

LACE, in the *Manufactures*, is formed of thread, cotton, or silk, woven into a net, the meshes of which are varied in their figure, according to the design of the pattern, as octagons, hexagons, &c. &c. The lace is also ornamented by a thread, much thicker than the thread forming the net, which is woven in among the meshes, in the figure of flowers, and other fantastic curves; upon the beauty and elegance of which, the value of the lace depends. This thick thread is called the *gimp*.

Lace is made upon a pillow or cushion, upon which a piece of stiff parchment is stretched, having a number of holes pricked through it, to form a pattern of the intended lace. Through these holes, pins are stuck into the pillow; and the threads, wound upon small bobbins, are woven around the pins, and twilted round each other in various ways, to form the required pattern. This process is extremely tedious, particularly for the wide laces, with complicated patterns; and though it is extremely expensive to
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the consumer, the people (chiefly in Bedford and Buckinghamshire) who manufacture it can only obtain sufficient to support a wretched existence, by the most incessant exertion. Of late years, the manufacturers of Nottingham have directed their ingenuity to imitate this species of lace by machinery, in which they have succeeded most perfectly: but still it is only an imitation, the knot or loop of the meshes being essentially different. In the pillow lace, the net or meshes may be described, by supposing a number of ropes, each formed of two or more threads twisted round each other: these are extended parallel; but at every two or three spiral turns of these ropes, the strands or threads composing one rope are twisted around with those of its neighbour, and then return to be twisted with its own; and this reciprocally of the whole number forms a netting; the figure of the meshes depending upon the number of turns which are made, before the twist is changed from one rope to the next. To form a lace of this description, it is essential that the ends of each thread be detached, and capable of being twisted over the adjacent threads. This is easily done by the hand upon the pillow, by twisting the bobbins round each other; but has many difficulties which prevent its performance by machinery.

The Nottingham lace is only a modification of the stitch or loop of which stockings are made; all the meshes being formed by a continuance of one thread, which is, by the machine, formed into loops a whole course (that is, length of the intended piece of lace) at once, by pressing it down alternately over and under between a number of parallel needles; a second course is then made of similar loops on the same needles, and the loops of the first are drawn through those of the second, in such a manner as to form meshes by retaining the first loops; the second are then retained by a third course, and this by a fourth, and so on. The machine is very nearly like a common stocking-frame, but provided with an additional apparatus, which can be readily applied. It consists of a frame, containing a number of needles, which we will call points: these are introduced between the fixed needles of the stocking-frame, and a certain number (one half, for instance) of the loops in the thread are taken off the fixed needles upon these points, which are moved endways, the space of two, three, or more fixed needles, and put down upon them again. Another set of loops is now taken upon the points, and moved in the opposite direction; by this means, crossing the loops over each other, and forming meshes, the figure of which will depend upon the number of needles it is thus carried over. But as this admits of no great variety of patterns, another machine has been invented, which is much more extended in its applications. Like the former, it has the parts of the stocking-frame, but differently made. The thread is, in this, rolled upon a cylinder, in the same manner as a weaver's beam; as many threads being wound round it as there are needles in the frame. These threads pass through eyes in the ends of small points, called guides, which are opposite the needles; and these guides are fixed on two bars, each of which has half the guides fastened in it, that is, one guide is fast in one bar, and the next in the other, and so on alternately of the whole. Each of the guides presents a thread to its needle, and are all at once moved by the hand to twist the threads two or three times round the needles which are opposite them; the loop is now made in a manner similar to the other frame. The next time, the alternate guides are shifted endways, so as to apply themselves to other needles than those they were opposite before. This crosses the thread, so as to make a net: but the quantity which is shifted endways is altered every time, by means of the ma-

chinery, so as to move a certain number of needles; which number is altered every time, to produce the pattern. All the parts of this machine, except the guides, are moved by means of treadles, instead of using the hands, as in the common stocking-frame. The net produced by these frames is woven in bands of the width of the intended lace, leaving a wider mesh than the others, through which the division is to be made to separate the lace into narrow strips. Before cutting up in this manner, the lace is spread in a frame, and a common needle with a thick thread is worked in the meshes, to imitate the gimp, according to the pattern for which the lace is intended.

The lace trade of Nottingham has been carried to a very great extent, but is at present in a state of stagnation, being chiefly dependent on foreign trade, as it has never been in such great repute with the British ladies.

Lace is also made of *gold* and *silver thread* (which see), much in the same manner as the bone or blond lace above described. The importation of gold and silver lace is prohibited. Great quantities of the finest blond laces have been imported from Flanders. By 3 Geo. III. c. 21. and 5 Geo. III. c. 48. if any person shall import any ribbands, laces, or girdles, not made in Great Britain, whether the same shall be wrought of silk alone, or mixed with other materials, the same shall be forfeited, and may be seized by any officer of the customs, in whatever importers', vendors', or retailers' hands they may be found; and the importer, and every person assisting therein, and the vendors and retailers in whose custody they shall be found, or who shall sell or expose the same to sale, or conceal with intent to prevent the forfeiture, shall forfeit respectively 200*l.* with costs; half to the king, and half to the officer who shall inform and prosecute.