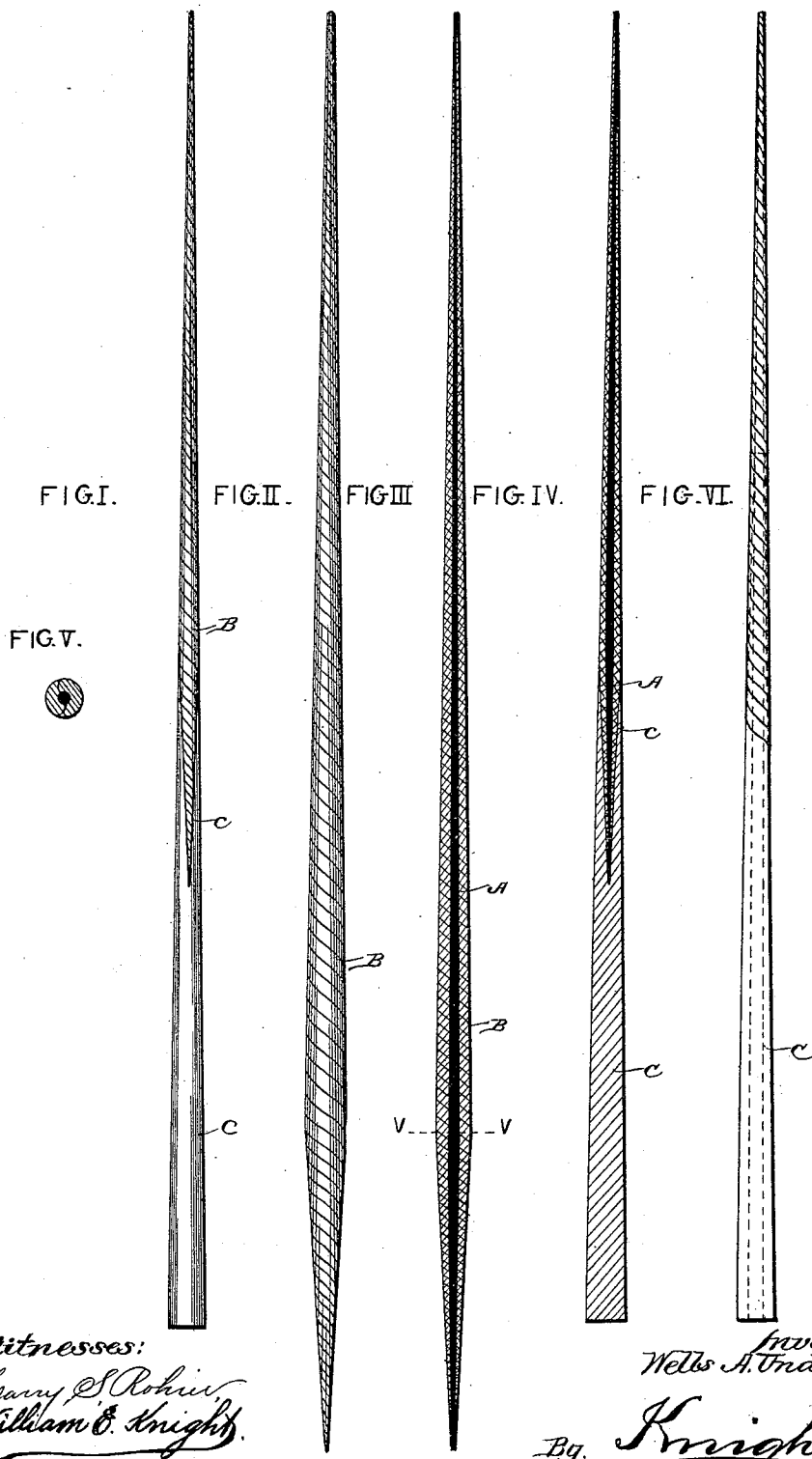


(No Model.)

W. A. UNDERWOOD.
WHIP.

No. 460,456.

Patented Sept. 29, 1891.



Witnesses:

Harry S. Rohrer
William E. Knight

Inventor:
Wells A. Underwood

By *Knight Bros.*
Attorneys.

UNITED STATES PATENT OFFICE.

WELLS A. UNDERWOOD, OF WOOSTER, OHIO.

WHIP.

SPECIFICATION forming part of Letters Patent No. 460,456, dated September 29, 1891.

Application filed August 20, 1890. Serial No. 362,516. (No model.)

To all whom it may concern:

Be it known that I, WELLS A. UNDERWOOD, a citizen of the United States, residing at Wooster, in the county of Wayne and State of Ohio, have invented certain new and useful Improvements in Whips, of which the following is a specification.

The object of my invention is to produce a whip with a body combining the advantages of whalebone and rawhide as now ordinarily used, and at the same time dispense with the existing necessity of using tapering strips of rattan to round out the whip, as is the practice in constructing whips with square cores of whalebone or whalebone and leather and other material.

My invention consists, essentially, of a whip-core having a whalebone center and a wrapping of rawhide wound spirally around the whalebone.

In carrying out my invention I form the tip with a tapered core of whalebone, which may extend about one-half or two-thirds of the length or completely to the butt-end of the whip, as preferred. This core I cover with a strip of rawhide, which is itself tapered and wound spirally around the bone, extending to the extreme tip end of the whip and about half to two-thirds the entire length, leaving more or less of the whalebone exposed toward the butt-end or not, as preferred, the combined rawhide and bone core thus formed being tapered at its lower end to adapt it to being spliced to the butt. I then form the butt portion of the core of rattan suitably tapered, split from its upper end, and scarfed in such a manner as to receive the whalebone and rawhide tip, the tapered, split, and scarfed upper end of the rattan covering the tapered end of the combined whalebone and rawhide core to a sufficient distance to form a strong and durable splice, and the parts being glued together in the customary manner. The entire core, being thus constructed, can be conveniently rounded and finished by turning, ready for braiding.

In order that my invention may be fully understood, I will proceed to describe the same with reference to the accompanying drawings, in which—

Figure I is a view of my improved whip-core complete, ready for braiding. Fig. II is

an enlarged view of the combined whalebone and rawhide tip-core ready to receive the rattan stock or butt. Fig. III is a longitudinal section of the same. Fig. IV is a longitudinal section of the complete whip-core. Fig. V is a transverse section on the line V V, Fig. III. Fig. VI is a modification.

A is the tapered core of whalebone, and B is the spirally-wound piece of tapered rawhide tightly inclosing the bone core for forming the tip of the whip. The bone core and the spirally-wound rawhide extend the entire length of the whip-tip, and they are slightly tapered at the base end to facilitate splicing the tip to the butt.

C is the butt, formed of rattan into the proper tapering shape. It is split at *c* to receive the end of the tip, which is secured therein by gluing. The butt and tip thus constructed, as shown in Fig. I, form the completed whip-core ready for braiding.

In Fig. VI, I have shown a modification of my invention. In this form the whalebone core A extends to the extreme end of the rattan butt-piece. The whalebone core A and the rattan butt-piece C are first spliced together and the tapering piece of rawhide B afterward wrapped in place, said rawhide extending from the end of the tip to about half or two-thirds the entire length of the whip and over the rattan splice.

I am aware that it is common to construct whips with tapering cores of rattan, rawhide, and other material covered with rawhide or other material applied by braiding or in the form of a ribbon wrapped around said core.

I am also aware that it has been common for many years to make whips or whip-bodies of strips of rawhide tapered and twisted, as described in the expired patent of Charles Baeder, No. 17,133, dated April 28, 1857.

My invention differs from the devices first above referred to, in that I employ the rawhide not merely as a covering to protect the body of the whip, but as a part of the body itself, to which it imparts the qualities of tensile strength and durability, and it differs essentially from the last-named device, in that a tapering core of whalebone is combined with the twisted or spirally-wound tapering strip of rawhide, so as to impart permanent elasticity and preserve the shape of the whip,

thus supplementing the valuable qualities in which rawhide is superior to other materials with those in which it is deficient. The tapering form will be seen to be an essential characteristic of the spirally-wound rawhide strip, in making it an integral or component part of the whip-body, in contradistinction to a mere covering.

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

A whip-body constructed, as herein described, with a tapered core of whalebone covered with a tapered strip of rawhide wound spirally around it to form the tip, and a stock or butt connected by a wedge-shaped or tapered splice to the tip thus formed, substantially as set forth.

WELLS A. UNDERWOOD.

Witnesses:

OCTAVIUS KNIGHT,
W. E. KNIGHT.