broad lace on his wife's cap, thought he could apply his machine to the production of a similar article.2 His attempt so far succeeded that, by means of the stocking-frame invented the previous century,3 he produced, in 1768, not lace, but a kind of knitting, of running loops or stitches, like that afterwards known as "Brusless ground." In 1777, Else and Harvey introduced at Nottingham the "pin" or point-net machine, so named because made on sharp pins or points. "Point-net" was afterwards improved, and the "barley-corn" introduced: "square" and "spider net" appear in succession.

But, with all these improvements, machinery had not yet arrived at producing a solid net; it was still only knitting, a single thread passing from one end of the frame to the other; and if a thread broke, the work was unravelled; the threads, therefore requiring to be gummed together, to give stiffness and solidity to the net. To remedy this evil, the warp or chain machine was invented, uniting the knitter's and the weaver's mechanism. Vandyke,4 a Flemish workman, and three Englishmen dispute the invention. This new machine was again improved and made "Mechlin net," from which the machine took its name.

For forty years from Hammond's first attempt on the stockingframe, endless efforts were made to arrive at imitating the ground of pillow lace, and there are few manufactures in which so much capital has been expended and so much invention called forth. Each projector fancied he had discovered the true stitch, and

<sup>2</sup> An open stitch on stockings, called Jedediah Strutt, in 1758.

<sup>3</sup> By Rev. William Lee, of Calverton (Nottinghamshire). The romantic story is well known; but whether actuated, as usually stated, by pique at the absorbing attention paid to her knitting by a lady, when he was urging his suit or, as others more amiably affirm, by a desire to lighten the labour of his wife, who was obliged to contribute to their joint support by knitting stockingscertain it is that it was he who first conceived the idea of the stocking-frame, and completed it about 1589. His invention met with no support from Queen Elizabeth, so Lee went to France, where he was well received by Henry IV.; but the same year Henry was assassi-

nated, and the regent withdrawing her the "Derby rib," had been invented by protection, Lee died of grief and disappointment. The arms of the Framework Knitters' Company (Fig. 147, see p. 395) are a stocking-frame, having for supporters William Lee in full canonicals and a female holding in her hand thread and a knitting needle. After Lee's death his brother returned to England, where Lee's invention was then appreciated. Stocking-making became the fashion, every one tried it, and people had their portraits taken with gold and silver needles suspended round their necks.

4 Vandyke had also appended the chain to his stocking-frame, and the zigzags formed by the ribs of his stockings were called "Vandyke;" hence the term now generally applied to all indented edges.