Nov. 3, 1925. 1,560,352

H. N. SHEPPARD

SINKER FOR KNITTING MACHINES

Filed Nov. 13, 1922

Fig. 1.

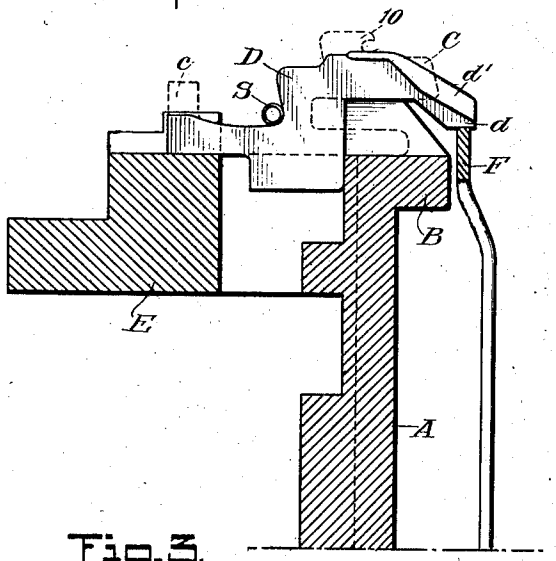


Fig. 2.

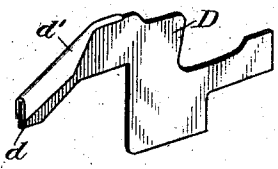


Fig. 3.

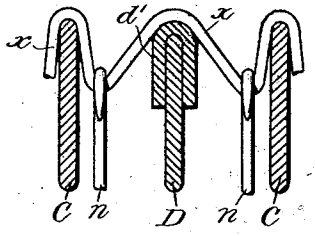
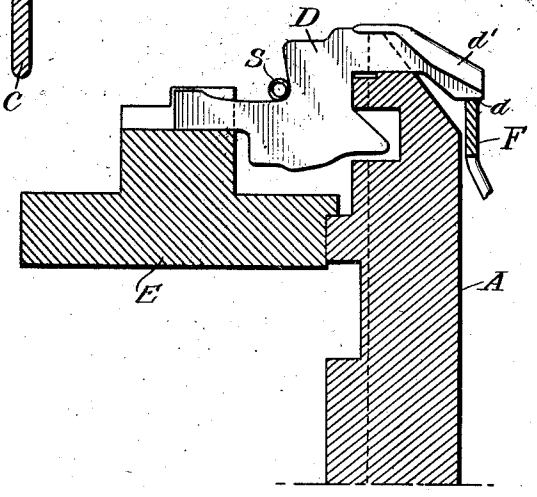


Fig. 4.



INVENTOR
Harry N. Sheppard
BY
Howson and Howson
HIS ATTORNEYS.

Patented Nov. 3, 1925. 1,560,352

UNITED STATES PATENT OFFICE.

HARRY N. SHEPPARD, OF NEWARK, NEW JERSEY, ASSIGNOR TO SCOTT AND WILLIAMS, INCORPORATED, OF NEW YORK, N. Y., A CORPORATION OF MASSACHUSETTS.

SINKER FOR KNITTING MACHINES.

Application filed November 13, 1922. Serial No. 600,772.

To all whom it may concern:

Be it known that I, HARRY N. SHEPPARD, a citizen of the United States of America, residing in Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Sinkers for Knitting Machines, of which the following is a specification.

My invention has reference more particularly to the construction of sinkers for use in knitting machines for the production of drop-stitch or mock rib effects, and my invention is especially useful in carrying out the invention for which Robert W. Scott has applied for United States Letters Patent Serial Number 569,621, filed June 20, 1922.

A characteristic feature of the said Scott machine is the provision of tilting sinkers interspersed with the ordinary web-holding sinkers in the tricks of the sinker ring at the points where the drop stitch or mock rib effects are to be produced. The main object of my invention is to so construct the tilting sinkers as to insure the production of a more perfect and uniform line of wide sinker wales throughout the length of the knitted fabric than is commonly obtained by the use of sinkers as heretofore constructed. This object I attain by thickening the acting edge of the tilting sinker over which the yarn is laid, as hereinafter described.

In the accompanying drawings,

Figure 1 is a side view, drawn to an enlarged scale, of my improved tilting sinker, in position in the sinker ring:

Fig. 2 is a perspective view of the tilting sinker:

Fig. 3 is an enlarged sectional diagram through the sinkers:

Fig. 4 is a view of a slightly modified form of tilting sinker.

In these drawings, A is the needle cylinder provided at the top with any suitable sinker guide ring B, with radial grooves to guide the inner ends of all the sinkers, both the usual web-holding sinkers and my improved tilting sinkers D. These sinkers are also guided in radial grooves in a suitable outer sinker ring E.

The usual web-holding sinkers C are indicated by dotted lines in Fig. 1, and have butts *c*, which are acted on by suitable cams in any usual or convenient form of sinker ring cap to move those sinkers radially. By preference, such cams are arranged to draw the web-holding sinkers outwardly at the proper points with relation to the knitting, while a garter spring S, embracing shoulders on the sinkers tends to push these sinkers inwardly towards the axis of the circular knitting head, assuming that we are dealing with a circular knitting machine.

The web-holding sinkers C are provided with the usual web-holding throats 10 (Fig. 1), but by preference my tilting sinkers are not provided with such throats, and I give them only a tilting motion, as described in the Scott application. This tilting action takes place only at the knitting point, and may be effected as in the Scott machine, by means of a suitably controlled cam F within the knitting head and adapted to be brought into the path of the inwardly projecting ends *d* of the tilting sinkers D. The consequent elevation of the inner ends of these sinkers by the cam F causes the production of a long sinker wale at that point in the knitted fabric. The spring S will tend to drop the sinkers D back to position as they pass off the cam F.

I have found in practice that by thickening the upper edge of each tilting sinker D as at *d'*, the drop stitch or mock rib effect produced throughout the length of the knitting is made more uniform and perfect than otherwise would be the case.

This thickening may conveniently be obtained by folding a width of sheet metal over the upper edge of that part of the tilting sinker over which the yarn *x* is laid.

As a further aid to the production of uniformly long sinker wales, the outer ends of the two needles *n*, *n* on opposite sides of each tilting sinker D may be bent away from this sinker and closer to the adjacent web-holding sinkers C, as indicated in the diagram, Fig. 3.

I claim as my invention:

1. A knitting machine loop forming sinker

having the upper edge over which the yarn is laid thickened on both sides, for the purposes described.

2. A knitting machine having needles and web-holding sinkers in combination with drop stitch sinkers interspersed in the set of web-holding sinkers and having their edges over which the yarn is laid thickened in comparison with the adjacent sinkers, for the purpose set forth.

In testimony whereof I have signed my name to this specification.

HARRY N. SHEPPARD.