(No Model.)

C. E. WILKINSON.

SEWING MACHINE SHUTTLE.

No. 492,930. Patented Mar. 7, 1893.

Fig. 1.

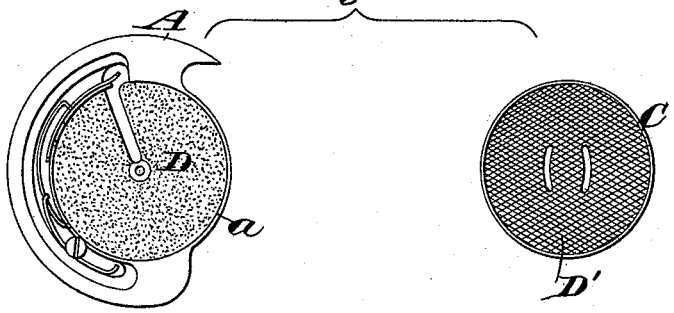


Fig. 2.

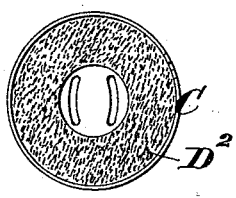
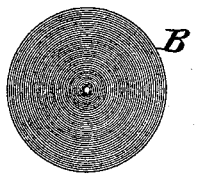


Fig. 3.



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UNITED STATES PATENT OFFICE.

CHARLES E. WILKINSON, OF NEW HAVEN, CONNECTICUT.

SEWING-MACHINE SHUTTLE.

SPECIFICATION forming part of Letters Patent No. 492,930, dated March 7, 1893.

Application filed June 24, 1891. Serial No. 397,314. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. WILKINSON, of New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Sewing-Machine Shuttles, of which the following is a specification.

My invention relates to an improvement in sewing machine shuttles adapted to receive a cop of thread to be unwound and fed to the machine from the center of the cop. It is found in practice, that, as the central portion of the cop is removed by the feeding of the thread therefrom the outer portion of the cop is liable to collapse and produce a snarl which both hinders the progress of the sewing and produces a waste of thread. To remedy this trouble the cops have heretofore been provided with thin pieces of paper pasted to their opposite sides to afford the necessary rigidity to prevent the collapsing.

The object of my present invention is to fit the shuttles themselves with means for preventing the aforesaid collapsing, and thereby save the labor and expense of the special stiffening mechanism for each individual cop.

A practical embodiment of my invention is represented in the accompanying drawings, in which:

Figure 1 is an inside view of the shuttle and cop holder each fitted with a cop retaining surface. Fig. 2 is a view of the holder showing the retaining surface extending only part of the distance from the periphery to the center, and Fig. 3 represents a cop of thread, partially unwound.

The shuttle which I have selected to represent my invention is of the oscillating type but the invention is applicable to any shuttle in which a disk-like cop of thread is employed.

A represents the shuttle having the circular pocket *a* for the reception of a cop B, of thread, and C represents the cop holder. The inner surface of the pocket or of the holder, one or both, where it comes in contact with the sides of the cop B, is roughened or rendered yielding so as to afford a frictional engagement with the cop. The frictional surface may be formed by securing a thin layer of leather or other yielding material on the inner face of either the shuttle or holder or both as shown at D, or the inner face of either the shuttle or holder or both may be roughened by burrs or scratches as shown at D′, or an emery or sand faced sheet of material might be employed as shown at D^2. The frictional surface may extend from the periphery of the pocket or holder to the center or only part of the distance sufficient to engage the side of the cop to a depth corresponding to the depth of the cop before a sufficient amount of the central portion is removed to allow it to collapse.

What I claim is—

A sewing machine shuttle provided with means for securing a cop of thread thereto, and having and presenting an especially prepared retaining surface in position to engage the side of the cop of thread from its extreme outer edge toward the center to prevent the collapsing of the cop, substantially as set forth.

CHARLES E. WILKINSON.

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