

D. AVERY & C. C. PRATT.

Manufacture of Whips.

No. 154,211.

Patented Aug. 18, 1874.

Fig. 1.

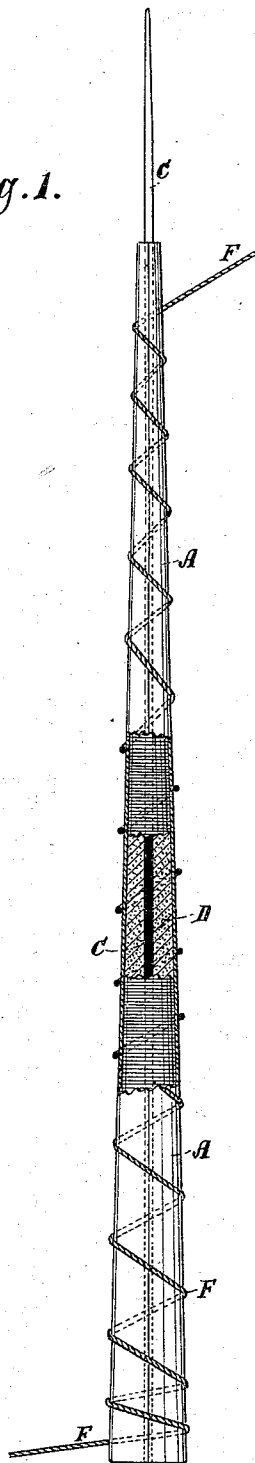


Fig. 2.

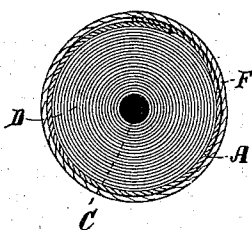
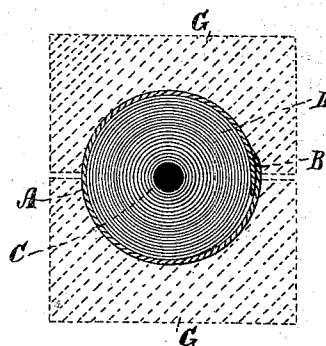


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

DEXTER AVERY AND CHARLES C. PRATT, OF WESTFIELD, MASS.

IMPROVEMENT IN THE MANUFACTURE OF WHIPS.

Specification forming part of Letters Patent No. **154,211**, dated August 18, 1874; application filed May 16, 1874.

CASE B.

To all whom it may concern:

Be it known that we, DEXTER AVERY and CHARLES C. PRATT, of Westfield, in the county of Hampden and State of Massachusetts, have invented a new and useful Improvement in the Manufacture of Whips, of which the following is a specification:

Our invention consists of a mode of compressing fibrous material in the manufacture of tapered whip-stocks, to condense the fibers previously rolled or laid on a central core into a hard, compact, and smooth condition.

In carrying out our invention we use a tapered mold or former, consisting of a tapered tube of sheet metal somewhat larger than the complete body of the stock is to be, with overlapping edges not fastened together, putting the material of which the body of the stock is composed, and which is to be compressed, into said tube, and then pressing the tube on all sides so as to contract it, and thus compress the material, which consists of the vegetable fibers built on the core, either in the form of loose fibers of jute, flax, or hemp, laid lengthwise, or a triangular piece of woven cloth rolled on and prepared with cement to stick the body together in a solid mass when dry. The tube is used to make the surface perfectly smooth and even, and free from seams or ribs, as it would be if pressed in two-part molds.

To prevent a seam or crease along the edges of the overlapping parts of the tube, they are beveled down to very thin edges.

To compress the mold, we may use various methods. For instance, we may force it endwise into a welded tapered tube or die, wind it with a rope or cord under considerable ten-

sion, or press it in grooved molds of two or more parts.

In the accompanying drawing, Figure 1 is partly a side elevation and partly a sectional elevation of our compressing-mold or former containing the body to be pressed, and having a cord wound on it for compressing it by that means. Fig. 2 is a transverse section of the mold and body, together with a tapered welded tube, showing the manner of effecting the compression by forcing the mold into the tube. Fig. 3 is a cross-section of the mold and body, together with grooved compressing dies or molds in two parts, for compressing the former by lateral pressure in that manner.

Similar letters of reference indicate corresponding parts.

A represents the tapered mold or former of sheet metal, with overlapping edges B. C represents the core of whalebone; D, the body of fibrous material to be compressed. E is the welded tapered tube or die; F, the cord, and G the grooved compressing dies or molds.

Either of these three methods, or others, may be employed for effecting the compression.

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

The method of compressing fibrous material on a center core in a tapered tube with overlapping edges not fastened together, said tube being subjected to pressure, substantially as specified.

DEXTER AVERY.

Witnesses: CHARLES C. PRATT.

M. B. WHITNEY,
J. R. DUNBAR.