

THE PIGEON TOWERS OF ISFAHĀN

By Elisabeth Beazley

Generations of travellers have recorded the marvels of Iṣfahān and most have been sufficiently amazed and intrigued to comment on the extraordinary pigeon towers which dot the hazy green sea of orchards and gardens surrounding the city. Massive in scale, these towers seem to be incongruously out of context; they might be naval forts stranded hundreds of miles inland, or chess-men waiting the master mind of a remote giant.

The bigger towers are free-standing but many of the smaller, built into the walls of the gardens, are deceptively akin to bastions or corner towers in a defence system. Others brood protectively, but unstrategically, over the flat mud roofs of village houses. Their useful but unromantic purpose is to collect the pigeon manure which has been found to be so beneficial to the melon fields, but for sheer sculptural form and fascination of pattern their interiors alone would make worthwhile an expedition to Iṣfahān even if the Seljuqs or the great Shāh ‘Abbās himself had never built in that most splendid city.

As in all traditional vernacular building dating is very difficult. The only two (Figs. 1 and 2 and Pls. I and II) to which even a period is ascribed are thought to have been built during the reign of Shāh ‘Abbās (1587–1629) in the great royal gardens of the Hazār Jarīb (“thousand acres”), but since these have more highly developed plans than any others now extant it must be assumed that a considerable tradition lies behind them.

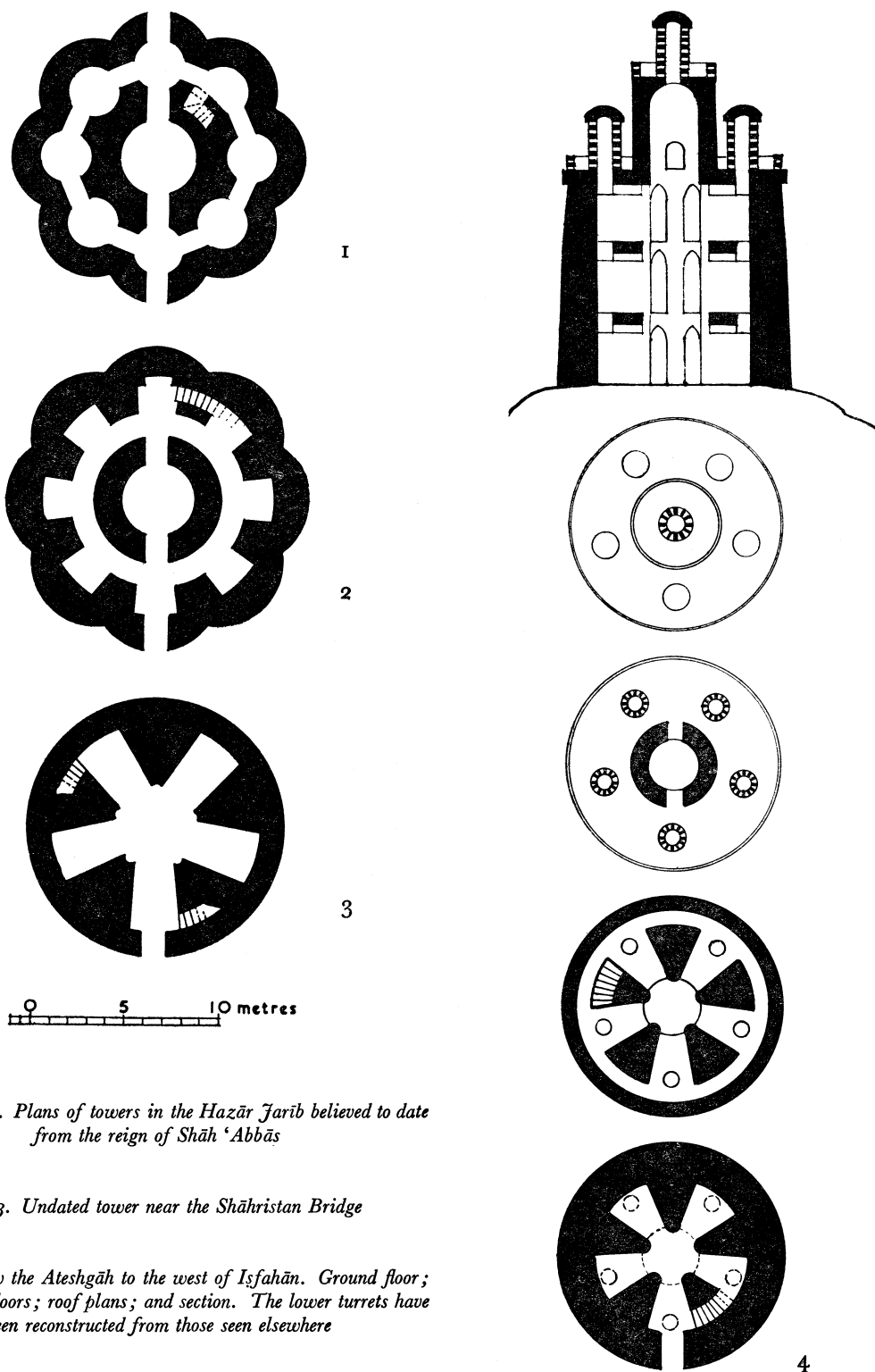
Unfortunately, there is a dearth in travellers’ reports in the period preceding that of Shāh ‘Abbās when they appear, architecturally, in full flower. It is possible that they were introduced by the Armenian architects and craftsmen from Julfā in Azarbaijan who were settled by decree of the Shāh to work in Iṣfahān, but no evidence has been found either to support or refute this theory. It would be most interesting to know if any architectural parallels still exist in Azarbaijān.

They were first noted by the seventeenth-century traveller, Thomas Herbert (1629–31) in Mehiar (between Shahreza and Iṣfahān): “. . . albeit their houses were neat, yet they were in no wise comparable to their dove-houses for curious outsides”¹ he wrote. For the next 300 years traditional designs seem to have been handed down within each family or village without drawings. Although the objective of the builders and the unit on which they worked, the pigeon hole, were identical, no two which we saw were alike.

Amazing inventiveness has gone into the solution of the basic problem: the provision of the maximum number of pigeon holes with the minimum amount of building material. That material being unbaked mudbrick, plastered with mud, this requires great ingenuity. Timber is very rarely used, so the whole structure must be designed to be in compression; the resulting vaults and domes are individually themselves works of art, but built as they are on fascinating ground plans, their rhythm and the sequence of solid and void which they produce can only be compared with the best architecture of that building tradition. Had Herbert seen the interiors he would have been even more amazed.

Basically the towers consist of an outer drum, battered for stability and buttressed internally to prevent collapse and to gain lateral support from an inner drum which rises perhaps half as high again as the main structure. The main drum is divided vertically by the galleries which cut the buttresses and are connected by a circular stair. The galleries are supported on barrel vaults and saucer domes. Between the buttresses (which look like the spokes of a wheel on plan) the domes are pierced to allow the birds to fly up and down; similarly the inner and outer drums are connected by open arches at every level. The pigeons enter only through the domed cupolas or “pepper-pots” (with holes in walls, not tops) of honeycomb brickwork at roof level. One of these crowns the inner drum while others

¹ Thomas Herbert, *Travels in Persia, 1627–29*, Broadway Travellers edition, London, 1928, p. 120.



Figs. 1 and 2. Plans of towers in the Hazār Jarīb believed to date from the reign of Shāh ‘Abbās

Fig. 3. Undated tower near the Shāhristān Bridge

Fig. 4. Below the Ateshgāh to the west of Isfahān. Ground floor; intermediate floors; roof plans; and section. The lower turrets have been reconstructed from those seen elsewhere

ring the flat roof of the main drum below. They vary in number according to the ground plan.² A tower still in use at Chahār Burj has twenty, plus four in the central drum³ (Pl. VI). In Kaempfer's *Amoenitatum Exoticarum*, Lerngo, 1712, a three-tier tower is shown (Pl. V).

Most builders seem to have been content to build the outer wall as a simple drum and it is the way it may be alternately hollowed out and buttressed internally which provides its architectural fascination. However, the two towers attributed to the late sixteenth or early seventeenth century in the Hazār Jarīb have the further refinement of a corrugated outer wall which increases the stability of these larger towers without increase of wall thickness. The eastern tower (Fig. 1) could be thought of as a cluster of eight small drums round a larger central drum: thus the surface area of the walls and hence the number of pigeon-holes are considerably increased.

The mesmeric quality of the inside of the towers comes from the repetition on every vertical surface, whether or not it is curved on plan of the standard pigeon-hole (20 × 20 cm. by 27 cm. deep) with its mud perch below (Pls. II and X); much of the sculptural quality of the structure is due to these perches (note the comparative flatness of those interiors where they have fallen away). Each is made of an asymmetrical mud pyramid of four unequal sides whose square base is clapped, damp, on to the vertical brick face below the hole (whether this is done at the time when the brick was made or when it was in position is not clear. It would seem easier when the brick was still green, but this would have the disadvantage of making its transport awkward). When in position, the smaller top side of the pyramid forms a horizontal perch and the other sides slope away making access to the neighbouring holes easier for the pigeons next door.

The towers are entered once a year for the collection of manure. A small door, usually at ground level (occasionally there are two), is sealed and one tower (presumed to be in use as it was in very good repair) had no entrance below roof level. This was almost certainly to reduce the danger of snakes. We were told that the cause of structural cracks (see Pl. III) was the tremendous vibration set up by the wings of the thousands of terrified birds if a snake got into the tower. Some cracks may have been caused by earthquakes: a mud-brick building without timbers to take tensile stress might be expected to crack badly in such conditions.

External decoration varies according to the grandness of the tower, but even at its most exotic it probably derives from the dual function of letting the birds in and keeping snakes out. The bands of smooth *gach* plaster, usually coloured in lime wash or red ochre are certainly for this purpose (see Pl. XI); a snake might otherwise creep up the drum of the tower, getting a grip on the rough *kahgil* (mud/straw) plaster of its surface. String courses of brick and moulded mud or brick cornices and friezes, besides giving an effective decorative capping to the wall, provide projections which snakes would find difficult to negotiate. Perhaps these intricate decorations were in use before the smooth plaster bands were introduced; Morier (1810–16) noted that the towers were “painted and ornamented” and that “more care appears to have been bestowed upon their outside than upon that of the generality of dwelling-houses” (see Pl. VII).⁴

The honeycomb brickwork, which gives the pigeons access through the cupolaed turrets, is in itself very decorative and is usually carried round both drums as a balustrade, giving the birds somewhere to perch.

Today, as in the past, the function of the towers is the collection of manure. It is the most valuable in Persia and is mixed with ash and soil in varying proportions for different purposes, of which the cultivation of melons and water melons is the most important. Both towers and birds belonged to the landlord who paid a tax to the Shāh on the manure sold. It now sells at about 7d. per kilo; in the early nineteenth century the revenue from a tower might be 100 tomans per annum.

In Chardin's time,⁵ only Muslims could build these towers; there were no exclusive conditions of privilege. All that they had to do was to pay the tax or duty on the manure.

² Probably the best photograph (unfortunately not clear enough for reproduction) is the sectional picture of a half collapsed tower shown in G. N. Curzon, *Persia and the Persian Question* vol. II, 1892, p. 20. It clearly shows the whole structure.

³ Belonging to Colonel Zahedi. Unfortunately snow prevented

us from visiting this tower.

⁴ Morier, *A Second Journey through Persia, Armenia and Asia Minor to Constantinople between the Years 1810 and 1816*, London, 1818, pp. 140–1.

⁵ Chardin, *Voyages de Chevalier Chardin en Perse et autres Lieux de l'Orient*, vol. III, Paris, 1811, pp. 386–7.

Although hundreds of towers have disappeared there may be as many as fifty still in use in the Gavart area and there are others scattered around Işfahān.⁶ The best known example (Pl. VI) in good condition belongs to Colonel Zahedi in the village of Chahār-Burj, 30 km. to the south of the city. It is a very big tower, said to hold 10,000 birds, and provided the chief income of the village.⁷

Despite the high value of the manure it is surprising to an outsider that the towers were never also used for providing pigeon meat, their chief function in Europe. In medieval England, when the peasant had little redress if the landlord's pigeons ate his corn, they were common and Church as well as lay landlords, tucked in to pigeon-pie. In hungry Persia similar eating habits might have been expected.

But Dr. Edmund Leach has pointed out⁸ that the fact that we refer to these birds as pigeons and not as doves is in itself a reflection of the fact that there is a very long-standing tradition of sacredness surrounding this particular bird. This goes back much further than the Christian association of the dove with the third person of the Trinity, having Sanskrit parallels. Its ritual significance seems to be particularly strong in Syria and Palestine as well as among Christians in Russia. This free, but semi-domesticated bird, living close to human dwellings is often felt to be an appropriate symbol for the soul. "Its sudden appearance can be taken as an ill omen foreboding death, or alternatively the killing of the bird may be regarded as an act of sacrilege."⁹

Early travellers were surprised at this abstention on the part of the Persians from pigeon flesh. Marco Polo (who mentions no towers) wrote that in Rūdbār (south Iran) "Turtle-doves flock here in multitudes. . . . The Saracens never eat them, because they hold them in abhorrence".¹⁰ It could be that the opposite reason was intended by his informant. But Morier wrote, "The Persians do not eat pigeons, although we found them well flavoured. It is remarkable that neither here nor in the South of Persia have I ever seen a white pigeon, which Herodotus remarks was a bird held in aversion by the ancient Persians".¹¹ Curzon¹² (1892) says that the pigeons were two species of the blue rock (*Kabutar*, the blue one).

Probably Herbert gives us the clue when, after describing how much grander the pigeon towers of Mehiar (Mahyar) were than the ordinary houses, he goes on, "This reason they give: some of them (as tradition persuades at least) are descended, not *a columba Noe* (i.e. from Noah's dove), but from those who, being taught to feed at Mahomet's ear, not a little advanced his reputation, persuading thereby the simple people they communicated to him intelligence from some angel".¹³

It seems possible that a taboo already in existence among the Moslems might have been reinforced by another brought by the Armenians who were settled in Julfa. It was also noted years later by Mme. Dieulafoy¹⁴ (1887), who presumably had a practical Frenchwoman's attitude to the kitchen, and, with Gallic commonsense, she also dismissed a quotation, "Les gens d'Ispahan ne mangent que des ordures" supposing the author to be "sujet sans doute à des douleurs d'entrailles".

At all events while Europeans lived well on pigeon squabs, the Iranian peasant from the seventeenth to twentieth centuries, however hungry, seems to have abstained.

Incidentally, Fryer (1672-81), on a journey up to Işfahān from Shirāz "encountered almost in every Village old Castles made of Mud and almost turned to Earth again: in whose stead, at the Emperor's Charge, are maintained many Dovecots, pleasantly seated in Gardens, for the sake of their Dung, to supply the Magazines with Saltpetre for making Gunpowder, they have none else but what is Foreign".¹⁵ Both Curzon¹⁶ and others are surprised by this statement on the use of the dung and no other source suggests it. At that time there were reported to be over 3000 of these towers.¹⁷

Although the birds were not taken for food they might be shot on the wing for sport¹⁸ and Olearius,

⁶ Dr. Caro Minasian.

⁷ Dr. Caro Minasian.

⁸ In correspondence, June 1965. See also A. de Gubernatis, *Zoological Mythology*, pt. 2, ch. 10, London, 1872.

⁹ *Ibid.*

¹⁰ Marco Polo, *The Travels*, Penguin Classics, 1958, p. 33.

¹¹ Morier, p. 141.

¹² G. N. Curzon, The Hon., *Persia and the Persian Question*, vol. 2, 1892, p. 19.

¹³ Herbert, p. 120.

¹⁴ Jane Dieulafoy, *La Perse, La Chaldée et la Susiane*, Paris, 1887, pp. 285-6.

¹⁵ Fryer, *A New Account of East-India and Persia in Eight Letters being Nine Years Travels, begun 1672 and finished 1681*, London, 1698, p. 259.

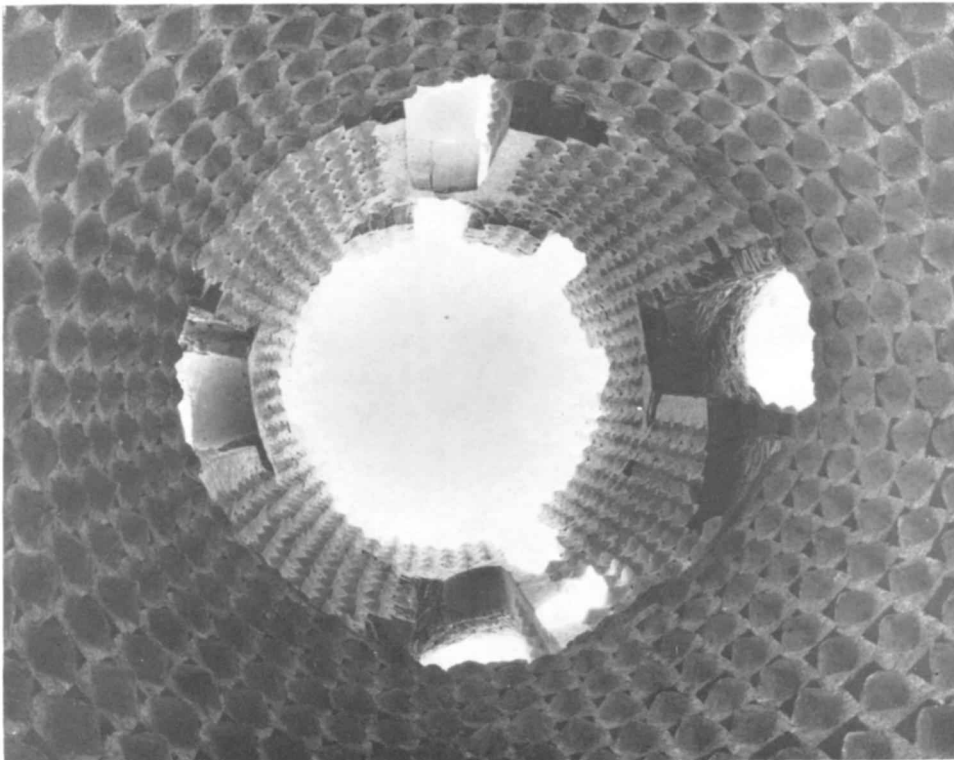
¹⁶ Curzon, vol. II, p. 19.

¹⁷ Tavenier, *Travels*; and Chardin, *Voyages de Monsieur le Chevalier Chardin en Perse et Autres Lieux de l'Orient*.

¹⁸ Morier.



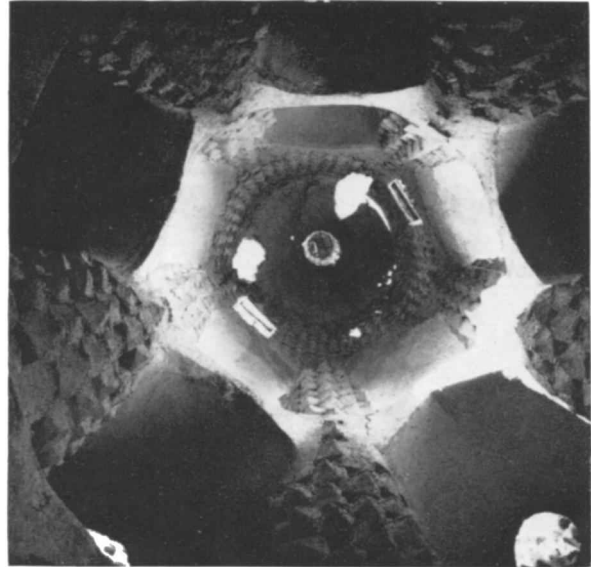
Pl. I. The west tower in the Hazār Jarīb, 1963. See plan in Fig. 2. Believed to be built c. 1700



Pl. II. Interior of the central drum of the east tower on the Hazār Jarīb



Pl. III. Tower near the Ateshgāh



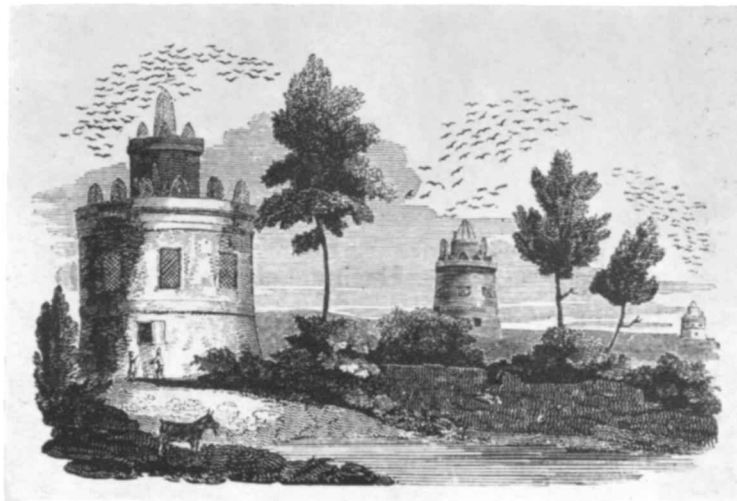
Pl. IV. Looking up the central drum of the tower shown on the left



Pl. V. "Columbarium", etc., in the Hazār Jarīb 1684–85, from Kaempfer's Amoenitatum Exoticarum, 1712



Pl. VI. Pigeon towers at Chahār Burj



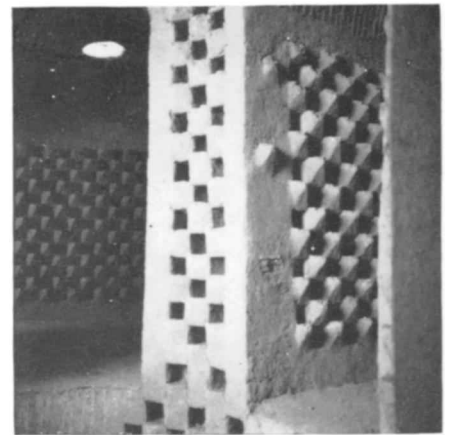
Pl. VII. Pigeon towers, from Morier's second journey. Seen 1810-16



Pl. VIII. Detail of top of outer drum, 1964



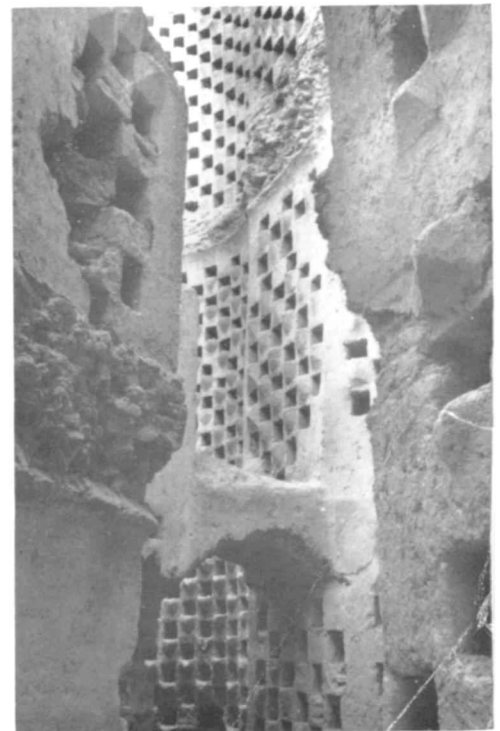
*A tower immediately north of Isfahān
Pl. IX. Turrets through which pigeons enter the tower*



Pl. X. Pigeon holes in inner buttresses



Pl. XI. Smooth plaster bands were to prevent snakes climbing the towers, but their function seems to be undermined by the addition of buttresses. A tower near the Ateshgāh



Pl. XII. Interior of tower in the Hazār Jarīb showing remains of galleries

writing in 1669, gives a curious description: "The King sent to us betimes in the Morning to invite us to go to a Pidgeon-hunting. We were carried to the top of a great Tower, within which there were about a thousand Nests. We were plac'd all without, having in our hands little Sticks forked at the ends. The King commanded our trumpets to sound the charge, and immediately there were driven out of the Tower or Pidgeon-house great numbers of Pidgeons, which were most them kill'd by the King and those of his Company. This was the end of that kind of hunting".¹⁹ Perhaps it was not quite the end, for today it is a popular sport to drive the pigeons out of the *qanāts* by throwing stones into the well and catching the birds by hand or hitting them with sticks.

In Chardin's²⁰ time (early nineteenth century) it was "un des plaisirs et un des attachemens de la canaille, de prendre des pigeons à la campagne, et même dans les villes, quoique cela soit défendu. Ils les prennent par le moyen des pigeons apprivoisés et élevés à cet usage, qu'ils font voler en troupes, tout le long du jour, après les pigeons sauvages, et tous ceux qu'ils trouvent, ils les mettent parmi eux dans leur troupe, et tous ceux qu'ils trouvent, et les amènent ainsi au colombier. Quelquefois les pigeons apprivoisés en emmènent aussi d'autres qui sont apprivoisés comme eux, en sorte que tout d'un coup un colombier se trouve vuide et raflé. Il n'y a point de justice sur cela. Le pigeon qui entre dans un autre colombier, est réputé pigeon sauvage. On appelle ces chasseurs de pigeons *Keftér baze*²¹ et *Keftér perron*, c'est à dire *trompeurs et voleurs de pigeons*. . . ." Fun no doubt for the *chasseur*, but infuriating to the owner of the deserted tower who would feel as bereft as a beekeeper whose hive has swarmed.

* * * * *

It will be seen that much remains to be found out about the towers. The extreme cold and heavy snow of an unusually hard winter made it impossible to reach several of the villages to which we had been invited.

Unfortunately, the plans reproduced here seem to be the only ones in existence: a more representative survey could be very interesting. Those examined were disused and, like all mud-brick structures, once the weather gets into the top of the walls, disintegration is fast. The two great towers of the Shāh 'Abbās period in the Hazār Jarīb have already lost their turrets and most of the roofs have gone. It is very much hoped that funds will be found to prevent further decay or even restore them to their former glory.

Sincere thanks are due to Dr. Bisharat, Head of the Department of Antiquities in Isfahān, Major Herbert Garcia, U.S. Army (Pls. VIII-X), Miss Olive Kitson (photographer), Mr. S. Kiureghian, Dr. Edmund Leach for anthropological observations on the eating of pigeon-flesh, Dr. Laurence Lockhart for his invaluable work on sources and Pl. VI, Dr. Caro Minasian, Isfahān particularly for current information on the pigeon towers and Mr. G. H. Vevers, Keeper of the Aquarium for the Zoological Society, London, and Colonel Maḥmūd Zāhedī.

¹⁹ Olearius, *The Voyages and Travels of the Ambassadors sent by Frederick Duke of Holstein to the Great Duke of Muscovy and the King of Persia*, London, 1669, p. 211.

²⁰ *Voyages du Chevalier Chardin en Perse et Autres Lieux de l'Orient*, vol. III, Paris, 1811, pp. 386-7.

²¹ Père (afterwards Abbé) Martin Gaudereau, who had an

extensive knowledge of Persia, in his book *Relation de la Mort de Shah Soliman Roy de Perse et du Couronnement de Sultan Ussain son Fils, avec plusieurs Particularitez touchant l'état présent de la Perse*, Paris, 1696, pp. 48 and 49, thus explained the term *Kāftar-bāz*: . . . les Caftarbaz, c'est-à-dire, certaines Gens qui passent leur vie à faire voler les Pigeons.