A.D., the date of the construction of Little Wenham Hall in Suffolk, but it is certain that brick-making as an industry, and brick-building as an art, did not exist during that period. Shortage in quantity, or inferiority in quality in local building-stone was met by the early English builders, not by the recourse of Roman brick fields, but by the importation of Caen stone from France. It is evident that the first cause of the re-use of brick was the growing scarcity, not only of stone, but of timber, and the constant destruction of timber buildings by fire must also have caused the introduction of a more resisting material. This movement manifested itself first in the Eastern counties.

## EARLY TUDOR BRICKWORK

Although the use of brick in church buildings was fragmentary and incidental in housework, its possibilities were grasped, and a style developed which is most typical of English domestic methods. In cottages and smaller houses, brick was early discovered to be a suitable filling for half timber framing, a fine example is "West Stow Hall," Suffolk, where every pattern of brick bonding seems to have been exploited.

Another characteristic of Tudor brickwork is the introduction of diaper patterns, originating in the accidental effects of vitrified beaders. Corbelling is also a marked feature of this period, and retained a strong Gothic tradition till well into the sixteenth century, as at Layer Marney, in Essex, and was at its finest in such early work as Rye House, Hertfordshire. Chimneys were also a great feature, and were a comparatively new thought to the early Tudor Architect.

The brick newel stairs of the period also form an interesting study, and the typical stair of Waynflete's Tower at Esher Place, Surrey, which was built about 1500 A.D., the newel, vault, handrails and treads are brick throughout.

# RENAISSANCE BRICKWORK

Geographically, the use of brick during this period was more widespread than during the Tudor. The most characteristic feature of Renaissance brickwork was the flat rubbed brick arch. In brick, as in stone, the Orders formed the great decorative resource of the Renaissance architects. A survey of brickwork of this period is perhaps best studied by analysing the characteristic work of prominent architects than by a general description. For this reason I have selected the following men and will employ their work as examples.

#### INIGO JONES' BRICKWORK

Inigo Jones, like his master Palladio, was by no means adverse to brick, though using it little in his more important works. West Woodhay Manor House, an apparently authentic design by Inigo Jones, shows an early use of rubbed brick in its window architraves. St. Paul's Church, Covent Garden, London, was probably the first use of brick in Renaissance church building in London.

#### SIR CHRISTOPHER WREN'S BRICKWORK

Wren's use of brick is characteristic of his natural strength and decision. In church work he evidently preferred stone, employing brick only for

constructive utility as in the cone of St. Paul's Cathedral, or for an economical facing as at St. James', Piccadilly, and St. Bennets, Upper Thames Street, London. In domestic work he used brick indiscriminately, considering it to be as suitable for a palace as for a house. He appears to have carefully considered the colour of his brickwork, and for almost the first time introduced yellow stocks.

The quality of Wren's brickwork was as excellent as his design. The Bluecoat School, Westminster, is perhaps the most careful and consistent of his brick building, but some others that are quite as interesting are:—Christ's Hospital, London, (lately demolished), Chelsea Hospital, Kensington Palace and Hampton Court Palace.

The climax of Renaissance brickwork was followed by a decline, hastened by the general introduction of stucco in the late eighteenth century. The revivals of the nineteenth century induced from necessity a renewed vigor of brick practice. Impelled by economic considerations to build in brick the Gothic Revivalists employed that material with architectural enthusiasm for all but their most important works.

Of the brickwork that has been done in England since the Gothic Revival, it is impossible now to give a survey, as apart from the invidiousness of differentiating between the work of recent architects, the survey would require too much space, but an outline of the main factors of an artistic design will be given in the concluding part of this article.

### AMERICAN BRICKWORK

Turning now to the subject of brick architecture in the United States, it must be stated that up to some years ago there was nothing worthy of the name, if we except the architecture of the Colonial period, which was in some way an echo of that of the Georgian period in England. In the best of this work the bricks came from England and Holland in the holds of returning vessels, where they served as ballast for the relatively unladen part of the voyage.

America owes a debt to Richardson, who performed useful service in laying his transforming touch upon the brickwork of his day, and since then it has progressed rapidly, and to-day America contains many fine examples of brickwork. The personality of the Americans is clearly shown in the execution of their brick designs, and under a later heading I will endeavour to describe the enief characteristics.

(To be continued.)

"In architecture, the creative power of nature herself is the model imitated. It is an art which appeals directly to the understanding, and has not the means of flattering the senses in the same way as her sister arts: hence her productions are not universally appreciated: in truth, they are rarely understood, except by those whose education and acquirements have qualified them to judge." Gwilt.

"Repose is based upon quiet strength and an assured position."—Belcher.