

**Cap'pa-dine.** Silk floss or waste obtained from the cocoon after the silk has been reeled off.

**Clear'ing.** 1. (*Silk-manufacture.*) The process of removing irregularities from silk filaments before spinning, by passing them beneath a scraper, or between steel rollers. See SILK-MANUFACTURE.

**Court-plas'ter.** Silk surfaced with a solution of balsam of benzoin.

**Crap'ing-ma-chine'.** A machine by which silk is craped, i. e. crinkled.

**Cut'ting-en'gine.** (*Silk-machinery.*) A machine in which refuse or floss silk — the fibers having been previously disentangled, straightened, and laid parallel by the HACKLE, FILLING-ENGINE, and DRAWING-FRAME (which see) — are cut into lengths of about  $1\frac{1}{4}$  inches, so as to enable them to be treated as a staple by the carding-machine and the machines which follow in the cotton process, bringing the fiber to a *sliver*, a *roving*, a *thread*, suitable for weaving.

The cutting-engine has feed-rollers, and an intermittingly acting knife, somewhat similar to a chaff or tobacco cutter.

**Flor'et-silk.** FLOSS-SILK (which see).

**Floss-silk.** The exterior soft envelope of a silk-worm's cocoon; the raveled downy silk broken off in the filature. It is carded and spun for various purposes.

**Mar'a-bout.** A peculiar kind of silk, generally containing 3 threads, and made from the white Novi raw silk. It is dyed without discharging the gum.

**Or'gan-zine.** *a.* A silk thread made of several *singles*, thrown together. *Thrown-silk.*

**Raw-silk.** Reeled silk wound from the cocoons, several fibers forming one thread.

The cocoons are immersed in warm water to soften the natural gum on the filaments, and the ends of a number being gathered are wound as a single thread upon the reel. When the skein is dry, it is made into a hank. See SILK-REEL.

**Silk-doub'ling Ma-chine'.** A machine for twisting together two or more filaments of twisted silk.

**Sill-dress'ing Ma-chine'.** A special kind of wood-planing machine for dressing heavy timbers on two or more sides, for car-bodies or other structures. It has various adjustments for different thicknesses and widths of stuff.

**Silk-mill.** A building where silk is reeled, spun, and woven.

**Silk-siz'ing Ma-chine'.** See SILK-SORTING MACHINE.

**Silk-throw'ing Mill.** At the commencement of the eighteenth century, silk machinery was so imperfect in England that the supply of thrown silk was chiefly derived from Italy. In 1717, John Lombe returned from Italy with drawings of the machinery employed in that country, where the process was kept as a profound secret. He obtained access to the mills by bribing the workmen, and committed the results of his observations to paper at night. Having been discovered, he with great difficulty made his escape. In 1718 he obtained patents for the improvements thus introduced, and in 1719 erected a mill on the Derwent at Derby, 5 stories high and  $\frac{1}{4}$  of a mile in length, which was considered one of the age.

**Silk-worm Gut.** A fine cord for angling, made of the silk-gut of the worm.

Fine worms about to begin spinning, being selected, are killed by immersing in vinegar. After steeping for about twelve hours, a worm is removed and pulled apart, exposing two transparent yellowish-green cords. These are stretched to the required extent, and fastened in the elongated condition on a board to dry.

**Spun-sil'ver.** Thread of coarse silk, or *singles*, wound with flattened silver wire.

**Thrown Silk.** A silk thread made of two or more *singles*, twisted together in a direction contrary to the twist of the *singles* of which it is composed.

**Thrown Sin'gles.** Silk thread, the result of three separate spinning operations.

Silk filaments are twisted to form *singles*. Several of these are combined and twisted together (doubling), forming *dumb singles*. A number of the latter are associated and twisted together (*throwing*), forming *thrown singles*.

This, if single-twisted, is *tram*; if double-twisted, is *organ-zine*.

If the gum be left in it, it is *hard silk*; if the gum be removed, *soft silk*.

The operation is as follows: the filaments of silk from the bobbin are twisted in one direction, and the *single* thus obtained is wound on a second bobbin. A number of bobbins containing singles are placed in a frame, and their ends, being united, the combined bunch of singles is wound on a bobbin, and from thence on to a reel. From this the bunch of singles is conducted to a rotating flyer, which twists it and delivers it as *thrown silk* on to a bobbin. See DOUBLING.

**Tus'sah-silk.** A strong, coarse, dark silk, made from a native Bengal silk-worm.

**Twist.**

6. A closely twisted strong sewing-silk. Saddler's silk.