

Cot'ton. A plant, or the fibrous product thereof, having a scientific Latin name (*gossypium*), but an Arabic common name (*goton*), which pleasantly reminds us of the great people from whom we derived it.

Herodotus (Book III. c. 106) refers to the cotton of India: "The wild trees of that country bear fleeces as their fruit, surpassing those of the sheep in beauty and excellence; and the Indians use cloth made from this tree-wool." In another place he states that the Indian contingent of the army of Xerxes wore cotton drawers (Book VII., German *Baumwolle*, tree-wool, c. 65).

Theophrastus, the disciple of Aristotle, derived farther information from the expedition of Alexander, and says:—

"The trees from which the Indians make clothes have a leaf like that of the black mulberry, but the whole plant resembles the dog-rose. They set them in the plains arranged in rows, so as to resemble vines at a distance. They bear no fruit, but the capsule containing the wool is, when closed, about the size of a quince, and when ripe it expands so as to emit the wool, which is woven into cloths, either cheap or of great value."

Aristobulus, one of Alexander's generals, mentions the cotton-plant as the "wool-bearing tree," and stated that its capsules contained seeds, which were taken out, and that what remained was combed like wool. Nearchus, Alexander's famous navigator, also refers to it, and says that the shirts, mantles, and turbans of the people of India were made of it. Strabo, on the authority of Nearchus, refers to the fabrics of cotton as being flowered and beautifully dyed.

An awning of cotton was spread over the theater by Lentulus Spinther, July 6, 63 B. C. Linen had been formerly used.

Pliny mentions cotton in four places in his Natural History; two refer to the account of Theophrastus, one to the *carbasa* (cotton) of Spain, one to the cotton of Egypt:—

"In Upper Egypt, towards Arabia, there grows a shrub, which some call *gossypium*, and others *xylton*, from which the stuffs are made that we call *xylina*. It is small, and bears a fruit resembling the filbert, within which is a downy wool which is spun into thread. There is nothing to be preferred to these stuffs for softness and whiteness; beautiful garments are made from them for the priests of Egypt."

The old hatred of the Egyptian priests for wool and preference for flax would not militate against the cotton when they found it to be vegetable growth. In the earlier periods of the Nile people, nothing but linen was used by priests or for embalming.

Arrian the historian (d. A. D. 140) cites the importations from the East to Europe of cotton goods, plain and ornamented. The muslins of Bengal were then called *Gangitiki*, to indicate that they came from the Ganges. The Indian names yet survive in the words *muslin*, named from Moussol, and *calico* from Calicut.

Julius Pollux, in the Onomasticon (A. D. 170), refers to the cotton of India, which he terms *byssus*, and compares with flax:—

"The tree produces a fruit most nearly resembling

a walnut, but three-cleft. After the outer covering, which is like a walnut, is divided and dry, the substance resembling wool is extracted, and is used in the manufacture of cloth for woof, the warp being linen."

Cotton paper used by the gold-beater is mentioned by Theophilus Presbyter about A. D. 800.

On the discovery of America by Columbus, cotton formed the principal article of clothing among the Mexicans. They interwove it with fine-spun hair of rabbits, or with feathers for state robes. The cuirasses of thick cotton fabric were proof against the Indian missiles, and were adopted by the Spaniards. The nobles wore instead, cuirasses of thin plates of gold or silver with surcoats of feather-work.

Among the presents stolen or purchased by the brutal Cortez and sent to Charles V. were "cotton mantles, some all white, others mixed with white and black, or red, green, yellow, and blue; waistcoats, counterpanes, tapestries, and carpets of cotton; and the colors of the cottons were extremely fine." — CLAVIGERO'S *Conquest of Mexico*.

The Mexicans had indigo and cochineal.

Columbus found the cotton-plant wild in Hispaniola, in other West India islands, and on the continent of South America, where the natives used it for dresses and fishing-nets.

Magellan, in 1519, found the Brazilian natives reposing on beds of cotton down.

Cotton goods were familiar to the Arabs in the time of Mohammed, A. D. 627, and the culture was carried by his followers through the Mediterranean coast of Africa into Spain, whence the fabric reached the less civilized parts of Europe. Abderahman III. commenced the manufacture of cotton in Spain, and in the fourteenth century it was introduced into Italy.

When the best part of the inhabitants of Spain were expelled, when the University of Cordova became a thing forgotten on the peninsula, when the memory of Alhazen was lost, and the era of the Pedros and Philips commenced, then the cotton-plant, too, faded away, and all the industries growing out of this beautiful staple languished. The culture and manufacture revived again in Spain at Valencia and Barcelona respectively.

Fabrics and yarns were largely imported from the East into Europe for several centuries; but the manufacture of the *cotton-wool*, as it was long called, gradually crept into the various countries of Europe.

The earliest notice in England is by Roberts, 1641, who describes the excellent goods, "*fustians, vermillions, dimities*, and other stuffs," made by the inhabitants of Manchester, of "*cotton-wool* brought from Smyrna and Cyprus." First made by machinery by Louis Paul in 1736-40. See COTTON-MACHINERY.

In the seventeenth century, cotton fabrics were so largely imported into England from India as to interfere with the woolen, linen, and silk interests, and the importation of cotton goods was forbidden in 1700.

An act of parliament in 1721 imposed a fine of £5 on the wearer of cotton and £20 on the vendor. It was thought to be the ruin of England, and every depression in trade was charged on the cotton, which was superseding wool. Thirty years afterward the annual value of manufactured cottons was £200,000. In 1860 it was £52,000,000. In 1823, Great Britain employed 10,000 steam-looms; the number in 1865 was 400,000, driven by steam-power estimated equal to 294,000 horses, and directly employing 1,000,000 persons.

The Parliamentary Report of 1851 states the number of pounds of cotton worked into yarn per day (nearly) 2,000,000 pounds.
Spindles in operation 20,000,000
Power-looms 250,000
Factories 2,000
Hands employed inside the walls 350,000
Horse-power (steam and water) 80,000
Production of cotton goods in 1850 per day 4,000,000 yards.
Production of unwoven cotton yarn per day 500,000 pounds.

Cotton-seed was brought into England from the Levant; taken thence to the Bahamas, and thence to Georgia in 1786. The first cotton-mill in America was at Beverly, Mass., in 1788.

In the following list are associated the terms used in the description, manufacture, and products of fibrous material, excepting those involving pulping, which will be found under the indicial head of PAPER (which see). The following list includes cotton, flax, wool, hemp, silk, etc., appliances. See —

Ageing.	Carding-machine.
Balling-machine.	Card-machine.
Bat.	Card-setting machine.
Batting.	Carriage.
Batting-machine.	Carrier.
Beating-engine.	Cask.
Bier.	Caudroy.
Billy.	Chamber.
Bink.	Chemicking.
Bleaching.	Chenille-machine.
Block-printing.	China-blue style.
Blower and spreader.	Circular bolt.
Blowing-machine.	Clasp.
Bobbin.	Cleaning-machine.
Bobbinet-machine.	Cleaver.
Bobbin-winder.	Clearing.
Bobbin and fly frame.	Cloth.
Boon.	Cloth-creaser.
Bott-hammer.	Cloth-crimping machine.
Braiding-machine.	Cloth-cutting machine.
Braid-sizing and polishing machine.	Cloth-dressing machine.
Brake. Flax and hemp	Cloth-drying machine.
Branning.	Cloth-embossing machine.
Breaker.	Cloth-finishing machine.
Breaking-frame.	Cloth-folding machine.
Breaking-machine.	Cloth-measuring machine.
Bronze.	Cloth-napping machine.
Brushing-machine.	Cloth-press.
Bucking.	Cloth-shearing machine.
Bucking-keir.	Cloth-smoothing machine.
Buffalo.	Cloth-sponger.
Bunch.	Cloth-stretcher.
Bundle.	Cloth-teaseler.
Bundling-press.	Cloth-tenter-bar.
Burling-iron.	Coiling or laying slivers.
Burling-machine.	Color-doctor.
Burr.	Column.
Burring-machine.	Clouded-yarn machine.
Cable-laid.	Comb.
Calendering-machine.	Comb-broach.
Calico-printing.	Combing-machine.
Can-frame.	Condenser.
Can-roving machine.	Cone-pulley.
Canvas-frame.	Cop.
Card.	Copping-plate.
Card-clothing.	Copping-rail.
Card-grinding.	Cop-tube.
Carding-engine.	Cop-winder.
	Cord.

Cord-covering machine.	Floss silk.	Packaging-machine.	Slab.
Cord-dryer.	Fluting-machine.	Padding.	Sliver.
Cot.	Flyer.	Parrotting.	Sliver-box.
Cot-roller.	Fondu.	Picker. Cotton	Slub.
Cotton.	Frame.	Picking. Cloth	Slubbing.
Cotton-cleaner.	Frizzing-machine.	Pigment.	Slubbing-machine.
Cotton-elevator.	Fulling.	Pile.	Souring.
Cotton-gin.	Fulling hat-bodies.	Pirn.	Speeder.
Cottonizing-fiber.	Fulling-mill.	Planking-machine.	Spindle.
Cotton-paper.	Fulling-stock.	Plaquage-style.	Spinel.
Cotton-picker.	Gasing.	Plucker.	Spinning.
Cotton-press.	Gig.	Polishing. Yarn and	Spinning-jack.
Cotton-thread.	Gigging-machine.	thread	Spinning-jenny.
Counterfaller.	Gill.	Pouncing-machine.	Spinning-machine.
Crapping-machine.	Gill-frame.	Printing.	Spinning-wheel.
Creel.	Gimp-machine.	Presser-bar.	Spirit-colors.
Creeping-sheet.	Gin. Cotton	Presser-flyer.	Spool.
Crisper.	Glossing.	Puffer-pipe.	Spooling-machine.
Crofting.	Grounding-in.	Quill.	Spool-labeling machine.
Cross-shearing machine.	Habeck.	Quilting-frame.	Spoon.
Cut.	Hackle.	Rap.	Spreader.
Cutting-engine.	Hackling-machine.	Raw-silk.	Spreading-frame.
Damping-machine.	Hair-rope picker.	Reed.	Spun-yarn.
Dash-wheel.	Hand-spinning machine.	Reel.	Squirrel.
Decoloring-style.	Hank.	Reeling-machine.	Steam-chest.
Dent.	Harle.	Reëntering.	Steeping.
Devil.	Harp.	Reserve-style.	Stocking-frame.
Discharger.	Hatchel.	Resist.	Stocking-machine.
Discharge-style.	Hawser.	Retting.	Stop-finger.
Distaff.	Hawser-laid.	Ribbon.	Strand.
Doffer.	Heck-box.	Ring and traveler.	Stretcher-mule.
Doffing-cylinder.	Heckle.	Ring-spinner.	Stretching-frame.
Doffing-knife.	Heckling-machine.	Rinsing-machine.	Strick.
Doubler.	Heddle.	Ripple.	Suint.
Doubling.	Hemp.	Roll.	Sulphuring.
Doubling and twisting	Hemp-brake.	Roll-boiling.	Swift.
machine.	Hook-frame.	Roller-bowl.	Swimming-tub.
Drawing.	Hot-flue.	Rongeant-style.	Swingle.
Drawing-frame.	Iron-man.	Rope.	Swing-stock.
Drawing-head.	Jack-frame.	Rope-making machine.	Teaseling-machine.
Dresser. Copper	Jack in a box.	Rope-winch.	Tenter.
Dressing-machine.	Jenny.	Roving.	Tenter-bar.
Drum.	Kemp.	Roving-frame.	Tewing-beetle.
Drying-machine.	Knitting-burr.	Scavenger-roll.	Thread.
Dumb-singles.	Knitting-machine.	Scouring.	Thread-finisher.
Dunging.	Knotting.	Scribbling-machine.	Thread-frame.
Dust-room.	Lace-machine.	Scrimping-bar.	Thread-machine.
Dyeing.	Lag.	Scutcher.	Thread-polisher.
Embroidering-machine.	Lantern.	Scutching-machine.	Thread-winder.
Enleavage-style.	Lap.	Shake-willy.	Throstle.
Equational-box.	Lap-frame.	Shearing.	Throwing.
Fabric (see list).	Lapping-machine.	Sheeting-machine.	Thrown-silk.
Faller.	Lay.	Shives.	Thrum.
Faller-wire.	Laying-machine.	Shove.	Top.
Felt.	Lea.	Shroud. Hawser-laid	Top-flat.
Felting-machine.	Leaver-machine.	Shuttle.	Tow.
Fiber-cleaning.	Lewis.	Silk.	Tram.
Fiber. Separating ani-	Licker-in.	Silk-cleaning knife.	Twill.
mal and vegetable	Linen-prover.	Silk-doubling machine.	Twine-machine.
Filling-engine.	Lint-doctor.	Silk-filature.	Twine-reeler.
Fine-drawing.	Loom (see WEAVING).	Silk-reel.	Twist.
Finishing-card.	Madder-style.	Silk-sizing machine.	Urchin.
Fishing-net machine.	Mangle.	Silk-sorting machine.	Wadding.
Flat.	Marabout.	Silk-stretching machine.	Wadding-sizer.
Flax.	Mordant.	Silk-twister.	Warp.
Flax and hemp brake.	Mosaic-wool.	Silk-winder.	Warp-dresser.
Flax-cleaning machine.	Mule.	Singeing-machine.	Warp-frame.
Flax-cotton.	Napping-cloth.	Singer.	Warping-hook.
Flax-cutting machine.	Netting-machine.	Singles.	Warping-jack.
Flax-dresser.	Noils.	Sinker.	Warping-mill.
Fleece.	Oiling.	Sizing-machine.	Warp-machine.
Flock.	Opening-machine.	Skein.	Waste-picking machine.
Flock-duster.	Orgazine.	Skewer.	Water-frame.
Flocking-machine.	Pad.	Skip.	Water-laid.

Water-twist.	Wool-machinery.
Waxing.	Wool-oiler.
Whirl.	Wool-picker.
Whirlers.	Wool-press.
Willowing.	Wool-sorting.
Willy.	Wool-table.
Wincing-machine.	Wool-washer.
Winding-machine.	Worker.
Wolf.	Worsted.
Woof.	Yarn.
Wool.	Yarn-cleaner.
Wool-burring machine.	Yarn-dryer.
Wool-cleaner.	Yarn-printing machine.
Wool-combing.	Yarn-reel.
Wool-dryer.	Yarn-winder.