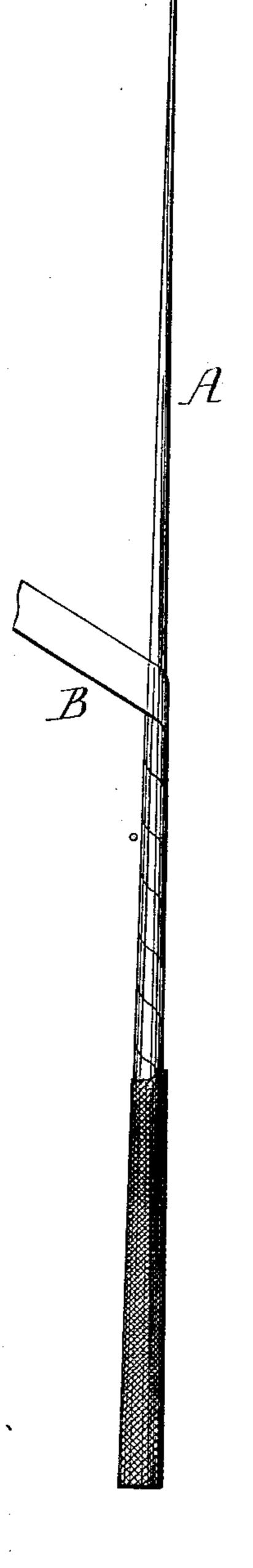
## A. SCHARFF

WHIP.

No. 187,916.

Patented Feb. 27, 1877.



Witnesses. John M. Dennen. John KReputus anthony Scharff byhis attorney Howoowandom

## United States Patent Office.

ANTHONY SCHARFF, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN WHIPS.

Specification forming part of Letters Patent No. 187,916, dated February 27, 1877; application filed January 22, 1877.

To all whom it may concern:

Be it known that I, Anthony Scharff, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Whips, of which the following is a specification:

The object of my invention is to make a cheap whip, which shall be more elastic and less liable to break than ordinary whips having cores of whalebone.

The figure in the accompanying drawing represents the improved mode of manufacturing whips.

In carrying out my invention, I first select a stalk of rattan, and reduce it to a tapering form, the length and thickness and taper of the rattan being determined by the character of the whip, of which it is to form the core.

The next operation is to render this tapering core A pliable by the application of oil, ordinary linseed-oil, which has been once boiled, being preferred. The silicious coating of the rattan having been removed by the first operation of reducing it to a proper tapering form, it is so absorbent that the oil, which may be applied by an ordinary brush, soon penetrates through it.

In about twenty-four hours after the application of the oil the rattan will be ready for the next operation, which consists in coating it with pitch so tempered that it will retain its adhesive property. Shoemaker's wax is a good composition for the purpose, the wax being simply rubbed against the oiled rattan until the latter has received a thin coating.

The next operation is the application of rawhide for imparting toughness and elasticity to the core. This may be best accomplished by coiling a strip, B, of rawhide previously rendered pliable by soaking in water round

the waxed core. As the hide becomes dry it shrinks and tightly embraces the core, with which a complete junction is effected through the medium of the intervening wax. When the rawhide cover is dry it should be properly trimmed by rubbing with sand-paper or by grinding, filing, or otherwise, after which the surface should be rendered water-proof, for it is essential to the integrity of the whip that no moisture should gain access to the rawhide, the waterproofing of which may be effected by the application of a coat of ordinary oil-paint, or varnish, or waterproofing cement. After this the whip may be completed by braiding or otherwise covering the waterproofed rawhide.

A whip thus produced is much more elastic and less liable to break than one having a core of whalebone, which is much more expensive than rattan.

I claim as my invention—

1. The mode herein described of manufacturing whips—that is to say, the coating of a core of oiled rattan, with tempered pitch or shoemakers' wax, then covering the waxed core with rawhide, and finally waterproofing the latter, all substantially as set forth.

2. As an improved manufacture, a whip composed of a core of oiled rattan with a coating of tempered pitch or shoemakers' wax and a cover of waterproofed rawhide, all as set forth.

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

ANTHONY SCHARFF.

Witnesses:

HERMANN MOESSNER, HARRY SMITH.