It has been said that there is no indigenous 'architecture' in the true sense of the word in West Africa. By this it is meant that to the casual observer most of the towns of West Africa consist of a collection of nondescript buildings, mostly built in a shoddy manner out of temporary materials by Africans for their own use, while all the more pretentious permanent buildings have been designed by Europeans either for Government occupation or as homes for European officials. Such a cursory appraisal is very far from the truth. Early travellers in the Mohammedan Hausa areas, from the days of Mungo Park onwards, were invariably deeply impressed with the size and importance of the towns through which they passed. Clapperton, who travelled through the northern parts of Nigeria in 1822, records that Katagum, about one hundred miles east of Kano, was the largest town seen since Tripoli from which his expedition had set out. It was planned in the form of a square with four imposing gates, and defended with two parallel walls and three ditches. The walls were twenty feet high and ten feet broad at the base, complete with a footpath along the top protected by a low parapet. Within the walls there was a large number of mud houses, that belonging to the Governor being remarkable for its size and the number of rooms and towers that it contained.

With the coming of the Europeans and the establishment of settled conditions there was no longer a need for the construction of fortifications. Most of them have therefore now disappeared altogether, but at Kano and nearby Zaria extensive remains of the original walls can be seen. At Kano the wall is over eleven miles in length and is pierced with thirteen gates. Its height originally varied from thirty to fifty feet and in front of it was a wide ditch filled with live thorns. The various gatehouses were cleverly planned in re-entrant angles so that they were covered by fire from the returns on either side; and Lord Lugard, to whom the city fell in 1902, is recorded as saying that if a determined resistance had been made on the part of the defenders, the city might have withstood an interminable siege. The wall can still be traced throughout its whole length, and even in its present ruinous state it forms an imposing monument.
In Hausaland the art of building in mud, a most unpromising material, has been developed to its highest level, and this has endowed the towns of this region with a uniformity of appearance which is in striking contrast with anything to be seen elsewhere in West Africa. This is, however, but one expression of the various historical influences—the chief being the unifying effect of the Moslem religion—which have combined to raise the Hausa people to a high cultural standard. The technique of building in mud as practised in the towns has now become standardized by long tradition and is a highly organized and specialized craft, the same in its main methods over the whole Hausa region, but varying slightly from town to town. In Northern Nigeria, for example, walls are constructed of sun-dried bricks, roughly pear shaped, which are laid on top of each other in parallel courses with their points upwards. Flat roofs and first floors are constructed in the same way, being supported by flat mud arches—cantilevered beams for the true arch, with a series of interdependent voussoirs, is unknown in traditional West African building—reinforced by lengths of split palm of a species which termites find particularly unpalatable. This reinforcement has a limiting length of about six feet, and from this it follows that the simplest form of roof that can be constructed is made by laying lengths of palm across the top of two walls spaced at about this distance apart. Arches, consisting of a number of lengths of palm bound together, may have a longer span, but the arches themselves require to be spaced at the modular distance apart so that the roof may be filled in. Thus the whole problem of roof design is to divide up the area to be covered into bays having a maximum span of six feet, and this in its turn is the controlling factor in all planning. By grouping the arches so that they run at angles to each other, it is possible, however, to build up panelled domes of considerable span, resulting in rooms in which the principal dimension may be as much as forty feet, and rooms of this size are often found in mosques or Emir's palaces.

Due to the limitations imposed by mud construction, buildings of more than two stories are seldom found, and since high parapets normally surround the roofs the general silhouette of Hausa towns is a comparatively level one, with no building standing out above its neighbours. The exception, if any, is invariably the mosque. Few of those constructed in the traditional way remain, and their number is fast diminishing as they
Hausa ceiling and roof construction
fall into disrepair and are demolished to be replaced by buildings of modern materials. This has happened at Kano, where the new mosque, designed by the European staff of the Public Works Department, is of concrete and sandcrete block. The mosque at Djenné*, in the French Sudan, is probably the most imposing example remaining in good repair and is fortunately now protected as an ancient monument. There is another important one at Bobo-Dioulasso. At Mopti, however, some seventy miles to the north of Djenné, a new mosque was built in 1924 using mud and palm reinforcement, and this is a good illustration of the possibilities of this material for the construction of an imposing public building. It is rectangular in plan, measuring about one hundred feet long and fifty feet wide. The roof is flat and is supported by no less than twenty-one massive mud columns, each about three feet square and forty feet high. The external walls have an average thickness of about four feet, but this is much increased by the multitude of slender buttresses surrounding the building on all four sides, which extend up the full height of the elevation and terminate above the parapet in a series of pinnacles and towers. In addition to having a highly decorative effect, the buttresses serve a practical purpose since they break up the wall surface and ensure that a large area of it is in shade at all times of the day. Internally the floor is of beaten earth covered with mats for the worshippers, but the walls are worked so smooth that they catch the reflection of the small amount of light coming in from the cracks in the doors which are kept permanently closed to keep out the dust and the heat. The columns occupy fully one tenth of the floor area of the building, and the general darkness, relieved only by the glimmer of light from a series of small ventilators set in the roof, results in an overwhelming impression of dignity and sombre grandeur.

Town dwellings in Hausaland, whether they belong to a wealthy merchant or to a poor peasant, are invariably planned on the same general principle which has the triple object of ensuring privacy for the occupants, safety for animals and possessions, and above all purdah for the women. Openings in external walls are thus kept as small as possible to discourage thieves and as a protection against the glaring sun of the summer and the torrential storms of the rainy season. The usual arrangement is for a two storey block to be built on the street frontage. This is reserved for the head of the household, his bedroom being on the

* Featured on the postage stamps of French West Africa.
The Mosque at Mopti, French West Africa
first floor. Behind it are set a series of single storey buildings comprising the boys’ quarters, storage rooms and the wives’ quarters, each with their own compound surrounded by a high wall. The principal room on the ground floor of the front block is the ‘zaure’ where the master receives his friends and guests and beyond which the stranger never penetrates. Sometimes the ‘zaure’ may be detached from the main accommodation and set separately in front of it. Behind, the whole plan is so arranged as to conceal the wives’ rooms from the casual visitor and all approaches to them are carefully screened. Doors in any one room are never placed opposite each other and there is seldom any direct communication between important rooms, it being necessary to pass through an intervening lobby.

The natural skill of the builder is best seen in the adornment of the finished work. Wealthy householders have the panelled ceilings of the main rooms patterned in designs of raised mud-work, picked out in colour, while externally the blank areas of wall are often decorated in relief—perhaps only a small panel over the front door or, if the owner can afford it, the whole elevation covered with sinuous arabesques. A newly decorated house with its façade entirely covered by geometrical designs, glistening white in the high sunlight, is a striking sight.

In the belt of tropical rain forest extending along much of the coast and in the wooded areas lying immediately inland, a multitude of different tribes live in houses and compounds which differ greatly in their plan arrangement and the materials used for their construction. Two basic plan types are found, the square or rectangular hut and the round hut with either a domed or conical roof. In the forest areas the rectangular plan predominates. The whole construction is of forest materials, the walls consisting of a light framework of wooden members covered with large leaves of various types, straw plaited in various ways or made into mats or alternatively with earth plastered over the whole framework. The roof is of similar construction but covered with thatch.

Further inland, there is a transitional belt where square or rectangular huts with walls made of solid earth and pitched roofs are found. The important Yoruba tribe in Nigeria live in this type of house. Yet further inland, where the vegetation becomes sparse and the fringe of the desert regions is reached, the round hut supersedes the square or the two types are found indiscriminately, often in company with the flat-roofed urban method
A decorated house at Zaria
of building common to the Hausas. Although great ingenuity and a natural sense of craftsmanship are often shown, little of this deserves to be classed as anything more than mere building. Among some tribes, however, the houses of the chiefs, by their very size and the complexity of their planning, command attention as examples of a highly developed architecture.

Among the most interesting chiefs’ houses are those to be found at Benin, a city whose importance as a commercial centre goes back to the early days of European penetration in the fifteenth century and whose reputation as one of the principal artistic and cultural centres of West Africa is considerable. The houses of Benin chiefs have their rooms arranged around a series of courtyards leading one out of the other very much on the pattern of the classical Roman house with its sequence of atria. The resemblance to Roman houses is all the more remarkable for in the centre of the roof of each courtyard is a hole which serves to admit light and air, while immediately below it in the floor is a sunken impluvium with an outlet to carry away the storm water. The various courtyards may be with or without a peristyle of squat mud columns, depending on their size, but common features in them are couches and shrines constructed entirely in mud, the surface of which is polished to a high glaze and has a remarkable quality of endurance, so that even the oldest examples appear to have been but recently built. The sequence of courtyards culminates in the apartments of the chief, while on either side or at one end, separated from the main block by narrow passages open to the sky, are the wives’ and boys’ quarters.

The chiefs’ houses in Benin have been referred to in some detail for there still exist numerous examples in the city and they represent the highest and most compact development of a basic type of plan that is common to many parts of West Africa. Very few of these houses have been recorded and there is a wide field of research open to anyone who is willing to undertake this task and to interpret them as expressions of a social structure that may soon die away.

During the last five hundred years an ever increasing volume of European building of all kinds has been superimposed upon the patchwork of West African architecture. The first permanent building of any importance was the Fort of S. Jorge da Mina, built in 1482 by the Portuguese on the Ghana coast. This was followed by a chain of forts which until about one hundred years ago formed the principal physical evidence of
European settlement, for the early traders generally carried out their business from ships moored offshore, rather than risk the dangers of fever and attack which awaited them on land. During the last hundred years, however, the volume of European building has rapidly increased, commencing with the chapels of the missionaries—who at first built in the native style for reasons of economy—and culminating in the ambitious building programmes undertaken by the Public Works Departments and commercial undertakings during the post-war years. It is unfortunately the case, however, that none of the splendid examples of contemporary architecture which are now such conspicuous features of the West African scene in both the British and the French territories has actually been designed by Africans—simply because there are as yet very few African architects.

The key to the emergence of a truly West African style of architecture lies therefore in the development of architectural education. Until recently there have been only a few West African students at Schools of Architecture in England, but the situation is now slowly improving following the introduction of a scheme whereby promising assistants in the Public Works Departments are enabled to come to England for training, while a similar arrangement operates in the French territories. Most of those who qualify return home to take up official posts and so accelerate the Africanisation of the Government services. In addition, Nigeria now boasts a flourishing School of Architecture within the Nigerian College of Arts, Science and Technology, and this can be relied upon to produce an increasing flow of qualified men. Regrettably, however, the number of Africans in practice on their own account remains negligible. A further delaying factor in the growth of a local style is the utter dependence on Europe both for technical assistance and for the very materials and components required for building. The lack of African technicians is a familiar phenomenon, but in the building industry it is unfortunately felt at all levels, even to the point of its being difficult to find skilled labour of the foreman class capable of supervising work on the site. It is certain, however, that as the various countries of West Africa move rapidly towards political freedom and economic independence, so the conditions will be established in which a vigorous West African style of architecture will flourish.