A. B. KIERSTED.

Whips.

No. 127,246. Patented May 28, 1872.

Fig. 1.

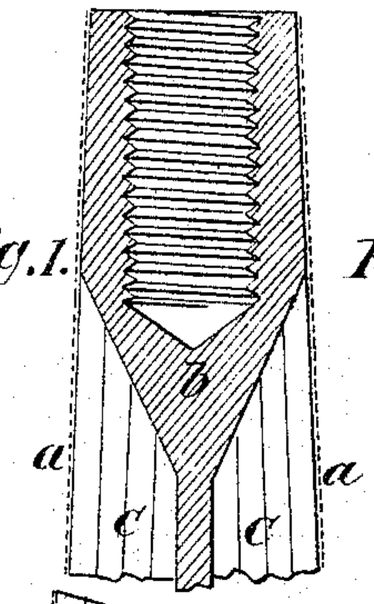


Fig. 2.

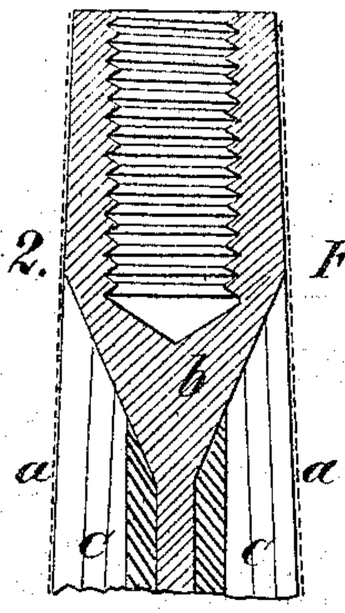
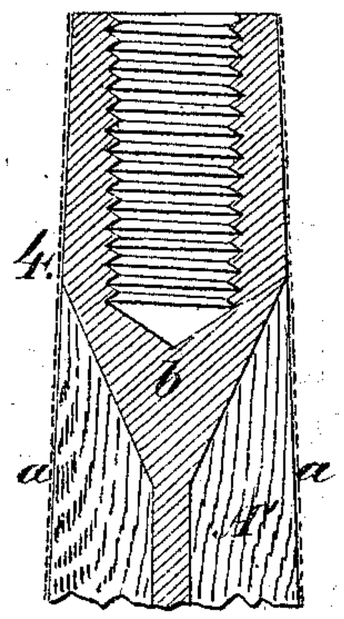


Fig. 4.



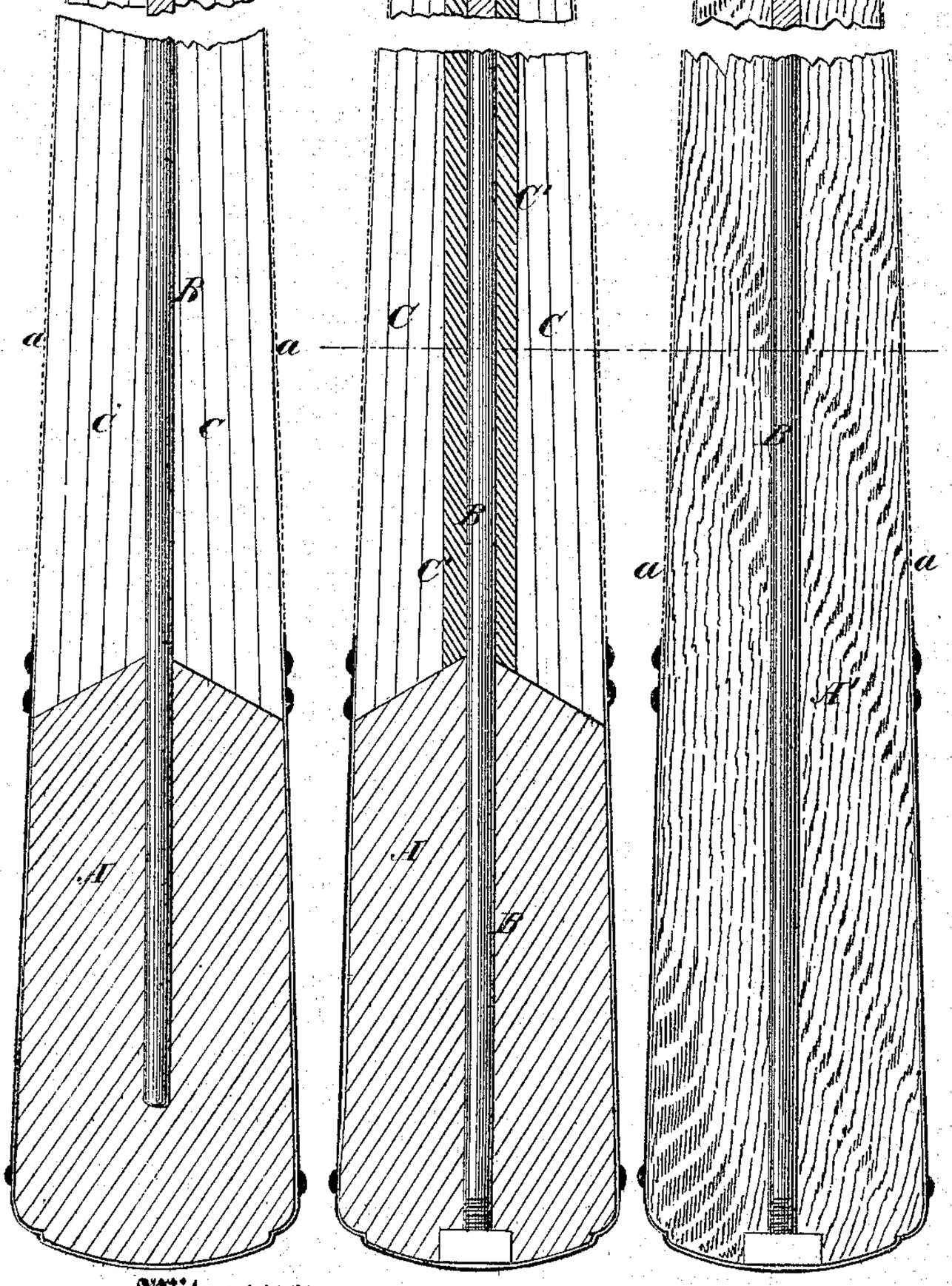


Fig. 3.

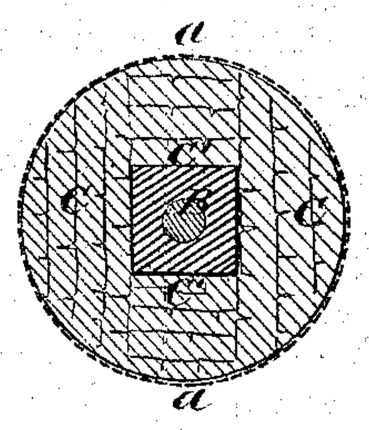
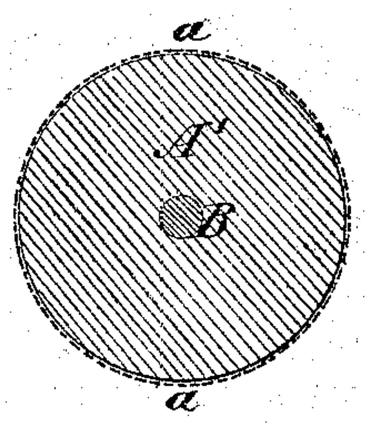


Fig. 5.



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UNITED STATES PATENT OFFICE.

ALFRED B. KIERSTED, OF NEW HAVEN, CONNECTICUT.

IMPROVEMENT IN WHIPS.

Specification forming part of Letters Patent No. 127,246, dated May 28, 1872.

Specification describing a new and useful Improvement in Whips, invented by ALFRED B. KIERSTED, of New Haven, in the county of New Haven and State of Connecticut.

Figure 1 is a sectional elevation of a whip-stock, showing my improvement. Figs. 2 and 3 are similar elevations, showing modifications of my improvement; Fig. 4, a cross-section of Fig. 2. Fig. 5 is a cross-section of Fig. 3.

Similar letters of reference indicate corresponding parts.

The object of this improvement is to impart additional strength, elasticity, and durability to whip-stocks, and also to effect an economy in their manufacture. The invention is applicable especially to the jointed or socket-whips in which the stock or body is divided, the parts being united for use by means of screw-joints. My invention consists, principally, in the application of an elastic filling with the metallic core of a whip, and in connecting the handle proper with the other portion of the whip, as hereinafter described.

In the drawing, A is the handle proper, which is made of metal so as to also constitute the weight of the whip. B is a metallic core, made either solid or hollow, composed preferably of the best steel, so formed as to present the greatest amount of strength and flexibility with the least weight. The lower part of this core is attached by any suitable mode of fastening to or within the handle A, from which it rises to or near the tip of the whip. In the case of the jointed whip the upper end of the core is firmly attached to the lower end of the screw-socket *b*, as shown, which thus securely connects the said socket with the handle or stock of the whip. The core may be made to pass partly through the handle, as shown in Fig. 1, or wholly through, as in Fig. 2, in which latter case a nut, *d*, fits on a thread on the lower end of the core, as shown. The skeleton whip-stock, made as above described, is filled out and completed by surrounding or filling the space between the handle and the tip of the stock with suitable filling material, C, such as rubber, whalebone, rattan, or wood, or by a combination of some or all of these substances, the parts composing the filling being united by cement or attached in any other suitable manner. When thus filled the whip-stock is finished by weaving upon it an exterior envelope, *a*, of fibrous material, after which it is varnished, all in the usual manner. The filling which I most prefer is composed of rubber C′, which, as shown in the drawing, Fig. 2, surrounds the metallic core B, the latter being embedded in the rubber. The rubber is then surrounded by strips of wood filling C or other suitable materials, arranged as shown. In some cases the filling is to be wholly composed of rubber.

For cheaper whips I surround the metallic core with an elastic filling that is less expensive than the rubber—as, for example, rattan—and in some cases I make the whip-stock and handle of one piece, A′, of wood or other substance, D, and insert in the metallic core B, in the center thereof, substantially as shown in Figs. 4 and 5.

I do not limit or confine myself to the precise form or arrangement of any of the parts herein described, as they may be varied in many ways without departing from my invention.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The rubber filling C′, applied to the metallic core B and surrounded by rattan or other equivalent material, as set forth.

2. The part C, the weight or piece A, socket *b*, core B, and its screw-nut, all arranged as specified.

ALFRED B. KIERSTED.

Witnesses:
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WM. Y. BEACH.