

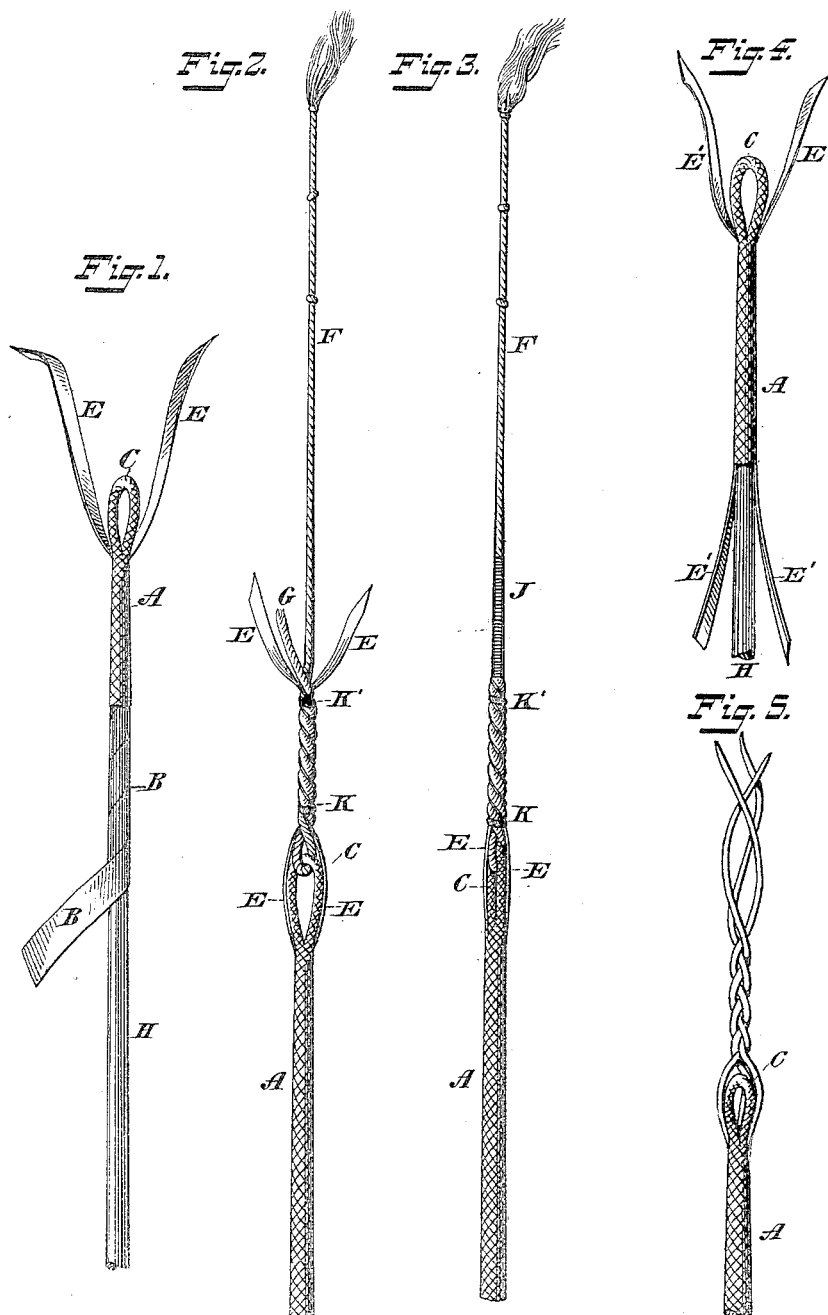
(No Model.)

2 Sheets—Sheet 1.

G. PIRNIE.
WHIP.

No. 419,130.

Patented Jan. 7, 1890.



WITNESSES:
Gustav Dietrich
Hermon J. Plummer

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BY
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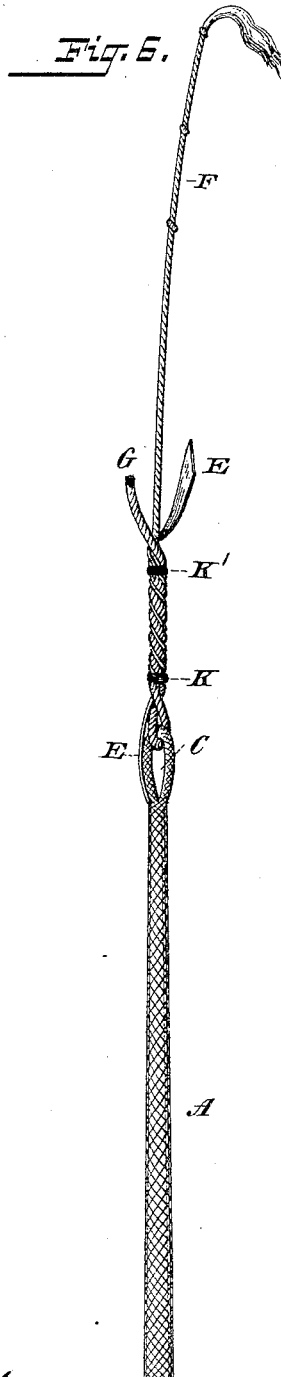
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WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE PIRNIE, OF NEW YORK, N. Y.

WHIP.

SPECIFICATION forming part of Letters Patent No. 419,130, dated January 7, 1890.

Application filed February 11, 1889. Serial No. 299,522. (No model.)

To all whom it may concern:

Be it known that I, GEORGE PIRNIE, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Whips; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to carriage-whips and other whips having a covered stock, which may all be classed together as "covered" whips. The body of a covered whip is usually made up of a core or center with an inner lining or covering of skin or cloth wrapped or wound around the core and with an external woven or plaited covering. The lower part of the core is usually re-enforced or "stocked in" with strips of rattan applied longitudinally. The tip of the whip is usually finished off with a loop, in which the snap or snapper is fastened.

My invention relates to an improved means of fastening the snap to the body of the whip and of strengthening the snap itself. The snap is simply a silk or cotton cord of suitable length and thickness knotted at one end. The unknotted end is sometimes finished with a loop, and the snap is then fastened by knotting the loop of the snap with the loop on the end of the whip-stock. The more common mode, however, of fastening the snap is to have its unknotted end finished as a plain cord and then to pass this end through the loop on the whip-stock, doubling the end back on the snap, and then braiding the two portions of the snap in with the free ends of an additional thread or cord, the middle of which is fastened to and about the loop on the stock and outside of the outer plaited covering. The ends in the braid are then secured in some suitable manner.

Both the above methods of fastening the snap are objectionable, because the loop on the end of the whip-stock is liable to break from the strain caused by a blow on the harness or by the oft-repeated cracking of the whip. The breaking of the loop practically spoils the whip, as it is a difficult matter for an ordinary harness-maker to repair a broken loop.

The object of my invention is to provide an improved means for fastening the snap to the body of the whip, which by reducing the strain on the loop will prevent the loop from breaking, and will increase the durability of the whip generally, besides adding other desirable qualities.

My invention is shown in the accompanying drawings, which are hereby made a part of this specification, and in which similar letters refer to similar parts.

Figure 1 represents the tip of a covered whip. H is the core or center. B is an inner covering or lining of skin, cloth, or other suitable material. A is an outer woven or plaited covering. C is the loop. Fig. 2 represents the tip of a whip with a snapper attached by my method. F is the snap, and G is the unknotted end of the snap, which is passed through the loop, doubled back, and braided in. Fig. 3 represents the tip and snapper with the fastening completed and the ends secured. Figs. 4 and 5 represent modified forms of my invention. Fig. 6 represents a form of my invention in which only one strip E is used.

In its preferred form I carry out my invention as follows: In whips in which the lining or inner covering B of the whip extends to the extremity of the whip-stock below the loop C, I allow one or more narrow strips E E of the material of which the lining B is composed to project several inches beyond the end, said strips E E being continuous with the lining B. The lining B being usually wound or wrapped in a ribbon about the center H, the free end of the ribbon of lining need only be slit down its middle and the two parts will serve as the narrow strips E E; or part of the end of the ribbon of lining may be removed and only one narrow strip be left projecting. In plaiting on the outer covering A and making the loop C care is taken to keep the narrow strips E E disengaged. When the outer covering A and loop C are complete, the strips E E project through the covering A at the base of the loop C.

Where the lining or inner covering B does not extend to the tip of the whip, as is the case in many whips, especially those of the less expensive grades, or where the material of the lining B is not suitable for the pur-

pose for which the strips E E are intended, I lay one or more strips E' E' of suitably tough material along the end of the stock for a distance of several inches before plaiting, and then, plaiting on the covering A over the strips, I allow the ends of the strips to project as before at E' E'. (See Fig. 4.) What I say hereinafter about the strips E E applies equally to the strips E' E'; but I will, for convenience, speak only of strips E E. I now pass the unknotted end G of the snapper F through the loop C and double it back on the snapper F in the usual way. Then the strips E E, first being wet, if of skin, are braided together with the snapper F and its end G, as shown in Fig. 2, and the loose ends fastened in any suitable way, as at J. (See Fig. 3.) Before braiding in the strips E E, I prefer to tie one of the strips E about the other strip E, the snap F and the end G just above the loop C forming the knot K, and I tie a similar knot after the braiding at K'.

In the braiding I may leave the braided portions of the strips E E slightly shorter than the braided portions of the snap. This will require some care if the strips E E be of cloth or other fibrous material. If, however, the strips E E be of skin, no attention need be paid to the length in the braiding, for the strips, being wet before braiding, will shrink slightly upon drying, and thus become a trifle shorter than the cord of the snap. The object of this shortening is to relieve the strain on the loop C. If the strips E E be knotted, as in Fig. 2, and be shortened, as just explained, the strain may be made to bear first on the knot K', then on the knot K, and then on the loop C, and finally on the junctions of the strips E E with the covering A; or the relative lengths of the strips E E and of the braided portions of the snap may be so adjusted as to distribute the strain equally all the way from the knot K' to the loop C and beyond it to the junctions aforesaid.

In practice I shall generally use eel-skin for the strips E E and E' E'. In Letters Patent of the United States No. 375,950, granted to me January 3, 1888, I have given a full description of the qualities of eel-skin and the method of preparing it for use, and I hereby refer to said letters for such description. The qualities therein mentioned make eel-skin far the best material for the purposes of my present invention. It is so thin and so pliable when wet as to be easily braided with the snap. Its shrinkage is so great that the strips E E, if made of eel-skin and braided in while wet, will on drying become perceptibly shorter than the braided portions of the snap. It needs no tanning or other preparation, and its toughness is extraordinary. When the snap is fastened with eel-skin strips E E, braided and knotted in the manner described, it is almost impossible to break the loop C or to break the snap F from the whip in any way, unless the snap F itself wear out, and that, as I shall show, is a matter easily reme-

died. I have thus accomplished the much-sought-for object of making a whip with a snap, in which the loop C cannot break with any amount of ordinary use. The great value of this invention will readily be perceived by any horseman. It is well known among whip-makers that nothing is more needed in the manufacture of whips than some satisfactory means of re-enforcing the loop C. My invention furnishes such a means.

Should the snap itself break—say above the knot K'—or if the means employed for fastening the loose ends of the strips E E and portions of the snap at J become unfastened, it is a very simple matter to unbraid the strips and snap, put in a new snap if needed, and braid the whole up again, the loop C and the strips E E being uninjured. Thus not only have we a stronger fastening for the snap, but one easily repaired.

An additional use of the method of fastening I have described is to stiffen the snap, so that it will stand straighter and droop over less. This is also a point which has been sought for in the manufacture of whips. Any softening from dampness may be prevented by varnishing the parts after braiding.

I do not wish to limit myself to the methods described either for holding the strips E E and E' E' along or about the stock or for fastening them to the snap F. The strips may be twisted about the snap or braided without knotting or fastened in some other manner. They may be wound spirally around the end of the stock instead of being applied longitudinally. It is obvious that but one strip E or E', as shown in Fig. 6, may be employed. I do not limit myself to any particular number of strips, but have shown two for convenience. I wish, indeed, to cover every method and all cases in which one or more strips of any suitable material, either continuous with the lining B or applied to the upper end of the whip-stock, are attached securely to the stock under the plaited cover and below the loop C, and are then carried outside of and above the loop C and securely attached to the snap F, whereby the loop C is re-enforced and the strain thereon is reduced. A similar device could be employed for strengthening the fastening of lashes to whips.

Any proper material for a center may be employed with my invention, and any desired form of snap suitable for braiding. I may also dispense altogether with the silk or cotton snap by employing three or more of the strips E E of suitable length and width, rolling them into cord shape, and braiding them tightly together, so as to form the snap entirely of the strips E E. The finishing of the whip in all its parts may be as usual.

Having described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. A whip provided with improved means of fastening for the whip-snap, said means

- consisting of one or more strips of skin, cloth, or other suitable material, one end of which strips is attached to the whip-stock below the loop through which the snap passes, and the
5 other end of which extends beyond the loop and is united to the snap by suitable means, whereby the strain upon the loop is diminished, substantially as and for the purposes set forth.
- 10 2. A whip provided with improved means of fastening the whip-snap to the end of the whip-stock, said means consisting of one or more strips of the material of which the
whip-lining is composed, which strips, being continuous with the lining, project through 15 the plaited covering below the loop C, extend beyond the said loop, and are securely attached to the whip-snap, whereby the said loop is re-enforced and the strain thereon reduced, substantially as shown and described, 20 and for the purposes set forth.

GEORGE PIRNIE.

In presence of—

F. L. CRAWFORD,
JOSEPH K. BRICK.