Lace. Authorities differ regarding what constitutes a lace fabric, whether we adhere strictly to the technical distinction of an ornamental open work fabric made with threads by knotting, twisting or stitching, or sewing with a needle, or include fabrics that resemble embroidery, made in combination with something woven. In some statements on the subject prepared for the writer some years ago by the late Dr. Thomas Wilson, one of our highest lace experts, it was set forth that lace is not a textile, because not woven, and that it was not embroidery, its peculiarity, and its principal difference from these being that it is made a mesh or loop at a time, each one being complete in itself, and not made on any previously prepared foundation. There are, however, netted fabrics which would never be called lace although made in the same way, because they do not work out an ornamental design or pattern. All authorities agree that lace is an ornamental fabric, the word ornamental being the one characteristic that distinguishes a lace fabric proper from a fine fishing net, or a Yucatan hammock, in which the threads are netted or twisted precisely as some forms of lace are made, though these articles are not lace. On the other hand, there are fabrics made with threads which have the appearance of lace, embodying in their fabrication artistic, graceful, or ornamental designs, but which are not lace, such as drawn-work, where the design is wrought in a woven fabric by drawing out certain threads forming the fabric, as well as other manipulation.

It is impossible to say when or where lace was first made. We know that the art of weaving is older than any written records, and that flax threads were wrought into fabrics by rude weaving processes in the early Stone age in Europe; and that the art was brought to a high degree of perfection in the later Bronze age. We know that attempts at ornamentation, in the form of more or less elaborate fringes are found in some of the delicate Egyptian linens of 4,000 years ago. The art of embroidering is likewise ancient, for it had reached a high state of perfection before the period of the Pharaohs, and has been prac-

tised by all countries and peoples from time immemorial. The art of lace making, however, must have developed, by a kind of evolution, from early attempts at the ornamentation of fabrics - possibly as early as the 12th century these first attempts being mere loops of plaited or twisted threads in the form of small cords, attached to the hems of garments. In the earliest productions of lace there was a foundation of woven fabric, such as very fine linen, and the design was wrought by means of needle-point stitches, or darning, something after the manner of embroidery, the uncovered portion of the woven fabric being afterward removed, and a number of such designs skillfully joined together. Thus, from needlework or embroidery, which has come down from Bible times, we may imagine lacemaking was developed. The fabrication of the true laces, according to Dr. Wilson's definition of the true laces, according to Dr. Wilson's definition of the true laces, according to Dr. Wilson's definition of the laces of t tion of "a knotted or twisted fabric made one mesh or loop at a time," dating back no farther than the latter part of the 15th century, and it has been said that it is extremely doubtful if any particular specimen can be identified as having been made prior to the middle of the 16th century, at which time lace first appeared as a perfected fabric. The point lace of the earliest period of manufacture came nearer being what might be termed a pure art creation than that which followed in a later period; that is to say, the motive or design having been worked out from a thought in the brain of the maker, and not from a set pattern, as was the case in the fabrication of the later or second period needlepoint laces. The earliest work is supposed to have been produced by nuns, and the patterns or motives not only give evidence of high artistic merit, with originality, but the practice of a patience on the part of the worker that would hardly be appreciated in this practical and rapid transit age. The designs from the period which followed were quite as beautiful, but were more set, and show the restrictive influence of copying rather than directly producing original forms as the work progressed

Italy, France, Belgium, and Germany have all claimed the invention of lace-making, but the country to which the honor belongs is unknown. Dr. Thomas Wilson held it remarkable that lacemaking should have sprung up, or been invented at about the same period by two entirely distinct processes without relationship or evolution between them, and that the people of the countries wherein either of the inventions was made were not only unknown to each other, but apparently neither had any knowledge of the process of lace-making invented or employed in the other country. One of these processes is by the employment of the needle and a single thread. wherein the work was perfected mesh by mesh, each mesh being completed as the work progressed. The other process was by the use of many threads at once, each one attached to bobbins for the purpose only of separating them, the meshes being made by twisting the threads a greater or less number of times. When each mesh is only partially completed, the thread is carried on to the next, and so on from side to side the entire width of the fabric. While the countries in which these processes were invented are unknown, the evidence points to Venice as the seat of the former, and to Belgium as the seat of the latter. By these two totally distinct processes fabrics are produced so nearly alike as often to require an expert to distinguish the difference, which, though many times easily determined, yet not infrequently requires the aid of

an expert.

It is seen, therefore, that there are two distinct classes of hand-made lace, though many varieties of each:—(I) needle-point lace, and (2) bobbin or pillow lace. Manufactured lace, a third class, is a recent invention, and while it has been the means of bringing a form of ornamental lace fabric within reach of everybody, it can never be compared with the exquisitely delicate and wonderful fabrications of hand-wrought lace, many examples of which are of priceless

Lace is chiefly made from linen, cotton and silk threads, usually of the finest numbers, and often specially prepared—some of the finest threads being spun in underground rooms where a damp atmosphere can be maintained, and where the only light is a single beam directed upon the work. Gold and silver threads have also been used, as well as other fibres than those named, such as aloe fibre, or ramie, which is now considerably used in machine-made laces. Mohair and fine wool have also been employed, and even horsehair has been used to stiffen portions of the work in some laces.

Point lace, or fabric made with the needle point, is the oldest known form, its most cele-brated examples being the beautiful Venetian designs, and the exquisite French laces of Alençon and Argentan. The early French industry doubtless derived its inspiration directly from Venice, as Colbert, in the time of Louis XIV., is said to have been because the form Levis of the contract of the con said to have brought from Italy 30 or more of the best lacemakers, and, encouraged by the king, this lace - also known as Point de Francesoon became in such vogue that many establishments sprang up in other places in France to

supply the demand.

In the oldest designs in point lace there was a foundation of delicate linen, as we have seen; there was also a reticulation of threads attached to a light frame, the patterns being worked over with the button-hole stitch upon these threads and into the linen foundation, which, as the work progressed, was completely hidden by the design. The portions of the foundation outside of the design were cut away, and a number of the design or patterns joined together by means of connecting threads. But sometimes no founda-tion was employed, the patterns simply wrought upon threads stretched upon the frame as above described, the button-hole stitch being employed. The Venetian point had attained a wonderful perfection by the middle of the 16th century, some of the examples in complexity of stitch, delicacy of design, and artistic merit being masterly conceptions.

Point d'Alençon and Brussels point are still manufactured, the former maintaining many of the distinctive characteristics for which it was so esteemed in the 17th century. Other varieties of needle-point or Guipure laces are Rose point, Portuguese point, and Maltese point. The first-named is especially characterized by the figures

being worked in high relief.

Brussels point differs from the Venetian and French needle-point chiefly in the manner of making the stitch, a plain thread being used, and not overcast with the button-hole stitch. In early

times Spanish point enjoyed a wide celebrity, but as much Flemish lace was imported into Spain, there was a decline in the industry, though point laces from the Spanish convents, in the early part of the last century, were very similar in character to the Venetian point. Point d'Espagne is said to have been merely a commercial name used in the 17th century, for which the French manufacturers were responsible. Point d'Angleterre owes its name to an effort on the part of the Flemish lace-makers to evade the restrictive measures which were adopted by Great Britain in the latter part of the 15th century, to encourage the home lace industry. The prohibition worked effectively, smuggling was difficult, and in time Flemish lace-makers were induced to settle in England, whereby some of the characteristics of Flemish laces have been perpetuated in the English pillow laces.

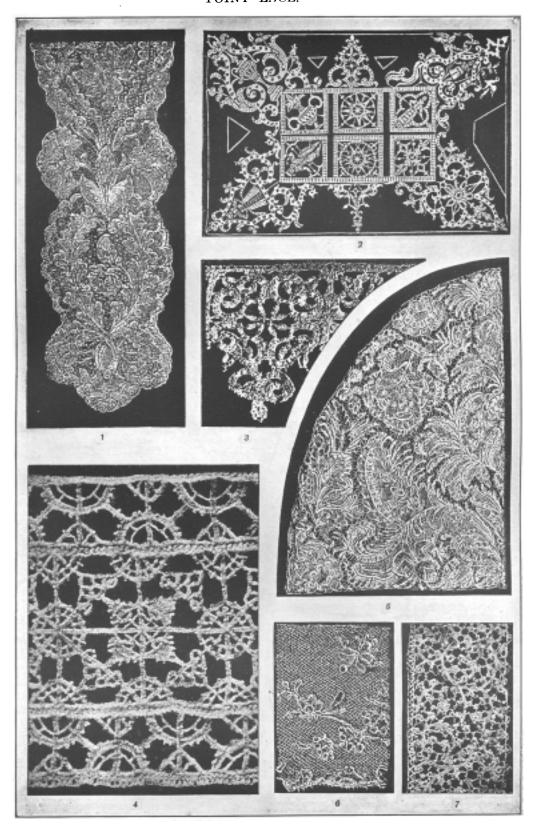
It has been claimed that pillow lace manufacture was the invention of Barbara Uttman, of St. Annaberg, Saxony, about 1561, though some authorities assert that she only introduced the manufacture, probably from Flanders. At any rate, paintings from an earlier period give evidence that lace was manufactured in Flanders at least half a century before her time. Pillow lace is made by working the design over a parchment pattern upon a pillow or cushion, the threads being wound upon bobbins. The method was to attach the pattern to the pillow, pins being inserted at regular intervals following closely the lines of the pattern or design. The figure is then wrought by twisting the threads around the pins to form the netted or open-work effect, which characterizes this form of lace. Flemish laces of the 16th century became quite as famous as the Italian, and the art, as practised in Flanders, was early introduced into many countries of Northern Europe. Among the more important laces that are made with the pillow and bobbins, may be mentioned Brussels (both Saxony and Flemish), Mechlin, Lille, Chantilly, Valenciennes, Honiton, Buckinghamshire, and Limerick or Irish lace.

The Mechlin laces - sometimes called the queen of laces, and which formerly enjoyed a wide celebrity—are products of Mechlin, Ant-werp, and Lierre. Ordinary Mechlin is made with a hexagonal mesh, as is also Brussels pil-low. The Lille laces embody a simple pattern, low. The Lille laces embody a simple pattern, marked by a thick thread, and are said to be "the finest, lightest, most transparent, and best made of all grounds." The Chantilly silk laces were also very simple in character, particularly in regard to their meshed grounds. The black laces were especially noted, and at one time were in high favor. Valenciennes is probably the most important pillow lace now manufactured most important pillow lace now manufactured in Belgium, the cities of Courtrai, Bruges, Ypres, Ghent, and Alost furnishing the larger part of the supply. That made at Ypres especially is the finest quality. Its predominant characteristics are richness of design, beauty of ground, and evenness of tissue. In this lace the mesh is diamond shaped and closely plaited, without twisted sides to the mesh.

The English laces are chiefly made in the

Ounties of Buckinghamshire, Devonshire, and Bradford. Honiton is the best known of the pillow laces of Great Britain, and the most beautiful. It embodies original characteristics that give it an individuality, although it bears some

POINT LACE.



- Valenciennes.
 Venetian chain lace.
- Italian bobbin lace, 1691.
 Double point lace.
 Brussels guipure.

- 6. Mechlin point.7. Relief point lace.

resemblance to Brussels. British point is an imitation of Honiton. Patronized by the late Queen and by other members of the royal family, Honiton soon became popular and its manufacture for many years has been important. Buckinghamshire is said to be an adaptation of the Mechlin, and the patterns to have been used since the 18th century. Laces are made in other places in England, and in Scotland, for the most part as household industries. As has been said, the Irish lace is made at Limerick; it is justly popular, and holds a high position. The lace industry of Russia is said to have been promoted through court patronage after the visit of Peter the Great to Paris. These laces are especially noted for the uniformity of their

designs, or patterns.
We have been considering chiefly lace-making in Europe. In more modern times the art has been introduced into many countries, the European nations especially extending the manufacture into their colonies, the natives being the lace-makers. Even the natives of some of the South American countries practise the art, which was taught them by the missionaries of an earlier period, and which, handed down from generation to generation, has become identified with the people. The peasant women of Fayal have for many years produced an ex-quisite lace, with designs in high relief, the fibre used being finely prepared filaments of the Agave Americana, or "Aloe fibre" as it is known. This lace was formerly sold in Paris at very high prices; and it was claimed a few years ago that there were only 25 women on the island who were skilled in its manufacture. Among the beautiful peasant laces should be mentioned those of Russia, Germany, and Crete, though the Cretan lace manufacture has not survived. Malta produces a pillow lace in white and red threads which is noted, and pillow lace is made in Ceylon which somewhat resembles both the Malta and the Buckinghamshire. The natives of Madagascar, under French tuition, make a fabric resembling antique lace, which is an article of export. Wm. E. Curtis is authority for the statement that the women of Paraguay make a very fine pillow lace which is called Nanduty (Nanduti), the art having been taught them by the Spanish nuns. A native fibre is used which is described as soft and lustrous as silk. The designs are beautiful and the fabric indestructible. The lace is made in small squares and these joined together. In Dr. Thomas Wilson's valuable collection there are also some fine examples of aloe fibre lace from Corfu and Zante.

The third class of lace manufactured is that produced by machinery, the chief centres of the machine lace industries being Nottingham, England, and Calais, France. Nearly every kind of lace can be made by machinery, and the manufacture has been brought to so high a state of perfection, that some of the lace is difficult to distinguish from the fabrics produced by hand processes. While the enormous output and cheapness of machine lace has placed the fabric within reach of all classes, it is claimed that the demand for hand-made lace has not diminished, though prices have been affected.

It would be a hopeless task to endeavor to describe the complicated machines in use today, to make them understood, in so brief an account as appears in this place, and the

student is therefore directed to the 'History of Machine Wrought Lace, by Mrs. Bury Palliser, London, 1865-9, and to the 'History of Machine Wrought Hosiery and Lace Manufacture, Felkin, 1867. The first attempt at the invention of a lace machine dates back to 1758 when a stocking weaver was able to produce upon a machine a lace in imitation of Brussels. really practical machine, however, did not appear until 1809, the invention of Heathcote, which is said to have been suggested from machinery employed in the manufacture of fishing nets. A year or two later there were improvements by several inventors, Morley, Leaver, Clark, and others, which with subsequent improvements, have brought the lace machinery of to-day to such perfection. Machine lace is largely made from cotton, though the new fibre ramie has been employed to some extent, and with best results. This textile is very strong, with the lustre of silk, and takes color well. Some malustre of silk, and takes color well. chine-made black ramie lace, a fourth of a yard wide, in the writer's collection of textiles, is an exquisite fabric.

Gold and silver lace, strictly speaking, is not a lace fabric, but rather a woven fabrication resembling in the finished state some kinds of embroidery. It is either made from fine filaments of gold and silver (threads), or from textile yarns or threads wound or otherwise

covered with the metal.

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