

Silk. 1. The fine glossy thread spun by the caterpillars of various moths of the genus *Phalœna*. That of the *Phalœna bombyx*, or common silk-worm, is most generally known and used.

The earliest notices of the use of silk are to be found in Chinese annals, as we might expect: these people had the worm, its products, and the means of rearing. If we assume with one of the moderates that Hoang-to, who began the culture of silk in China, lived in 1703 a. c., he was contemporary with Joseph, the viceroi of Egypt. The wife of the Emperor, named Si-ling-chi, is particularly credited with the success of the domestication of the worm and the mode of rearing its product.

The passage in Ezekiel rendered silk is believed to be a misnomer; probably fine flaxen goods. Another reference to silk in the Bible is in Revelations xviii. 12, where it is mentioned as among the treasures of the typical Babylon.

For ages after its first importation into the West the Greeks and Romans remained ignorant of the manner in which it was produced. The Greeks, returning from their Persian conquests, 321 a. c., brought back wrought-silk.

One specimen of silk has been found in the Catacombs of Egypt. It is associated with some bead network taken from a mummy at Sakkarah.

The serice of the ancients, from whence the silk was derived, and whence its European name, has been identified probably with the modern Khotan.

Procopius calls it Serinda, which terminal denotes the India whence it was derived, or else an indication of the alliance of the two by race, position, or inter-commercial relation.

All the ancient and modern names of silk are derived from the Chinese *Se*, which in Corea becomes *Sir*; in Mandchou, *Sigê*; was in Chaldee, Arabic, and Syriac, *Seric*; in Greek, *Sericea*; in Latin, *sericum*; in Anglo-Saxon, *seof*, and so on.

The first ancient Western author who mentions it distinctly is Aristotle; in his time it is believed to have been imported in skeins from Asia and woven in Coe. The references to it in later authors are numerous. Crassus found that the Parthian troops had silken flags attached to gilt standards. The silken and embroidered robes of Cleopatra are celebrated by various authors, — Lucan, for instance. It long remained an expensive luxury: Hellogabalus, it is said, being the first Roman who had a complete silken garment; and silk was worth its weight in gold in the time of Aurelian. At the end of the third century it was worked with a warp of linen or wool, and became more common.

The history of the introduction of silk culture into Europe is thus related by Procopius ("De Bello Gothico," IV. 17):—

"About this time [A. D. 530] two monks having arrived from India, and learned that Justinian was desirous that his subjects should no longer purchase raw-silk from the Persians, went to him and offered to contrive means by which the Romans would no longer be under the necessity of importing this article from their enemies the Persians or any other nation. They said that they had long resided in the country called Serinda, one of those inhabited by the various Indian nations, and had accurately informed themselves how raw-silk might be produced in the

country of the Romans. In reply to the repeated and minute inquiries of the emperor, they stated that the raw-silk is made by worms, which nature instructs and continually prompts to this labor; but that to bring the worms alive to Byzantium was impossible; that the breeding of them is quite easy; that each parent animal produces numerous eggs, which are hatched by the heat of manure. The emperor having promised the monks a handsome reward if they would put in execution what they had proposed, they returned to India and brought the eggs to Byzantium, where, having hatched them in the manner described, they fed them with the leaves of the black mulberry, and thus enabled the Romans thenceforth to obtain silk in their own country."

Western Europe was long supplied from this point. The manufacture was introduced into Spain by the Saracens.

In 780, the Emperor Charlemagne sent Offa, king of Mercia, a present of two silken vests, indicating the esteem in which the material was then held.

In 1147, Roger II. of Sicily, returning from Palestine, plundered Athens and Corinth, seized workmen who understood the silk manufacture, and introduced it into his own dominions. From thence it slowly spread to Italy and France. Louis XI., in 1480, obtained Italian workmen and established the manufacture at Tours, and in 1521 Francis I. established a colony of Milanese at Lyons.

The manufacture was encouraged in England by James I. in emulation of his "Brother the French King," as he styles him. The revocation of the Edict of Nantes by Louis XIV., in 1685, drove 50,000 Protestants from France, and materially aided in spreading the manufacture of silk, crystal glass, jewelry, and other fine goods, in which that nation of *dévoles* and artists so highly excelled.

In 1717, John Lombe obtained by stealth from Sardinia a model of the silk throwing-mill, and set up silk-works in Derby, England. The works afterward devolved upon his brother William, and then reverted to a cousin, who became Sir Thomas Lombe, whose name is also creditably associated with the pursuit of the enterprise.

Silk from spiders was spun, in 1736, by Baon, a Frenchman, who manufactured with this material both stockings and gloves. He estimated 12 house-spiders = 1 silk-worm.

The Arachnide have engaged other artists not belonging to the great college of Laputa, and a patent of the United States was granted to some officers of the United States Army, January 9, 1866. They appear to have found in South Carolina some spiders of wondrous fibrous fecundity, and patented a machine in which the Arachnide are secured upon a frame, their spinnerets being so presented as to yield their webs to be associated and wound upon a spool. The legs are drawn back out of the way of interference while the reeling proceeds.

2. (*Fabric.*) A fabric woven from silk. There are many varieties, different in the fineness, density, and finish, such as—

Shot-silk.	Tissue.
Lutestring.	Gros.
Satin.	Moire-antique.
Satinet.	Ribben, etc.

For specific list of appliances in the treatment and manufacture of silk and other fiber, see COTTON, FLAX, WOOL, HEMP, SILK, etc., APPLIANCES.