Fine Linens Have Lustre and Durability

THE wearing qualities of linen are second to none in the natural fibres, and in the finer qualities the material has a lustre almost equal to that of silk. It is available in different weights and weaves, depending on use. In this article by Maud B. Strain, Field Officer in Rural Sociology, Department of Agriculture, Dunedin, linen is discussed from such aspects as kinds available, laundering and care, ironing, stain removal, and storage.

FIBRE obtained from the stem of the flax plant was probably the first textile used by man. Many Continental countries grow linen flax, from which the fibre is obtained by processes which are intricate and lengthy. In the manufacture of fine linens Ireland has always held supreme place. Spinning the fibre into yarn by machine presented difficulties because, though the fibre is strong, it is inelastic. Weaving also has problems due to the inelastic qualities of the fibre.

Even the plain square mesh requires endless care and precautions, but the fancy damasks are among the most intricate and difficult of the weaver's art. Apart from damasks the weaving of linen is very largely plain weave, the fabric depending, particularly in the finer weaves, on the inherent qualities of the fibre and its enduring good looks rather than on fancy weaves.

In plain weave there are approximately the same number of warp and weft threads, but there may be variations. Sometimes the warp threads are thicker than the weft threads; sometimes they are closer together. Sometimes the warp threads are "thrown to the surface" and sometimes the weft threads. (Threads thrown to the surface are those which appear in the pattern on the right side of the fabric.)

Damask is the patterned weave used for linen table cloths and napkins. It is a combination of satin and sateen weave. Satin weave is more or less a twill weave, but the points where warp and weft threads meet are kept as far apart as possible (this gives the smooth, shiny surface to satin) with the warp threads thrown to the surface. Sateen weave is similar, but with the weft threads on the surface. The jacquard weave is a combination of satin and sateen weaves and produces a patterned surface.

Damask may be square woven with an equal number of warp and weft threads per inch, over-wefted, with more weft threads than warp threads per inch, and under-wefted, with fewer weft threads than warp threads per inch.

Single and Double Damask

Double damask is a weave with weft threads passing over seven warp threads and under one warp thread to form the design on the right side, and with warp threads passing over seven and under one weft thread to make the background. The threads are therefore bound down, every eighth thread producing a loose enough weave to allow the cramming in of a greater proportion of weft threads to the inch. A high-quality double damask used to have 1½ times as many weft threads as warp threads, which resulted in a firm, fine cloth.

Single damask is a tighter weave, with weft threads passing over four and under one warp thread. Thus the threads are bound down every fifth thread to produce a tighter weave than in double damask and with less opportunity for over-wefting. Few single damasks are over-wefted more than 10 to 15 per cent. Most are approximately square; cheaper qualities may be under-wefted.

Double and single damask are merely names for methods of weaving and the term double damask, which used to indicate that the fabric was up to 50 per cent. over-wefted and finer and richer than was possible with single damask, has lost its significance. A single damask cloth at a comparable price will give equally as good wear, and a good single damask cloth is superior to a poor double damask cloth. If a double and a single damask, both the same price and in the same shop, are under consideration, the single damask would be the better purchase, but if at the same time a double damask of a much higher price were offering, probably the double damask would be one of the extremely fine cloths still made to the old high standards.

Attributes of Linen

Because of its length (the flax fibres are from 8in. to 4ft. long) and smoothness linen is lintless. A short fibre leaves minute ends protruding from the thread which, wearing loose, form lint and, as well as catching dirt particles, give a roughened appearance to the surface.

The smooth, lintless surface of linen gives up stains readily and offers little harbourage for germs and bacteria. This explains why supplies of clean, old linen are in demand for bandages and surgical dressings.

Though strong and durable, linen fibre is inelastic, and fabric made from it, not being springy, has a tendency to crease rapidly. This has been a disadvantage with it for outer wearing apparel. However, many dress and suiting linens are now being processed for crease resistance, and linens are manufactured that will resist and recover from creasing in a manner similar to silk and wool. Whether a material is crease resistant or not can be determined by crushing a portion of the fabric in the hand and noting the degree to which it smooths out. If it has been chemically processed for crease resistance, the fact is usually stamped along the selvedge.

Linen is the best conductor of heat and therefore the ideal choice for summer apparel, having the ability to look and feel cool on the hottest days.

Because moisture spreads through the meshes of linen fabric more readily than through cotton fabric, a quick method of identifying linen is to place a drop of water on it and note the almost instantaneous speed with which it is absorbed; cotton takes appreciably longer. Though moisture is readily soaked up by the linen fabric, it does not penetrate the fibre and evaporates again quickly. The linen articles in the wash are always the first dry. This characteristic makes linen the most desirable fibre for use as towelling and handkerchiefs, and at the same time explains why it is cold to wear next the skin.

The wearing qualities of linen are second to none in the natural fibres. The less linen is bleached the stronger it is, the so-called unbleached (really half-bleached) linens giving particularly long wear, and after a few launderings they become almost white. The pure white, fully bleached linens, though the most expensive, lose a slight degree of durability in bleaching.

Below—Three linens of different weights. The sturdier one at the top is suitable for curtains, loose covers, and other furnishings, the middle one is a dress linen, and the bottom fine-thread material is handkerchief linen.