When the whole had dried sufficiently the surface was scraped level, with a thin sharp tool, with the result that the tile appeared with a kind of cloisonne design, the cloisons or boundaries of the cells being, of course, the upstanding ridges of the moulded red tile.@@1 Over the surface of the tile finely powdered galena (native sulphide of lead) was freely dusted, and the whole was fired at one operation with the resulting production of a tile or tiles bearing a yellowish white pattern relieved against red or chocolate, and glazed with a natural lead glaze, which was much harder and better adapted to resist wear than the majolica glazes of Spain or Italy. The origin of this type of pavement tile is still obscure; one idea is that they were a development of the Roman Mosaic pavement, for, in examples discovered at Fountains Abbey and at Prior Crauden’s Chapel, Ely, in which the tiles were of great variety of form and size, and, in­stead of the patterns being wholly inlaid in the tiles themselves, the design is, to a large extent, produced by the outlines of the individual pieces, which, in the later examples, are cut to the forms required to be represented, including the subject of the “ Temptation of Adam and Eve,” trees, lions, &c., the tesserae being also enriched with what may be more strictly called encaustic decoration. The more probable origin of this method of work seems, however, to be a development of the pavement tiles with simple incised designs which were made in the northern parts of Burgundy, in the Rhine Valley and in Flanders. Most interesting examples of these incised tiles are to be found in the cathedral of St Omer, which are known to be of the 12th century, and it seems impossible to resist the conclusion that such incised work forms the starting-point of the English encaustic tile-makers. A similar piece of work exists in Canter­bury Cathedral, where we have stone tiles engraved with pictorial designs, the sunk parts being filled with a dark cement—this pavement also belongs to the 12th century.

Four styles of decoration are found on medieval Gothic tiles (1) incised or impressed, (2) raised, (3) inlaid, (4) slip-painted. It is to the third of these groups—the inlaid—that the name of “ encaustic ” tiles had been particularly given. The manu­facture of medieval Gothic tiles was apparently the secret of certain religious houses in England, belonging either to the Benedictine or the Cistercian Orders. The earliest date at which we have tangible proof of the existence of this art is 1237, in which year it was ordered that the king’s little chapel at Westminster should be paved with “ painted tile “ mandatum est etc., quod Parvum capellam apud Westm. tegula picta decenter paveari faciatis,” Rot. Claus. 22, Henry III. Μ. 19, a.d. 1237-38. In 1840 the removal of a wooden floor in the chapter-house at Westminster, exposed to view a tile pavement in good preservation which, though it can hardly be the pavement in question, is evidently of contemporary manufacture.

The finest and most artistic of these early English tiles were those found in Chertsey Abbey in Surrey. They were found in a very fragmentary condition on the Abbey site, but have been to a great extent pieced together by Mr Shurlock. Practically all the tiles that have been recovered are now in the British Museum (a number of them were formerly in the archi­tectural museum at Westminster). They present a remarkable series of illustrations from the English romance of Sir Tristram and of events in the history of Richard Cæur-de-Lion (see Hobson’s *Catalogue of English Pottery in the British Museum,* pl. ii.). Mention should also be made of the tile pavement discovered at the abbey of Halesowen in south Staffordshire. Many of these tiles are of very similar design to those of Chertsey, while some appear to have been made from the same moulds. From the evidence of inscriptions it would appear that this pavement was laid down in the latter part of the 13th century.

Combinations of tiles forming a cross were frequently used as

mortuary slabs; an example is in Worcester Cathedral *in situ,* whilst detached component tiles of similar slabs are to be found in other ancient churches.

Encaustic tiles are almost exclusively used for pavements, but an interesting instance of their employment for wall decora­tion occurs in the Abbey Church of Great Malvern, where these tiles have probably been originally used to form a reredos, and bear designs representing Gothic architecture in perspective, have introduced into them the sacred monogram “ I.H.S.,” the crowned monogram of “ Maria,” the symbols of the Passion, the Royal Arms and other devices. This example is also inter­esting as bearing the date of its manufacture on the margin “ Anno R.R. H.VI. XXXVJ.,” that is the thirty-sixth year of the reign of Henry VI. (1457-1458).

Kilns for tile-burning have been found at Bawsey, near Lynn, Norfolk; Malvern, containing some 15th-century tiles; Repton; Farringdon Street, London; and Great Saredon, in Staffordshire, with tiles of the 16th century.

Literature.—John Gough Nicholls, *Examples of Encaustic Tiles* (1845); Henry Shaw, *Specimens of Tile Pavements* (1858); T. Oldham, *Ancient Irish Pavement Tiles;* Frank Renaud, “ The Uses and Teachings of Ancient Encaustic Tiles ” *(Trans. Lancashire and Cheshire Antiquarian Society,* vol. ix.); W. W. Pocock's article in *The Surrey Archaeological Collections* (1885); J. R. Holiday on “ Halesowen," in *Transactions of the Birmingham and Midland Institute* (1871); Manwaring Shurlock, *Tiles from Chertsey Abbey* (1885) ; Major Heales, F.S.A.. *The Chertsey Tiles* (1880) ; W. Burgess, in *The Builder* (July 24, 1858).

With the downfall of the monasteries in the reign of Henry VIII. the making of encaustic tiles in England appears to have come to an end, and for nearly two centuries foreign tiles were imported from Germany, the Netherlands, Italy and Spain, or workmen from those countries must have practised their art here. There are in evidence the well-known green glazed tiles in the British Museum which, if made in England at all, are obviously inspired by contemporary German work, and the tiles used in the house of Sir Nicholas Bacon (c. 1509-1579) are obviously the work of an Italian majolist, whether they were made in Italy or in England. Increasing intercourse with the Netherlands brought into this country and, during the 17th century into the American colonies, the famous Delft tiles, painted either in blue, or in blue and manganese purple, on a tin enamel ground like that of the contemporary Delft pottery. From the 16th century onwards every country in Europe continued to makes tiles by methods strictly analogous with their contemporary pottery (see Ceramics). Thus we have in Italy and Spain, throughout the 17th and 18th centuries, wall tiles in the style of the debased Italian majolica; in Ger­many a continuation of the ancient German stove tiles, either glazed with green, brown or black glaze, or bearing painted designs in the crude colours characteristic of the contemporary German pottery; in France there were, first, the painted tile pavements of Masseot Abaquesne of Rouen (1542-1557), and later the decorative tiles produced at Rouen, Nevers, Marseilles and elsewhere, always in the style of the current pottery of the same centres; and painted tiles for the decoration of fireplaces and for use as wall panels formed a considerable part of the output of the Dutch factories. Wherever imita­tions of Delftware were made, in England, Germany or the north of France, the manufacture of similar tiles naturally followed; and at Lambeth, Liverpool and Bristol, the chief centres of this industry in England, large quantities of tiles were made, especially during the 18th century. The tiles produced at Lambeth and Bristol factories were invariably painted after the manner of their Dutch prototypes, but during the latter half of the 18th century Liverpool became famous for its printed tiles, in which designs, mostly in black, trans­ferred from engraved copper plates, took the place of hand­painting. Fine examples of all these 18th-century English tiles are to be found in the British Museum; the Guildhall Museum; the Victoria and Albert Museum, London; and in the museums at Liverpool and Bristol.

During the 17th and 18th centuries the old painted and

@@@1 It is interesting to note the similarity of technique between the English encaustic tiles, and the later methods of Hispano- Moorish work. The English filled their cells in the surface of the tiles with another clay, the Spanish-Moorish potters with coloured glaze.