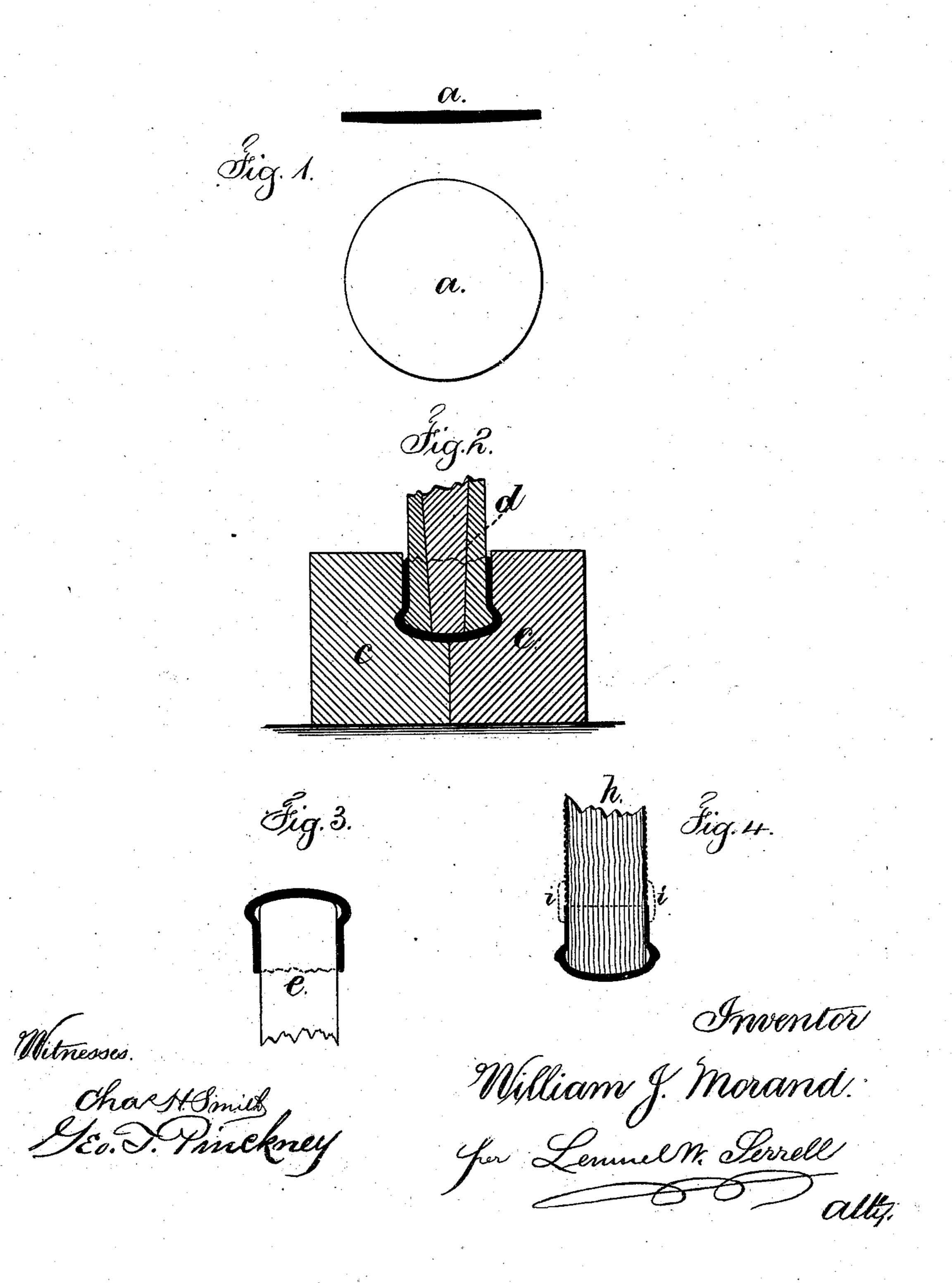
## W. J. MORAND. RAWHIDE CAPS FOR WHIPS, &c.

No. 194,612.

Patented Aug. 28, 1877.



## United States Patent Office.

WILLIAM J. MORAND, OF PASSAIC, NEW JERSEY, ASSIGNOR TO I. S. VAN DEUSEN & SON, OF SAME PLACE.

## IMPROVEMENT IN RAWHIDE CAPS FOR WHIPS, &c.

Specification forming part of Letters Patent No. 194,612, dated August 28, 1877; application filed February 5, 1877.

To all whom it may concern:

Be it known that I, WILLIAM J. MORAND, of Passaic, in the county of Passaic and State of New Jersey, have invented an Improvement in Caps for Whips, Canes, Umbrellas, &c., of which the following is a specification:

Caps for the ends of whip and similar handles have been made of metal, horn, indiarubber, wood, and similar material. In some instances they are pressed up in dies and afterward turned and polished. When these caps are made of metal they are liable to be scratched and indented, and when of horn, ivory, or similar material, they frequently break while in use. This is especially the case with the caps of whip handles, because of the concussion when dropped into the socket or holder.

My invention is made for preventing these difficulties and making a better and stronger article.

I make my cap of rawhide, softened, pressed up to shape, allowed to dry, and then turned up and finished. This cap is tough, durable, and can be made as handsome as those of bone, horn, or similar material. They are not liable to chip, crack, or wear when in use.

In the drawings, Figure 1 is a plan and section of the disk of rawhide as cut out. Fig. 2 is a section representing the dies made use of in pressing the softened disk of rawhide up into a cup shape. Fig. 3 is a section of the cap upon the circular form while drying, and Fig. 4 a section of the finished cap.

The disk a of rawhide is shaved down thinner at the edge, as indicated in the section. It is softened and pressed up, by dies c d, into the form and shape required for the cap. The cup-shaped cap is then taken off the male die d and placed upon the form e while it

dries. It may be confined to said die by being inserted into a wooden form or shape.

When the interior portion of the cap is diverging, so as to be widest at the inner end, the dies are made accordingly and expansible or sectional, so as to allow for pressing and holding the blank cap. The mode of constructing the dies will vary according to the size and shape, and they may be of any known character.

It is generally preferable to cut off the rough irregular edge of the cap before it dries.

After the cap is sufficiently dry and hard it is to be turned off and finished in any desired manner. It is preferable to coat the same with a water-proof varnish, and also to varnish the interior, to prevent injury by moisture.

The cap is to be applied upon the end of the handle h, and secured by adhesive material or by pins driven through the cylindrical portion, and a metallic band may be applied around the handle, or a "button" or band of thread or similar material may be braided or twisted around the handle, as shown by dotted lines at i.

This cap made of rawhide for the butts of whips, umbrellas, &c., is a new and useful article of manufacture.

I claim as my invention—

The cap for handles, made of rawhide, in the shape of a cup, and turned up and finished, as a new article of manufacture.

Signed by me this 27th day of January, A. D. 1877.

WILLIAM J. MORAND.

Witnesses:

C. R. VAN DEUSEN, R. WM. BOWDITCH.