

Card-cloth'ing. The garniture of a carding-machine.

Card'ing. A roll of wool as it comes from the carding-machine. The *doffing-cylinder* has longitudinal bands of cards, the wool on which is removed by the *doffing-knife* in the form of separate *slivers*, the length of the doffing-cylinder. These slivers fall into a *roller-bowl*, which gives them a slight rolling and compacts them into *cardings*. These have but little strength, as their fibers are only held together by being interlaced. They next receive a slight twist in the *slubbing-machine*.

Che-nille'-ma-chine'. In one form of French machine, the material is constantly reflexed upon itself, so that the article in the first instance presents a series of close loops, which must be cut, to give it a finish. Martin's machine, invented in 1851, produces in this way $2\frac{1}{2}$ yards per minute.

In Canter's machine the silk is confined between two strands, which are twisted together in the act of manufacture, and a rotatory knife is let down as may be required, to cut the pile, or silk, worsted, or other material which forms the ornamental surface of the chenille; or, by holding the knife aloft, to leave the pile uncut, to vary the effect.

Clean'er 1.

3. (*Carding.*) One of a pair of small card cylinders called *archins*, arranged around the periphery of a card-drum. The *worker* is the larger of the two; it takes the fiber from the card-drum and delivers it to the *cleaner*, which returns it to the card-drum. See CARDING-MACHINE.

Clean'ing-ma-chine'. (*Silk-manufacture.*) A machine in which silk thread is carried from bobbins over a glass or iron guide-rod, and then drawn through a brush in order to detach any particles of dust or dirt therefrom. To remove knots or bunches the thread is drawn through a notch in a bar of metal. When a knot refuses to pass through the opening, the plate is depressed, the bobbin lifted off the friction-roller which drives it, and, the attention of the operator being thus drawn to it, the knot or fluff is picked off and the bobbin again set in motion. See also COTTON-CLEANER.

Cloth-teaz'ler. A machine for raising the nap of cloth. See TEASELING-MACHINE.

Cloth-dress'ing Ma-chine'. A machine in which the nap of woolen cloth is raised by teasels. See TEASELING-MACHINE. Also known as a *gigging-machine*.

Cloth-fin'ish-ing Ma-chine'. One for *teasel-ing* and *shearing*; raising the nap, and bringing it to an even length. See TEASELING; SHEARING; NAPPING.

Cloth-meas'ur-ing Ma-chine'. A machine by which fabrics made in great lengths are measured off in pieces of convenient length for sale, and hence known as piece-goods.

Cloth-spong'er. A device for damping cloth previous to ironing. In machines for this purpose the cloth is sponged by steam applied through a perforated adjustable horizontal cylinder around which it is rolled.

Cloth-stretch'er. A machine in which cloth is drawn through a series of frictional stretching-bars and passed over spreading rollers so as to equalize the inequalities on its surface and enable it to be firmly and smoothly wound on the winding-roll.

Cloth-tear'ing Ma-chine'. A machine having a fluted roller and knife-edges. The latter push the cloth into the flutes and tear it into strips as it passes through the machine.

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Cot-ton-el'e-va'tor. An arrangement in a cotton-mill of a tube with air-blast or spiked straps for carrying cotton to the upper stories.

Cot-ton-top'per. A machine which passes along and prunes the row of growing cotton-plants, in order to curb its rampant luxuriance.

Cot-ton-hook. A claw with a handle, by which cotton-bales are moved in loading and shipping.

Creep'ing-sheet. The feeding-apron of a carding-machine.

Fall'er-wire. 1. A horizontal bar by which the rovings, slubbings, or yarn are depressed below the points of the inclined spindles in a *slubbing-machine* or *mule*, in order that they may be wound into *cops* upon the spindle in the backward motion of the *billy*, or *mule-carriage*, as the case may be. See SLUBBING-MACHINE; MULE.

2. A device in the silk-doubling machine for stopping the motion of the bobbin if the thread break. The wire is hung by its eyelet end to the thread, and with the breakage of the latter falls upon the lighter arms of a balance-lever and actuates a detent.

Fan'cy-roll'er. (*Carding-machine.*) One placed immediately in advance of the *doffer*, and provided usually with straight wire teeth, its function being to loosen up the wool on the main cylinder so that it may be taken up with facility by the *doffer*.

Flat-press. A press used in the india-rubber business for flattening together a number of piles of folded cloth while they are vulcanized and blended together by a steam heat of say 280° F.

Friz'zing-ma-chine. 1. (*Fabric.*) A machine on which the nap of woolen cloth is formed into a number of little prominences or tufts. Petersham cloth, so called, is thus formed.

The machine consists of three parts, — the *frizzer*, the *frizzing-table*, the *drawing-beam*. The cloth is drawn by the beam between the two former portions, which are respectively about ten feet long, fifteen inches wide, and laid parallel, a short distance apart. The *table* is underneath, and its upper surface is covered with a coarse nappy cloth. The *frizzer* has a slow semicircular motion, and its surface is incrustated with a cement composed of glue, gum-arabic, and yellow sand.

The *drawing-beam* is covered with sharp points, and drags the cloth between the frizzer and the table, the latter preventing its being shifted about by the rotary reciprocation of the frizzer above, whose numerous protuberances catch the fibers of the cloth under treatment and roll them into little aggregated tufts or bunches, as the cloth is fed gradually through.

Rais'ing-gig. (*Cloth-manufacture.*) A machine for raising a nap on cloth. A *gig-machine*.

Re-volv'ing-press. One form of baling-press, in which, as the box revolves, screws acting in stationary nuts actuate the followers in the box, approaching or withdrawing them according to the direction of rotation of the box.

The press has usually but a single screw, one example of which is shown under BALING-PRESS (which see).

In the present example, the box rotates on a vertical axis, and has two followers attached to the ends of screws, one right and the other left, which screws pass through fixed nuts, one at the top and the other at the bottom of the frame, so that, as the box is rotated, the followers turn the screws and are thereby made to advance toward or recede from each other.

Sin'ger (*singe-r*). An apparatus through which cotton or woolen goods are passed to relieve them of their fluff, preparing them for the dyer. The capacity of a braid-singer is 10,000 yards per hour. See SINGEING-MACHINE.

Skip-wheel. (*Carding.*) A wheel in a self-stripping carding-machine to govern the order in which the *top flats* are lifted to be cleaned. In most cases, the action of the *stripper* is upon every other *flat* in order, at the next motion taking the alternate *flats* left on the former passage. In other cases, the action is more frequent upon the flats nearer to the feeding-cylinder, and which become the soonest choked and inoperative, and less frequent upon those nearer to the *doffer*. See CARDING-MACHINE.

Stop-fin'ger. A device in a silk-doubling machine for stopping the motion of the bobbin if the thread break. See FALLER-WIRE.

Stretch'ing-ma-chine. A machine for stretching textile fabrics so as to lay their warp and wool yarns in truly parallel positions.

An ingenious and effective machine for this purpose, patented by Morand of Manchester, is described in Newton's "London Journal of Arts and Science" for December, 1835. See also TENTERING-MACHINE.

Strip'per. 1. See FILE-STRIPPER.
2. (*Carding.*) A device for lifting the top flats from the carding-cylinder.

Strip'ping. 1. (*Carding.*) The operation of cleaning or removing the short fibers from between the teeth of the various cylinders and top flats.

Some machines are self-stripping; every other flat being moved in one motion of the stripping mechanism, the second motion taking the alternate flats.

Ten'ter-ing-ma-chine. A machine for stretching fabrics.

In one form of the machine, combinations of adjustable oblique traveling selvedge-feeding and carrying devices are used, which, in some cases, operate in connection with endless belts, bands, or cords arranged to hold the selvedges of the fabric in between them and the carrying-devices; the intermediate portion or body of the fabric is run over a divided longitudinally expanding and contracting friction-frame or drag arranged between the selvedge carrying and stretching devices.

Another machine has an arrangement of separate selvedge carrying, stretching, and feeding devices on opposite sides of the machine. Driven in a positive manner, with facility not only for driving said devices on one side of the machine and not on the other, but of positively driving them at different velocities relatively with each other, to adjust the stretch or feed on opposite sides, as required. A roller on the delivery side at the foot of the chains stretches the fabric in its passage from the stretching-devices to the first drying-cylinder. See Palmer's patents, 88,504, March 30, 1860; 148,082, March 3, 1874; and 161,896, April 13, 1875.

Waste-pick'ing Ma-chine. A machine for tearing refuse fabric into shoddy.

Winc'ing-ma-chine. A wince is a reel (see WINCH) placed over the division-wall between two pits, so as to draw the cloth from either, discharging it into the other, according as the handle is turned.

It is used by dyers and calico-printers in steeping or washing cloth. The *wincing-machine* is a succession of wincers over which the cloth passes continuously over reels dipping into tanks placed in succession and holding a mordant, a dye, soap-suds, solution of bleaching-powder, a chemical solution of any kind, or water, as the case may be. The tanks are *wince-pots*. See WASHING-MACHINE, Figs. 7062, 7063.

Yarn-beam'ing Ma-chine. A machine for winding the warp-yarn on to the beam. See WARPING-MACHINE.