

(No Model.)

H. MULLEN & J. NOBLE, Jr.
WHIP CORE.

No. 256,031.

Patented Apr. 4, 1882.

Fig 1.

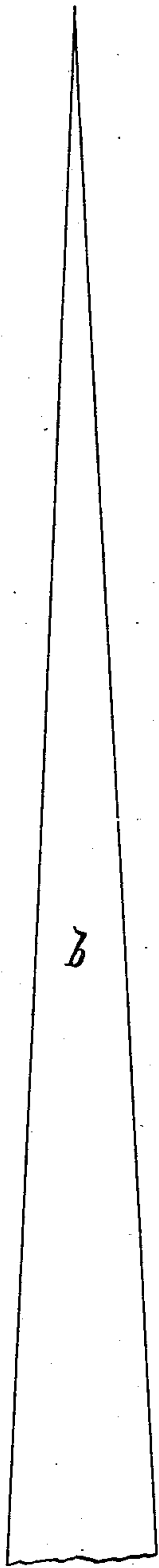


Fig 2.

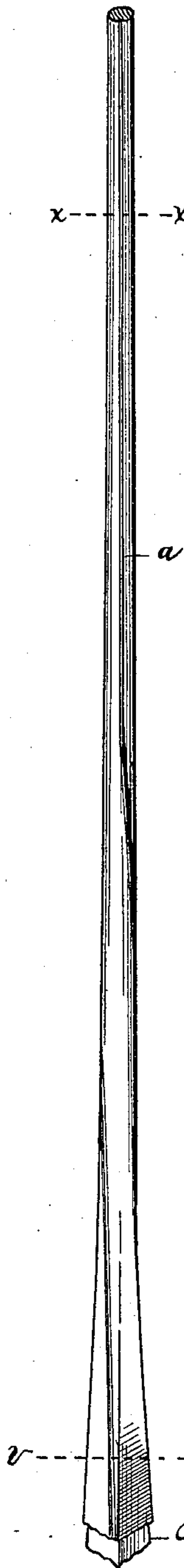


Fig 4.



Fig 3.



Fig 6.



Fig 5.



Witnesses
J. D. Gorfield
H. E. Hickins

Inventors
Henry Mullen
and James Noble Jr.
By Henry A. Chappin

UNITED STATES PATENT OFFICE.

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

WHIP-CORE.

SPECIFICATION forming part of Letters Patent No. 256,031, dated April 4, 1882.

Application filed December 14, 1881. (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 jointly invented new and useful Improvements in Whip-Cores, of which the following is a specification.

This invention relates to an improved method of constructing rawhide cores for whips adapted to be used separate from or attached to the tip end of an ordinary rattan center, the object being to provide a rawhide whip-core which is more rigid than an ordinary twisted core made from the same material, and which permits of utilizing in its construction parts of the rawhide which are unfit for the manufacture of solid square rawhide cores.

In the drawings forming part of this specification, Figure 1 is a view of the form in which the piece of rawhide is cut to form our improved core. Fig. 2 is a view of a whip-core constructed according to our invention and adapted to the pointed squared tip of the ordinary rattan center. Fig. 3 is a view of a round core made as herein described. Fig. 4 is a transverse section of the cores, Figs. 2 and 3, on the lines *x x*. Fig. 5 is a transverse section of the core, Fig. 3, on the line *o o*, and Fig. 6 is a transverse section of the core and end of the rattan center, Fig. 2, at the line *v v*. Figs. 4, 5, and 6 show the parts somewhat enlarged, as also is the lower end of Fig. 2.

In the drawings, *b* is the core-leather. *a* is the cylindrical core, with its lower end joined to a square butt. *a*² is the cylindrical core. *c* is the rattan center.

In making rawhide cores heretofore it has been customary to form them by twisting a narrow strip of softened rawhide or by cutting from the thickest part of the leather squared strips to form such cores. Cores made by the first method possess but little resistance to flexure and have little or no spring to them, and those made by the second method are necessarily costly, being cut from the thickest part of the leather, and but few pieces can be obtained from a side of leather.

In making our improved cores we employ a piece of rawhide cut in the form substantially of that shown in Fig. 1, said piece being more or less tapered from end to end, according to the form of core desired. A piece having that form would make a core which at its tip would

have a very slight diameter. The core shown in Figs. 2 and 3 represent those having their tips cut off. The said piece of rawhide is well softened by wetting it and covered with glue, and, if it is to be employed to make a core which is to be attached by its lower end to the pointed tip of a common rattan center piece ordinarily placed in the butt part of a whip-stock to fill up the space surrounded by the sidings, it has its lower end first slightly wrapped around and secured to the tip of said rattan piece, whence a turn or two is given to the body of the rawhide above said rattan, to draw the leather or rawhide as solid as possible, and then the edges of said rawhide are guided butt to butt, much as shown in Fig. 5. At this point in the operation a binding-cord is wound around said core by the employment of an ordinary winding-machine in which the core is drawn horizontally through a central hole in a bobbin carrying revolving winding-plate, while the cord winds upon said core. The edges of said rawhide having been butted, as aforesaid, the winding force of the said cord causes the side of said core opposite to said edges to fold in the form shown by the sectional view, Fig. 4, thus making substantially a solid fourfold core. By the aid of said glue or other suitable cement first applied to the rawhide and the subsequent winding, as aforesaid, said core when dried becomes so solidly united as to form practically one single solid core of great toughness and durability. Said winding-cord is removed after said core becomes dry.

In making a cylindrical core as shown in Fig. 3—that is, one which is not calculated to be secured to a rattan piece—a piece of rawhide of a less tapering form than that shown in Fig. 1 is used, and is folded and wound substantially in the manner above described. Said folded whip-core may be secured to the split end of a rattan center such as is above described in the usual manner.

What we claim as our invention is—

The within-described whip-core, consisting of a core of rawhide folded upon itself and having its folds solidly united by the interposition of suitable cement, substantially as set forth.

HENRY MULLEN.

JAMES NOBLE, JR.

Witnesses:

H. A. CHAPIN,

J. D. GARFIELD.