

CHAPTER VI

ARCHITECTURE.

I. Civil Architecture.

A. BUILDINGS.

THE story of Mysore Architecture is a long and interesting one. To deal with it adequately would require more space than it has been possible to allot to it in this work. The different styles employed, their relations to one another, their growth and development, and the peculiarities of the many structures falling under each of them are all legitimate objects of study in this Chapter. But it is obvious that they could not be pursued here in any detail as they would necessitate the employment of illustrations which are beyond its scope. There is the less reason to-day for any such detailed treatment as Fergusson's well known work *History of Indian Architecture* (new Edition by James Burgess and R. F. Spiers) and a host of other publications mentioned in the Bibliography appended to this Chapter supply all that might be required in the directions indicated. In Mysore itself, the Archæological Department has projected a series of monographs devoted to the more important temples, which when completed ought to furnish valuable data for the scientific study of the growth and progress of Architecture generally in India. All that can therefore be attempted here is a brief sketch of the main features of architectural advancement in the State with special reference to outstanding examples, to which it is proposed to add some notices of less known groups.

The Story of
Mysore
Architecture.

The impor-
tance of its
study.

It is hardly necessary to enlarge on the importance of a study of Mysore Architecture to any one interested in the history of Indian Architecture, or of Architecture generally, Eastern and Western. What did the designer in Mysore aim at and how did he realise his aim? What arrangements did he use and what forms and details did he adopt for effectuating his object? And how did these differ from the forms and arrangements of his brother designer in India itself and elsewhere? These are some of the points on which a careful study of Mysore Architecture is likely to throw considerable light. The results obtained by such a study ought to prove of supreme value to the student of world art. Apart from the high scientific value of a study of the kind suggested, which cannot be exaggerated, it has been remarked by Fergusson, to whose genius we owe not only a wider appreciation of Indian and Eastern architecture but also of the history of architecture itself, that "the great value of the study of these Indian examples (he has been really referring to the Halebid group of temples in this State) is that it widens so immensely our basis for architectural criticism. It is only by becoming familiar with forms so utterly dissimilar from those we have hitherto been conversant with that we perceive how narrow is the purview that is content with one form or one passing form. By rising to the wider range, we shall perceive that architecture is as many sided as human nature itself, and learn how few feelings and how few aspirations of the human heart and brain there are that cannot be expressed by its means." In another place, Fergusson has said, "It will undoubtedly be conceded by those who are familiar with the subject that, for certain qualities, the Indian (including Mysore) buildings are unrivalled. They display an exuberance of fancy, a lavishness of labour and an elaboration of detail to be found nowhere else." In writing the last sentence, it

would seem as though Fergusson had specially in mind the great monuments connected with the Hoysala dynasty of Mysore, which extorted from him the very highest admiration. Architecture is, as Burgess has remarked, something more than the mere art of building in any form. It is more correctly the fine art of designing and constructing ornamental buildings in wood, stone or other material. It is, from this point of view, entirely distinct from common building or civil engineering and for that very reason is a true manifestation of the spirit of the era to which it belongs. The architectural art of every epoch must, therefore, be taken to be the purest reflection of the intellectual and social conditions prevailing at the time. The significance of architecture to the serious study of history will thus be easily apparent.

There is scarcely any doubt whatever that in the early architecture of Mysore, as in the rest of India, Burma, China and Japan, wood was solely or chiefly employed. There are specific references in inscriptions as late as the 13th century A.D. to the conversion by later kings of temples in wood built by their early predecessors (*e.g.*, *E.C. VII Shimoga, i. Shinoga 5* dated in 1218 A.D.; see also Chapter V on *Sculpture and Painting*). When stone displaced wood as the primary material of architecture, the older forms were continued and perpetuated, with the result that builders preserved their own style, so that it bore witness to the antecedent general use of wood. Partly by reason of conversion and partly on account of the perishable nature of the material employed, buildings of early date in which wood should have been used, have disappeared.

Early
Architecture
in wood.

The transition from wood to stone was doubtless made gradually, brick being first used for filling in the wooden

Beginnings
of stone
architecture.

framing of the structures. The spread of Buddhism westward and the invasion of Alexander the Great brought India into contact with Persia, where in the 5th and 6th centuries B.C. mausoleums had been hewn out in the rocks and places with stone basements, pillars and doorways, filling in the walls with bricks, had been constructed. The embassies of Asōka should have familiarised structures of this nature, with the result that the use of dressed stone—whether in the construction of the many *stūpas* attributed to him or in the making of the stone pillars on which his edicts are engraved—became general. Thus Architecture in stone may be said to date from about the period of Asōka. During its earliest stages, it had, perhaps, most to do with the construction and embellishment of *stūpas* for the enshrining of Buddha's relics and to the representation of his foot marks, the sacred *bōdhi* tree and other symbols, combined possibly with aboriginal snake worship. As the Jain and Brāhmanic religions were also tolerated by Asōka, they must have developed simultaneously with Buddhism, their own cults and with them their own shrines, cave temples and monastic abodes for their followers. The evidence of the Sātavāhana coins found at Chandravali (2nd century A.D.) is entirely in favour of the view that about the time of Asōka, some of whose edicts have been found in the State, reverence for Buddha's relics and his foot marks and the *Bōdhi* tree should have been prevalent in Mysore. There is no reason to believe that the evolution of architecture in the State during the periods immediately preceding and following that of Asōka ran a different course from what it did in and around his capital. Though no distinctly Buddhist rock-cut caves or *stūpas* built of stone have so far been traced in the State, the representation of the *Chaitya* on coins unearthed in it shows that the structural form of the *Chaitya* was quite familiar to people of the time. The

structural *Chaityas*, if any, built in the State, following wooden prototypes, in the pre-Asōkan and Asōkan ages have not survived into our own times.

There are, however, a few caves and cave temples whose age is not certain. It is now acknowledged that some at least of the earliest caves were other than Buddhist in origin—either Brāhmanical or Jain. A closer study of these caves in conjunction with those found in Northern India—Buddha Gaya, Junagarh, etc,—is therefore necessary before we could promise to what religion they should be affiliated. It ought to suffice for the present to note the localities where these caves are found. The inner sanctuary of the Hidimbēsvara temple at Chitaldrug is carved out of a single rock. The figure of Hidimba, the Rākshasa who was killed by Bhīma, one of the Pāndava brothers, is sculptured on the *Vimāna*. The Anklematha at Chitaldrug is noted for its caves which form a perfect labyrinth consisting of rooms of various sizes at different levels. They are approached by a good stone staircase. The shrines, *lingas*, baths and pedestals, the last apparently for *Yōgāsana*, may be of recent origin but the caverns no doubt existed long before. When and for what purpose they were originally formed or occupied is unknown. At the Panchalinga cave, near the entrance, is an inscription (*E.C.* IX, Chitaldrug 32 dated in 1286 A.D.) which says that the *tīrtha* of the five *lingas* was established by the Pāndavas and that Perumala Dēva Dannāyaka, the minister of the Hoysala King Narasimha III and others joined in making a grant of land to it. The temple of Gangādharēsvara at Sivaganga is a large cave sheltered by a huge overhanging boulder with cells all round. The caves on the Bettadapura hill and near the Ānjanēya temple close to it are irregular shaped and dark. The peculiarly mixed Brāhman and Jain images in it will be found described in Volume V of this work.

Caves and
cave temples.

The double *linga* to be seen in them, one placed in front of the other, on a single *pītha* or seat, is specially noteworthy because of its unusual character. The Virabhadra temple on the Nandi hill is in a large cave near the fort gate, the overhanging boulder being about 70 feet high. The Gōpinātha temple on the Gōpinātha hill is in a large cave sheltered by a gigantic boulder measuring 100' x 60' x 70'. On the Tyakal hill, the cave known as Bhīma's *Gardi* (Gymnasium), is a magnificent one measuring 150' x 70' x 50', the approach to it being very difficult.

Early
Buddhist,
Brāhmanic
and Jain
monuments.

The Malvalli stone pillar, which has been assigned to the end of the 1st century A.D., is perhaps the oldest stone monument yet found in the State. It records a grant to a Brāhman. Equally old is the Banavāsi stone inscription which records the grant of a Nāga slab, a tank and a *vihāra* apparently to a Buddhist. These two inscriptions make probable the existence of Brāhmanic temples and Buddhist *Vihāras* in the north-west of Mysore during the close of the 1st century A.D. The Sātavāhana kings were tolerant towards both the faiths, a fact which is confirmed from other sources as well. When the Mahāyāna cult spread through the land, the Buddhists of Mysore appear to have adopted it, with the result that we hear of the founding of a chief Buddha *vihāra* at Banavāsi in the 11th century A.D. During the time of the Chālukya king Āhavamalla, we hear of the installation of various gods and goddesses in it. Brāhmanic and Jain temples, however, flourished side by side with Buddhist *vihāras* for long after until Buddhism finally ceased to exist as an organized cult in the State about the 13th century or thereabouts. The Tālgunda pillar inscription which has been assigned to the 5th century A.D. makes it possible that temples like the Pranavēsvara mentioned in it were in existence long before

that time. This pillar belonging to early Kadamba times, though rough and clumsy, when compared with Persian forms, is of interest as descended from those to be seen at Karle, and based on wooden models, both in the form of its pedestal and in the making of its shaft. The Ganga kings patronised as much the Jain as the Brāhman religion as is evident from their many extant grants. The temples of their period range from about the 2nd to the 10th century A.D. Their first temples were admittedly in wood, and their conversion into stone is actually referred to in their later inscriptions. They appear to have developed the decorative freizes so common later in Hoysala temples. In the temple at Varuna, we see it in a narrow form running along under the roof, illustrating the *Rāmāyana*. Associated with the Jain temples of their time are the elegant monolithic *stambhas* detailed in Chapter V above. These are seen at Ellōra as well and are descended from the Buddhist *lats*. In their style, the Gangas followed—if the early Jain temples at Sravana Belgola are any guide in the matter—the Dravidian.

Jain architecture in its essentials follows the Dravidian style. In this State, it is represented by two classes of structures, *bastis* and *bettas*, (For *bettas*—See *E.I.* VIII. 138, No. 5) and is in this respect different from that of the north, where *bettas* are altogether unknown. The *bastis* are regular temples in the usual acceptance of the word, containing an image of one of the Tīrthan-karas as the object of worship. The *bettas* (literally hills) are courtyards,—properly, though not always, at the summit of a hill,—open to the sky, and containing a colossal image of Gommatēsvara. The *bastis* are many in number and at one time must have covered over the greater part of the State. The rise of the Virasaiva cult checked their growth and even converted a number

Jain
Architecture.

of them into Saiva temples. The principal group of *bastis* at present well known in the State are at Sravana Belgola. They have been described at length by Mr. Narasimhachar in the introduction to the new edition of *Inscriptions at Sravana Belgola* (E.C. II) and the interested reader would do well to refer to it. The description that follows is taken from Fergusson, the eminent authority on Indian and Eastern Architecture, whose writings have done so much to make known to the world the sculptural and architectural treasure of Mysore. Fergusson writes:—

“The principal group of *bastis* at present known above the Ghats is that at Sravana Belgola. There are there two hills—the Indragiri on whose summit the colossal image just described stands and dominates the plain. On a shoulder of the other, called Chandragiri, stand the *bastis*, fifteen in number. As might be expected from their situation, they are all of the Dravidian style of architecture, and are consequently built in gradually receding storeys each of which is ornamented with small simulated cells Their external appearance is more ornamental than that of the generality of northern Jaina temples. The outer wall of those in the north is almost always quite plain. The southern ones are as generally ornamented with pilasters, and crowned with a row of ornamental cells. Inside is a court, probably square, and surrounded by cloisters, at the back of which rises the *vimāna* over the cell which contains the principal image of the Tirthankara. It is always surmounted by a small dome, as is universally the case with every *vimāna* in Dravidian architecture.

It may be vain speculation, but it seems impossible not to be struck with the resemblance to the temples of southern Babylonia. The same division into storeys with their cells; the backward position of the temple itself; the panelled or pilastered basement, are all points of resemblance it seems difficult to regard as purely accidental.

Besides the greater temples, there are several varieties of smaller ones, which seem peculiar to the style. Four-pillared pavilions are not uncommon in front of Hindu temples in the

south, but these Jain *mantapas* are five-pillared, that is, with a pillar at each angle and one in the middle. There is one before the entrance to the *hetta* on Sravana Belgola, the middle pillar being so supported from above that a handkerchief can be passed through below its base.

Though not the grandest, certainly the most elegant and graceful objects belonging to the Jaina style of architecture are the *stambhas* which are found attached to almost every temple. They are used sometimes by the Hindus, but then generally as dip-dāns or lamp-bearing pillars, and in that case have some arrangement for exhibiting light from their summit. With the Jains this does not appear ever to have been the case. Their pillars are the lineal descendants of those of the Buddhists, which bore either emblems or statues, generally the former—or figures of animals. With the Jains or Vaishnavas they as generally bore statues. Be this as it may, they seem nowhere to have been so frequent or so elaborately adorned as among the Jains in the south They generally consist of a single block of granite, square at base, changing to an octagon, and again to a figure of sixteen sides, with a capital of very elegant shape. Some, however, are circular, and indeed their variety is infinite. They range from thirty to forty and even fifty feet in height, and whatever their dimensions, are among the most elegant specimens of art in Southern India."

The origin of the Dravidian architecture is lost in obscurity. It is so called because of its prevalence in the Dravidian territorial area, roughly approximating to the country south of the Krishna river and among peoples classed usually Dravidian and speaking the languages of Tamil, Telugu, Malayalam and Kannada. The architecture of this area and of these peoples is essentially different from that of other regions in India and of one type. The earliest example in this type, so far as has been ascertained, does not go beyond the sixth or seventh century A.D., if, indeed it is quite so ancient. In this State in the Kālahastīsvara temple on Nidugal Durga is an inscription of the 8th century A.D. which mentions a temple founded by Bilichorarasa of the Pallava family

Dravidian
Architecture.

(Pavagada 45). It is possible that this was in the Dravidian style, seeing that it is mentioned as having been founded by a Pallava king. The *raths* at Mamallapuram (in the modern Chingleput District), dating from the 7th century A.D., may be considered as the prototypes of this style. From them to the temple of Virūpāksha at Patadakal and the rock-cut example of the Kailāsa at Ellora, the transition, as Fergusson* puts it, was easy but the step considerable. At Māmallapuram, "we have manifest copies of structures intended originally for other purposes and used at Mahābalipur in a fragmentary and disjointed manner. At Ellora, on the contrary, the whole is welded together, and we have a perfect Dravidian temple, as complete in all its parts as at any future period It seems certain that the square *raths* are copies of Buddhist *vihāras*, and are the originals from which all the *vimānas* in Southern India were copied, and continued to be copied nearly unchanged to a very late period On the other hand, the oblong *raths* were halls or porticoes with the Buddhists, and became the *gōpuras* or gateways which are frequently—indeed generally—more important parts of Dravidian temples than the *vimānas* themselves. They too, like the *vimānas*, retain their original features very little changed to the present day." Another feature is the use of cornices of double curve; in other Indian styles the cornices are mostly straight and sloping downwards. *Mantapas* or pillared halls used for various purposes, often of 48 or 100 pillars, and occasionally of 1000 pillars, are additional features in certain of the more important temples usually built in the enclosures of the temple. Besides these, are tanks or wells and other buildings for the residence or use of the priests. Burgess writes:—

"The style is distinctly of wooden origin, and of this the very attenuated pilasters on the outer walls and the square-

pillars—often of small section—are evidences. But as the contemporary Northern styles are characterized by the prevalence of vertical lines, the Dravidian is marked by the prevalence of horizontal mouldings and shadows, and the towers and *gōpurams* are storeyed. Then the more important temples are surrounded by courts enclosing great corridors, or *prākāras*, and pillared halls. In the early Kashmir temples, in many of the Jain temples of Western India, at Brindāban, at the great temple of Jagannāth in Orissa, and others—probably in early times very many more—there are courts surrounded by cells; but in the great Dravidian temples, such as those at Madura, Ramēswaram, Tinnevely, Srirangam, Tiruvallur, Chidambaram, Kanchipuram (Conjeevaram), etc., the courts are very extensive, and are one within another. This system of enclosure within enclosure, with pillared corridors, was also carried across to Siam and Kamboja, where the largest and most magnificently sculptured temples perhaps ever raised were executed in this Dravidian style, developed and more fully adapted to lithic materials, with complete symmetry of arrangement, a consideration disregarded in South India, where they are too often a fortuitous aggregation of parts, arranged as accident required during the long course of their erection.

“The later examples of the style were over-loaded with carving; every part of the building was covered with ornamentation in the most elaborate and intricate designs the artist could invent; but while the imagination may be impressed with the evidence of power and labour so lavished on ornament—much of it truly elegant—the better judgement is offended by want of architectural design in the arrangement of the constituent parts of the whole.”

Temples in this style generally consist of different parts, arranged in various ways, and differing in themselves only according to the age in which they were built. First, the *Garbhagriha* or actual shrine itself in which the image is kept. It is always square in plan, ornamented externally by thin tall pilasters and surmounted by a *Sikhara* of pyramidal roof always divided into one or more storeys and crowned by a small dome, either circular or octagonal in shape. This shrine is also called

the *vimāna*. Immediately in front of the *Garbhagriha* is the *Sukhanasi*, or *adytum* or inner sanctuary; next in front is the *navaranga* or middle *mantapa*, followed sometimes by another *mantapa*, called the *mukha-mantapa*, or front *mantapa*. Each of these *mantapas* cover and precede the door leading to the inner sanctuary. Then comes the *prākāras* or enclosures which may be one or more. Built into the *prākāra* is the *gōpura* or great gateway, which is a special feature in this style. Sometimes a *gōpura* is to be found at each side of a temple not infrequently opening into and each successive enclosure wall. In general design these *gōpuras* are like the inner shrines but twice as wide as deep, and very frequently from an architectural point of view far more important than the temples themselves. They are usually well sculptured, particularly the jambs on either side and the pediment of the doorway. They are, in fact, the loftiest and most imposing feature in the temples built in this style.

Temples in
Dravidian
style in
Mysore.

The principal specimens of the Dravidian style in Mysore are the temples at Terakanāmbi, Gundlupet Taluk, which date from a period anterior to Krishna Rāya of the Vijayanagar Dynasty (1509-1530); the Srīranganātha temple at Seringapatam, the Nanjundēsvara temple at Nanjangud and the Chāmundēsvari temple on the Chāmundi hill near Mysore. Of the imposing *gōpuras* attached to these temples of the Mysore royal family, the first probably belongs to the 15th century, or may be older; the other two are modern, that at Chāmundi being built in 1827, and the one at Nanjangud, apparently, about 1845. The temples at Halsur (16th century), Mēlkote, Talkād (1100 A.D.), Tirumukudlu-Narsipur (1100 A.D.), Ramanathapur and other places may be mentioned as effective illustrations of temples in this style. The Nandīsvara temple at Nandi, architecturally the first and

most ornate of Dravidian temples in the State, goes back to the 8th century A.D. (See *M.A.R.* 1913-4 Para 20). The temples at Kolar and Kaivara (11th and 12th century) belong to this style. The Binnamangala temple, dating from the time of Kulōttunga Chōla I, (11th century), is typical of this style in the State. The Lakshminarasimha temple at Doddadālivatta (Tumkur District) is one of the largest temples in the State in this style. The Sōmēsvara temple on the Nidugal Durga, is another fine structure in this style. It was probably founded in 1292 A.D. (*E.C.* XII Pavagada 53). Its more noteworthy features are its carved doorway and its beautifully sculptured *navaranga*. The temple of Vidyāsankara at Sringēri is another well designed and effective building in this style. It resembles the temple at Vijayanagar and belongs to the reign of Bukka I (1356 A.D.). As Burgess remarks, the earlier Dravidian structures had lions or *yālis* and elephants placed as supports for pillars; and these were gradually enlarged, made affixes to pilasters or pillars and the animal forms multiplied and conventionalized with riders and human and other figures introduced as supporters or attendants, until about the 14th century or earlier they had obtained a permanent place in the architecture. At a later date figures of gods, demons and patrons or donors sometimes took their places. Well known examples of these occur in the famous temples of Vellore, Madura, Vijayanagar and Rāmēswarem. In this State, the best examples of these later innovations are to be seen at the Aghorēsvara temple at Ikkēri (*circa* 1560 A.D.), Hanumantha *mantapa* at Terakanāmbi (1640 A.D.), the double temple of Rāmēsvara and Virabhadra at Keladi (*circa* 1681 A.D.); etc.

The influence of the dominant Hoysala style on later Dravidian architecture as known in this State is manifest in many temples, during the period of Vijayanagar

Influence of
Hoysala style.

ascendancy and even later. The most notable example of this is the Vidyāsankara temple at Srīngēri (1356 A.D.) which is such a blend of the two styles that it is difficult to say to which style it belongs, though there is unmistakable evidence of its Dravidian parentage. Another is the Aghorēsvara temple at Ikkēri and the Gōpālākriṣṇa temple at Krishnarājasāgara (*circa* 1560 A.D.). The Gōpālākriṣṇa temple at Nonavinkere is a three-celled temple (or *trikūtāchala*) in the Dravidian style.

Chālukyan
Architecture.

The Chālukyan dynasty, which gives its name to this style, began to distinguish itself in the history of the Deccan from about the beginning of the 5th century A.D. Bādami was its capital. About 615 A.D., a branch of the family set up rule at Vēngi on the lower Gōdāvāri and about the same time another was established in the south of Guzerat. The area of the style therefore occupies the whole of the basin of the Gōdāvāri and includes the Haiderabad territory, the Central Provinces, Berar, and the Marāthi part of the Kannada districts of the Bombay Presidency. Though temporarily superceded in the middle of the 8th century by the Rāshtrakūtas, the Chālukyas reasserted themselves late in the 10th century and continued for another two centuries, when they were finally overthrown by the great Hoysala king Vishnuvardhana in 1184 A.D., who absorbed into his own dominions the south-western portion of the Chālukya territories, while the Kākatīyas had set themselves up a little earlier at Wārāngal to the east. Both these kingdoms were conquered about 1320 by the Muhammadans, though the old Hoysala territories were regained for the Hindus by the early kings of the Vijayanagar dynasty some fifteen years later. As Burgess aptly remarks, the earliest temples within the area mentioned above are, however,—

“not very clearly marked off from the Dravidian and the more northern style—some of them have distinctly northern

spires, and others are closely allied to the southern style and it was perhaps only gradually that the type acquired its distinctive characteristics. Till a late date we find temples with towers differing so little in form from Dravidian *vimānas*, that, other details apart, they might rapidly be ascribed to that order. Unfortunately many of the finer examples must have perished during the Mussalman invasions and during the rule of the Muhammadan dynasties of Bijāpur, Gulbarga, Bidar, Hyderabad and Burhanpur, and, as we might expect, round these cities most of the earlier works have disappeared. Still in Mysore, Dharwar and Belgaum as well as in Berar and the Mahratta districts, sufficient remains still exist to illustrate the various developments of the style.

"The old Temple of Pāpanātha at Pattadakal presents a curious combination of styles. The body of the temple is Dravidian and must have been a fine specimen, of as early a date as the early part of the eighth century; but the *sikhara* is a curious approximation to the form of the early Northern Hindu or Indo-Aryan order, while in details the temple shows a strong leaning to the Dravidian. One is almost tempted to suppose that the architect of the temple had died and left the spire to another, who, having a preference to the northern form, had tried to adapt it to a Dravidian substructure. The temple of Virupaksha at the same place is an excellent example of the pure Dravidian, built about 740 A.D., while close by is another that might have been transferred from Orissa.

"On the temple of Kuchchimalliguli at Aihole is a somewhat similar *sikhara*. This temple is small and plain, with a sloping roof over the side aisles, and belongs to about the seventh century. The Meguti temple also at Aihole must have been a fine work, but unfortunately it has lost all above the wall heads.

"Among Chālukyan temples a prevalent form is that of three shrines round one central *mantapa* or hall. The arrangement for supporting the roofs of the halls almost always follows the Dravidian mode of four pillars, or multiples of four, in squares; the device of twelve columns, so disposed in a square that, omitting the corners, the remaining eight could be connected by lintels to form the octagonal base of a dome, is almost unknown. It is employed however, in the outer hall of the great temple at Hangal. In the

Dravidian and northern temples the projections on the walls are generally formed by increments of slight thickness added flatly to their faces, and, however thick, they are so placed as to leave the true corners of the shrines, etc., more or less recessed."

Numerous temples mentioned in the Chālukyan and Kālachūrya inscriptions seem to have belonged to this style. The Basavēsvara at Tonachi (*circa* 1047 A.D.), the Kēdārēsvara at Baligami (*circa* 1060 A.D.), the Tripurāntaka at Baligami (1070), Kaitabēsvara at Kuppattur (*circa* 1070 A.D.) and the Mallinātha *basti* at Angadi (1060) and the Ādinātha *basti* at Chikka Hanasoge (1070), are temples in that style which mark off the transition from it to the purely Hoysala style which from about the time of Vishnuvardhana became the dominant one in and around the State.

Hoysala
architecture.

In the Hoysala style, called a sub-variety of Chālukyan style, a new development of the Chālukyan style is seen. All the temples in this style are to be found in Mysore State and were built entirely during the period of Hoysala rule. The impropriety of calling them Chālukya—having neither to do with the Chālukya rule or Sovereigns or even territorial area—ought to be sufficiently obvious to need mention. The name "Hoysala" has therefore been suggested as a more appropriate designation of this style. The objection of Mr. Havell to what he calls "the dynastic system" of classification applies as much to "Chālukyan" as to "Hoysala," while his criticism that it takes "no account of the religious character of the building" is as much true of a "dynastic" as of a territorial classification based on the "Dravidian," "Indo-Aryan," etc., which are either territorial or linguistic, if not racial. The nomenclature "Chālukyan" has, however, become so far impressed on the style that it is by no means easy to oust it. But

temples in the Hoysala style possess certain distinctive features about them that it is difficult not to class them under a style by themselves. The numbers of shrines joined together by a single *mantapa*, usually the *navaranga* is, in this style, seen increased sometimes to four and occasionally to five. The figure sculpture is elaborate and is often its chief distinguishing mark. The general style may be thus described:—

The temple itself, *i.e.*, the shrine in which the image of the presiding deity has been installed—is polygonal or star-shaped. The sides, however, are not obtained as in the northern style by increments added flatly to a square, but are points touching a circle, at one time apparently right angles, but afterwards either more acute or flatter than a right angle. There are four principal faces larger than the others, three occupied by niches, the fourth by the entrance. The roof is in steps, and with a flat band on each face in continuation of the larger face below. The porch is simple, consisting of columns disposed equidistantly over its floor. (It should be added that this porch is generally surrounded by a wide stone seat or bench, with a sloping back, which runs completely round the porch and forms as it were a low wall on every side.) The details are often of great beauty, especially the entrance, which are objects on which the architects generally lavished their utmost skill. Nothing in Hindu Art is more pleasing than the pierced slabs which the Chālukyas used for windows. The pillars, too, are rich without being overdone: and as it is only in pairs that they are of the same design, the effect of the whole is singularly varied and yet at the same time, pleasing and elegant. The temples generally stand on a terrace, a few feet high and from ten to fifteen feet wide. This is one of the characteristic features of Chālukyan design, and adds very considerably to the effect of their temples. In regard to the pillars, it may be added that those used in the later temples are markedly different from the earlier forms in this style. They are, as Burgess has pointed out, massive, richly carved, often circular and highly polished. Their capitals are usually spread out, with a number of circular mouldings immediately below: and under

these is a square block, while the middle section of the shaft is richly carved with mouldings in the round. In many cases the capitals and circular mouldings have been actually turned in a sort of lathe, the shaft being held in a vertical position.

Writing of the ornamentation of the doorways, Burgess says :—

“As we see at Ajanta and elsewhere, doorways were, from a very early period, objects on which much artistic skill was lavished ; and this taste was maintained in the utmost elaboration bestowed on the sculptures surrounding the doors of Dravidian and Chālukyan shrines. Pierced stone windows were employed in Dravidian temples at Pattadkal, Ellora and other places ; but the richly carved and highly ornamented pierced windows belong specially to this style. Generally, the temples stand on a terrace from 10 to 15 feet wide, quite surrounding them, and from 3 to 6 feet in height—a feature which adds considerably to the architectural effect. The buildings were erected without mortar, and, in the earlier examples at least, the joints were carefully fitted. The whole was carved with sculpture, often of geometric and floral patterns, intermixed with numerous mythological figures ; and, in the later examples, the courses of the base were carved with the succession of animal patterns prescribed for them in the *silpa sāstras*. This is very fully exemplified in the great temple of Hoysalēsvara at Halebid. This temple, though unfinished, is one of the most remarkable in India, and, in an artistic sense, is unmatched in the variety of its details and the wild exuberance of fancy displayed in its ornamentation ; while the combination of horizontal with strongly marked vertical lines and the play of outline and of light and shade are hardly surpassed in any style.”

Extent and
number of
Hoysala
temples.

Buildings of this style are very numerous in the north and west of Mysore. A more or less cursory exploration has revealed the existence of some 80 to 90 temples in this style in the State. Several of these are in ruins, some being past recovery. Most of these, however, are under conservation by orders of Government. The

Lakshmīdēvi temple at Doddagaddavalli, which is in the rare quadruple form, is perhaps one of the earliest examples of this style. The symmetrical disposition of its plan is its chief merit. It was built by a great merchant and his wife in 1113 A.D. during the reign of Vishnuvardhana. The Kēsava temple at Belur is one of the most exquisite specimens of this style. It was built under orders of King Vishnuvardhana himself in 1117 A.D. During his reign at least ten other temples in this style came to be erected. Among these is the famous Hoysalēsvara temple, which might be assigned to *Circa* 1141 A.D., the first year of Narasimha I, the successor of Vishnuvardhana. During Narasimha's reign, the building activity appears to have continued unabated, over fifteen temples built during that period being known. Among these are the fine Īsvara temple at Anekonda (*Circa* 1160 A.D.), the Sōmēsvara at Sathur (*Circa* 1169 A.D.) and the well-known Būchēsvara at Koramangala (1173 A.D.). During the reign of Ballāla II, the enthusiasm for the erection of temples in this style reached its high water mark. Nearly a couple of dozen temples are known to have been built in his reign of 47 years. Among the most famous temples of this period are the Amritēsvara at Amritapura (1196 A.D.), the Chattēsvara at Chatchattanahalli (*Circa* 1200 A.D.), the great Trimūrti at Bandalike (*Circa* 1200 A.D.), the famous Kēdārēsvara at Halebid (1219 A.D.), the Īsvara temple at Arsikere (*Circa* 1200 A.D.), and the Īsvara temple at Nanditavare (*Circa* 1200 A.D.). Though the number of temples erected in the reign of Narasimha II was not large, only some seven being known that are assignable to it, the far-famed Harihar temple at Harihar (1224 A.D.), the Sōmēsvara at Haranahalli (1234 A.D.) and the Mallikārjuna at Basral (1235 A.D.) fall into his reign. Over a dozen temples belonging to Sōmēsvara's reign are so far known. Of these the Lakshmī Narasimha and the Sadāsiva

temples at Nuggihalli (1249 A.D.) are well known. The Panchalinga temple at Gōvindanahalli (Circa 1250 A.D.) is equally famous. The latter is a quintuple temple, the only one of its kind known in the State. In the reign of Narasimha III, the Kēsava and Mūlasankarēsvara temples at Turuvekere (Circa 1260 A.D.), the Yōga-Mādhava at Settikere (1261 A.D.), the splendid Kēsava at Sōmanāthpur (1268 A.D.), Lakshmī Narasimha at Hole-Narsipur, all triple temples, and a few others came into existence. Even the troublous times of Ballāla III saw the erection of a couple of temples but the times were too disturbed for a peaceful continuance of building activities. Royal munificence combined with the piety of generals, ministers and merchants gave an impetus to the master-builders of the time to put forth their very best in the architectural line. The names of many gifted architects and sculptors of successive periods, covering over 200 years, who took an active part in making the Hoysala name famous for all time for its passionate attachment to art, are known and their work and worth are told in the magnificent monuments they have left to posterity. (*Vide Chapter V, Sculpture and Painting, above.*)

Descriptions
of the more
important
temples.

The temples at Halebīd, Belur and Sōmānathpur may be regarded as master-pieces of this style. The following accounts of these more famous temples based on the writings of Fergusson are included here for convenience of reference. Brief descriptions of the other temples referred to above will be found in Volumes V and VI of this work.

(i) Kēdārēs-
vara at
Halebīd.

Kēdārēsvara temple at Halebīd.—Mr. Fergusson writes :—

“Its plan was star-shaped, with sixteen points, and it had a porch well proportioned in size. Its roof was conical,

and from the basement to the summit, it was covered with sculptures of the very best class of Indian art, and these so arranged as not materially to interfere with the outlines of the building, while they imparted to it an amount of richness only to be found among specimens of Hindu art. If it were possible to illustrate this little temple in anything like completeness, there is probably nothing in India which would convey a better idea of what its architects were capable of accomplishing."

This exquisite specimen of the most ornate Chālukyan style of architecture is, alas! a thing of the past. Mr. Fergusson's gloomy anticipations have been completely fulfilled. The trees which had rooted themselves in the *vimāna* were suffered to do their work unchecked and the building is now a hideous heap of ruin. Some of the most perfect figures have been conveyed to Bangalore and set up in the museum, but divorced from their artistic setting they have lost their meaning.

"It is, however, surpassed in size and magnificence by its neighbour, the great temple at Halebid, which, had it been completed, is one of the buildings on which the advocate of Hindu architecture would desire to take his stand. Unfortunately it never was finished, the works having been stopped after they had been in progress apparently for eighty-six years.

"The general arrangements of the building are that it is a double temple. If it were cut into halves, each part would be complete, with a pillared porch of the same type as that at Belur, an *antarāla* or intermediate porch, and a sanctuary containing a *lingam*, the emblem of Siva. Besides this, each half has in front of it a detached pillared porch as a shrine for the bull, Nandi. Such double temples are by no means uncommon in India, but the two sanctuaries usually face each other and have the porch between them. Its dimensions may roughly be stated as 200 feet square over all, including all the detached pavilions. The temple itself is 160 feet north and south, by 122 feet east and west. Its height, as it now remains, to the cornice is about twenty-five feet from the terrace on which it stands. It cannot, therefore, be considered

by any means as a large building, though large enough for effect. This, however, can hardly be judged of as it now stands, for there is no doubt but that it was intended to raise two pyramidal spires over the sanctuaries, four smaller ones in front of these, and two more, one over each of the two central pavilions. Thus completed the temple, if carried out with the richness of detail exhibited in the *Kēdārēsvara*, would have made up a whole which it would be difficult to rival anywhere.

“The material out of which this temple is erected is an indurated potstone of volcanic origin, found in the neighbourhood. This stone is said to be soft when first quarried, and easily cut in that state, though hardening on exposure to the atmosphere. Even this, however, will not diminish our admiration of the amount of labour bestowed on the temple; for, from the number of parts still unfinished, it is evident that, like most others of its class, it was built in block and carved long after the stone had become hard. As we now see it, the stone is of a pleasing creamy colour and so close-grained as to take a polish like marble. The pillars of the great Nandi pavilion, which look as if they had been turned in a lathe, are so polished as to exhibit what the natives call a double reflection—in other words, to reflect light from each other. The enduring qualities of the stone seem to be unrivalled, for, though neglected and exposed to all the vicissitudes of a tropical climate for more than six centuries, the minutest details are as clear and sharp as on the day they were finished. Except from the splitting of the stone arising from bad masonry, the building is as perfect as when its erection was stopped by the Muhammadan conquest.

“The building stands on a terrace, ranging from five to six feet in height, and paved with large slabs. On this stands a frieze of elephants, following all the sinuosities of the plan and extending to some 710 feet in length and containing not less than 2,000 elephants, most of them with riders and trappings, sculptured as only an oriental can represent the wisest of brutes. Above these, is a frieze of *shārdūlas*, or conventional tigers—the emblems of the Hoysala Ballāla who built the temple. Then comes a scroll of infinite beauty and variety of design; over this a frieze of horsemen and another scroll; over which is a bas-relief of scenes from the *Rāmāyana*, representing the conquest of Ceylon and all the varied incidents of

that epic. This, like the other, is about 700 feet long. (The frieze of the Parthenon is less than 550 feet). Then come celestial beasts and celestial birds and all along the east front a frieze of groups from human life, and then a cornice, with a rail, divided into panels, each containing two figures. Over this are windows of pierced slabs, like those of Belur, though not so rich or varied. In the centre, in place of the windows, is first a scroll, and then a frieze of gods and heavenly *apsaras*—dancing girls and other objects of Hindu Mythology. This frieze, which is about five feet six inches in height, is continued all round the western front of the building, and extends to some 400 feet in length. Siva, with his consort Pārvati seated on his knee, is repeated at least fourteen times; Vishnu in his nine *avatāras* even oftener. Brāhma occurs three or four times, and every great god of the Hindu pantheon finds his place. Some of these are carved with a minute elaboration of detail which can only be reproduced by photography and may probably be considered as one of the most marvellous exhibitions of human labour to be found even in the patient East.

“It must not, however, be considered that it is only for patient industry that this building is remarkable. The mode in which the eastern face is broken up by the larger masses so as to give height and play of light and shade, is a better way of accomplishing what the Gothic architects attempted by their transepts and projections. This, however, is surpassed by the western front, where the variety of outlines, and the arrangement and subordination of the various facets in which it is disposed, must be considered as a masterpiece of design in its class. If the frieze of gods were spread along a plain surface it would lose more than half its effect, while the vertical angles, without interfering with the continuity of the frieze, give height and strength to the whole composition. The disposition of the horizontal lines of the lower friezes is equally effective. Here again the artistic combination of horizontal with vertical lines and the play of outline and of light and shade, far surpass anything in Gothic art. The effects are just what mediæval architects were often aiming at, but which they never attained so perfectly as was done at Halebid.

“Before leaving Halebid, it may be well again to call attention to the order of superposition of the different animal

friezes. As in the rock-cut monastery described by the Chinese pilgrims, so here, the lowest were the elephants ; then the lions ; above these came the horses ; then the oxen, and the fifth storey was in the shape of a pigeon. The oxen here are replaced by a conventional animal, and the pigeon also by a bird of a species that would puzzle a naturalist. The succession, however, is the same, and the same five genera of living things form the ornaments of the moonstones of the various monuments in Ceylon. Sometimes in modern Hindu temples only two or three animal friezes are found, but the succession is always the same, the elephants being the lowest, the next above them are the lions, and then the horses, etc. When we know the cause of it, it seems as if this curious selection and succession might lead to some very suggestive conclusions. At present, we can only call attention to it in hopes that further investigation may afford the means of solving the mystery.

“ If it were possible to illustrate the Halebid temple to such an extent as to render its peculiarities familiar, there would be few things more interesting or more instructive than to institute a comparison between it and the Parthenon at Athens. Not that the two buildings are at all like one another ; on the contrary, they form the two opposite poles, the alpha and omega of architectural design ; but they are the best examples of their class, and between these two extremes lies the whole range of the art. The Parthenon is the best example we know of pure refined intellectual power applied to the production of an architectural design. Every part and every effect is calculated with mathematical exactness, and executed with a mechanical precision that never was equalled. All the curves are hyperbolas, parabolas, or other developments of the highest mathematical forms—every optical defect is foreseen and provided for, and every part has a relation to every other part in so recondite a proportion that we feel inclined to call it fanciful, because we can hardly rise to its appreciation. The sculpture is exquisitely designed to aid the perfection of the masonry—severe and godlike, but with no condescension to the lower feelings of humanity.

“ The Halebid temple is the opposite of all this. It is regular, but with a studied variety of outline in plan, and even greater variety in detail. All the pillars of the Parthenon are identical, while no two facets of the Indian temple are the

same; every convolution of every scroll is different. No two canopies in the whole building are alike, and every part exhibits a joyous exuberance of fancy scorning every mathematical restraint. All that is wild in human faith or warm in human feeling is found portrayed on these walls; but of pure intellect there is little—less than there is of human feeling in the Parthenon.

“The great value of the study of these Indian examples is that it widens so immensely our basis for architectural criticism. It is only by becoming familiar with forms so utterly dissimilar from those we have hitherto been conversant with, that we perceive how narrow is the purview that is content with one form or one passing fashion. By rising to this wider range, we shall perceive that architecture is as many-sided as human heart and brain there are that cannot be expressed by its means. On the other hand, it is only by taking this wide survey that we appreciate how worthless any product of architectural art becomes which does not honestly represent the thoughts and feelings of those who built it, or the height of their loftiest aspirations.”

Kēsava temple at Belur.—Mr. Narasimhachar devotes a well-illustrated monograph to this temple in the *Mysore Archæological Series* to which reference should be made. The following is Fergusson's well-known description of this great temple:—

(ii) Kēsava at Belur.

“This consists of a principal temple, surrounded by four or five others and numerous subordinate buildings, enclosed in a court by a high wall, measuring 360 feet by 440 feet, and having two very fine gateways or *gōpuras* in its eastern front. The great temple consists of a very solid *vimāna*, with an *antarāla*, or porch; and in front of this a porch of the usual star-like form, measuring ninety feet across. The whole length of the temple, from the east door to the back of the cell is 115 feet, and the whole stands on a terrace about three feet high, and from ten to fifteen feet wide. The arrangements of the pillars have much of that pleasing subordination and variety of spacing which is found in those of the Jains, but we miss here the octagonal dome, which gives such poetry and meaning to the arrangements they adopted. Instead of

that, we have only an exaggerated compartment in the centre, which fits nothing, and though it does give dignity to the centre, it does it so clumsily as to be almost offensive in an architectural sense. This dome fell in and is now being rebuilt.

“It is not, however, either to its dimensions or the disposition of its plan, that this temple owes its pre-eminence among others of its class, but to the marvellous elaboration and beauty of its details. The effect of these, it is true, has been, in modern times, considerably marred by the repeated coats of white-wash which the present low order of priests consider the most appropriate way of adding to the beauty of the most delicate sculptures. Notwithstanding this, however, their outline can always be traced, and where the white-wash has not been applied, or has been worn off, their beauty comes out with wonderful sharpness.

“The richness and variety of pattern displayed in the windows of the porch are astonishing. These are twenty-eight in number and all are different. Some are pierced with merely conventional patterns, generally star-shaped and with foliated bands between; others are interspersed with figures and mythological subjects—for instance, the *Varāha avatār* and other scenes connected with the worship of Vishnu to whom the temple is dedicated. The pierced slabs themselves, however, are hardly so remarkable as the richly carved base on which they rest, and the deep cornice which overshadows and protects them. The amount of labour, indeed, which each facet of this porch displays is such as, I believe, never was bestowed on any surface of equal extent in any building in the world; and though the design is not of the highest order of art, it is elegant and appropriate, and never offends against good taste. (One of them has sculptured to the life a fly, of the natural size, as if settled on one of the figures, thus rivaling the feat of Apelles, the most celebrated of the Grecian painters, and the one who accompanied Alexander the Great into Asia.)

“The sculptures at the base of the *vimāna*, which have not been white-washed, are as elaborate as those of the porch, in some places more so; and the mode in which the undersides of the cornices have been elaborated and adorned is such as is only to be found in temples of this class. The upper part of the tower is anomalous. It may be that it has been

white-washed and repaired till it has assumed its present discordant appearance, which renders it certainly a blot on the whole design. My own impression rather is, that, like many others of its class, it was left unfinished, and the upper part added at subsequent periods. Its original form most probably was that of the little pavilions that adorn its portals, which have all the peculiar features of the style, the flat band on each face, the three star-like projections between, and the peculiar crowning ornament of the style. The plan of the great tower, and the presence of the pavilions where they stand, seems to prove almost beyond doubt that this was the original design; but the design may have been altered as it progressed, or it may, as I suspect, have been changed afterwards."

Kēsava temple at Sōmanāthpur.—The building at Sōmanāthpur is a single but complete whole. The temple is triple, the cells with their *sikharas* being attached to a square-pillared hall, to the fourth side of which a portico, now in ruins, is attached, in this instance of very moderate dimensions. It is impossible without illustrations to give an idea of the elegance of outline and marvellous elaboration of detail that characterizes these shrines. The temple stands on a raised terrace intended to correspond with the ground plan of the temple, each of the numerous angles being supported by an elephant. The whole stands in a courtyard, surrounded by an open verandah, containing a cell between every set of columns. The exterior walls of the temple are carved with an elaborate profusion of detail, the arrangement of the subjects being similar to that at Halebīd. The small canopies with pendants, which cover each compartment of the *antarāla* are all, like those of the Baligāmi temples, carved with a different design, on which the architect has expended the utmost fertility of his skill.

(iii) Kēsava
Temple at
Sōmanāth-
pur.

The temples of the Malnad regions in the west of Mysore are of a totally different style, corresponding to that of

Temples in
the Malnad
Kanara
style.

Kanara. The frame work is of wood, standing on a terrace, and the whole covered with a tiled and gabled roof. The wooden pillars and joists are often well carved but not in the highest style of art. Better specimens of this order must be sought for beyond the western limits of the State.

The Lingāyat style, mixed Hindu and Sāracenic.

The Lingāyats, or Virasaivas as they are more correctly known, originally followed the purely Brāhmanical style. The Dodda Basavanna temple, belonging to the Hoysalāsvara temple at Halebīd, is a perfect specimen of the Hoysala style. Dēmōja, we are told in an inscription dated 1140 A.D., (*E.C.* VI, Hassan, Belur 241) made the frame of the eastern door for it. Other architects and sculptors should have been responsible for the temple itself and its further ornamentation. As Mr. Rice has pointed out, there seems no doubt that Siva worship in accordance with the Lingāyat faith superceded that of Jaina throughout the north-western part of the State—Shimoga and the country adjoining it. Several *lingas* have been noticed, both free-standing and engraved as symbols at the heads of inscriptions, which have been simply formed by cutting down a seated Jaina figure into the required shape. (*E.C.* VII—i. Introd. 31). In later years, however, after the Muhammadan incursions of the 17th century, the Lingāyats adopted what seems a somewhat distinctive style in their public buildings, such as *mathas*, tombs, etc., which is a combination of the Hindu and the Sāracenic. The best specimens, perhaps, are the tombs of the Coorg Rājas at Mercara, but there are buildings at Nagar, Chitaldrug, Nāyakanhalli and other places which may serve as illustrations. At Yela-hole on the Tungabhadra in the Chitaldrug district, is a fine and well-built *matha*, with simple but good ornamentation.

Sāracenic Architecture.

The Sāracenic architecture, which dates from about the end of the 12th century, is represented in the State

in the places associated with Muhammadan rule. As applied to mosques and tombs, this style varied much at different periods and under the various Muhammadan dynasties in different parts of the country. Burgess, for instance, distinguishes ten or more fairly different styles of Sāracenic structures.

The Bijāpur Sultans, who were the first to invade Mysore in the north and east, in the 17th century, had a distinguished record as builders in their own territories. Far-famed though they were as the creators of the beautiful Juma Masjid (1557-1570), the celebrated Gōl Gumbaz (1626-1656) and other equally well-known structures at their capital, which are remarkable as much for originality of design as for boldness of execution, they have hardly left their impress on Mysore from the purely architectural point of view. The only building connected with their period is a solitary mosque erected by Randhulla Khān, their general, at Sante Bennur in the Shimoga District which may be set down to *Circa* 1637, the very period covered by the construction of the Gōl Gumbaz by Muhammad Ādil Shāh. Though they approximate in dates, these two structures entirely differ in the styles they adopt. While the Gōl Gumbaz bears no trace of Hindu forms or details, the Sante Bennur mosque is, like the first mosques built by the Muhammadans in the Northern India, an adaptation of a Hindu structure with but comparatively slight alterations. Randhulla's mosque is, in fact, built on the site of an old temple of Ranganātha built by Hanumappa Nāyak, the local chief, which was destroyed for making room for the mosque. The materials of the temple were used in the construction of the mosque, which is an imposing structure with groyned roof and Sāracenic details. The mosque was, however, desecrated in revenge by the ousted Pālegar, and has accordingly never been used. The

Bijāpur
style.

honda, or reservoir in front, converted into a *hauz*, is faced round with a grand flight of *ashlaz* steps, and had ornamental *mantapas* (pavilions) at the angles, in the centre and in the middle of its sides, with very finely worked turrets and *gōpuras* in the Dravidian and Chālu-kyan styles. These were improved with elegant additions by Randhulla Khān, but are at present in a ruinous condition. Apparently a fountain used to play from the middle pavilion. The paucity of structures in the true Bijāpur style in the State is probably due to the fact that the Governors of its possessions in the Karnātic were Mahrattas and not Muhammadans.

Moghul
Style.

Bijāpur was taken by the Moghuls under Aurangzib in 1687, and the subjection of the Karnātic provinces belonging to it immediately followed, ending in the establishment of Sira as the capital of the new territory acquired in Mysore. The architectural remains now existing are the Juma masjids at Sira (built in 1696) and Hirebidnur near Goribidnur, and several tombs, now partially in ruins, both at Sira and Hirebidnur. The domes at Sira are not large, but of a very light and elegant design, being well raised on a sort of floral cup, the petals of which press close round the base. The structures have survived through being built of stone. It is on record that a palace was erected by one of the Governors of Sira, name Dilāvar Khān, of such elegance that it was adopted as the model on which Haidar and Tipu built their palaces at Bangalore and Seringapatam. There may be truth in this tradition. Haidar, who received the title of Nawab of Sira in 1761, was undoubtedly much impressed with the Moghul architecture of the place. He accordingly modelled his own buildings on the one at Sira. The Bangalore Fort was in like manner re-built on the model of the fort at Sira and the Lal-Bagh at Bangalore was probably suggested by the Khān Bāgh at

Sira. Tipu followed in Haidar's footsteps in this particular domain of activity. But all the three buildings—at Sira, Bangalore and Seringapatam—were of such perishable materials, though thickly decorated with gilding and colour, that hardly anything now remains of any of them. The same fate has overtaken Latif Sāheb's *Darga*, at one time a handsome ornamental structure, at Hoskote, Bangalore District. The Bangalore Palace, like the *Sejje* or Durbar Hall of the old Palace at Mysore, unfortunately destroyed by fire, and the Daria Daulat at Seringapatam, referred to below, appear to have been built in the Moghul style of architecture resembling Akbar's famous Durbar Hall at Allahabad, in which Indian and Sāracenic details are mixed up. In these buildings, while the main floors were mean in proportion and dwarfed in height and filled with the most fantastic mosaic decorations, an appearance of grandeur was imparted to the structures by the tall and beautifully carved wooden pillars, running up from the basement right up to the top of the ceiling of the first floor and connected with ornamental and fretted rods formed by wooden planks. The approaches to these buildings were laid out with great regard to beauty and one felt, in approaching these piles, one's own insignificance compared with the splendour and magnificence of the monarchs who held their Durbars on the projecting balconies of the top floor. The Bangalore Palace was long used for the Offices of the Administration until 1868, when being no longer safe, it was abandoned, and the greater part has since been demolished. In what remains, a municipal school is maintained but it is under orders of removal, for conservation as a work of historical and architectural interest. Of the Palace at Seringapatam, Buchanan says that it was a very large building, surrounded by a massive and lofty wall of stone and mud; and though outwardly of a mean appearance, contained some

handsome apartments but ill-ventilated. The private apartments of Tipu formed a square, on one side of which were the rooms that he himself used. The other three sides of the square were occupied with warehouses, in which he had deposited a vast variety of goods, for he acted not only as a prince, but also as a merchant. These goods were occasionally distributed among the Amildars with orders to sell them, on the Sultān's account, at a price far above their real value, which was done by forcing a share of them upon every man in proportion to his supposed wealth. The apartment most commonly used by Tipu was a large lofty hall, open in front after the Mussalman fashion, and on the other three sides entirely shut up from ventilation. From the principal front of the palace, which served as a revenue office, and as a palace from whence the Sultān occasionally showed himself to the populace, the chief entry into the private square was through a strong narrow passage, wherein were chained four tigers. Within these was the hall in which Tipu wrote, and into which very few persons except Mir Sādak were ever admitted. Immediately behind this was the bed-chamber, which communicated with the hall by a door and two windows, and was shut up on every other side. The door was strongly secured on the inside, a close iron grating defended the windows. The Sultān, lest any person should fire upon him while in bed, slept in a hammock which was suspended from the roof by chains in such a situation as to be invisible through the windows. The only other passage from the private square was into the *zenāna* or women's apartments.

Tipu's *Mahal* at Chitaldrug appears to have been an imposing, though plain, structure. It is also in a ruined state now. The ceiling of the inner hall has tumbled down but the lofty wooden pillars still standing indicate the nature of the building. The pillars, however,

have no ornamentation about them like those in the Palace at Bangalore Fort. The upper storey has a few plain looking rooms. There was apparently a garden attached to the building, of which the remains are still to be seen.

A few buildings, designed in the Moghul style, however, are also to be found in fair preservation, some being maintained in good order by special grants. They are the *Makbara* or mausoleum of Haidar's family at Kolar, the great mosque at Seringapatam, the well-known *Gumbaz* (or mausoleum of Haidar and Tipu) in the Lāl Bāgh at the same place, and the Summer Palace known as the Darya Daulat. To these may be added the little known but fine *Gumbaz* at Hoskote (see *M.A.R.* for 1919, Plate VI, facing page 10) and the tombs at Chennapatna and the mosque at Nagar. Of the Kolar *Makbara* (sometimes called Imāmbāra), there is architecturally little to remark. The imposing mosque at Seringapatam is a fine structure, built on the site of an old temple, with two lofty minarets. One of the five Persian inscriptions in it gives 1787 A.D. as the date of its construction and the others contain extracts from the *Korān* and the ninety-nine names of Allah. The *Gumbaz* of Haidar and Tipu at Ganjām, near Seringapatam, is an effective building, consisting of a large dome resting on a basement storey, which is surrounded with a colonnade of pillars of black serpentine. The dome covers the central apartment containing the tombs. The interior is lacquered with the tiger-stripe emblem of Tipu, and the doors are of ebony inlaid with ivory, a special industry of Mysore. The present ones were the gift of the Marquis of Dalhousie to replace the old ones, which were worn out. (For the ground plan and front elevation of this building, see *E.C. Mysore* i pp. 32 and 56). On its west wall is an inscription in Persian characters, dated in *Hijra* 1195 or A.D. 1782, the year of Haidar's death. In this inscription the building is described as

the "bed-chamber" of the "King" Haidar, who is said to be "taking rest" in it. In its hyperbolic language, it is thus described: "Marvellous is the dome which from the loftiness of its construction has made the firmament low in height. As you will, you may call it either the moon or the sun, and the firmament finds itself put to shame on account of envy. The pinnacle of the dome is the light of the firmament's eye from which the moon has borrowed its light. The fountain of mercy has gushed out from the earth and the cherub angels have surrounded it." As we enter the precincts of this mausoleum, surrounded on three of its sides by mosques, prayer halls and rest houses for visitors, built in imitation of the Sâracenic buildings of Northern India, with its cyprus trees and finely laid-out gardens, a solemnity unconsciously steals on us and makes us feel that it is a resting place for one of the Sultâns of Mysore.

The Darya Daulat building was a summer palace, erected on the bank of the river by Tipu Sultân, and was at one time occupied by Colonel Arthur Wellesley, the future Duke of Wellington. It is an oblong building, with small rooms and steep stairs at each of the four corners. The upper storey forms an inner floor, with canopied balconies in the middle of the four sides, working down on to the spacious audience halls below. The whole stands on a high basement, surrounded with deep verandabs. The most striking feature in the building is the painted walls. "The lavish decorations, which cover every inch of wall from first to last, from top to bottom, recall the palaces of Ispahan," says Mr. (afterwards Sir John) Rees, "and resemble nothing that I know in India." (*The Duke of Clarence in South India*, 81.) There is a good picture of the building in his book. The design seems to be substantially similar to that of Tipu's palace at Seringapatam and Bangalore, which were, as already stated, copied from one erected

at Sira by the Moghul Governor Dilāvar Khān. The most striking fresco on the wall of the Darya Daulat palace is a representation of the defeat of Colonel Baillie's detachment by the Mysore troops, which occupies the greater part of one side. (For further information, see under Chapter V, *Painting*, and Volume V of this work under *Seringapatam*.)

The above description of the earlier architectural monuments in the State, composing numerous imposing and artistic structures, has to be supplemented by a brief reference to works erected in more recent times.

Modern
Architecture
in Mysore.

Of buildings modelled on the later Indo-Sāracenic style, the most important is the New Palace at Mysore, which in its exterior is in the manner of the later Moghul buildings, while in the interior the details are in the style of the indigenous Hoysala art. The details are framed in by Sāracenic motives. Here are very fine specimens of panel and spandrel carvings in stone and some very artistically designed doors of wood inlaid with ivory and of wood covered with silver plates, on which are worked scrolls of thin foliage pattern found in the temples at Halebid and Bēlūr, displaying great dignity in proportion and quality in ornamentation. It exhibits the results of the powerful influence of the local Hoysala buildings on the craftsmen employed on the work and the officers responsible for the execution of the details of the Palace. As further examples of the same style may be mentioned the range of shops known as the Lansdowne Bazaars, the 2nd and 3rd Mahārāja Kumāris' Mansions and the New Palace Offices at Mysore, and the Revenue Survey Offices in Bangalore.

Later Indo-
Sāracenic
style.

In the middle of the 19th century, a regular Public Works Department was organized in the State and it

Buildings in
Classic or
Renaissance
style.

was presided over by European Engineers. Most of the State buildings naturally came to be constructed under their supervision. As they were conversant with the types of buildings based on the five classic orders, *viz.*, Tuscan, Doric, Ionic, Corinthian and Composite, these buildings were raised in the manner of Italian or French Renaissance with classic details. The District Offices in Bangalore, constructed in 1856, was the earliest of such buildings. The Public Offices and the Government Museum came next. As specimens of Renaissance buildings, built in recent times, may be mentioned the Jubilee Institute, the Mahārāja's College, the Public Offices, the Law Court Buildings, and the 1st Mahārāja Kumāri's Mansion in Mysore, and the Victoria Hospital and the New Public Offices in Bangalore.

⌘ Gothic style.

A design in Gothic style of a plain but elegant type was successfully attempted in the case of the old Central College at Bangalore. But for want of considerations of scale, the new additions for Physical and Chemical Laboratories have dwarfed the beautiful old pile and these new additions not having verandahs or arcades, running all round the main block, look morosely heavy. The next building in the same style but of the type of structures in the Tudor period in England, is the Palace at Bangalore, which is a fine specimen of a building constructed on the model of Mediæval castles in Normandy and England.

In mixed style.

As was to be expected, the influence of the Western School of builders pushed into the background the traditions of design and craftsmanship observable in the old temples. Owing to the introduction of European models and departmental procedure under European heads, most of the artisans and workers began to copy Western architectonic motives within their reach without any

consideration for purity and unity of design. The result has been the creation of a Mixed or Mongrel style of building construction. This is exhibited in the Central College Hostel, the Government High School, the Minto Ophthalmic Hospital, the Technological Institute, the Seshadri Hall, the Government Printing Press, and the Y. M. C. A. Buildings and some of the large private and commercial buildings at Bangalore, and the Students' Home, the Chāmarājēndra Technical Institute, the Mōthikhāna and the Banumiah's School at Mysore.

Quite recently, some buildings have been constructed in the style of the modern American Renaissance Art. The most imposing and beautiful of such structures is the newly completed Sri Krishnarājēndra Hospital in Mysore, with the super-imposed classic arcades and with a Corinthian pedimental portico surmounted by a low dome of Pantheon type. Similarly, the New University Buildings in Mysore, *i.e.*, the Union, the Lecture Halls, the Oriental Library, etc., are of a severe type of classic architecture, correctly proportioned of architectonic motives with rich plaster ornamentation.

Modern
American
Renaissance
structures.

What promises to turn out to be a very beautiful pile on account of its approach, access, situation and surroundings, is the Guests' Palace at Mysore, sanctioned to be constructed at an estimated outlay of Rs. 15 lakhs. This is proposed to be perched on the top of the ridge which is in continuation of the main spur of the Chāmundi Hill, now named Lalitādri. Towards the west, the site overlooks a beautiful valley studded with small tanks and cocoanut gardens. To the east is also a small green valley with fertile fields, along which the road from Mysore to T.-Narsipur winds. To the north and north-west is situated the fine avenue named Narasimharāja Boulevard and a magnificent row of buildings is

Some
proposed
structures.

proposed to be constructed along the approach road in continuation of the Boulevard, while to the south is situated the beautiful hill, the abode of the patron Goddess of the City, a hill which lends solemnity and enchantment to the new building and to the Polo ground to the west. When completed with all the appendages, this Palace is destined to be what the Falkanāma Palace is to the City of Haiderabad.

It will thus be seen that the products of the Western School of builders loom so largely in the life of the people that the very existence of the grand old Hoysala Art in their midst at Bēlur, Sōmanāthpur and Halebīd, is all but forgotten. Hence in their homesteads, personal decoration and dress, they follow the types established by fashion in Government Departments no less than in the case of their Public Buildings. It can be asserted that the traditions of design and craftsmanship in Mysore, as in other parts of India, are in a stage of transition where slavish imitation of classic cornices, brackets, mouldings, egg and dart carvings and Acanthus leaf ornamentation is regularly copied with no sense of propriety. A new style, based on the old models but suited to present day conditions, with the necessary alteration of dimensions rendered possible by truss, jack-arch and girder constructions, remains yet to be developed. People who can evolve such a style of structure suited to the country, its climate and traditions, have to be sought for and encouraged with a view to bring about this much desired consummation.

Modern
buildings of
architectural
interest.

Subjoined is a list of the more important buildings of architectural interest, some of them having true pretensions to such a title and others less so, but all of them exhibiting dignified and well proportioned features.

STATEMENT OF ARCHITECTURAL BUILDINGS IN MYSORE.

Name of building	Date of completion	Cost	Name of building	Date of completion	Cost
BANGALORE CITY.			MYSORE CITY.		
		Rs.			Rs.
1 The District Office	1856	22,000	1 The Jubilee Institute	1994	39,999
2 The Public Offices	1869	4,27,980	2 The Mahārāja's College	1894	94,965
3 The Government Museum	1879	48,335	3 The Public Offices	1895	1,75,506
4 The Central College	1882	...	4 The Law Court buildings	1899	21,470
5 The New Palace	1882	6,19,867	5 The Lansdowne Bazaars	...	80,308
6 The Victoria Hospital	1896	7,49,507	6 The Students' Home (old)	1900	52,570
7 The Central College Hostel (old)	1901	66,940	7 The Students' Home (new extension)	1919	87,145
8 The Central College Hostel (new)	1901	49,080	8 The First Mahārāja Kumari's Mansion	1907	6,98,296
9 The Sir Seshadri Memorial Hall	1907	83,624	9 The Second Mahārāja Kumari's Mansion	1914	4,29,146
10 The Mechanical Engineering School	1914	16,015	10 The Third Mahārāja Kumari's Mansion
11 The Physics Laboratory	1915	1,43,729	11 The New Palace	...	41,72,232
12 The Chemistry Laboratory	1915	1,36,060	12 The Bed Room Block	1917	3,34,768
13 The Government High School	1917	1,55,502	13 The Chāmarājendra Technical Institute	1917	2,44,516
14 The Minto Ophthalmic Hospital	1917	2,85,139	14 The Krishnarājendra Hospital	1918	3,65,000
15 The Extension of Public Offices	1917	1,68,011	15 The Office Block to the New Palace	1923	4,10,168
<i>University Buildings.</i>			<i>University Buildings.</i>		
16 The Lecture Hall and Class Rooms	1922	89,500	16 The Lecture Hall	1922	1,42,000
17 The Students' Union	...	59,200	17 The Students' Union	1920	51,712
			18 The New Oriental Library	1922	47,550
			19 The University Professors' Quarters	1922	...
			20 The Cricket Pavilion	1918	...

The above list is sufficiently long and comprehensive to show that in building activities, Mysore, thanks to the special interest evinced in architectural development by His Highness the present Mahārāja Sri Krishnarāja Wodeyar Bahadūr, stands second to none among Indian States, either in the architectural excellence of its public buildings, or in the magnitude and variety of structures which it has erected and is still erecting.

B. STRUCTURES OTHER THAN BUILDINGS.

From numerous inscriptions found in the State, it might be inferred that ancient rulers not only built palaces for themselves but also provided the people with the necessary amenities of life.

Ornamental
Wells, Ponds
and Tanks.

Thus we are told in an epigraph dated in 1234 A.D. that the towns in the Hoysala country were surrounded with gardens, that many tanks filled with lotuses were formed in their vicinity and that groves were planted from *yōjana* to *yōjana* (about nine miles) for travellers to rest in (*E.C.* IX Arsikere 82). Of the Mysore king Dodda Dēva Rāja Wodeyar, it is said that he made wells, ponds and tanks, with *chattras* or feeding houses from road to road (*E.C.* XII Kunigal 37). The importance of a good water supply, whether for irrigation or for the use of towns, seems to have been early recognized. We accordingly find references to the erection of dams to rivers, from which channels were led off, and to the construction of wells and tanks and reservoirs in almost every period. The oldest tank in the State is, perhaps, the Panamankere (*i.e.* Pranavēsvara's tank) at Tālgunda, Shikarpur Taluk, which has been assigned to the 4th century A.D. (*E.C.* VII Shimoga, Shikarpur 176, dated in about 400 A.D.). Puliyaṁma, Perggade of the Santalige Thousand, who had attained the rank of a great minister, is said to have constructed this tank in 935 A.D. and to have made a grant of land for it and made over the same to the people of the town on condition of certain annual payments being kept up by them (*E.C.* VII—Shimoga i, Shikarpur 194 and 322 both dated in 935 A.D.). It is probable he restored or repaired the tank, for it is undoubtedly earlier than the 10th century. The Akale-Samudra, at Gundalhalli in Pavagada Taluk, named after Akaleti, who built it, is referred to in

an inscription which, on palæographical grounds, has been set down to 754 A.D. A lithic inscription of Sri-purusha, the Ganga king, dated in 760 A.D., found at Halkur, Sira Taluk, refers to one Addepara building a tank and records a grant for its maintenance. To the same century or before, belongs the tank at Bēthamangala, on the Pālār river in the Kolar District. It breached more than once and was restored, once in 950 A.D. and again in 1,155 A.D. (*E.C.* Bōwringpet, 4 and 9). In the 10th century, the local priest of Āvani in the Mulbagal Taluk, dug some tanks (*E.C.* X Mulbgal 65), while in the 12th century, the Kadyala chief formed others in the Tumkur Taluk (*E.C.* XII Tumkur 9). In 1358, a number of tanks were constructed by one Bhatt, who planted lines of trees on the four sides and consecrated them with due religious ceremony. An inscription found in the sluice of the Kunigal tank gives the interesting information that it was built in 1394 A.D. by Irugappa, the Jaina general of Harihara II, the Vijayanagar king and the author of the Sanskrit lexicon *Nānārtha Ratnamāla*. This tank is a famous one. According to local tradition, the Emperor Nriga, his horse and dog were, all three of them, cured of leprosy on bathing in a pond situated in this tank. (*M.A.R.* for 1919, para 31). Many beautiful step-in wells have been constructed from time to time. These have not only served the utilitarian purposes for which they were intended but also added to the beautification of the places in which they were constructed. Thus in front of the Chitra-matha at Edeyur, Kunigal Taluk, there is a beautiful well built with dressed vertical slabs all round and adorned with a well carved stone parapet. The well dates probably from *Circa* 16th century. A pond of more than ordinary interest is the Dalavāyi Honda, about 2 miles west of Bistuvalli, Jagalur Taluk, which is symmetrical in form, about 30 yards square, with flights of steps on all the four sides. A parapet

wall goes round it and it is ornamented at the middle on each side. Though the pond is mostly buried now, it should have been, when full, an excellent sheet of water. It was, according to a local chronicle, constructed by Muddanna, the *Dalvāyi* (or general) of Hiri Medakēri Nāyaka, about the close of the 17th century. He also built, to the north, a fine *mantapa* of dressed stone supported by sculptured pillars for the use of the God Ranganātha of the adjacent hill known as *Konāchal Guddū*. One of the sculptures is an ingenious combination of three cows, with one body and three heads in different postures. At Kavale Durga there are well constructed ornamental ponds, one of which is the Sānti-Gange pond. They date from the time of the old Nagar dynasty (18th century). At Nagar, there is the Basavanna-byāna, which is an old park and pleasure garden, covering some 73 acres. The high road runs through it, cutting off a portion of about 10 acres to the east. At the farthest point to the west is an enclosure containing a flower garden and a number of ornamental ponds and fountains, the principal of which is called the Dēva-Ganga pond. The sluice by which the fountains were fed from a neighbouring tank is now choked up.

At Malandur, near Anantapur, included among the remains of the fine Lingāyat Mutt called Champakasadasa, is a splendid tank, about 200 feet by 144 feet, built round with laterite steps. The plan adopted in connection with it is, as in the case of the Basavanna-byāna at Nagar, abovementioned, a *linga* temple in the middle of a large tank or pond, surrounded by water (like the golden temples of the Sikhs at Amritsar), which is approached by a stone causeway. The beautiful *honda* in front of Ranadhulla's mosque, which originally belonged to a Hindu temple, has already been mentioned. The fine large pond stepped in all sides and surrounded by a

wall with gates surrounded by towers, at Sravana Belgola, was built by Chikka Dēva Rāja Wodeyar of Mysore, about 1704 A.D. He probably enlarged the original pond, which gives its name (Belgola) to the place. In 1653, Bari Malik, the Bijāpur Governor, built the tanks called Vali Surūr, in Channagiri Taluk. The inscription recording its construction refers to the merit acquired by all who assist in the formation of a tank. It runs thus: "The quail and the boar, the she-buffalo and the elephant, the teacher and the performer,—these three went to *Svarga* (or paradise)." The explanation given is that a quail once scraped a hollow in the ground to nestle in; a boar came and made it larger; a buffalo and an elephant each in turn enlarged it still more; a holy man then pointed out that it could be made into a tank or pond, and the king to whom this advice was given carried it out. For their shares in this work of merit they all went to *Svarga* (*E.C.* VII Channagiri 43, 44). A water supply scheme carried out under the orders of Bukka Rāya in 1388 is described in another inscription (*E.C.* X Goribidnur 6). The water was brought into the town concerned by a channel made from the river Pennār to a tank about ten miles from it. The construction of a dam across the Haridra at Harihar in 1410 is referred to in an inscription dated in that year (*E.C.* XI Davangere 23). It soon breached but was restored in 1492 (Davangere 29). A dam on the Pālār, which had been long ruined, was restored in 1416 (*E.C.* X Mulbagal 7). The chief of Nagamagala made a new dam in the Cauvery in 1460 and led a channel from it to Harahu (*E.C.* III Seringapatam 139). The conditions of the contract for making a channel, in 1397, included the present of a horse and bracelets to the contractor. But it was stipulated that these, as well as the funds advanced, were to be returned if water did not flow between certain specified points.

City
Architecture
and Town
Planning.

Some of the particulars given above show that in olden days town-planning was understood, though only in a limited sense, and the necessity for devising adequate facilities for the supply of water and other requirements to sites was well realized. We have, indeed, evidence in certain inscriptions that important cities were divided into *puras* and *Brahmapuris* with provision for medical aid in them. Thus Belagāmi, we are told, included five *mathas*, three *puras* and seven *Brahmapuris*, with three medical institutions (*E.C.* VII Shikarpur 123, 119, 100 and *E.C.* VIII Sorab 277). Similarly, Talakād—Rājārājapura—contained seven *puras* and five *mathas* (*E.C.* III Malavalli 109). Agara, again, comprised three cities and eighteen *Khampanas* (*E.C.* VIII, Tirthalli 133, 197). Another *pura* known is the *Manyapura* (modern Manne) mentioned in Kondajji plates of Śrīpurusha, the Ganga king, dated in the 7th year of his reign (or 733 A.D.). It was apparently the capital of the Ganga Kingdom at the time. That even a cursory study of the remains of these old towns, from the point of view of City architecture, is likely to yield valuable results has been proved beyond doubt by competent town-planning experts. In recent times, considerable attention is being paid by City and Urban Municipalities in the State to the principles underlying town-planning in its intimate relation to City architecture under expert advice.

Bridges.

Among other structures of an utilitarian character built by the ancient kings of Mysore are bridges over rivers. The ornamental bridge constructed by the Gaṅga king Sivamāra (*Circa* 713 A.D.) over the Kilini river to the north of Keregodu is perhaps one of the earliest ones known so far. (*E.C.* III, Mandya 113). Many centuries later, two other bridges, both purely Hindu in style, were built. These are the Wellesley Bridge over the Cauvery at Seringapatam, erected in 1804, by Dewān Pūrnaiya

and named after the Marquis of Wellesley, the Governor-General of India, and a similar bridge over the same river at Sivasamudram, erected in 1832. Both these bridges are composed of rough stone pillars, firmly let into the rocky bed of the stream. These support stone brackets, on which rest the stones forming the frame work of the bridge, upon which again the floor of the roadway is laid. The rude solidity of these two structures has been proof against all the highest floods of the river, and they still serve, especially the former, for the transit of a great and increasing traffic. A projected bridge over this river also deserves mention. De Havilland, a well-known Military Officer who afterwards served as Chief Engineer of Madras, proposed the construction of a brick arch, of a span greatly exceeding anything that had at that time been attempted. On his design being set aside as visionary, he resolved to demonstrate its practicability, and thus built the great arch (112 feet span) across the garden attached to his own house, where it still stands as a monument of his skill. It is still known as the De Havilland arch at Seringapatam. He also designed the large room without pillars in the old Residency at Mysore, and the wide circular roof of St. Andrew's Kirk at Madras. (For the bridges erected in the last and present centuries, see Volume III—Chapter X of this work).

II. *Military Architecture.*

Of Military structures erected by previous rulers, per- Forts.
haps the most important were forts, for which there was ample need and scope. There is hardly any hill or mountain top in Mysore which has not been fortified. An inscription of the time of Vishnuvardhana gives a list, for instance, of important forts which he captured (*E.C.* IV Nagamangala 70). In the Tumkur District, there

would appear to have been many forts—Dēvarāya Durga, Maddagiri, Midigēsi, Pāvagada, etc. Information relating to these and other well-known forts will be found under their names in Volumes V and VI of this work. Some of these were built by Vijayanagar kings, or by generals under them. Thus, Gōpanna, a general under Dēva Rāya I, built the Pavagada fort according to an inscription found on the hill. Others were built by later Pālegar Chiefs, *e.g.*, Midigesi by Nāgareddi, etc. Some of the forts are very old, and are described in inscriptions as impregnable. Thus Nidugal, (Pavagada 54) dated in 1487 (*E.C.* XII), is described as the most impregnable in the whole Karnāta country. It is also called Kālānjana in certain inscriptions. Most of these forts had the usual granaries, powder-magazines, *done*s (drinking water reservoirs), palaces, etc. They had many gates and sometimes as many as seven enclosures, one within another (*e.g.* *Elusuttinakote* in Pavagada Taluk). The erection of a fort on a hill at the Māsūr Madaga tank by the Bijāpur Governor in 1634 is referred to in Shikarpur 324 (*E.C.* VII—i *Introd.* 44). The forts at Bangalore and Mysore are well known. That at Bangalore was rebuilt by Haidar Ali after the model of the fort at Sira. After the fall of Seringapatam, it was again rebuilt by Pūrnaiya at considerable cost. The work of rebuilding was finished about 1803. In the same year, the fort at Channapatana was rebuilt by him. The rebuilding of the fort at Mysore appears to have been finished about 1805. The original fort at Seringapatam possibly dates from the time of Udayāditya, the brother of Vishnuvardhana, the great Hoysala king (1111-1141), who is said to have built Seringapatam in 1120 A.D. (*M.A.R.* 1900, page 15). The subsequent transformations under French auspices will be found under *Seringapatam* in Volume V of this work. The fortifications on the Maddagiri Hill, in Tumkur District, are formidable

erections of the time of Haidar Ali. Buchanan, writing in 1800, says:—"The view of Maddagiri on approaching it from the east, is much finer than that of any hill-fort I have seen." But for picturesqueness of situation, nothing can exceed that of the Narasimha temple on Dēvarāyadurga, which was built in the time of Chikka Dēva Rāja (1672-1704). The group of rocky pinnacles, on a ledge of which it stands, reminds one of some scene on the Rhine. The building itself is not in any way remarkable.

The extensive fortifications of the upper fort of Chitaldrug are good specimens of the military buildings of the latter part of the 18th century, erected in the time of Haidar Ali and Tipu Sultān, with the assistance probably of French engineers. They contain immense granaries and pits for storing oil and ghee. Also a number of temples, of much older date. The *Mahal* or palace erected by Tipu Sultān in the inner fort below is used as a *cutcherry*. Recently there has been excavated a quadruple mill in the arsenal, which was probably intended for preparing gunpowder.

III. Conservation of Ancient Buildings.

In regard to the conservation of architectural remains of historical or other interest, reference may be made to Volume IV, Chapter VIII. The preservation of such buildings is now governed by the Ancient Monuments Regulation, an enactment largely based on the Indian Act bearing on the subject.

Application
of Ancient
Monuments
Regulation.

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