

CARPETS AND RUGS. In the United States by carpets is usually meant carpeting 27 inches (ingrains 36 inches) wide, cut into lengths, sewed together, and tacked down, completely covering the floor of a room, except the space occupied by hot-air registers; by rugs is meant one-piece or seamless floor coverings, usually rectangular but sometimes round or oval, that leave part of the floor uncovered (at least a foot around the outside), and not being tacked down can be easily removed for cleaning. Imitations of one-piece rugs are also made out of strips of carpeting sewed together, usually so woven that these seamed rugs have an outside border like the seamless ones. In England large rugs are called "carpets," while in the United States they are often spoken of as "of carpet size."

The word "carpet" is derived from ML. *carpita*, meaning a "villose or thickish cloth," in other words, a heavy-pile fabric. In Chambers' Cyclopædia (1727-51) "carpet" is defined as "a sort of covering . . . to be spread on a table, trunk, an estrade, or even a passage or floor," "estrade" being an old word for "dais" or "raised platform"; so that we should not be surprised at finding that "on the carpet," like the French "sur le tapis," means not "on the floor," but "on the table"; and at the same time that "knight of the carpet" is so called because dubbed, not in the field, but on the "carpet or cloth usually spread," in the sixteenth century and earlier, before the throne of the sovereign or lord, and that once when servants were summoned before

the master for reprimand, they were said "to walk the carpet."

In the Orient carpets, whether for floor, couch, table, or wall, have usually been pile fabrics knotted by hand, although soumaks and kelims (both flat without pile, the former made by twisting wefts around pairs of warps, forward over four, back under two; the latter figured reps in real tapestry weave) are also employed. In the Occident, during the Middle Ages and later, the most common floor coverings were coarse tapestries and ingrain.

For a long time the use of imported Oriental pile rugs and of domestic hand-knotted pile rugs was confined to the very rich. Finally, in the middle of the eighteenth century, the invention at Wilton in England of Brussels carpeting, in imitation of floor tapestries, of which Brussels was then the chief centre of production, as it had formerly been of pictured wall tapestries, and the later invention of Wilton carpeting, in imitation of hand-knotted pile rugs, extended the use of carpets widely. Both Brussels and Wilton carpeting are woven usually the width of the old Flemish ell (27 inches, or three-quarters of a yard, which explains why they are called "three-quarter goods"), and the wefts are carried by shuttles all the way across the warp, instead of by hand-passed bobbins only part way, as in tapestries. The back of both Brussels and Wilton carpeting consists of warp and weft of cotton or jute, whose function it is to bind fast and serve as an inexpensive body for the extra warps of worsted that, as the weaving progresses, are looped over wires forming the ridges or ribs of Brussels. The cutting of the loops makes Wilton. The figures are formed by six or fewer warps of different colors that are buried in the body when not wanted on the surface. Wilton carpets and rugs (the larger sizes usually seamed), though having a comparatively short pile, from one-quarter to three-eighths of an inch, are the best and most durable of the machine-made goods. They are woven in better qualities and with more wool than Brussels carpets and rugs and cost much less than the superior chenille Axminster. The Wilton patterns are largely Oriental, or at least adapted and simplified from Oriental originals, and average much better than those of Brussels, some of which are still French. However, it is to the spool Axminster that one must turn for Gallo-American designs of the pronounced and obtrusively Baroque and Rococo types. As far as other American carpets and rugs are concerned, the Orientals have things all their own way, with comparatively little competition even from simple modern designs of the type now favored in Germany and Austria. But solid colors are popular in Wiltons, and two and three tone effects in chenille Axminsters and hand-knotted rugs.

Tapestry and velvet carpets and rugs are in their origin merely cheaper imitations of Brussels and Wilton, having only one worsted warp instead of several, and consequently being most economical of the expensive material. Tapestries and velvets are of two types—warp printed and piece printed, or, as they say in the trade, drum printed and machine printed. Warp printing dates from the second quarter of the nineteenth century, while successful piece printing is comparatively recent. The warp prints, as the name implies, have the pattern printed on the warp before weaving, the distortion of the designs due to looping up over the wires having been

calculated against beforehand. The piece prints are woven plain or "in the natural" and printed in the piece after weaving. In order to emphasize the quality of Brussels and distinguish them from tapestries, they are often called "body Brussels," while velvets are sometimes dubbed "Wilton velvets" in order to make them sound better than they are. Tapestry and velvet rugs are usually seamless.

Besides Brussels, Wilton, tapestry, and velvet, the principal types of carpets and rugs found in the shops of to-day are ingrain, Aubusson, savonnerie, spool Axminster, chenille Axminster, Smyrna, rag, fibre, and grass. Rag rugs are seamless, with cotton string warps, and body and surface of coarse twisted-rag wefts. Fibre and grass rugs are similar in weave. Ingrains have cotton string warps that are entirely concealed by the two or three sets of heavy worsted weft threads in pairs. When there are two wefts, the red one appears on the face where the green one shows on the back. When there are three, one is always buried. Seamless ingrain rugs are called art squares. Solid-color ingrain carpeting is called terry, or filling. The use of figured ingrains that 60 years ago was common throughout the United States is now confined to the rural districts. Patterns once famous that still survive are Henry Clay, Eagle Head, and Martha Washington. Henry Clay shows a huge, conventionalized floral, evidently copied remotely from some ancient Roman floor of marble tiles with metal inlay. Eagle Head not only shows the two-headed bird that crowns the coats of arms of Russia, of Austria, and of the old Holy Roman Empire superseded by Napoleon in 1806, but also two lyres of classic shape and suggestion. Martha Washington is more modest, appealing to a less classic and less learned taste.

Of Brussels and Wilton carpets and rugs, the intricacy of the pattern is limited by the number of colored worsted warps (never more than six). Not so with moquettes and spool Axminsters, commonly called Axminster (without the spool). The ingenious loom on which they are woven makes it possible to insert a loop of any desired color at any point. The texture of these Axminsters is loose, soft, and very agreeable.

Smyrna rugs, on account of their Oriental patterns, luxurious texture, and seamlessness, were exceedingly popular 20 years ago. They are the result of two weavings—the first producing chenille cords, the second inserting these chenille cords as extra weft in a body of cotton or jute warp and weft, with the chenille fuzz or pile showing on both sides and making a double-faced fabric exactly alike on both sides. Smyrnas are woven without seam up to 12 by 18 feet, but of course the patterns are necessarily much simplified from even the coarsest Orientals.

Chenille Axminster rugs are made like Smyrnas, except that the chenille cord is steamed and flattened into a chenille braid with fuzz on one side only, so that they are one-faced like Oriental rugs and Wiltons and velvets. Although the weave is theoretically not limited as to colors, chenille Axminsters are made mostly with plain fields and in two and three tone effects and any size or shape. The pile of some is seven-eighths of an inch thick, with five-eighths as the average and three-eighths the least expensive. Although several American factories make them, they are

largely imported from England, Scotland, Germany, and Austria. The finest materials are used.

As most real-tapestry rugs are now woven in the little town of Aubusson in central France, Aubusson has become the trade name for them. Savonneries are hand-knotted pile rugs made in France in French patterns. They get their name from the factory founded by Pierre Dupont in 1627 in the ancient soap works (*savonnerie*) at Chaillot, transferred in 1827 to the Gobelins, where it is still active. The name is also given to hand-knotted pile French rugs made at Aubusson and elsewhere.

Hand-knotted rugs were made in Europe at least as early as the thirteenth century by the Saracens of southern Spain. That they were probably made in England as early as the sixteenth century is shown by the examples that survive. Lord Verulam has one with the letters E. R. (Elizabeth Regina) intertwined in the royal arms of England and dated 1570. In the Victoria and Albert Museum is one with the inscription "Feare God and Keep His Commandments, made in the yeare 1603." Hand-knotted rugs are now made at Wilton, but called Axminsters from the little Devonshire village where the factory was first established. About 30 years ago the industry was started in the United States, at Milwaukee, by a German weaver who had learned the art at home. A loom was brought from Germany, others were made like it, and finally all were moved from Milwaukee to New York, where they continued in operation for about 20 years, but with practically no profit. A branch factory established in Elizabethport, N. J., by the English proprietors of the English factory at Wilton was active about five years.

However, the history of the manufacture of carpets and rugs in the United States begins in Colonial days, when each village had its weaver to whom the thrifty housewives brought their parti-colored balls of rags sewed together in long strips. As late as 1890 there were in the United States 854 rag-carpet factories, with an annual output valued at \$1,714,480. To-day there are several important factories making carpets and rugs out of new rags and for the trade. The first American factory for the manufacture of yarn carpets was started in Philadelphia in 1791 by W. P. Sprague. A second factory was started in 1804 at Worcester, Mass., by Peter and Ebenezer Stowell. By 1840 about 1500 looms were in operation, the majority making ingrain. In 1841 came an invention that, combined with the Jacquard attachment already in use, transformed the industry. Erastus Bigelow, a young medical student of Boston, harnessed an ingrain loom successfully to steam power and increased the 8 yards a day possible on the hand loom to 10 yards and later to 25 yards. He also patented a power loom for weaving Brussels and Wilton carpeting and another for weaving tapestry carpeting.

In 1899 the United States had 133 carpet factories (not including rag carpets) operating 10,754 looms and producing 72,344,732 yards of carpet valued at \$48,192,351. In 1850 the value of the total output was only \$5,401,234. In 1909 it was \$71,188,152, from 139 establishments, of which 93 were in Pennsylvania, 16 in New York, 11 in Massachusetts, 9 in New Jersey, and 10 in other States. In value of output New York led, with \$25,606,262 as against

\$24,879,232 for Pennsylvania and \$12,811,981 for Massachusetts.

Tapestry and velvet rugs contributed largely to the increase in the seamless-rug production from 12,171,289 square yards in 1899 to 24,042,152 in 1909, more than doubling, and in value increasing 50 per cent, while the production of carpeting declined. In 1909 the number of carpet and rug looms of all classes had increased to 11,943, of which only 207 were hand looms, decreasing from 9.7 per cent of the total in 1899 to 1.7 per cent in 1909. The feature of the decade was the increase in the production of Axminster carpets from 5,026,778 to 12,507,261 square yards (148.8 per cent) and from a value of \$4,762,269 to \$13,680,806 (187.3 per cent), and Axminster rugs from 327,598 to 3,184,097 square yards (872 per cent) and from a value of \$342,262 to \$3,691,900 (978.7 per cent), while ingrain carpeting decreased from 39,920,849 to 17,799,762 square yards (55.4 per cent) and from a value of \$14,368,930 to \$6,749,672 (53 per cent), and ingrain art squares increased from 2,722,323 to 6,131,862 square yards (125.2 per cent) and from a value of \$1,175,951 to \$2,408,960 (104.9 per cent). The production of Wilton carpets and rugs also increased largely to a total of 5,343,616 square yards and a value of \$10,019,330. See RUG.

Consult: *An Account of the New Manufactory . . . of Carpets after the Manner of that at Chaillot . . . now Undertaken at Fulham by Mr. Peter Parisot* (London, 1753); Christopher Fresser, "Carpets," in *British Manufacturing Industries Edited by G. Phillips Bevan* (London, 1876); Darcel et Guiffrey, *La stromaturgie de Pierre Dupont: Documents relatifs à la fabrication des tapis de Turquie en France au XVII^e siècle* (Paris, 1882); James Christie, *Catalogue of Elegant Brussels, Wilton, Venetian, and Kidderminster Carpets Sold by Auction by Mr. Christie* (London, 1800); "Oriental and Domestic Rugs: Their Origin, Manufacture, and Marketings," Supplement to the *American Carpet and Upholstery Journal* (Philadelphia, February, 1903); Fred. Bradbury, *Carpet Manufacture* (Boston, 1904); the chapters on "Carpets" and "Rugs" in G. L. Hunter's *Home Furnishing* (New York, 1913).