

CANVAS, a stout cloth which probably derives its name from *cannabis*, the Latin word for hemp. This would appear to indicate that canvas was originally made from yarns of the hemp fibre, and there is some ground for the assumption. This fibre and that of flax have certainly been used for ages for the production of cloth for furnishing sails, and for certain classes of cloth used for this purpose the terms "sailcloth" and "canvas" are synonymous. Warden, in his *Linen Trade*, states that the manufacture of sailcloth was established in England in 1590, as appears by the preamble of James I., cap. 23:—"Whereas the cloths called *Mildernix* and *Powel Davies*, whereof sails and other furniture for the navy and shipping are made, were heretofore altogether brought out of France and other parts beyond sea, and the skill and art of making and weaving of the said sailcloths never known or used in England until about the thirty-second year of the late Queen Elizabeth, about what time and not before the perfect art or skill of making or weaving of the said cloths was attained to, and since practised and continued in this realm, to the great benefit and commodity thereof." But this, or a similar cloth of the same name had been used for centuries before this time by the Egyptians and Phoenicians. Since the introduction of the power loom the cloth has undergone several modifications, and it is now made both from flax, hemp, tow, jute and cotton, or a mixture of these, but the quality of sailcloth for the British government is kept up to the original standard. All flax canvas is essentially of double warp, for it is invariably intended to withstand some pressure or rough usage.

In structure it is similar to jute tarpaulin; indeed, if it were not for the difference in the fibre, it would be difficult to say where one type stopped and the other began. "Bagging," "tarpaulin" and "canvas" form an ascending series of cloths so far as fineness is concerned, although the finest tarpaulins are finer than some of the lower canvases. The cloth may be natural colour, bleached or dyed, a very common colour being tan. It has an enormous number of different uses other than naval.

Amongst other articles made from it are:—receptacles for photographic and other apparatus; bags for fishing, shooting, golf and other sporting implements; shoes for cricket and other games, and for yachting; travelling cases and hold-alls, letter-bags, school-bags and nose-bags for horses. Large quantities of the various makes of flax and cotton canvases are tarred, and then used for covering goods on railways, wharves, docks, etc.

Sail canvas is, naturally, of a strong build, and is quite different

from the canvas cloth used for embroidery purposes, often called "art canvas." The latter is similar in structure to cheese cloths and strainers, the chief difference being that the yarns for art canvas are, in general, of a superior nature. All kinds of vegetable fibres are used in their production, chief among which are cotton, flax and jute. The yarns are almost invariably two or more ply, an arrangement which tends to obtain a uniform thickness—a very desirable element in these open-built fabrics. The plain weave A in the figure is extensively used for these fabrics, but in many cases special weaves are used which leave the open spaces well defined. Thus weave B is often employed, while the "imitation gauze" weaves, C and D, are also largely utilized in the production of these embroidery cloths.

Weave B is known as the hopsack, and probably owes its name to being originally used for the making of bags for hops. The cloth for this purpose is now called "hop pocketing," and is of a structure between bagging and tarpaulin. Another class of canvas, single warp termed "artists' canvas," is used, as its name implies, for paintings in oils. It is also much lighter than sail canvas, but must, of necessity, be made of level yarns. The best qualities are made of cream or bleached flax line, although it is not unusual to find an admixture of tow, and even of cotton in the commoner kinds. When the cloth comes from the loom, it undergoes a special treatment to prepare the surface for the paint.



A



B



C



D