially as set forth.

HENRY MULLEN.
JAMES NOBLE, Jr.

Witnesses:

WM. H. CHAPIN, G. M. CHAMBERLAIN.