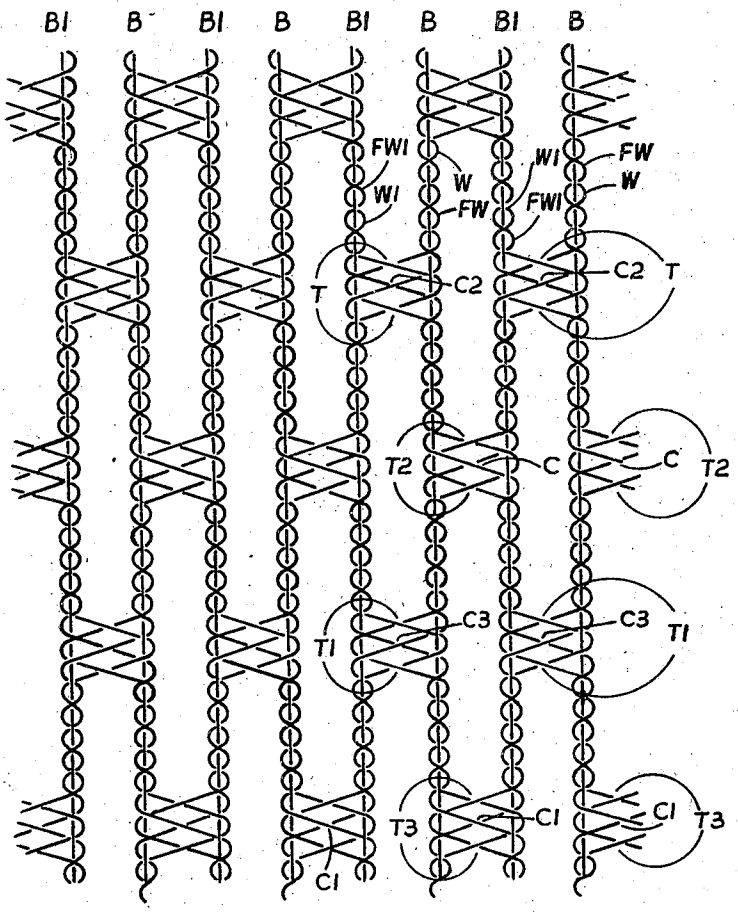
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MACHINE MADE NET

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MACHINE-MADE NET

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2 Claims. (Cl. 87—4)

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This invention is for improvements in machine made nets and has for its principal object to produce on a machine a net which is suitable, particularly on account of its strength and tenacity, for use in the manufacture of wigs.

Heretofore, nets used in the manufacture of wigs have always been made by hand and have been knotted, but such nets are very expensive.

Numerous attempts have been made to produce a suitable net on a twist lace machine, but none of the previous attempts have been successful. As a result of experiments lasting over a considerable period of time it has now been found possible to make nets suitable for this purpose on twist lace machines of the Levers or Go-through type and such nets are considerably cheaper than the previous hand-made knotted nets.

According to the present invention there is produced on a twist lace machine, preferably of the Levers or Go-through type, a double warp traverse net in which each warp intermediate a predetermined number of sequential pillarings with a bobbin thread alternately crosses and ties with an adjacent warp of the same face, the arrangement being such that at that position where the front warps cross the rear warps double cross and at that position where the front warps double cross the rear warps cross.

In carrying the invention into effect a fully threaded bar is used for both front and back warps. Due to the fact that the warp threads are comparatively thick the threads of each fully threaded bar may be divided between 16 steel bars. The warps are all of the same twist, preferably being right twisted yarns.

In order to describe the invention more fully reference will now be made to the accompanying drawing.

Referring to the drawing the warp threads are designated by the reference letters W, W' and the bobbin threads by the letters B, B'. While the alternate warps W are pillaring for a predetermined number, say eight motions, with the alternate bobbin threads B, the other alternate warps W' are pillaring with the other alternate bobbin threads B' and thereafter a tie T is produced by the alternate warps W traversing to the left and back to tie with the next adjacent bobbin threads B' to the left while the other alternate warps W' traverse to the right and back to tie with the next adjacent bobbin threads B to the right.

The warps W and the warps W' now pillar for the same number of motions as previously with the same bobbin threads B and bobbin threads B' respectively and then cross at C, the warps W which tied to the left crossing to the bobbin threads B' to the right and the warps W' which tied to the right crossing to the bobbin threads B

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to the left. The warps now pillar with the new bobbin threads, i. e. the warps W pillar with bobbin threads B' and the warps W' with bobbin threads B, for the same number of motions as previously then produce a tie T' in the opposite direction to the first tie. They then continue to pillar with the second bobbin thread (i. e. the warps W with bobbin threads B' and warps W' with bobbin threads B), for the same number of motions as previously then cross at C' to the original bobbin threads (the warps W to the bobbin threads B and the warps W' to the bobbin threads B') to complete the sequence of motions. The sequence of motions for the front warps FW, FW' is the same as the back warps (W, W') excepting that where the back warps W, W' cross at C, C' the front warps FW, FW' double cross at T2, T3 and that where the front warps cross the back warps double cross. Furthermore, each warp twists in an opposite sense in successive pillarings and in each pillaring the front and back warps pillar in the opposite sense, that is to say, when the front warp is pillaring with one bobbin thread with a right twist the back warp is pillaring with the same bobbin thread with a reverse twist and vice versa. In this manner an openwork net is produced which is exceedingly strong and is suitable for use as a wig net. It will be appreciated that each leg of each individual mesh of net is joined by four threads, two of which cross and two of which double cross. If the net is made of real silk the warp threads are conveniently of 13/2 spun silk and the bobbin threads are 40–50 denier pure silk. If the net is made of artificial silk the warp threads are in the order of 480 deniers and the bobbin threads are 100 denier extra twist.

It is, however, within the scope of the invention to make net of any suitable yarn and the foregoing is given merely by way of example and is not to be construed in a limiting sense.

We claim:

1. A double warp traverse net in which each warp intermediate a predetermined number of sequential pillarings with a bobbin thread alternately crosses and double crosses with an adjacent warp of the same face, the arrangement being such that at that position where the front warps cross the rear warps double cross and at that position where the front warps double cross the rear warps cross.

2. A double traverse warp net according to claim 1 in which each warp twists in an opposite sense in successive pillarings and in each pillaring the front and back warps pillar in an opposite sense.

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