

(No Model.)

C. F. SHEPARD.
WHIP CORE AND WHIP.

No. 246,041.

Patented Aug. 23, 1881.

Fig 1



Fig 2

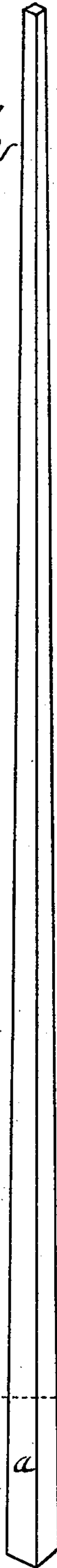


Fig 4



Fig 3



Witnesses
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WHIP-CORE AND WHIP.

SPECIFICATION forming part of Letters Patent No. 246,041, dated August 23, 1881.

Application filed June 14, 1881. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. SHEPARD, a citizen of the United States, residing at Westfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Whip-Cores and in Whips, of which the following is a specification.

This invention relates to the construction of an improved whip-core, and of whips having a flexible core surrounded by and solidly cemented within a series of rattan sidings; and it consists in constructing a four-sided whip-core of hardened springy rawhide of square form in cross-section, the object being to provide a whip-core which is a practical substitute for whalebone, and of such form as will permit of applying the flat-faced rattan sidings directly against its four sides without the interposition of any other element or elements between said sidings and core, such as is required when said sidings are applied around a round core.

In the drawings forming part of this specification, Figure 1 is a longitudinal sectional view of a whip constructed according to my invention. Fig. 2 illustrates my improved whip-core. Fig. 3 is a transverse section of said core at the line *x x*, Fig. 2; and Fig. 4 is a transverse section of the butt of a whip embodying my improvements.

In the drawings, *a* is the core of the whip, and *c* represents the sidings thereof.

It has been customary heretofore to construct whips with twisted gut or rawhide cores which have a cylindrical form, said cores being made by twisting said gut or rawhide while in a wet state and subsequently drying it. Cores so made do not of themselves possess the springy flexibility of whalebone, which is a necessary prerequisite in a whip-stock. Neither do cores so formed possess the requisite shape to adapt them for economical use in combination with rattan sidings to make a

whip, as said sidings are adapted to be most advantageously used with a core having four flat sides. Hence cylindrically-shaped cores have to be inclosed in a tube having four flat sides, so that said flat-faced sides may be laid flatly against and around said core. This obviates the necessity of cutting grooves upon the sidings so that the latter may conform to the cylindrical shape of a round core, and contributes to make a whip which combines toughness and elasticity to a great degree.

I construct my improved core *a* of partially-tanned rawhide cut into strips of suitable width and length, which I stretch while moist, and allow them to dry hard. After having so dried them I carefully cut and trim the four sides of said strips to give them the requisite tapering form and to square them. The core *a* so made resembles and has the springy elastic quality of whalebone, and is of the requisite form to have the sidings *c* applied and solidly cemented around it, as they would be around a whalebone core-piece, and when said core *a* and sidings *c* are thus united they form a whip of economical construction, and one which is practically as valuable as one having a whalebone center-piece, but costing much less, and said rawhide core cannot be broken.

What I claim as my invention is—

1. The within-described improved whip-core *a*, which consists of a four-sided partially-tanned strip of hard rawhide, substantially as set forth.

2. As an improved article of manufacture, a whip consisting of the rattan sidings *c* and the four-sided core *a*, of hard partially-tanned rawhide, all solidly cemented together, substantially as set forth.

CHARLES F. SHEPARD.

Witnesses:

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