

(No Model.)

C. E. WILKINSON & M. V. PALMER.  
COP HOLDER FOR SEWING MACHINE SHUTTLES.

No. 487,910.

Patented Dec. 13, 1892.

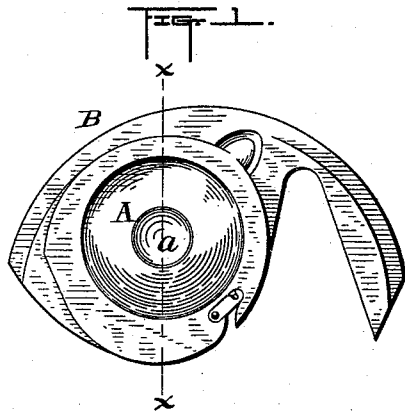


FIG. 2.

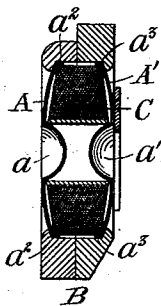


FIG. 3.

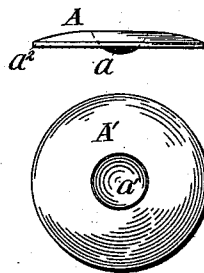


FIG. 4.



Witnesses.

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# UNITED STATES PATENT OFFICE.

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## COP-HOLDER FOR SEWING-MACHINE SHUTTLES.

SPECIFICATION forming part of Letters Patent No. 487,910, dated December 13, 1892.

Application filed April 11, 1892. Serial No. 428,622. (No model.)

*To all whom it may concern:*

Be it known that we, CHARLES E. WILKINSON, of New Haven, in the county of New Haven and State of Connecticut, and MARO V. PALMER, of Willimantic, in the county of Windham and State of Connecticut, have invented a new and useful Improvement in Cop-Holders, of which the following is a specification.

Our invention relates to an improvement in cop-holders for use in connection with sewing-machine shuttles, and more particularly in connection with the ordinary oscillating shuttle of the "Singer" sewing-machine type.

A practical embodiment of our invention is represented in the accompanying drawings, in which—

Figure 1 is a view in side elevation of a shuttle representing the cop-holder adjusted for use. Fig. 2 is a transverse section of the same on the line  $xx$  of Fig. 1. Fig. 3 is a view of the two shells in detail, and Fig. 4 is a view of a modified form of shell.

The cop-holder consists of a pair of shells, represented by  $A$  and  $A'$  and adapted to conform in general to the opposite ends of the cop. The shells  $A$  and  $A'$  may be struck up from thin pieces of metal—sheet-brass, for example—and are provided at their central portions with inwardly-projecting spurs or teats  $a a'$ , adapted to enter the opposite open ends of the core of the cop. The shells  $A A'$  are made of such size as to fit snugly within the recesses in the opposite chambers of the shuttle  $B$ , and are preferably provided with rims or flanges  $a^2 a^3$ , in order to secure a more extended frictional contact with the walls of the chambers in the shuttle to hold the shell securely in position therein, and at the same time permit of their ready removal when for any cause it is desired to use the ordinary rotary cop-holder within the shuttle.

In practice, after the shells  $A$  and  $A'$  have been pressed into position in the opposite chambers of the shuttle the cop of thread  $C$  may be dropped into position between the shells and the shuttle closed. The cop being held loosely upon the spurs or teats  $a$  and  $a'$  will be allowed to rotate freely within the

shells, and if at any time the thread shall be drawn across the end of the cop, as will sometimes happen, it will readily free itself by passing over the end of the spur or teat  $a$  or  $a'$  between it and the core and any liability of breaking is thereby avoided. Furthermore, the shells being held against rotation within the shuttle their edges do not become worn sharp and the liability of cutting the thread by its passage over such edges is avoided.

The shells may be formed without the flanges  $a^2 a^3$ , as shown, for example, in Fig. 4, and may be held in position within the shuttle permanently by means of solder or other fastening.

What we claim is—

1. In combination with a shuttle, a cop-holder comprising shells adapted to the opposite ends of the cop, said shells being provided with round-faced spurs or teats for engaging the opposite ends of the core of the cop, and means for holding the shells in position, substantially as set forth.

2. In combination with a shuttle, a cop-holder comprising a pair of shells fitted to the opposite chambers of the shuttle and provided centrally with inwardly-projecting rounded spurs or teats adapted to loosely engage the opposite open ends of the core of the cop, substantially as set forth.

3. In combination with a shuttle, a cop-holder comprising shells fitted to the opposite chambers of the shuttle and provided with flanges at their outer edges and with inwardly-projecting round-faced spurs or teats at their central portions, substantially as set forth.

CHARLES E. WILKINSON.  
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