CHAPTER VI
OTHER MONUMENTAL STRUCTURES

Mughal architecture, however, was not confined to the four categories described on the preceding pages. Of course, they formed the main building types but the other buildings of substantial beauty, requiring equal skill and imagination, were also constructed throughout the empire. Chief among these were forts, private residences, pleasure pavilions, madrasas, baolis, tanks, bridges, hosi-miners etc. As in the case of the buildings of other types, here also, practical needs dictated their basic plans, but imagination transformed them into works of beauty.

Some specimens of these types have also survived in the region under study. Here follows a category-wise description of the extant monuments:

(A) Forts

Bahadurgarh Fort (District Patiala)

This fort is situated on the Patiala-Chandigarh road. The inscription on the inner-most gateway of the fort, when translated, reads as follows:

"God wills his servants to enjoy his grace!"
"May the dwellers here be ever happy!"
"In the time of the emperor Alamgir, Saif Khan² founded Saifabad."

The last line of the inscription is a chronogram which yields the year 1067 A.H.³ (the year began the 10th October, 1656).
As is obvious from the inscription, when founded it was meant to be a fortified village and not a military post. It is also testified by Shah Nawaz Khan who records that "Seif Khan made his home at a place called Seifabad...."6

Raja Amer Singh of Patiala occupied the place in 1774 A.D. and in lieu of it he allotted a jagir to the descendants of Seif Khan.5

The Phulkian State Gazetteer of 1904 A.D. records that "The foundation of the present pakka fort was laid in 1837 by Maharaja Karn Singh, and it was completed in 8 years at a cost of Rs 10,00,000. This strong fort is surrounded by two circular walls or ramparts, the outer wall being 110 feet [33.5 m.] apart from the inner one. The outer wall which is 20 feet [6.05 m.] high is surrounded by a pakka ditch 25 feet [7.62 m.] deep and 58 feet [17.7 m.] wide. The circumference of the fort is 6890 feet or 1 mile 596 yards and 2 feet [2.1 km]. Maharaja Karn Singh gave the fort its present name in commemoration of the sacred memory of Guru Teg Bahadur...."6

The major portion of the fort as it survives at present, belongs to the Sikh period. Only the innermost gateway, ramparts and the mosque are the Mughal constructions. Of these, the mosque has already been described in the preceding chapter.

The gateway is in the usual style of the gateways of the Mughal sarais (Plate 93). The facade of the gateway measures 14.8 m. across and rises to a height of 8.8 m. (Fig. LI). An octagonal bastion, covered with a kiosk, is appended to each end of the facade. The entrance is provided through a 4.0 m. broad arch. The passage is flanked with a 3.8 m. deep verandah,
opening into a room on its side. Each bastion also accommodates a circular room. One flight of steps on either side of the gateway approaches its top. All the arches used have a cusped profile.

The aforesaid inscription appears on the facade of the gateway.

At present, the fort is occupied by the Punjab Armed Police.

(B) Private Residences

Chhatta Mukand Das at Narnaul (District Mohindergarh)

In local parlance, the building is called Birlal ka Chhatta. Local inhabitants are of the view that originally, here was situated a group of six buildings, including the present one. Hence the name, Chhatta.

This four-storeyed mansion was erected by Rai Mukand, a mansabdar during the reign of Shah Jahan. He also built a sarai for travellers in the town.

The plain high enclosing walls of this mansion fail to give any idea of this dexterously planned and decorated stately residence. The building stands on a high platform having rooms in it. A flight of steps built in the western wall of the platform leads to a terrace on the first floor. Here is a lofty gateway, facing west (Plate 94). It has a four-centred arch with a fringe of stylised spearheads on the intrados, a device familiar in north Indian Muslim architecture since Khalji times. The ceiling of the gateway is adorned with stalactites, moulded in stucco. This gateway leads to a courtyard surrounded with rooms and large verandahs and a hammam. A platform rises in the midst of the courtyard. From this courtyard, one can approach all other floors
including the *tekhana* which consists of dark and cool rooms. One of them also has tanks and water-chutes in it. It might have been a cozy retreat during the tropical summer. The ceilings of most of the rooms were made of wood and that is why most of them gave way long ago. Some parts of the building bear traces of painted decoration also. Marble has been profusely used for pillars.

On the wide terrace of the first floor is a well which supplied water to the hamman.

To the west of this imposing dwelling is an isolated gateway provided with balconies and clad in a marble veneer. Also it bears traces of painted decoration. This gateway is said to have been the main entrance to the complex.

Regarding the over-all style of this manor, the present scholar agrees with C. Yaddani who notes that "The building is not at all in the style that was prevalent at the time (of Shah Jahan) there. It is much like a building of Akbar's time. The outlines are Muhammadan, but the details are purely Hindu." The mansion exhibits a harmonious synthesis of the Hindu and the Mughal elements.

**Havali of Todar Mal at Sirhind (District Patiala)**

This *havali* is the only specimen of the domestic architecture of the Mughal nobles, surviving in the present state of the Punjab, although it is in utter ruins. But for its enclosing walls, not much is extant. The *havali* is filled with debris and wild growth.

The main building covers an area of 28.0 m. by 12.5 m. (Plate 96). It is enclosed by high walls having rows of sunken panels.
Attached to it is a small block of rooms, perhaps, originally a hammam. The main building comprised two blocks of rooms having a courtyard in between. The entrance to the haveli was from the eastern side. The entrance arch has a shabatja above it, supported on corbelled brackets. There is a tank in front, measuring 6.0 m. by 5.8 m.

The whole building was plastered in its pristine condition. Traces of some painted decoration (particularly a vase and flowers motif) are still visible on the northern wall.

The arches used for openings are large in span and almost flat-headed which indicates the date of its erection not earlier than the middle of the seventeenth century.

Cunningham refers to the building as "The Haveli of Sahabat Beg or Sandik Beg."

But popularly, it is known as the Haveli of Raja Todar Mal or Jahani Navali.

In the Maathia-ul-Umara, we come across one Raja Todar Mal who was appointed the Divan, Asin and Paujdar of the gaekar of Sirhind in the thirteenth year of Shah Jahan’s reign. The next year, the charge of the Paujdar of Lakhi Jangal was added to it. His rank continued to swell throughout the reign of Shah Jahan.

After the battle of Samgarh when Dara Shikoh, during his flight, reached Sirhind, he took in 20,00000 of the Raja’s property which were buried in various places. Todar Mal had already retired to the Lakhi Jangal nearby. He died in the ninth year of Aurangzeb’s reign, i.e., in 1676 A.H. (the year began the 6th July, 1665). During Aurangzeb’s reign, he was , for a time, in charge of the Paujdar of Itawa.
(C) Pleasure Pavilions

Jal Mahal at Agra (District Agra)

The Jal Mahal or the 'water palace' stands outside the city, near the tomb of Shah Jahan. This double-storied structure is, picturesquely situated amidst a large tank (Plate 96). It is connected to the mainland by means of a 5.9 m. broad causeway on arches which is preceded by a simple gateway, 14.0 m. broad and 8.4 m. deep (Fig. LXXVII). On either side of the passage is a 6.2 m. broad and 3.2 m. deep verandah. The causeway leads to a square platform of 26.3 m. side on which stands the Jal Mahal.

The palace is a square building of 17.0 m. side, comprising a central square room of 5.9 m. side having a 3.9 m. deep verandah on all the four sides. There is a double-storied square room of 2.5 m. side in each corner. The parapet is marked by a deep shhadjas. At each corner of the building is installed a square cupola of 2.5 m. side and supported on octagonal sandstone pillars. In the centre of the roof is an octagonal platform of 3.1 m. side and 1.5 m. high, approached by steps and covered by an octagonal cupola of 1.85 m. side. It was used, perhaps, to sit on and to enjoy the cool air and the vistas of the tank. Besides this practical use, these pavilions provided the building with an interesting skyline. The same type of superstructure is seen on the Vikaram Mahal in the Gwalior Fort and the Divan-i-khas at Fatehpur Sikri.

Comparing the plan of the Jal Mahal with those of the tombs of Ustad and Shajird at Birhind or the tomb of Jamal Khan at Ropar, it appears more or less the same. It has been rightly remarked that Muslim architecture had a limited vocabulary of
buildings which could be used for various purposes. The same type of building could serve for a tomb as well as for a palace.

The whole building is covered with plaster having the smoothness of marble.

The domical ceiling of the central room had graceful designs painted in harmonious colours, traces of which are extant. The ceiling of the verandahs also bear traces of painted decoration. The facade is adorned with geometrical designs rendered in Indian red colour. Stalactites appear on the ceiling of the central room.

This palace bears two inscriptions, one over the main doorway and the second in the north verandah. G. Yamani's translations of the inscriptions run as follows: 18

I. Inscription over the main doorway

"(1) This pleasant building which is the envy of Iran, its water and air are refreshing like Paradise.

"(2) It is built in the reign of Akbar, the victorious, the king who has placed his foot on the heads of the kings of the world.

"(3) As Shah Quli Khan has laid its foundations, O God, make it durable like the palace of the highest heaven.

"(4) The far sighted wisdom, for the date of its foundation, said, 'This was built in the year 999 A.H.' (the year began the 29th October, 1590).

II. Inscription in the north verandah

"(1) Jamshed in dignity, Shah Quli Khan, the honour of the country, he who has carried away the ball of valour from his rivals:

"(2) Generous like the ocean, grave like the mountain, of exalted rank; a second Rustam 20 and the Hatim Tai 21 of this time:
victorious in the battle and prosperous in the day of entertainment.

"(4) He has built a tank which is a second Kenar and a palace like the garden of Irem in the middle of it.

"(5) The water of immortality gives an idea of its water, and the pleasant air of Paradise is a specimen of its air.

"(6) O God! Keep it safe from the vicissitudes of time, so that he may sit in joy and exaltation in this house.

"(7) I enquired of wisdom about the date of its completion; the reply, 'the house of Grace', came to the ear of my soul.

1001 A.H." (the year began the 26th September, 1592).

A medieval traveller Abdul Latif Al-Abbasi, in his Safarnam gives a good account of the buildings at Narnaul. He writes that Shah Quli Khan built a big tank outside the city on the imagined model of the Ham-e-Khazar, i.e., the Tank of Paradise and also built a beautiful building in its midst which can be called Roza-i-Ruwan, i.e., the Garden of Paradise. He went to the extent of placing them, in quality, even further to the Ham-e-Khazar and the nectar (Asb-Haiwan). He adds that "Quli Khan built a beautiful garden also near this tank and the palace within." Dr. Mulik Raj Anand misread the account and wrote that the said garden had been laid out around this Jal Mahal. But, obviously, Latif referred to the garden which once surrounded the tomb of Shah Quli Khan.

Roza Mahal at Buria (District Ambala)

The palace is a double-storied building situated to the northwest of the village (Plate 97).

Its ground floor comprises a square room of 4.3 m. side,
surrounded with eight rooms of various sizes, forming a sort of circumambulatory around it. In the midst of the central room stands a thick pillar of 2.8 m. circumference, supporting the ceiling. Most probably, this pillar is a later addition as it is totally out of proportion with the dimensions of the room in which it stands.

Two flights of steps approach the upper storey which almost repeats the same plan. The difference is that the have slightly domical ceilings whereas on the ground floor they are flat and there is no pillar in the central room as is seen on the ground floor.

Once again, two flights of steps lead to the roof in the middle of which is a 0.6 m. high square platform of 6.0 m. side. Here, the staircases are covered with simple structures, each topped by two small domes.

The building stands on a raised platform. On two sides of the platform, there are two square tanks of 4.2 m. side. The structure is provided with straight as well as slanting ventilators so that every drought of air is bound to pass through the palace, cooling it.

The whole building was plastered with a fine quality of chung (lime). Some of its portions still retain a marble-like lusture. The walls of the rooms are relieved with sunken panels.

The building boasts of some most attractive painted designs. All the nine rooms on the ground floor bear painted ornament. The motifs include pot and flowers, vase and flowers, plain and arabesque borders, cypress and date trees and flowering tree (Plate 98).
But the most interesting feature is the appearance of animate motifs which include fairies, elephants, peacocks and other birds (Plate 99). The colours used are viridian, yellow ochre, blue and two shades of red. Some designs have been formed without using colours. In such designs, the upper snow white plaster layer has been scrapped to reveal the lower slightly brownish ground.

On the upper storey, only three rooms have paintings and the rest have merely colour borders.

Exterior walls also bore painted decoration which could not withstand the ravages of the elements. However, one panel depicting a lady with a peacock can still be seen, though not clearly, on the northern corner of the western wall. The lady is dressed in red and viridian. Some traces of geometrical and floral designs are also extant.

H.H. Cole ascribes its construction to Shah Jahan who, he says, though without substantial basis, built it in 1630 A.D. 27 A local tradition recorded in a Gazetteer, has it that it was built by Jehangir who used to sojourn here on his way to his favourite hunting grounds at Valesar. 28 The depiction of animate motifs on the building weighs in favour of Jehangir because zoomorphic decoration is virtually non-existent on the buildings of Shah Jahan. 29

At present, the building has developed wide cracks in its walls and ceilings and village lads use it to play hide and seek.

(D) Madrasas

Madrasa at Thanesar (District Kurukshetra)

The madrasa sits adjoining the southern wall of the tomb
of Sheikh Chilli and forms part of the complex (Plate 100). It has been built at a level, six meter lower than the tomb platform. The enclosure of the madrasa is exactly the same in size as that of the tomb, i.e., 53 m. square from the outside. Though there is a gateway in the southwest corner, its main entrance is on the eastern side, approached by a flight of steps, rising with a gentle slope from the main road.

An arcade of nine openings on all sides, encloses a courtyard 35.8 m. by 37.5 m. in area. These arches open into rooms of various sizes and shapes and halls. An opening in the back wall of the hall on the northern side leads to the crypt of the tomb of Sheikh Chilli. Three central arches on the western side form the mosque. In the southeast corner is a complex of rooms which perhaps used to be a hammam originally.

In the midst of the courtyard is a square tank of 8.2 m. side.

This madrasa is a brick structure. But General Cunningham says, "The building is formed entirely of the spoils of Hindu temples, the arcades being supported on plain Hindu pillars." 30 But the statement is not true and one can agree with Rodgers who opines that the General's note was intended perhaps for the Pathriwa Masjid nearby. 31

Nothing is known about the date of erection of the madrasa. However, the fact that the main approach to the tomb lies through the madrasa, confirms the view that both the buildings were erected conjointly about 1650 A.D. 32

David Ross at the time of his visit in 1881-82 A.D., found the Hindu and the Muhammadan children learning Gurmukhi (Punjabi) and Persian in this madrasa. 33
(E) Gateways

In all, there are two isolated gateways in the region under study. The buildings they served as entrances have disappeared. Both of these lie in the district of Rohtak, one in the city proper and the other in the nearby town of Jhajjar.

Gateway at Jhajjar

Gateway of Rustam Khan is the name of the structure at Jhajjar (Plate 101). It is a 5.2 m. broad and 3.7 m. deep structure rising to a height of 7.3 m. It has a battlemented parapet. The entrance arch is 2.4 m. broad which is contained in a larger arch. The spandrels of both the arches are inlaid with red sandstone whereas the gateway itself is made of large and small courses of kanker blocks. Each spandrel of the larger arch has a projected boss whereas that of the smaller arch has a circular religious inscription. Above the lower arch is an inscription of two lines which as translated by P. Horn runs thus: 34

"I testify that there is no God but God alone, who has no companion; and I testify that Muhammad is His servant and His apostle.

"The date of the gateway of Rustam Khan, son of Muhammad Khan Sarbani (1a) 1029." (the year began the 28th November, 1619).

P. Horn, on the basis of Nahj-i-Jahangiri, gives the following information about Rustam Khan: 35

"Jahangir elevated the builder from a commander of 60 to a chief of 5000 foot and 4000 horse and named him Rustam Khan; besides he bestowed upon him the Government of Gujarat. He put much confidence in him and placed him in 1032 (A.H.) as general
under the command of Prince Parwas, after he had abandoned the service of the rebel Prince Shahjahan."

But the above information refers to Rustam Khan Shaghali about whom much more is given in the Nashik-ul-Imara. But the person mentioned in the inscription is Rustam Khan Sarwani. Most probably, he was a different man about whom nothing is known but for the fact that he also built a mosque at Shajjar in 1035 A.H. (the year began the 23rd September, 1625) known as Shaikhewal Masjid. The mosque is not extant.

**Gateway at Rohtak**

The gateway at Rohtak is situated in the locality known as Muhalla Wazir Khan and is locally known as Dhobion ka Parwana or the washermen's gateway (Plate 102).

It is a 8.3 m. broad structure rising to a height of 5.6 m. In its pristine condition, it rose 1.9 m. higher but its parapet crumbled long ago. The entrance arch is 3.2 m. broad and 0.8 m. thick and is contained in a larger arch. On either side of the entrance is a vertical row of three sunken panels. The spandrels of the main arches and the sunken panels are filled with red sandstone. The rest of the gateway is made of kankar. Each spandrel of the larger arches has a projected boss made of kankar. A carved flower adorns each spandrel and apex of the decorative arches in sunken panels. A similar carving also appears on the apex of the main arches. Above the lower arch is an inscription which as translated by P. Horn runs thus: 38

"With the favour of God Almighty and His apostle, the erection of this building in the time of the reign

"And the Khalifat of Abu-l Fath Shihab addin Muhammed, the
second Sahib-qiram (Timur)

"Shahjahan Radishah-i-Ghazi — may God perpetuate his kingdom! — by the endeavour of the slave of the...

"Pir Khan, son of Serkhan, the Sarwe[ni?] has been finished. In the beginning of the month Muharram A. 1044" (the month began the 17th June, 1634).

Rodgers gives the name of the father of the builder as Sher Khan. 39

No other information about the builder of the gateway is available.

(7) Baolis

Baolis or stepwells were built all over northern India much before the advent of the Mughals. 40 These "are found wherever the wells are deep and the water far from the surface." 41 Baolis were more popular in Gujarat where these were treated more artistically than they were treated anywhere else. 42 At Ahmadabad, there are several baolis "ornamented with pillars and galleries to as great an extent as some of the largest buildings above ground." 43 The artisans of Gujarat introduced this particular form of structure in Mughal architecture as a cool retreat 44 as to dwell on all sides of a cool body of water in subterranean rooms must have been a heaven indeed.

Some baolis erected during the Mughal period also exist in the region under study. Of these, the baolis at Narsaul and Mehs are the best preserved specimens.

Baoli at Narsaul (District Mohindergarh)

The baoli at Narsaul forms part of a complex given the
appellation of Mirza Ali Jan ka Talqat or the throne of Mirza Ali Jan⁴⁵(Plate 101). Though the baoli bears two inscriptions, these are affixed at such inaccessible places that the present scholar could not get their readable photographs even with a tele-lens. However, the name Akbar Padshah is quite clear on one of these. Therefore, the construction of the baoli took place in between 1556 and 1604 A.D.

Breadthwise, the structure measures 13.4 m. The gateway to the baoli is a double-storeyed, 11.0 m. high structure, surmounted with an open, pillared pavilion, covering an area of 6.9 m. by 2.5 m. One long inscription runs along the parapet of this pavilion. Each pillar of the pavilion, measuring 0.36 m. square and bearing shallow carvings, is made of black stone. The rest of the complex is made of rubble. Only a carved band of red sandstone appears at the parapet of the pavilion. The baoli extends to a length of 37.0 m. At its southern end, there is an octagonal well of 3.0 m. side. Currently, there are only two storeys of arcades visible below ground level. The rest lies dipped in the thick and murky green waters of the baoli.

In front of the gateway of the baoli there is an octagonal tank of 3.0 m. side, 1.3 m. deep, having a fountain in its midst. From here extended a small garden, measuring 66.4 m. by 12.1 m. What survives of this garden is two water chutes formed by receding layers of stone. In its pristine condition, the whole must have been imposing.

**Baoli at Mehta (District Rohtak)**

The best and the finest preserved baoli in the region under
study is the one at Maha. 46 (Plate 104). The British traveller
Peter Mundy appraised it as "a monument of public utility worthy
of munificence of a Roman Emperor."47

This brick and hemer structure descends in three stages.
The first stage, at a depth of 4.3 m. from ground level, is
reached after traversing a flight of sixteen steps. From here,
an equal number of steps leads to the second stage, 4.6 m. deeper
than the first. Here, a flight of twenty seven steps descends
6.3 m. deeper where there is an arched gateway. It has rectangular
recesses in its sides. After descending four steps, hence-forward,
all is submerged. At present, the water level is 15.2 m. below
ground level.

All the previous levels are rectangular whereas the last one
is a 6.7 m. square in shape. Adjoining it is the round shaft of
the well forming the southern end of the structure. Close to the
well are said to have sets of rooms.48 Besides the main flight of
stairs, two subsidiary staircases in the thickness of the walls
also give access to the landings.

A raised platform with a tank on its either side, marks the
well on the ground level. The well has an inscription stone. The
English rendering of its text runs thus:49

"In the name of the Merciful and compassionate God. In the
reign of the king of kings, conqueror of the world, this spring
of Paradise was dug by Saidu. When I searched for its date from
the sage, he replied, 'The water of charity floweth ever.' 1069."50
(The year began the 19th September, 1658)

History is silent about Saidu, the builder of the tank.
Traditionally, he is believed to have been a mace-bearer to Shah Jahan.51
Near the baoli, there were two wells, each of which had an inscription stone in it.52 One of them was filled up and the other is extant to the northeast of the baoli. The inscription stone is still in situ but the inscription has been deleted by atmospheric ravages.

There was one more baoli in the same town. This baoli existed, though not in a good condition, till the first decade of the present century.53 But only its well made of kanher is extant and is being used for irrigation. This baoli also had an inscription, according to which it had been built in 1054 A.H. (the year began the 29th February, 1644) by Darab Khan of Hams under the orders of Prince Dara Shikoh.54

Baoli at Sarai Amanat Khan (District Amritsar)

Within the present state of the Punjab, there are three Mughal baolis. Of these, the baoli at Sarai Amanat Khan is in a comparatively better condition. Locally known as Sarai-khana or a 'cool resort', it is situated to the west of the sarai (Plate 105).

The section of the baoli containing stairs is 11.3 m. long at the end of which is a well of 3.0 m. diameter. The most of this portion is covered with debris and wild growth. At the northern end of the baoli is a double-storeyed structure. It comprises three inter-connected rooms on the ground floor and the same number of rooms on the upper storey. The northern façade of the building has a large recess covered with a four-centred arch and is contemplated in a square frame-work. The recess is pierced with three arches, each giving access to one of the rooms. Each room measures 1.0 m. square. The central room opens onto the
stairs on the southern side. The upper-storey rooms are approached by a flight of stairs on the southern side. All the rooms have domical ceilings, supported on corbelled pendentives. Stalactites appear on the soffits of the half-domes in the side recesses of the central room.

The baoli does not bear any inscription but most probably, it was built contemporaneously with the sarai nearby, during the period 1627-65 A.D.

Baoli at Doraha (District Ludhiana)

It is situated to the south of the sarai. It is in an advanced stage of decay.

It is more than 46.0 m. in length, including its well of 7.5 m. diameter at its southern end. From north, a nine meter broad staircase gently descends to water level which is very high at present. Adjoining the well is a 4.0 m. square room having a 2.5 m. deep recess in its either side. Through the facing wall of the room, three arched openings look into the well shaft. Bushes and creepers festoon the crumbling masonry.

Most probably, it was erected contemporaneously with the sarai for the benefit of travellers.

Baoli at Kanch (District Ludhiana)

The baoli is situated outside the village, in the fields. It is in a ruinous condition.

The baoli is about 42.0 m. long. The main flight of steps descends only in two stages and gives access to a square room of 4.0 m. side, having a 2.5 m. deep recess in sides and a 3.3 m. deep porch in front. One subsidiary stairway also descends from
the roof into the porch. The back wall of the room opens into the well shaft of 8.5 m. diameter. On the exterior, the well is in the middle of an octagonal platform, approached by three steps on each side. At the end of the platform is a small tank into which water flowed from the well through a 0.6 m. broad channel.

Rodger's arbitrarily fixes the construction of the beoli during the Sikh period. But most probably, it was situated on the Badshahi road from Agra to Lahore and was erected during the Mughal period to supply drinking water to travellers.

(G) Tanks

Tanks were dug to store rain water or water from some other channel in the areas far from rivers or springs, for future use. Such tanks were usually lined with brick or stone and were provided with bathing ghats. Four tanks constructed during the Mughal period (1526-1707 A.D.) have survived in the region under study.

Tank of Shamsher Khan at Batala (District Gurdaspur)

A large tank built by Shamsher Khan, during the reign of Akbar, exists to the north of his own tomb at Batala (Plate 106). It is extended over an area of 236 m. by 218 m. Both of its corners on the southern side are chamfered making it hexagonal in shape. A flight of seven steps extends along its southern bank and chamfered corners. A bathing ghat occupies the middle of this side. The tank was filled through the sluices provided on the eastern side. In the centre of the tank stands a pavilion which could be
approached only by a boat. This pavilion was not a part of the original plan but later constructed by Maharaja Sher Singh, son of Maharaja Ranjit Singh.\footnote{57}

**Tanks at Jheijar (District Rohtak)**

Outside the town of Jheijar on the road to Delhi, is a small tank locally called Buwawala Talab. It is said to have been built by Kalal Khan, a mace-bearer to Jehangir, in 1035 A.H.\footnote{58} (the year began the 23rd September, 1625). The name of Kalal Khan appears in the inscription on the nearby mosque, built by him in 1039 A.H. (the year began the 11th August, 1630).\footnote{59}

The tank covers an area measuring 67 m. by 60 m. According to a published report, "there are four wells within the tank, on account of which the water in it never dries up."\footnote{60} There are two separate ghata for men and women to bathe in. The building material used for the tank is **manker**.

To the north of the same town is another tank, locally known as Shah Kanal Gazi's tank. It measures 127 m. by 124 m., about four times in area than the preceding one. On its side is a large ghata, once flanked by two octagonal towers, in the southern one of which, there was an inscription.\footnote{61} The inscription is not extant but its contents have come down to us through P. Horn's translation which runs as follows: \footnote{62}

"In the time of the king Nuruddin the tank, which has scarcely its like, became a sign

"Of Rai Rayan Rai Daryhal [perhaps Durga Mal], for the benefit of the happiness of the people of the world,

"I asked the mind the date-year; the mind spoke to me 'Know
it in 'ghulay'?

"(I) the poor hermit 'Abd as-Samad, the son of Mankan, who is a master of knowledge.

"The year was 1036" (the year began the 12th September, 1626).

The name of Abd as-Samad also appears in an inscription on the tomb of Ismail, in the same town. Most probably, he was the composer of both inscriptions. 63

Tank at Taraori (District Karna{)

The construction of the tank at Taraori along with the sarai nearby, is traditionally attributed to Aurangzeb who built the tank, sarai and a walled-in garden in the town to commemorate the birth of his son Asma Shah here. 64

The tank measures 139 m. square having its angles chamfered. A flight of five stairs all around is still visible. The middle of each side is marked with a 9.6 m. broad ghat.

(H) Bridges

The Mughals knew the value of bridges to their network of roads. In his Memoirs, Jahangir ordered that convenient bridges be erected across the passage of every river so that the illustrious traveller might be enabled to pursue his object without obstruction. 65 Various types of bridges were built depending upon the availability of the building material and the span to be vaulted. Temporary bridges, made of wood, rope and most often of boats were put up for economy, both time and money. Permanent bridges built of brick or stone were erected across highways only.

Six Mughal bridges in various states of preservation survive
within the region under study.

**Bridges at Sultanpur Lodhi (District Kapurthala)**

The remains of two bridges, which once spanned Kalna or Kali Vani river at Sultanpur Lodhi are situated to the north of the Majhal sarai in the town. One of them is situated just opposite the Bus Stand. Only four of its arches on the southern bank, spreading over a length of 37.0 m., are extant. The breadth of each of its arches and piers is 3.4 m. and 3.1 m. respectively. Each pier has been relieved of its dead weight by a one meter broad arch, providing an overflow for high water. The arches carried a 3.6 m. broad roadway.

When most of the arches of this bridge collapsed, a more ambitious structure was raised a little lower down the river. In its original form, it must have been an effective and attractive structure. Even in its present condition, it does not fail to impress the viewer (Plate 107). The total span of this plastered brickwork bridge was about 210.5 m. The middle arches of this bridge also met the same fate as those of the previous one, leaving an unspanned gap of 90.0 m. At present, seven of its arches are extant on the southern bank (spanning 85.5 m.) and three on the opposite side (spanning 43.0 m.). The shape of the arches is pointed. Each pier is buttressed with a wedge-shaped cut-water. But the breadth of the arches, piers and the road above are 3.9 m., 3.8 m. and 8.8 m. respectively in the southern section and 2.5 m., 2.5 m. and 9.5 m. in the northern portion. So obviously, one of the two sections was a later addition.

Accounting for the destruction of the above bridges, Cunningham
comments, " (The bridges were) built on well foundations; but as the piers had the same thickness as the span of the arches, one half of the waterway was obstructed, and the river, like Virgil's pontem indignatus Araxes, soon made a way for itself by cutting away the bank at one end of the bridge." But the causation does not appear convincing. There are at least two other bridges, one spanning the Buddhimagala Nala at Kavasa Sarai (District Faridebad) and the other near Karnal, where the piers have the same thickness as the span of the arches. Both of them stand in an excellent state of preservation. Moreover, the piers of the first bridge at Sultanpur Lodi were also pierced with arches which eased the pressure of suddenly backed up water. Then, why was always the northern portion of the bridges washed away?

It appears that the river took an inward turn at this place which gave its current more thrust along its northern bank. When the northern section of the first bridge was washed away, the second structure was erected. Again, the northern section might have met the same fate. Then, it was substituted with arches and piers of smaller dimensions. Even this could not hold its own and came down leaving only three of its arches.

Tradition attributes the construction of the first bridge to Jahangir and the second one to Arangase. The present scholar has not come across any evidence either corroborating or contradicting the tradition.

**Bridge at Bhirhind (District Patiala)**

One of the extant Mughal bridges, in perfect order spans the
ghogra at Sirhind (Plate 108). This bridge is situated one kilometer to the northwest of the Am Khas Bagh, on the road to Morinda. The main road still passes across it.

It consists of three parts. The eastern part has three pointed arches having rounded cutwaters. It is 21.3 m. long and 12.6 m. broad. The central portion is 27.7 m. long and consists of five arches. A flight of steps at each end of this portion lands down to water level. On each side of the passage are six octagonal towers. The western section extends over a length of 43.3 m. but its arches which are four in number, cover a length of 24.8 m. only. On one side of the road are five pillars. Perhaps, these were also there on the other side but crumbled later. Some people attribute the construction of the bridge to Jahangir and others to Shah Jahan. However, nothing can be said conclusively.

**Bridge near Dehlin Sarai (District Jalandhar)**

A bridge once conducted the Badshahi Road from Agra to Lahore, across the Dhauili Veni river to the east of the Dehlin Sarai. The ruins of five arches are extant. The span of each arch is 4.6 m. Each pier is 5.5 m. broad and is provided with triangular cutwaters. An 8.25 m. broad road, flanked with a 0.75 m. broad parapet, passed over it. But later the river changed its course and the bridge lies derelict in the fields. This bridge is believed to have been erected during the reign of Shah Jahan.

**Bridge at Thanedar (District Kurukshetra)**

A small bridge, merely 22.5 m. long, exists, though in a ruinous form, to the northeast of the tomb of Sheikh Chilli at
Thenesar. Its roadway was carried on four arches, each 3.5 m.
wide. Each of the piers having circular cut-waters, is 2.2 m.
wide. A 5.7 m. broad passage passed over it. Perhaps, originally
Saraswati river flowed under it. Nothing is known about the
date of its construction.

Bridge at Khara Sarai (District Faridabad)

This bridge spans the Buddhewala Nala, at a distance of
(about one kilometer to the east of the C.T. Road. This 23.0 m.
long and 4.3 m. broad bridge consists of three four-centred
arches. The span of each arch is 4.3 m. which is supported on
piers of a bit smaller width (4.2 m.). The central arch is
slightly higher than those on the sides. The piers have no
cut-waters. On each end of the northern pier of the central
arch stands a kos-minar-like tower, topped with a fluted dome.

This bridge made of rubble is in an excellent state of
preservation. Nothing is known about the date of construction.

(I) Kos-minars

Kos-minars served as beacons for caravans. The travellers
could compute the distance they had traversed with the help of
these kos-minars. The kos-minars were in use in India even before
the Mughal rule. Ibn Batuta witnessed such towers during the
fourteenth century. Babur erected square towers twelve caras
high, every eighteen miles. Akbar is said to have built
kos-minars on the road from Agra to Ajmer.

In 1619 A.D., Jehangir ordered Daqir Khan, the Paujdar of
Multan to erect kos-minars from Agra to Lahore. At least
seventy-five of these survive to this day, partly due to the
fact that these were repaired by the inhabitants, from time to
time, as an act of public welfare. 78

Kos-minars are brick structures, covered with plaster (Plate 110). Each minar soars from a tapering octagonal base which rises nearly half of its total height. Hence-forward, it becomes a tapering circular pillar, rounded at the top. The octagonal base is separated from the circular portion by a moulding, above which runs a band of colour. A similar band of colour and a moulding is also there, below the spherical top. These Kos-minars were uninscribed.
FOOTNOTES


2. For a brief account of Seif Khan, see pp. 151-52 of the thesis.

3. In Patiala and its Historical Surroundings (Patiala, Rep. 1909, p. 24) the date is given as 1077 A.H. which is not correct.


7. For a brief account of Makand Das see p. 70 of the thesis.

8. For a description of the sarai see pp. 69-70 of the thesis.


12. Ibid.

13. Ibid., p. 958.

14. Ibid.

15. Ibid.

16. Ibid.

17. R. Nath, History of Mughal Architecture, Part I, Delhi, 1982, pp. 20-22 & Plate XX.


19. The celebrated but fabulous garden, said to have been anciently made in Arabia Felix by a king named Shahdad bin' Ad or Iran bin Omed. (Ibid.)


21. A famous Arabian chief of the tribe Tai, celebrated for his liberality, wisdom and valour.
22. A heavenly reservoir.


24. Ibid.

25. Ibid., p. 74.


27. List of Some Ancient and other Native Architectural Buildings in India, Simla, 1880, p. 11.


32. Cunningham, loc. cit.


35. Ibid.


The inscription on the mosque which could not be deciphered fully, included the following information:

"In the time of Shah Nuruddin Jahangir, who is more exalted than the kings of the world, Rustam Khan, son of Muhammad Khan, has built it, who has not his like on the earth." The date of the completion of the building was recorded as the 10th of the month Rajab in the year 1035 (the 26th March, 1626)

38. Ibid., p. 147.


42. R. Nath, Some Aspects,... op. cit., p. 23.


44. R. Nath, Some Aspects,... loc. cit.

45. The **Hauli** has been declared a protected monument by the Department of Archaeology, Haryana.

46. It was declared protected by the Government of India vide notification number 4891 dated 12.1.1923, List of Protected Monuments accepted by the Government of India (corrected upto September, 1928), Simla, 1928, pp. 12-13.


48. Rodgers, Revised List,... op. cit., p. 76.

49. Rohtak District Gazetteer (1920), Lahore, 1911, p. 43.

50. In the Gazetteer quoted above, the date is given as 1096 A.H. (Ibid.) Rodgers gives it to be 1067 A.H. (Revised List,... loc. cit.) But neither of the two is correct. It has been personally verified to be 1069 A.H.


52. Rodgers, Revised List,... loc. cit.

53. Ibid. & Rohtak District Gazetteer, loc. cit.

54. Ibid.

55. Rodgers, Revised List,...op. cit., p. 47.


57. Ibid.


59. For details of the mosque and its inscription see pp. 119-20 of the thesis.

60. Objects of Antiquarian Interest,... loc. cit.

61. Rodgers, Revised List,... op. cit., p. 78.
62. P. Horn, op. cit., p. 135.
63. See p. 138 of the thesis.
64. Rodgers, Revised List..., p. 88.
67. Ibid.
68. Local inhabitants believe that this bridge was built by Jahangir but Rodgers records that according to a tradition, it belonged to the times of Shah Jahan ( Report..., op. cit., p. 7.)
70. Objects of Antiquarian Interest..., op. cit., Part IV, pp. 4-5.
71. This bridge was recommended to be declared a Protected Monument during the session 1927-28. ( H. Hargreaves, op. cit., pp. 190-91.) The recommendation was accepted by the Government of India vide notification number 32223 dated 20.11.1929. (List of Protected Monuments..., op. cit., pp. 12-13.)
73. A measurement of 24 feet or 36 feet. (Bahurnasa, tr. A.S. Beveridge, Delhi, Rep. 1970, p. 629, f.n. 4).
74. Ibid., pp. 629-30.
According to Badoni, Abber had the stags' horns he killed, affixed to the kos-minara. He laments, "would that instead of these kos-minara he had ordered gardens and caravanserais to be made."
77. On the basis of the lists of the monuments declared protected by the Archaeological Survey of India; Departments of Archaeology, Punjab & Haryana, the district-wise list of extent kos-minara is as follows:
Jalandhar - 8; Ludhiana - 7; Patiala - 2; Amritsar - 3;
Ambala - 1; Gurgaon - 16; Karnal - 26; Rohtak - 8. Besides
these, the present scholar has witnessed five more hosi-minars in
Amritsar district which are not included in the said lists.

78. Captain Leopold Von Orlich, Travels in India including