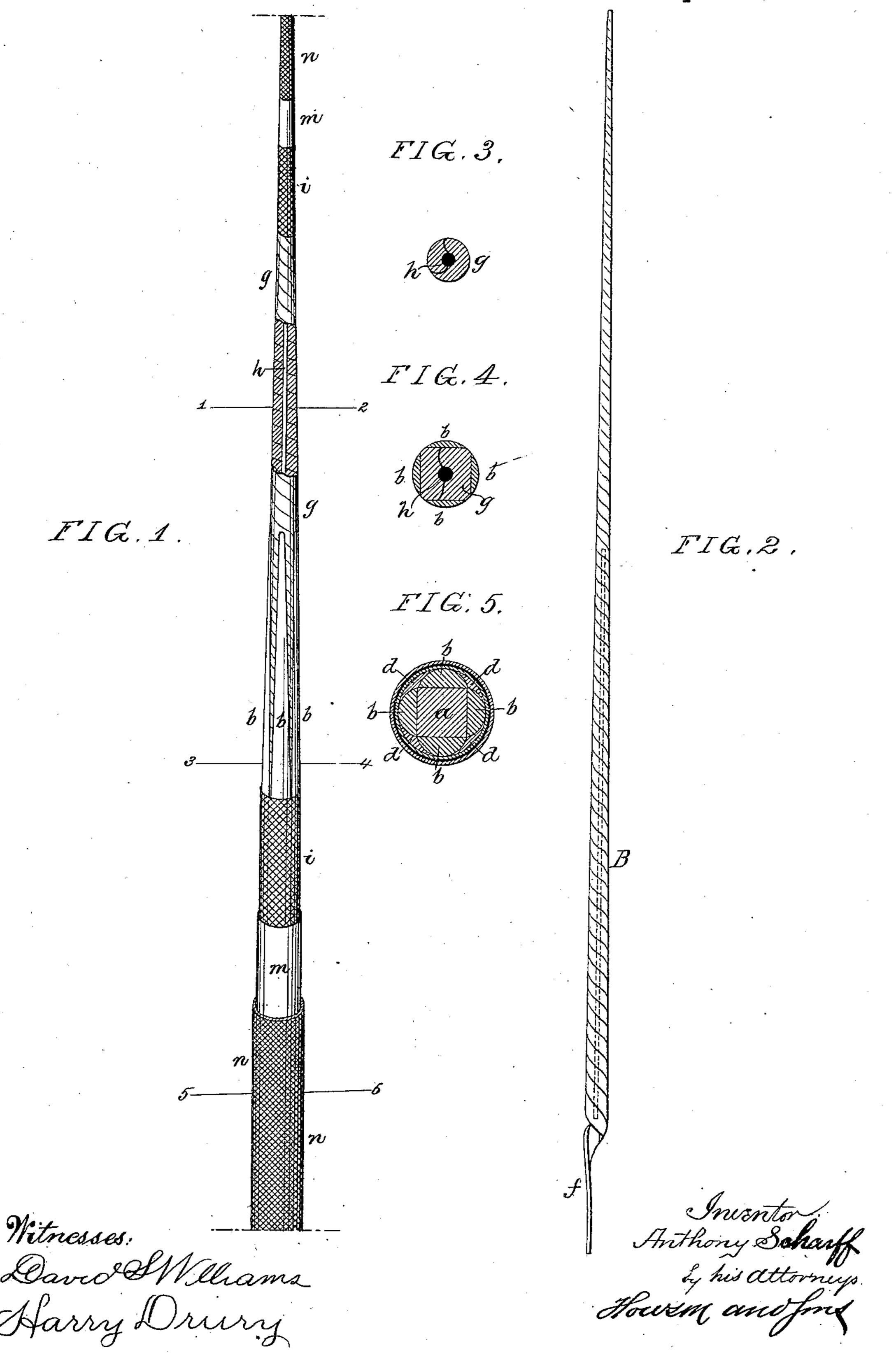
A. SCHARFF.

WHIP.

No. 257,078.

Patented Apr. 25, 1882.



N. PETERS, Photo-Lithographer, Washington, D. C.

## United States Patent Office.

## ANTHONY SCHARFF, OF PHILADELPHIA, PENNSYLVANIA.

## WHIP.

SPECIFICATION forming part of Letters Patent No. 257,078, dated April 25, 1882. Application filed February 20, 1882. (No model.)

To all whom it may concern:

Be it known that I, ANTHONY SCHARFF, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain 5 Improvements in Whips, of which the follow-

ing is a specification.

The main object of my invention is to makefor application to the stock of a whip an extremely tough and elastic tip, which can be to firmly secured to said stock, my invention relating further to the covering of a whip pro-

vided with the improved tip.

In the accompanying drawings, Figure 1 is a view of part of a whip furnished with the 15 improved tip and otherwise made according to my invention, part of the covering being removed in order to show the structure of the whip; Fig. 2, a detached view of the tip, drawn to a reduced scale; and Figs 3, 4, and 5, sec-20 tional plan views on an enlarged scale, and on the lines 12, 34, and 56 respectively.

The stock of the whip may be made as usual of a central square core, a, of whalebone or rattan, having on each side segmental strips  $25 \, b \, d$ , to impart the desired cylindrical form thereto, the upper end of the core a being tapered and secured to a prolongation, f, of the tip B, and the strips b being extended above the base of the tip, so as to strengthen the 30 connection of the latter to the stock, in the manner usually adopted in making whips with whalebone tips. Instead of using whalebone, however, I make the tip B of a coiled strip of rawhide, g, properly tapered toward the outer 35 end, and squared at the inner end for the reception of the strips b. The inner end of the strip of rawhide is allowed to project beyond the coiled portion of the same, so as to form the projection f, for attachment to the core of 40 the stock, thus insuring a more secure connection of the tip than when the latter is tapered off at the inner end as usual.

A tip made of rawhide is very tough and flexible; but if made of rawhide alone it is 45 not capable of properly supporting itself, and | termediate layer, m, of water-proof cement, as soon becomes bent out of shape. In order therefore to properly stiffen the tip without detracting from its flexibility, I provide said tip with a core, h, of tempered steel wire, which 50 extends from the stock up into the tip, but terminates some distance from the outer end of the latter, so that while the base of the tip is properly stiffened, the outer end retains its original pliability. The same result may in a

measure be attained even when the tempered 55 steel core extends to the outer end of the tip, the core in this case being tapered as it approaches the end, so as to exercise but a slight modifying influence upon this part of the tip.

The improved tip must be protected from 60 moisture. Hence I provide the tip, and preferably the whole of the whip, with a coating, m, of water-proof cement; but before applying the same I cover the tip and stock of the whip with a braided covering, i, which serves 65 to strengthen the whip, and presents a good surface for the reception of the cement.

In the absence of the water-proof cement, moisture would gain access to the rawhide and its steel core, and would soften the rawhide 70 and cause the core to become rusted, while if the cement was applied to the rawhide without the intervention of the braided cover, the integrity of the water-proof coating would be affected more readily than when such braided 75 cover is used.

The whip is finished by the application of the outer braided cover, n, as usual.

If desired, the core h may extend through the stock of the whip as well as the tip; and 80 in making short riding-whips both tip and stock may be made of one piece of coiled rawhide, with the steel core extending through the same to within the required distance of the outer end.

I claim as my invention—

1. The within-described tip for whips, said tip consisting of a coiled strip, g, of rawhide, having a central core, h, of tempered steel, as set forth.

2. The within-described tip for whips, said tip consisting of a coiled strip of rawhide, with central steel-wire core, h, and uncoiled depending strip f, as set forth.

3. The combination, in a whip, of the stock, 95 the tip consisting of a coiled strip of rawhide with steel core, and the covering comprising an inner braid, i, an outer braid, n, and an inset forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

A. SCHARFF.

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Witnesses:

HARRY DRURY, HARRY SMITH.