

Among many uncivilized tribes, baskets of a superior order are made and applied to various useful purposes. The North American Indians prepare strong water-tight *Wattape* baskets from the roots of a species of *abies*, and these they frequently adorn with very pretty patterns made from the dyed quills of their native porcupine, *Erethizon dorsatum*. Wealthy Americans have formed collections of the beautiful ware treasured as heirlooms in Indian families, and large prices have been paid for baskets made by the few squaws who have inherited the traditions and practice of the art, as much as £300 having been given for one specimen. It has been computed that baskets to the value of £1,000,000 were recently drawn from California and Arizona within two years. The Indians of South America weave baskets equally useful from the fronds of the Carnahuba and other palms. The Kaffirs and Hottentots of South Africa are similarly skilful in using the Ilala reed and the roots of plants; while the Abyssinians and the tribes of Central Africa display great adroitness in the art of basket-weaving.

Basket-making, however, has by no means been confined to the fabrication of those simple and useful utensils from which its name is derived. Of old, the shields of soldiers were fashioned of wicker-work, either plain or covered with hides. Xenophon, in his story of the Thirty Tyrants at Athens, relates that the exiled Greeks who had seized on the Peiraeus made themselves shields of whitened osiers; and similar weapons of defence are still constructed by modern savages. The huts of the earliest settlers in Rome and in western Europe generally were made of osier work plastered with clay. Some interesting remains of British dwellings of this nature found near Lewes in 1877 were described by Major-General H. L. F. Pitt-Rivers in *Archaeologia*, vol. xlvi. pp. 456-458. Boats of the same material, covered with the skins of animals, attracted the notice of the Romans in Britain; they seem to have been of the ordinary boat-shape. The basketwork boats mentioned by Herodotus as being used on the Tigris and Euphrates were round and covered with bitumen. Boats of this shape are still used on these rivers, and boats of analogous construction are employed in crossing the rivers of India, in which the current is not rapid. Nor have methods of making much changed. The strokes employed in the construction of basket-work found in Etruscan tombs and now exhibited in the Museo Etrusco at Florence, and in similar articles discovered in Egyptian tombs, are the same as those used by the English basket-maker to-day. General Pitt-Rivers, on comparing the remains excavated near Lewes with a modern hamper in his possession, found the method to be identical.

Since about the middle of the 19th century the character of basket-work in England has been greatly modified. The old English cradle, reticule, and other small domestic wares, have been driven out of the market by cheap goods made on the continent of Europe, and the coarse brown osier packing and hampers have been largely superseded by rough casks and cases made from cheap imported timber. This loss has, however, been more than counterbalanced by the production of work of a higher class, such as finely made chairs, tables, lounges and other articles of furniture; luncheon and tea-baskets and similar requisites of travel. In addition to the foregoing the chief categories of English manufacture are: vegetable and fruit baskets, transit and travelling hampers, laundry and linen baskets, partition baskets for wine, and protective wicker cases for fragile ware such as glass carboys, stone and other bottles. Wicker shields or cases made from cane pith, for the protection of shells, have been introduced by the English military authorities. Some evidence of the above-mentioned developments is afforded by a comparison of the wages lists of the London Union of Journeymen Basketmakers issued in 1865 and in 1896. The former consists of 87 printed pages; the latter of 144 pages, and these more closely set.

No machinery is used in basket-making. A considerable training and natural aptitude go to form the expert workman, for the ultimate perfection of shape and beauty of texture depend upon the more or less perfect conception of form in the

BASKET, a vessel made of twigs, cane or rushes, as well as of a variety of other materials, interwoven together, and used for holding, protecting or carrying any commodity. The process of interweaving twigs, rushes or leaves, is practised among the rudest nations of the world; and as it is one of the most universal of arts, so also does it rank among the most ancient industries, being probably the origin of all the textile arts of the world. Decorative designs in old ceramic ware are derived from the marks left by the basket mould used before the invention of the potter's wheel, and in the willow pattern on old china, and the basket capitals or mouldings of Byzantine architecture, the influence of the basketmaker's art is clearly traceable. Essentially a primitive craft, its relative importance is in inverse ratio to the industrial development of a people.

The word "basket" has been generally identified with the Latin *bascauda*, as in Martial (xiv. 99):—

"Barbara de pictis veni bascauda Britannis;
Sed me iam mavult dicere Roma suam."

But its etymology is unknown, and the *New English Dictionary* states that there is no evidence to connect basket with *bascauda*, which denotes rather a tub, tray or brazen vessel.

craftsman's mind and on his power to impress it on a recalcitrant material. In England at least, he rarely uses a mould; every stroke made has a permanent effect on the symmetry of the whole work and no subsequent pressure will alter it. Wages in London vary from 25s. to 50s. per week according to aptitude. The Basketmakers' Company is one of the oldest craft guilds of the city of London and still exists.

Employment is given by the London Association for the Welfare of the Blind to a number of partially or wholly blind workpeople, who are engaged in the making of some of the coarser kinds of baskets; but the work, which bears obvious traces of its origin, is not commercially remunerative, and the association depends for partial support on the contributions of the charitable, and on supplementary sales of fine or fancy work produced under ordinary conditions and largely imported. Similar associations exist in some English provincial towns, in Edinburgh, in Dublin and Belfast, and in certain European cities.

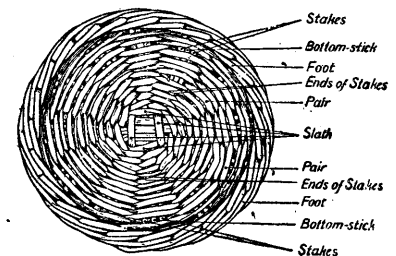
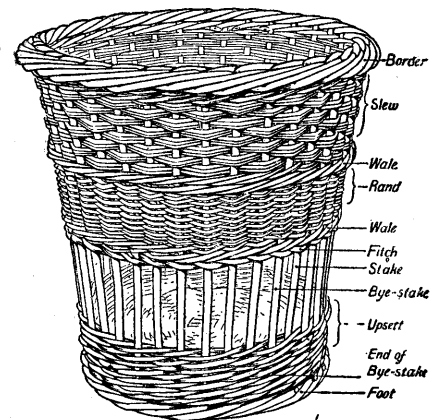
The materials which are actually employed in the construction of basket-work are numerous and varied, but it is from certain species of willow that the largest supply of basket-making materials is produced. Willows for basket-work are extensively grown on the continent of Europe, whence large quantities are exported to Great Britain and the United States; but no rods surpass those of English growth for their tough and leathery texture, and the finest of basket-making willows are now cultivated in England—in Leicestershire, Nottinghamshire and the valleys of the Thames and the Trent. In the early part of the 19th century, considerable attention was given in Britain to the cultivation of willows suitable for basket-making, and the industry was first stimulated by premiums offered by the Society of Arts. Mr William Scaling of Basford, Notts, was a most successful grower and published some admirable pamphlets on the cultivation of willows. The most extensive English willow plantation or salicetum (Lat. *salix*, willow) of the present day is that planted by Mr W. P. Ellmore at Thurmaston near Leicester, and consists of about 100 acres of the finest qualities. Mr Ellmore, a practical basket-maker, successfully introduced some valuable continental varieties (see OSIER).

Willows are roughly classed by the basket-maker into "osier" and "fine." The former consists of varieties of the true osier, *Salix viminalis*; the latter of varieties of *Salix triandra*, *S. purpurea* and some other species and hybrids of tougher texture. For the coarsest work, dried unpeeled osiers, known as "brown stuff," are used; for finer work, "white (peeled) stuff" and "buff" (willows stained a tawny hue by boiling them previous to peeling). Brown stuff is sorted, before it reaches the workman, into lengths varying from 3½ ft. to 8 or 10 ft., the smallest being known in London and the home counties as "luke," the largest as "great," and the intermediate sizes as "long small," "threepenny" and "middleboro." White and buff rods are more carefully sorted, the smallest, about 2 ft. or less, being known as "small tack," and rising sizes as "tack," "short small," "small," "long small," "threepenny," "middleboro" and "great." Rods of two to three years' growth, known as "sticks," are used to form the rigid framework of the bottoms and lids of square work. In every case, except the last, the stuff is soaked in tanks to render it pliable before use—brown from three to seven days, white and buff from half-an-hour to half a day. The rods are used whole for ordinary work, but for baskets of slight and finer texture each is divided into "skains" of different degrees of size. "Skains" are osiers cleft into three or four parts, by means of an implement called a "cleaver," which is a wedge-shaped tool of boxwood inserted at the point or top end of the rod and run down through its entire length. They are next drawn through an implement resembling the common spokeshave, keeping the grain of the split next to the iron or stock of the shave, while the pith is presented to the steel edge of the instrument, and in order to bring the split into a shape still more regular, it is passed through another implement called an upright, consisting of a flat piece of steel, each end of which is fashioned into a cutting edge, like that of an ordinary

chisel and adjusted to the required width by means of a thumb-screw.

The tools required by a basket-maker are few and simple. They consist, besides the foregoing, of a shop-knife for cutting out material; a picking knife for cutting off the protruding butts and tops of the rods after the work is completed; two or three bodkins of varying sizes; a flat piece of iron somewhat narrowly triangular in shape for driving the work closely together; a stout pair of shears and a "dog" or "commander" for straightening sticks. The employer supplies a screw block or vice for gripping the bottom and cover sticks of square work, and a lapboard on which the workman fixes the upsetted bottom while siding up the basket. This is the full kit. A common round or oval basket may, however, be made with no other tools than a shop-knife and a bodkin. On the continent of Europe shapes or blocks are in use on which the fabric is in some cases woven.

The technicalities of basket-making may be easily followed by a glance at the illustration here reproduced by the courtesy of the Society of Arts.¹ It will be seen that the "bye-stakes" are merely inserted in the "upsett," whereas the stakes are driven in at each side of the "bottom-sticks" and pricked up to form the rigid framework of the side. When the "bottom-stick" and "stake" are formed of one and the same continuous rod, it is termed a "league." If the bottom is made on a hoop the butts of the stakes are "sliped," i.e. cut away with a long cut of the shop-knife, and turned tightly round the hoop; they are then said to be "scalomed" on. The chief strokes used in constructing an ordinary basket are:—the "slew"—two or more rods woven together;



the "rand," rods woven in singly; the "fitch," two rods tightly worked alternately one under the other, employed for skeleton work such as cages and waste-paper baskets; the "pair," two rods worked alternately one over the other, used for filling up bottoms and covers of round and oval baskets; and the "wale," three or more rods worked alternately, forming a string or binding course. Various forms of plaiting, roping and tracking are used for bordering off or finishing.

An ordinary oval basket is made by preparing the requisite number of bottom sticks, preserving their length greater than the required width of the bottom. They are ranged in pairs on the floor parallel to each other at small intervals, in the direction of the longer diameter of the basket, thus forming what may be called the "woof," for basket-work is literally a web. These parallel rods are then crossed at right angles by two pairs of the largest osiers, on the butt ends of which the workman places his feet; and they are confined in their places by being each woven alternately over and under the parallel pieces first laid down and their own butts which form the end bottom sticks. The whole now forms what is technically called the "slath," which is the foundation of the basket. Next other rods are taken and

¹ See the report of a paper by T. Okey, published in the *Journal* of the Society of Arts, January 11th, 1907.

woven under and over the sticks all round the bottom until it be of sufficient size, and the woof be occupied by them. Thus the bottom or foundation on which the superstructure is to be raised is finished. This latter part is accomplished by sharpening the large ends of as many long and stout osiers as may be necessary to form the stakes or skeleton. These are forced between the bottom sticks from the edge towards the centre, and are turned up or "upset" in the direction of the sides; then other rods are woven in and out between each of them, until the basket is raised to the intended height, or, more correctly speaking, the depth it is to receive. The edge or border is finished by turning down the ends of the stakes, now standing up, behind and in front of each other, whereby the whole is firmly and compactly united, and it is technically known as the "belly." A lid is constructed on the same plan as that of the bottom, and tied on with hinges formed of twisted rods; simple handles may be made by inserting similar rods by the sides of two opposite stakes and looping them under the border to form rope-like handles of three strands. This is the most simple kind of basket, from which others differ only in being made with finer materials and in being more nicely executed; but in these there is considerable scope for taste and fancy, and articles are produced of extreme neatness and ingenuity in construction.

In addition to willows many other materials are employed in the fabrication of wicker-work. Among the more important of these is the stem of *Calamus viminalis* or other allied species—the cane or rattan of commerce—which is used whole or made into skains. Since 1880 the central pith of this material, known as "cane-pulp" or "cane-pith," has been largely used in Great Britain and on the continent of Europe in the manufacture of furniture and other finer classes of work. About the same period plaited rush and straw, often coloured, came into use together with enamelled skains of cane. It must be admitted, however, that basket-work in these developments has encroached somewhat on the domain of cabinet-making; for wood and nails are now much used in constructing basket-work chairs, tables and other furniture.

With splits of various species of bamboo the Japanese and Chinese manufacture baskets of unequalled beauty and finish. The bamboo wicker-work with which the Japanese sometimes encase their delicate egg-shell porcelain is a marvellous example of manipulation, and they and the Chinese excel in the application of bamboo wicker-work to furniture. In India "Cajan" baskets are extensively made from the fronds of the Palmyra palm, *Borassus flabelliformis*, and this manufacture has been established in the Black Forest of Germany, where it is now an important and characteristic staple. Among the other materials may be enumerated the odorous roots of the khus-khus grass, *Anatherum muricatum*, and the leaves of various species of screw pine, used in India and the East generally. The fronds of the palm of the Seychelles, *Lodoicea sechellarum*, are used for very delicate basket-work in those islands. Strips of the New Zealand flax plant, *Phormium tenax*, are made into baskets in New Zealand. Esparto fibre is used in Spain and Algeria for rude fruit baskets. Various species of *Maranta* yield basket materials in the West Indies and South America; and the *Tirite*, a species of *Calathea*, a member of the order *Zingiberaceae*, is also employed similarly in Trinidad. Baskets are also frequently made from straw, from various sedges (*Cyperus*), and from shavings and splints of many kinds of wood.

The chief centres of English basket manufacture outside London are Thurmaston near Leicester, Basford near Nottingham, and Grantham. Large but decreasing quantities of light basket-work are made for the English market in Verdun, in the department of the Aisne, and in other parts of France; and great quantities of fancy and other work are produced in Belgium, in the Netherlands and in Germany, notably at Lichtenfels in Bavaria, at Sonnefeld in Saxony and in the Black Forest.

The import and export values of baskets and basket-ware, and of willows and rods for basket-making, have been enumerated in the Board of Trade returns for the United Kingdom since 1900, in which

year basket-ware from foreign countries was imported to the value of £239,402. In 1901 the imports increased to £264,183; then they declined to £227,070 in 1905. The main sources of supply are shown in this comparison of 1900 and 1905:—

	1900.	1905.	
Belgium	£72,031	£77,766	+ £5,735
Holland	58,214	54,407	- 3,807
France	55,870	27,910	- 27,960
Germany	33,155	22,892	- 10,263
Japan	8,140	25,536	+ 17,396
Portugal	5,066	3,971	1,095

The increase from Japan (for 1904 the value was £52,377) and the decrease from France are remarkable.

The import values of foreign willows increased from £52,219 in 1900 to £62,286 in 1905, the most important exporting countries being:—

	1900.	1905.	
Germany	£22,594	£34,752	+ £12,158
Belgium	18,800	11,864	- 6,936
Holland	9,771	12,750	+ 2,979

Small British re-exports of willows (£1808 in 1900 and £371 in 1905) and of baskets (£3785 in 1900 and £6633 in 1905) to foreign parts and British possessions are tabulated. No particulars of exports of British produce and manufacture are specified in the returns. (T. O.)