magnificent examples existing at Natenz, Seljuk, Tabriz, Isfahan and other places.@@1 Indian tile-work is specially described in the article Kashi.

Stamped Spanish tile decoration in its earliest form was an imitation of mosaic, pieces of enamelled tile of various colours being arranged in geometrical patterns, or combined with glass or stone for the purpose. In the 14th and 15th centuries this process was supplanted by one in which the variously shaped and coloured sections of tile were separated by means of narrow bands of the same material, enamelled in white and disposed in various combinations of geometrical interlacing. Of this kind arc the bulk of the Alhambra tiles. But the tediousness of the process gave rise, about 1450, to what is known as the *cuerda seca* (or “ dry cord ”) method, in which narrow fillets at the edges of the separating interlacings were first stamped upon the tile itself and filled with clay and manganese; these being fired (thus forming a “ dry cord ” or line) formed shallow compartments which were in turn filled with coloured enamel, white being used for the interlacings themselves. The process was much in vogue in Andalusia and Castile until about 1550, when there arose the method *de cuenca* in which the parts of the design to receive different coloured enamels were stamped, slightly concave *(cuenca—*a bowl or socket), their edges alone being left in relief. This process lasted until about the commencement of the 18th century.

At Manises, Paterna and elsewhere in Valencia, soon after the middle of the 14th century there commenced an extensive pro­duction of white enamelled tiles painted with designs in blue (more rarely in lustre and manganese) for wall and pavement decoration. This manufacture continued throughout the 15th century and produced some of the finest freehand tile designs that are known to-day. The motives included figure compositions, animals, plants, coats of arms, &c., drawn with great skill and facility. Most of these tiles are to be found in old houses in the city and province of Valencia.

In Catalonia, in the 16th century, blue and white painted tiles were produced in imitation of those of Valencia. For the most highly finished of these stencils were employed to block out the designs.

Polychrome painting upon tiles in the Italian manner was introduced into Spain by Niculose Francisco of Pisa, who settled at Seville (1503-1508) and executed altar-pieces and architectural details in tile work. This imported Italian style was much affected for armorial decoration.

In the 16th and 17th centuries tiles of a coarse kind of majolica were used for wall decoration in southern Spain; some rich examples still exist in Seville. These were the work of Italian potters who had settled in Spain.

Literature.—A. Van de Put, *Hispano-Moresque Ware of the XVth Century* (1904); G. J. de Osma, *Λpuntes sobre ceramica morisca: textos y documentes valencianos, No. 1* (1906), and “ Los Letreros ornamentales en la ceramica morisca del siglo XV.” (in the review *Cultura española,* no. ii., 1906); J. Font y Guma, *Rajolas valencianas y catalanas* (1905); J. Gestoso y Perez, *Historia de los barros vidriados sevillanos* (1904).

3. *Floor Tiles.—*After the development of painted and lustred tiles in Spain and Italy for the decoration of wall surfaces, they were also introduced, during the latter part of the 15th and the first part of the 16th centuries, as pavements, especially in the chapels of the famous cathedrals of those countries. Compara­tively few examples of these pavements now exist, as the majolica enamel was too soft to stand the wear of the feet of worshippers. The earliest known pavement of this type is that in the church of San Giovannia Carbonara in Naples, which is dated, approxi­mately, 1440. The tiles, square and hexagonal in shape, are coated with white enamel and are painted chiefly in dark blue, with touches of green and purple. The British Museum, the Louvre and other museums have secured odd examples of these tiles. It seems probable from the technical methods of the work that it was produced by a Spanish or even a Moorish hand. It is well known that Moorish tile-makers did travel both into Italy and into France to embellish the palaces of great nobles or the chapels

they founded. There is the well-known instance of the Moorish potter, Jean de Valence, who, in 1384, was brought to France by Jean de Berry to make tiles for the adornment of his ducal palace at Poitiers. One of the most important of these early majolica pavements is that made for the Convent of San Paulo at Parma, now in the museum of that town, which was probably laid down in 1482. One of the south chapels in the church of S. Maria del Popolo in Rome has a very fine pavement of painted tiles, executed probably at Forli, about 1480, for Cardinal della Rovere (Julius II.), whose arms—an oak tree—are repeated over and over again among the rich decorations. A still more magnificent tile floor, in the uppermost of Raphael’s Vatican *loggie,* is men­tioned in the article Della Robbia, where also are described the exquisite, enamelled tiles which Luca della Robbia made as a border for the tomb of Bishop Federighi at Fiesole near Florence. Fine examples of tile pavements of i486 exist in the basilica of S. Petronio at Bologna. The chapel of St Catherine at Siena and the church of S. Sebastiano at Venice have majolica pavements of about 1510. Fig. 6 shows an example of about this date from

the Γetrucci Palace in Siena, now in the Victoria and Albert Museum. In the early part of the 16th century majolica tiles from Spain were occasionally imported into England. At the south-east of the mayor’s chapel at Bristol there exists, though much worn, a fine pavement of Spanish tiles dating from about 1520. Others have been found in London, at Newington Butts, and in other places.

Long before the southern nations of Europe were introducing their painted majolica tile pavements, a much more practical type of flooring tile was in use in Germany, France and England; of these the English encaustic tile pavements, dating from the early years of the 13th century to the end of the 16th century, are particularly important and beautiful. These Northern peoples had no knowledge of enamels and colours such as was possessed by the contemporary tile-makers of Moorish Spain or of Italy, and they were confined to the native red-brick earths and white pipeclays for their materials. The method of decoration was as simple and homely as the materials. Slabs of ordinary red-brick clay freed from pebbles, but not from grit or sand, were shaped by pressing cakes of clay into a mould of wood or baked clay, carved in such fashion that when the clay was just hard and dry enough to be removed from the mould the important elements of the design were formed as sunk cells divided by broad raised outlines. While this red tile was still soft and plastic, a thickish paste of pipeclay or other light burning clay was poured into the cells and allowed to stiffen.

@@@1 See Coste, *Monuments de la- Perse* (Paris, 1867).