Hall, and the Royal College of Science, all in South Kensington, London, which illustrate to perfection the English terracotta work of the mid-Victorian period. The Rijks Museum at Amsterdam, and many important buildings in the north of Germany, in Belgium and in France, display the increasing use of baked clay for archi­tectural purposes.

The effort of all terracotta makers during recent times has been to produce a building material capable of resisting the acids and soot contained in the atmosphere of our great towns. Technically many of the leading manufacturers in England and the continental countries have been very successful in this effort, as they are able to produce building materials of pleasant colour and texture which are practically acid-resisting. Critics of this modern development of terracotta as a building material frequently complain of the want of truth in the lines of cornices, door or window jambs, &c. For this default the manufacturer is not so much to blame as arc those modern architects who design a building for stone construc­tion and then decide to have it executed in terracotta. The shrink­age of clay both in drying and firing is well known, and it is this shrinkage which causes large pieces of terracotta to twist or become crooked. When our modern architects shall have realized that the details of a building must be designed specially for the material that is to be used in its construction, terracotta will come into its own again as a decorative building material. The present method of constructing buildings in reinforced concrete, faced with glazed or unglazed terracotta, will afford the architects of the 20th century an unrivalled opportunity for the use of this material.

*Collections.—*The Louvre, British Museum, and the museums of Berlin and Athens have remarkably fine collections of the Greek and Roman terracottas, and many provincial museums, such as those of Florence, Perugia, Rome, Naples, Nîmes and Arles, have also collections of importance. The best collections of Greek terra­cotta figures are in the British Museum, the Louvre and the museums of Berlin and Athens; but a large number of the finest Greek terracotta figures are in private collections. In the Victoria and Albert Museum there is a remarkable collection of fine Floren­tine terracottas of the best periods.

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(W. B.\*; H. B. Wa.)

**TERRAMARA** (from Ital. *terra marna, “* marl ”), the name given by archaeologists@@1 to a type of primitive culture mainly of the early bronze age, but stretching back into the later stone age. This civilization is represented by a number of mounds, formerly thought *(e. g.* by Venturi) to be sepulchral, but really the remains of human habitations, analogous to shell heaps *(q.v.)* or kitchen middens. They are found chiefly in north Italy, in the valley of the Po, round Modena, Mantua and Parma. A summary of early results as to these mounds was published by Munro *(Lake Dwellings)* in 1890, but scientific investigation really began only with the excavation of the terramara at Castellazzo di Fontanellato (province of Parma) in 1889. From this and succeeding investigations certain general conclusions have been reached. The terramara, in spite of local differences, is of typical form; it is a settlement, trapezoidal in form, built upon piles on dry land protected by an earthwork strengthened on the inside by buttresses, and en­circled by a wide moat supplied with running water. The east and west sides are parallel, and two roads at right angles divide the settlement into four quarters. Outside are one or two cemeteries. Traces of burning which have been found render it probable that, when the refuse thrown down among the piles had filled the space, the settlement was burned and a new one built upon the remains. The origin of the terramara type is not definitely ascertained. The most probable inference, however, is that these settlements were not built to avoid the danger of inundation, but represent a survival of the ordinary lake dwelling.

The remains discovered may be briefly summarized. Stone objects are few. Of bronze (the chief material) axes, daggers, swords, razors and knives are found, as also minor imple­ments, such as sickles, needles, pins, brooches, &c. There are also objects of bone and wood, besides pottery (both coarse and fine: see Ceramics), amber and glass-paste. Small clay figures, chiefly of animals (though human figures are found at Castellazzo), are interesting as being practically the earliest specimens of plastic art found in Italy.

The occupations of the terramara people as compared with their neolithic predecessors may be inferred with comparative certainty. They were still hunters, but had domesticated animals; they were fairly skilful metallurgists, casting bronze in moulds of stone and clay; they were also agriculturists, cultivating beans, the vine, wheat and flax. According to Prof. W. Ridgeway *(Who were the Romans?* p. 16; and *Early Age of Greece,* i. 496) burial was by inhumation: investigation, however, of the cemeteries shows that the bodies were burned and the ashes placed in ossuaries; practically no objects were found in the urns.

Great differences of opinion have arisen as to the origin and ethnographical relations of the terramara folk. Brizio in his *Epoca Preislorica* advances the theory that they were the original Ibero-Ligurians who at some early period took to erecting pile-dwellings. Why they should have done so is difficult to see. Some of the terremare are clearly not built with a view to avoiding inundation, inasmuch as they stand upon hills. The rampart and the moat are for defence against enemies, not against floods, and as Brizio brings in no new invading people till long after the terramara period, it is difficult to see why the Ibero-Ligurians should have abandoned their unprotected hut-settlements and taken to elaborate fortifica­tion. There are other difficulties of a similar character. Hence Pigorini regards the terramara people as an Aryan lake-dwelling people who invaded the north of Italy in two waves from Central Europe (the Danube valley) in the end of the stone age and the beginning of the bronze age, bringing with them the building tradition which led them to erect pile dwellings on dry land. These people he calls the Italici, to whom he attri­butes also the culture known as *Villanova (q.v.).* This view

@@@1 Since the International Congτess of Prehistoric Archaeology at Bologna in 1871, when the shortened form *terramara* (plur. *terre­mare)* was adopted.