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# THE MUGHUL INDIAN COURT AND ITS INSTITUTIONS.

*A close-range survey of facts and details drawn from original Persian and contemporary European sources.*

By

ABDUL AZIZ, *Barrister-at-Law.*

In this Series the author has attempted a study of the Mughul court and the institutions connected with it, so as to obtain a tolerably clear picture of Mughul court life, and of the actual working in practice of the administrative system. In the opinion of the writer the spirit of this civilization can be better studied in the customs and manners of the people and in the systems and institutions in which they crystallized, than in the vicissitudes of kings and peoples which too often pass for "history". The real life of a people is their social, intellectual and economic life, and this can be better studied in their manners and morals, their etiquette and procedure, their art and letters, than in the sequence of political events.

An attempt has been made to visualize the *milieu* which served as the cradle of Mughul thought and culture.

Books and pictures, buildings and furniture, arms, jewels and dresses, thrones and carriages, vessels and utensils—all articles of daily and occasional use in fact are passed in review, so as to give us an idea of the people's thought and life, taste and judgment, ambitions and achievements, and of public industry and royal patronage. Stirring scenes of Mughul court life—durbars and celebrations, receptions and progresses—are reproduced before the reader, and the glory of the Mughul past lives again.

Such a study of concrete facts will help us better to test the foundations of the social and administrative system of the Mughuls

than theorizings and learned discussions based on conjectures and unverifiable hypotheses. We can see here how intimately pursuit of beauty and daily life were woven together in the better Mughul days, and how apparently unconnected currents of historical knowledge underlie, explain, and lead up to, the art and life of this great people.

It is expected that this series of monographs, when completed, will furnish material for a true social and economic history of Mughul India—indeed for a somewhat comprehensive history of Mughul Indian civilization.

The work is meant both for the scholar and the general reader; and an effort has been made to keep the style simple, clear and non-technical throughout; although here and there the specialized character of the subject made it a difficult task.

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## (3) ARMS AND JEWELLERY

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CHAPTER I.—Ensigns : *Chatr* (umbrella).—*Āftābgīr.*—*Kaukaba.* —*'Alam.*—*Chatrtoq, Tuman-toq* and *Qutās-toq* (yak-tail standards).—*Jandā.*—*Māhī-marātib* (fish ensign) and *Sher-marātib* (lion ensign).—Drum.—*'Aṣā* or stick (as sign of office).—Pen, Ink-stand and Pen-case (as sign of office).

CHAPTER II.—Weapons : Swords and sabres.—*Khānda* (straight sword).—*Dhāb* (another straight sword).—Shield.—*Jamdhar* (broad dagger).—*Khanjar* (double dagger).—*Pesh-k* (bent knife).—*Jambwa.*—*Katār* (ring and bar).—Knife.—Spear.—Bows and arrows.—Mace,—*Gupti* (sword-stick).—Walking-stick.

*PART II :—Jewellery.*

CHAPTER I.—Ornaments worn on the Emperor's person.

CHAPTER II.—Head-dress : Caps and crowns.—*Sar-pech, sar-band,* and *dastār-pech.*—Aigrettes and plumes (*jīgha, kalgī, turra*).—*Sihra* (bridegroom's chaplet or diadem).

CHAPTER III.—Necklaces and collars (*tasbīh, mālā, hār, larī 'aqd, urbasī, baddhī, dhukdhuki, gulū-āwez*).

CHAPTER IV.—Ornaments for hands and arms : Bangles and bracelets (*pahunchī, smaran, kara, dast-band*).—Rings.—*Bāzū-band* (armlet).

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SECTION I: Descriptive and illustrative :—Howdah.—'*Amārī*. —*Megh-dambar*.—Throne on an elephant.—Saddle.—*Jhūl*.—*Ankus*. —Miscellaneous.

SECTION II: Presentations :—Elephant furniture (*talā'ir*, *yarāq*, *sāz*) explained. Elephants with brass, silver, and gold trappings bestowed by emperors. Furnished elephants presented to emperors (from Akbar to Aurangzeb).—Pictures.

CHAPTER III.—Camel Furniture: *Kajāwa*.—*Muḥāfa*.—Saddle.

CHAPTER IV.—Conveyances :—

SECTION I: Wheeled carriages :—Bullock-driven vehicles.— Horse-driven vehicles.— *Bahal* or *Bahlī*.—*Rath*.—The English coach, etc.—Pictures.

SECTION II: Litters and sedans :—*Dolī*.—*Nālkī*.—*Pālkī* (palanquin).—*Takht-i-rawān*.—*Sukh-pāl*.—*Sukh-āsan*.—*Chauḍol*.—Pictures.

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Orders and inquiries to be addressed to the Author:

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Qutab Road, Lahore (Punjab, India).

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*For Selected Opinions see end of book.*

# THE IMPERIAL TREASURY OF THE INDIAN MUGHULS

By
ABDUL AZIZ
BAR-AT-LAW

1942

Sole Agent
SH. MUHAMMAD ASHRAF
KASHMIRI BAZAAR, LAHORE

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The reader is requested to correct, before beginning this book, the following errors which have persisted in spite of great care taken in correcting proofs :

## ERRATA

| Page and line | Wrong | Right |
|---|---|---|
| 5, f. n., last line. | *krāk-y.irāgh* | *kirāk-y irāgh* |
| 52, f. n. 1. | 1. Chapter V .. | 1. P. 533 below. |
| 68, first line. | crown lands | crown-lands |
| 89, l. 18. | rubies | rubles |
| 121, l. 6. | 26 *surkhs* | 26 *surkhs* |
| 133, l. 4. | muhur | mohur |
| ,, l. 11. | in Chapter III | in Chapter III, |
| 158. l. 3 from bottom. | stones to pearls | stones or pearls |
| 175, fnn., last line. | *Tūzuk*, 198 ; R. & B., I,400. | 2. *Tūzuk*, 198 ; R. & B., I,400. |
| 179. l. 19. | *nazr* | *nazr* |
| 189, last line. | primeauthority | prime authority |
| 216. f.n. 1. | *Ranjit Sing* | *Runjeet Sing* |
| 264, l. 8. | Sharfu'd-Dīn's | Sharafu'd-Dīn's |
| 289, l. 5. | lacinth | Iacinth |
| 295, l. 7. | *B.N.*, I | *B. N.*, I, |

| Page and line | Wrong | Right |
|---|---|---|
| 309, l. 4. | *Á'n*, | *Á'in*, |
| 361. | See below. | |
| 422, f. n., l. 3 from bottom. | Khal$^{n}$ | Khaṭā |
| 449, l. 17. | rewarded Ustād Pūran | rewarded, Ustād Pūran |
| 496, last line. | *Mir'ātu'l-Iṣṭil* | *Mir'ātu'l-Iṣṭilāḥ*, |
| 497, l. 6. | f. n. 4 (p. 33) are examples. | f. n. 4 (p. 33)) are examples. |

On p. 361, column 'Authorities and Remarks':

| | |
|---|---|
| 'Tavernier, II, 103 (Illustr. No. 4, Pl. V).' | Should remain against No. 10, as it stands. |
| 'Tavernier, II, 103-04 (Illustr. No. 5, Pl. V). It may or may not be the same as No. 3 (c) or No. 5 (e) above.' | Should be read as against No. 11. |

# PREFACE

This treatise constitutes the second volume in the Series. It is in no sense a continuation of the first, as it deals with an independent subject. The word 'Treasury' is used here in a very wide sense, so that the articles treated of in this monograph have an extensive range.

The substance of this book, which was designed from the beginning as a connected treatise, was published at various intervals in the *Journal of Indian History*, Madras. The whole of it has now been thoroughly revised, considerably enlarged, and brought up to date; so that it is in no sense a reprint. I am grateful to D. B. Dr. S. Krishnasvami Aiyangar for his kind permission to print this volume.

The reader who has no taste for statistics and calculations, and who is prepared to take the author's findings on credit, may pass over the chapter on "Jewellers' Weights", if he so chooses. The continuity of his reading will not be affected.

I have pleasure in placing on record my debt of gratitude to the following gentlemen, who, on all points of doubt and difficulty that

I referred to them, gave me ungrudgingly sound and helpful advice: Principal Shafi of the University Oriental College, Lahore, Prof. Shairani, late of the same College, Mr. S. H. Hodivala, and Mr. A. Yusuf Ali, late of the I. C. S. My thanks are also due to the late lamented Mr. Labhu Ram, Librarian, Punjab University Library, Lahore, and to K.B. K.M. Asadulla, Librarian, Imperial Library, Calcutta, for their courtesy and kindness in having freely placed at my disposal such books as were required by me during my research. My friend, Mr. S. D. Azar, District Inspector of Schools, has laid me under a heavy obligation by generously lending me books and MSS. from his fine Library, which is probably the largest private MS. collection in Northern India.

I consider it as an earnest of appreciation in academic circles in India that this book has, before its actual publication, been placed by the Calcutta University on its M.A. course in Cultural History of Islam in India for 1942.

ABDUL AZIZ.

BATALA.
*June*, 1942.

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## TRANSLITERATION

In writing Arabic, Persian, Urdū and Hindī words I have followed the system adopted and recommended by the Royal Asiatic Society of Great Britain and Ireland, with a few necessary additions and modifications. The additional signs used by me are neither original nor arbitrary. They are in fact well-established, being sanctioned by general usage in standard works. The signs are as under :—

*Consonants*

| | |
|---|---|
| ا | to be omitted at beginning of words ; elsewhere it is *hamza*, and should be represented by an apostrophe (') ; as, احمد (Aḥmad), جرأت (*jur'at*), فائدہ (*fā'ida*). |
| ب | b |
| بھ | bh |
| پ | p |
| پھ | ph |
| ت | t |
| تھ | th |
| ٹ | ṭ |

| | |
|---|---|
| ٹھ | ṭh |
| ث | s̤ |
| ج | j |
| جھ | jh |
| چ | ch |
| چھ | chh |
| ح | ḥ |
| خ | k̲h |
| د | d |
| دھ | dh |
| ڈ | ḍ |
| ڈھ | ḍh |
| ذ | z̲ |
| ر | r |
| ڑ | ṛ |
| ڑھ | ṛh |

| | |
|---|---|
| ز | z |
| ژ | zh |
| س | s |
| ش | sh |
| ص | ṣ |
| ض | ẓ |
| ط | ṭ |
| ظ | ẓ |
| ع | ‘ |
| غ | gh |
| ف | f |
| ق | q |
| ک | k |
| کھ | kh |
| گ | g |
| گھ | gh |
| ل | l |
| م | m |

| | |
|---|---|
| ن | n |
| ں (or *nūn-i-ghunna*) | ñ |
| و | w *or* v |
| ہ | h |
| ی | y |

*Diacritical Marks and Vowels.*

| | | |
|---|---|---|
| | ـَـ | a |
| | ـِـ | i |
| | ـُـ | u |
| Long | ـا | ā |
| | ـُو | ū |
| | ـو | o (as in روز *roz*). |
| | ـِی | ī |
| | ـی | e (as in پیش *pesh*). |
| | ـیٰ | á (as in مرتضیٰ Murtazá, اعلیٰ a' l á) |

*Diphthongs.*

| | |
|---|---|
| ـَو | au (as in اورنگ *aurang*). |
| ـَی | ai (as in سلیمان Sulaimān). |

The silent و after خ is represented by ẉ thus: خوش *khẉush* خواب (*khẉāb*). خود (*khẉud*).

The imperceptible ہ at the end of some Persian words is not transliterated; thus بندہ is *banda*, not *bandah*; خانہ is *khāna*, not *khānah*. When pronounced, it is written; as, گناہ *gunāh*.

Geographical names, both Oriental and European, have been written in the form used in well-known Maps and Atlases; and in case of Indian place-names I have adopted more particularly the spelling in the *Imperial Gazetteer of India*, 26 Vols. (Oxford, 1907-09).

## ABBREVIATIONS

*Ā'īn.*—Abū'l-Faẓl, *Ā'īn-i-Akbarī* (Bibliotheca Indica edition, Calcutta), 2 vols.

*Ā'īn*, tr.—English translation of above in 3 Vols. (Bibliotheca Indica edition, Calcutta). Vol. I by H. Blochmann and D.C. Phillott, Vols. II and III by H. S. Jarrett.

*'Alamgīr Nāma.*—Muḥammad Kāẓim *bin* Muḥammad Amīn Munshī, *'Ālamgīr Nāma* (Bibliotheca Indica edition, Calcutta).

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*A. S.*—Muḥammad Ṣāliḥ Kambo, *'Amal-i-Ṣāliḥ* or *Shāh Jahā Nāma* (Bibliotheca Indica edition, Calcutta), 3 Vols.

Bernier.—Francois Bernier, *Travels in the Mogul Empire A. D.* 1656-1668; tr. Archibald Constable and Vincent A. Smith. Oxford University Press, 1916.

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*B. N.—Bādshāh-nāma*, Vols. I (i & ii) and II by Mulla 'Abdu'l-Ḥamīd Lāhorī (Bibliotheca Indica edition, Calcutta); and Vol. III (MS.) by Muḥammad Wāris.

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*E. F. I.*—William Foster, *The English Factories in India.* Clarendon Press, Oxford.

Fryer.—John Fryer, *A New Account of East India and Persia*; ed. William Crooke. 3 Vols. London, 1909-15.

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*Hobson-Jobson.—Hobson-Jobson*, by Henry Yule and A. C. Burnell, ed. William Crooke. London, 1903.

*Humāyūn Nāma.—The History of Humāyūn* (*Humāyūn-nāma*), by Gul-badan Begam (Princess Rose-body). Text and translation by Annette S. Beveridge. London, 1902. [In references given to this book figures within square brackets are pages of the English translation].

*J. R. A. S.—Journal of the Royal Asiatic Society of Great Britain and Ireland.*

*Letters* or *Letters Received.—Letters Received by the East India Company from its Servants in the East.* 6 Vols.

Linschoten.—*The Voyage of John Huyghen Van Linschoten to the East Indies.* 2 Vols. Tr. A. C. Burnell (Vol. I); P. A. Tiele (Vol. II). London, 1885.

*Ma'āṣir-i-'Ālamgīrī.*—Muḥammad Sāqī Musta'idd Khān *Ma'āṣir-i-'Ālamgīrī*; ed. Aḥmad 'Alī (Bibliotheca Indica edition, Calcutta).

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*M. L.*—Muḥammad Hāshim Khān, "Khāfī Khān," *Muntakhabu'l-Lubāb* (Bibliotheca Indica edition, Calcutta), 3 Vols.

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*Ovington.*—J. Ovington, *A Voyage to Suratt in the year,* 1689. London, 1696.

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R. Y.—Regnal Year.

Steingass.—F. Steingass, *A Comprehensive Persian-English Dictionary*. London, 1930.

Stewart.—*The Tezkereh al Vakiāt or Private Memoirs of the Moghul Emperor Humāyūn*, by Jouher, tr. Major Charles Stewart. London, 1832.

*Storia*.—Niccolao Manucci, *Storia do Mogor, or Mogul India* (1653-1708), tr. William Irvine. 4 Vols. London, 1907-08.

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*Zafar Nāma*.—Sharafu'd-Dīn 'Alī Yazdī, *Zafar Nāma*; ed. M. Ilāhdād (Bibliotheca Indica edition, Calcutta). 2 Vols.

NOTE (1).—4,000/3,000, etc.—The *manṣab* or rank of 4,000, etc., personal and 3,000, etc., horse.

NOTE (2).—Titles are always given within double inverted commas, except when a man's title is better known than his name, in which case his title is freely used as a name.

# CHRONOLOGY

In the reigns of Bābur and Humāyūn Islamic or *Hijrī* dates were observed, and no other calendar was recognized. This era may therefore be taken up first:

## THE MUSLIM ERA

The Muslim or the *Hijrī* era began on July 16, 622 A.C. The year, which is lunar, consists of the following twelve months, and comprises 354 days (or, in a leap year, 355 days, with 30 days to *Zū'l-ḥijj*):

| | Days. | |
|---|---|---|
| *Muḥarram* .. .. .. | 30 | |
| *Safar* .. .. .. | 29 | |
| *Rabī' I* .. .. .. | 30 | |
| *Rabī' II* .. .. .. | 29 | |
| *Jumādá I* .. .. .. | 30 | |
| *Jumādá II* .. .. .. | 29 | |
| *Rajab* .. .. .. | 30 | |
| *Sha'bān* .. .. .. | 29 | |
| *Ramazān* .. .. .. | 30 | |
| *Shawwāl* .. .. .. | 29 | |
| *Zū'l-qa'd* .. .. .. | 30 | |
| *Zū'l-ḥijj* .. .. .. | 29 | (or 30 in leap year). |

It must be remembered, however, that the rule according to which the months have alternately 30 or 29 days, is true only approximately and in long calculations. Variation in latitude and longitude sometimes makes a difference in the number of

days in a month, so that a month may begin a day earlier in one place than in another. The actual appearance of the moon plays an important part in the determination of Muslim dates. We often have two consecutive months of 30 or of 29 days in practice. Thus is explained much of the prevailing confusion about *Hijrī* dates.

It must also be noted that the day, according to the Muslim Calendar, consists of the period from sunset to sunset (and neither from sunrise to sunrise, which is the Hindu practice, nor from midnight to midnight, which is the modern European method of calculation); so that 'Friday evening' or 'Friday night' in the mouth of a Muslim historian means the evening or night occurring between Thursday and Friday, and not the one between Friday and Saturday.

## AKBAR'S ILĀHĪ OR DIVINE ERA

In XXIX R. Y., Akbar introduced, with slight modifications, the Persian calendar, which was based on solar calculation, and called it *Ilāhī* or Divine era. The order had retrospective effect, so that the era began with the year of his accession, 963 A.H. (=1556 A.C.). The Persian names of the months were retained, and the number of days in a month varied from 29 to 32:—

| | | | |
|---|---|---|---|
| *Farwardīn* | (*Māh-i-Ilāhī*). | *Mihr* | (*Māh-i-Ilāhī*). |
| *Urdībihisht* | Ditto | *Ābān* | Ditto |
| *Khurdād* | Ditto | *Āzar* | Ditto |
| *Tīr* | Ditto | *Dai* | Ditto |
| *Amurdād* | Ditto | *Bahman* | Ditto |
| *Shahrīwar* | Ditto | *Isfandārmuz* | Ditto |

In the reign of Jahāñgīr the *Ilāhī* calendar was followed, though *Hijrī* dates are often met with in the histories.

When Shāh Jahān came to the throne, he felt that the *Hijrī* dates had been sadly neglected by his predecessors, and consequently reinstated them in the official histories and in court life. Persian parallel dates are, however, occasionally mentioned by Shāh Jahān's historians. The *Nauroz* and the *'Īd-i-Gulābī* (13 *Tīr*) as well as the Solar Weighments, [1] which were calculated by the solar calendar, continued to be regularly celebrated.

In Aurangzeb's time a further change was made in the same direction; *viz.*, even the *Nauroz*, a relic of the Persian calendar, was discarded; and only *Hijrī* dates and festivals were observed. Solar Weighments, [1] however, were still kept, and occasionally we hear of *'Īd-i-Gulābī* (13 *Tīr*). [2]

## REGNAL YEARS

From Akbar's time on it was customary with Mughul historians to record events under regnal years the first regnal year (I R. Y.) beginning theoretically on the Coronation day, but practically on a near date arbitrarily fixed to suit certain adjustments. When so adjusted, it was rigidly adhered to.

Akbar was enthroned on Friday, 2 *Rabi'* II, 963 A. H. (=14 February, 1556), but his first regnal year (and consequently the *Ilāhī* era) began on 11 March, 1556—that being the next *Nauroz*—*i.e.*, 25 days later. Jahāñgīr followed the same practice and shifted the anniversary of his coronation from

[1] See below.

[2] *'Alamgīr Nāma*, 404; and *Ma'āṣir-i-'Alamgīrī*, 50.

October 24 to March 10—12 to make it synchronize with *Nauroz*. The New Year Festival (1 *Farwardīn*), to which the coronation anniversary was linked, fell, both in Akbar's and Jahāñgīr's time, on a date between 9th and 12th March.[1]

Shāh Jahān's coronation took place on 8 *Jumādá* II, 1037. As he calculated his regnal years by the lunar calendar, 1 *Jumādá* II was fixed upon as the Coronation day; and the *Nauroz*, now automatically uncoupled from it, was independently celebrated every year.

Aurangzeb was crowned on 24 *Ramaẓān*, 1069 (second coronation), but he shifted his coronation anniversary a few days forward to make it coincide with the *'Īd* festival (1 *Shawwāl*), and to save the festivities from the fasts.

BIRTHDAYS

The Muġhul emperors celebrated their birthdays, both solar and lunar, by a great festival, the main feature of which was the weighment of the King's person against gold, silver and other commodities. These festivals are spoken of in this book as those of Solar or Lunar Weighment. Considerable latitude was observed in fixing the dates of these celebrations every year.

[1] The Christian dates for the Coronation Festivals of R.Y.'s III to XII of Jahāñgīr's reign are wrongly given in R. & B. The *Hijrī* dates in the *Tūzuk* are correct.

## INTRODUCTORY:

## *THE IMPERIAL HOUSEHOLD*

THE Imperial Household was a great miscellany of offices, factories, departments and institutions. It was a microcosm, a complete, independent unit, where the economic processes of production, consumption, and exchange went full circle. The standard of the articles and services consumed at court was so high and the amounts required were so large that no private agency or set of agencies could be relied upon to meet the demand with a reasonable degree of satisfaction.

Some of these, indeed, were of a kind usually managed by state, such as a mint or an arms factory. But it is proof of the fastidious tastes of the aristocracy in general and the Emperor in particular that every thing consumed by court was specially produced by its various offices.

These offices constituted the mainspring of life at court—like all mainsprings invisible

to outside observers, but vitally necessary. To realize the significance of court life and ceremonial one should understand the inner working of the machinery that was behind it. This machinery was to the Imperial Court what anatomy is to the art of animal sculpture—foundation of its being.

We have a wish not only to see what passed on the stage, but also to watch the processes of preparation in the green-room and to study the appliances which controlled the shifting of scenes and the rest.

'The *kārkhānajāt*', says Abū'l-Faẓl, 'were more than a hundred in number, and each was like a city, in fact like a kingdom' (Ā'īn, Text, 9).

The Treasury stored valuables of all kinds: coins, gold and silver, precious stones, and useful and ornamental things made of these; as well as articles of virtu prized for rarity or workmanship.

Several departments were concerned with the royal table, such as Kitchen, *Nānbā-khān*

(Bakery), *Ḥawā'ij-khāna* (for pot-herbs, seasonings, sweets, etc.), *Mewa-khāna* (Fruitery), *Ābdār-khāna* (for water), *Rikāb-khāna* (Pantry), and *Áftābchī-khāna* (for ewers, etc.).

Not far removed in function were *Sharbat-khāna* (for sherbet and other beverages), and *Tambūl-khāna* (for betel-leaves).

Lighting-up was in charge of *Chirāgh-khāna* (lamps) and *Mash'al-khāna* (torches); while *Khwushbū-khāna* (Perfumery) supplied scents, *'itrs*, essences and oils.

A large number of well-organized factories, where articles were manufactured and stored in proper order, also formed part of the Household. These were *kārkhānas*, *i.e.*, factories, properly so called:

The Mint stamped its seal on the current coin of the realm; and the *Qūr-khāna* produced arms and equipments of war. Another department engraved royal seals.

The following *kārkhānas* were concerned with the weaving of textile fabrics and the needlework connected with them:—*Farrāsh-khāna*

(for tents and carpets), *Kurkyarāq-khāna*[1] and *Tūshak-khāna* (for dresses and stuffs of all kinds used for wearing-apparel, etc.), and the Shawl department.

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[1] This is a Turkish word, and a troublesome one. It is a compound of two distinct words: the first may be read *kirak*, *kurak* or *kurk*, *kīrak*, *kīrāk* or *girāk*, etc.; and the second is *yarāq*, *yārāq*, *yarāgh* or *yārāgh*. There is an equal diversity of opinion as regards the meaning: *Kīrāk* or *girāk* (which is the same word) means 'il faut' (Pavet de Courteille, *Dictionnaire Turk-Oriental*) or 'necessary, needful' (R. B. Shaw, *Vocabulary of the Language of Eastern Turkistán*), which is supported by *Rasāla-i-Faẓlu'llāh Khān*. And *yarāq etc.* means 'provisions; ustensile; appareil; convenable; préparé' (P. de Courteille, *Dict.*). Blochmann translates it 'supellex' (p. 684). The word also means arm, weapon, equipments, accoutrements, fittings, etc. (See author's *Horse and Elephant Furniture and other Conveyances*, under 'Elephant-Furniture'). According to Rāi Dhan Singh's *Nūru'l-Abṣār*, *kīrāk-yārāgh* means things that are necessary, requirements, equipments, suitable things. This interpretation of the word seems somewhat tautological.

Other writers think that the first word in the compound is not *kīrāk*, but *kurk*, which means: (1) a kind of down or fine wool combed from the roots of the long hair of a goat, of which shawls are manufactured (Steingass, who gives this sense under *kurg*, supported by *Bahār-i-'Ajam* and *Farhang-i-Anandrāj*); (2) a pelisse, a fur coat (Steingass)—both senses supported by P. de Courteille. Blochmann writes the word *kürk*, and translates it 'fur' (p. 684). *Kurk* is a winter wear stuff well known in North West India and Afghānistán. *Barak* and *kurk* 'are soft, warm cloths woven from the wool of the sheep and the mountain goat. *Kurk* is far finer in texture than *barak*, but both realize high prices, and are consequently beyond the reach of the poor' (*Imperial*

In other workshops skilful artists and artisans worked in metal, stone, ivory and other

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*Gazetteer of India*, 1908, V, p. 56). In the opinion of the present writer this derivation makes better sense. So *kurkyarāq*, so written, would mean the department dealing with woollen stuffs, furs, etc.

The *Nūru'l-Abṣār* mentioned above, curiously enough, has an extensive article on *kīrakyarāq-khāna* (f. 392*b*-393*a*). From the details enumerated there it seems to be a tailoring department. If there is any justification for spelling the word as it is spelt here, the correct pronunciation of the vowel in *kurk* may correspond to the French u or German *ü*. That is presumably why Blochmann spells the word *kürk*. It has the advantage of reconciling a discrepancy.

But the standard reference in Indo-Persian literature is of course the *Ā'īn* (Text, 101-3; Blochmann, 93 and 684), where we have all necessary details about this department. It contained all kinds of stuffs and dresses made of hair, silk, cotton, wool and fur, and even wax-cloth. So we see that while in earlier times this department included only woollen stuffs and furs, which were presumably the normal wear in Central Asia, by Akbar's time in India it came to include stuffs and dresses of all kinds. Blochmann translates *kurkyarāq* as 'wardrobe,' which seems quite correct.

This word occurs in many places in the Persian histories, *e.g.*, in *Akbar Nāma* (I, 359), where it is correctly translated 'wardrobe' (Tr., I, 647). It occurs again in *Tūzuk* (p. 21) and is explained by the translators as 'the furriery' (R. and B., I, 45, n. 3), which is not wrong.

But it must be remembered that the word is also used in Persian histories in quite a different sense, which the reader should keep distinct in his mind. The *Nūru'l-Abṣār* gives, under *kārk-yārāqh*, also the sense *khānsāmān*, a house-steward. It is in

substances; and the upper reaches of art were approached in the work of goldsmiths and painters. Each department was conducted and supervised by master workers of established reputation[1].

Akbar, says Father Monserrate, who was at the Mughul Court in 1580-82, 'is so devoted to building that he sometimes quarries stone himself, along with the other workmen. Nor

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this sense that the word is used in *Akbar Nāma* (I, 220). Mr. Beveridge, in his translation (Tr., I, 446,n. 1), complains that Blochmann did not explain this word satisfactorily. But he himself connects this word with *kurk*, meaning fur, which, I think, is wrong; and puts us off with the remark 'Here it is used as a title'. Then we have it in *Tūzuk* (p. 265). The meaning of the term here, however, is not clear. The word may be *kurkyarāqi*, and would then mean the man in charge of the *kurkyarāq* department. This is likely, since precious cloths and stuffs of Gujarāt are being spoken of. But if the word is *kurkyarāq*, which stands in text and is adopted by the translators, it may just mean the house-steward of the prince.

Mr. Hodivāla has a note on the word. He writes the name '*karkarāq*' in one place and '*karkirāq*' in another, and yet bases his explanation on *kurk* or *kurg* (*Studies in Indo-Muslim History*, 536).

1. As an example, by no means isolated, may be cited Bebadal Khān, the *Dāroghā* of Goldsmiths' workshop in Shāh Jahān's time, who was a celebrated lapidary, a great calligraphist, and also an author of some respectable verse (*A.S.*, II, 89-90).

does he shrink from watching and even himself practising, for the sake of amusement, the craft of an ordinary artisan. For this purpose he has built a workshop near the palace, where also are studios and work-rooms for the finer and more reputable arts, such as painting, goldsmith-work, tapestry-making, carpet and curtain-making, and the manufacture of arms. Hither he very frequently comes and relaxes his mind with watching at their work those who practise these arts' (Monserrate, *Commentary*, 201).

Bernier, who came some eighty years later, is talking of the same factories in the following passage:—'Large halls are seen in many places, called *Kar-kanays* or workshops for the artisans. In one hall embroiderers are busily employed, superintended by a master. In another you see the goldsmiths; in a third painters; in a fourth, varnishers in lacquer-work; in a fifth, joiners, turners, tailors, and shoemakers; in a sixth, manufacturers of silk, brocade, and those fine muslins of which are made turbans, girdles with golden flowers, and drawers worn by females, so delicately fine as

frequently to wear out in one night. This article of dress, which lasts only a few hours, may cost ten or twelve crowns, and even more, when beautifully embroidered with needle-work.—The artisans repair every morning to their respective *Kar-kanays*, where they remain employed the whole day; and in the evening return to their homes' (Bernier, 258-59).

Every one knows the heights of excellence essayed by the building art in this period.

Music, both as an art and as a profession, was in high esteem, and a heavy establishment consisting of musicians and singers (both male and female) and of dancing girls (of all nationalities) was maintained at considerable expense.

Where art excelled knowledge did not lag behind. And it is one of the paradoxes of history that one of the finest manuscript libraries in the world was built up, in great part, during the reign of an illiterate monarch. The Imperial Library of the Mughuls is a remarkably interesting phenomenon in many ways.

A large number of animals were kept and fed in the fort-palace: Some, like elephants, horses, camels, mules and cattle, were for use, and were lodged in stables. Others, such as leopards, deer, dogs, hawks and falcons, were for hunting. Others, again, were for amusement, almost all Mughul emperors being amateur naturalists. All sorts of animals and birds that influence and patronage could bring found their way into the royal menagerie.

Then there was an office of the *Naubat-khāna* or *Naqqār-khāna* (Music Gallery) which tuned up at stated times and during the imperial audiences; and informed the capital and the camp of the time of day and night, and of the functions at the court.

There seems to have been a department in charge of the insignia of royalty. Rigid rules were observed regarding the use of these; for symbolism played a great part in Mughul administration and etiquette.

A very important department stands by itself: the Haram.

In the conspectus which has preceded, and the detailed treatment which will form the subject-matter of this and the following monographs on Mughul Court, we have practically confined ourselves to the reigns of the greater Mughuls. We are unable, therefore, to make any use of Sir Jadunath Sarkar's Classified List of *Kārkhānajāt* in his *Mughul Administration* (Second Series), (Patna University, 1925), Lecture V, where, besides the *Ā'īn* and *Ẓawābit-i-'Alamgīrī*, he draws upon 'Afīf's *Tārīkh-i-Firozshāhi* on the one hand, and on the Mahratta histories on the other. We are attempting a pen-picture of the Household as it was roughly from 1526 to 1700. The authorities relating to the periods anterior and posterior to this epoch are beside our purpose.

The account that follows is not meant to be exhaustive. All we can manage is a description, as material serves, of the chief offices and departments. The importance of each will naturally determine the space to be allotted to it; so that some will have a somewhat generous treatment at the expense of others, which may be crowded out.

Perhaps the reader is asking himself what would be the approximate cost of running such a gigantic establishment as the Imperial Household. Risking a guess is worse than useless. Luckily some material is available for arriving at a tolerably accurate estimate.

We may begin with Abū'l-Faẓl. Writing in or before the year 1597, he says : ' Although the majority of the officers of the Imperial Household get their salary from the army exchequer the expenditure for the year 39 *Ilāhī* [ March 11, 1594—March 10, 1595] came to 30,91,86,795 *dāms*. The expenses of this Empire as well as the revenues are daily increasing ' (*Ā'īn*, Text, I, 9). At 40 *dāms* to the rupee this would be equivalent to Rs. 77,29,670.

These are no doubt the office figures for Akbar's period, and we have no hesitation in accepting them. But we see that this is not at all a high figure. Both the Household and its expenses, we must remember, expanded considerably during the last ten years of Akbar's reign and under his descendants.

Hawkins' report, which refers to the years 1609-11, is as follows:

'His daily expences for his owne person, that is to say, for feeding of his Cattell of all sorts, and amongst them some few Elephants Royall, and all other expences particularly, as Apparell, Victuals, and other petty expences for his house, amounts to fiftie thousand Rupias a day.

The expences daily for his Women by the day, is thirtie thousand Rupias' (Purchas, III, 34)

We understand it to mean that according to Hawkins the daily expenses of the Imperial Household, exclusive of the Haram, amounted to Rs. 50,000, and those of the Haram to Rs. 30,000, *per diem*—total, Rs. 80,000, a day. The annual expenditure would then be Rs. 1,09,50,000 for the Haram, and Rs. 1,82,50,000 for the rest of the Household—total, Rs. 2,92,00,000, or nearly three crores.

The annual budget of the Household must have gone up with rapid strides between 1595 and 1610. And these figures are neither

incredible nor unlikely, seeing that Akbar's careful husbandry contrasted with Jahāñgīr's negligent ways, and that fifteen years of peaceful development intervened between these dates.

The historiographers of Shah Jahan's reign give us no details on this point; and we have to fall back upon foreign travellers. Bernier had no access to the official records, and has no definite estimates to offer. Still from a man of his judgment and balance even general statements like the following are worth quoting. He is writing early in Aurangzeb's reign, and is discussing the Emperor's wealth:

'But I have not enumerated all the expenses incurred by the *Great Mogol*. He keeps in *Dehly* and *Agra* from two to three thousand fine horses, always at hand in case of emergency: eight or nine hundred elephants, and a large number of baggage horses, mules, and porters, intended to carry the numerous and capacious tents, with their fittings, his wives and women, furniture, kitchen apparatus, *Ganges'-water*, and all the other articles necessary for the

camp, which the *Mogol* has always about him, as in his capital, things which are not considered necessary in our kingdoms in Europe.

Add to this, if you will, the enormous expenses of the *Seraglio*, where the consumption of fine cloths of gold, and brocades, silks, embroideries, pearls, musk, amber and sweet essences, is greater than can be conceived.

Thus, although the *Great Mogol* be in the receipt of an immense revenue, his expenditure being much in the same proportion, he cannot possess the vast surplus of wealth that most people seem to imagine. I admit that his income exceeds probably the joint revenues of the *Grand Seignior* and of the King of *Persia*; but if I were to call him a wealthy monarch, it would be in the sense that a treasurer is to be considered wealthy who pays with one hand the large sums which he receives with the other' (P. 221-22).

It may be remarked in passing that the Princes and the greater nobles had a similar set of *kārkhānajāt* attached to their household, of course on a descending scale of magnitude, according to the position and wealth of its owner.

## TREASURIES

The Imperial Treasury contained, as we have said, cash and precious metals, and jewels and jewelled articles. We shall take up the Cash and the Jewel Treasury separately, winding up with the miscellaneous articles of artistic and general interest—not jewels, nor forming part of Jewel treasury, yet more valuable than many gems.

# PART I

# CASH TREASURY

## CASH TREASURY.

A monarch's resources in war and peace depend on wealth. Consequently the treasury which contains that wealth is a measure of his power. No wonder then that Treasury occupied the first place in the Imperial Household.

In history and tradition the Greater Mughuls (from the middle of the sixteenth to the middle of the eighteenth century) have been famous for their wealth. The fame of 'the wealth of Ormus and of Ind'[1] had reached Milton as early as the middle of the seventeenth century. Sir Thomas Roe, a hostile and unsympathetic witness, writing to Prince Charles from Jahāngīr's court at Ajmer on the 30th of October, 1616, speaks thus of the prosperity and wealth of Mughul India: 'Plentifull in corne and cattle for mans necessitye: aboundant in wealth and commodityes of trade for superfluitye. His revenew far above any easteren monarch knowne: farr above the Turke: incredible if I sawe not the issues

1. *Paradise Lost*, II, *l.* 2.

and incomes and could not give a better reason of yt then report. In jewells (which is one of his felicityes) hee is the treasury of the world, buyeing all that comes, and heaping rich stones as if hee would rather build then weare them'[1] (Roe, 270).

We have already heard Bernier's qualified praise.

Is it possible to arrive at a tolerably accurate valuation of the contents of the treasury during the various reigns ?

We propose to attempt in this part a rapid survey of the Cash Treasury from Bābur to Aurangzeb.

It is often, if somewhat vaguely, supposed that one of the causes of the immensity of the Great Mughul's wealth was the fact that unlimited treasures cumulated by the successive lines of Delhi Kings (Khaljīs, Tughlaqs, and Lodīs) fell to Bābur at Panipat, and that they went on steadily increasing in the hands of his descendants till Nādir Shāh fell on them in

1. An unconscious prophecy, since Shāh Jahān did build (the Peacock Throne) with some of these jewels.

1739 and carried them off at one fell swoop to his native land of Persia. Well, such sweeping statements are generally misleading. The reader is warned that whatever truth there may be in such a generalization, in the first place it can apply only to the Jewel treasury, since the Cash treasury, which Bābur inherited as the spoils of war, was completely squandered by him, as we shall see, in a short time; and while Humāyūn was mostly a fugitive, Jahāngīr's crapulous hands, it appears, were not strong enough to guard, or to spend properly, Akbar's hard-earned wealth, so that Shāh Jahān inherited, comparatively speaking, a depleted treasury. Secondly, even if we consider only the jewel treasury, the period from 1526 to 1739 was not one of steady growth and progress. Humāyūn's defeat and flight to Persia was a great set-back, and we have no means of telling how much of Ibrāhīm Lodī's jewel treasury was actually inherited by Akbar.

We can now proceed to the details:

Boundless wealth seems to have fallen into the hands of Bābur at Panipat, though no appraisement of its value is possible from the

data available. It is equally certain that heavy sums were bestowed on the princes and nobles and the rank and file of the victorious army, not omitting even the camp followers; and immense amounts were sent to princes, relations, officers and soldiers, in the Trans-oxiana and elsewhere, and to pious people and holy places. The story is best told by the imperial donor himself:

'On Saturday the 29th [ ? 30th ] of Rajab [=May 12th, 1526 *A. C.*] the examination and distribution of the treasure were begun. To Humāyūn were given 70 laks from the Treasury, and, over and above this, a treasure house was bestowed on him just as it was, without ascertaining and writing down its contents. To some begs 10 laks were given, 8, 7, or 6 to others. Suitable money-gifts were bestowed from the Treasury on the whole army, to every tribe there was, Afghān, Hazāra, 'Arab, Bīlūch *etc.* to each according to its position. Every trader and student, indeed every man who had come with the army, took ample portion and share of bounteous gift and largess. To those not with the army went a mass of treasure in gift

and largess, as for instance, 17 laks to Kāmrān, 15 laks to Muḥammad-i-zaman Mīrzā, while to 'Askarī, Hindāl and indeed to the whole various train of relations and younger children went masses of red and white (gold and silver), of plenishing, jewels and slaves. Many gifts went to the begs and soldiery on that side (Tramontana). Valuable gifts (*saughāt*) were sent for the various relations in Samarkand, Khurāsān, Kāshghar and 'Irāq. To holy men belonging to Samarkand and Khurāsān went offerings vowed to God (*nuẕūr*); so too to Makka and Madīna. We gave one *shāhrukhi*[1] for every soul in the country of Kābul and the valley-side of Varsak, man and woman, bond and free, of age or non-age' (*B. N. E.*, 522-23).

This passage incidentally illustrates the traditional wealth of India on the one hand and the munificence of the Mughul conquerors on the other—features, the combination of which

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[1]. One *Akbarī* rupee was equivalent to 2½ *shāhrukhīs*. Taking the rupee as equivalent to two shillings, a *shāhrukhī* comes to nearly 10d. So Mrs. Beveridge's value, 10 or 11 d., is substantially correct. For an exhaustive examination of this point see Mr. Hodivala's chapter on *Shāhrukhīs* in his *Historical Studies in Mughal Numismatics*, pp. 1—10.

was to lead to so much that is great in the art and annals of Mughul India.

The next item of news about the treasury in the Emperor's Diary is the following entry under April-May, 1527 :

'Meantime news came that Humāyūn had gone into Dihlī, there opened several treasure-houses and, without permission, taken possession of their contents. I had never looked for such a thing from him; it grieved me very much; I wrote and sent off to him very severe reproaches'. (*B. N. E.*, 583).

Finally, by the 22nd October, 1528, exactly 2½ years after Bābur's great victory, we learn that 'the treasure of Iskandar and Ibrāhīm in Dihlī and Āgra was at an end. Royal orders were given therefore, on Thursday the 8th of Ṣafar, that each stipendiary (*wajhdār*) should drop into the Dīwān, 30 in every 100 of his allowance, to be used for war-material and appliances, for equipment, for powder, and for the pay of gunners and match-lockmen' (*B. N. E.*, 617).

So the first Mughul emperor, after his reckless extravagance, finds himself straitened for military necessaries—life-blood for a conqueror whose power and safety in a foreign land rested solely on the strength of his arms. No wonder that he earned the sobriquet of *qalandar* or dervish (*Firishta*, Text, ed. Briggs, I, 383).

Humāyūn's reign is uneventful for our present purpose. Nobody can tell how much of Humāyūn's failure was due to the pecuniary resourcelessness in which Bābur's 'generosity' must have left him. Whatever money he possessed must have been exhausted in his military operations; for he was not in a position to carry with him in his flight to Persia anything more than the crown jewels, as we shall know later[1].

This brings us to the reign of the great Akbar. Thanks to his minister, Abū'l-Faẓl, we possess interesting details about the administration of the treasury. It is probable that the lines here laid down were followed in the succeeding reigns.

[1] In Part II.

A general treasurer with a *dārogha* and a clerk constituted the central establishment.

When a provincial treasurer had collected the sum of two lakhs of *dāms* he had to send it to the Treasurer General at the Court, together with a memorandum specifying the quality of the sum. A separate treasurer was appointed for the *peshkash* receipts, another for receiving heirless property, another for *nazr* receipts, and another for the moneys expended in weighing the royal person,[1] and for charitable donations. These treasurers were assisted by superintendents, *dāroghas* and clerks.

The amount of the revenues was so great and the business so multifarious that twelve treasurers were appointed to guard the treasures, nine for different kinds of coined money, and three for gems, gold and jewelled things.

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1. It should be explained that the valuables and food-stuffs against which the Emperor was weighed every solar and lunar year, were not given away at once but were stored in treasury and disbursed slowly for charitable purposes throughout the year. These included also works of public utility; for Jahāngīr tells us that he once ordered five thousand rupees to be spent out of the *wazn* money on construction of a bridge at Baba Hasan Abdal and another building there (*Tūzuk*, 76; R. & B., I, 160).

A separate treasurer was also appointed for each of the Imperial Workshops, the number of which was nearly one hundred.

'Again, by the order of His Majesty', continues Abū'l-Faẓl, 'a person of known integrity keeps in the public audience hall some gold and silver for the needy, who have their wants relieved without delay. Moreover, a crore of *dāms* is kept in readiness in the courtyard of *Daulat-khāna*, every thousand of which is kept in bags made of a coarse material. Such a bag is called *sahsa*, and many of them put up in a heap, *ganj*. Besides, His Majesty entrusts to one of the nobility a large sum of money, that it may be ready at all times; and a part is put in a *bahla*, *i.e.*, a purse, for immediate use —hence commonly known as *kharj-i-bahla*.'[1]

Bābur is certainly the founder of the Mughul dynasty in India, but then Akbar is equally truly the founder of the Mughul empire in India; for the effects of Bābur's victories had

[1] These paragraphs are from *Ā'īn* (Text, I, 10-11; Blochmann and Phillott, 14-15). I have made slight alterations here and there in Blochmann's translation.

worn off during the unsuccessful reign of Humāyūn, and Akbar had to rough-hew from the beginning.

Akbar inherited practically nothing, and during a strenuous but successful reign of half a century he built up a body of resource which would do credit to a monarch under any circumstances.

The following estimate of his treasure is taken from V. A. Smith's article, 'The Treasure of Akbar' in *J. R. A. S.*, 1915, p. 231-43, which is based in turn on the accounts in De Laët's *De Imperio Magni Mogolis*, and Manrique's *Itinerario*, Ch. LXXVI (that in Mandelslo's *Voyages and Travels* being discredited as spurious). De Laët obtained his information prior to 1631, and Manrique got his about 1640. We have thought it safer to rely on Smith's collated account than on the English Translation of De Laët by Mr. Hoyland, edited by Mr. Banerjee.

## Cash Treasure left by Akbar

| Coins | Value in Rs. |
|---|---|
| Gold coins weighing 100 *tolas* (or 1150 *māshas*), 50 *tolas*, and 25 *tolas* each: Total weight, 6,970,000 *māshas*. Value calculated at Rs. 14 a *māsha*[1]. | 97,580,000¾ |
| Silver coins or *Akbarī* Rupees. | 100,000,000 |
| Bronze *Paisa* or Pice, numbering 230,000,000[2] (Rate, 30 *takas per* rupee). | 766,666 |
| Total | 198,346,666¾ (or nearly 20 crores) |

[1]. *Māsha* in the last two places is obviously a mistake for *tola*, since Rs. 14 a *tola* is an infinitely more likely quotation for gold than Rs. 168 a *tola*. It is strange that the error is common to all the three original authors (including "Mandelslo"), and more strange that neither V.A. Smith nor the editor of De Laët's *Empire of the Great Mogol* has noted the absurdity. We are glad to find that Mr. Hodivala has noted this point (among others) in his able and scholarly review of the *Empire of the Great Mogol* (trans. by Mr. Hoyland, edit. by Mr. Banerjee), which appeared in the *Journal of Indian History*, VII, ii, 236-46.

We may, however, pass over it, as it is no more than a careless clerical error.

[2]. V.A. Smith notes that this should be 23 millions.

Mr. Hodivala challenges the equation of a rupee=30 *taṭas*, and holds that De Laët here by *taṭa* means only a *dām*, of which

It must be added that the above is the total value of the cash hoard kept at Agra alone at the time of Akbar's decease. From statements by Hawkins (Purchas, III, 31 and 34) it appears that treasure was also kept (in Jahāñgīr's time) in the six fortresses of Gwalior, Narwar, Ranthambhor, Asīr (Asīrgarh), Rohtas (Rohtasgarh), and, specially, Lahore. We may presume that in Akbar's time too it was so. At a rough calculation there may be at most another five crores of rupees in these provincial fortresses. V. A. Smith's estimated total of twenty crores for the *mofussil* treasure (*Akbar*, 347) is not only excessive but extravagant. Thus we arrive at a total of nearly twenty-five crores.

De Laët's list calls for some criticism. But for the purpose of that criticism it will be convenient to take up first another list given by an earlier writer, which refers, however, to a lower date.

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40 went to a rupee. The high price of a *dām* given here is, he says, due to the fact, that copper had risen in price about 1630, *i.e.*, about the time *De Imperio Magni Mogolis* was compiled.

The exchange value of the *taṅka* does not, however, affect the total of the treasure appreciably.

We give below the 'cash' part of the inventory of the Imperial Treasury, apparently obtained from some official source, by Captain Hawkins, who visited Agra in 1609-11, and who possesses the credentials—unique for a European—of having been appointed a *manṣabdār* in the Emperor's army. Although this document falls properly into Jahāñgīr's reign, in time De Laët's and Hawkins' lists stand only a quinquennium apart.

'His Treasure is as followeth, The first, is his severall Coine of Gold.

Inprimis, of Seraffins Ecberi, which be ten Rupias a piece, there are sixtie Leckes. Of another sort of Coyne, of a thousand Rupias a piece, there are twentie thousand pieces. Of another sort of halfe the value, there are ten thousand pieces. Of another sort of Gold of twenty Toles a piece, there are thirtie thousand pieces. Of another sort of tenne Toles a piece, there bee five and twenty thousand pieces. Of another sort of five Toles, which is this Kings stampe, of these there be fiftie thousand pieces.'

A Tole is a Rupia Chalany of Silver, and ten of these Toles, are the value of one of gold.

'Of Silver, as followeth.

Inprimis, of Rupias Ecbery, thirteene Crou (every Crou is an hundred Leckes, and every Leck an hundred thousand Rupias) or one thousand three hundred Leckes. Of another sort of Coine of Selim Sha this King, of an hundred Toles a piece, there are fiftie thousand pieces. Of fiftie Toles a piece, there is one Lecke. Of thirtie Toles a piece, there are fortie thousand pieces. Of twentie Toles a piece, there are thirtie thousand pieces. Of ten Toles a piece , there are twentie thousand pieces. Of five Toles a piece, there are five and twentie thousand pieces. Of a certaine Money that is called Savoy, which is a Tole ¼ of these there are two Leckes. Of Jagaries, whereof five make sixe Toles, there is one Lecke. More should have beene coyned of this stampe, but the contrary was commanded.'

(Purchas, III, 31—32).

This matter can be put in figures thus :—

## Jahāñgīr's Cash Treasure in 1610-11

### Gold Coins

| No. | Name of Coin. | Weight in Tolas. | Value in Rs. | Number. | Total Value in lacs of Rs. |
|---|---|---|---|---|---|
| 1 | *Akbarī Ashrafi* | (1) | 10 | 60,00,000 | 600 |
| 2 | | (100) | 1000 | 20,000 | 200 |
| 3 | | (50) | 500 | 10,000 | 50 |
| 4 | | 20 | (200) | 30,000 | 60 |
| 5 | | 10 | (100) | 25,000 | 25 |
| 6 | *Jahāñgīrī* | 5 | (50) | 50,000 | 25 |
| | Total | | | | 960 |

Note.—I have calculated the value of coins No. 4, 5 and 6 on the basis of ten rupees to a *tola*, which seems justified not only by the quaintly worded marginal note by Hawkins quoted above, but generally by the values of gold coins of Akbar's time given in *Ā'in* (Text, I, 25; Blochmann, 30-31). Calculated weights and values are given within brackets to distinguish from those given by Hawkins himself. They are approximate, not exact. All total values are calculated by me.

## Silver Coins

| No. | Name of Coin. | Weight in Tolas. | Number. | Total Value in lacs of Rs. |
|---|---|---|---|---|
| 1 | *Akbarī* Rupee | | 13,00,00,000 | 1,300 |
| 2 | *Salīm Shāhī* Rupee | 100 | 50,000 | 50 |
| 3 | | 50 | 100,000 | 50 |
| 4 | | 30 | 40,000 | 12 |
| 5 | | 20 | 30,000 | 6 |
| 6 | | 10 | 20,000 | 2 |
| 7 | | 5 | 25,000 | 1¼ |
| 8 | 'Savoy'[1] .. | 1¼ | 200,000 | 2½ |
| 9 | *Jahāngīrī* .. | 1⅛ | 100,000 | 1⅛ |
| | Total .. | | | 1424-19/20 Say, 1425 lakhs or 14¼ crores. |

Note.—In all cases except No. 1 the total values have been calculated on the rough basis of a *tola* weight being equal to a rupee. This is only a working assumption, since we know that both the *Akbarī* rupee and the square *jalāla* weighed only 11½ *māshas*.

[1]This is *sawā'ī* (one and a quarter).

| | | |
|---|---|---|
| Gold Coins | | 9,60,00,000 |
| Silver Coins | | 14,25,00,000 |
| Total | Rs. | 23,85,00,000 |

It will be noted that no copper coins are given in this list, being presumably considered unimportant. Even if they were added the total would still be under 24 crores.

This was probably the value of the Agra treasure. Comparing this with the Agra treasure in 1605, we find that the amount of cash had increased by 4 crores during these five or six years.

With these two inventories of the Imperial Treasury before the reader, we can profitably devote a little space to their analysis and comparison.

Let us begin with the Gold Coins : Our first impression on comparing the two lists is that Hawkins' inventory dwarfs De Laët's into insignificance in every respect ; in fact the latter seems to be no more than a hasty, fugitive sort of summary of the former, carelessly

worded, and not without slips, and errors of a more reprehensible kind. The most serious omission seems to be the total absence of *ashrafīs*, which in the other list number 60 lakhs,. are valued at 6 crores, and constitute the major portion of the gold treasure. Apart from Hawkins' list, a treasury without *ashrafīs* would be inconceivable.

Judging from the fact that De Laët's and Hawkins' totals of the gold treasure tally very nearly, we can charitably assume that De Laët's total (and he gives only the total) represents the value of gold coins of all weights from 100 to 1 *tola*, although he mentions by name only the heaviest three.

Descending to details: We find that De Laët equates 100 *tolas* with 1150 *māshas*. This is of course not exact, since a *tola*=12 *māshas*; but we don't consider it a serious error, as Mr. Hodivala does (*J. of I. H.*, VII, ii, 240).

We know from *Ā'īn* (Text, I, 23-24) that the big pieces weighed respectively 101 *tolas*, 9 *māshas*, 7 *surkhs* (value=100 *la'l-i-jalālī*) and 91

*tolas*, 8 *māshas* (value=100 round mohurs of 11 *māshas* each); and the smaller ones were halves of these two, and a quarter of the one first mentioned.

It appears that De Laët (or whoever copied out the list) struck a rough-and-ready sort of average between the true weights of the big pieces, and having stated the weight to be 100 *tolas*, tried to be more correct by stating it as the equivalent of 1150 *māshas*; the true weights of the two pieces being nearly 1222 and 1100 *māshas* respectively.

The next point is the rate quoted for gold, *viz.*, Rs. 14 a *tola*. We agree with Mr. Hodivala that this is excessive. Judging from most authorities available the price of gold seems to have been about Rs. 10 a *tola* in Akbar's time and the early part of Jahāñgīr's reign. We know, however, that soon after Shāh Jahān's accession gold was selling at Rs. 14 a *tola* (*B. N.*, I, ii, 79).

The explanation of De Laët's error lies in the fact that the compilers, instead of stating the rate which obtained in 1605 (to which

date the document refers), probably quoted the rate current at the time of the compilation of the book, *viz.*, about 1630.

If we correct Rs. 14 to Rs. 10, the obvious result will be that either we assume the weight to be correct and make the necessary alteration in the total value, or we accept the total value and work out the total weight from it. Either the weight or the value is taken from the State document—we don't know which; and the other is reckoned from it by the compilers.

Seeing that the total gold treasure in De Laët's list nearly equals the total gold treasure in Hawkins' list—assuming that no serious change took place in the short interval of five years (which is unlikely)—one would be inclined to think that the *value* given is the correct figure, and that the weight should be increased.

Now we come to the Silver Coins: De Laët's item is so brief that no detailed criticism is possible. Hawkins' total, even after deducting the *Salim-shāhi* rupees of 100 *tolas* each and the *Jahāngīris* of 1-1/5 *tolas* each (which were coined subsequent to Akbar's death),

is still far in excess of De Laët's. In fact the *Akbarī* rupees alone exceed De Laët's total amount by a great deal. Possibly there was an actual increase in the store during the period 1605-1610.

Jahāñgīr, in his Autobiography, speaks in some detail of gold and silver coins, the striking of which he ordered in the first year of his reign (*Tūzuk*, 5; R. and B., 10-12). But the Emperor does not mention the quantities minted, nor does Hawkins specify in his list all the coins which bore the stamp of Jahāñgīr. We are, therefore, unable to make any use of the entry in the Emperor's Diary; and a possible way of reconciling Hawkins' list with De Laët's is lost to us.

Speaking generally, one may say that Hawkins' list has all the appearance of being a careful copy of an authentic document. As regards De Laët, we agree with most of the strictures passed on him and on the editor of the English Translation of his work by Mr. Hodivala. Apart from the points noticed above, a great fault of De Laët's seems to be a

lack of co-ordination in his work. De Laët's list is immediately followed by a reproduction of Hawkins' list (which, by the way, is not free from errors); and the least that we should have expected from De Laët is a comparison and discussion, with consequent correction and explanation. And it is still more unfortunate that even the editor has not cared to collate the results or suggest corrections.

Our final opinion is that De Laët's list is a badly copied and ill-digested memorandum of what appears to be an authentic record, the exact copy of which perhaps never actually reached De Laët. But, ill supplied with reliable information as we are, we cannot afford to ignore completely even such a defective document. Even a bad record is better than no record, for it always has a corroborative value.

Further, we have also the details of the treasure left by Akbar in two Persian histories.

Both the *Tārikh-i-Firishta* and *M. L.* give what purports to be details of Akbar's treasure.

According to the former Akbar left at his death

علاي ده کرور روپیه و هزار کرور لعل خاصه که پادشاه بدست خود جدا کرده بود ده من پخته طلای غیر مسکوک و هفتاد من پخته نقره غیر مسکوک و شصت من پخته پول سیاه و پنجهزار کرور تنکه

(*Tārīkh-i-Firishta*, ed. Briggs, Bombay, 1831—32, I, p. 517).

The Nawalkishor edition (I, 272) reads exactly the same. We can translate the passage, as it stands, as follows: (Akbar left) *'alā'is* worth 10 crores of rupees, 1000 crore *la'l-i-khāṣṣa*, which the emperor had set apart with his own hand, 10 pucka maunds of uncoined gold, 70 pucka maunds of uncoined silver, 60 pucka maunds of copper, and 5000 crore *tankas*.

The *'alā'i* is probably the same as the *ashrafī*; but هزار کرور لعل خاصه is obviously corrupt, and Briggs does not translate the text which he prints (Tr., II, 281). It may be a mistake for هزار گرد لعل خاصه or هزار گرد لعل جلالی which will mean simply a thousand round *la'l-i-jalālis*,

altogether worth 18,000 rupees[1]—a paltry sum hardly worth mentioning! In any case discussion on a conjectured reading will serve no useful purpose.

All that we learn is that the gold coins in Akbar's treasury were worth about 10 crores of rupees. This is in substantial agreement with De Laët and Hawkins; but, like De Laët, the author gives no details, which would have enabled us to check and compare. And, what is more, *Firishta* has nothing to say about the silver coins, which is a serious omission. The number of copper *tankas* is preposterous—another misprint presumably. Briggs feebly translates it as one crore—at a guess, apparently.

The value of bullion will be discussed presently.

Next comes Khāfī Khān, the author of *Muntakhabu'l-Lubāb*. We have no admiration for him as a historian, nor any respect for his sense of accuracy or responsibility. Still we

[1] See *Ā'īn*, I, 25; Blochmann and Phillott, 30.

give below his account of Akbar's treasure for what it is worth. His wording is so obscure that we prefer to give his text in Persian, permitting the reader freedom of opinion in the matter of its interpretation:

بعد وفات او که عرض خزانه گرفتند ده کرور روپیه را اشرفی یازده ماشه و سیزده ماشه و چهار ده ماشه سوائے اشرفیهائے کلان که از صد تولہ تا پانصد تولہ هزاراشرفی در خزانه موجود بود و دو صد و هفتاد و دو من طلائے غیر مسکوک و سه صد و هفتاد من نقره و یک من جواهر خاصه که قیمت آن از سه کرور روپیه تجاوز نموده بود برآمد—

(*M. L.* I, 243).

Literal translation:

'After his [Akbar's] death when stock of the treasury was taken, ten crores of rupees' worth of *ashrafis* of 11, 13 and 14 *māshas* besides the large *ashrafis* weighing 100 to 500 *tolas*, 1000 of which were present in the treasury, and 272 *man* uncoined gold and 370 *man* silver, and one *man khāṣṣa* jewels, valued at over 3 crores of rupees, were found.'

It is not clear whether 10 crores is the value of all *ashrafis* or only of those weighing 11, 13 and 14 *mashas* respectively. Assuming that it applies to all (which is by no means clear), we get the total value roughly equivalent to the total value in the authorities previously discussed.

By the *ashrafis* of 11, 13 and 14 *mashas* Khāfī Khān means probably the following in the same order :

(1) The *'Adl-gutka*, the *Muhr-i-gird* (round mohur), and the *Mihrābī*. Weight, 11 *mashas*; value, nine rupees.

(2) The *Ilāhī* and the square *La'l-i-jalālī*. Weight, 12 *mashas*, $1\frac{3}{4}$ *surkhs* ; value, ten rupees.

(3) The *Aftābī* and the *Chahārgosha*. Weight of both, 1 *tola*, 2 *mashas*, $4\frac{3}{4}$ *surkhs*. Value of the former, twelve rupees ; of the latter, not given (*Ā'in*, Text, I, 25).

The weight of No. 2 can hardly be described as 13 *mashas*, as Khāfī Khān does.

Next there is the difficulty of 1000 *ashrafis* weighing from 100 to 500 *tolas*.

In the first place we know of no coins heavier than 100 *tolas*. Thus the 500 is either a myth or a misprint. Secondly, supposing it is a mistake for 5, and that the author means *ashrafis* weighing from 100 to 5 *tolas* each (which fits in with the weights given in Hawkins' list, though we must exclude the 5-*tola* ones, which are *Jahāngīrī* coins), we have the further difficulty of their number being 1000; whereas in Hawkins the total number of these coins comes to 135,000, out of which 50,000 (the number of *Jahāngīrī* coins) being deducted, we have still 85,000 left.

Again, silver and copper coins given in the De Laët-Maurique document are not given by Khāfī Khān, while gold and silver bullion in Khāfī Khān is found neither there nor in Hawkins.

But we can compare the values of bullion given by Firishta and Khāfī Khān. The following comparative table will place their estimates in vivid contrast:

| | *Tārikh-i-Firishta* | *M. L.* |
|---|---|---|
| Gold bullion | 10 pucka maunds | 272 maunds |
| Silver bullion | 70 pucka maunds | 370 maunds |
| Copper bullion | 60 pucka maunds | |

We can think of no hypothesis that has a chance of reconciling these widely divergent returns. The *man* is a variable quantity, it is true. The *Akbari* official *man* was a little over 55 lb.[1], and the *man* in Southern Indian ports was very much less. So this will not help Firishta, who lived in the Deccan. He describes his maunds as pucka, but no given relation between an ordinary and a pucka maund will reconcile the two statements. The combined value of gold and silver bullion, even if we accept the figures given in *M. L.*, does not exceed 70 lakhs, taking the *man* at 55lb. or a little over.

[1] See Moreland's "Notes on Indian Maunds" in *India Antiquary*, Vols. LX and LXI, and the results obtained there.

Although Hawkins' list refers to a time when Jahāñgīr's reign was well under way, we may look upon all the four documents so far discussed as practically a record of what Akbar bequeathed to Jahāñgīr.

The increase that we find in Hawkins may or may not signify a real increase in resources. Even if it does, the rate of progress seems not to have been kept up. For, according to Mullā ʿAbdu'l-Ḥamīd Lāhorī, Jahāñgīr spent in his reign of 22 years the greater part of what Akbar had saved up during a reign of 51 (*B. N.*, II, 713).

Akbar's legacy ought to have been Jahāñgīr's opportunity ; but it does not seem to have been utilized as such. Else the enormous resources inherited by the latter, if properly husbanded and developed in a fairly peaceful reign of a quarter century, would have placed the key to unimaginable power and possibilities in the hands of the Mughul emperor, already the richest monarch in the world. Our information about Jahāñgīr's reign in this respect is, it must be admitted, meagre. But all the signs

point to a gradual dissipation of Akbar's hard-earned wealth.

V. A. Smith states that the treasure accumulated by Akbar was much increased during the comparatively peaceful reigns of Jahāñgīr and Shāh Jahān (*J. R. A. S.*, 1915, p. 240); and this seems to be the general belief to this day. Well, as regards Jahāñgīr, we have reason to doubt the validity of such a proposition.

It will add a touch of reality to our picture if we may watch that emperor, for once, inspecting his coins. The following quotations from the Jesuit fathers are interesting: 'Zelaldinus [Jalālu'd-Dīn, *i.e.*, Akbar] is sparing and tenacious of his wealth, and thus has become the richest Oriental king for at least 200 years..... With the object of exhibiting his wealth four times every year he has sacks of minted copper money publicly piled up (I think in the palace courtyard) into a heap ten feet wide and thirty feet high. By the side of this pile sit the superintendents and tellers of the treasury. They supervise the

counting of the money, which is paid out to those who are entitled to receive it, after deduction of the profit which an ordinary banker would have made if it had been deposited with him. Each sack holds about four thousand copper coins' (Monserrate, *Commentary*, 208). We must remark that from all that we know about the greater Mughul monarchs we cannot associate such vulgar ostentation with any of them. Monserrate seems to have witnessed a periodical disbursement of cash to officers. That Akbar always or sometimes personally supervised the payments is only another proof of his frugal and careful habits with which all historians credit him.

The members of the Third Jesuit Mission, which came in 1595, relate thus the Emperor's examination of newly coined money: They saw him once 'counting a large sum of gold coins of many different values which he had ordered to mint. Behind him were some hundred and fifty plates full of them, and a good number of bags, with others that had already been examined or were still to be seen. He examines them by himself or by others and it is his chief

distraction every day, when he has retired, that is during the leisure left him after he has shown himself three times to the people ; and when the money has been counted and put in bags, he has it placed among his treasures, which are very great'. (Quoted by the editor of Monserrate's *Commentary*, p. 208, f. n., from the *Examiner*, Nov. 22, 1919, pp. 469—70).

We can now proceed to deal with the reign of Shāh Jahān. It is much to be regretted that here too the material is inadequate. The official histories are generally silent or evasive. 'Abdu'l-Ḥamīd, who winds up at the end of the twentieth regnal year, instead of giving us some useful totals of the contents of the treasury, stops short with facile but useless generalizations ; and Muḥammad Wāriṣ, who closes on the thirtieth year, has nothing to say.

Shāh Jahān was, according to Bernier, ' a great economist '. But we must remember that the expenditure had increased considerably in his reign (witness the heavy *manṣabdārī* list besides other evidence), and he had always been lavish with his gifts. Further,

that emperor has left more abiding monuments of architecture than any other king in ancient or modern times, in or outside India. According to the lists in *B. N.* (II, 714; III, f. 17*b*) Shāh Jahān must have spent something like 3 crores on palaces and gardens, mosques and mausoleums, castles and fortifications.

As for the treasure, where the authors of *B. N.* and Muḥammad Ṣāliḥ all fail us, we can only fall back upon less well-informed writers.

Khāfī Khān has the following statement about the treasure left by Shāh Jahān. His ambiguous language is placed before the reader as it is:

بیست و چهار کرور روپیه و از جنس اشرفی سوائے طلا و نقرهٔ غیر مسکوک و ظروف طلائی و نقرئی و جواهر که تخمینا تا پانزده شانزده کرور آں نیزمی شد مانده بود—

(*M. L.* I, 758).

| | |
|---|---|
| Rupees and *ashrafis* | 24 crores. |
| Gold and silver bullion, gold and silver vessels and jewels | About 15 or 16 crores. |

The above is our interpretation of the text. The reader, however, can judge for himself. The cash part is clear, and presumably represents the treasure at the capital. We can see that the cash hoard has been marking time since 1610.

As for bullion, it is difficult to extricate its value from the miscellaneous item of 15—16 crores. We shall learn in Part II[1] that Shāh Jahān possessed 5 crores' worth of jewels in XVIII R. Y. By the end of the reign the value may have mounted to 6 or 7 crores. Still we can form no idea of the bullion, since we know nothing about the quantity or value of the ' gold and silver vessels ', and it will not be safe to base our estimate of these on the figures of the Akbar-Jahāñgīr jewel treasury, which are available[2]. We can, however, assume the gold, silver and copper bullion to be worth one crore. Shāh Jahān's treasure of cash and bullion thus comes to about 25 crores.

The reader probably expected Shāh Jahān's cash treasure to be at least double that on

1. Chapter V.....
2. To be discussed in Part II.

which Jahāñgīr started his career. We agree that the peaceful and prosperous reigns of Jahāñgīr and Shāh Jahān should be reflected in the treasury returns of the latter reign. The reason for the contrary result is to be found in Shāh Jahān's munificence and the heavy state expenditure already referred to.

Bernier has the following short note on Shāh Jahān's wealth: '*Chah-Jehan*, who was a great economist, and reigned more than forty years without being involved in any great wars, never amassed six *kourours* of *roupies* ' (P. 223). It is possible to reconcile Khāfī Khān and Bernier by supposing that Shāh Jahān's cash treasure consisted of 6 crores of rupees and 18 crores' worth of *ashrafis*. But Bernier's statement is slipshod ; and we know he had no access to the official registers. It will be nearer the truth to assume that the proportion of rupees to *ashrafis* continued much the same since the time of Akbar and Jahāñgīr.

## SOURCES OF REVENUE

When the contents of the Cash treasury have been surveyed one feels a natural curiosity

about the sources from which all these accumulations were derived.

There is no doubt that in a country like India land revenue was by far the most important item in finance; but it was not by any means the only one.

Father Monserrate has the following interesting discourse on the subject:

'The King', he says, 'exacts enormous sums in tribute from the provinces of his empire, which is wonderfully rich and fertile both for cultivation and pasture, and has a great trade both in exports and imports. He also derives much revenue from the hoarded fortunes of the great nobles, which by law and custom all come to the King on their owners' death. In addition, there are the spoils of conquered kings and chieftains, whose treasure is seized, and the great levies exacted, and gifts received, from the inhabitants of newly-subdued districts in every part of his dominions. These gifts and levies are apt to be so large as to ruin outright many of his new subjects. He also

engages in trading on his own account, and thus increases his wealth to no small degree; for he eagerly exploits every possible source of profit.

Moreover, he allows no bankers or money-changers in his empire except the superintendents and tellers of the royal treasuries. This enormous banking-business brings the King great profit; for at these royal treasuries alone may gold coin be changed for silver or copper, and vice versa. The government officers are paid in gold, silver or copper according to their rank. Thus it comes about that those who are paid in one type of coin need to change some of it into another type.

Such means of increasing the revenue may be thought base, but they have two distinct advantages; for the coinage cannot possibly be debased or adulterated; and the rate of internal exchange is kept constant, since it cannot be manipulated by fraudulent money-changers. Moreover, as all the money in circulation comes eventually to the royal treasuries, there can be no scarcity of money with

consequent high prices' (*The Commentary of Father Monserrate*, 207).

But the Father's list is not exhaustive ; for presents received as a matter of custom from nobles and officers came to a considerable sum in the course of the year. And there must have been many miscellaneous heads of revenue.

Manucci, who has experience only of Aurangzeb's reign, enumerates the sources of revenue other than land as follows. The reader should not expect precision or strict accuracy from him :

' In addition to this revenue obtained from grain, *et cetera* [he means land revenue], there are other considerable receipts. One is the tribute paid by the Hindûs, as I have stated in my Second Part (II. 182). This has no fixed total, being sometimes more and sometimes less. This variation is caused by deaths, and by travellers moving from one place to another. If carrying with them a receipt for what they have paid, the latter are allowed to pass free. But if they chance to lose this paper, or it be

stolen, they are made to pay again either in the same or in another province. The officials embezzle their collections most terribly, to such an extent that the king gets more often than not less than half.

There is a second customs duty upon goods brought by Hindū merchants; it is five per cent.; and though Aurangzeb had remitted it for Mahomedans, he has not failed all the same to take two and a half per cent. [from them]. He makes those whom he had exempted pay the rents and customs duty. He also draws large sums from the bathings which the Hindūs perform at various points in the empire. There is also another source of revenue, the diamond mines in the kingdom of Gulkandah, over and above the largest and the best of the stones. Any which weigh above three-eighths of an ounce belong to the Crown. The seaports also yield him a large revenue; among them are those of Sindī, Bharoch, Sūrat, and Kambāya. Sūrat alone brings him in usually thirty *lakhs*, besides the eleven lakhs derived from the profit on new coin struck there.

In addition to all these items, he has the revenue from the whole coast of Choromandal, from Masulipatam (Machhlipatanam), from Narsāpur, and of the whole coast from Pundy (Pūndī), or from Ginzerly (Gingerli), as far as Ballasor (Bāleshwar); also from all the ports on the river Ganges. Over and above all these items, he seizes everything left by his generals, officers, and other officials at their death, in spite of having declared that he makes no claim on the goods of defunct persons. Nevertheless, under the pretext that they are his officers and are in debt to the Crown, he lays hold of everything. If they leave widows, he gives them a trifle every year and some land to furnish a subsistence. He also causes the goods of merchants to be seized if they die without heirs. Again, added to all that, he receives very considerable presents from the Hindū princes, *zamīndārs*, and their servants.

The rajahs, the generals of the army, and the commanders are made to contribute a certain sum, according to the number of Hindūs in their service. Usually this is taken as a

deduction from the pay disbursed to them. The king's sons even are not exempted, and Shāh 'Ālam, my prince, paid in my day eighty thousand rupees a year. These revenues amount to something near the same total as the revenue from grain, of which I gave the figures above '[1] (*Storia*, II, 415, 417-18).

I fully agree with the editor's remarks in the footnote. The land revenue was the chief revenue of the empire; so much so that the *Ā'īn* has no space for the miscellaneous heads of revenue. As we shall see later, sea customs were included in the official land revenue returns.

## Land Revenue

We now proceed to appraise the land revenue of the Mughul empire, taking each successive reign separately.

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1. 'The statement that the miscellaneous revenue equalled the land revenue can hardly be accepted; it must be a great exaggeration. In fact, many of the miscellaneous items, such as sea customs, collected by the *dīwāns*, were entered as *maḥāls* (heads of receipt) in the *māl* (land revenue), and not in the *sā'ir* (miscellaneous) accounts, and thus are already included in Manucci's total of £38,725,900. Most of the *sā'ir* items (fines, market dues, ferry tolls) were collected by the police—that is, by the *kotwāls* and *faujdārs*' (*Ibid.*, P. 418, f.n.1).

## *Akbar*

One may begin with Abū'l-Faẓl. In the opening passage of the 'Account of the Twelve Provinces' in *Ā'īn*, we are told that when the *Jam'-i-dahsāla* (annual revenue calculated on ten years' average) was assessed, *viz.*, in the 25th regnal year (1580-81 A.C.), the empire was divided into twelve provinces (which are named), the total revenue of which amounted to 3,62,97,55,246 *dāms* (or over 9 crores of rupees) and 12 lakhs of betel-leaves (*Ā'īn*, I, 386).

Now we know that the so-called Kabul province (one of the twelve provinces) was only nominally under the emperor at that time, and did not fall in until the death of Mīrzā Muḥammad Ḥakīm in 1585. Kashmir was annexed in the following year, while Kandahar came under Mughul sway in 1595. All these territories were included in what afterwards became the Kabul province.—Again, Sind was conquered in 1590-91, and Baluchistan followed suit five years later—both territories being placed together under Multan as 'Tatta.'

So even in 1595, while the number of provinces remained the same, *viz.*, twelve, the revenue of the empire must have increased considerably. Abū'l-Faẓl tells us in the passage already referred to that the empire in the 40th regnal year (1595-96 A.C.) comprised 105 *sarkārs* and 2,737 *qaṣbas*,[1] though he gives no revenue total for that year.

Accretion to the empire, however, continued. Berar, Khandesh, and Ahmednagar were conquered and organized into three additional provinces early in 1601, bringing the total number of provinces to fifteen.

Now *Ā'īn* was finished in the first quarter of 1598. If nothing was added to the *Ā'īn* gazetteer after that date it is obvious that there could be no mention of these three provinces in that work. But Abū'l-Faẓl not only mentions them in the passage already quoted from, but the statistics relating to the two provinces of Berar and Khandesh (called here Dāndes) are actually included in the gazetteer that follows (I, 387-596). The only possible explanation

[1] This word seems to mean here a *maḥal* or *pargana*.

is that these details were entered and some necessary alterations made here and there some years after the *Á'ín* was completed, the heading 'Account of the Twelve Provinces' being allowed to stand as if by an oversight. The figures for the Ahmadnagar province are not, however, included—which is inexplicable.

The total given by Abū'l-Faẓl refers, as we have said, to 1580-81. But his Gazetteer is brought down to 1601. Casting up the sums separately given for the various provinces in the body of the Gazetteer, I arrive at a figure close upon 13¼ crores of rupees,[1] to which is probably yet to be added the revenue of the Ahmadnagar province, which is unknown. It is to be assumed that the difference is accounted for by the addition of territory already noted.

The reader will remember that this is all land revenue. But there is one exception: The figure for the Gujarat province (included in this total) comprises also the income from thirteen ports, which amounted to 1,62,028¾

[1]. I confess the exact revenue of the Kabul province is not easy to ascertain from Abū'l-Faẓl's statistics.

*maḥmūdīs*, say, Rs. 67,500[1]. This, however, is an insignificant amount.

Next comes an authority which is second in importance, though, chronologically, it ought to have preceded the *Ā'īn*. Niẓāmu'd-Dīn Aḥmad closes his *Ṭabaqāt-i-Akbarī* (finished presumably in the 38th regnal year: 11 March, 1593—10 March, 1594) with the following remarks. After giving the length and breadth of the empire in *karohs*, he says: 'and all this land is good and cultivable. In each *karoh* several villages flourish. At present there are 3,200 towns (*qaṣbas*), each *qaṣba* having attached to it 100, 200, 500 or 1000 villages. The revenue of this country is to-day 640 crore *tanka-i-murādī*. Out of these towns 120 are large ones, which are to-day populous and prosperous' (P.U.L. MS., f. 502 *b*)[2].

The *tanka-i-murādī* means a copper coin of Sikandar Lodī's time, twenty of which went to

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[1]. Twelve *maḥmūdīs* went to five *Akbarī* rupees. The results of Mr. Hodivala's inquiries (*Historical Studies in Mughul Numismatics*, 115—30) are confirmed by a statement in Pelsaert (p. 42).

[2]. The printed edition (Nawalkishor, Lucknow) is defective.

an *Akbarī* rupee[1]. 640 crores of these *tankas* are, therefore, equal to 32 crores of rupees.

There is nothing in the context or the wording of this passage to show that this is the revenue *from all sources*, as Mr. Thomas assumes. On the contrary it seems obvious that the author is talking of nothing but land revenue. Mr. Thomas is apparently trying to reconcile Niẓāmu'd-Dīn with other authors. Even making this unwarranted assumption, Niẓāmu'd-Dīn Aḥmad's figure is considerably more than double the revenue total in *Ā'īn*. But this is not all. *Ā'īn* was finished in 1598, and includes, as we have seen, revenues of provinces annexed subsequently; so that Abū'l-Faẓl's total practically represents the land revenue for the year 1601. If the total income of the Mughul empire was 32 crores in 1593, it would be approaching 40 crores in 1601. We know that the land revenue was 13¼ crores in that year. It is incredible that income from other sources amounted to double the land revenue. Edward Thomas's plea for *Ṭabaqāt-i-Akbarī*

[1]. On this point Mr. Thomas and Prof. Hodivala (*Historical Studies in Mughal Numismatics*, 51) agree.

being an authoritative work fails rather badly in this particular instance. And of course Niẓāmu'd-Dīn means land revenue only. In either case his statement is wild and irresponsible.

Our old friend, De Laët, tells us that the annual revenue of the fifteen provinces (which he names) was, 'according to the roll of king Achabar', 17,45,00,000 rupees (*Empire of the Great Mogol*, 172). The date to which this statement refers is the death of Akbar. De Laët's statistics, as we have said before, cannot stand the search-light of modern criticism, V. A. Smith's undeserved panegyrics on *De Imperio Magni Mogolis* notwithstanding. His list of provinces is badly bungled; and, as usual with him, he gives only the grand total, refraining scrupulously from giving the details that go to make it up, as if on purpose to foil our efforts to check the accuracy of his results by reference to other authorities. V. A. Smith found it easier to quote his total than to do the sums in the *Ā'in* (*Akbar*, 379).

In comparison with Abū'l-Faẓl's statements

De Laët's have no value. We give the latter, however, for what they are worth.

We are not told by any authority for Akbar's reign how much of the total land revenue came from crown-lands (*Khāliṣa-i-sharīfa*), which went to the emperor's privy purse.

*Jahāngīr*

Hawkins' statement that the yearly income of the *Khāliṣa* lands in this reign was 50 crores of rupees (Purchas, III, 30) is wild and unworthy of an author who is generally well informed.

In Thomas Coryat's Letters we are told that the Emperor's revenues are 40 million crowns of six shillings' value, by the year (Purchas, IV, 474). At ten rupees to the pound this yields 12 crores of rupees.

But all such statements are nebulous and elusive. We are on solid ground when we come to *Bādshāhnāma*. According to that work the total land revenue of the Mughul empire at the time of Shāh Jahān's accession

was 700 crore *dāms*, which comes to 17½ crores of rupees (II, 711).

If De Laët's figure, given above, be assumed to be correct, the annual revenue of the empire seems to have remained stationary throughout Jahāñgīr's reign. Or, is it that De Laët took the figures pertaining to the end of Jahāñgīr's reign, and applied them wrongly to the beginning of it ? We must not forget that *De Imperio Magni Mogolis* was compiled in 1631. This hypothesis is supported by a statement in Mandelslo given below.

### *Shāh Jahān*

Now we come to Shah Jahan's reign. Mullā 'Abdu'l-Ḥamīd Lāhorī, in the passage cited above, where he is summing up at the end of the twentieth regnal year, goes on to tell us that the total revenue of the older provinces had gone up by 100 crore *dāms*, amounting to 800 crores ; and that the revenue of the territory conquered since Shah Jahan's accession totalled 80 crore *dāms*, bringing the aggregate to 880 crores or 22 crores of rupees. Out of this 120 crore *dāms* or 3 crores of rupees was

the income from the crown lands or *Khāliṣa*.[1] We are further told that the *Khāliṣa* income had never reached this figure before (*B.N.*, II, 711-13).

This is the revenue of 23 provinces.

Mandelslo, in a carelessly worded statement, gives 17,45,00,000 rupees as the annual revenue for this reign (*Voyages and Travels, p.* 38). It is probable that this figure and De Laët's estimate are derived from the same source; and possible that they both refer to the end of Jahāngīr's reign, as we have already hinted.

We notice that the land revenue of the Mughul empire rose steadily from the 40th year of Akbar's reign (1595-96) to the 20th year of Shah Jahān's (1647), due partly of course to conquests, but also, presumably, to stabler conditions and settled administration.

In the last decade of Shah Jahān's reign Balkh, Badakhshān and Kandahar, which here

[1]. This has been misunderstood by Edward Thomas (*Revenue Resources of the Mughul Empire in India, from A. D 1593 to A.D. 1707*, p. 29-30).

account for a revenue of 19 crore *dāms* or) nearly half a crore of rupees), were lost to the Mughuls. The total for the end of the reign must abate to that extent, to take no notice of other (internal) changes of which there remains no record.

*Aurangzeb*

Bernier (1660—65) has a list of 20 provinces, the revenue of which totals Rs. 22,59,35,500. The editor and Mr. Thomas rightly point out that a zero has been omitted by a clerical error in the revenue for Kashmir. So counting 35,00,000 in place of 3,50,000, we have to add 31,50,000 to the grand total, which will then become 22,90,85,500 rupees—roughly nearly 23 crores.

Manucci gives Rs. 38,71,94,000 (which his editor corrects to Rs. 38,72,59,000) as the land revenue for 24 provinces (*Storia*, II, 413-15).

*Ma'lūmātu'l-Āfāq* (a sober and well-informed work, written some time between the death of Aurangzeb and 1127 *A.H.*) gives the land revenue of 19 provinces (comprising 4440

*parganas*) as 9,24,17,16,082 *dāms* (=23,10,42,902 rupees and 2 *dāms*). Of this 1,72,79,81,251 *dāms* (or about 4⅓ crores) is stated to be the income of the *Khāliṣa-i-sharīfa*, the rest going to the *Jāgīrdārs* as salary.[1]

Only about ten or fifteen years separate *Storia* and *Ma'lūmātu'l-Āfāq*, and the discrepancy between their returns is monstrous, nor do the number of provinces agree.

When we see how the revenue total gradually mounted from 17½ crores (in 1627), through a period of prosperity and annexation, to 22 crores (in 1647), and stood at 23 (in 1660), and note further that as late as 1712 this last figure was only barely exceeded, the wild exaggeration of Manucci's estimate becomes apparent. It is true that Bijapur surrendered in 1686, and Golconda fell in 1687, and that the year 1691 'may be taken as marking the most distant advance of the Mogul power.'[2] Allowing for the consequent addition to the

1. *Ma'lūmātu'l-Āfāq* (P.U.L. MS.), f. 227*b*—229*a*. The two items are given, but the total does not tally. There seems to be a slight mistake in the P.U.L. MS. available to me.

2. V.A. Smith, *Oxford History of India*, 443.

imperial revenue, Manucci's return still remains fantastic.

Some of the discrepancies in the various writers are no doubt attributable to redistribution of territory.

The returns in Bernier and in *Ma'lūmātu'l-Āfāq* have every appearance of being substantially correct for the respective periods to which they refer.

We fully endorse Mr. Irvine's remarks on all these revenue statistics. 'There remains the objection', he says, 'that applies to all similar tables—those of the "Ā'īn-i-Akbarī" included—that we do not know what the figures represent: whether (1) a standard assessment (*jam'a-i-kāmil*), (2) the demand of some particular year *jam'a-i-wājib*), or (3) the actual collections (*jam'a-i-waṣūlī*)' (*Storia*, II, 413, f.n. 1).

We may wind up with a vague statement of a French traveller, who wrote in seventeen fifties, but is talking of earlier times, presumably on hearsay: 'Il a été un tems où il entroit au trésor du Grand Mogol environ

cinquante courours de roupies par an, ce qui fait douze cent cinquante millions et la levée des revenus montoit bien au delà du double de cette sonme ' (Jean Law de Lauriston, *Mémoire sur quelques affaires de l'Empire Mogol 1756-1761*, Paris, 1913).

A single-glance summary of the results reached may be attempted in a table.

## Statement of Land Revenue of the Mughul Empire

| Reign | Date | Number of *ṣūbas*, *sarkārs*, *maḥals*, etc., in the Empire. | Approximate amount in rupees. | Authorities |
|---|---|---|---|---|
| Akbar .. | 1580-81 | 12 *ṣūbas* | 9 crores (and 12 lakhs of betel-leaves) | *Ā'īn*, I, 386 |
| Do. .. | 1593-94 | 3200 *qaṣbas* (120 large ones) | 32 crores | *Ṭabaqāt-i-Akbarī* P.U.L.MS.), f.502*b* |
| Do. .. | 1601 | 14 *ṣūbas* | 13¼ crores (and 12 lakhs of betel-leaves) | *Ā'īn*, I, 387-596 (Calculated) |
| Akbar-Jahāñgīr | 1605 | | 17,45,00,000 | De Laët, 172 |
| Jahāñgīr .. | | | 12 crores | Thomas Coryat (Purchas, IV, 474) |

| Reign | Date | Number of *ṣūbas*, *sarkārs*, *maḥals*, etc., in the Empire. | Approximate amount in rupees. | Authorities |
|---|---|---|---|---|
| Jahāñgīr Shāh Jahān | 1627 | | 17½ crores | *B.N.* II, 711 |
| Shāh Jahān .. | | | 17,45,00,000 | Mandelslo, 38 |
| Do. | 1647 | 23 provinces | 22 crores (3 crores, crown lands) | *B.N.*, II, 711-13 |
| Shāh Jahān-Aurangzeb .. | 1658 | 20 provinces | 21½ crores | Calculated |
| Aurangzeb .. | 1660-65 | 20 provinces | 23 crores | Bernier |
| Do. .. | end of 17th century | 24 provinces | 38¾ crores | *Storia*, II, 413-15 |
| After Aurangzeb's death .. | | 19 provinces= 4440 *maḥals* | 23 crores 4⅓ crores, crown lands) | *Ma'lūmātu'l-Āfāq* P.U.L. MS.), f. 227*b*—229*a* |

# PART II

# JEWEL TREASURY

## INTRODUCTION :
## *PRECIOUS STONES IN GENERAL*

Wealth may have power and money may be wealth, but there is nothing essentially interesting or inspiring about a heap of gold and silver as such. A pearl or precious stone, however, is a different matter. Just as a beautiful manuscript is art wedded to knowledge, so a jewel is art wedded to wealth.

We have no respect for a man who loves gold or silver, except when it is used as a means to a moral or artistic end : we have nothing but admiration for a man who loves gems and jewels for their own sake; for love of beauty is itself beautiful.

The Jewel Treasury of the Mughuls represents a very special institution which reflects their temperament and their tastes, their wealth and their power—the spirit of the age, in fact, as interpreted by them.

The subject-matter of this Part, therefore, is fascinating beyond words.

One's interest in life must precede one's interest in history; and things must make a real impression on our minds before stories about them can signify anything. We propose, therefore, to devote this Introduction to the general nature of precious stones, the qualities which they have been believed to possess, the uses to which they have been put, and the like.

## SECTION I: FANCY

Weight for weight, precious stones have always been among the most valuable things of the world. Their use is mainly ornamental or artistic. It constitutes one of the facile paradoxes of economists that while the most essentially useful things like air and water seldom have a price in the market, the utterly useless things like rubies or diamonds command incredibly high prices. But we are not all economists or dealers in paradox.

From a wider point of view a deep and subtle interest attaches to the appearance of gem-

stones from the bowels of the earth. Whatever the mineralogists may have to say, the mysterious forces of nature, in producing a diamond or an emerald, seem to strike together by rare chance into a delicate balance. No one can deny that among the products of nature there is something noble and select and classic about precious stones. The Germans certainly need not apologize for calling a precious stone an *edel*-stein—a 'noble stone'.

The colouration of gem-stones has always made a powerful appeal to the poet. Metaphors from precious stones have constituted an ornament in the poetry of all countries since early times. Who has not heard of the 'Emerald Isle', 'sapphire seas', 'ruby lips', 'pearly teeth', 'amber hair', 'coral lips', and 'turquoise skies'; or read in Shelley of 'the emerald heaven of trees', 'the sapphire floods of interstellar air', and 'the chrysolite of sunrise'?

'The love of precious stones', says Dr. Kunz, 'is deeply implanted in the human heart, and the cause of this must be sought not only in their coloring and brilliancy but also in their

durability. All the fair colors of flowers and foliage, and even the blue of the sky and the glory of the sunset clouds, only last for a short time, and are subject to continual change, but the sheen and coloration of precious stones are the same to-day as they were thousands of years ago and will be for thousands of years to come. In a world of change, this permanence has a charm of its own that was early appreciated ! ' (G. F. Kunz, *Curious Lore of Precious Stones*, Preface, p.v.).

But this is not all. Fable and popular superstition have, from shadowy antiquity, invested these products of nature's mute alchemy with weird powers over man's destiny and his temperament. Who knows, some of the earliest intuitions of humanity may be a nearer approach to truth than a closely reasoned system of thought, which has its day and ceases to be ? For, still there are more things in heaven and earth than are dreamt of in Horatio's philosophy. All we are concerned with is the fact that from the earliest times the precious stones have filled the human observer with wonder, and sent his fancy

travelling through a strange system of affinities and symbolism.

'The magi, the wise men, the seers, the astrologers of the ages gone by,' continues the same writer, 'found much in the matter of gems that we have nearly come to forgetting. With them each gem possessed certain planetary attractions peculiar to itself, certain affinities with the various virtues, and a zodiacal concordance with the seasons of the year. Moreover, these early sages were firm believers in the influence of gems in one's nativity—that the evil in the world could be kept from contaminating a child properly protected by wearing the appropriate talismanic, natal, and zodiacal gems. Indeed, folklorists are wont to wonder whether the custom of wearing gems in jewelry did not originate in the talismanic idea instead of in the idea of mere additional adornment' (Kunz, 1).

Colour went a long way to determine the influence of gemstones on the fortunes or health of the person who wore them; and affinities between temperaments and precious stones

could possibly be traced through the colours with which the latter were associated.[1]

Primitive imagination has always revelled in a gorgeous display of gems. The Babylonian legends tell of trees on which grow precious stones (232).[2]

The reader is no doubt familiar with the description of the New Jerusalem in the vision of John (*Revelation*, xxi, 18-21).[3] Nor is that the only example of the kind, for the idea of a gem-city has always fascinated the nations of antiquity. Lucian, in his *Vera Historia*, describes one under the name of the city of the Islands of the Blessed (237). Again, the *Puranas* contain a description of the wonderful city of Dwaraka which is 'a gorgeous mass of the most brilliant gems known in India' (236). 'Hindu mythology tells of a wonderful tank formed of crystal, the work of the god Maya' (237). A wonderful 'Diamond Throne' stood near the Tree of Knowledge beneath which

1. On this subject see Kunz, 29-34.
2. This and the figures within brackets that follow are references to the pages of Kunz.
3. See also *Isaiah*, liv, 11-12.

Gautama Buddha received his supreme revelation of truth (238).

A few virtues of precious stones may be noticed here by way of curiosity. It is only a selection from a very large and miscellaneous catalogue :

Spirits lived in precious stones (27). Amulets were considered indispensable, by way of protection, for those who evoked dark spirits (39). The magician's art was powerless if an emerald was in his vicinity (77).

The opal rendered its wearer invisible (148). The serpent could not look upon an emerald without losing his sight (157-58).[1]

The true Oriental ruby announced coming misfortunes by change of colour and by growing obscurity (158-59). The red coral and the onyx had a similar ominous character (159-60). The emerald foreshowed future events (76). Again, by putting it under the tongue, one could predict future events (79).

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1. 'Blinded like serpents when they gaze.
Upon the emerald's virgin blaze'.—Moore.

A diamond worn on the breast of the high-priest showed the guilt or innocence of a person accused of any crime (71 and 278). The emerald ' revealed the truth or falsity of lover's oaths ' (78). Yet this stone was an enemy of sexual passion; for the exceptionally valuable emerald worn in a ring by King Bela of Hungary broke into three parts when he embraced his wife (Albertus Magnus) (78). A sapphire was used as a test of female virtue, the change of colour indicating unfaithfulness on the part of the wearer (105). Shakespeare considers the opal a fit emblem of inconstancy (*Twelfth Night*, II, iv).

A ruby of the King of Ceylon was ' believed to possess the virtues of an elixir of youth' (166). Diamond, emerald and sapphire were all antidotes against poison (376, 379 and 104 respectively). Diamond was said to grow dark in the presence of poison (379). The ruby, when thrown into water, caused it to boil (102).

' Sleeping-stone' induced sleep, and ' Waking-stone' induced wakefulness (Pseu-

do-Aristotle) (163-64). In Sumero-Assyrian inscriptions we have 'Stone of Love' and 'Stone of Hate', which excited these passions respectively in the hearts of their wearers. There are similarly the stones of memory and forgetfulness in the *Gesta Romanorum* (35).

Precious stones could, under certain circumstances, lose their powers, 'if handled or even gazed upon by impure persons and sinners, some of the virtues of the stones departed from them. Indeed, there were those who held that precious stones, in common with all created things, were corrupted by the sin of Adam. Therefore, in order to restore their pristine virtue it might become necessary to sanctify and consecrate them, and a kind of ritual serving this purpose has been preserved in several old treatises' (44-45). Again, 'the talismanic power of a diamond was lost if the stone were acquired by purchase; only when received as a gift could its virtues be depended on. The same belief is noted regarding the turquoise. The spirit dwelling in the stone was thought to take offence at the idea of being bought and sold, and was supposed to depart from the stone,

leaving it nothing more than a bit of senseless matter' (73).

The ancient Mexicans called blood " water of precious stones" (40). With some people ' the wearing of precious stones was believed to enrich the blood and thus to promote health and vigour, for " the blood is the life" ' (40).

Extravagant tales are told of luminous stones, of how they lit up rooms, temples and palaces. Instances are reported where rubies, diamonds and emeralds shone by their own light. ' From the Lydian river Tmolus a marvellous stone was taken which was said to change color four times a day. This surpasses the properties of the " saphire merveilleux" which changed its hue at night. Only innocent young girls could find the Lydian stone, and while they wore it they were defended from outrage' (163).

*Engraved Stones.*—So far about the plain stones. From ancient times signs, figures and letters have been engraved on stones, which imparted certain special qualities of their own to them, independently of the inherent qualities

of the latter. If these two reinforced each other the effect was stronger. Again, in order to attain special efficiency, the signs were engraved at a time when the astrological influences were favourable. Further, 'in the production of engraved stones to serve as amulets, the influence of the respective planet was made to enter the stone by casting upon the latter, during the process of engraving, reflections from a mirror, which had been exposed to the planet's rays. In addition to this, the work was executed while the planet was in the ascendant, and the design was emblematic of it. With these combined influences the gem was believed to be thoroughly impregnated with the planetary virtue' (340).—Throughout the historical and the prehistoric periods we find gnostic signs and writings, astrological symbols, sacred texts and names, names and monograms, etc., of owners, engraved on gems for various purposes.

The Babylonian and Assyrian cylinder-seals (from 4000 B.C. to 500 B.C.), Cretan seals (from 2500 B.C.), the Egyptian scarabs (funeral scarabs, or else used as gifts or as signets), Roman rings set with scarabs, Babylonian

scaraboid seals introduced from Egypt (fifth or sixth century B.C.) and seal-rings (third century B.C. to third century A.C.) can only be mentioned here (117-22).

Engraving sacred texts on stones is an old practice. The ancient Egyptians engraved 'texts from a very ancient ritual composition, called the Book of the Dead, upon certain semi-precious stones which had been cut into various symbolical forms' (225).

A few of the most remarkable examples of engraved stones are given below:

'In the Cabinet du Roi, in Paris, there was an engraved carnelian, the design showing Jupiter enthroned, with thunderbolt and sceptre, and Mars and Mercury standing on either side of the central figure. Separated from the gods of the upper air by a bow, probably representing the arch of the sky, appears the bust of Neptune, emerging from the sea. The border of the design is formed by the twelve signs of the zodiac, Virgo being of an unusual type—the virgin and a unicorn—said to have

been used only during the reign of Domitian (81-96 A.D.)' (341).

'The popularity of the carnelian as a talismanic stone among Mohammedan peoples is said to be due to the fact that the Prophet himself wore, on the little finger of his right hand, a silver ring set with a carnelian engraved for use as a seal'. Imām Ja'far declared that all the desires of any man who wore this stone would be gratified. In Persia the name of one of the twelve *Imāms* is frequently engraved on this stone (63-64).

Again, 'there is in the Imperial Academy at Moscow a turquoise two inches in diameter, inscribed with a text from the Koran in letters of gold. This turquoise was formerly worn by the Shah of Persia as an amulet, and it was valued at 5000 rubies by the jeweller from whose hands it came' (quoted from Kluge, *Edelsteinkunde*, Leipsic, 1860, p. 366) (142).

At the other extremity of the moral scale are certain jewels said to have been pawned in Paris by the ex-Sultan 'Abdu'l-Ḥamīd for 12,00,000 francs (about £47,500). The designs

on these were an offence against public decency, so that they could not be offered at a public sale (139).

*Religious Uses of Stones.*—These, as we have seen, date from the ancient Egyptians.

Every one knows of the Breastplate on the ephod of the Hebrew High-priest, the twelve stones of which symbolized the twelve months of the year. This Breastplate, it should be noted, belongs 'to the time of the return from the Babylonian Captivity and the building of the second temple' (231)[1].

Instances could be added *ad libitum*; but space prohibits.

Among the Hindus there was the *Panch-ratna*, usually consisting of gold, diamond, sapphire, ruby, and pearl (241). And then we have the *nauratna*, the nine-gem jewel, 'one of the oldest and perhaps the most interesting talismanic jewel' (242). It was designed to combine all the powerful astrological

1. The "breastplate of Aaron", if it had any actual existence, and the one 'brought by Titus to Rome after the capture of Jerusalem in 70 A.D., are in all probability entirely distinct objects' (289).

influences, and comprised diamond, ruby, cat's eye, zircon (hyacinth), pearl, coral, emerald, topaz, and sapphire.

The *Manī Mālā*, or Chain of Gems, in possession of the late Rāja Sir Surindro Mohun Tagore, of Calcutta, consisted of diamond, ruby, cat's eye, pearl, zircon, coral, emerald, topaz, sapphire, chrysoberyl, garnet, carnelian, quartz, and rock-crystal, with a *nauratna* pendant, from which a pear-shaped pearl hung.

The so-called "phenomenal" gems, which exhibit a phenomenal quality—a moving line as in the chrysoberyl cat's-eye, or the quartz cat's-eye, or a star as in star-sapphire or star-ruby—are a great favourite with the Oriental peoples, being considered to bring good fortune to the wearer (333-34).

Jade talismans are very popular at the present day in the Muslim world, specially among the Turks (246).

*Birth-stones.*—These came into use comparatively late. The fashion of wearing them is traceable to the Jews (309).

A stone corresponded to each one of the twelve months of the year, and had influence over the destiny of the person born in that month. Again, a stone belonged to each of the seasons of the year, spring, summer, autumn and winter (323). A series of stones corresponded also to the twelve zodiacal signs—"astral" or "zodiacal" stones.

'When the zodiacal signs were engraved on gems to give them special virtues and render them of greater efficacy for those born under a given sign, the Hebrew characters designating the sign (or at least the initial character) were often cut upon the gem' (332).

*Medicinal Uses.*—Only a word need be added on the medicinal uses of precious stones. These cured not only talismanically by the patient wearing them but were ground to powder, dissolved and taken internally. Considering the therapeutic properties of gems noticed by various writers, we fancy a natty little pharmacopoeia could be compiled out of the multitudinous variety of stones prescribed for the various ills and ailments.

*Diamond and Pearl.*—We may wind up these odds and ends of curious lore by the following passage, where the birth of the diamond and the creation of the pearl are poetically narrated. Considering that imagination, after all, is of the essence of life, the following is delightful reading :

' When the God of the Mines called his courtiers to bring him all known gems, he found them to be of all colors and tints, and of varying hardnesses, such as the ruby, emerald, sapphire, etc., etc. He took one of each ; he crushed them ; he compounded them, and said : " Let this be something that will combine the beauty of all ; yet it must be pure, and it must be invincible". He spoke : and lo ! the diamond was born, pure as the dew-drop and invincible in hardness ; but when its ray is resolved in the spectrum, it displays all the colors of the gems from which it was made. " Mine", said the god, " must be the gem of the universe ; for my queen I will create one that shall be the greatest gem of the sea", and for her he created the pearl ' (325-26).

*Rock-crystals.*—The use of rock-crystal for purposes of divination, which dates from ancient times, is a fascinating subject. Instances of 'scrying' are to be found as early as classical Greece and Rome. The Achaians 'used a mirror to divine diseases or to learn whether there was danger of sudden death' (177). Pausanius tells us of a sacred well with its oracle of the magic mirror, in front of the Temple of Demeter, or Ceres, at Patras, which answered questions touching diseases. In Lucian's description of the palace of the Moon-King we have a similar well with a large mirror, where one could hear and see everything passing in the world (*Ibid.*). A god of the ancient Mexicans saw in a magic mirror everything that happened in the world (178). Helenus, the Trojan soothsayer, foretold the downfall of Troy by a magic sphere of stone mentioned in the Orphic poem "Lithica" (*Ibid.*). We learn from Joseph's story (*Genesis*, xliv, 1-5) that a silver cup was used for divination among the primitive Hebrews; and a golden ball was used by 'the Magi, followers of Zoroaster', in their incantations (179). Roger Bacon made a marvellous

'glass' in which events happening at far-distant places were mirrored (182-83).

The *jām* (cup) of Jamshed, with which every student of Persian literature is familiar, and which, curiously enough, is not mentioned by Kunz, obviously belongs to this class.

It will be noticed that divination was not done by crystals alone. Besides cups or balls of gold and silver, polished spheres or cubes of stone such as beryl, surfaces of water, boys' fingernails, etc., were often used for the purpose. Dr. Dee, the famous charlatan of Queen Elizabeth's time, used several articles for scrying, a polished slab of black stone, obsidian, among the number.

Among remarkable crystals may be mentioned the following :—

(1) Crystal globe, 2¼ inches in diameter, surmounting the sceptre of the Scottish regalia (183).

(2) Dr. Dee's Crystal, of cairngorm, or 'smoky-quartz', now preserved in the British Museum (190).

(3) 'A crystal ball, one of the largest perfect spheres ever produced, has been made from rock-crystal of Madagascar. It is a very perfect sphere and of faultless material'. Diameter, $6\frac{1}{8}$ inches ; price, $20,000 (217).

(4-6) Three fine crystals in the collection of the American Museum of Natural History, New York: (*a*) Apparently perfect. Diameter, $5\frac{1}{2}$ inches. (*b*) Not entirely perfect. Diameter, $6\frac{1}{2}$ inches. (*c*) Fine crystal ball, of wonderful purity. An ideally perfect sphere on account of very precise cutting. Diameter, 4-11/16 inches (219).

(7) One of the largest and most perfect crystal balls is in the 'Grüne Gewölbe' (Dresden). Weight, 15 German pounds ; diameter, 6-2/3 inches ; price, $10,000 (in 1780). It was used for purposes of augury (223).

(8) The Currahmore Crystal. Slightly larger than an orange, with a silver ring encircling it at the middle. It cures cattle of all distempers. Supposed to have come from the Holy Land (223).

(9) 'An exceptionally fine specimen of Aztec work is a skull carved out of rock-crystal.

It weighs 475¼ ounces Troy, and measures 8¼ inches in width' (101). See illustration of this rock-crystal skull (Ancient Mexican), now in British Museum, London, on p. 100 of Kunz.

## SECTION II : FACT

We have no doubt the modern scientific instincts of the reader are scandalized by this incursion into the realm of fancy. We often forget how much of pure illusion goes to make up our real life. Besides unknown things and half-known things furnish a befitting background for knowledge, and give us a feeling of reality otherwise unattainable. Yet we will try to placate the reader by giving a brief characterization of the more important gemstones—after which we shall be qualified to deal with the jewels of the Mughul Treasury.

### Chief Characteristics of Stones

*Scale of values.*—Assuming the same size and quality, and when cut, the same perfection of form, different stones have been held in high esteem in different periods. Among the Romans and in the earlier times in India, diamond was most highly prized; while among the Persians

it was placed after pearl, ruby, emerald and chrysolite. In the middle of the sixteenth century ruby and sapphire were placed above diamond which had only $\frac{1}{8}$th value of ruby (Benvenuto Cellini); and about 1565 the order of value was: emerald, ruby (when clear), diamond (Garcias ab Horto). To-day diamond is far exceeded in price by ruby, and is often equalled by emerald (Dr. Max Bauer, *Precious Stones*, transl. L. J. Spencer, 1904, p. 103).

Some stones, like topaz, aquamarine, etc., occur often in large masses. Value in their case varies directly with weight; while in case of diamonds and rubies (where large specimens are uncommon) price increases in a higher ratio than weight (*Ibid.*, 105).

The jewels at present in general request are: Diamond, ruby, emerald, sapphire, pearl, opal, turquoise, topaz and amethyst. 'For the first five the demand is relatively steady, and varies absolutely only with the purchasing power of the world' (G.F. Herbert Smith, *Gem-stones and their Distinctive Characters*, 5). These five occupy the first rank, but 'it is im-

possible to form the gem-stones in any strict order ' (*Ibid.*).

Among the transparent colourless stones diamond 'alone possesses that marvellous "fire", oscillating with every movement from heavenly blue to glowing red, which is so highly esteemed and so much besought'. No other stone glows with such mysterious gleams (*Ibid.*, 2). Among coloured stones, the colours most admired are : ' the fiery red of ruby, the royal blue of sapphire, the verdant green of emerald, and the golden yellow of topaz'. These retain the purity of their colour even in artificial light, though certain sapphires turn purple at night (*Ibid.*, 2-3). ' Of the small group of translucent stones which pass light, but are not clear enough to be seen through, the most important is opal' (*Ibid.*, 3). The opaque variety of precious stones is represented by the turquoise. ' The claims of turquoise are maintained by the blue variety' (*Ibid.*).

## Cutting, Grinding and Polishing of Stones

Dr. Max Bauer has the following on the subject: 'Engraved precious stones are generally

known as *gems*. The device engraved upon a gem is either sunk in the stone so as to lie below its surface, in which case the gem is known as an *intaglio*; or the device is in relief so as to lie above the surface of the stone, a gem so engraved being known as a *cameo*. Intaglios are frequently used for seals or signets to produce a raised cameo-like impression; for this purpose they are commonly engraved with a crest or monogram. Cameos, on the other hand, have no application of this kind, but are used merely as ornaments. The art of engraving intaglios is known as *sculpture*, while that of producing cameos is known as *tornature*. Of the two arts, the former is the more ancient, but the antiquity of the latter is well established by the number of cameos, in the shapes of a beetle—the so-called scarabs—found in Egyptian tombs' (*Precious Stones*, 86).

*Diamond*,—The discovery that two diamonds rubbed together ground each other was made as early as 1475 (Smith, *Gem-stones*, 90). But the Indian lapidaries 'were the first to realize that diamond could be ground with its own powder' (*Ibid.*, 128), and so first per-

formed the miracle of polishing a diamond. 'In India, the ancient home of the diamond,' says Dr. Bauer, 'the art of polishing the faces of natural crystals was practised in the remotest times; when or how the device of faceting stones was discovered or introduced in this country is not known, but it was practised in the seventeenth century, at the time of Tavernier's visit (1665)' (*Precious Stones*, 238). The Indian diamond cutters contented themselves with polishing the natural facets, if the stone were perfectly clear; but if it contained flaws or specks, they covered it with numerous small facets haphazardly placed. The stone was invariably left in almost its original shape, and no effort was made to improve the symmetry(Smith, *Gem-stones*, 91). In spite of this, various forms of cutting were common in India, the most general forms being the thick-stones, table-stones, and thin-stones. The first-named form, on account of its generality in India, is often referred to as the 'Indian cut'. 'The Oriental diamond-cutter', continues Dr. Bauer, 'follows the outlines of the rough stone as closely as may be, striving to reduce the loss

of material to a minimum. The European diamond-cutter, on the contrary, aims at developing to their fullest extent the optical properties of the stone, and makes economy of material only a secondary consideration' (*Precious Stones*, 239).

Up to 1562 the only regular patterns known were the diamond-point and the diamond-table (Smith, *Gem-stones*, 91).

The *rose pattern* was introduced a century later.

At close of the seventeenth century the brilliant form of cutting was introduced, which revealed for the first time its amazing 'fire'. This form remains to this day the standard style for the shape of diamond. The perfect brilliant has 58 facets, 33 above, and 25 below, the girdle. In case of large stones, the number of facets may be increased. The largest stone cut from the Cullinan[1] has the exceptional number of 74 (*Ibid.*, 92-94).

*Coloured Stones.*—'A popular style of cutting which is much in vogue for coloured stones is

[1] See Chapter III below (table at end of Diamonds).

the step- or trap-cut, consisting of a table and a series of facets with parallel horizontal edges above and below the girdle (p. 98).

*Sapphire and Ruby.*—The front of these stones 'is usually brilliant-cut and the back step-cut, but Indian lapidaries often prefer to cover the stone with a large number of triangular facets, especially if the stone be flawed; star-stones are cut more or less steeply *en cabochon*' (p. 173).

Mr. Goodchild in the same strain, but fuller: 'The colour of a Ruby varies with the direction in which it is viewed; the richest colour is seen on looking along the principal axis of the crystal; hence, in cutting, the gem should be so fashioned that this axis is presented to the eye of the observer, the table thus being parallel to the basal face of the crystal. The gem is usually cut as a brilliant. Some few Rubies show asterism, and are cut *en cabochon*, but this is not nearly so frequently seen in Ruby as in Sapphire. More rarely step cut stones are seen, or those in which the form of the crown is that of a brilliant, while the culasse is

cut in steps. Since the dispersive power is small there is no marked play of colour, and hence there is not the same importance in giving the gem an exact form as in the case of the Diamond. Hence, too, rose cut Rubies are relatively more effective than rose cut Diamonds' (*Precious Stones*, 190-91).

'What has been said of the cutting of the Ruby', continues Mr. Goodchild, 'applies to Sapphire also. The fact that the colour is of a richer hue when viewed along the principal axis of the mineral should guide the lapidary in cutting the stone. Sapphires are particularly prone to be patchy in colour, and bad parts may have to be removed by slitting before grinding commences. Sapphires usually show a change of colour in artificial light; some few specimens change to violet, thus, and they are highly prized. Most Sapphires have their colour destroyed by heat, some very much more easily than others' (*Ibid.*, 194).

*Emerald and Aquamarine.*—'Fine varieties of Beryl are sometimes brilliant cut, the deeper coloured specimens requiring a rather

shallow form, while the paler shades must be given a good depth to ensure a fine colour effect. More often a mixed cut is used, or a pure step cut. Good stones with fine colour may be mounted *à jour*, but stones of poorer colour are often improved by being mounted with foil in a closed setting' (*Ibid.*, 236).

*Topaz.*—'Topaz, when of large size, is often cut with a large table of generally elliptical form, and with numerous triangular facets between the table and the girdle, the lower part of the stone being cut in shallow steps. The ordinary step and table forms of cutting are also used, and for the colourless crystals (*gouttes d'eau*) the brilliant cut may be used. Most Topaz is mounted in a closed setting, often with foil at the back' (*Ibid.*, 267).

### Diamond

' The diamond', says Dr. Bauer, ' although not the most valuable of precious stones, yet unquestionably exceeds all others in interest, importance and general noteworthiness..... In hardness, in the perfection of its clearness

and transparency, in its unique constants of optical refraction and dispersion, and finally in the marvellous perfection of its lustre, the diamond surpasses all other minerals. For these reasons, and despite the fact that it is not of very great rarity even in faultless specimens of fair size—nine-tenths of the yearly trade in precious stones being concerned with diamonds alone—it is very greatly valued as a gem; moreover, on account of its extreme hardness, it has several technical applications' (*Precious Stones*, 113).

'Diamond,' continues the same writer elsewhere, 'is often regarded as the type of what a perfectly clear, colourless, and transparent stone should be. It can by no means, however, be always so regarded, since cloudy and opaque diamonds are actually more common than those which are clear and transparent, while very great variety in colour is found in this mineral. A great number of diamonds are indeed perfectly colourless, and correspond strictly to the popular conception of the stone; this number is, however, only one-fourth of the total number of diamonds found; another

quarter show a very light shade of colour, while the remainder, at least one-half of the total, are more or less deeply coloured.

Perfectly colourless diamonds are, at the same time, most free from impurity' (*Ibid.*, 133).

'The colouring of diamonds is seldom intense, pale colours being much more usual than deeper shades. Diamonds which combine great depth and beauty of colour with perfect transparency, are objects of unsurpassable beauty; for, in addition to their fine colour, they possess the wonderful lustre and brilliant play of prismatic colours peculiar to the diamond, so that other finely-coloured stones, such as ruby and sapphire, are not to be compared with them. Only a few stones of this description are in existence; they are among the most highly-prized of costly gems' (p. 134).

Cleavability of diamond was known to Indian lapidaries at the time of Tavernier's visit. It was not unknown in Europe in the sixteenth century; but it was not credited at the time and was soon forgotten. As late as the early nineteenth century it was so little

known in Europe that it was practised as a secret art (Smith, *Gem-stones*, 132-33).

The value of diamond was long determined by an old rule : rate per carat to be multiplied by the square of the weight in carats ; so that if the rate was £4 a carat, a stone weighing two carats would cost £16, and one weighing three carats £36. Owing to economic changes in the modern world, however, this rule holds good no longer.

### Ruby and Sapphire

These should be treated together as they fall under the mineral species Corundum. The blue crystalline variety is the sapphire, and the red the ruby, while other colours are known as Oriental Topaz, Oriental Amethyst, Oriental Emerald, etc. (W. Goodchild, *Precious Stones*, 183). 'Oriental Topaz includes several yellow shades of Corundum, and when of fine reddish yellow colour is of about the same value as Sapphire' (*Ibid.*, p. 196). 'Oriental Amethyst, also called the Purple—or Amethyst —Sapphire, is very close in colour to the common Amethyst, but it shows a much greater range

of colour than Amethyst does, and in fact may vary from a slightly purple red to a blue with a slight tint of red in it' (*Ibid.*). 'Oriental Emerald is an emerald-green form of Corundum, and is extremely rare' (*Ibid.*).

This leaves the sapphire and the ruby to be dealt with. These two are pre-eminent among coloured gem-stones and are second only to diamond in hardness (Smith, *Gem-stones*, 172).

'The red of the Ruby', says Mr. Goodchild, 'varies a good deal, the "masculine" Ruby showing the deeper tints of carmine or blood-red (often referred to as "Pigeon's blood"-red, from a Burmese simile), while the "feminine" Ruby is paler, and more of a rose-red; in this, as in other varieties of Corundum, a transition is seen, and the feminine Ruby may pass gradually to colourless Corundum. The masculine Ruby, in its most admired shades, has a slight blue tone in the red, which thus tends to magenta. The colour is usually evenly distributed in the Ruby, but in the Sapphire it is quite usual to find much variation in depth of colour.

All shades of blue are found and of all depths. Perhaps the most characteristic colours are a smalt-blue and a corn-flower blue. Deep-coloured stones are known as Lynx- or Cat-Sapphires, and the paler ones as feminine stones or Water-Sapphires, though the latter term is more often applied to the blue Iolite (Cordierite). Pale Sapphires merge insensibly into the next colour variety, Leuco-Sapphire, which is really devoid of colour—simply colourless crystallised Corundum. It also passes into the blue-green variety, known as Oriental Aquamarine. In fact, in many crystals of Corundum a gem might be cut from one end which would be a Sapphire, while from the other end of the crystal a Leuco-Sapphire might be obtained. The yellow-green variety of the colour of Chrysolite (Olivine) is called Oriental Chrysolite. The intense green stones are Oriental Emerald; the pure amber, or honey-yellow stones are Oriental Topaz; while those of a rich brownish-red are known as Oriental Hyacinth, and the violet specimens as Oriental Amethyst' (*Ibid.*, 184).

Large rubies are far from common (Smith,

*Gem-stones,* 179). 'Ruby ranks above Diamond in point of value for good stones; while the price of a pale Ruby of one carat may only be £1, a stone of rich deep colour, weighing when cut one carat, may fetch £25 or more. Mr. Streeter states that £20,000 has been paid for a very fine Ruby of 38 9-16 carats. While Rubies up to 2,000 carats[1] have been found, most of the larger ones show considerable imperfect areas, and of large flawless Rubies very few are known compared to Diamonds of similar quality and size' (Goodchild, 191).

'The value of Sapphire of good quality, and in carat size,' continues the same writer, 'is about two-fifths that of Ruby. Moreover, since Sapphires of large size are more plentiful than in the case of the Ruby, there is not the same rapid increase with size. Small stones may be said to be very much the same in value as Diamonds, and larger stones only increase in about direct proportion to their weight' (*Ibid.*, 194).

[1] No definite specimen approaching that size is heard of in the other authorities.

## Emerald

Beryl includes Emerald, Aquamarine, and Morganite. Emerald has the bright green shade—the famous "emerald-green"; while aquamarine covers the pale-blue, bluish-green, and greenish-blue shades of beryl (Goodchild, 229).

Compared with other stones, perfect specimens of emerald are very rare, and proportionately costly. 'The disparity between the value of a perfect and of an imperfect emerald is enormous. A faultless emerald is worth as much, or nearly as much, as a ruby, and certainly more than a diamond' (Bauer, 309). And the price increases very rapidly with size, so that for a flawless stone of four carats and more almost any price could be asked. A perfect emerald of four carats, for instance, may easily fetch £1,600 to £2,000 (Smith, 193).

Beryl 'occurs from transparent to subtranslucent, but the modern gem varieties are confined to the transparent kinds. The lustre is characteristically vitreous' (Goodchild, 229).

The emerald retains its purity of colour in artificial light.

### Topaz

'Topaz occurs colourless and more frequently of a straw or amber colour, or pale green or blue; more rarely pink.—The lustre is vitreous and especially bright on the prism faces; the cleavage plane shows a pearly lustre. The mineral in the kinds used as gems is transparent, though less clear forms are also found' (Goodchild, 262). 'Topaz is not worth nearly so much now [1907] as it was at one time, largely on account of change of fashion. A fine stone of 2 carats would now only be worth about £1' (*Ibid.*, 267).

### Pearl

The pearl makes up in beauty what it lacks in durability.

'A pearl may assume any and every variety of shape from the regular to the fantastic. It may be truly spherical, egg- or pear-shaped—pear-drops or pear-eyes, as they are termed—or it may be quite irregular—the so-called

baroque or barrok pearls. The first is the most prized, but a well-shaped drop-pearl is in great demand for pendants or ear-rings. The colour is ordinarily white, or faintly tinged yellowish or bluish, and somewhat rarely, salmon-pink, reddish, or blackish grey. Perfect black pearls are valuable, but not as costly as the finest of the white' (Smith, 292).

The unit of weight is the pearl grain (=¼ carat). The rate of price depends on the square of the weight in grains. Apart from quality, the value varies with shape: spherical pearls, pearl-drops, and buttons (in descending order of desirability). But without 'orient' a pearl is valueless (Smith, 294-95).

### Abnormally Large Specimens

We have space here to talk only of the highest class of precious stones; but exceptionally large pieces even of semi-precious stones constitute phenomena in the world of things.

The appearance of the giant 'Cullinan,' which will be mentioned in its place, was an event of the first magnitude in all respects.

On a lower plane considering value, but a remarkable stone none the less, is an aquamarine crystal, largest and finest ever seen, found at Marambaya (Brazil) in 1910 : Greenish blue in colour ; measurement : length, 19 inches; diameter, 16 inches ; weight, 243 lb. Perfectly transparent : could be seen through from end to end. Price paid, £5133. For Illustration, see Smith, Pl. XXVI.

Jade is cheaper material still ; but such huge masses of this material exist as would justify their mention here :

(1) An enormous mass of New Zealand jade (Statue of a Maori Warrior on a big base), weighing 7000 lb., found in South Island in 1902. Now in the Museum of Natural History, New York. ' Largest mass of jade known, or of which we have any record' (Kunz, *Curious Lore of Precious Stones*, 254). See Illustration on Pl. facing p. 254.

(2) The largest mass of prehistoric jade (nephrite and jadeite) ' that has been taken from a European deposit is that found by the writer at Jordansmühl in Silesia, in April,

1899, and which weighed 4704 pounds.' Now in the American Museum of Natural History, New York (Kunz, 250 and f. n. 42).

(3) Sculptured jade mountain from the Summer Palace, west of Peking (Collection of T.D. Walker, of Minneapolis, Minn.). Design on it commemorates meetings of a literary club of the fourth century. Chinese characters on it (engraved directly from the autograph of the Emperor Ch'ien-lung, written by him in 1784) used by the Chinese ever since as model of elegant calligraphy. Largest mass of sculptured jade in existence. Height, 23 inches; width, 38½ inches and 18½ inches; weight, 640 pounds. See Illustration and letterpress on Pl. facing p. 244, *Ibid.*

# CHAPTER I

# JEWELLERS' WEIGHTS

# CHAPTER I

## JEWELLERS' WEIGHTS

Before we begin to talk of individual precious stones it will be convenient to give some necessary details about the way in which the weight of stones is denoted; for much important discussion will often turn on the precise weight of a stone. So our labour in gaining as much precision as is possible will not be wasted. If the reader has patience with these dry details he will be amply rewarded when we come to their practical application. We shall be as brief as is consistent with clearness and precision.

In the Mughul period there were three kinds of weights current: (1) *Jauhari*, *i.e.*, Jewellers'; (2) *Sairafi*, *i.e.*, Bankers', or Money-changers'; and (3) those used by other dealers. *Misqāl*, *Tānk*,[1] and *Ratī* (or *Surkh*) are the units in

[1]The *tānk* is the indigenous unit of weight; but the *misqāl* is foreign, being imported from Persia and Turkestan.

jewellers' weights; while *Tola*, *Māsha*, and *Ratī* (or *Surkh*) are the units in money-changers' weights. We are not concerned with No. 3; nor are we directly concerned here with the bankers' weights. These latter will, therefore, be referred to only when it is necessary to do so for distinguishing jewellers' weights from them. It should be remembered that in all that follows we are talking of jewellers' weights, unless the contrary is indicated.

Some of the weight equivalents seem to have varied from period to period; so that instead of one table of weights, corrected and verified, we shall have to give several, chronologically arranged.

*Bābur's reign.*—The following table of equivalents is taken from the *Bāburnāma*:

8 *ratīs* = 1 *māsha*.

32 *ratīs* = 4 *māshas* = 1 *tānk*.

40 *ratīs* = 5 *māshas* = 1 *misqāl*.

96 *ratīs* = 12 *māshas* = 1 *tola*. (*Bāburnāma in English*, 517).

*Akbar's reign.*—*Ā'īn-i-Akbarī* has the following:—

*Jewellers' Weights*

10 *birinjs* (grains of rice) = 1 *surkh* (or *ratī*).

24 *surkhs* = 1 *tānk*.

26 *surkhs* = 1 *misqāl*.

*Money-changers' Weights*

7½ *birinjs* = 1 *surkh* (or *ratī*).

8 *surkhs* = 1 *māsha*.

12 *māshas* = 1 *tolcha* (or *tola*). (*Ā'īn*, Text, II, 60; B. and J., III, 125).

The author of *Tārikh-i-Firishta*, in talking of Bābur's diamond,[1] gives 8 *misqāls* as its weight, without saying how many *ratis* went to the 8 *misqāls* (*Tārikh-i-Firishta*, ed. John Briggs, Bombay, 1831-32, 1, 381; Navalkishor edition, 205). Alexander Dow, who translated that work in 1768, in an endeavour

[1] See Chapter III below.

to make his translation more intelligible, omitted the 8 *misqāls* altogether, and gave 224 *ratis* instead (*History of Hindostan, London*, 1768, II, 112). John Briggs, whose translation was published in 1829, in rendering the same passage, gives both 8 *misqāls* and 224 *ratīs* in the text, without making clear that the author gives only 8 *misqāls* as the weight, and that 224 *ratis* is only added by him as an explanatory equivalent (*History of the Rise of the Mahomedan Power in India*, London, 1829, II, 46).

This simple and well-intentioned procedure of these translators has caused no end of mischief; since writers (like Ball and others) who had not the time or the inclination to consult the original, were led to suppose that they had Muḥammad Qāsim Firishta's authority for the statement that 8 *misqāls* equalled 224 *ratis* in his day. It is only fair to the author of *Tārikh-i-Firishta* to point out that he makes no such statement. A *misqāl* did not weigh 28, but 26, *ratis* in Akbar's reign—which Firishta probably knew very well.

Presumably *at the time of these translations* the *misqāl* did weigh 28 *ratīs*. We shall learn below that in the seventies of the seventeenth century a *misqāl* was just 28 *ratīs*. This explains, though it does not justify, the translators' interpolations.

*Jahāñgīr's reign.*—As there is no authoritative statement for this period, we can only depend on stray bits in *Tūzuk*.

In one place Jahāñgīr equates 19 (R. and B. give 19½) *tānks* with 17 *misqāls* and 5½ *surkhs* (*Tūzuk*, 198; R. & B., I, 399-400). Assuming that a *tānk* is 24 *ratīs*, which is the value given to it both by the *Ā'īn* and the *Bādshāhnāma* (see below), and granting that the text reading of 19 *tānks*[1] is correct, the *misqāl* works out to 26½ *ratīs*—a likely value.

This value is beautifully corroborated by another equation given a few lines lower: A

[1]. The fine MS. of the first volume of *Tūzuk* in the Punjab University Library (f. 209*b*, bottom) also has 19 *tānks*. *Iqbālnāma-i-Jahāñgīri* (p. 105) corroborates this reading of 19 *tānks*, although it carelessly gives its equivalent as 17 *misqāls* only.

pearl weighed 64 *surkhs* or 2 *misqāls* and 11 *surkhs* (*Tūzuk*, 198 ; R. and B., I, 400).

In another place the emperor makes 1½ *tānks* and 1 *surkh* = 1 *misqāl* and 15 *surkhs* (*Tūzuk*, 63 ; R. & B., I, 132). Here a *misqāl* would come to something like 22 *ratis*—which is a patent absurdity. Either the MSS. are at fault, or else the emperor was nodding. Prof. Hodivala reads 11 for 15 *surkhs*, and deduces the values 24 and 26 *ratīs* for the *tānk* and the *misqāl* respectively—which are correct enough.[1]

In the last place may be noted an entry which occurs very early in the *Tūzuk*. The weight of a *tola*, says the emperor, equals 2½ *misqāls* current in Persia and Turan (*Tūzuk*, 5 ; R. & B., I, 12). Now a *tola* is again a variable quantity, if we aim at mathematical exactitude. Considering the authorities cited by

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[1]. *Historical Studies in Mughul Numismatics*, 108-9. Bu Prof. Hodivala's amendment is not supported by *Iqbālnāma-i Jahāngīrī* (p. 31), which gives 1 *misqāl* and 15 *surkhs* just th same.

Professor Hodivala in his exhaustive treatment,[1] and omitting such mentions as are either casual or obviously unreliable, the consensus of opinion would seem to place the *tola* somewhere very close to 185 grains ; and what is more, the value of the *tola* seems to have remained fairly constant throughout the period from Akbar to Aurangzeb, notwithstanding occasional statements by various writers to the contrary. Now if a *tola* was 185 grains, a *misqāl*, according to Jahāñgīr, would come to 74 grains. Considering the value for the *misqāl* given by the imperial diarist in other places, we must say that this equation is not to be accepted with mathematical precision. Probably a rough equalization alone was attempted.

*Shāh Jahān's reign.*—Here we have something more definite. From a statement in *B. N.*, II, 391, we learn clearly that

1 *tānk* = 24 jewellers' *ratis*.

*misqāl* = 27 jewellers' *ratis*.

1. S. H. Hodivala, *Historical Studies in Mughul Numismatics*, Chapter on 'The Weight of the Mughul Tola', pp. 224-234.

*Aurangzeb's reign.*—John Fryer, who travelled in India in 1672-81, in the course of an elaborate table, gives the following equivalents :

1 *tānk* =24 jewellers' *ratis*.
1 *misqal* =28 jewellers' *ratis*.

*A New Account of East India and Persia*, London, 1909-1915, II, 127-28).

The English equivalents given by him do not seem to be reliable. I have not thought it safe to consider them in the discussion that follows.

At the end of *Ma'lūmātu'l-Āfāq* we have a list of weight equivalents, the relevant portion of which is given below :

4 *rā'īs* (mustard seeds)=1 *birinj* (grain of rice).
8 *birinjs*—1 *surkh*.
8 *surkhs* = 1 *māsha*.
12 *māshas* =1 *tolcha*.
4 *māshas* =1 *tānk*.

(P. U. L. MS., f. 232*b*).

Before entering on a discussion of these tables it will be advisable to follow them up with equivalents in English weights.

Dr. Ball, after a patient consideration of all the data available, has valued the two *ratīs* as follows :

Ordinary or money-changers' *rati* = 1·842 grains troy. Jewellers' *rati* (or the pearl *rati*, as Tavernier calls it) = 2·66 grains troy (Final appraisement). (Tavernier, I, 333 ; II, 333 and 347).

The two *ratīs* weigh, according to Abū'l-Faẓl, 7½ and 10 rice grains respectively. He further tells us that early in Akbar's reign they weighed 6 and 8 rice grains respectively, and that the former values were fixed by Akbar. This regulation made no change in the respective *ratīs*, only the *birinj* became smaller. It will be noticed that the ratio of the jewellers' to money-changers' *rati* remained constant, *viz.*, 4 : 3.

If we assume 10 *birinjs* to be = 2·66 grains, 7½ *birinjs* yield 1·995 grains, and not 1·84,

or anything near it. It is a pity that Dr. Ball did not consider this important source in arriving at his values. Nevertheless, so much patient work has gone before Dr. Ball's formulation of results that we are loth to disturb his conclusions.

It may be added that 1 English carat = 3·1682 grains troy. This is the old carat, however. The metric carat (=200·0 milligrams or 3·08 grains) was adopted by most of the more progressive countries in Europe and America in the second decade of the twentieth century (Frank Wade, *Text-Book of Precious Stones*, 289); though, strangely enough, the *Encyclopaedia Britannica*, 14th edition, article 'Diamond' (VII, 320) gives only the older value. But as the elaborate calculations of Prof. Maskelyne and Dr. Ball are based on the old carat, we will not disturb them by introducing this new factor.

It must, further, be remembered, that Tavernier calculates always by the light Florentine carat, which is exactly 4 p.c. lighter than the English carat. English carat = 205·4

milligrams. Light Florentine carat = 197·2 milligrams.

It is time now to review the tables. We see that from the beginning of Akbar's reign to well within Aurangzeb's the *tānk* seems to have remained steady at 24 *ratīs* of 2·66 grains each; while the *miṣqāl* appears to have slowly risen from 26 to 28 *ratīs* of the same value, being probably 26½ *ratīs* in Jahāñgīr's reign. This much is tolerably clear. We take no account here of the tables in *Baburnāma* and *Ma'lūmātu'l-Ifāq*, which are not covered by this generalization, and require a separate treatment. With these we are now in a position to deal.

Bābur's table of Indian weights is, at first sight, somewhat perplexing. The explanation of it, however, is not at all difficult. The only fault that the founder of the Mughul dynasty of India is guilty of is that instead of giving two mutually exclusive tables, one of jewellers', and the other of money-changers' weights, he mixes them up in a single scale of values. This procedure would be justifiable if

the *ratī*, which (in name) is common to the two systems, had been of the same value in both systems; as the grain is common to the avoirdupois, troy, and apothecaries' systems of weights, and has the same value throughout.[1] As we have seen, this is not the case. The question remains which of the two *ratis* Bābur has chosen for this composite table of weights. The answer is that he has chosen *not* the jewellers', but the money-changers' *rati*. That Bābur's *rati* weighs approximately 1·84 grs. tr. (and not 2·66 grs.) is the key to his whole scale of values.

Assuming this value of the *rati* (which is Dr. Ball's) to be true, Bābur's *tānk* = 32 × 1·84 grs. = 58·88 grs. tr. This is equivalent to just over 22 jewellers' *ratis*. So Bābur's *tānk* is slightly more than 22 jewellers' *ratis*.

Again, Bābur's *misqāl* = 40 × 1·84 grs. = 73·6 grs. troy. This works out to about 27½ jewellers' *ratis* of 2·66 grs. each.

[1]The reader will have noticed that the *birinj* is the denominator common to all the ponderary systems current in India.

Thus Bābur's *misqāl* is too large by 1½ *ratīs*, and his *tānk* too small by 2 *ratīs*.

We have no reason to think that Bābur was ill informed. We notice that his money-changers' weights are exact and accurate. He apparently took these as the base, so that the equivalents in jewellers' weights had to be modified slightly to avoid fractions. The errors in jewellers' weights are probably due to this rough and ready method of equalizing weights belonging to different systems. It is not likely that weights differed so materially between 1526 and 1556.

The table in *Ma'lūmātu'l-Āfāq* goes one better, and amalgamates *all the three scales* mentioned at the beginning of this chapter, trying to reduce them to a common denominator—as might be expected, with disastrous results. What has been said of Bābur's list is true, and more true, of the list in *Ma'lūmātu'l-Āfāq*, which is possibly copied in part from *Bāburnāma*. No comment is called for, except that it is strange that Amīnu'd-Dīn Khān should have taken the emperor Bābur as his

model and ignored the authorities of the intervening period. It will be noticed that he gives only the *tānk*, and omits the *misqāl*.

Whenever an attempt is made to express the jewellers' in the terms of money-changers' weights, mathematical accuracy is not to be expected. We have already noticed two examples. A third is furnished by the *Tūzuk*, where Jahāngīr equates a *tola* with $2\frac{1}{2}$ *misqāls* current in Persia and Tūrān (*Tūzuk*, 5; R. & B., 1, 12). Such equations are not meant to be taken mathematically.

Equivalents of the *tānk* and the *misqāl* in *Jauhari ratis* as well as in English grains may now be given in a table arranged chronologically—for each successive reign. Before doing so, however, a short note may be added about the value of the *misqāl* current in Persia and Tūrān.

Tavernier equates 6 Persian *misqāls* with 1 French oz., which is=482·312 grs. tr. (Tavernier, 1, 399 and 418). This yields 80·4 grs. for the *misqāl*. This is far in excess of the value

otherwise obtained ; though Prof. Hodivala points out that Tavernier's value is corroborated by the weight of the earlier type of the heavy muhur (*Hist. Studies in Mughal Numismatics*, 144-45). Prof. Maskelyne, however, contends that Tavernier is wrong, and that 6½ *misqāls* should equate 1 French ounce (*Nature*, Oct. 8, 1891, p. 557). This gives us 74·2 grs. for the *misqāl*—a value very close to that given by Fryer. It may be added that Tavernier, as we shall learn in Chapter III is a very careless and unreliable writer.

## TABLE SHOWING VALUES OF THE *TĀNK* AND THE *MISQĀL* IN THE VARIOUS REIGNS

| Reign | *Tānk* | | *Misqāl* | | Authorities |
|---|---|---|---|---|---|
| | Value in jewellers' *ratīs* of 2·66 grains each. | Value in grains | Value in jewellers' *ratīs* of 2·66 grains each. | Value in grains | |
| Bābur | 22 | 58·88 | 27½ | 73·6 | *B.N.E.*, 517. These values are not exact. |
| Akbar | 24 | 63·84 | 26 | 69·16 | *Ā'īn*, Text, II, 60; B. & J., III, 125. |
| Jahāngīr | 24 | 63·84 | 26<br>26½ | 69·16<br>70·49 | *Tūzuk*, 63; R. & B., I, 132. *Tūzuk*, 198; R. & B., I, 399-400. |
| Shāh Jahān | 24 | 63·84 | 27 | 71·82 | *B.N.* II, 391. |
| Aurangzeb | 24 | 63·84 | 28 | 74·48<br>80·4 | Fryer, II, 127-28. Tavernier, I, 399 and 418. |

# CHAPTER II

## GEMS AND GEM-STONES IN MUGHUL HISTORY (GENERAL).

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## GEMS AND GEM-STONES IN MUGHUL HISTORY (GENERAL)

Having cleared the ground with these more or less dry and technical details, we now address ourselves to the more interesting task of dealing with historical notices of gems and jewels, which occur in Mughul Indian history. The work is not so easy as it appears ; because while a simple notice of a single diamond or ruby can be easily assimilated or quickly disposed of, difficulties of selection and classification begin where a gift or transaction consists of several valuables, of which only the collective value is very often given.

I propose, therefore, to take up in this chapter collective notices of stones and pearls, with such miscellaneous matter as the custom of presentation, the rules of acquisition, the ways of wearing jewels, etc. ; leaving records of individual jewels and gem-stones to be dealt

with under a somewhat elaborate classification in the chapter following. Our material consists of presentations at the Mughul court recorded in the Persian histories, occasional trade notices by the factors of the E. I. Company, observations by European travellers regarding the method of acquisition of precious stones and the custom of presentation.

We may begin with Tīmūr's time, if only as background. The following passage is of general interest. Clavijo gives a glowing description of Samarqand of the time when Tīmūr's empire was at its zenith. After talking of its large population of a very cosmopolitan character and of the way in which it was accommodated, he tells us that 'the markets of Samarqand....are amply stored with merchandise imported from distant and foreign countries. From Russia and Tartary come leathers and linens, from Cathay silk stuffs that are the finest in the whole world, and of these the best are those that are plain without embroideries. Thence too is brought musk which is found in no other land but Cathay, with balas rubies and diamonds which

are more frequently to be met with in those parts than elsewhere, also pearls, lastly rhubarb with many other spiceries. The goods that are imported to Samarqand from Cathay indeed are of the richest and most precious of all those brought thither from foreign parts, for the craftsmen of Cathay are reputed to be the most skilful by far beyond those of any other nation ; and the saying is that they alone have two eyes, that the Franks indeed may have one, while the Moslems are but a blind folk. Thus the Franks and the Chinese in what they make have in the matter of eyes the advantage over the people of all other nationalities.' [1]

*Rules of Purchase and Acquisition*

Certain rules seem to have secured to the emperor the refusal of all precious stones bought or sold in the empire. Further, mining of precious stones was subject to a royalty, and there was a duty on all purchases.

'No man can buy from five Carats upwards, without his [Emperor's] leave : for he

[1] Clavijo, *Embassy to Tamerlane 1403-1406*, tr. Guy Le Strange, London, 1928, p. 288-89.

hath the refusall of all, and giveth not by a third part so much as their value.'[1]

Talking of diamonds and diamond mines, Tavernier makes the following remarks: 'Two per cent. on all purchases is paid to the King, who receives also a royalty from the merchants for permission to mine' (a duty of 2 pagodas per diem for fifty men, and 4 pagodas for a hundred) (II, 46). All 'those who sold [precious stones] were obliged to make a return [report] of all to him [the Governor], on account of the charge of 2 per cent. duty which is due to the King by those who buy.... I paid him [the Governor] the 2 per cent. for the King's dues' (II, 52).

Ovington reports that he once saw at Sūrat two large diamonds, the smaller, a 'Table-Diamond', valued at £12,000, and the larger at nearly £20,000. 'All stones of such a size,' he continues, 'are Royalties, and Sacred to the Crown; and whoever finds them, or wheresoever they are heard of, they are presently seized, and taken for the use of

[1] William Hawkins (Purchas, III, 42).

the *Mogul*. Therefore the Owner of these Noble Diamonds solemnly engaged our Secresie, and bound us to Silence, before we were permitted a sight of them.'[1]

He is corroborated by Manucci, who, while talking of the diamond mines of Golconda, says that all diamonds weighing above 3/8 oz. are the property of the Crown.[2]

All diamonds weighing above 25 mangelins (of 4 grains each)[3] dug at the mines near Vijayanagar, says Linschoten, were the property of the sovereign of that territory; and concealment of a stone was punished with death and confiscation of the stone concealed (II, 137).

The procedure followed at the Mughul Court for inspection and acquisition of precious stones and pearls is thus narrated at length by Tavernier:

'Aurangzeb.... had a short time ago established a custom very injurious to mer-

[1] Ovington, *Voyage to Suratt*, 199.

[2] *Storia*, II, 417.

[3] The mangelin was a diamond weight used in Southern India, and varied from place to place—from about 4 to over 5 troy grains (Tavernier, I, 333).

chants who come from Europe and other places to sell jewels at the Court. When they arrive, whether by sea or by land, the governors of the places where they arrive have orders to send them to the Emperor with their goods, either with their consent or by force;[1] this the governor of Surat did in the year 1665, and sent me to Delhi or Jahanābad where the Emperor was. There are in the employment of His Majesty, two Persians, and a Banian, whose duty it is to see and examine all the jewels which one wishes to sell to the Emperor. One of these two Persians is named Nawāb ʿ Ākil Khān, i.e. the prince of wit, and it is he who has charge of all the Emperor's precious stones. The other is named Mīrzā Muʿazzam, whose duty is to tax each piece. The Banian, called Nihāl Chand, has to see whether the stones are false and if they have any flaw.

These three men have obtained permission from the Emperor to see, before he does, all the foreign merchants bring to sell

[1] 'Marco Polo (ed. Yule, i.379) reports that the Great Kaan used to treat in the same way merchants visiting his dominions.'—Editor's footnote.

to him, and afterwards to present them to him, and although they have sworn to take nothing from the merchant, they do not neglect to extort all they can in order to ruin him. When they see anything beautiful from which there is reason to hope for a large profit, they try to make him sell it to them for half its value, and if he refuses to let them have it, they are malicious enough to estimate the jewels when they are before the Emperor at half their value; besides which the Emperor Aurangzeb cares little for stones, and loves gold and silver much better. On the day of the Emperor's festival, of which I shall elsewhere speak, all the princes and nobles of the court make him magnificent presents; and when they are unable to find jewels to buy, they present him with golden rupees, of which the Emperor, as I have said, makes more account than the precious stones, although precious stones constitute a more honourable present than golden coins. It is at the approach of this festival that he sends out of his treasury numerous diamonds, rubies, emeralds, and pearls, which the controller of the jewels entrusts to several merchants for sale to the

nobles, who are bound to make presents to the Emperor, and in this manner the Emperor receives both the money and his jewels together.

There is still another disadvantage for the merchant jeweller. It is that after the Emperor has seen any stones, a Prince or other noble who knows of it will never buy them, and besides, while these three valuers of the jewels are considering and examining them in their dwellings, where he is obliged to carry them, he meets several Banians who are experts, some for diamonds, others for rubies, for emeralds, and for pearls, who write down the weight, quality, perfection, and colour of each piece. And if the merchant afterwards goes to the Princes and Governors of Provinces, these people send them a memorandum of all that he carries, with the price, which they maliciously place at half the true value of the goods. These Banians are in business a thousand times worse than the Jews, and more cunning than they in all kinds of dodges and in malice when they wish for revenge.'[1]

[1] Tavernier, I, 110-11.

A few pages lower, Tavernier goes on :— 'It should be stated that if any one desires to have audience of the Emperor, they ask, before everything else, where the present is that he has to offer to him, and they examine it to see if it is worthy of being offered to His Majesty. No one ever ventures to show himself with empty hands, and it is 'an honour obtained at no little cost'.....' So true is it that those who desire to do business at the courts of the Princes, in Turkey as well as in Persia and India, should not attempt to commence anything unless they have considerable presents ready prepared, and almost always an open purse for divers officers of trust of whose services they have need' (I, 113-15).

Manucci in similar strain : 'It is a custom established throughout India that without friends and without interest nothing can be done. Even princes of the blood royal, if they want to carry out any purpose, cannot do so without paying. It is such a usual thing to give and to receive that when any eunuch or any princess asks the king for something

as a favour to some general or officer, be it an appointment or some other favour of any consequence, the king never omits to ask how much has been received.' [1]

*Presentations*

It is usually in the form of a presentation that we meet with a jewel in Mughul historical records. We are now in a position to take up mixed notices, where a number of various gems change hands together.

A word of warning before we proceed: The reader should not imagine that the valuations of precious stones, pearls or ornaments given in the Persian histories are haphazard —or only approximations. Skilful jewellers and connoisseurs were in government employ, and all valuables, purchased or accepted, were strictly graded and appraised at the time of acquisition, and their prices were carefully entered on the registers. These prices were considered when the articles were given away as present or reward. The historical notices themselves, as the reader will see, carry with them abundant evidence

[1] *Storia*, II, 344-45.

to this effect. The emperor and nobles rolled in wealth, it is true, but the administration of the treasury was rigorous, and the system of classification and valuation elaborately complete.

In making a comparative study of prices the reader will please bear in mind that the purchasing power of the rupee in the seventeenth century was at least five times what it is to-day.

At the opening of his reign Jahāñgīr sent Prince Parwīz against Rāna Amar Singh and bestowed on him, among other things, 'a rosary of pearls intermixed with rubies of great price of the value of 72,000 rupees.'[1]

'Abdu'r-Raḥīm "Khān Khānān," who was Jahāñgīr's tutor or guardian, came from Burhānpur and waited on the emperor (III R. Y.). He offered two strings of pearls and a few rubies and emeralds—total value, three lakhs of rupees.[2]

In the month of *Farwardīn*, X R. Y., the following presentations took place: On

[1] *Tūzuk*, 7; R. & B., I, 16.

[2] *Tūzuk*, 70; R. & B., I, 147.

the 8th 'a small rosary of pearls and emeralds with a ruby in the centre, which in the language of the Hindus is called *smaran*' was bestowed on Rāna Karan.[1] On the 11th out of the jewels offered by Murtaẓá Khān seven rubies, one string of pearls, and 270 other pearls were accepted by Jahāñgīr. Their value came to 1,45,000 rupees.[2] And on the 13th out of Khwāja Abū'l-Ḥasan's offerings one *qutbi* ruby, one diamond, a rosary of pearls, five rings, four large pearls and some stuffs—total value, 32,000 rupees—were accepted.[3]

On 18 *Tīr* of the same year, Khān Khānān's presents worth about one lakh of rupees were placed before Jahāñgīr. They included three rubies, 103 pearls and 100 *yāqūts*.[4]

On Tuesday, 8 *Amurdād* (same year), Khān Jahān paid his respects to Jahāñgīr. He offered four rubies, twenty pearls, one emerald and a jewelled *phūl kaṭāra*—total value 50,000 rupees.[5]

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[1] *Tūzuk*, 138; R. & B., I, 281.
[2] *Tūzuk*, 138; R. & B., I, 282.
[3] *Ibid.*
[4] *Tūzuk*, 145; R. & B., I, 295.
[5] *Tūzuk*, 145-46; R. & B., I, 296-97.

From Tatār Khān, *Bakāwul-begi*, were accepted one ruby, one *yāqūt*, a jewelled tablet, two rings and some stuffs (9 *Farwardīn*, XI R. Y.). [1]

On 2 *Mihr*, XII R. Y., Āṣaf Khān came to court and offered a rosary containing eighty pearls and two rubies, and a *pahunchī* (bracelet) set with one ruby and two pearls.[2]

On Monday, the 28th *Rabī* ʿ I, 1027, Jahāngīr bestowed on Rāja Lachhmī Narāyan a jewelled rosary and four pearls for his earrings. [3]

In *Rabiʿ* II, 1045, Shāh Jahān sent to Naẓr Muḥammad Khān 160 *yāqūts*, 250 emeralds, a female elephant with a silver howdah, besides some jewelled articles and precious stuffs of India—total value, 1,25,000 rupees. [4]

On 4 *Rabī* ʿI, 1055, Shāh Jahān went to see the show of the *arghawān* trees in the garden of the house of the late Āṣaf Khān "Khān Khānān" (in Kashmīr), which had been given to Khān Daurān Bahādur "Nuṣrat

[1] *Tūzuk*, 156; R. & B., I, 318.
[2] *Tūzuk*, 193; R. & B., I, 390.
[3] *Tūzuk*, 223; R. & B., II, 2.
[4] *B. N.*, I, ii, 104.

Jang" for residence. The said Khān Daurān offered as *peshkash* one ruby and two pearls—total price, 1,20,000 rupees.[1]

On the occasion of the Solar Weighment festival, which fell on Tuesday, 18th *Ṣafar*, 1062, Jahān Ārā Begum offered presents worth nearly one lakh of rupees. They included one large, old, peerless emerald, which had been bought for her at Sūrat, and one diamond which 'Ādil Khān had sent her as *peshkash*.[2]

A few notices of European travellers and ambassadors may now be taken up. The Mughuls had an interesting custom of distributing among courtiers at time of departure small artificial fruits made of gold and silver.

Jahāngīr, on his birthday, September 2, 1616, was in a merry mood, and asked Roe to join him in drinking. After having presented Roe with the jewelled gold cup 'hee threw about to those that stood below two

[1] *B. N.*, II, 420. *A. S.* (II, 428) gives only one lakh as value.

[2] *B. N.*, III, 60 *b*; *A. S.*, III, 136. The latter gives wrongly 18 *Muḥarram* instead of 18 *Ṣafar* as the Solar Weighment day.

chargers [*i.e.*, large dishes] of new *rupyes*, and among us two chargers of hollow almonds of gould and silver mingled; but I would not scramble as did his great men; for I saw his sonne tooke up none. Then hee gave *shashes* of gould and girdles to all the musitians and wayters and to many others. So drincking and commanding others, His Majestie and all his lords became the finest men I ever saw, of a thowsand humors. But his sonne, Asaphchan, and some two ould men, and the late king of Candahor [Mīrzā Rustam, a Persian prince, who had surrendered Qandahar to Akbar, and accepted the governorship of Multan in return] and my selfe forbare'. [1]

On the next birthday (September 1, 1617) Roe was also present. It was on this occasion that he witnessed the full ceremony of Weighment. The weighment being over, 'he ascended his throne, and had basons of nuts, almonds, fruits, spices of all sort, made in thinne silver, which he cast about, and his great men scrambled prostrate upon their bellies; which seeing I did not, hee reached

[1] Roe, 226.

one bason almost full, and powred into my cloke. His noblemen were so bold as to put in their hands, so thicke that they had left me none if I had not put a remayner up. I heard he threw gold till I came in, but found it silver so thinne, that all I had at first, being thousands of severall pieces, had not weighed sixtie *rupias*. I saved about twentie *rupias* weight, yet a good dishfull, which I keepe to shew the ostentation; for by my proportion he could not that day cast away above one hundred pound sterling.'[1]

This custom was not confined to India, but was also to be found in Persia, for Roe tells us that among the presents offered by the Persian ambassador (October 21, 1616) there were 'all sorts of Europian fruicts artificiall in dishes.'[2]

There seems to be reference to the same custom in a passage in *Humāyūn Nāma* where preparations are being made for childbirth, both the wives of Humāyūn being expectant. His mother prepared pistachios, almonds and

[1] *Ibid.*, 379.
[2] *Ibid.*, 262.

walnuts of gold and silver. [1]

Manucci has an interesting item: On occasions of birthday weighments and other festivals, which sometimes last for days, ladies of the nobility attend at the Haram, bringing valuable presents as offering. The ladies are received according to their rank, and are honoured with robes and jewels. At the time of their departure their hands are filled with *khichari*, which is 'a mixture of gold and silver coin, with all kinds of precious stones and pearls, large and small.' [2]

We have proof of a somewhat similar practice even as early as Tīmūr's time. Clavijo thus describes one of Tīmūr's feasts which he attended: 'On the day of which we are now speaking Timur had sent to us one of his lords in waiting who brought us as a gift from his Highness a great jar of wine, and the message was that he would have us drink some of this before coming to him, in order that when we should attend his presence we might be right merry. Hence thus we went

[1] *Humāyūn Nāma*, 27.

[2] *Storia*, II. 346.

to him, and he ordered us to be seated, this being after the fashion that has already been described, and thereupon beginning to drink we sat so for a long space of time. Then the viands were brought in, namely roast horse-flesh and boiled mutton, and stews cooked in diverse fashions with the rice thereto prepared in several ways as is their custom. When the feast was ended one of the lords in waiting came forward with a silver bowl in his hand full of small pieces of silver money such as is their current coin, namely Tangas, and of this money he proceeded to throw handfuls over us ambassadors as also over the other guests present, and after he had done this enough for custom, he gathered up all the rest of the coins that remained in the bowl and threw them into the skirt of the cloaks that we ambassadors were wearing, this being a gift to us. Then Timur presented us each with a robe of honour in kincob [gold brocade], when getting up in acknowledgement three times we bowed then kneeling before him as is their custom.' [1]

[1] *Embassy to Tamerlane*, 231-32.

Another of Tīmūr's banquets, which Clavijo witnessed likewise, is equally interesting:—We 'partook of the feast, which was ordered after the usual fashion. When the entertainment was over two of the lords of the court who were the intimate attendants of his Highness—their names were Sháh Melik Mirza and Núr-ad-Dín Mirza—that day were permitted to present Timur with a gift, and the several items now were brought before him. Their present was a great number of trenchers in silver, each standing on its tall feet, and on these trenchers were set comfits and cakes of sugar with raisins, almonds and pistachio nuts. Further each trencher was covered over by a piece of silk stuff. On this occasion these trenchers were laid down, nine by nine, such being the custom when any gift is offered to his Highness, for all such must be in groups of nine pieces in any sort of the thing presented. On the present occasion Timur immediately portioned what had been given him as gifts among the courtiers and lords who were present: and to us ambassadors his Highness gave award, bestowing on us

two of those trenchers each covered with its silken cloth. As we arose to depart the attendants threw over us and the folk round and about a shower of silver coin, with among the rest small thin patens of gold each with a turquoise set in the centre. With this that festival came to an end and the guests departed home.' [1]

*Some Trade Notices*

Here is a relevant item in the trade carried on by the Portuguese. A letter from the Agra factors to the East India Company, dated 20th December, 1617, runs to the following effect: 'We never heard of any other commodity the Portingalls doe bringe to Goa then jewells, ready mony and some few other provisions of wine and the lyke, except the marfeel [ivory], gold and amber which they bringe from Mozambique. Those factors which come from Goa to the court, Agra, and Brampore bringe nothinge but jewells, which they retorne imployed in indico, both of Biana and Cirkeis [Sarkhej],

[1] *Ibid.*, 243-44.

semanaes, carpetts and the lyke ' (Roe, 450, f. n. 2).

The following gives us some idea of the kind of jewels in request at the Mughul court.

Sir Thomas Roe, who is an unsympathetic witness, bears unwilling (and therefore valuable) testimony to the great demand of jewels of quality and size at the Mughul court.

He is never weary of reminding the officers of the East India Company about the best way of capturing the trade of the Mughul court. It appears that the John Company factors pursued a petty, short-sighted policy in their operations. Roe, who combined with a fervent patriotism a vivid imagination and sound common sense, tried to introduce into their commercial policy certain broad lines of reform. Naturally he is jealous of the Portuguese, and is drawing conclusions from their successful methods.

The following are the items of his advice which are relevant to our present subject.

He recommends the purchase of the following articles :—

Coral (as much as you can buy ); great pearls, and chains of pearls between 3 and 10 carats. Rubies from 3 carats upwards, he says, give the best profits, especially those of high colour and fair. Ballass rubies, fair and great, of 60 carats and upwards ; cat's-eyes (if you know the right stone) ; emeralds of the old and new rock, the greatest ; agates, a few well cut, with white faces ; and armlets, made to lock on with one joint, set with diamonds and rubies of good workmanship.

It would bring great profit and credit, as against the Portuguese, the ambassador goes on to say, if the servants of the Company could find a rich stone of the kind detailed above worth £ 20,000.

On a big deal of that kind, he tells them, you can build up a prosperous trade, and can get any conditions, ' for their covetousnes of them is unsatiable.' He exhorts them to send yearly stones to pearls to the value of £100,000 , which, he says, will bring both profit and prestige. He even suggests the

export of 'manie great olde stones' that are lying useless in the Tower (Roe, 457—58).

The following notices about gems in general occur in *E. F. I.* and *Letters Received*:

Francis Fettiplace, one of the factors, writes to the East India Company (26 November, 1616) from Agra: 'Fair pearls, ballast rubies and emeralds of extraordinary great sizes surely would vend here to the King in infinite quantities.'[1]

'The fittest and best goods to rayse a some of money,' writes William Biddulph from Aḥmadābād on February 15, 1618, 'is greate pearle, verey large emeralds of the ould rocke (new worth little), ballast rubyes and perfect coullored rubyes. The Portingalls cheife trade is in these comodityes; I have knowne them to sell ballast rubyes for 7, 8, and 10,000*l.* starling apeece, present monye.'[2]

Again a letter dated January 4, 1628 from Sūrat says: 'No endeavour has been omitted to sell the great ruby belonging to Sir

[1] *Letters Received*, IV, 243.
[2] *E. F. I. 1618-1621*, p. 21.

Thomas Roe and Mr. Leate. It has now been purchased by a rich jeweller of Ahmadabad.. [for] 15,900 rupees....He also bought three other rubies for 5,200 rupees. Little hope of the sale of the remaining jewels, as no one will give anything like the price asked, " all jewells being declined from their wonted estimacion, except extraordinary rich orient round pearles, paragon rubies, and beautifull great ballasts ; but of ordinary sorts be pleased to send no more, nor any emrauldes, though never so cheape and rare." '[1]

*The Method of Wearing Jewels*

Some information is available regarding the way in which the emperors wore their jewels. As we should expect from the abundant store and great variety of gems and ornaments in the imperial wardrobe, they were used in rotation, and were called up at regular intervals.

The following from Hawkins is interesting, albeit somewhat quaint :

' He [the Emperor] is exceeding rich in

[1] *E.F. I. 1624-1629*, pp. 195-96.

Diamants, and all other precious stones, and usually weareth every day a faire Diamant of great price, and that which he weareth this day, till his time be come about to weare it againe, he weareth not the same: that is to say, all his faire jewels are divided into a certaine quantitie or proportion, to weare every day. He also weareth a chaine of Pearle, very faire and great, and another chaine of Emeralds, and ballace Rubies. Hee hath another Jewell, that commeth round about his Turbant, full of faire Diamants and Rubies'. [1]

Manucci, writing in Aurangzeb's time, has a curious note about the names by which that emperor called the precious stones which were used on his person: 'All the stones he [the Emperor] wears have special names, almost always taken from some planet, such as the sun, the moon, or that of a star, or other similar names, such as he judges appropriate. He finds it strange to call for them by their own name, which would be to ask for stones; therefore when he wants to wear one

[1] Hawkins (Purchas, III, 42).

he orders them to bring him the "sun", the "moon," *et cetera.*' [1]

Both this passage and the one already quoted from Hawkins remind one of the following in Kunz, *Curious Lore of Precious Stones*: 'Instead of uniting the different planetary gems in a single ring, they have sometimes been set separately in a series of rings to be worn successively on the days originally named after the celestial bodies.' An example is cited there from the life of Apollonius of Tyana (I century, A. C.) on the authority of Philostratus (P. 244). 'Fashion in some parts of the Orient,' says Dr. Kunz in another place, 'dictates the use of special colors for raiment and jewels to be worn on the different days of the week' (P. 335).

We may wind up with the following: There seems to have been a healthy rivalry among princes and nobles in the matter of buildings erected by each of them. 'Everyone,' says Francisco Pelsaert (p. 56), 'tries, as far as possible, to erect a new building of his

[1] *Storia*, II, 342.

own, and establish his own reputation alongside that of his ancestors.'[1]

There must have been a similar rivalry as regards their private collections of art, both of natural products like pearls and precious stones, and of finished articles of vertu like jewellery, choice bits of furniture, pictures, manuscripts and the rest.

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[1] The subject will bear a fuller quotation. Pelsaert speaks of 'the noble buildings—gardens, tombs, or palaces,—which, in and near every city, one cannot contemplate without pity or distress because of their ruined state.' These costly buildings, he continues, are kept in repair,' only so long as the owners live and have the means. Once the builder is dead, no one will care for the buildings; the son will neglect his father's work, the mother her son's, brothers and friends will take no care for each other's buildings, everyone tries, as far as possible, to erect a new building of his own, and establish his own reputation alongside that of his ancestors. Consequently, it may be said that if all these buildings and erections were attended to and repaired for a century, the lands of every city, and even village, would be adorned with monuments; but as a matter of fact the roads leading to the cities are strewn with fallen columns of stone.'

This shows incidentally what a large number of architectural monuments erected by the nobility (in whose temperament ambition vied with art) must have crumbled to dust through sheer neglect, so that history knows nothing of them to-day.

The Mughul period was a great building era. Only the sturdier edifices have survived; and are a wonder at this distance of time. But during the period when buildings sprang up all round, fresh and muscular and beautiful, they must have presented a grand and inspiring sight.

# CHAPTER III

## PRECIOUS STONES AND PEARLS IN MUGHUL HISTORY (SPECIAL)

## CHAPTER III

## PRECIOUS STONES AND PEARLS IN MUGHUL HISTORY (SPECIAL)

We may begin with some general observations made by European travellers.

The question of discrimination and valuation of precious stones—diamond, ruby, emerald—and pearls is dealt with in rather an elaborate manner by Linschoten (Chapters 88-91 : II, 145-58). Space does not allow of our incorporation of those discussions here. The reader desirous of such information is consequently referred to the chapters cited.

'As regards the water of the stones, it is to be remarked that instead of, as in Europe, employing daylight for the examination of stones in the rough (*brutes*), and so carefully judging their water and any flaws which they may contain, the Indians do this at night; and they place in a hole which they excavate in a wall, one foot square, a lamp with a large

wick, by the light of which they judge of the water and the cleanness of the stone, as they hold it between their fingers. The water which they term "celestial" [*āb-i- āsmāni*] is the worst of all, and it is impossible to ascertain whether it is present while the stone is in the rough. But though it may not be apparent on the mill, the never-failing test for correctly ascertaining the water is afforded by taking the stone under a leafy tree, and in the green shadow one can easily detect if it is blue.' [1]

'Rough, Brute, or Uncut Stones,' says Fryer, 'are in value half the Price of Cut, or Polished Stones.' [2]

## SECTION I: DIAMONDS

Linschoten speaks of the Old Rock in the Deccan, whence come the best and the costliest diamonds. Diamond grinders, jewellers and Indians, he adds, can easily tell these from the rest. 'In this Roca Velha, there are Diamonds founde that are called Nayfes

[1] Tavernier, II, 58-59.

[2] Fryer, II, 143.

ready cut, which are naturall [1], and are more esteemed then the rest, specially by the Indians themselves' (II, 137). Again, at Tandjong Pura, the old capital of Matan on the west coast of Borneo, there is likewise an old rock, 'where many Diamonds are found, that are excellent: they are small, but verie good, and heavie, which is good for the seller, but not for the buyer' (*Ibid.*, 137-38).

So Ovington: 'Diamonds take their Estimate from their Magnitude, Splendour, Figure, and Water; for some Persons value a Diamond of such a Water much more than of another; and some are pleas'd with such a sort of Cut, beyond any else. Thus a fair Rose-Diamond of Black Water and Diamond Cut was of general Esteem with some *Europeans* at *Suratt*, whilst a White Water gain'd a Repute with the *Dutch*, and Table-Diamonds were with them of best Esteem. The *Moors* exalt the Rate of such a Diamond, whose Surface is cut in very minute Figures, much less than what the *Europeans* affect, though

[1] Orig. Dutch: 'which in such manner are procreated by nature.'

in all things else the Diamond was equally good and valuable.' [1]

It is now time to look through the Persian histories of Mughul India. The various reigns can be taken up in chronological order.

*Akbar*

Abū'l-Faẓl's quotation for diamonds, which is apparently suggested as a standard, is one lakh of rupees for a stone of 136 *ratīs*[2]—a much lower price, as the reader will notice, than those recorded for later reigns. We are not told how prices were calculated; whether the well-known rule of the square of the number of weight units multiplied by the rate per unit being equal to the price was accepted. Nor can any such rule be deduced from the run of prices, the details of which are available.

For the rest, we will not anticipate here what Abū'l-Faẓl has to say about the classification of precious stones and pearls in the

[1] Ovington, *Voyage to Suratt*, 200-1.

[2] *Ā'īn*, I, 12. Both the B. I. and Nawalkishor editions have 5½ *tānks* 4 *surkhs*. Blochmann (p. 16) has 5¼ *tānks* instead of 5½ *tānks*, and in a footnote amends it to 4½ *tānks*. I ignore the translator.

Imperial Treasury, which falls more properly under Administration of the Jewel Treasury, and will be given at length in Chapter V.

Prince Dāniyāl sent as present to Emperor Akbar a diamond weighing 27 *surkhs* and a ruby weighing 4 *misqāls* or 104 *ratīs* (XLVII R. Y.).[1]

Prince Salīm waited on his father on Thursday, 4 *Ażar*, XLIX R. Y. to beg forgiveness for his misdeeds, and offered one diamond worth one lakh of rupees, 209 mohurs of 100 tolas, 200 of 50 tolas, 4 of 25 tolas and 3 of 20 tolas each as *naẓr*, and 200 elephants as *peshkash*.[2]

It may be noted that the diamond "Akbar Shah" or "Jahangir Shah" (in Table of Famous Diamonds below) ought to come in here; but no diamond is mentioned in the

[1] *A. N.*, III, 816; Tr., III, 1224. *Iqbāl Nāma-i-Jahāngīrī* (Nawalkishor edition, p. 490) gives the weight of the ruby as 4 *misqāls* and 5 *surkhs*, *i.e.*, 109 *ratīs*. Beveridge's statement that the *Iqbāl Nāma* gives the weight of the diamond as 4 *misqāls* and 5 *surkhs* (p. 1224, f. n.) is not supported by the Nawalkishor text.

[2] *A. N.*, III, 832; Tr., III, 1247. The numbers of these *ashrafis* given in Muḥammad Hādī's Preface to *Tūzuk* are all wrong (Preface, 15).

Persian histories which could be identified with it.

### *Jahāñgīr*

For Jahāñgīr's reign the following bits of information are available :

The emperor, while relating (at the end of the 10th regnal year) the acquisition of the Khokhara diamond mines (in the Bihar and Patna province) informs us that a large diamond worth Rs. 50,000 had lately been brought from there.[1]

On Thursday, the 1st of *Urdibihisht*, XII R. Y., a diamond sent by Muqarrab Khān was placed before Jahāñgīr. It weighed 23 *ratis*. The jewellers placed the value at Rs. 30,000. The Emperor liked it immensely, and ordered it to be set in a ring.[2]

Here is a story which has an interest even apart from the diamond bracelet which makes it relevant in this place : ' On the 7th [*Urdibihisht*, XII R. Y.], as the huntsmen

[1] *Tūzuk*, 155 ; R. & B., I, 316.

[2] *Tūzuk*, 185 ; R. & B., I, 375.

had marked down four tigers, when two watches and three gharis had passed I went out to hunt them with my ladies. When the tigers came in sight Nūr-Jahān Begam submitted that if I would order her she herself would kill the tigers with her gun. I said, "Let it be so." She shot two tigers with one shot each and knocked over the two others with four shots. In the twinkling of an eye she deprived of life the bodies of these four tigers. Until now such shooting was never seen, that from the top of an elephant and inside of a howdah (*'amāri*) six shots should be made and not one miss, so that the four beasts found no opportunity to spring or move. As a reward for this good shooting I gave her a pair of bracelets (*pahunchi*) of diamonds worth 100,000 rupees and scattered 1,000 ashrafis (over her).' [1]

Ibrāhīm Khān "Fatḥ-jang," when governor of Bihar, sent to court nine diamonds, which were laid before Jahāngīr on the 15th of *Tīr*, XII R.Y. (1026 *A.H.*=1617 *A.C.*). One of these weighed 14½ *tānks* or 348 *ratis*, and was

[1] *Tūzuk*, 186; R. & B., I, 375.

valued at Rs. 100,000.[1] This would be the largest diamond in Mughul history, and the price ridiculously low, if it was a cut stone. But we are told in the annals of the next year that 'some of the diamonds that Ibrāhīm Fatḥ-jang had sent to Court after the taking of the mine had been given to the Government lapidaries to cut.' Bahrām, son of Jahāngīr Qulī Khān (governor of Bihar), happening at this time to pass through Agra to join the royal court (in Gujarāt), Khwāja Jahān, governor of Agra, sent along with him some of the diamonds that were ready. 'One of them,' continues the royal diarist, 'is of a violet colour [*banafsha*], and cannot be outwardly distinguished from a sapphire. Up to this time I had not seen a diamond of this colour. It weighed several *surkh* [according to another manuscript "thirty *surkh*"], and jewellers estimated its value at Rs. 3,000, and represented that if it had been white (*safid*) and had had perfect marks, it would have been worth Rs. 20,000.'[2]

[1] *Tūzuk*, 188; R. & B., I, 379.

[2] *Tūzuk*, 244-45; R. & B., II, 38.

Whether the large diamond was or was not among the stones sent by the Governor of Agra on this date (and possibly it was not, since it is not specifically mentioned here), it is reasonable to assume that the large diamond which weighed 348 *ratis* in the rough, was among the stones entrusted to the lapidaries. We meet with no mention of this gemstone in later history; presumably it was so reduced in the cutting that it deserved none.

Again, in the 12th regnal year, Jahāngīr received from Ibrāhīm ʿĀdil Shāh II, King of Bījāpur, the so-called "chamkora" diamond,[1] weighing 30 *ratis*, valued at Rs. 40,000, and another diamond (weight, 24 *ratis*; price, Rs. 30,000) from Qutbu'l-mulk of Golconda.[2] Judging from the prices these two

[1] 'The name of Chamkoṛa is derived from this, that there is in the Deccan a plant called *sāg-i-chamkoṛa*. At the time when Murtaẓā Niẓāmu-l-mulk conquered Berar he had gone one day with his ladies round to look at the garden, when one of the women found the diamond in a chamkora vegetable, and took it to Niẓāmu-l-mulk. From that day it became known as the Chamkoṛa diamond, and came into the possession of the present Ibrāhim 'Ādil khān during the interregnum (*fatarāt*) of Ahmadnagar' (*Tūzuk, ibid.*).

*Tūzuk*, 198; R. & B., I, 400.

diamonds must have been of a very high quality.

Early in the 13th regnal year (1027 *A. H.* = 1618 *A.C.*) a diamond ring was presented to Prince Khurram 'as part of the offering of Qutbu'l-mulk. It was of the value of 1,000 muhars,' says Jahāñgīr, 'and on it there appeared three letters of equal size and of good form, such that they made the word Lillahi (for God). This diamond had been sent, as it was reckoned one of the marvels of the world. In fact, veins and scratches are flaws in precious stones, but it was generally thought that the marks on this one were fabricated.[1] Moreover, the diamond did not come from any celebrated mine. As my son,

[1] So the translator. The text has:

لیکن بظاهر عام فریب بود

which means: but apparently it was such as to mislead the common people (into thinking that the marks were miraculous writing). One is reminded of the so-called 'natural gems,' *i.e.*, gems with 'natural pictures' or figures of Jesus, Mary, etc., and of staurolite crystals or fairy-stones showing a representation of the cross—really due to twinning of two crystals. See Kunz, pp. 266-67 and 270-71. Graphic granite and other minerals present a somewhat similar phenomenon.

Shah Jahan, wished that it should be sent to my brother, Shah ' Abbas, as a souvenir of the conquest of the Deccan it was sent to the Shah along with other gifts.' [1]

The following is a unique offering even in Mughul Indian annals: Panjū, a *zamīndār* of Khandesh, hard pressed by the royal forces under Amrulla, the son of ' Abdu'r Raḥīm " Khan Khanan," saw his safety in gracefully presenting to the Emperor the diamond mine which was in his possession. A *dārogha* was at once appointed to manage the mine. ' The diamonds of that place,' the Emperor assures us, ' are superior in kind and beauty to all other kinds of diamonds, and much esteemed by jewellers. They are of good shape, and larger, and superior.'[2]

On the New Year's Feast of the 14th regnal year (4, *Rabī* ' II, 1028 *A.H.* =10 March 1619 *A. C.*) Shah Jahan offered to his royal father a diamond worth Rs. 18,000.[3]

[1] *Tūzuk*, 229; R. & B,, II, 8-9.

[2] *Tūzuk*, 236; R. & B., II, 21-22.

[3] *Tūzuk*, 265; R. & B., II, 78.

Mahabat Khan offered to Prince Shah Jahan (XXI R. Y.) a big diamond worth 7,000 rupees. [1]

Hawkins relates a story of Jahañgīr's Jeweller, Hīranand ('Herranand'), a *banya*, who had bought a diamond of 3 *misqāls* for Rs. 100,000. On the Emperor coming to hear of it, and Hīranand being told of it in time, the latter made the best of a bad bargain, and asked the Emperor to his house, pretending that he had bought the diamond on purpose to present it to his royal master. So the Emperor had both the feast and the diamond, besides many other precious stones.[2]

*Shāh Jahān*

For Shah Jahan's reign, unfortunately, mentions of individual diamonds, which would yield some information of interest, are rare. This sounds somewhat paradoxical, considering that emperor's passionate fondness for gems. The reason, presumably, is to be found in the fact that Shah Jahan, unlike his father, wrote no memoirs, and his

1 *Tūzuk*, 418.

2 Hawkins (Purchas, III, 41-42).

tastes and preferences are not fully reflected in the histories which were written to his order.

The following entries are from the *Bādshāhnāma* :

Shā'ista Khān offered to Shāh Jahān *Zū'l-hijj*, 1055 *A.H.*) as *peshkash* a large diamond weighing 116 *ratīs*. Sixteen *ratīs* were polished away, leaving the weight of the cut stone just 100 *ratīs*. The price was fixed at one lakh.[1]

Shāh Jahān, returning from Kabul, crossed the Indus near Sarāi Khairābād on 3 *Ramaẓān*, 1057 *A.H.* Prince Dārā Shukoh, with his son, Sulaimān Shukoh, came from Lahore to receive him. Sa'dulla Khān the Prime Minister, was ordered to go out to meet the Prince. Dārā Shukoh, being presented, offered 1,000 muhurs as *nazr*, and the Emperor bestowed on him a diamond used as turban ornament (*almās-i-sarāwez*) weighing 100 *ratīs* and valued at one lakh of rupees.[2] This may

[1] *B. N.*, II, 480.

[2] *B. N.*, III, P. U. L. MS., f. 5 *a-b*.

have been the diamond mentioned in the last paragraph.

The following passage from the third volume of *Bādshāhnāma* relates Shāh Jahān's sending of a jewelled candle to Madīna. It occurs in the records of the 21st regnal year:

'Some time earlier it had reached the royal ears that a large and rare diamond had come into the possession of Quṭbu'l-mulk from the mine in his territory. Orders were issued that it should be sent to the royal court, the price of it to be credited to him in the account of the yearly tribute (*peshkash*) of two lakhs of *hūns* due from Quṭbu'l-mulk.'

Before the issue of these directions, however, Quṭbu'l-mulk had handed over the stone, which weighed uncut 180 *ratis*, to his lapidaries. Only a little cutting had been done when the imperial demand arrived. Quṭbu'l-mulk sent it half-finished as it was to the royal court. When the Emperor's diamond cutters, under his orders, had cut away some 70 *ratis* [80 *ratis*], an exceedingly rare piece weighing 100 *ratis* was left. The price was

fixed at Rs. 1,50,000, which yields an average of Rs. 1,500 per *ratī*. As from the beginning of this reign no jewel of such value had yet come into the royal jewel treasury as *peshkash*, the Emperor decided to make an offering of it at the holy sepulchre of the Great Prophet at Madīna; and selecting from among the ambergris-scented pastiles [*shamā'im-i-'ambarin*] in the royal stores, the largest weighing 700 *tolas* [say, 18½ lbs.] and priced at Rs. 10,000 (which by a lucky chance was shaped like a candle), he ordered that it should be worked in a gold lattice. The whole was to be artistically decorated, and the great diamond along with the other smaller stones was to be set in. The total cost of this unparalleled candle came to 2½ lakhs of rupees—1½ lakhs, price of the diamond, the remaining 1 lakh, the cost of jewels, gold, and ambergris.'[1] This candle was sent with cash presents through Sayyid Aḥmad Sa'īd, who left Agra on 23 *Muḥarram*, 1058 *A.H.*

[1] *B.N.*, III, P.U.L. MS., f. 11 *a*.

## THE *KOH-I-NŪR* DISPUTE: BĀBUR'S DIAMOND, MIR JUMLA'S STONE, AND THE *KOH-I-NŪR*.

The place of honour in this region belongs to what is known as the *Koh-i-Nūr* dispute. It ranges over the whole period from Bābur to Aurangzeb, on to Nādir Shāh and Queen Victoria. Three of the most famous stones are involved in this controversy, though one of them only by mistake—as will appear in the sequel.

We will begin with Bābur's celebrated diamond, and let a quotation from *Bābur-nāma* lead off :

'In Sultan Ibrāhīm's defeat the Rāja of Gūāliār Bikramājīt the Hindū had gone to hell.

Bikramājīt's children and family were in Āgra at the time of Ibrāhīm's defeat. When Humāyūn reached Āgra, they must have been planning to flee, but his postings of men (to watch the roads) prevented this and guard was kept over them. Humāyūn himself did not let them go. They made him a voluntary offering of a mass of jewels and

valuables amongst which was the famous diamond which 'Alā'ud-dīn must have brought. [1] Its reputation is that every appraiser has estimated its value at two and a half days' food for the whole world.[2] Apparently [3] it weighs 8 *misqāls*. Humāyūn offered it to me when I arrived at Āgra; I just gave it him back.'[4]

The earlier history of this stone, based on tradition and conjecture, loses itself in the mists of time. Legends, says Prof. Maskelyne, had gathered round it, and tradition had

[1] '*i.e.*, from the Deccan of which 'Alā'ud-dīn is said to have been the first Muhammadan invader.'—f. n. 5.

[2] Other texts and translations, and Abū'l-Faẓl give it a different value. 'Abdu'r-Raḥīm Khān Khānān's Persian translation, which is followed by Leyden, Erskine and King, places it at half the daily expenses of the whole world; and Abū'l-Faẓl (*A.N.*, I, 99) and Firishta (John Briggs' ed., Bombay, 1831-32, I, 381) accept it as correct. Pavet de Courteille, however, who is translating from the Turkish original, has the following rendering: 'Il est tellement estimé, qu'un connaisseur disait que son prix équivalai à la dépense d'un jour du monde entier'. (Pavet de Courteille, *Mémoires de Baber*, Paris, 1871, II, 172). But one translation gives no more information about the market value of the diamond than another. The hyperbolic way of describing it means no more than that nothing like the stone was heard of in the known world.

[3] 'Abdu'r-Raḥīm has 'probably'.

[4] *B.N.E.*, 477.

linked the legends with authentic history in the dawn of the fourteenth century. This great diamond, continues the learned professor, 'emerges in history in the first years of the fourteenth century. It was in 1300 A. D. in the hands of the Rajahs of Malwa, an ancient Rāj that had at one time spread over Hindostan, and in all the vicissitudes of a thousand years had never bent to a Muhammadan conqueror, until the generals of the Delhi Emperor Alā-ud-dīn Muhammad Shah [1] overran its rich territory, and carried away the accumulated treasure of Ujjein in the first decade of the fourteenth century.

The date of 1304 is that given by Ferishta for this conquest, and then it was that the great diamond takes its place in history. (N. Story-Maskelyne's article, 'The Koh-i-Nur—A Criticism,' in *Nature*, October 8, 1891, p. 556).

History does not record how the diamond passed from 'Alā'u'd-Dīn Khaljī to the rājas of Gwalior.

[1] 'Alā'ū'd-Dīn was not emperor at this time. Prince 'Alā'u'd-Dīn invaded Mālwa in the reign of his uncle, Jalālu'd-Dīn Khaljī (1294).

Next, we have it in *Akbarnāma* and other histories that when Humāyūn was down with an illness which was believed to be fatal, and the court physicians had despaired of the prince's life, Mīr Abū'l-Baqā, a reputed savant, said that it had come from the sages of old that where the secular wisdom of physicians failed to effect a cure, the only remedy was to sacrifice the best of things (*or* one's possessions) and then to supplicate the Almighty for recovery. Bābur declared his intention of sacrificing himself, since Humāyūn, he said, possessed nothing nobler or worthier than his father. The courtiers protested that the meaning of what had been reported from the ancients was that the best of one's worldly possessions should be offered, and suggested that the precious diamond which had come to hand in the battle against Ibrāhīm Lodī and had been bestowed on Humāyūn, should be given away as charity.[1] Bābur did not agree ; but the rest of the story

[1] *A. N.*, Text, I, 116. It is strange that Gulbadan Begam, who was an eye-witness of the scene, does not mention the stone in her account of the incident (*Humāyūn-Nāma*, Text, 21 ; Transl., 105).

does not concern us. We see that this stone was in the Imperial Treasury in 1530, and remained there.

The next link in the history of this stone is furnished by an anecdote related by Abū'l-Faẓl: Humāyūn, defeated by Sher Shāh and wandering about, passed near Mārwār, Rāja Māldev's territory. Sanka of Nagaur, one of the trusted agents of Rāja Māldev, entered his camp pretending to be a merchant, and offered to buy the great diamond. Humāyūn suspected his design, and directed that the purchaser should be made clearly to understand that such precious gems cannot be obtained by purchase: either they fall to one by the arbitrament of the flashing sword, which is an expression of the Divine Will, or else they come through the grace of mighty monarchs.[1]

Later, when Humāyūn reached Persia—a refugee, suing for help—he offered this diamond along with 250 rubies of Badakhshān to Shāh Ṭahmāsp of Persia as a return for the magnificent reception he received in the

[1] *A. N.*, I, 180. The story is also found in Major Charles Stewart, *Private Memoirs of the Moghul Emperor Humāyūn*, p. 38.

latter's dominions. Abū'l-Faẓl assures us that the value of these presents repaid the total expenditure of the reception and hospitality accorded him from beginning to end more than four times over (*A. N.*, Text, I, 217).

This was in the summer of 1544.

Further, we have it on the authority of Mr. Beveridge[1] that Khur Shāh, the ambassador of Ibrāhīm Quṭb Shāh, the King of Golconda, at the Persian Court, says in B.M. MS. Or. 53, that Humāyūn presented to Shāh Ṭahmāsp the diamond which Bābur had got from Sulṭān Ibrāhīm's treasury, and it weighed 6½ *miṣqāls*; that Shāh Ṭahmāsp did not think so much of it, and afterwards sent it to India as a present to Niẓām Shāh, the ruler of the Deccan [*i.e.*, Burhān Niẓām Shāh of Ahmadnagar] through Āqā Islām "Mihtar Jamāl" (f. 58 *b* of MS.)

1 Article, 'Bābar's Diamond: Was it the Koh-i-Nur?' in *Asiatic Quarterly Review* for January—April, 1889, pp. 370-389.

This report of the return of Bābur's diamond to South India is corroborated by *Tārīkh-i-Firishta*, which says in its account of Burhān Niẓām Shāh of Ahmadnagar that Shāh Ismā'īl [wrong for Shāh Ṭahmāsp] sent a large diamond, which had been Humāyūn's, as a present by the hands of Āqā Sulaimān (?) commonly known as Mihtar Jamāl. Despite the slips about the names, the restoration of the diamond to India in 1547, which is the year of "Mihtar Jamāl's" embassy, seems fairly established.

It is possible that when Akbar conquered and annexed Ahmadnagar in 1600 this stone passed with other valuables into the Imperial Treasury. Yet it is not likely, since if a diamond of such historic antecedents had been acquired contemporary historians would be sure to record the event; and if such a gem was in the Imperial Treasury from this date on, throughout the reigns of Jahāngīr and Shāh Jahān, it would come up for a mention among the elaborate notices of gem-stones which abound in *Tūzuk*, and in Mulla 'Abdu'l Ḥamīd's review of the contents of the jewel

treasury at the end of the twentieth regnal year (*B.N.*, II; 391).

This is all the authentic information we possess about this stone.

Before taking leave of Bābur's diamond we may state the equivalents of its weight for facility of comparison. Granting Bābur's statement to be exact, the stone weighed 8 *misqāls* of 40 *ratīs* each, or 320 ordinary *ratīs* of 1·842 grs. each. The weight in grains, according to my calculation, comes to 589·44. Prof. Maskelyne, taking the weight of the *misqāl* as the basis, arrives at 589·088 grs.; which Dr. Ball accepts. The weight in carats, as stated by them, is 186·06.

Next comes a stone which has been wrongly mixed up in this controversy—leading to no end of absolutely unnecessary confusion. Yet it is necessary to bring it in, partly to show its irrelevancy to the present dispute, partly because we are talking of all great gems, and we might as well talk of this one here as elsewhere.

Muḥammad Wāris, the author of the third volume of *Bādshāhnāma*, and the primeauthority

for the third decade of Shāh Jahān's reign, has the following :—

On the 18th of *Ṣafar*, 1066 *A.H.* [=Dec. 17, 1655 *A.C.*] Mīr Muḥammad Sa'īd Mīr Jumla "Jumlatu'l-Mulkī" "Mu'aẓẓam Khān," the newly appointed Prime Minister, offered to Shāh Jahān as *peshkash* precious jewels including a large diamond weighing 9 *tānks* or 216 *surkhs*, the price of which was fixed by the royal order at Rs. 2,16,000.[1]

This account of this stone is authentic. *B. N.* is the court history, which we know to be thoroughly reliable. It is corroborated in this particular not only by *Qarniya* and *Ma'āsiru'l-Umarā* (see last footnote) but also by *'Amal-i-Ṣāliḥ*, which is the only complete history of Shāh Jahān's reign, and *Muntakhabu'l-Lubāb*, I, 753. Further, the weight is given in all places not only in *tānks* but also in *ratis*. Every possibility of error of transcription is thus

[1] Muḥammad Wāris, *B.N.*, III, (P. U. L. MS.), f. 119*a* (where 3 *tānks* is wrongly given for 9 *tānks*). My MS. of the same (f. 289*b*) and Muḥammad Ṭāhir "'Ināyat Khān" Āshnā's *Qarniya* (my MS., III, f. 67*b*.) give correct weight. So does *Ma'āsiru'l-Umarā* (III, 535), which probably copies from these authorities.

satisfactorily eliminated, and we have no doubt in our mind that this diamond weighed neither more nor less than 216 jewellers' *ratis*, or 574·56 grains troy.

Bernier is speaking of this stone when he says that 'he [Mīr Jumla] presented *Chah-Jehan* with that celebrated diamond which has been generally deemed unparalleled in size and beauty' (Bernier, 22).

Presumably this was a cut stone; for an uncut stone weighing 216 *ratis* would hardly deserve such distinguished mention. The price given also favours this assumption.

According to Tavernier this diamond was excavated from the mine of Kollūr on the Kistna river (Tavernier, II, 58).

This stone we will call, for brevity, Mīr Jumla's diamond.

Now we proceed to examine the full account of Tavernier, which has been the main cause of the mystification and error, and has led to a bright display of dialectics on the part of a number of writers of undoubted ability and judgment.

We give the whole passage with all its

embroidery of minute and life-like detail, which throws welcome side-light on the arrangement and procedure observed in the Imperial Jewel Treasury.

'On the first day of November 1665 I went to the palace to take leave of the Emperor, but he said that he did not wish me to depart without having seen his jewels, and witnessing the splendour of his fête.

Early in the morning of the next day five or six of the Emperor's officers and others on behalf of Nawāb Ja'far Khān, announced that the Emperor wished to see me. Immediately on my arrival at the Court the two custodians of the royal jewels, of whom I have elsewhere spoken, accompanied me into the presence of His Majesty; and after I had made him the customary salutation, they conducted me into a small apartment, which is at one of the ends of the hall where the Emperor was seated on his throne, and whence he was able to see us. I found in this apartment 'Ākil Khān, chief of the jewel treasury, who, when he saw us, commanded four of the imperial eunuchs to bring the

jewels, which were carried in two large wooden trays lacquered with gold leaf, and covered with small cloths made expressly for the purpose—one of red and the other of green brocaded velvet. After these trays were uncovered, and all the pieces had been counted three times over, a list was prepared by three scribes who were present. For the Indians do everything with great circumspection and patience, and when they see any one who acts with precipitation, or becomes angry, they gaze at him without saying anything, and smile as if he were a madman.

The first piece which ‘ Ākil Khān placed in my hands was the great diamond, which is a round rose, very high at one side. At the basal margin it has a small notch and flaw inside. Its water is beautiful, and it weighs 319½ ratis, which are equal to 280 of our carats—the rati being 7-8th of our carat. When Mīr Jumla, who betrayed the King of Golkonda, his master, presented this stone to Shāhjahān, to whose side he attached himself, it was then in the rough, and weighed 900 ratis, which are equivalent to 787½ carats; and it had several flaws.

If this stone had been in Europe it would have been treated in a different manner, for some good pieces would have been taken from it, and it would have weighed more than it does, instead of which it has been all ground down. It was the Sieur Hortensio Borgio, a Venetian, who cut it, for which he was badly rewarded; for when it was cut he was reproached with having spoilt the stone, which ought to have retained a greater weight; and instead of paying him for his work, the Emperor fined him 10,000 rupees, and would have taken more if he had possessed it. If the Sieur Hortensio had understood his trade, he would have been able to take a large piece from this stone without doing injury to the Emperor's jewel, and without having had so much trouble in grinding it; but he was not a very accomplished diamond cutter.' [1]

In another place Tavernier speaks of 'the great diamond which weighed 900 carats before cutting, which Mīr Jumla presented to Aurangzeb' (II, 58). According to himself it weighed 900 *ratis*, not carats, and it was

[1] Tavernier, I, 314-16.

presented to Shāh Jahān, not to Aurangzeb. This is only to show Tavernier's gross carelessness.

Again, on Pl. II facing p. 97 of vol. II, Tavernier gives the figure of this diamond among others, and says, 'You see represented here its form after having been cut, and, as I was allowed to weigh it, I ascertained that it weighed 319½ ratis, which are equal to 279 9/16 of our carats. When in the rough it weighed, as I have elsewhere said, 907 ratis, or 793 5/8 carats. This stone is of the same form as if one cut an egg through the middle' (II, 97). Mathematical accuracy is not among Tavernier's strong points.

Further, on p. 75 (vol. II), Tavernier speaks of 'the two largest among the cut stones in the world—one of them in Asia belonging to the Great Mogul [Mīr Jumla's diamond], the other in Europe belonging to the Grand Duke of Tuscany.' 'The Great Mogul's diamond,' he continues, 'weighs 279 9/16 carats, is of perfect water, good form, and has only a small flaw which is in the edge of the basal circumference of the stone.'

Allowing for this flaw, and calculating according to the rule formulated by the author, he values the stone at 11,723,278 livres, 14 sols, and 3 liards, which the editor says is equivalent to £ 879,245—18s.—1½d. (Tavernier, II, 75).

What is Tavernier talking of? Surely not of the diamond presented by Mīr Jumla, of which we have authoritative record in *B.N.*?[1] And yet he can be talking of no other. The discrepancy between the weights given by Muḥammad Wāris and Tavernier is irreconcilable; and yet the way in which each gives parallel weights precludes the possibility of a slip of the pen or an error of transcription, and what is more, Tavernier also claims the highest credentials of not only seeing but actually weighing the diamond himself. Muḥammad Wāris undoubtedly means 216 *ratis* of 2·66 grains tr. each, and Tavernier likewise means 319½ *ratis* of exactly the same value.

I am afraid we must reject Tavernier's account with all its show of direct evidence and

[1] See p. 190 above.

circumstantial detail.

His estimate of its value (nearly 88 lakhs of rupees) is wild, and deserves no more credit than the rest of his evidence. Even if we allow for the exaggeration in weight, and for the fact that a stone would probably fetch in the open market a higher price than the value assigned it in the imperial registers, Tavernier's valuation still remains outrageously extravagant, specially when we remember that the purchasing power of money in those days was some five times what it is to-day.

And then there is the whole story of the cutting of it by Hortensio Borgio, to which the Persian histories give no countenance. We view it with grave suspicion. Manucci's account (quoted below) is of no corroborative value, since he is only copying Tavernier—and Bernier.

The apparent approximation between Bābur's 320 *ratis* and Tavernier's 319½ *ratis* has led some writers on the subject (Beveridge among them) to suppose it possible that Tavernier's Mīr Jumla diamond was really the same as Bābur's, Mīr Jumla having obtain-

ed that stone somewhere in the Deccan. The reader will see at once that this was a mistake; for Bābur's *ratī* was 1·842 grs., while Tavernier's 2·66. So the similarity of weights is only verbal.

For clearness and future reference we may state that the weight ascribed by Tavernier to this stone is 319½ jewellers' *ratīs* = 279 9/16 Tavernier's (*i.e.*, Florentine) carats = 268 19/50 English carats.

And as if Tavernier's account was not sufficiently confused and misleading we have the following from the pen of Manucci:

'Mīr Jumlah, or the newly-made Mu'azzam Khān, gave a present to Shāhjahān of a large uncut diamond which weighed three hundred and sixty carats. He added that if Qandahār produced such precious stones, his majesty might undertake the labour of going there, or could despatch some loyal vassal to take it. But to his mind, his majesty had better send some trusty person to conquer the lands where, of a verity, such stones were to be found. These were the

kingdoms of Bizapur (Bījāpur) and Golconda (Gulkandah), and the island of Ceilaō (Ceylon). Having spoken thus, he once more held forth his hand full of diamonds, already cut, of considerable size, though not so large as the first one.'[1]

'The large diamond', continues the same writer, 'was returned to him to have it cut by an expert, and for this purpose they sent to him a Venetian lapidary named Ortencio Bronzoni. I saw this diamond many a time; it was as large as a nut' (*Ibid.*, p. 238).

Another eye-witness! But an eye-witness whose weight bears no resemblance to the weight of the uncut stone, as given by the first 'eye-witness.' According to Manucci the weight of the uncut stone was 360 carats (=411 jewellers' *ratis*); while according to Tavernier it was either 787½ carats (=900 *ratis*) or 793 5/8 carats (=907 *ratis*). The weight of the cut diamond is not given by Manucci; so no comparison with the figures given in the Persian histories is possible.

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[1] *Storia*, I, 237—38.

We have no hesitation in dismissing all this talk as idle gossip.

The true weight of Mīr Jumla's diamond was 216, and that of Bābur's stone, about 221½, jewellers' *ratīs*—important land-marks in the history of jewels in those days. In view of this such high figures as 900 *ratīs* or 411 *ratīs* for the uncut stone, and 319½ *ratīs* for the cut stone can only be described as cheap sensation-mongering—quite unworthy, at least, of a professional jeweller like Tavernier.

Now we come to the stone called *Koh-i-Nūr*. When we are discussing the question of the identity of Bābur's diamond or of Mīr Jumla's diamond with *Koh-i-Nūr*, we should be careful to confine the latter designation to the stone, the history of which is sketched below. Applying that term in our discussion to Bābur's diamond (as Prof. Maskelyne does), or to Mīr Jumla's diamond (as Dr. Ball does. Tavernier, II, 343) is begging the entire question at issue.

The *Koh-i-Nūr* makes its visible entry into the world of gems in 1739. Nādir Shah

took away this diamond from the Indian treasury in the sack of Delhi in that year. The moment he saw the stone he was so struck by its brilliance that he acclaimed it as *Koh-i-Nūr*— "Mountain of Light", and the name has clung to it since. Sayyid Muḥammad Laṭīf assures us that 'there is no truth in the story told by Bosworth Smith (the Biographer of Lord Lawrence) and others, representing Nádir Sháh as having changed turbans with Muhammad Sháh and having taken the diamond along with the turban.'[1]

The same author traces the further history of the famous stone as follows: '.On the murder of Nádir Sháh.....in 1747, the diamond passed with the throne to his nephew, Ali Kuli Khán, *alias* 'Ali Sháh, who, in the words of Sir William Jones, "eager to possess the treasures of his uncle and panting for the delights of a throne," had caused his assassination. 'Ali Sháh having been blinded and deposed, the diamond came into the possession of his successor, Sháh Rukh Mirza, grandson

[1] Latif, *Lahore*, p. 378, f. n.†

of Nádir Sháh, who retired to his castle at Meshed. There he was made prisoner by Agha Muhammad, who, in vain, tortured him to induce him to surrender the invaluable diamond. Sháh Rukh, in 1751, bestowed it on Ahmad Sháh Durráni, as a reward for his services. On Ahmad Sháh's death, it was inherited by his son and successor, Tymúr Sháh, who dying in 1793, it passed, with the crown jewels, to his eldest son, Sháh Zamán. The latter was subsequently blinded and deposed by his brother, Sháh Mahmúd; but he contrived to retain the diamond in his custody until finally it came into the possession of his third brother, Sháh Shuja.'[1]

After Shāh Shujā''s accession to the throne of Kābul, Elphinstone, who visited him at Peshawar (1809), saw it in a bracelet worn by him.

Among the sons of Tīmūr, *viz.*, Shāh Zamān, Shāh Maḥmūd and Shah Shujā', there was constant fighting (in the early years of the nineteenth century), which was not con-

[1] Latif, *Lahore*, pp. 378-79.

fined to Afghanistān, but later extended to western Punjab. During these troublous times the families of Shāh Zamān and Shāh Shujā' were sent to Lahore for safety. After a series of successive engagements of an indecisive character the fighting became more general, and Shāh Shujā' was taken prisoner not by Shāh Maḥmūd, but by Jahāndād Khān, governor of Attock, who sent him to his brother, 'Aṭā Muḥammad Khān in Kashmir. But this was not the end of Shāh Shujā''s troubles. Fatḥ Khān, the vizier of Shāh Maḥmūd, who was already contemplating an attack on Kashmir, was now prepared for an advance, and was negotiating with Ranjīt Singh on the subject.

Wafā Begum, Shāh Shujā''s favourite wife, who was now at Lahore, heard of her husband's imprisonment and of Fatḥ Khān's designs upon Kashmir, and fearing that Shāh Shujā' might fall into Shāh Maḥmūd's hands, from whom they expected no mercy, offered to present the *Koh-i-Nūr* to Ranjīt Singh, if

the latter would get her husband released and brought safely to Lahore.[1]

This fitted in beautifully with Ranjīt Singh's plans for the conquest of Kashmir, which were already nearing completion. Furthermore, Fatḥ Khān asked the Mahārāja's help and cooperation in the Kashmir campaign, which he thought could not be a success without an understanding with him. Ranjīt Singh found his opportunity, and terms were readily agreed upon. The Afghan and Sikh armies began operations immediately. The Sikh army, unused as it was to fighting in the hilly country, could not render much effective assistance; and the Afghan soldiery defeated 'Aṭā Muḥammad, governor of Kashmir, who fled after a feeble resistance.[2]

The *ex*-King, Shāh Shujā', was released, and brought to Lahore. Here the Mahārāja

[1] Sohan Lāl, *'Umdatu't-tawārīkh*, Bk. II, p. 131; Dīwān Amar Nāth, *Zafarnama-i-Ranjit Singh*, ed. Sita Ram Kohli, pp. 70-71.

[2] Latif, *History of the Panjáb*, 395; W. L. M'Gregor, *History of the Sikhs*, I, 169.

asked the *ex*-King for the fulfilment of Wafā Begum's promise. The King and Queen prevaricated and made excuses. Strict guard was, in consequence, placed on the *ex*-King's house. Shāh Shujā' and his wife pleaded that the diamond was in pawn at Kandahar for six crores of rupees. There was much unpleasantness. At last it was agreed that Shāh Shujā' should receive 3 lakhs of rupees in cash and a *jāgīr* worth Rs. 50,000 in consideration; and a time limit of fifty days was fixed for the delivery of the diamond.[1]

Osborne's account of the whole affair including the actual delivery of the famous diamond is worth quoting in full: Shāh Shujā' 'came to Lahore, his wife (who was already there) having assured her husband that he would find a friend in the ruler of the Punjaub. But he had no sooner arrived, than a demand was made upon him to surrender the "Koh-i-noor," or mountain of light, a Jaghire being promised as the price of his compliance. The eagerness of the Sikh to obtain, and the reluctance of the Affghan to

[1] Sohan Lāl, *Umdatu't-tawārikh*, Bk. II. pp. 139-40.

resign, this celebrated jewel (alike renowned for its magnitude and its migrations) appear to have been of equal intensity, but not so the power of the contending parties. The character of Runjeet, more unscrupulous than cruel, was curiously displayed in the measures he adopted to possess himself of this highly coveted prize.

No greater severity was employed, than appeared absolutely necessary to vanquish the obstinacy of the Shah, and none was omitted which promised the accomplishment of that end. The exiled family was deprived of all nourishment during two days, but when their firmness was found proof against hunger, food was supplied. It was in vain that the Shah denied that the diamond was in his possession, and having exhausted remonstrance, resorted to artifice and delay.

Runjeet was neither to be deceived, nor diverted from his purpose, and at length Shah Shooja, wearied out by importunity and severity, and seeing that nothing else would satisfy the rapacity of Runjeet, agreed to

give up the jewel. Accordingly on the 1st June, 1813, the Maharajah waited on the Shah for the purpose of the surrender.

He was received with great dignity by the prince, and both being seated, there was a solemn silence which lasted nearly an hour. Runjeet then grew impatient, and whispered an attendant to remind the Shah of the object of the meeting. No answer was returned, but the Shah made a signal with his eyes to an eunuch, who retired, and brought in a small roll, which he placed on the carpet at equal distances between the two chiefs. Runjeet ordered the roll to be unfolded, when the diamond was exhibited to his sight. He recognised, seized it, and immediately retired.

The Shah some time afterwards purchased his release by a payment of 20,000 rupees. He was not yet, however, out of the power of his oppressor, and not long after, Runjeet being apprised that he had still left some rare and valuable jewels, he seized the most precious of them for his own use, together with all the other costly articles on which he could

lay his hands. After suffering various hardships and indignities, Shah Shooja contrived to make his escape, and after some further adventures and misfortunes, placed himself under the protection of the British Government, by whom a moderate provision was assigned for his maintenance, and in this asylum he remained until recent events caused a revolution in his favour, and seated him beyond all expectation on the throne of Cabool'. [1]

So we see that even the delivery of the diamond did not satisfy Ranjīt Singh ; and as soon as he discovered that the *ex*-King possessed more valuables, no scruples stood in the way of his making further demands and using brute force for their satisfaction. And this in spite of the fact recorded by Munshī Sohan Lāl, that at the time of the presentation of the diamond Ranjīt Singh had agreed in writing that the *ex*-King should be molested no more. [2]

[1] W. G. Osborne, *Court and Camp of Runjeet Sing*, pp. XXXI-XXXV.

[2] '*Umdatu't-tawārīkh*, Bk. II, p. 144.

The fact that the acquisition of the *Koh-i-Nūr* only served to whet Ranjīt Singh's appetite, and that the latter then embarked on a shameless career of robbery and spoliation is further attested by Shāh Shujā' himself,[1] and H. T. Prinsep,[2] and, less directly, by W. L. M'Gregor.[3]

The fact of the matter is that the Mahārāja, finding his guest completely in his power, did not scruple to starve, persecute and insult him, till he had no alternative left but to flee.

'In the course of the year, 1812,' says M'Gregor, 'Shah Soojah Ool Moolk escaped from Lahore to Rajouree in the hills, and from thence to Loodianah, after suffering great privations;' and adds in a footnote, 'another account states, that the *ex*-King made his escape direct to Loodianah by means of an

[1] In his *Autobiography*, tr. Bennet ("Biographical Sketch of Shah Soojah, ex-King of Cabul," pp. 21-22, in *Calcutta Monthly Journal* for 1839).

[2] *Origin of the Sikh Power in the Punjab, and Political Life of Muha-raja Runjeet Singh*, p. 101.

[3] *History of the Sikhs*, I, p. 170 and f. n.

accomplice, who effected his release from the house in which he was confined, and placed horses for him on the road to Loodianah. Others say that he was obliged to escape through a sewer or drain.'[1]

From Shāh Shujā''s *Autobiography*, where fuller details are given, we learn that the ladies of his haram had to steal out of Lahore dressed in Punjābī costume, and several months later the *ex*-King himself was compelled to make his escape through a hole cut in the roof of his apartment, disguised as a 'holy mendicant', leaving a faithful attendant in his bed.[2]

This unfortunate episode does no credit either to Ranjīt Singh or to the Afghan *ex*-King and his consort. On the one hand if the queen had made a promise, she ought to have kept it, and when Ranjīt Singh had fulfilled his part of the contract (even if it was only a part of his own plans already

[1] *History of the Sikhs*, I, 170.

[2] "Biographical Sketch of Shah Soojah, ex-King of Cabul," 22. in *Calcutta Monthly Journal* for 1839.

laid and in operation),[1] she should have redeemed the royal word which she had pledged.

On the other hand it must be said that, taking into account the relative position of the parties, the *ex*-Queen's undertaking has all the appearance of having been given under coercion ; and the way in which Ranjīt Singh took advantage of a lady in distress and played on her apprehensions is not exactly chivalry—certainly not worthy of a man who was called, and is still remembered as, the "Lion of the Punjab."[2]

Further, even if the delivery of the *Koh-i-Nūr* be interpreted as no more than specific performance of a fair contract, what justification or explanation can be given of the extortions which followed the delivery of the fateful diamond ? The only explanation lies in the 'rapacity' and 'unconquerable avarice' of Mahārāja Ranjīt Singh, to

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[1] Latif, *Lahore*, 394-95.

[2] See title-page of '*Umdatu't-tawārīkh*, M'Gregor, I, 224 and Osborne, p. 223.

which Osborne, an intelligent contemporary observer, bears witness.[1]

The greater pity that Wafā Begum seems to have had implicit confidence in Ranjīt Singh's good faith, for we are told that she 'assured her husband that he would find a friend in the ruler of the Punjaub '.[2] Neither this fact nor the consideration that the *ex*-King was a refugee and a guest of honour seems to have troubled Ranjīt Singh's mind.

But to follow the *Koh-i-Nūr*, Ranjīt Singh often wore the diamond on his person.[3] On 13th July, 1838, the Mahārāja showed the diamond to Osborne, who says 'it certainly is a most magnificent diamond, about an inch and a half in length, and upwards of an inch in width, and stands out from the setting, about half an inch : it is in the shape of an egg, and is set in a bracelet between two very handsome diamonds of about half its

[1] *Court and Camp of Runjeet Sing*, pp. xxxiii and 151 respectively. Also p. 91.

[2] Osborne, p. xxxi.

[3] M'Gregor, p. 216.

size. It is valued at three millions sterling, is very brilliant, and without a flaw of any kind '.[1]

On his deathbed he ordered the diamond to be given away to the temple of Jagan Nāth.[2] But this wish was not complied with. Ranjīt Singh died in 1839, and the diamond remained in the treasury.

'On the conquest of the Panjáb by the British, and the abdication of Mahárája Dalíp Singh in 1849', says Sayyid Muḥammad Laṭīf, 'the diamond was formally made over to the Board of Administration for the affairs of the Panjáb, at one of its earliest meetings, and by it committed to the personal care of Sir (afterwards Lord) John Lawrence'.[3] Then after passing through several vicissitudes 'on 3rd July, 1850, it was formally presented to Her Majesty the Queen by the Deputy Chairman of the East India Company. The gem, as already noted, was exhibited at the

[1] Osborne, p. 202.

[2] Osborne, p. 223 and M'Gregor, p. 169, f. n.

[3] Latif, *Lahore*, 381.

first Great Exhibition in London, in 1851. In 1852, it was re-cut in London, at a cost of £8,000, by Messrs. Garrad [Garrards], who employed Voorsanger, a diamond-cutter, from M.Coster's *atelier* at Amsterdam. The actual cutting lasted thirty-eight days and reduced the diamond to 106 1/16 carats.'[1] We may add that in the Exhibition of 1851 this stone weighed 589·52 grs. troy (=186·06 English carats).

The *Koh-i-Nūr* is now among the crown jewels of England.

Having traced the history of this celebrated diamond to the present day, we can return to our subject, and consider the views held by various writers. Some, like Prof. Maskelyne and others, have held that the *Koh-i-Nūr* is Bābur's diamond; others, like Dr. Ball and the rest, are of opinion that Mīr Jumla's diamond and the *Koh-i-Nūr* are one; a third school contends that all three stones are identical. [2]

[1] *Ibid.*, 382. The weight of the reduced diamond, according to Goodchild, was 102¼ carats (*Precious Stones*, 41).

[2] See Dr. Ball's classified list of these authorities in Tavernier, II, 331, f. n. 1.

The last view may be taken up first.

From the vague wording in *Bāburnāma* it is certainly possible to think that Bābur's diamond weighed a little less or a little more than 320 ordinary *ratīs* or about 589 grains, and if we were in the mood for it we could perhaps even stretch it down to 216 jewellers' *ratīs* or 574½ grains, counting the *misqāl* at 27 *jauharī ratīs*. Thus it would seem possible to hold, as Beveridge does,[1] that the diamonds of Bābur and Mīr Jumla are identical, and that Mīr Jumla obtained the stone of old fame in the market somewhere in South India, and presented it to Shāh Jahān. This supposition has the merit of establishing the return of Bābur's diamond into the Mughul Treasury—a point where every other theory fails.

But before we grant it we should realize that in that case Mīr Jumla, instead of concealing the fact, would have loudly claimed the credit of restoring the world-famous diamond, after a century and a quarter of adventure, to the Mughul Treasury, and would have

[1] Article in *Asiatic Quarterly Review*, already referred to.

taken good care to announce the fact by beat of drum. Nor are the court-chroniclers likely, when speaking of Mīr Jumla's presentation, to omit mention of the noble pedigree of the stone. This is not all: There is the monstrous discrepancy in the values of the two stones, which militates against the hypothesis of their identity. A stone which was worth (making allowance for the conservative estimates at the Mughul Court) at most 3 lacs of rupees, could not be the stone valued at an inconceivable sum 130 years earlier, and again at about 3 crores of rupees in Ranjīt Singh's time (1838)[1].

Finally, granting all this and ignoring all difficulties, even if both stones weighed 216 jewellers' *ratīs*, and were one, this stone cannot be the *Koh-i-Nūr*, since the *Koh-i-Nūr* weighed over 589 grains, *i.e.*, 15 grains more.

My own opinion is that Bābur's estimate of weight is more accurate than his loose language would imply.

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[1] H. W. G. Osborne, *Court and Camp of Ranjit Sing*, p. 202. See p. 213 above.

We are now in a position to deal with Dr. Ball's opinion. It is believed in many quarters to-day that the conclusions of Dr. Ball, who has comprehensively reviewed all previous literature on the subject,[1] constitute the final position, and contain as much of the truth as can be known at this distance. After an exhaustive survey of facts and figures, and a searching criticism of opinions held he arrives at the conclusion that although Bābur's diamond and *Koh-i-Nūr* happen to agree in weight, 'there is no direct evidence that any diamond of that weight was in the possession of the Mogul emperors at any subsequent period [subsequent to 1526], up to the time of Nādir Shāh's invasion. We know nothing as to the weight of the Koh-i-Nūr, as such, till about the time it was brought to England, namely, the year 1850; and then, although its weight was 186 1/6 carats, the trustworthy evidence, as to its condition at that time, as will be seen, is to the effect that it was not identical with Bābur's diamond' (Tavernier, II, 338).

[1] Tavernier, II, 331-48.

In view of the new sources available to us it is unnecessary to go further into the details of 'the trustworthy evidence.' Dr. Ball admits, however, that 'it is possible, that Bābur's diamond may have been in Shāh-jahān's possession when Tavernier saw Aurangzeb's jewels, and that the latter obtained possession of it when Shāhjahān died, and so ultimately it passed to Persia with other jewels taken by Nādir Shāh' (*Ibid.*, p. 338-39). But this is only concession of a possibility.

The positive side of Dr. Ball's finding is that the *Koh-i-Nūr* is Mīr Jumla's diamond, the difference between the weight given by Tavernier and the actual weight of *Koh-i-Nūr* in 1851 (82 1/3 carats) being accounted for by supposing that 'the Mogul's stone, while in the hands of one or other of its necessitous owners, after it was taken to Persia by Nādir, had pieces removed from it by cleavage, which altogether (there were at least three of them) amounted to the difference between its weight and that of the Koh-i-Nūr as it was when brought from India' (*Ibid.*, 341).

All this argument and speculation and the inferences drawn from the actual appearance of the *Koh-i-Nūr*, which follow (p. 342), would have been unnecessary and impossible if Dr. Ball had had before him the account of the acquisition of Mīr Jumla's diamond in *B.N.* As the reader knows, the stone weighed only 216 *ratīs*, *i.e.*, 574·56 grs. troy; while the *Koh-i-Nūr* scaled 589·52 grs. In no number of centuries can a stone put on weight; and here is an actual increase of 15 grains troy. Woe to the historian who builds his edifice on the shifting sands of Tavernier's figures!

This leaves Prof. Maskelyne and his school to be dealt with. His position briefly is that the *Koh-i-Nūr* is really Bābur's diamond, that this was the stone which Tavernier actually saw and handled; and that he mixed it up in his mind with Mīr Jumla's diamond, and wrongly appended to it the story of the latter diamond, which was probably current at the time. He adduces the parity of weights and his own observation of the stone in 1851 in proof of his contention.

Prof. Maskelyne's explanation of Tavernier's error is ingenious; it is undoubtedly the only possible one if we are bent on extricating Tavernier from the hopeless muddle in which he has involved himself. We must suppose, he says, that 'Aqil Khān gave Tavernier the traditional weight of the Bābur diamond which he had placed in his hand, and that Tavernier translated this weight into carats, not as from the old *ratis* of Bābur or even of Akbar, but from the pearl *ratis* with which he had become acquainted in the bazaars of India (p. 558-59). So all that story about his being allowed to weigh it is only a jeweller's embroidery.

Prof. Maskelyne further holds that Mīr Jumla's diamond was, at the time, probably with Shāh Jahān in the Agra palace-prison.

Both Dr. Ball and Prof. Maskelyne agree that Tavernier saw and described the stone which afterwards came to be called *Koh i-Nūr*, only according to the former this was Mīr Jumla's diamond (which was in later times clipped and pared till it became *Koh-i-Nūr*),

and according to the latter it was Bābur's stone (which remained unimpaired and entire till 1851).

Prof. Maskelyne, who carefully observed the *Koh-i-Nūr* personally in 1851, thinks that Tavernier's rude sketch was probably made from memory some four or five years after he saw the stone. And this drawing, he continues, is 'so absolutely unlike the Koh-i-Nūr as to be hardly recognizable as representing the Queen's diamond, and even less the diamond that he himself described, as he saw it, among the treasures of Aurangzebe' (p. 558). Again, 'except for the trace of a small undercut face in his projection, it has not any resemblance to the Koh-i-Nur' (P. 557).

Dr. Ball adduces much evidence for his clipping theory but is not able to point to any distinct features which are common to Tavernier's sketch and description on the one hand and the *Koh-i-Nūr* on the other.

Dr. Ball finds in the authentic sketches and models of the *Koh-i Nūr* a great deal of 'evidence' in favour of his clipping theory,

and also 'defects similar to some of those described by Tavernier as having been in the Mogul's diamond' (Tavernier, II, 342).

He admits that there are discrepancies between Tavernier's description and the figure, 'which, as it represents the whole stone, does not, at first sight, seem to resemble the Koh-i-Nūr'. But he holds that these discrepancies can be satisfactorily explained on his hypothesis.

Indeed the appearance of the *Koh-i-Nūr* in 1851 and of its models and drawings seems to be so tricky that widely differing authors find in it strong support each for his own view.

Fortunately it is not necessary for us to take sides in this fight; since our position is clear: The passage in *B.N.* knocks the bottom out of the whole discussion about the identity of the Mīr Jumla diamond with either the Bābur diamond or the *Koh-i-Nūr*. Things are simplified for us, and our choice is narrowed down to this: either the *Koh-i-Nūr* is Bābur's diamond, or all three are

distinct. Evidence seems to point to Bābur's diamond being the same as *Koh-i-Nūr*. The exact degree of the probability, however, it may be left to the experts to determine. It is risky to build on Tavernier's statements; but the almost exact equality of weights seems a strong reason in favour of the identity. Perhaps this is the only sure evidence.

When all is said and done we must not lose sight of the fact that the re-entry of Bābur's diamond into the Mughul Treasury stands unproved to this day, and unless that is proved even the identity of Bābur's stone with the *Koh-i-Nūr* is not possible. This is just what makes the advancing of any hypothesis with any degree of confidence impossible.

Further, granting that Tavernier saw Bābur's stone, where was Mīr Jumla's diamond at the time of his inspection, and what happened to it afterwards? Tavernier does not mention it among the other gems he saw at court; and it was not a thing to be omitted or forgotten. It would be reasonable to

suppose with Prof. Maskelyne that it was with Shāh Jahān in the Agra palace. Later history of this gem cannot be traced.

But the two stones must have come together in the royal treasury after Shāh Jahān's death; and both of them must have been there when Nādir Shāh inspected the contents of the Jewel Treasury and appropriated them.

Prof. Maskelyne says it is probable that Mīr Jumla's diamond is the same as the 'large diamond, standing high upon an elliptic base,' which Sir John Malcolm saw in the treasury of Teheran (P. 559).

As for Tavernier it is no part of our business to save him or his reputation. The more closely one studies him the more deeply is one convinced that he is a negligent and inconsistent writer, and does not care even to compare or adjust the various statements made by himself in different parts of his work. Therefore no reliance is to be placed on his uncorroborated statements. On this particular point we can only say that possibly Prof.

Maskelyne has made a remarkably shrewd guess, and Tavernier really saw Bābur's diamond, and wrongly connected it with the story of Mīr Jumla's stone which he had heard; and when 'Āqil Khān told him that it weighed 320 (ordinary) *ratis*, he understood him to mean that it weighed 320 (*jauhari*) *ratis* (which Tavernier, as jeweller, knew so well). This works out with such astonishing precision to the 280 carats given by Tavernier that we are more than half inclined to fall in with his position; for 320 × 2·66 grains make nearly 269 English carats; and Tavernier's (Florentine) carats being 4 p.c. lighter, we get a figure very near 280 Florentine carats, which Tavernier equates with $319\frac{1}{2}$ *ratis*.

It should be noted that if Prof. Maskelyne's conjecture is correct, Tavernier's estimate of the value of the stone, given above, will have to be revised. The weight is now about 194, and not 280, Florentine carats. Following Tavernier's own method of valuation, his estimate of about 88 lacs of rupees will have to be reduced to less than half that amount.

Two other statements of Tavernier still require an explanation: First, in the passage already given, Tavernier speaks of a great diamond which weighed 900 carats before cutting being presented by Mīr Jumla to Aurangzeb (II, 58). Next, there is the whole story of the cutting by Hortensio Borgio.

Now, on the last day of *Jumādá* II, 1066 *A.H.*, Mīr Jumla offered to Prince Aurangzeb, when the latter went to his house in the Deccan, an uncut diamond among other jewels (*B.N.*, III, P.U.L. MS., f. 113 b; *Muntakhabu' l-Lubāb*, I, 749, which, by the way, gives wrong month). The weight of this diamond is not recorded.

It is true that Tavernier nowhere distinctly speaks of another diamond presented to Aurangzeb by Mīr Jumla. But, says Mr. Beveridge,[1] the fact that he speaks in one place of a diamond being presented by Mīr Jumla to Shāh Jahān, and in another of its being presented by Mīr Jumla to Aurangzeb may possibly be due to the unconscious

[1] Article in *Asiatic Quarterly Review*.

confusion in his mind caused by the story about this other diamond which he had also heard. The weight he gives, however, still remains his creation.

Similarly the story of Hortensio Borgio may be really connected with the cutting of this diamond.

Possibly we are giving the French traveller more credit than he deserves.

The diamonds mentioned by Garcia da Orta (discussed by certain writers) seem to have no bearing on the subject. Nor has the large diamond obtained by a Portuguese at the Wajrā Karūr mine in the Bellary District about the beginning of the seventeenth century (Tavernier, II, 42, f. n. 1 ; 334-35).

*Aurangzeb*

On the Solar Weighment Day, which fell on the last day of *Rabī'* I, 1072, Mīr Jumla sent to Aurangzeb as *peshkash* one diamond worth 75,000 rupees, and Dānishmand Khān offered another of the value of 50,000 rupees.[1]

[1] *'Alamgīr Nāma*, 636.

In *Rabī* 'II, 1074, Aurangzeb sent by the hands of Tarbiyat Khān to the Shāh of Persia presents worth 7 lakhs of rupees,[1] which included, according to Tavernier, a diamond weighing nearly 60 carats. The ambassador was insulted and the presents were treated with contempt; but the Shāh kept for himself the diamond. [2]

Tavernier saw in Aurangzeb's Treasury some diamonds and diamond jewels besides the one discussed under the *Koh-i-Nūr* dispute. They are of minor importance; but first-hand evidence is always welcome. The following is in continuation of Tavernier's account of his inspection of Aurangzeb's jewels already quoted (p. 192-94 above): 'After I had fully examined this splendid stone, and returned it into the hands of 'Ākil Khān, he showed me another stone, pearshaped, of good form and fine water, and also three other table

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[1] *Ma'āsir-i-'Ālamgīrī*, 47; *'Ālamgīr Nāma*, 845 and 974.

[2] Tavernier, I, 297-99. For another detailed and somewhat conflicting account of this unfortunate embassy see *Storia*, II, 128-31.

diamonds, two clear, and the other with some little black spots. Each weighed 55 to 60 ratīs, and the pear 62½. Subsequently he showed me a jewel set with twelve diamonds, each stone of 15 to 16 ratīs, and all roses. In the middle a heart-shaped rose of good water, but with three small flaws, and this rose weighed about 35 or 40 ratīs. Also a jewel set with seventeen diamonds, half of them table and half rose, the largest of which could not weigh more than 7 or 8 ratīs, with the exception of the one in the middle, which weighed about 16. All these stones are of first-class water, clean and of good form, and the most beautiful ever found' (Tavernier, I, 316).

Manucci has the following: 'The officials in charge of the [Mysore] diamond mines reported to his majesty (Aurangzeb) that they had obtained there a large diamond weighing two ounces and two eighths. He ordered it to be sent to the Presence; but it never reached him, the Mahrattahs having carried it off while it was on its way.'[1] This

[1] *Storia*, IV, 100.

TABLE I.—INDIAN DIAMONDS WHICH

| No. | Name or description | Weight when uncut |
|---|---|---|
| | | BĀBUR'S |
| 1 | Bābur's Diamond .. .. .. | |
| | | AKBAR'S |
| 1 | Standard Diamond. .. .. | |
| 2 | Diamond offered by Prince Salīm. .. | |
| | | JAHĀÑGĪR'S |
| 1 | Large diamond from the Khokhara mines.. | |
| 2 | Diamond sent by Muqarrab Khān to Jahāñgīr. | |
| 3 | Diamond sent by Ibrāhīm Khān "Fatḥ-jang," governor of Bihar. | 348 *ratis* |
| 4 | The "chamkora" Diamond .. .. | |
| 5 | Diamond from Quṭbu'l-Mulk. .. | |

ENTERED THE MUGHUL TREASURY

| Weight when cut | Price | Authorities |
|---|---|---|
| REIGN | | |
| 221·6 *ratīs*=589·44 grs. troy | The costliest jewel in Bābur's Treasury. | *B.N.E.*, 477. |
| REIGN | | |
| 136 *ratīs* | Rs. 100,000 | *Ā'īn*, I, 12. |
| | ,, 100,000 | *A. N.*, III, 832. |
| REIGN | | |
| | ,, 50,000 | *Tūzuk*, 155; R. & B., I, 316. |
| 23 *ratīs* | ,, 30,000 | *Tūzuk*, 185 ; R. & B., I, 375. |
| | ,, 100,000 | *Tūzuk*, 188 ; R. & B., I, 379. |
| 30 *ratīs* | ,, 40,000 | *Tūzuk*, 198 ; R. &. B., I, 400. |
| 24 *ratīs* | ,, 30,000 | *Tūzuk*, 198 ; R. & B., I, 400 |

TABLE I.—INDIAN DIAMONDS WHICH

| No. | Name or description | Weight when uncut |
|---|---|---|
| 6 | Diamond ring, which came from Qutbu'l-Mulk, and was finally sent to the Shāh of Persia. | |
| 7 | Diamond of violet colour (*banafsha*). .. | |
| 8 | Diamond offered by Prince Shāh Jahān on the New Year's Day of XIV R. Y. | |
| 9 | Diamond presented by Mahābat Khān to Prince Shāh Jahān. | |
| 10 | Diamond which Hīrānand bought and presented to Jahāngīr. | |
| | | SHĀH JAH |
| 1 | Diamond offered by Shā'ista Khān to Shāh Jahān. | 116 *ratis* |
| 2 | Diamond bestowed by Shāh Jahān on Dārā Shukoh. | |
| 3 | Diamond acquired by Shāh Jahān from Qutbu'l-Mulk, set in a candelabrum or candle-stick, and sent to the shrine at Madīna. | 180 *ratis* |

ENTERED THE MUGHUL TREASURY—(*Cont.*)

| Weight when cut | Price | Authorities |
|---|---|---|
| | 1,000 mohurs | *Tūzuk*, 229; R. & B., II, 8—9. |
| 30 (?) *ratīs* | Rs. 3,000 | *Tūzuk*, 244-45; R. & B., II, 38. |
| | ,, 18,000 | *Tūzuk*, 265; R. & B., II, 78. |
| | ,, 7,000 | *Tūzuk*, 418. |
| 3 *misqāls*=78 or 79½ *ratīs* | ,, 100,000 | Hawkins (Purchas, III, 41—42). |
| ĀN'S REIGN | | |
| 100 *ratīs* | ,, 100,000 | *B.N.*, II, 480. |
| 100 *ratīs* | ,, 100,000 | *B.N.*, III, P.U.L. MS., f. 5*b*. |
| 100 *ratīs* | Rs. 150,000 | *B.N.*, III, P.U.L. MS., f 11*a*. |

These may be one and the same.

TABLE I.—INDIAN DIAMONDS WHICH

| No. | Name or description | Weight when uncut |
|---|---|---|
| 4 | Mīr Jumla's Diamond. .. .. | |
| | | AURANGZEB'S |
| 1 | Diamond sent by Mīr Jumla to Aurangzeb. | |
| 2 | Diamond offered by Dānishmand Khān to Aurangzeb. | |
| 3 | Diamond sent by Aurangzeb to the Shāh of Persia. | |
| | | MUḤAMMAD |
| 1 | "Koh-i-Nūr". .. .. | |

ENTERED THE MUGHUL TREASURY.—(*Cont.*)

| Weight when Cut | Price | Authorities |
|---|---|---|
| 216 *rat*ís | Rs. 216,000 | *B.N.*, III, P.U.L. MS., f. 119*a*. etc. See p. 190 above. |
| REIGN | | |
| | ,, 75,000 | ' *Álamgír Nāma*, 636. |
| | ,, 50,000 | ,, ,, ,, |
| 60 carats | | Tavernier, I, 297—99. |
| SHĀH'S REIGN | | |
| 589.52 grs. troy = 186.06 English carats. Reduced to 106 $\frac{1}{16}$ [or 102¼] carats. | Fabulous values assigned | See pp. 200-214 above. |

TABLE II.—INDIAN DIAMONDS WHICH NEVER

| No. | Name or description | Weight when uncut |
|---|---|---|
| 1 | A large diamond, the size of a small hen's egg, reported by Garcia da Orta (1563) as having been seen at Vijayanagar. | |
| 2 | Also mentioned by Garcia da Orta. | |
| 3 | " " " " " | |
| 4 | " " " " " | |
| 5 | Diamond seen by Tavernier at Golconda (1642). Largest Diamond Tavernier saw in India in the possession of merchants. "The Great Table" of Streeter. Prof. Maskelyne suggests it is "Daryā-i-nūr." | |
| 6 | Streeter's "Ahmadābād Diamond." Bought by Tavernier for a friend. | 178 *ratīs*=150$\frac{2}{16}$ Eng. car. |
| 7 | Diamond sent up to Aurangzeb but intercepted by the Mahrattas. | 2¼ oz. (?) |
| 8 | Diamond given by Andrews to Sir George Oxinden. | |
| 9 | "Table-Diamond" seen by Ovington at Sūrat. | |
| 10 | Ditto .. | |

ENTERED THE MUGHUL TREASURY

| Weight when cut | Price | Authorities |
|---|---|---|
| | | Garcia da Orta, *Colloquies on the Simples and Drugs of India*, trans. Sir C. Markham, London, 1913, p. 347 (Tavernier, II, 333). |
| 250 mangelins=416 2/3 *ratīs*=312½ Eng. car. | | ,, ,, ,, ,, |
| 140 mangelins=233 1/3 *ratīs* =175 Eng. car. | | ,, ,, ,, ,, |
| 120 mangelins=200 *ratīs*=150 Eng. car. | | ,, ,, ,, ,, |
| | Rs. | |
| 232 43/50 Eng. car. | 450,000 | Tavernier offered Rs. 400,000 on behalf of two friends, but could not purchase it. Tavernier thinks it could have been purchased for Rs. 450,000 (Tavernier, II, 98; illustr. No. 3 on pl. fac. p. 97). |
| 90 18/25 Eng. car. | | *Ibid.*, II, 98-99 and 348. *Storia*, IV, 100. |
| | £400 or £ 500 | *E.F.I.* 1661-1664, p. 119, f.n. |
| | £12,000 | Ovington, 199. |
| | Nearly £20,000 | ,, ,, |

weight lies in the neighbourhood of 1000 grains or well over 300 English carats. If Manucci's information is correct—and we have no means of verifying it—this must have been a diamond of remarkable size, even if the weight given is of the uncut stone. But Manucci is not a witness of unimpeachable antecedents.

From a footnote on p. 119 of *E.F.I.* 1661-1664 we learn incidentally that Andrews before his departure from Sūrat 'gave Sir George Oxinden (the Companyes President) severall presents, and particulerly he gave him one very large dyamond,.....to the vallue of about 4 or 500 *li* sterling.'

The information so far obtained may be summed up in a tabular form for easy reference. Table I on pp. 230-35 gives stones which are known to have been in the Imperial Treasury. Only important stones are included in this and the following tables.

We know also something about certain Indian diamonds which never found their way into the Mughul Imperial Treasury, but were seen by merchants and others in different parts of India. These are not strictly relevant to

our inquiry. The information about them, however, is condensed in Table II (pp. 236-37), under the impression that it will help in fixing the relative values of stones which are the proper subject of our study.

The standard of all stones, specially of diamonds, seems to have been so high in Mughul India that there was no room for inferior specimens. Hawkins relates how difficult it was, on one occasion, for the government lapidary to find a foul diamond wherewith to make powder for cutting and polishing other diamonds. ' There was, ' he says, ' a Diamant cutter of my acquaintance, that was sent for to cut a Diamant of three Mettegals [*Misqāls*] and a halfe, who demanded a small foule Diamant to make powder, wherewith to cut the other Diamant. They brought him a Chest, as he said of three spannes long, and a spanne and halfe broad, and a spanne and halfe deepe, full of Diamants of all sizes and sorts yet could he find never any one for his purpose, but one of five Rotties [*ratis*]

which was not very foule neither ' (Purchas, III, 42). The reason was that there was an abundance of good diamonds.

The above passage no doubt applies primarily to the conditions in the Imperial Treasury. But when we see that the Imperial Court, directly or indirectly, was the chief buyer of this commodity, we are inclined to think that diamonds of smaller size and inferior water were in cold request in the country at large ; so that it was hardly worth while working mines which produced only these. The following passage may be cited in corroboration [Tavernier is relating a meeting with Mīr Jumla, the Commander-in-Chief of the King of Golconda, which took place at Gandikota (Cuddapah District in the Carnatic) in September, 1652] :

' On the morning of the 10th [September, 1652] he [ Mīr Jumla] sent to summon us, and as soon as we were seated in his tent, close to him, the attendants brought him five small bags full of diamonds, and each bag contained about, as many as one could hold

in the hand. They were all lasques,[1] but of very dark water and very small, and most of them were only 1 carat or half a carat in weight but otherwise very clear. There were very few of them which weighed 2 carats. The Nawāb, showing us these stones, asked if such goods were saleable in our country. We replied that they might be sold provided the water was white, because in Europe we do not esteem diamonds if they are not clear and white, and we make no account of other kinds of water. When he first began to contemplate the conquest of this Kingdom for the King of Golkonda, he was told that it contained diamond mines, and he sent 12,000 men to work them, but in the space of a year they found only those which he had in the five bags. The Nawāb, seeing that they found only stones of very brown water, tending much more to black than white, rightly considered that it was loss of trouble, and, for-

[1] 'Lasques, a term applied by jewellers to flat and oval stones, such as are used in Indian jewellery, and derived from Pers. *lashk*, "a bit, piece." The "table" was the original form in which diamonds were cut. The technical name of this is "lasque," and small slabs in this form are still used for covering miniatures, and are then called portrait stones (Streeter, *The Great Diamonds of the World*, 283)' (p. 230, f. n. 1).

TABLE III.—SOME

| No. | Name of Stone | Weight when uncut | Weight when cut |
|---|---|---|---|
| 1 | "Pitt" or "Regent." Measures 30 by 25 by 19 millimetres. | 410 car. | Brilliant weighing 136⅞ car. |
| 2 | "Orloff." Forms the top of the imperial sceptre of Russia. Rose-cut. | | 194¾ car. |
| 3 | "Moon of the Mountains." | | |
| 4 | "Nizam." | | 340 car. |
| 5 | "Daryā-i-Nūr." Fine diamond. Rose-cut. Is of the purest water. Now the largest diamond in the Persian collection. | | 186 car. |

[1]According to the *New International Encyclopaedia* (New

FAMOUS DIAMONDS

| Price | Remarks |
|---|---|
| £20,400 (in the rough). £1,35,000 (present value, £4,80,000) £7,000 realized from the fragments left over. | Purchased by Pitt for £20,400 in India The cutting cost £5,000. Sold to Duc d'Orléans, Regent of France (1717) fo about £1,35,000. Now exhibited in th Apollo Gallery of the Louvre (Paris). |
| First sold for £2,000; then for £12,000 in London; finally to Prince Orloff for £90,000 and an annuity of £4,000.[1] | Stolen from a temple in Mysore (India) where it formed the eye of a statue o Brahma. Finally presented by Prince Orloff to Catherine II of Russia. |
| | Captured by Nādir Shāh at Delhi. Finally acquired by the Russian Crown for an enormous sum. |
| | Belonged to the Nizam of Hyderabad Fractured at beginning of Indian Mutiny. |
| | Captured by Nādir Shāh at Delhi. |

York, 1907), an 'annuity of $ 4.000 and a Russian title.'

TABLE III.—SOME

| No. | Name of Stone | Weight when uncut | Weight when cut |
|---|---|---|---|
| 6 | "Akbar Shāh" or "Jahāñgīr Shāh." | | 116 car.<br>Later, 71 car. |
| 7 | "Nassak." Originally pear-shaped. Re-cut to a triangular form, being reduced to | | 89¾ car.<br>78⅝ car. |
| 8 | "Napoleon." | | |
| 9 | "Cumberland." | | 32 car. |
| 10 | "Pigott." A fine Indian stone. | | 47½ car. |
| 11 | "White Saxon." Square in contour, measuring 1 1/16 in. | | 48¾ car. |
| 12 | "Pacha of Egypt." Brilliant. | | 40 car. |
| 13 | "Tāj-i-Māh." | | 146 car. |

FAMOUS DIAMONDS—(*Cont.*)

| Price | Remarks |
|---|---|
| About £23,333 | Once the property of Emperor Akbar, this diamond was engraved on two faces with Arabic inscriptions by the instructions of his successor. It disappeared, but turned up again in Turkey under the name of "Shepherd's Stone," being recognized by its original inscriptions, which it still retained. Recut in 1866, being reduced from 116 to 71 carats, the inscriptions being destroyed. Stone sold to the Gaekwar of Baroda for 3½ lakhs (Smith, *Gem-Stones*, 163). |
| £7,200 | |
| £8,000 | Purchased by Napoleon Bonaparte. |
| £10,000 | |
| £30,000 | Brought to England by Lord Pigott (1775) and sold. Destroyed at ʿAlī Pāshā's death. |
| £150,000 | |
| £28,000 | |
| | Belongs to the Shāh of Persia. |

TABLE III.—SOME

| No. | Name of Stone | Weight when uncut | Weight when cut |
|---|---|---|---|
| 14 | "Star of the South." Largest of Brazilian diamonds. Cut as brilliant. | 254½ car. | 125½ car. |
| 15 | "Star of South Africa." | 83½ car. | 46½ car. |
| 16 | "Stewart." | 288⅜ car. | 120 car. |
| 17 | "Victoria," "Imperial," or "Great White." | 457 car. | 180 car. |
| 18 | "Excelsior." By far the largest South African stone till 1905. From it were cut 21 brilliants of varying weights, total weight of cut stones amounting to (Smith) | 969½ car. | 364 3/32 car. |
| 19 | "Jubilee." From it was obtained a splendid, faultless brilliant weighing | 634 car. | 239 car. |
| 20 | "Porter Rhodes." | 150 car. | |
| 21 | A yellowish octahedron found at De Beers. | 428½ car. | 228½ or 225 car. |

[1]The writer of article "Diamond" in the *Encyclopaedia*

FAMOUS DIAMONDS—(*Cont.*)

| Price | Remarks |
|---|---|
| £40,000 (in the rough) | Discovered 1853. |
| £25,000 (when cut) | |
| £6,000; shortly afterwards, £9,000 | |
| £20,000 | Eventually sold to the Nizam of Hyderabad for £20,000.[1] |
| | Found 1893. According to Dr. Bauer, this stone measured 2½ by 2 by 1 in., and was valued by different experts at amounts varying from £50,000 to £1,000,000. But that writer seems to identify this stone with No. 19 below. |
| | Discovered in Jagersfontein mine (1895). |
| £200,000 | Found at Kimberley, Feb. 12, 1880. Surpasses all the other South African diamonds in beauty, says Dr. Bauer, who wrote before the discovery of "Cullinan." |

*Britannica* has the incredible figure of £400,000 instead.

TABLE III.—SOME

| No. | Name of Stone | Weight when uncut | Weight when cut |
|---|---|---|---|
| 22 | "Star of Minas." Had shape of a dome with a flat base. | 174¾ car. | |
| 23 | "Star of Africa" or "Cullinan." | 3025¾ car. (about 1⅛ lb.) | |
| | | | 516½ car. |
| | | | 309 3/16 car. |
| | | | and 103 other smaller stones (Total weight of cut stones being 1036 5/32 car.) |

FAMOUS DIAMONDS—(*Cont.*)

| Price | Remarks |
|---|---|
| | Found in 1911. |
| | Discovered at the Premier mine near Pretoria (Transvaal), Jan. 25, 1905. More than three times the size of any known stone, it broke all previous records, and set up a new scale of size and value. What is most remarkable, its shape suggested that it was a portion of an enormous stone more than double its size. |
| | Purchased by Transvaal Government for £150,000, and presented to King Edward VII (Nov. 9, 1907). |
| | Pendeloque or drop brilliant. Has 74 facets. Placed in the sceptre. |
| | Square brilliant. Has 66 facets. Placed in the crown. |
| | The first two are the two largest brilliants in existence. All the stones are of the finest quality. |

bidding further mining, sent all these poor people back to tillage. [1]

Now that the reader knows as much about diamonds in Indian history as can be known from the fragments available, perhaps he is sufficiently interested in diamonds at large to ask questions about the famous diamonds in the world. This, again, we are fully conscious, is not pertinent to the subject in hand. But a few striking facts about these, will, it is believed, give the reader his bearings in the world of diamonds; so that he will be able to judge for himself where the Mughul Emperors' collection of gem-stones exactly stood as compared with similar collections in other countries and in more recent times. Table III (pp. 242-49) gives a résumé of necessary details about the Famous Diamonds of the World. The information tabulated there has been gathered from Max Bauer,

[1] Tavernier, I, 230. 'The exact position of these mines (or washings?) is unknown, but they were probably situated in the neighbourhood of the Penner river. The nearest of the Kadapa (Cuddapah) sites known in modern times was at Jammalamadugu, which is only 5 or 6 miles E. of Gandikota. There are a number of mines near Kadapa (See *Economic Gealogy of India*, p. 9). In vol. ii. 67, Tavernier says there were six of them. The mine at Wajrā-Karūr, in Bellary, was also taken by Mīr Jumla' (p. 230, f. n. 2).

*Precious Stones*, G. F. Herbert Smith, *Gemstones and their Distinctive Characters*, and other miscellaneous sources. The matter has been boiled down to facts and figures, so as to stand in proper proportion to the rest.

*Note on the Price of "Cullinan."*

The price which the "Cullinan," entire and uncut, would have fetched in the open market tickles the imagination. The acquisition of the diamond by the Transvaal Government for the paltry sum of £150,000 has all the appearance of being a forced sale. This can be best seen by studying the prices of such celebrated diamonds as "White Saxon" (nearly 49 car.), "Porter Rhodes" (uncut: 150 car.), "Pitt" (nearly 137 car.), "Orloff" (nearly 195 car.), and "Excelsior" (?). Comparing the weights of these stones with those of the cut stones obtained from the "Cullinan" —the two largest brilliants in the world, by the way—(*viz.*, 516½ car. and 309 3/16 car. respectively), we see at once that the price actually paid for the "Cullinan" is ridiculous. It is obvious that the collective price of all the 105 stones carved out of the "Cullinan" (total weight, 1036 5/32 car.) must run into millions of pounds.

One loves to speculate how the " Cullinan " diamond would have been treated if it had appeared in Shāh Jahān's reign, and what price would have been set on it by his jewellers. Cutting up of it into smaller brilliants is practically unthinkable. One can easily imagine that every skill of the glyptic art would have been lavished on it, and it would have entered the treasury as its premier stone, and a wonder of the world.

As for its price: Perhaps the reader will think that an enthusiast of gems like Shāh Jahān would have depleted half his treasury, if necessary, for the acquisition of such a prodigy as the " Cullinan." Well, making every allowance for the fact that the advent of this Prince of Diamonds would have marked a memorable event in Shāh Jahān's life, the present writer is not prepared to endorse this view.

When we compare the weight-and-price columns of Table I and III we are impressed by the fact that while the prices of diamonds in the Mughul times were on the whole sober and stable and constant, those of the famous

diamonds of the world are fancy prices determined mainly by the whim of the purchaser or his resources at the moment. Many of the figures, in fact, seem wild and extravagant. This is forcibly illustrated by the same diamond being sold successively for £2,000, £12,000, and finally for £90,000 with an annuity of £4,000.[1] It is easier, therefore, to find a place for the "Cullinan" in the Mughul scale of values than to locate it among the Famous Diamonds of modern times.

It is true that the list of Mughul diamonds does not furnish sufficient data to warrant a clear and definite rule for fixing prices; and the price probably varied also with other qualities than weight or size, such as the "water", purity or flawlessness, cut, shape, etc. Yet I think we can venture the suggestion that the price of diamonds on the whole varied with weight or size, and was roughly from 1,000 rupees to 1,500 rupees per *rati* in the seventeenth century. It may be remarked that the rule of determining the price by multiplying the square of the weight in carats

[1] [? or nearly £800].

by the rate per carat[1] applies neither to the known prices of the great diamonds of the world nor, *mutatis mutandis*, to the quotations available in Mughul history. This would place the collective price of the two large brilliants cut out of the "Cullinan" between 10 and 15 lakhs of rupees; so that the price of the whole stone uncut and entire, might be in the

[1] See p. 108 above.

COLOURED

| No. | Name of Stone | Weight when uncut | Weight when cut |
|---|---|---|---|
| 1 | "Hope". Largest of coloured diamonds. | | 44⅛ car. |
| 2 | "Dresden." | | 40 car. |
| 3 | "Florentine." Colour pale yellow. | | 133 car. |

neighbourhood of 20 lakhs. This figure, when corrected to the meridian of modern Europe, would be equivalent to some 80 lakhs of rupees to-day. This price seems by no means extravagant, and is, in fact, quite moderate, seeing that Dr. Bauer places the value of the "Excelsior" (?or "Jubilee"), as appraised by different experts, between £50,000 and £ 1,000,000 (!)

DIAMONDS

| Price | Remarks |
|---|---|
| £18,000 (London 1830)<br>£80,000 (America, 1908)<br>£16,000 (1909)<br>£60,000 (1911) | Possibly a portion of the drop-formstone (weighing 67 carats) brought by Tavernier from India (1642). Now privately owned in U.S.A. |
| About £9,000 (1743) | In Green Vaults of Dresden.<br>Was in possession of the Austrian Royal Family. |

For illustrations of some of the famous diamonds of the world the reader is referred to *New Standard Dictionary*, plate facing P. 700, where their comparative sizes and shapes can be studied. It is more comprehensive than plate III facing p. 320 of *Encyclopaedia Britannica*, 14th edition, Vol. VII.

We may wind up with a recent mention of a modern diamond. In the *Civil & Military Gazette* of Lahore, dated 25th March, 1938, we read: 'The firm which owns the famous Jonker diamond is looking for a buyer in India. The uncut Jonker diamond weighed 726 carats.....After twelve flawless diamonds were cut from it, the stone weighed 143 carats, and it was again cut in order to improve its shape. It now weighs 130 carats.' In the news columns of the same issue we have the following additional information: 'Altogether 12 flawless diamonds valued at two million dollars, of exquisite shape and cut and snow white in colour, were obtained from the original. The majority of these have been sold. Of the remainder the largest weighs 130 carats and is valued at over £220,000.

This stone is reckoned by experts to be the finest in the world and when first cut and completed weighed 143 carats. The owner, however, thought that the shape could be improved and the stone was re-cut to a more elegant shape which meant the sacrificing of 13 carats on an already finished article.

In the opinion of experts this diamond far surpasses any other in colour and excellence, although it is smaller than the Star of Africa or the Cullinan diamond, both in the British Crown.

Mr. Harry Winston [of Harry Winston Incorporated, diamond cutters and merchants, New York and London] purchased the stone in London for a price said to be in the vicinity of a million dollars.'

## SECTION II: RUBIES

Linschoten's classification of rubies as found in India is as follows: 'Rubies are of manie sorts, but the best are those that are called Carbunckles, which are Rubies that waigh above 25. quilates, wherof there are verie few and seldome to be found. The best Rubies that are

of the best colour and water are in India called Tockes, which are like Carbunckles, there are others called Ballax, which are of a lower price then the first, and they are red. There are others called Espinellas, that are of colour like fire, and are lesse esteemed then the other two sortes, because they have not the right water of Rubies. There are Rubies also of manie other sorts, wherof some are white like Diamonds as I said before: other of a Carnation colour or much like white Cherries when they are ripe. There are Rubies found halfe white, halfe red, some halfe Rubies, halfe Safires, and a thousand such other sortes.' These last, he adds, are called by the Indians 'Nilcandi' (II, 139).

/We may compare with this Fryer's remarks on the same subject: 'There are four sorts of Oriental *Rubies*; that which is the hardest, the best, and fairest Colour, if it be very fair and cut Diamond-Cut, is no less esteemed than a Diamond for the Weight, (or of the same Weight), but it is rare to see such an one.

The second sort of *Ruby* is White, Oriental, and Hard, which also is of good esteem, if cut

of a Diamond-Cut, but not of so high Price as the perfect Red Ruby ; but yet if it be in Perfection, 'tis very rare, because there are but few of this sort.

The third sort of *Ruby* is called a *Spinell*, which is softer than the former, and is nothing of like esteem, because not so hard, neither hath it the Life of the other, nor of such perfect Colour ; it's naturally somewhat greasy in cutting, because of its Softness.

The last sort is called a *Ballace Ruby*, which is not in so much esteem as the *Spinell*, because it is not so well coloured : This also is a Stone naturally greasy, and will scarce take a Polish : This looks like a *Garnet*' (Fryer, II, 146).

Another writer observes : ' In India Ruby occurs but rarely in good quality, though the poorer qualities are widely distributed. In Afghanistan to the east of Kabul, Ruby is found in an altered limestone' (Goodchild, 189).

After remarking that a ruby ' in Perfection is a Stone superiour to a Diamond', Ovington

relates the romantic career of a ruby, which was first sold for 400 rupees, and then successively for 600, 800, 1200, 1600, 2,000, 2400, 2800, 3000 and lastly 3200 rupees. He adds that in India ' perfect Rubies are scarce attainable, those of a deep clear Colour are rarely seen '.[1] Of course he is talking of the jewel market, and not of the royal treasury or of private collections.

Ovington has an interesting discourse on rubies of Pegu : The increased wealth of that country, he says, comes from ' Precious Stones, such as Rubies, Topazes, Saphirs, Amethists, *etc.* all which the Inhabitants comprehend under one common Name of Rubies, and distinguish them only by their Colour, calling the Saphir the Blew ; the Amethist the Violet ; the Topaz the Yellow Ruby ; and so of the rest. But that which properly obtains that Name, is a Jewel transparent, sparkling Red, and towards the extremities thereof, or near the surface, something incl[in]ing to the Violet of the Amethist. Some take it to be the same with the *Hyacinth* of the Ancients, and a notable Critick would

[1] Ovington, *Voyage to Suratt*, 201-202.

perswade us, that *Jacut* [*yāqūt*], the Name given it by the *Arabians* and *Persians*, is deriv'd from the word *Hyacinthus*. 'Tis found in several places of the *Indies*, as also in *Europe*; but those most valued, are the Stones of *Ceylon* amd *Pegu*; the chiefest place for them in this Kingdom, being the most barren part thereof, *viz.* a Mountain near *Capelan*, or *Cablan*, between *Siriam* and *Pegu*; as likewise those Hills which stretch from this Kingdom to that of *Cambodia*. They are distinguish'd into four sorts or species, the Ruby, the Rubacel, the Balace, and the Spinel; of which the first is much preferr'd before the rest. The natural shape is generally Oval or Globular, being scarce ever found with Corners. Their Value, as that of the Diamonds, increases proportionably to their Weight, being weighed by *Ratis*, whereof one is reckon'd three Grains and a half, or seven eighths of a Caratt,[1] and a Stone of this Weight has been sold for twenty Pagods;[2] one of two *Ratis*, and one of eight,

[1] This does not agree with the results obtained by us (pp. 127–28 above).

[2] The pagoda was a Southern Indian coin. There were gold and silver pagodas. The gold pagoda, which is presumably meant here, varied in value from 3 to 4 rupees.

for eighty five Pagods; one of three *Ratis*, and one fourth, for an hundred eighty five; one of four *Ratis*, and five eighths, for four hundred and fifty; one of five *Ratis*, for five hundred twentyfive; and one of six *Ratis* and half, for nine hundred and twenty Pagods. But if the Stone exceed this Weight, and be clean and perfect, there is no certain value to be set upon it.'[1]

In Persian literature and in the histories written in Persian Badakhshān has been celebrated for rubies of a superior quality. In European writers and travellers we frequently meet with 'balass', and occasionally 'ballast', rubies, which means rubies from Badakhshān. The following passage from Clavijo is interesting reading:

'To this great festival that we have been describing Timur had ordered all the great lords and nobles of his Empire to appear and be present, and thus it came about that we saw now in Samarqand the King of Badakhshán, nearby whose capital city are the mines where the balas ruby is found. This monarch was

[1] Ovington, *Voyage to Suratt*, 585-87.

well attended by his lords and courtiers; and we took occasion to present ourselves before him, when after paying our respects we enquired of him as to how the balas ruby was found. He replied graciously and told us that close to the capital city of Badakhshán was a mountain where the mines were situated. Here day by day men go and seek and break into the rocks on that mountain-side to find these precious stones. When the vein is discovered where they lie, this vein is carefully followed ,and when the jewel is reached it must be cut out little by little with chisels until all the matrix has been removed. Then grinding the gem on mill-stones it would further be polished. We were told also that by order of Timur a strong guard had been established at the mines to see to it that his Highness's rights were respected. The capital of Badakhshán lay ten days' march from Samarqand in the direction of India the Less. There was again another great lord at this festival, and he was governor in the name of Timur at the city of Aquivi, which is in the country where the lapis lazuli comes from: and in the rock that gives this stone they also find sapphires. This

city of Aquivi is also a like distance from Samarqand, namely ten days' journey in the direction of India the Less, but it lies rather to the southward of Badakhshán.'[1]

'Ballace' or 'balass ruby' is explained by Sir William Foster as 'really a rose-red spinel.'[2]

Now for presentations:—

It is recorded in Sharfu'd-Dīn's *Zafar Nāma* that Kurkīn (or Gurgīn), the Georgian king, sent to Tīmūr, through his envoys, 1000 gold *tankas* struck in Tīmūr's name, 1000 horses, fine stuffs and valuable articles including many vessels of gold, silver and crystal, and a bright ruby of beautiful colour, weighing 18 *misqāls*, such as is rarely met with.[3] The weight comes to 468 *ratīs* at the lowest reckoning; and the stone is slightly larger than the biggest ruby in the Mughul Indian treasury mentioned below.[4]

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[1] *Embassy to Tamerlane*, p. 274.

[2] Roe, 149, f. n. 1.

[3] *Zafar Nāma*, II, 542; Darby, *History of Timur-Bec*, II 318-19.

[4] Or could it be the same? See pp. 273-74 below.

*Akbar*

Abū'l-Fazl tells us that a ruby weighing 284 jewellers' *ratis* was worth a lakh of rupees on the treasury registers. This may be taken as an indication of the current price of this gem-stone in Akbar's reign (*Ā'īn*, 1, 12; Blochmann, 16).

Rāja Rāmchand of Bhatha (Rewah), on his submission, offered, among other things, 120 rubies, one of which was valued at 50,000 rupees.[1]

Prince Dāniyāl's offering of a ruby of 4 *misqāls* or 104 *ratis* to his father has already been mentioned under Diamonds.[2]

*Jahāngīr*

In the month of *Jumādá* 1, 1st regnal year, Jahāngīr presented to Prince Parwīz a ruby worth Rs. 25,000 (*Tūzuk*, 37; R. & B., 1, 77).

Again, on 21 *Jumādá* II, same year, a necklace composed of 4 rubies and 100 pearls

[1] Budāyūnī, II, 335.

[2] See p. 171 above.

was bestowed on Parwīz (*Tūzuk, ibid.*; R. & B., I, 79).

On Wednesday, 3 *Ṣafar*, 1016, Āṣaf Khān was appointed vizier. In recognition of the honour he offered a ruby which his brother, Abū'l-Qāsim, had bought for 40,000 rupees.[1]

Next comes an insignificant stone. In II R. Y. a man pretending to be Mīrzā Ḥusain son of Mīrzā Shah Rukh, presented a petition for military assistance, and offered as *peshkash* 'a ruby of the colour of an onion, which was worth 100 rupees' (*Tūzuk*, 56; R. & B., I, 118).

A ruby ring and a ruby are described in the following passage:

'Murtazā Khān from Gujarat sent by way of offering a ring made of a single ruby of good colour, substance, and water, the stone, the socket, and the ring being all of one piece. They weighed 1½ tanks and one surkh, which is equal to one misqal and 15 surkhs.[2] This was

[1] *Tūzuk*, 50.

[2] This should be 1 *misqal* and 11 *surkhs*, else the equation is quite wrong. The point is discussed above (p. 124).

sent to me and much approved. Till that day no one had ever heard of such a ring having come to the hands of any sovereign. A single ruby weighing six surkhs or two tanks and 15 surkhs,[1] and of which the value was stated to be £25,000,[2] was also sent. The ring was valued at the same figure' (*Tūzuk*, 63 ; R. & B., I, 132-33).

Vazīr Khān, the *Dīwān* of Bengal, waited on Jahāñgīr (17 *Jumādá* I, 1017) and offered a *qutbī* ruby.[3]

On the 22nd *Jumādá* I (III R. Y.) Āṣaf Khān made Jahāñgīr 'an offering of a ruby of the weight of seven *tánk*, which Abū-l-qāsim, his brother, had bought in the port of Cambay for 75,000 rupees. It is of a beautiful colour and well-shaped, but to my belief is not worth

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[1] This equation is absurd as it stands. Even if we assume '2 *misqāls*' has been omitted before 'six *surkhs*', we cannot equate the two weights until we also assume the '15 *surkhs*' to be a mistranscription for '11 *surkhs*' (as we did before). This would give a not unlikely value of 26½ *ratis* for the *misqāl*.

[2] A misprint for Rs. 25,000.

[3] *Tūzuk*, 70 ; R.& B., I, 147. *Farhang-i-Anandrāj* explains it as a broad ruby like one set in a ring, *etc.* R. & B. think the word is *Qibṭī*, 'Egyptian' (R. & B., I, 147, f. n. 1). But I prefer to read it *qutbī*.

more than 60,000 rupees' (*Tūzuk*, 70; R. & B., I, 148).

On the 17th *Jumādá* II (IV R. Y.) Jahāñgīr bestowed on Prince Parwīz a ruby worth Rs. 60,000, and another ruby with two single pearls, estimated at about Rs. 40,000, was conferred on Khurram (*Tūzuk*, 75; R. & B., I,156).

In the beginning of *Ẕū'l-qa'd* (same year), Khān Khānān sent to Jahāñgīr by Mullā Ḥayātī a ruby and two pearls worth about Rs. 20,000 (*Tūzuk*, 77; R. & B., 1, 160).

A famous ruby was offered by Rānā Amar Singh, when hard pressed, to Prince Khurram. The latter placed it among his offerings to the Emperor on his return to court. The story is thus told by Jahāñgīr: 'On the first day he [Khurram] paid his respects, he laid before me a celebrated ruby of the Rānā, which, on the day of his paying his respects, he had made an offering of to my son, and which the jewellers valued at 60,000 rupees. It was not worthy of the praise they had given it. The weight of this ruby was eight *tānk*, and it was formerly

in the possession of Rāy Maldeo,[1] who was the chief of the tribe of the Rāṭhors and one of the chief rulers (or Rays) of Hindustan. From him it was transferred to his son Chandar Sen, who, in the days of his wretchedness and helplessness, sold it to Rānā Uday Singh. From him it went to Rāna Partāp, and afterwards to this Rānā Amar Singh. As they had no more valuable gift in their family, he presented it on the day that he paid his respects to my fortunate son Bābā Khurram, together with the whole of his stud of elephants, which, according to the Indian idiom, they call [which the Hindus call] *gheta chār*, I ordered them to engrave on the ruby that at the time of paying his respects Rānā Amar Singh had presented it as an offering to Sultān Khurram' (*Tūzuk*, 140; R. & B., I, 285-86).

On the 10th *Farwardin* (XI R. Y.) 'Dayānat Khān presented his offering of two pearl rosaries, two rubies, six large pearls, and one

[1] This Rāja Māldev we often find associated with one gem or another. We have already seen how he made a bid, albeit an unsuccessful one, for Bābur's diamond. He seems to have had a taste for precious stones; and of course he was a man of considerable resource.

gold tray, to the value of 28,000 rupees. At the end of Thursday, the 11th, I went to the house of I'timādu'd-Daulah in order to add to his dignity. He then presented me with his offering, and I examined it in detail. Much of it was exceedingly rare. Of jewels there were two pearls worth 30,000 rupees, one *qutbī* ruby which had been purchased for 22,000 rupees, with other pearls and rubies. Altogether the value was 110,000 rupees. These had the honour of acceptance, and of cloth, etc., the value of 15,000 rupees was taken ' (*Ibid.*, 156 ; R. & B., I, 318-19).

Eight days later Prince Khurram offered to the Emperor ' a ruby of the purest water and brilliancy, which they pronounced to be of the value of 80,000 rupees ' (*Tūzuk*, 157 ; R. & B., I, 320).

Next, we have an interesting story from Jahāñgīr which throws welcome sidelight on Prince Khurram's discrimination and retentive memory, and shows that even from a boy he took a lively interest in pearls and precious stones : ' After the victory over the Rāna ',

says the Emperor, 'my son presented me in Ajmir with an exceedingly beautiful and clear ruby, valued at 60,000 rupees. It occurred to me that I ought to bind this ruby on my own arm. I much wanted two rare pearls of good water of one form to be a fit match for this kind of ruby. Muqarrab Khān had procured one grand pearl of the value of 20,000 rupees, and given it to me as a New Year's offering. It occurred to me that if I could procure a pair to it they would make a perfect bracelet. Khurram, who from his childhood had had the honour of waiting on my revered father, and remained in attendance on him day and night, represented to me that he had seen a pearl in an old turban (*sar-band*)[1] of a weight and shape equal to this pearl. They produced an old *sar-pich* (worn on the turban), containing a royal pearl of the same quality, weight and shape, not differing in weight even by a trifle, so much so that the jewellers were astonished at the matter. It agreed in value, shape, lustre, and brilliance; one might say they

[1] A *sar-band* is a wreath or fillet for fastening a lady's head-dress (Steingass). *Bahār-i-'Ajam* supports this sense.

had been shed from the same mould. Placing the two pearls alongside of the ruby, I bound them on my arm, and placing my head on the ground of supplication and humility, I returned thanks to the Lord that cherished His slave, and made my tongue utter His praise '[1]—

از دست و زبان که بر آید  کز عهده شکرش بدر آید

'Whose hand and tongue can perform the dues of His thanks adequately?'

On Solar Weighment Day, XI R. Y., Mahābat Khān offered to Jahāngīr a ruby which he had bought for 65,000 rupees from 'Abdulla Khān "Fīroz Jang" at Burhānpur. The Emperor liked the stone, and says it has a beautiful form.[2]

On 31 *Tīr*, XII R. Y., Jahāngīr sent to Shāh Sultān Khurram by the hands of Sayyid 'Abdulla a ruby worth a little over 30,000 rupees. The emperor adds that in sending the stone he had not considered its value, but

[1] *Tūzuk*, 158; R. & B., I, 322. I have quoted the verse in the original, and have appended to it my own translation.

[2] *Tūzuk*, 163; R. & B., I, 333.

as he had long worn it on his own head, he thought it would be of good omen.[1]

The story of the bargain of a ruby is thus narrated in the *Tūzuk*. It occurs in the annals of XII R. Y.:—'Then Mahābat Khān had the honour of kissing the ground, and presented an offering of 100 muhrs and 1,000 rupees, with a parcel (*gaṭhṛī*) of precious stones and jewelled vessels, the value of which was 124,000 rupees. Of these one ruby weighed 11 miskals; an European brought it last year to sell at Ajmir, and priced it at 200,000 rupees, but the jewellers valued it at 80,000 rupees. Consequently the bargain did not come off, and it was returned to him and he took it away. When he came to Burhanpur, Mahābat Khān bought it from him for 100,000 rupees' (*Tūzuk*, 195; R. & B., I, 394).

Among the offerings made by Prince Shāh Jahān after his victorious return from the Deccan (XII R. Y.) there was 'a fine ruby they had bought for my son at the port of Goa for 200,000 rupees; its weight was 19½

[1] *Tūzuk*, 189; R. & B., I, 382.

tanks,[1] or 17 miskals, and 5½ surkhs. There was no ruby in my establishment over 12 tanks, and the jewellers agreed to this valuation ' (*Tūzuk*, 198 ; R. & B., I, 399-400). This may be the ruby presented to Tīmūr by Gurgīn,[2] which may have changed hands and found its way to Goa. The ruby of 12 *tānks*, to which the emperor refers as hitherto the largest in the treasury, is probably the one mentioned in the last paragraph.

According to Sir Thomas Roe, some seventeen months earlier this ruby had been offered to Jahāñgīr by the Portuguese merchants for five lakhs of rupees, when the Emperor wouldn't pay more than a lakh for it. According to another note by the ambassador, seven lakhs was demanded. The stone, he says, weighed 13 *tolas* ! (Roe, 161-62 and f.n.). The way in which Roe has coolly multiplied both the weight and the value by three does not add to his reputation for responsible accuracy.

[1] So the translators : but both the Persian text of the *Tūzuk* (printed and MS.) and *Iqbālnāma-i-Jahāñgīrī* (p. 105) have ' 19 *tānks*', which is, therefore, the correct reading. See p. 123 above.

[2] See p. 264 above.

Among the offerings made by Prince Shāh Jahān to Nūr Jahān at the time of the celebration of the Prince's victory in the Deccan there was, according to 'Abdu'l-Hamīd Lāhorī, a ruby of good colour and very fine, weighing $5\frac{1}{2}$ *tānks* and valued at Rs. 50,000 (*B. N.*, I, ii, 189). This stone is not mentioned in any other history. The weight comes to 132 *ratīs*.

On Thursday, the 9th *Ārzar* (XII R. Y.) the Emperor presented Prince Shāh Jahān with ' a ruby of one colour, weighing 9 tanks and 5 surkh, of the value of 125,000 rupees, with two pearls. This is the ruby ', he says, ' which had been given to my father[1] at the time of my birth by Hazrat Maryam-makānī, mother of H. M. Akbar, by way of present when my face was shown, and was for many years in the *sarpīch* (turban ornament). After him I also happily wore it in my *sarpīch*. Apart from its value and delicacy, as it had come down as of auspicious augury to the everlasting State, it was bestowed on my son ' (*Tūzuk*, 202-3 ; R. & B., I, 409).

[1] This is the translator's oversight : the ruby was presented to the infant Salīm, and not to his father.

On Tuesday, the 15th *Isfandarmuz* (XIII R. Y.), Jahāñgīr was on a hunting expedition to Amānābād with the ladies of the *mahal*, where 'a string [necklace ?] of pearls and rubies that Nūr-Jahān Begam had on her neck was broken, and a ruby of the value of Rs. 10,000 and a pearl worth Rs. 1,000 were lost.' Both of them were found on the following Thursday (*Tūzuk*, 263; R. & B., II, 74). We learn incidentally the value of some of the jewels worn by the Empress.

A fortnight later, on New Year's Day of R. Y. XIV (which fell on Thursday, the 4th of *Rabi'* II, 1028 *A. H.* = March 10, 1619 *A.C.*) Prince Shāh Jahān offered to his royal father, among other things, a *yāqūt* weighing 22 *surkhs*, of good colour, water, and shape, valued by the jewellers at Rs. 40,000, and a very fine *qutbī*[1] ruby (*la'l-i-qutbī*), 3 *tānks* in weight, also valued at 40,000 rupees (*Tūzuk*, 265; R. & B., II, 78).

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[1] The editor prefers the reading '*Qibṭī*' (Egyptian) to '*qutbī*'. I take leave to differ and refer the reader to p. 267 f. n. 3 above.

Once Āṣaf Khān invited Jahāngīr to his house. The emperor went with some ladies of the haram on Thursday, the 15th of *Farwardīn*, XIV R. Y. Presents worth 1,67,000 rupees were accepted, and included a ruby weighing $12\frac{1}{2}$ *tānks* or 300 *ratis*, which had been purchased for 1,25,000 rupees.[1]

Towards the close of XV R. Y., the Shāh of Persia sent to Jahāngīr 'a ruby weighing 12 *tānks*,[2] which had belonged to the jewel-chamber of M. Ulugh Beg, the successor of M. Shāh-rukh. In the course of time, and by the revolutions of fate, it had come into the hands of the Ṣafawī family. On this ruby there were engraved in the *Naskh* character the words: "Ulugh Beg b. M. Shāh-rukh Bahādur b. Mīr Tīmūr Gūrgān." My brother, Shāh 'Abbās, directed that in another corner they should cut the words:

Banda-i-Shāh-i-Wilāyat 'Abbās

"The slave of the King of Holiness, 'Abbās", in the *Nasta'līq* character. He had this ruby

[1] *Tūzuk*, 266-67; R. & B., II, 81.

[2] We have '12 *misqāls*' in the *Iqbāl āma*, p. 178.

inserted in a *jiqha* (turban ornament), and sent to me as a souvenir. As the ruby bore the names of my ancestors, I took it as a blessing for myself, and bade Sa'īdā, the superintendent of the goldsmith's department, engrave in another corner the words "Jahāñgīr Shāh b. Akbar Shāh", and the current date. After some days, when the news of the conquest of the Deccan arrived, I gave that ruby to Khurram, and sent it to him' (*Tūzuk*, 325; R. & B., II, 195-96).

This is the ruby which was afterwards set in the middle slab of the rail of the Peacock Throne, as will be mentioned in another place (*B. N.*, I, ii, 80). The price of this stone is stated to be one lakh of rupees.

We possess accounts of only two rubies on which historical inscriptions were engraved. There may have been more memorial stones of this kind, no mention of which is found in our histories. Similarly there must have been many notable gems and jewels which, although they bore no records, were associated in the minds of the people with some important histori-

cal event or a domestic occurrence in the royal household. Some of these have been or will be placed before the reader; but there were probably many more of which our historians have left no notice. In fact, we may assume that each one of the bigger stones and jewels had probably a history of its own, partly oral partly written, which was a matter of common knowledge at the time, but of which history that has descended to us knows nothing.

Lashkar Khān offered a ruby which was appraised at 4,000 rupees.[1]

In the account of XVIII R. Y. we read: Khān Jahān came from Multān and offered 1,000 mohurs as *nazr* and a ruby worth one lakh of rupees, a pearl and other things as *peshkash*.[2]

A few notices from the John Company factors may now be given.

The following occurs in a communication dated Sūrat, 30 August, 1609: 'Balasses in

[1] *Tūzuk*, 326; R. & B., II, 197.

[2] *Tūzuk*, 373; R. & B., II, 281.

tables, as I have formerly written, bright and clear, will sell to very good profit. If your worships send for 100,000 r. worth, the lowest weight one meticall and their colour inclining to a red, they may be sold well, and, besides, the king will the more esteem both of us and our Country.

Of one meticall worth 1400, of 1½ worth 2,000 rials, of 2 meticalls 3000 rials, of 3 meticalls worth 4500 rials, etc. Of these I have no experience, this only is the copy of a note which I received from Mr. William Hawkins and, as I suppose, enquired forth by Mr. Marlowe'.[1]

The following is from Thomas Keridge at Ajmer (where the Emperor was in camp) under date 20 January, 1614: 'All sorts of jewels are here in good request and ballasses if brought from England will sell to good profit. They must be fair and of the lightest that are to be gotten, of 30, 40 or 50 carats but none under 20, for the smaller sorts they esteem not.'[2]

[1] *Letters Received*, I, 34.

[2] *Letters Received*, II, 301.

William Biddulph, a factor, writing on 15 February, 1618, says, he has known the Portuguese to sell 'ballast' rubies for a price ranging from £7,000 to £10,000 each, present money.[1]

From a communication dated Sūrat, November 7, 1621, we learn that three rubies, which cost £90, were sold for 1,400 rupees, and that a great ruby 'besett with diamonds', which was invoiced at £1,000, would yield only 6,500 rupees, because it was cracked, and 'lesse then its waight advised by 4/14', and because diamonds were low.[2]

A 'jewel of balass rubies' was sold for 12,000 rupees (February, 1625).[3]

*Shāh Jahān.*

The account of some important ornaments in Shāh Jahān's Jewel Treasury given by Mullā 'Abdu'l-Ḥamīd Lāhorī is interesting:

The *sar-pech* (turban ornament) which the Emperor wears on high occasions consists, he

[1] *E. F. I.* 1618-1621, p. 21.
[2] *E. F. I.* 1618-1621, p. 327.
[3] *E. F. I.* 1622-1623, p. 178.

says, of five large rubies and twenty-four large pearls, the central ruby weighing 12 *tānks* or 288 jewellers' *ratīs*. Although the price of this stone is only two lakhs of rupees on the royal registers, if a merchant were to obtain such a gem-stone, princes or nobles would pay even four lakhs for it and buy it for presentation to the Emperor: money is so abundant and such a present so rare. It is true that there are a few rubies in the royal jewel treasury exceeding it in weight; for instance, the one which Prince Shāh Jahān bought for two lakhs and presented to his father on 11 *Shawwāl*, 1026 *A. H.*, when he waited on him after his first victory in the Deccan. This last is the heaviest ruby in the imperial collection, and 1½ times the weight of the ruby in question; but none equals the latter in purity [*kāmil ʿ iyārī*] (*B. N.*, II, 391).

We have already reviewed Jahāñgīr's report of presentation of this second ruby, which weighed 19 *tānks* (pp. 273-74 above). Now the question is whether this central ruby of the *sar-pech* is the stone which Mahābat Khān purchased from a European for a lakh of rupees,

and offered to Jahāñgīr. The weight agrees, since 288 strikes very nearly a mean between 286 and 291½, the two alternative weights of the other stone. The prices assigned differ enormously no doubt, but the price asked originally by the European may after all be reasonable; besides gem-stones of special size and quality were at a premium in Shāh Jahān's reign generally.

In a gem-stone, continues 'Abdu'l-Hamīd, four things are required: (1) colour; for instance, colour of a ruby should be neither dark red, which is too deep, nor the colour of a peach-blossom, which is too light. (2) Clearness and flawlessness [*bejiramī*]. (3) Shape. (4) Size and weight. This ruby is of a beautiful colour and has all the four qualities.

The best and the largest of the pearls in the *sar-pech* is of the shape of a guava and weighs 47 *ratis*, and is priced at Rs. 50,000. The total value of the *sar-pech*, allowing only two lakhs for the large ruby, is estimated at 12 lakhs (*B. N.*, II, 391-92).

Next the same historian tells us of a *tasbih* (chaplet or necklace) which consisted of five

rubies and thirty pearls, the total price of the ornament being 8 lakhs of rupees.

The largest and the purest of the pearls, he continues, are put on the *sar-pech*, and such as are left over are strung on this *tasbīḥ*. Besides these there are two *tasbīḥs* containing altogether 125 pearls between which are strung alternately coloured *yāqūts*. These two *tasbīḥs* are valued at 20 lakhs. The central pearl of each of these *tasbīḥs* weighs 32 *ratis*, and is worth Rs. 40,000 (*Ibid.*, 392).

*Aurangzeb*

On 4 *Rabi'* II, 1072, Khwāja Aḥmad, the envoy of 'Abdu'l-'Azīz Khān of Bukhāra was presented to Aurangzeb. He offered his master letter and presents, which included a bright coloured ruby valued at 40,000 rupees.[1]

In 1079 A.H. 'Ādil Khān of Bījāpur sent to Aurangzeb a ruby, which weighed 5 *tānks* and 5 *surkhs* (*i.e.*, 125 *ratis*) and was valued at 20,000 rupees.[2]

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[1] *'Ālamgīr Nāma*, 638.

[2] *Ma'āsir-i-'Ālamgīrī*, 82.

Ḥusain Pāsha, the ruler of Baṣra, offered to Aurangzeb (*Ṣafar*, 1080) among other things a ruby worth 20,000 rupees.[1]

A few European notices are also available.

Tavernier, when he inspected the leading gems in Aurangzeb's treasury, saw there a chain ' of pearls and rubies of different shapes pierced like the pearls.' In the middle of this chain, he says, ' there is a large emerald of the " old rock ",[2] cut into a rectangle, and of high colour, but with many flaws. It weighs about 30 *ratis*.'

Tavernier also saw ' a balass ruby cut en cabochon, of fine colour and clean pierced at the apex, and weighing 17 melscals [*miṣqāls*]. Six melscals make one ounce (French).' Possibly the famous stone which, we know, was presented by Prince Shāh Jahān to Jahāñgīr in XII R. Y. (pp. 273-74 above).

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[1] *Ibid.*, 86.

[2] 'Precious stones were denominated " of the old rock " (*rocca velha*), when they exhibited more or less perfect crystalline forms, being considered more developed than those with amorphous forms (Linschoten, ii, 137; Fryer, i, 96; Bernier, 148)' (P. 318, f.n. 2).

Tavernier also saw ‘ another cabochon ruby of perfect colour, but slightly flawed and pierced at the apex, which weighs 12 melscals [*miṣqāls*]’ (I, 318).

Is this the stone which Mahābat Khān purchased from a European for a lakh of rupees and offered to Jahāñgīr, and which weighed 11 *miṣqāls* ?

Among the articles Tavernier presented to Nawāb Ja‘far Khān was a ‘ ring with a perfect ruby which cost 1,300 livres [£97 10s.]’ (Tavernier, I, 114).

It appears that Shāh Jahān knew more about precious stones than the jewellers and experts themselves. In the following anecdote from Tavernier, he is appealed to in a dispute where appraisers disagreed on a vital point, and his verdict was accepted as final with tacit consent.

‘ No. 2 [in Pl. IV],’ says Tavernier, ‘ represents a large stone believed to be a ruby, and sold as such to Ja‘far Khān, the Great Mogul’s uncle, who bought it for the sum of 95,000.

rupees, which amount to 1,425,000 livres,[1] He presented it to the Great Mogul, with many other precious things, on the King's festival, that is to say, the day whereon he is weighed, as I have elsewhere said. This stone having been priced at a little less than it cost, there happened to be present at that time an old Indian who had previously been chief jeweller to the King, but had been dismissed from his charge through jealousy. Having taken this stone in his hands, he maintained that it was not a balass ruby, that Ja'far Khān had been cheated, and that the stone was not worth more than 500 rupees. The King having been informed of the discussion, summoned the old Indian, with all the other jewellers, who maintained on their side that the stone was a balass ruby. As in the whole Empire of the Great Mogul there was no one more proficient in the knowledge of stones than Shāh Jahān, who was kept as a prisoner at Agra by Aurangzeb, his son, the latter sent the stone to the Emperor, his father, asking for his opinion. After full consideration he confirmed the verdict of the

[1] 'There is here a mistake on one side or the other; a cipher should either be added to the rupees or subtracted from the livres' (P. 100, f.n. 2).

old jeweller, and said that it was not a balass ruby, and that its value did not exceed 500 rupees. The stone having been returned to Aurangzeb, he compelled the merchant who had sold it to take it back and return the money he had received' (Tavernier, II, 100-101).

The story is corroborated by Bernier in the following passage: 'During a festival of this kind [a royal anniversary] *Aureng-Zebe* having paid a visit to *Jafer-kān*,' ["'Umdatu'l-Mulk" Ja'far Khān], not as his *Vizir* but as a kinsman, on the pretext that he wished to see a house which he lately erected, the *Vizir* made a present to the King of gold coins to the amount of one hundred thousand crowns, some handsome pearls, and a ruby, which was estimated at forty thousand crowns, but which *Chah-Jehan*, who understood better than any man the value of every kind of precious stone, discovered to be worth less than five hundred, to the great confusion of the principal jewellers, who in this instance had been completely deceived' (P. 271-72).

Now we can proceed to tabulate the information obtained so far:

## SECTION III : SAPPHIRES

Linschoten has the following :—

'The Safiers are of two sortes, one of a darke blew, the other of a right [light] blew, the Iacinth, Granades, and Robasses are likewise certaine kinds of Rubies, but little esteemed, the Indians call them the yellow and carnation Rubies, and so foorth, according to their colour.' These 'Iacinthes, Granadoes, and Robasses,' he adds, are common and cheap. 'The Safier is not of so great estimation as the Rubie, and yet is one of the most precious stones that are next the Diamond, and the Rubie'. Of rubies, sapphires and other stones aforesaid, those that come from Pegu, 'are esteemed the finest, whereof there is great store' (II, 140).

Of sapphires, says Fryer, 'there are three sorts, one perfect Blue, and very hard, which if cut of a Diamond-Cut, and without *Calcedone*, is of very good Esteem, and worth a good Price, if it be in perfection.

The second is perfect White, and very hard, which if without blemish, Diamond-Cut, is likewise in Esteem.

TABLE I.—RUBIES WHICH ENTERED

| No. | Description | Weight of Cut Stone |
|---|---|---|
| | | AKBAR'S |
| 1 | Standard Ruby. .. .. .. | 284 *ratīs* |
| 2 | Offered by Rāja Rāmchand of Bhatha to Akbar. | |
| 3 | Sent by Prince Dāniyāl to Akbar. .. | 104 *ratīs* |
| | | JAHĀÑGĪR'S |
| 1 | Presented by Jahāñgīr to Prince Parwīz. | |
| 2 | Offered by Āṣaf Khān to Jahāñgīr. .. | |
| 3 | Presented to Jahāñgīr by "Mīrza Ḥusain." | |
| 4 | Ruby Ring in one piece sent to Jahāñgīr by Murtaẓá Khān from Gujarāt. Of good colour, substance and water. | 37 *ratīs* |
| 5 | Ruby sent by same. .. .. | 59 *ratīs* |
| 6 | *Quṭbī* Ruby offered by Vazīr Khān. .. | .. |
| 7 | Offered by Āṣaf Khān to Jahāñgīr. Of beautiful colour and well-shaped. | 168 *ratīs* |

| Price | Authorities |
|---|---|
| REIGN | |
| Rs. 100,000 | *Ā'īn*, I, 12; Blochmann, 16. |
| Rs. 50,000 | Budāyūnī, II, 335. |
| | *A. N.*. III, 816; Tr., III, 1224. |
| REIGN | |
| Rs. 25,000 | *Tūzuk*, 37; R. & B., I, 77. |
| Rs. 40,000 | ,, 50. |
| Rs. 100 | ,, 56; ,, I, 118. |
| Rs. 25,000 | ,, 63; , I, 132. |
| ,, ,, | ,, ,, ,, I, 133. |
| ,, | ,, 70; ,, ,, I, 147. |
| Rs. 60,000 | Abū'l-Qāsim bought it in Cambay for Rs. 75,000. *Tūzuk*, 70; R. & B., I, 148. |

TABLE I—RUBIES WHICH ENTERED

| No. | Description | Weight of Cut Stone |
|---|---|---|
| 8 | Bestowed by Jahāñgīr on Prince Parwīz. | |
| 9 | Celebrated Ruby offered by Rānā Amar Singh to Prince Khurram, and by the latter to Jahāñgīr. It came originally from Rāja Māldeo. | 192 *ratis* |
| 10 | *Qutbi* Ruby presented by I'timādu'd-Daula to Jahāñgīr. | |
| 11 | Ruby of the purest water and brilliance offered by Prince Khurram. | |
| 12 | Exceedingly beautiful and clear Ruby offered by Prince Khurram to Jahāñgīr at Ajmir. | |
| 13 | Offered to Jahāñgīr by Mahābat Khān. | |
| 14 | Sent by Jahāñgīr to Shāh Sultān Khurram. | |
| 15 | Purchased by Mahābat Khān from a European and offered to Jahāñgīr. | 286 or 291½ *ratis* |
| 16 | Fine Ruby offered by Prince Shāh Jahān to Jahāñgīr. Largest in the Treasury. | 456 *ratis* |
| 17 | Very fine Ruby of good colour offered by Prince Shāh Jahān to Nūr Jahān. | 132 *ratis* |

THE MUGHUL TREASURY—(*Cont.*)

| Price | Authorities |
|---|---|
| ,, ,, | *Tūzuk*, 75; R. & B., I, 156. |
| ,, ,, | ,, 140; ,, I, 285-86. |
| Rs. 22,000 | ,, 156; ,, I, 318. |
| Rs. 80,000 | ,, 157; ,, I, 320. |
| Rs. 60,000 | ,, 158; ,, I, 32[illegible]. |
| Rs. 65,000 | ,, 163; ,, I, 333. |
| Over Rs. 30,000 | ,, 189; ,, I, 382. |
| Rs. 100,000 | ,, 195; ,, I, 394. |
| Rs. 200,000 | Bought at Goa. *Tūzuk*, 198; R. & B., I, 399 40[illegible] |
| Rs. 50,000 | *B. N.*, I. [illegible], 189. |

TABLE I.— RUBIES WHICH ENTERED

| No. | Description. | Weight of Cut Stone |
|---|---|---|
| 18 | Ruby of one colour bestowed by Jahāñgīr on Prince Shāh Jahān. Akbar's mother had presented it to Prince Salīm at the latter's birth. | 221 *ratīs* |
| 19 | Ruby on Nūr Jahān's necklace. .. | |
| 20 | A very fine *quṭbī* Ruby offered by Prince Shāh Jahān to Jahāñgīr. | 72 *ratīs* |
| 21 | Offered by Āṣaf Khān to Jahāñgīr. .. | 300 *ratīs* |
| 22 | An engraved Ruby of Timurid family sent by Shāh 'Abbās of Persia to Jahāñgīr; then bestowed by the latter on Prince Shāh Jahān. This history engraved on it in three inscriptions. Later set in the middle slab of the rail of the Peacock Throne. | 288 or 312 *ratīs* |
| 23 | Offered by Lashkar Khān. .. | |
| 24 | Offered by Khān Jahān. .. .. | |
| | | SHĀH JAHĀN'S |
| 1 | Central Ruby of Shāh Jahān's *sarpech*. Superior in quality even to the much heavier stone, No. 16 of Jahāñgīr. | 288 *ratī's* |

THE MUGHUL TREASURY (*Contd.*)

| Price | Authorities |
|---|---|
| Rs. 125,000 | *Tūzuk*, 202-3; R. & B., I, 409. |
| Rs. 10,000 | ,, 263; ,, II, 74. |
| Rs. 40,000 | ,, 265; ,, II, 78. |
| Rs. 125,000 | ,, 266-67; ,, II, 81. |
| Rs. 100,000 | ,, 325; ,, II, 195-96; *B. N.*, II, 80. |
| Rs. 4,000 | *Tūzuk*, 326; R. & B., II, 197. |
| Rs. 100,000 | ,, 373; ,, II, 281. |
| REIGN | |
| Rs. 200,000 or more. | *B. N.*, II, 391 |

RUBIES WHICH ENTERED THE

| No. | Description | Weight of Cut Stone |
|---|---|---|
| | | AURANGZEB'S |
| 1 | Bright coloured Ruby sent by 'Abdu'l-'Azīz Khān of Bukhāra to Aurangzeb. | |
| 2 | Sent by 'Ādil Khān of Bījāpur to Aurangzeb. | 125 *ratīs* |
| 3 | Offered by Husain Pāsha, the ruler of Basra. | |

Table II.—INDIAN RUBIES WHICH NEVER

| No. | Description | Weight of Cut Stone |
|---|---|---|
| 1 | Ruby which belonged to the King of Bījāpur. 'It is hollowed from beneath [i.e. cut *en cabochon*], clean, and of the first quality.' | 16 4/5 Engl. car. |
| 2 | A Ruby of the second quality. In form an almond *cabochon*, somewhat hollowed beneath, and bored near the point. | 58 *ratīs* = 48 $\frac{8}{25}$ Engl. car. |
| 3 | A Ring with a perfect Ruby which Tavernier presented to Nawāb Ja'far Khān. | |

MUGHUL TREASURY—(*Contd.*)

| Price | Authorities |
|---|---|
| REIGN | |
| Rs. 40,000 | *'Ālamgīr Nāma*, 638. |
| Rs. 20,000 | *Ma'āsir-i-'Ālamgīrī*, 82. |
| ,, ,, | ,, ,, 86. |

ENTERED THE IMPERIAL TREASURY

| Price | Authorities |
|---|---|
| Rs. 49,700 (1653) | Tavernier, II, 101 and 348 (Pl. IV, Nos. 3 and 4). |
| Rs. 50,000 | A Banian merchant showed it to Tavernier at Benares. Tavernier, II, 102 and 348 (Pl. IV, No. 5). |
| £ 97 10s. | Tavernier, I, 114. |

Some of the world's famous rubies are tabulated

Table III.—FAMOUS RUBIES (*Nos.* 1—7 *from ruby*

| No. | Description | Weight When uncut |
|---|---|---|
| 1 | Ruby, rich in colour; was originally cushion-shaped. | 37 carats |
| 2 | Ruby, a blunt drop in form. .. | 47 carats |
| 3 | A colossal stone. Broken into three pieces: Two were cut and the third was sold uncut in Calcutta. | 400 carats |
| 4 | Another large stone broken into two parts. | |
| 5 | A beautiful Ruby, found in Tagoung-nandaing Valley; perfectly clear and of splendid colour. | 18½ carats |
| 6 | Ruby found in 1899. .. | 77 carats |
| 7 | Ruby as large as a pigeon's egg. .. | |
| 8 | *Shāh's Ruby.* Belongs to the King of Persia. 'It is of the thickness and shape of an egg, is bored through and of very high colour, beautiful and clean, with the exception of a small flaw at the side.' | |

here to give a scale of sizes and values.

*mines near Magok, near Mandalay, Upper Burma).*

| Weight When cut | Price | Authorities |
|---|---|---|
| 32 5/16 carats | £ 10,000 | Brought to Europe in 1875. According to Streeter the finest that ever came to Europe. |
| 38 9/16 carats | £ 20,000 | |
| The weights of the cut pieces: 70 carats and 45 carats | Price of the third piece, sold uncut: 7 lakhs of rupees =£46,667. | |
| 98 carats<br>74 carats<br>11 carats | Sold for £7,000. Now valued at £10,000. | |
| | | Sold in India (1904) for 4 lakhs (£26,667). |
| | | Was presented in 1777 to the Czarina Catherine by Gustav III of Sweden when on a visit to St. Petersburg. Was amongst the Russian regalia. |
| 192 *ratis*= 161 7/25 Engl. car. | | Tavernier, II, 100 and 348 (Pl. IV, No. i). |

The third, called Water-*Saphires*, are of small Esteem, being not so hard as the other, and commonly of a dead Waterish Colour; they are of a slender Value' (II, 146).

*Jahāñgīr*

In XII R. Y. 'Ādil Khān sent to Jahāñgīr a sapphire weighing 6 *tānk*s and 7 *surkhs*, *i. e.*, 151 jewellers' *rat s*, and valued at Rs. 100,000. The Emperor says he had not seen before such a large and fine sapphire, nor one of such a beautiful and rich colour.[1]

In XIII R. Y., again, on Thursday, the 17th *Sha'bān*, I'timādu'd-Daula presented an offering of a *qutbī* sapphire exceedingly delicate.[2]

*Aurangzeb*

Tavernier saw in Aurangzeb's Treasury 'an oriental topaz [yellow sapphire (corundum)] of very high colour cut in eight panels, which weighs 6 melscals [*misqāls*], but on one side it has a small white fog within' (Tavernier, I, 318-19). This, in all probability, was the only jewel which Aurangzeb wore on his cap when he ascended the throne (*Ibid.*, 296).

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[1] *Tūzuk*, 198.
[2] *Tūzuk*, 237; R. & B., II, 23.

This stone is illustrated as No. 6 of Pl. IV, where the author adds that he did not see the Emperor wear any other jewel during the time he remained at his court on his last visit to India. It weighed 152 4/25 Engl. carats, and was bought at Goa for the Great Mogul for Rs. 181,000 or £20,412 10*s.* (*Ibid.*, II, 102 and 348).

Bernier is probably speaking of the same stone in the following passage: 'The King appeared seated upon his throne, at the end of the great hall, in the most magnificent attire. His vest was of white and delicately flowered satin, with a silk and gold embroidery of the finest texture. The turban, of gold cloth, had an aigrette whose base was composed of diamonds of an extraordinary size and value, besides an Oriental topaz, which may be pronounced unparalleled, exhibiting a lustre like the sun' (Bernier, 268).

Tavernier also saw in Aurangzeb's Treasury an oriental amethyst, *i.e.*, a purple sapphire, strung in the middle of a chain of pearls and emeralds—a long table, weighing some 40 *ratis* (See pp. 307 and 312 below).

TABLE I.—SAPPHIRES IN

| No. | Description | Weight of Cut Stone |
|---|---|---|
| | | JAHAÑGĪR'S |
| 1 | Sent by 'Ādil Khān to Jahāñgīr, Large and fine. Of beautiful and rich colour. | 151 *ratis* |
| 2 | *Qutbī* sapphire offered by I'timādu'd-Daula to Jahāñgīr. Exceedingly delicate. | |
| | | AURANGZEB'S |
| 1 | The favourite 'Oriental Topaz' of Aurangzeb. Of very high colour. Cut in eight panels. 'Unparalleled.' | 152 4/25 Engl. car. |
| 2 | The 'Oriental Amethyst' in the middle of Aurangzeb's chain of pearls and emeralds. A long table. 'Perfection of beauty.' | 40 *ratis* |

| Price | Authorities and Remarks |
|---|---|
| REIGN | |
| Rs. 100,000 | *Tūzuk*, 198; R. & B., I, 400. |
| | „ 237; „ II, 23. |
| REIGN | |
| Rs. 181,000 | Bought at Goa for the Emperor. Tavernier, I, 296, 318-19; II, 102 and 348. Bernier, 268. |
| | Tavernier, I, 318. |

TABLE II.—INDIAN SAPPHIRE

| No. | Description | Weight of Cut Stone |
|---|---|---|
| 1 | A *Yāqūt-i-ḳuḥlī* (Budāyūnī) or *Yāqūt-i-arzaq* (Firiṣhta) plundered by Maḥmūd at Muttra in 409 *A.H.*=1018 *A.C.* | 450 *misqāls* (!!) or 400 *misqāls* |

TABLE III.—FAMOUS

| No. | Name or Description | Weight When uncut |
|---|---|---|
| 1 | By far the most gigantic ever reported. | 951 carats (cut?) |
| 2 | "Rospoli." Quite flawless. .. | 132 1/16 carats |
| 3 | 2 in. long and 1½ in. thick. .. | |
| 4 | A fine cut stone, brilliant-cut above, and step-cut below, the girdle. | |
| 5 | Image of Budha cut out of a single sapphire, mounted on a gold pin. | |

## OUTSIDE MUGHUL TREASURY

| Price | Authorities and Remarks |
|---|---|
| | Budāyūnī, *Muntakhab-u't-Tawārīkh* '15; Engl. Transl., I, 25.<br>*Tārīkh-i-Firishta* (Nawalkishor), p. 29.<br>The weight, whether 450 *misqāls* or 400 *misqāls* be taken as the correct tradition, is incredible. It comes to well over 2 seers or 4lb. Nor is such a stone heard of at any later time. |

## SAPPHIRES

| Weight When cut | Price | Remarks |
|---|---|---|
| | | Seen in 1827 in the treasury of the King of Ava. |
| | | Two splendid rough specimens in the Jardin des Plantes collection (Paris). |
| 100 carats | | In possession of Duke of Devonshire. |
| | | In Mineral Gallery of the British Museum (Natural History). |

## SECTION IV : EMERALDS

Emeralds, says Linschoten, 'there are none throughout al India, yet it is reported yt some have bin found there, but [verie] few & not often : but they are much brought thether from Cairo in Aegypt, and are likewise called Orientall : they are much esteemed in India, because there are but few of them.'[1]

*Akbar*

Abū'l-Faẓl quotes Rs. 52,000 for an emerald weighing 17¾ *tānks* and 3 *surkhs*, *i.e.*, 429 jewellers' *ratis* (*Ā'in*, I, 12 ; Blochmann, 16).

*Jahāngīr*

Among the offerings of Ibrāhīm ' Ādil Khān already spoken of was an emerald. 'Although it is from a new mine,' says Jahāngīr, ' it is of such a beautiful colour and delicacy as I have never before seen.'[2]

Rāja Bikramājīt, one of Prince Shāh Jahān's favourite officers, on the occasion of being sent

[1] Linschoten, II, 140.

[2] *Tūzuk*, 198 ; R. & B., I, 400.

on an expedition to Kangra fort (XIII R. Y.) offered to Jahāñgīr a string of emeralds worth 10,000 rupees. [1]

From an entry on p. 77 of *Letters Received*, I, we learn that the cost price of two emeralds was £16.

Three emeralds were sold for 3000 rupees (February, 1625).[2]

A Sūrat letter dated 22 December, 1622, records the sale of two emeralds for 2,910 rupees.[3]

From another letter dated 18 June, 1625, we learn that the jewellers valued certain emeralds weighing 40 *ratis* each at four to five rupees the *rati*; but they could not be sold at that price.[4]

*Aurangzeb*

Tavernier saw in Aurangzeb's Treasury a chain of 'pearls and emeralds, round and bored.

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[1] *Iqbālnāma-i-Jahāñgīrī*, 117; *Tūzuk*, 238; R. & B., II, 26.

[2] *E. F. I.* 1622-1623, p. 178.

[3] *E. F. I.* 1622-1623, p. 178.

[4] *E. F. I.* 1624-1629, p. 90.

TABLE I.—EMERALDS IN

| No. | Description | Weight of Cut Stone |
|---|---|---|
| | | AKBAR'S |
| 1 | Standard Emerald. .. .. | 429 *ratīs* |
| | | JAHĀÑGĪR'S |
| 1 | Sent by ' Ādil Khān to Jahāñgīr. Fine and of good colour. | |
| 2 | String of Emeralds offered by Rāja Bikramājīt to Jahāñgīr. | |
| | | AURANGZEB'S |
| 1 | Large Emerald of the ' old rock '. Cut into a rectangle. Of high colour, but with many flaws. | 30 *ratīs* |

TABLE II.—EMERALDS OUTSIDE

| No. | Description | Weight |
|---|---|---|
| 1 | Two Emeralds. .. .. | |
| 2 | Three Emeralds. .. .. | |
| 3 | Two Emeralds. .. .. | |

THE MUGHUL TREASURY

| Price | Authorities |
|---|---|
| REIGN | |
| Rs. 52,000 | *Á'n*, I, 12 ; Blochmann, 16. |
| REIGN | |
| | *Tūzuk*, 198 ; R. & B., 1,400. |
| Rs. 10,000 | ,, 238 ; ,, II, 26 ; *Iqbāl Nāma-i-Jahāngīrī*, 117. |
| REIGN | |
| | Tavernier, I, 318. |

THE MUGHUL TREASURY

| Price | Authorities |
|---|---|
| £16 for both | *Letters Received*, I, 77. |
| Rs. 3,000 for three | *E.F.I.* 1622-1623, p. 178. |
| Rs. 2,910 for both | ,, ,, ,, |

TABLE III.—FAMOUS

| No. | Description | Weight When uncut |
|---|---|---|
| 1-5 | Five choice stones (the so-called Spanish or Peruvian emeralds) presented by Cortez to his bride. These stones had been worked to divers fantastic shapes. | |
| 6 | Largest single crystal known to exist at present. Diameter, 2 in.; length, about the same. Of good colour, but badly flawed. | |
| 7 | A fine, though much smaller, crystal, but of even better colour. Widest cross-diameter, 1 1/8 in.; length, same. | |
| 8 | Finest cut emerald. .. .. | |
| 9 | Small but perfect and flawless, faceted emerald. Set in a gold hoop. | |

EMERALDS

| Weight When cut | Price | Remarks |
|---|---|---|
| | | Lost in 1529, when Cortez was shipwrecked. |
| 1347 carats | | In possession of the Duke of Devonshire. Exhibited at the Great Exhibition of 1851. |
| 156½ carats | | In Mineral Gallery of the British Museum (Natural History). |
| 30 carats | | Belonged to the Czar of Russia. |
| | | In British Museum (Natural History). See illustration in Smith, *Gem-stones*, Pl. I, fig. 5. |

All the pearls are round', he says, 'and of diverse waters, and from 10 to 12 ratis each in weight.' In the middle of this chain there was 'an oriental amethyst [*i.e.*, a purple sapphire], a long table, weighing about 40 ratis, and the perfection of beauty' (Tavernier, I, 318).

In the middle of the chain of rubies already spoken of (under Rubies) there was a large emerald of the "old rock", cut into a rectangle, and of high colour, but with many flaws. It weighed about 30 *ratis* (*Ibid.*).

A journalistic item may close our account of the emeralds: The theft of an emerald valued at 5 lakhs of rupees from the Bahawalpur State treasury was reported in the *Civil and Military Gazette* of Lahore, dated 23 February, 1938. The editor's current comment, which appeared in the next day's issue, runs as follows:—'The loss of an emerald worth Rs. 5 lakhs (or nearly £37,000) from the collection of His Highness the Nawab of Bahawalpur will remind many of the fact that His Highness possesses some of the finest emeralds in the world. In India, the emerald has always occupied a

very high place among precious stones, even higher than the diamond, and connoisseurs have always been willing to pay a very high price for emeralds of the best quality, higher than even the price of diamonds weight for weight. It is the colour that decides the quality of the emerald. Stones of the velvety green colour are rare.'

## SECTION V: TOPAZ

'The Topaz,' says Fryer, 'is a Stone very hard, full as hard as the *Saphire*; some are very yellow, and like the Colour of Muskadine, pleasant to look on, which bears a good Price if good and without fault. The Stones may be burnt white in the Fire, and look very well. Another sort are said to be white naturally, which would bear a good Price if perfect, and cut of the Diamond-Cut. There's another sort of them soft, yet shew very well, but have not the quickness of the other, and therefore of low esteem; trial of their hardness may be made by a *Saphire* or such a Stone' (II, 147).

| No. | Name or description | Weight When uncut |
|---|---|---|
| 1 | "Braganza." .. .. .. | 1680 carats |
| 2 | Large rough crystal of opaque Topaz. .. | 137 lb. |

## TOPAZ

| Weight When cut | Price | Remarks |
|---|---|---|
| | | In the Portuguese regalia. Supposed to be a diamond but probably a white topaz, says Mr. Smith (p. 170). The *New Standard Dictionary* treats it as a diamond; and the *Encyclopaedia Britannica* article apparently counts it as a topaz (VI, 764). |
| | | From a felspar quarry in Norway. In mineral collection of British Museum (Natural History) (*Encyclopaedia Britannica*, XXII, 297). |

## SECTION VI: *YĀQŪTS* (?HYACINTH)

*Yāqūts* present some difficulty. The definitions in the dictionaries are vague and not helpful. Etymologically, *yāqūt* is the same word as jacinth or hyacinth (Gr. *hyakinthos*).[1] According to Steingass it means 'a hyacinth, a ruby, a cornelian; any precious stone;' and the equivalents given in Salmone's *Arabic-English Dictionary* are 'jacinth; ruby; sapphire; chrysolite'. This information is not definite; and does not carry us far. But what is a hyacinth (or jacinth)? It means '(1) Formerly, a bluish-violet gem, probably the sapphire. (2) Now, in jewelry, usually brownish, reddish, or orange zircon, but sometimes cinnamon-coloured garnet; essonite; also, occasionally applied to honey-yellow pyrope garnets' (*New Standard Dictionary*). Again a hyacinth or jacinth is 'a variety of zircon of yellowish red colour, used as a gem-stone. The *hyacinthus* of ancient writers must have been our sapphire, or blue corundum, while the hyacinth of modern mineralogists

[1] See Ovington (pp. 260-61 above), who is supported by Steingass.

may have been the stone known as *lyncurium*. The Hebrew word *leshem*, translated ligure in the A. V. (Exod. xxviii. 19),.....appears in the R. V. as jacinth, but with a marginal alternative of amber; both may be reddish yellow, but their identification is doubtful. Most of the gems known in trade as hyacinth are only garnets, generally the deep orange-brown hessonite or cinnamon stone; and the stones known as Compostella hyacinths are simply ferruginous quartz from Santiago de Compostella, Spain. Hyacinth is not a common mineral' (*Encyclopaedia Britannica*, XI, 954).

When no definite meaning can be assigned to 'hyacinth', what purpose can be served by explaining *yāqūt* as a hyacinth?

R. & B. translate *yāqūt*, as jacinth in some places,[1] and as ruby in another.[2] Again they render red *yāqūt* as a ruby,[3] blue *yāqūt* as a sapphire,[3] and yellow *yāqūt* as a topaz.[4] Here

[1] R. & B., I, 132 and 396.
[2] R. & B., II, 78.
[3] R. & B., II, 200.
[4] R. & B., I, 318 and f. n. 2.

apparently they follow the lead of Linschoten,[1] Ovington[2] and the rest. The *Makhzanu'l-Adwia* has an article on *yāqūt*, written apparently under western influence, where a similar classification is countenanced.

Blochmann & Phillott are more cautious, and, without committing themselves by adopting an equivalent, let *yāqūt* stand as it is.[3]

In the *Jawāhirnāmas*, we find that a *yāqūt* is not a kind of ruby, or sapphire or topaz, but is recognized as a distinct mineral, and has a place among the major precious stones. *Yāqūts*, we are told, are of four kinds; red, blue, yellow and white. The blue *yāqūts*, again, are divided into five varieties, the yellow ones into four, and the white ones into seven. And all these varieties are named.[4] *Ghyāsu'l-Lughāt*, drawing apparently upon some other *Jawāhirnāma*, gives seven varieties of the red *yāqūt*, whereas

[1] P. 289 above.

[2] P. 260 above.

[3] *Ā'īn*, I, tr., p. 16.

[4] *Jawāhirnāma* printed in *Oriental College Magazine* for August, 1928, Part I, pp. 112-32.

our *Jawāhirnāma* gives none. But these coincide with those of the white *yāqūt* in our *Jawāhirnāma*.

Again, we are told that crystals of hyacinth (*i.e.*, zircon) are rare, and not large enough for cutting.[1] But the reader has seen that Shāh Jahān had two rosaries which had altogether 125 pearls strung alternately with coloured *yāqūts*—total value, 20 lakhs of rupees. These *yāqūts* must have been of respectable size and high value. Further, the reader will find several important single *yāqūts* mentioned below. It is difficult to identify these valuable *yāqūts* with hyacinth, which is an insignificant stone.

Fryer has the following : ' The Hyacinth is a Stone Yellow and Transparent ; it's of the hardness of the *Emerald* ; these Stones are naturally foul, and full of little Sands like Gold ; if they be in Perfection, and of a very good Colour, they bear a reasonable Price ' (II, 147).

[1] *Encyclopaedia Britannica* article cited above.

I suspect the classification of the Persian writers differs radically from that of the modern mineralogists in many respects. Occasional remarks made by Linschoten,[1] Ovington,[2] Tavernier and others point to the same conclusion. This will account for much of the uncertainty and confusion that envelop this subject.

In consideration of all these facts I have thought it safe to adopt *yāqūts* as a heading and have collected under it all mentions of that stone, the Persian name being preserved throughout.

*Akbar*

The *Ā'in's* quotation for a *yāqūt* of 4 *tānks* and $7\frac{3}{4}$ *surkhs*, *viz.*, $103\frac{3}{4}$ jewellers' *ratis* is Rs. 50,000 (*Ā'in'*, I, 12; Blochmann, 16).

*Jahāngīr*

Some *yāqūts* figure among presentations of Āsaf Khān on one occasion.[3]

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[1] See p. 289 above.

[2] See pp. 260-61 above.

[3] *Tūzuk*, 63; R. & B., I, 132.

Among the presents offered by Mīr Jamālu'd-Dīn Husain early in XI R. Y. was a jewelled dagger which he himself had got prepared. On its hilt was set a yellow *yāqūt* very clear and fine, the size of half a hen's egg, along with other *yāqūts* of pleasing colours and old emeralds of remarkable shape and cut. The emperor adds that such a fine and big yellow *yāqūt* has never been seen. The appraisers fixed the price of the dagger at Rs. 50,000.[1]

By yellow *yāqūt* in this passage R. & B.[2] understand a topaz, and by *yāqūt* a ruby. For this and other reasons I have chosen to give my own translation.

In XII R. Y. Jahāngīr bestowed on Rāja Bharjīv of Baglāna three rings of *yāqūt*, diamond and ruby.[3]

A *yāqūt* of good colour, water and shape, weighing 22 *ratīs*, was offered by Prince Shah Jahān to Jahāngīr (XIV New Year's Day). It was valued at Rs. 40,000.[4]

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[1] *Tūzuk*, 155-56.

[2] R. & B., I, 317-18.

[3] *Tūzuk*, 196; R. & B., I, 396.

[4] *Tūzuk*, 265; R. & B., II, 79

Jahāñgīr says that he sent to Shāh Parwīz by the hands of Rāja Sārang Deo a *khāṣṣa* dress of honour, with a jewelled belt, which bore one blue and a few red *yāqūts*. R. & B. have translated the former as sapphire, and the latter as ruby.[1]

*Shāh Jahān*

It is recorded in the annals of IX R. Y. of Shāh Jahān's reign that the Emperor sent 'Abdu'l-Latīf of Gujarāt to Qutbu'l-Mulk at Golconda demanding the payment of a heavy tribute in gems and jewelled things and elephants; and Nihāl Chand, jeweller, was sent along with 'Abdu'l-Latīf to help in selecting and appraising the precious stones. The day when Qutbu'l-Mulk came out to receive Shāh Jahān's *farmān*, the jeweller noticed on Qutbu'l-Mulk's finger a *yāqūt* ring of rare beauty. And when the treasure sent by Qutbu'l-Mulk was displayed before the Emperor, the ring was mentioned by the two officers. Afzal Khān was at once ordered to

[1] *Tūzuk*, 327; R. & B., II, 200.

write to Qutbu'l-Mulk asking for the ring. Qutbu'l-Mulk sent it without delay. The *yāqūt* was found to weigh 12 *ratis*, had a beautiful colour, and was pure. It was consequently approved, and the price of it, which was fixed at Rs. 50,000, was credited to Qutbu'l-Mulk in his *Peshkash* account (*B. N.*, I, ii, 209).

## SECTION VII: PEARLS

'The Pearles,' says Linschoten, 'are sold by sives which are made of [mettell driven into thin plate][1] for that purpose, whereof the holes are round. There are many sorts of sives, the first hath small holes, and the Pearles that passe through them are at one price: the next sive hath greater holes, and the Pearles that fall through it are at higher price, and so foorth [at the least] seaven or eight sives. The small stuffe that serve for no Pearles, they call Alioffar, and are sold by the ounce, and used by Potticaries and Physitions, and to that end many of them are caried into Portingall, & Venice, and are very good cheape. To give the Pearles a faire colour, in India they use rice beaten a little with salt, wherewith they rub

[1]Orig. Dutch: 'blik' (white iron)

| No. | Description | Weight |
|---|---|---|
| | | AKBAR'S |
| 1 | Standard *Yāqūt*. . . . . | . . 103¾ *ratīs* |
| | | JAHĀNGĪR'S |
| 1 | *Yāqūt* of good colour, water and shape, offered by Prince Shāh Jahān to Jahāngīr. | 22 *ratīs* |
| | | SHAH JAHĀN'S |
| 1 | *Yāqūt* in Quṭbu'l-Mulk's ring, pure and of beautiful colour. | 12 *ratīs* |

| Price | Authorities |
|---|---|
| REIGN | |
| Rs. 50,000 | *Á'ín*, I, 12 ; Blochmann, 16. |
| REIGN | |
| Rs. 40,000 | *Tüzuk*, 265 ; R. & B., II, 78. |
| REIGN | |
| Rs. 50,000 | *B. N.*, I, ii, 209. |

them, and then they become as faire and cleare as christall, and so continue' (Linschoten, II, 135).

We learn from Manucci that Arabian and Persian vessels brought to India seed-pearls, pearls, and Jew's stones[1] (*Storia*, I, 59).

Manucci thus describes the seed-pearl fisheries of Tuticorin, and the way they were worked :

'Since I am speaking of that coast, I will state how they obtain seed-pearls on the shores of Tutochorim (Tuticorin) and in Manār. The inhabitants know the time of year for removing the pearls. It is in the months of March and April. The Dutch, as lords of the sea-shore on the coast of Tuticorin, and of the coast of Manār in the island of Ceylon, give licenses to fish for twenty-one different days. In this way they begin at the end of March, and spread the fishing out to May 20 or thereabouts. In this fishery participate six hundred *toni* (Tamil, *tōni*), which are vessels sufficient

[1] *Lapis judaicus* (considered a diuretic and dissolvent of calculus).'-Steingass.

for the purpose. Every vessel has a crew of thirty men, who pay the Dutch six *patacas* [=12 rupees] a head if they are Christians, nine if Hindû, twelve if Mahomedans. The Christian boats are three hundred, those of the Hindûs one hundred, and of the Mahomedans two hundred. Added together, these come to eighteen thousand men. These are the divers. Many more people collect as traders, carriers, including women and children. Ordinarily, during the fishing season there are forty thousand people. Each vessel pays one *pataca* for a *cartajo* (a license or permit). All this money together amounts to one hundred and forty-four thousand three hundred *patacas*.[1] Besides this, the Dutch provide supplies of rice, pulses, salted fish, and flour, *et cetera*, for sale to all this crowd. From this they derive great profit, for they sell at whatever prices they like.

The way of obtaining the seed-pearls is as follows: These vessels anchor in ten, twelve, or even sixteen fathoms. The divers

[1] *I* make the total come to 143.600 *patacas*.'—Editor's footnote.

are naked and oiled all over. In entering the water they lay hold of a rope, at the end of which a stone is attached, and this helps them to get nearer the bottom.[1] Another separate rope is tied round the man's waist. He has a basket hung across his shoulder, and holds in his hand a *coita* [bill-hook] which he uses to detach any shells which may be stuck to stones. Thus he rapidly fills the basket, and this done, he shakes the rope round his waist. His companions in the vessel, on getting this signal, haul him up as fast as they can to the surface, and take the shells. The diver who went down first takes a rest, and another man takes his place. Thus they continue the whole day, taking it in turns, and in the evening they withdraw, and from every boat they collect the shells and put them in a place set apart for them.

Some merchants take the chance of buying unopened oysters, the highest price given being one *pataca* per thousand. If the oysters turn out not to be rich in pearls, they do not

[1] 'The Venice Codex XLIV. adds that a weight is fastened to the diver's feet.'—Editor's footnote.

lose their money; while some have such good fortune as to enrich themselves at the cost of one *pataca*. The fishing being over, they leave the oysters to rot, and the smell makes anyone ill who is present. They leave the oysters to decay, because in this way the pearls turn out of a better colour, and the Dutch as over-lords of the site purchase the best, and at the cheapest rates. Every year at this fishery there die without fail a considerable number of the divers while diving.'[1]

There is a similar account in Linschoten (II, 133-35).

*Akbar*

The standard price given in *Ā'īn* is Rs. 50,000 for a pearl weighing 5 *tānks*, which means 120 jewellers' *ratis* (*Ā'īn*, I, 12; Blochmann, 16).

*Jahāngīr*

We have already seen (pp. 265-66 above) that Jahāngīr presented a necklace consisting of four rubies and one hundred pearls to Prince Parwīz (I R. Y.).

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[1] *Storia*, III, 106-8.

Again, a ruby and two single pearls valued at about Rs. 40,000 were bestowed on Prince Khurram in IV R. Y. (p. 268 above).

Some five months later, Khān Khānān sent to Jahāñgīr a ruby and two pearls of the value of about Rs. 20,000 (*Ibid.*).

On the New Year's Day of V R. Y. Khān-i-A'zam offered a pearl worth Rs. 4,000.[1]

Here is a good example of a gift of low-priced pearls on a large scale: 'As I had made a rule', says Jahāñgīr, 'that they should bring before me after two watches of the night had passed the dervishes and necessitous people who had collected in the illustrious palace, this year also after the same manner I bestowed on the dervishes with my own hand and in my own presence 55,000 rupees and 190,000 bighas of land, with fourteen entire villages, and twenty-six ploughs, and 11,000 *kharwār*[2] (ass-loads) of rice; I presented as well 732 pearls, of the value of 36,000 rupees, to the

[1] *Tūzuk*. 79; R.& B., I, 165.

[2] A *kharwār*, lit., an ass-load, was a weight equal to 100 Tabrīzī maunds or nearly 700 lb. English.

servants who by way of loyalty had bored their ears.'[1]

In X R. Y. Rāi Sūraj Singh received a pair of pearls for his ears (pendants apparently); and another pair of pearls was sent to Khān Jahān.[2]

We have also already learnt (pp. 269-70 above) that among Dayānat Khān's offerings (XI R. Y.) there were two pearl rosaries and six large pearls, though their price is not separately marked.

The next day I'timādu'd-Daula offered, among other things, two pearls worth Rs. 30,000 (*Ibid.*).

Salāmulla, the Arab, received a *ḥalqa* of pearls.[3] What is meant is not clear. R. & B. construe a *ḥalqa* as a necklace; but an ear-ring would suit the context better.

The story has already been narrated of a grand pearl worth Rs. 20,000 which Muqarrab

[1] *Tūzuk*, 136-37; R. & B., I,279.

[2] *Tūzuk*, 144; R. & B., I, 293.

[3] *Tūzuk*, 157; R. & B., I, 320.

Khān had procured for Jahāñgīr, and for which Prince Khurram found a match in an old *sar-pech* of Akbar's time. We need only refer here to pp. 270-72 above.

Among 'Ādil Khān's offerings came (XII R. Y.) two pearls, one weighing 64 or 65 *surkhs* and valued at Rs. 25,000, and another weighing 16 *surkhs*, very round and fine, valued at Rs. 12,000.[1]

Muqarrab Khān came from Ahmadābād and offered a pearl which he had bought for 30,000 rupees.[2]

We have already noticed (p. 276 above) how on a hunting expedition to Amānābād Nūr Jahān broke her necklace and lost a ruby worth Rs. 10,000 and a pearl worth Rs. 1,000.

Among the offerings brought forth by Prince Shāh Jahān on the XIV New Year's Feast were six pearls: one of these, which Shāh Jahān's agents had bought in Gujarāt for Rs. 25,000,

[1] *Tūzuk*, 198; R. & B., I, 400.

[2] *Tūzuk*, 206; R. & B., I, 415.

weighed I *tānk* and 8 *surkhs*, or 32 *ratis* ; while the other five were altogether worth Rs. 33,000.[1]

On Sunday, the 4th *Farwardīn*, XIV R. Y., Khān Jahān invited Jahāñgīr to an entertainment. He offered valuable presents, out of which the worth of 1,30,000 rupees including a pearl, which he had bought for 20,000 rupees, was accepted.[2]

The following story of how a pearl was lost and found is not only relevant here but is interesting as a curiosity of occult knowledge : 'It is a strange thing that when a pearl of the value of Rs. 14,000 or 15,000 was lost in the harem, Jotik Rāy, the astrologer, represented that it would be found in two or three days. Ṣādiq K. Rammāl (soothsayer) represented that in the same two or three days it would come from a place which was perfectly clean and pure, such as the place of worship or oratory. A female soothsayer represented that it would soon be found, and that a woman

[1] *Tūzuk*, 265 ; R. & B., II, 78.

[2] *Tūzuk*, 266 ; R. & B., II, 80.

with white skin would bring it in a state of ecstasy, and give it into the hand of the Hazrat (the king). It happened that on the third day one of the Turkish girls found it in the oratory, and all in smiles and in a happy frame of mind gave it to me. As the words of all three came true each one was favoured with an acceptable reward. This is written because it is not devoid of strangeness.'[1]

A merchant sold to Nūr Jahān two large pearls, which he had brought from Turkey, for 60,000 rupees. One weighed 1¼ *misqāls* or 33 *ratīs* and the other one *rati* less, *i.e.*, 32 *ratīs*. The empress offered the pair to Jahāngīr.[2]

A pearl was sometimes used as a button (*tukma*). A dress with a *nādiri* having *tukmas* of pearl was bestowed on Prince Shahryār,[3] Prince Parwīz,[4] and Khān Jahān.[5]

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[1] *Tūzuk*, 346 ; R. & B., II, 235.
[2] *Tūzuk*, 347 ; R. & B., II, 237.
[3] *Tūzuk*, 347 ; R. & B., II, 237.
[4] *Tūzuk*, 377 ; R. & B., II, 288.
[5] *Tūzuk*, 380 ; R. & B., II, 295.

A simple string of pearls frequently passed as a present in this reign: A rosary worth 10,000 rupees was bestowed on prince Parwīz (*Rajab*, 1018);[1] one on Bakhtar Khān *kalāvant* (*Dai*, IX R. Y.);[2] another one of valuable pearls was conferred on Khurram (*Isfandārmuz*, IX R. Y.);[3] another worth 50,000 rupees on Rāna Karan;[4] and yet another on Jagat Singh, son of Rāna Karan (29 *Tīr*, XVIII R. Y.).[5]

The following two items are of more than usual interest, and deserve individual attention:

Jahāñgīr tells us that *'itr* of roses (otto of roses) was invented in his reign by the mother of Nūr Jahān. After describing the method of its preparation, and its superior qualities, the emperor adds that in recognition of this achievement he bestowed on the inventress a

[1] *Tūzuk*, 75; R. & B., I, 157.
[2] *Tūzuk*, 133; R. & B., I, 271.
[3] *Tūzuk*, 136; R. & B., I, 278.
[4] *Tūzuk*, 144; R. & B., I, 293.
[5] *Tūzuk*, 367; R. & B., II, 270.

string of pearls. The *'itr* was given the name *'itr-i-Jahāñgīrī*.[1]

On the occasion of the anniversary of Hazrat Khwāja Mu'īnu'd-Dīn Chishtī, which fell on Sunday, 13 *Amurdād*, X R.Y., Jahāñgīr visited the Khwāja's tomb (at Ajmir). 'On the night of Sunday, as itwas the anniversary of the great Khwāja,' says the emperor, 'I went to his revered mausoleum, and remained there till midnight. The attendants and Sufis exhibited ecstatic states, and I gave the fakirs and attendants money with my own hand; altogether there were expended 6,000 rupees in cash, 100 *saub-kurta* (a robe down to the ankles), 70 rosaries of pearls, coral and amber, etc.'[2]

Among offerings: Rustam Khān offered a rosary of pearls (17 *Farwardīn*, X R. Y.),[3] and Mukarram Khān came from the province of Orissa with a similar present.[4]

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[1] *Tūzuk*, 132-33.

[2] *Tūzuk*, 146; R. & B., I, 297.

[3] *Tūzuk*, 139; R. & B., I, 283.

[4] *Tūzuk*, 332; R. & B., II, 208-9.

Sir Thomas Roe, writing from Aḥmadābād in December, 1617, says that he has sold the great pearl for 12,000 [*khazāna*] rupees, which was equivalent in value to 10,000 *Jahāngīris*. He adds that the pearl was worth a little more, but he could not find a purchaser, and so indulged Āṣaf Khān for reasons of policy.[1]

John Company's servants once bought some pearls at a total cost of £1521 17s. On being brought to Jahāngīr's court, they were rejected by Āṣaf Khān. They were then offered to Muqarrab Khān, but were 'disgraced in the Kings presence by Assuff Can, as being his refuzalls' (*E. F. I.* 1618-1621, p. 9). After having been unsuccessfully offered to many people, they were finally sold in June, 1618, to Āṣaf Khān for Rs. 8,092—at considerable loss (Roe, 450, f. n. 1). Sir Thomas Roe takes them to task for such ruinous dealings. He exhorts them either to buy cheaper or to invoice their goods right. The ambassador assures them that at the prices scheduled by him, a yearly sale to the value of £50,000

[1] *Letters Received*, VI, 230 ; Roe, 424.

ready money is possible, if pearls of good weight and beauty were chosen; and, further, that a trade of similar volume could be driven in precious stones, if bought according to his specifications (Roe, 450).

Sūrat factors, writing on 18 February, 1620, speak of a great pearl which has been received and sent up to the court, and add that pearls are esteemed rather by their greatness than their beauty.[1]

A Sūrat letter dated 7 November, 1621, informs us that the great pearl, which cost £340, was sold for Rs. 5000.[2] Perhaps this is the pearl referred to in the previous paragraph.

A pair of pendant pearls was sold for 2,300 rupees (February, 1625).[3]

*Shāh Jahān*

At the time of the treaty between Shāh Jahān and Qutbu'l-Mulk, the latter asked for

[1] *E. F. I.* 1618-1621, p. 185.
[2] *E. F. I.* 1618-1621, p. 328.
[3] *E. F. I.* 1622-1623, p. 178.

the Emperor's portrait. The Emperor had one sumptuously framed in pearls, and furnished with a string of precious pearls to hang it by. He sent it to him with other things including a tablet of gold on which the terms of the treaty were inscribed.[1]

In the passage quoted at length from 'Abdu'l-Ḥamīd's *Bādshāhnāma* (p. 283 above) we have already seen that Shāh Jahān's celebrated *sar-pech* (turban ornament) comprised besides five rubies twenty-four large pearls. The best and the largest of these, we were told, was of the shape of a guava, weighed 47 *ratis*, and was valued at Rs. 50,000.

Next to this *sar-pech* came the *tasbiḥ* on which there were thirty pearls and five rubies—total value, 8 lakhs of rupees (*Ibid.*).

The two other *tasbiḥs* already referred to comprised 125 pearls. These rosaries, which contained pearls and coloured *yāqūts*, were priced at 20 lakhs; and the central pearl of each was valued at Rs. 40,000, and weighed 32 *ratis* (*Ibid.*).

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[1] *B. N.*, I, ii, 210.

Shāh Jahān sent one lakh of rupees through Mīr Ibrāhīm Ṣafdarkhānī to Madīna, to be paid to Imām Qulī Khān, who had been shamefully ill-treated by his younger brother, Nazr Muḥammad Khān of Tūrān, and who was now visiting the Holy places. Imām Qulī Khān, it so happened, died at Madīna before Mīr Ibrāhīm reached there. The latter thought it best under the circumstances to invest the money in purchases; so he bought from ʿAlī Pāshā, governor of Laḥsā, a guava-shaped pearl weighing 43 *surkhs* for Rs. 30,000, besides some Arab horses.

On 21 *Ramaẓān*, 1054 *A. H.*, Ibrāhīm Ṣafdarkhānī came back to Court and waited on the Emperor. The pearl was approved and placed on the famous *sar-pech*, the price being fixed at 40,000 rupees (*B. N.*, II, 390-91).

We have it in the *Bādshāhnāma* that on the occasion of Jahān Ārā's recovery from a long illness lasting 8 months and 8 days, a feast of rejoicing was held from the 5th to the 12th of *Shawwāl*, 1054 *A. H.*, the bath of recovery taking place on the last day of *Ramaẓān*. On the

opening day of the feast the Emperor bestowed on her 130 unbored pearls for a *dast-band* (bracelet), the value totalling 5 lakhs of rupees (*B. N.*, II, 396-97).

On Solar Weighment (10 *Rabi'* I, 1065) Jahān Ārā Begum's presents to the Emperor included a pearl weighing 31 *ratīs*, which the princess had bought for 40,000 rupees.[1]

On the same occasion Shā'ista Khān offered presents worth two lakhs of rupees, including a large pearl which weighed nearly 46 *ratis* and was valued at 40,000 rupees.[1]

In a letter of April 13, 1630 we read: 'You shall doe well to continew your resolves for sending noe more jewells, except rare and ritch pearles, wherein the King taketh most delight. Other sortes hee doth nott esteeme, nor indeed of any thing, if not very curious, substantiall, and ritch.'[2]

*Aurangzeb*

On 7 *Shawwāl*, 1071, Būdāq Beg, the Persian ambassador, offered to Aurangzeb his master's

[1] *B. N.*, III, f. 96*b*; *A. S.*, III, 199.

[2] *E. F. I.* 1630-1633, p. 22.

presents—total value, 4,22,000 rupees. These included a bright, round pearl weighing 37 carats, such as is rarely met with (as the historian assures us). The royal connoisseurs appraised it at 60,000 rupees.[1]

On 24 *Sha'bān*, 1082, Muḥammad Amīn Khān offered 280 pearls valued at 1,05,000 rupees.[2]

Tavernier has a long note on pearls he found in Aurangzeb's Jewel Treasury: When inspecting it he saw 'two grand pear-shaped pearls, one weighing about 70 ratis, a little flattened on both sides, and of beautiful water and good form. Also a pearl button, which might weigh from 55 to 60 ratis, of good form and good water. Also a round pearl of great perfection, a little flat on one side, which weighs 56 ratis. I ascertained this to be the precise weight,' he continues, 'and that Shāh Abbās II, King of Persia, sent it as a present to the Great Mogul. Also three other round pearls, each of 25 to 28 ratis, or thereabouts, but their

[1] *'Ālamgīr Nāma*, 622; *Ma'āsir-i-'Ālamgīrī*, 36.

[2] *Ma'āsir-i-'Ālamgīrī*, 113.

water tends to yellow. Also a perfectly round pearl of 36½ ratis, of a lively white, and perfect in every respect. It is the only jewel which Aurangzeb, who reigns at present, has himself purchased on account of its beauty, for the rest either came to him from Dārā Shikoh, his eldest brother, he having appropriated them after he had caused his head to be cut off, or they were presents made to him after he ascended the throne. I have elsewhere remarked that the Emperor has no great regard for jewels, priding himself only on being a great zealot of the law of Muhammad.

'Ākil Khān also placed in my hands, for he allowed me to examine all at my ease, two other pearls, perfectly round and equal, each of which weighed 25¼ ratis. One is slightly yellow, but the other is of a very lively water, and the most beautiful that can be seen. It is true, as I have elsewhere said, that the Prince of Arabia, who has taken Maskat from the Portuguese, possesses a pearl which surpasses in beauty all others in the world; for it is perfectly round, and so white and lively that

it looks as though it was transparent, but it only weighs 14 carats. There is not a single monarch in Asia who has not asked the Prince of Arabia to sell him this pearl. Also two chains, one of pearls and rubies of different shapes pierced like the pearls; the other of pearls and emeralds, round and bored. All the pearls are round and of diverse waters, and from 10 to 12 ratis each in weight. In the middle of the chain of rubies there is a large emerald of the "old-rock", cut into a rectangle, and of high colour, but with many flaws. It weighs about 30 ratis. In the middle of the chain of emeralds there is an oriental amethyst [purple sapphire], a long table, weighing about 40 ratis, and the perfection of beauty' (Tavernier, I, 317-18).

Corresponding to the Illustration No. 4, Pl. V, we have the following letterpress:

'No. 4 is the figure of a large pearl perfect both as regards its water and its form which is like that of an olive. It is in the middle of a chain of emeralds and rubies that the Great Mogul sometimes wears round his neck, and it hangs down to his waist' (Tavernier, II, 103).

Now Tavernier, in the long passage quoted above, speaks no doubt of a chain of pearls and rubies, and of another chain of pearls and emeralds, but he has spoken nowhere of one of emeralds and rubies. Nor is it likely that here he is speaking of a third chain; for he himself tells us in letterpress to No. 5 just below[1] that it is customary to place a pearl between two rubies or between two emeralds—which is corroborated by the arrangement of the two chains already spoken of. The truth of the matter is that Tavernier is pleasant easy-chair reading, but once you prick the bubble everything goes to pieces. It appears it wasn't Tavernier's practice to turn back to what he had once written, to compare or to verify. Consistency, we have noticed again and again, is a minor virtue with him.

The following letterpress corresponds to Illustration No. 5 on Plate V :

'As a round pearl of perfect form, this is the largest I know of, and it belongs to the Great Mogul. Its equal has never been found,

[1] See next quotation.

for which reason the Great Mogul has not worn it, but has left it with other jewels which are unmounted. For if a match for it had been found, the pair might have been used as ear pendants, and each of the two pearls would have been placed between two rubies or two emeralds, in conformity with the custom of the country, everyone, rich or poor, in proportion to his means, wearing in each ear a pearl set between two coloured stones' (Tavernier, II, 103-4).

Is this one of the single pearls mentioned by Tavernier in his inspection note, or had he forgotten all about this important pearl ? In any case no cross reference is given to facilitate identification ; and we can only make guesses.

The largest pearl Tavernier saw at the Mughul court was the one which , he says, ' is suspended from the neck of a peacock made of precious stones, and rests on the breast, and this peacock surmounts the throne '. This pearl is illustrated in Tavernier, Pl. V, No. 2 (Tavernier, II, 103).

In the following passage Tavernier speaks of a grand bouquet of nine large pear-shaped pearls, which he presented to Aurangzeb, and goes on to narrate at length the story of the sale of a pear-shaped pearl of 55 Florentine (or 52$\frac{4}{5}$ English) carats, which Ja'far Khān tried in vain to buy, and which was finally sold to Shā'ista Khān at a considerable rebate:

'When I arrived at Jahānābād, one of them [*i.e.*, the two Persians, *viz.*, Nawāb 'Āqil Khān "Mīr 'Askarī" and Mīrzā Mu'azzam, and the Banian, Nihāl Chand] came and told me that he had the Emperor's order to see what I brought, before I would be permitted to exhibit it in his presence. They sincerely wished that the Emperor was not at Jahānābād, because they would have tried to buy all that I had for themselves, in order to profit by reselling it to the Emperor, and to the Princes when the opportunity should occur—this, nevertheless, they had never been able to induce me to do.

On the following day all three came to see me, one after the other, and they wished to get from me amongst other things a grand bouquet

of nine large pear-shaped pearls, the largest of which weighed thirty carats and the least sixteen with another single pear-shaped pearl of fifty-five carats. As for the bouquet, the Emperor took it; but with regard to the pearl, seeing that, notwithstanding all that they could say, I was, unwilling to sell them anything, they so managed that before I had shown my jewels to the Emperor Ja'far Khān, his uncle saw it, after which he did not wish to return it, saying that he would pay me as high a price for it as the Emperor, asking me not to mention it; for in fact he desired to present it to the Emperor.

After the Emperor had selected from among my jewels those which he desired, Ja'far Khān bought several pieces from me, and at the same time purchased the great pearl. Some days afterwards he caused me to be paid the amount agreed upon, with the exception of the pearl, upon which he desired me to rebate 10,000 rupees. The two Persians and the Banian had maliciously informed him that on my arrival they might, if they had wished, have had the pearl for 8,000 or 10,000 less than I

had sold it to him for; this was wholly untrue, and Ja'far Khān having told me that if I would not accept the money which he offered me I might take it back, I took him at his word, assuring him that he would never see it again during his life. I kept to my word, and remained firm in my resolve.....

Having then started for Bengal [*i.e.*, Tavernier having then started for Bengal], these three inspectors of jewels, incensed with spite, and urged on, no doubt, by Ja'far Khān, who was anxious to take his revenge for my refusal, wrote to Shāista Khān that I was taking some jewels to show to him, and among others a very beautiful pearl which I had sold to Ja'far Khān; but that he had returned it to me when he ascertained that I was trying to make him pay 10,000 rupees more than it was worth. They wrote similarly regarding the other jewels which I carried, and it was upon these false and malicious advices, which Shāista Khān did not receive till after he had delivered to me my bill of exchange, that the Prince wished to deduct 20,000 rupees from the total sum; this was reduced finally to a rebate of 10,000

rupees, with which I was obliged to content myself' (Tavernier, I, 112-13).

The author informs us in another place (II, 89) that this pearl 'of well-formed pear shape, and of fine water' came from the pearl fishery of the Margarita island. The pearls found there, he says, surpass the others in perfection, both as regards water and size.

This pearl is illustrated as No. 3, Pl. V, where, however, the water is described as 'somewhat dead'—by no means a solitary example of the author's short memory and slipshod manner. It is the largest pearl, he adds, which has ever been taken from Europe to Asia (II, 103).

A few more stories of pearls which never entered the Mughul Treasury to our knowledge are nevertheless interesting. Some or all of these may have found their way eventually into the Imperial Treasury.

Tavernier went to meet Mīr Jumla at Gandikota, and paid a preliminary visit to him on September 3, 1652.

'On the 4th,' he says, 'we again visited the Nawāb, and showed him the jewels which we hoped to sell to the King. They consisted of some pear-shaped pearls of a weight, beauty, and size which were unusual—the least exceeding 24 carats. After having examined them well, and shown them to a number of nobles who were present with him, he asked us the price; which having heard, he returned them to us, and at the same time said he would consider it' (Tavernier, I, 229).

Elsewhere Tavernier narrates the story of a 'large pearl of good water, but badly shaped', which Shā'ista Khān had once refused to buy from him. The nobleman asked for it again. Tavernier's report of the transaction is as follows:

'After I had handed it to him, "Say no more about it", said he. "In a word, how much do you want for this pearl?" I asked him 7,000 rupees for it, and it is true that rather than carry it back to France I would have taken 3,000. "If I give you", he replied, "5,000 rupees for this pearl, you will

be well repaid for the loss which you say you have sustained on the golden rupees. Come to-morrow and I shall pay you 5,000 rupees. I wish you to leave contented, and you shall have in addition a khil'at and a horse." I then made him a bow, and besought him to give me a young horse, fit for work, as I had a long journey to make. Accordingly, on the following day, I received as he had promised, the robe, mantle, two waistbands, and the turban, which constitute, as I have elsewhere described, the complete suit which these princes are accustomed to bestow upon those whom they desire to honour' (Tavernier, I, 17-18).

The Editor guesses that this pearl was the chief of the pearls Tavernier showed to Mīr Jumla at Gandikota.

Once in the hands of Shā'ista Khān, it may subsequently have found its way into the Imperial collection.

Tavernier has the following story of a pearl belonging to the 'Prince of Muscat': 'This Prince,' he says, 'possesses the most beautiful

pearl in the world, not by reason of its size, for it only weighs 12 1/16 carats, nor on account of its perfect roundness; but because it is so clear and so transparent that you can almost see the light through it. As the Gulf opposite Hormuz is scarcely 12 leagues wide from Arabia Felix to the coast of Persia, and the Arabs were at peace with the Persians, the Prince of Muscat came to visit the Khān of Hormuz, who entertained him with magnificence, and invited the English, Dutch, and some other Franks, in which number I was included, to the festival. At the close of the feast the Prince took this pearl out of a small purse which he carried suspended from his neck and showed it to the Khān and the rest of the company. The Khān wished to buy it, to present to the King of Persia, and offered up to 2,000 tomāns [about £6,900], but the Prince was unwilling to part with it. Since then I crossed the sea with a Banian merchant whom the Great Mogul was sending to this Prince to offer him 40,000 écus [£9,000] for this pearl; but he refused to accept that sum' (Tavernier, II, 87).

TABLE I.—PEARLS IN THE

| No. | Description | Weight |
|---|---|---|
| | | AKBAR'S |
| 1 | Model Pearl in Akbar's Treasury. .. | 120 *ratīs* |
| | | JAHĀÑGĪR'S |
| 1 | Offered by "Khān-i-A'ẓam" to Jahāñgīr. | |
| 2 | 732 pearls distributed by Jahāñgīr among his loyal servants. | |
| 3 | Two pearls offered by I'timādu'd-Daula. | |
| 4 | Grand Pearl procured by Muqarrab Khān for Jahāñgīr. | |
| 5 | "Ādil Khān's offerings : One Pearl. .. | 64 *ratīs* |
| 6 | Another Pearl. Very round and fine. .. | 16 *ratīs* |
| 7 | Pearl offered by Muqarrab Khān. .. | |
| 8 | Pearl on Nūr Jahān's necklace. .. | |
| 9 | Prince Shāh Jahān's offerings : One Pearl. | 32 *ratīs* |
| 10 | Five other Pearls. .. .. | |
| 11 | Pearl offered by Khān Jahān. .. | |

IMPERIAL TREASURY

| Price | Authorities and Remarks |
|---|---|
| REIGN | |
| Rs. 50,000 | *Ā'īn*, I, 12; Blochmann, 16. |
| REIGN | |
| Rs. 4,000 | *Tūzuk*, 79 ; R. & B., I, 165. |
| Rs. 36,000 for 732 pearls | ,, 136-37 ; R. & B., I, 279. |
| Rs. 30,000 for both | ,, 156 ; ,, I, 318-19. |
| Rs. 20,000 | Another to match it fourd in Akbar's *sar-pech*. *Tūzuk*, 158 ; R. & B., I, 322. |
| Rs. 25,000 | *Tūzuk*, 198 ; R. & B., I, 400. |
| Rs. 12,000 | ,, ,, ,, ,, ,, |
| Rs. 30,000 | *Tūzuk*, 206 ; R. & B., I, 415. |
| Rs. 1,000 | ,, 263 ; ,, II, 74. |
| Rs. 25,000 | |
| Rs. 33,000 for all the five pearls | Bought in Gujarāt. *Tūzuk*, 265 ; R.& B., II, 78. |
| Rs. 20,000 | *Tūzuk*, 266 ; R. & B., II, 80. |

TABLE I.—PEARLS IN THE

| No. | Description | Weight |
|---|---|---|
| 12 | Pearl lost and found in the Haram. | |
| 13 | Pair of large pearls bought by Nūr Jahān and presented to Jahāṅgīr. | 33 and 32 *ratis* |
| 14 | Rosary of pearls bestowed by Jahāṅgīr on Prince Parwīz. | |
| 15 | Rosary of pearls bestowed by Jahāṅgīr on Rānā Karan. | |
| | | SHĀH JAHĀN'S |
| 1 | The best and the largest Pearl on Shāh Jahān's famous *sar-pech*. Of the shape of a guava. | 47 *ratis* |
| 2 | The central Pearl of each of the two *tasbīḥs*. | 32 *ratis* |
| 3 | Guava-shaped Pearl bought by Mīr Ibrāhīm Ṣafdarkī ānī at Madīna. | 43 *ratis* |
| 4 | 130 unbored Pearls presented by Shāh Jahān for Jahān Arā's bracelet. | |
| 5 | Pearl offered by Jahān Ārā Begum to Shāh Jahān. | 31 *ratis* |

IMPERIAL TREASURY (*Cont.*)

| Price | Authorities and Remarks |
|---|---|
| Rs. 14,000 or 15,000 | *Tūzuk*, 346; R. & B., II, 235. |
| Rs. 60,000 for the pair | „ 347; „ „ 237. |
| Rs. 10,000 | „ 75; „ I, 157. |
| Rs. 50,000 | „ 144; „ „ 293. |
| REIGN | |
| Rs. 50,000 | *B. N.*, II, 392. |
| Rs. 40,000 | „ „ „ |
| Bought for Rs 30,000. Official price : Rs. 40,000 | „ „ 390-91. |
| Rs. 500,000 for all the pearls | „ „ 396-97. |
| Rs. 40,000 | *B. N.*, III, f. 96*b*; *A.S.*, III, 199. |

TABLE I.—PEARLS IN THE

| No. | Description | Weight |
|---|---|---|
| 6 | Large Pearl offered by Shā'ista Khān to Shāh Jahān. | Nearly 46 *ratīs* |
| | | AURANGZEB'S |
| 1 | Bright round Pearl sent by the Shāh of Persia to Aurangzeb. | 37 carats |
| 2 | 280 Pearls offered by Muḥammad Amīn Khān. | |
| | Seen by Tavernier in Aurangzeb's Treasury: | |
| 3 | (a) Pear-shaped Pearl. A little flattened on both sides. Of beautiful water and good form. | 70 *ratīs* |
| 4 | (b) A Pearl-button. Of good form and good water. | 55 to 60 *ratīs* |
| 5 | (c) A round Pearl of great perfection. A little flat on one side. Sent by Shāh 'Abbās II to the Great Mogul. | 56 *ratīs* |
| | (d) Three round Pearls. Their water tends to yellow. | 25 to 28 *ratīs* each |
| 7 | (e) A perfectly round Pearl. Of a lively white. Perfect in every respect. The only jewel purchased by Aurangzeb on account of its beauty. | 36½ *ratīs* |

IMPERIAL TREASURY (*Cont.*)

| Price | Authorities and Remarks |
|---|---|
| Rs. 40,000 | *B. N.*, III, f. 96*b* ; *A. S.*, III, 199. |
| REIGN | |
| Rs. 60,000 | *'Ālamgīr Nāma*, 622 ; *Ma'āsir-i-'Ālamgīrī*, 36. |
| Rs. 1,05,000 for 280 Pearls | *Ma'āsir-i-'Ālamgīrī*, 113. |
| | Tavernier, I, 317-18. |

TABLE I.—PEARLS IN THE

| No. | Description | Weight |
|---|---|---|
| 8 | (f) Two other Pearls. Perfectly round. One slightly yellow. The other of very lively water, and most beautiful. | 25¼ *ratīs* each |
| 9 | (g) The Pearls on the chain of pearls and rubies, and on that of pearls and emeralds. All the pearls round and of diverse waters. | 10 to 12 *ratīs* each |
| 10 | Large Pearl 'in the middle of a chain of emeralds and rubies'. Perfect as regards water and form. Of the shape of an olive. | |
| 11 | Round Pearl of perfect form. .. | |
| 12 | Pearl suspended from the neck of the peacock on the Peacock Throne. The largest pearl Tavernier saw at the Mughul Court. | |
| 13-14 | A grand bouquet of nine large pear-shaped Pearls offered by Tavernier to Aurangzeb. The largest of these weighed 30 Flor. carats, and the smallest 16 Flor. carats. | |

IMPERIAL TREASURY (*Cont.*)

| Price | Authorities and Remarks |
|---|---|
| | Tavernier, II, 103 (Illustr. No. 4, Pl. V).<br>„ II, 103-104 (Illustr. No. 5 Pl. V).<br>It may or may not be the same as No. 3 (c) or No. 5 (e) above. |
| | Tavernier, II, 103 (Illustr. No. 2, Pl. V). |
| | Tavernier, I. 112. |

TABLE II.—INDIAN PEARLS

| No. | Description | Weight |
|---|---|---|
| 1 | Pearl sold by Roe to Āṣaf Khān. .. | |
| 2 | Great Pearl sold by the E. I. Company factors. | |
| 3 | Pair of Pendant Pearls. .. .. | |
| 4 | Pear-shaped Pearl of fine water which Ja'far Khān tried to buy, and Shā'ista Khān finally purchased from Tavernier. | 55 Flor. car. = 52 4/5 Engl. car. |
| 5 | Some pear-shaped Pearls of unusual weight, beauty, and size shown by Tavernier to Mīr Jumla. | From 24 Flor. carats upwards |
| 6 | Large Pearl of good water but badly shaped, sold by Tavernier to Shā'ista Khān. | |

OUTSIDE THE MUGHUL TREASURY

| Price | Authorities and Remarks |
|---|---|
| Rs. 12,000 *khazāna* =Rs. 10,000 *Jahāngīri* | *Letters Received*, VI, 230 ; Roe, 424. |
| Rs. 5,000 | *E.F.I.* 1618-1621, p. 328. |
| Rs. 2,300 | ,, 1622-1623, p. 178. |
| Probably a costly article, since a rebate of Rs. 10,000 was asked on it. | Tavernier, I, 112-113, and II, 103 (Illustr. No. 3, Pl. V) and 348. |
| | Tavernier, I, 229. |
| Rs. 5,000 | ,, ,, 17-18. Possibly the chief of the pearls shown by Tavernier to Mīr Jumla(No. 5 above). |

TABLE III.—

| No. | Description | Weight |
|---|---|---|
| 1 | Largest known pearl. Cylindrical in form, with a slight swelling at one end. Measures 2 in. in length, 4½ in. in circumference about the thicker, and 3¼ in. about the thinner end. About three-quarters of it is white in colour with a fine 'orient,' the remainder bronze in tint (Smith, 294). | 454 carats |
| 2 | Large pearl. .. .. .. | 300 carats |
| 3 | Pear-shaped. .. .. .. | |
| 4 | "La Pellegrina." Beautiful white Indian pearl. Perfect sphere in shape. | 28 carats |
| 5 | "Great Southern Cross." 'Consists of nine large pearls naturally joined together in the shape of a cross, was discovered in an oyster fished up in 1886 off the beds of Western Australia' (Smith, 294). | |
| 6 | Some pearls of curious shapes. .. | |

FAMOUS PEARLS

| Price | Remarks |
|---|---|
| Over £12,000 | Was at one time in Henry Philip Hope's famous collection. |
| | Was in Imperial crown of Emperor of Austria. |
| | In possession of the Shāh of Persia. |
| | In Museum of Zosima in Moscow. |
| | In Green Vaults at Dresden. |

TABLE III.—

| No. | Description | Weight |
|---|---|---|
| 7 | The Pearl of the Prince of Muscat. The most beautiful in the world. Round, perfectly clear, and transparent. | 12 1/16 or 14⅞ Flor. carats |
| 8 | The largest pearl of which Tavernier had knowledge. The King of Persia bought this in 1633 from an Arab who had just received it from the fisheries at Al-katīf. 'It is the largest and most perfect pearl ever discovered, and it has not the least defect.' | |
| 9 | The biggest absolutely perfect pearl. The most superb specimen in the world. 'Although its diameter is that of a dime, the pearl is flawless, with a clear, lustrous beauty which excites wonder in all who see it' (Newspaper report, April, 1930). | |

FAMOUS PEARLS (*Cont.*)

| Price | Authorities and Remarks |
|---|---|
| More than £9,000 | Tavernier, II, 87; and p. 86, f.n. 1. |
| £110,400 | ,, ,, 103 (Illustr. No. 1, Pl. V). |
| $750,000 | 'Experts with the greatest knowledge of pearls say it is the biggest absolutely perfect pearl they have ever seen. It is certain there is not another like it in the whole world. It is one of nature's miracles. There are pearls in England that are bigger, but in quality cannot equal this one'.—Speech of Captain W. Llewellyn Amos, Secretary, National Jewellers' Association.<br><br>It was fished by divers in the Persian Gulf, and came by way of India.<br><br>Now in possession of a London firm.<br><br>If all this is not mere journalistic sensationalism, this pearl ought to be among pearls what Cullinan (when whole) was among diamonds. |

A footnote by the Editor supplements this information as follows: 'The account in the *Persian Travels* is that the pearl belonged to the Amīr of Vodana, who showed it to M. Constant and our author at Hormuz; it was perfectly round and transparent, and weighed 17 'abbās, or 14 7/8 carats, the 'abbās being equal to 7/8 of a carat. On behalf of the Governor of Surat, the latter, on a subsequent occasion, offered 60,000 rupees, say £6,750, to the owner for it, but he refused to sell it (*Persian Travels*, bk. ii, ch. ix)' (P. 86, f.n. 1). We can only add that the discrepancies are irreconcilable and thoroughly characteristic of the author.

### CASKETS OF JEWELS

Occasionally we hear of caskets containing jewels being given away as an integral present.

When the imperialists defeated the rebellious Khusrau in I R. Y., his box of jewels and precious things fell into their hands.[1]

[1] *Tūzuk*, 30; R. & B., I, 65.

The following presentations are recorded under *Shauwāl*, 1026 :[1] ' Ādil Khān sent to Jahāñgīr, through Prince Khurram, a casket of precious stones. Khān Jahān offered a casket full of gems and jewelled things. A parcel of gems and jewelled articles was offered by Mahābat Khān, the value of which was placed at 1,24,000 rupees.

On 21 *Shawwāl*, 1117, Aurangzeb bestowed on Sāhū Jī, son of Sambhājī, a special robe of honour and two valuable caskets. Presumably these caskets contained jewels.[2]

On the occasion of the death of their parents, princes Dādār Bakhsh and Dāwar Bakhsh received a sealed casket containing jewels and a bundle containing *khāṣṣa* dress (17 *Rabī'* I, 1118).[3]

## SECTION VIII : ROCK-CRYSTAL

' Rock Crystal,' says Mr. Goodchild, ' is the ordinary colourless variety ; it is always crys-

[1] *Tūzuk*, 195 ; R. & B., I, 394.

[2] *Ma'āṣir-i-'Ālamgīrī*, 511.

[3] *Ibid.*, 515.

talline and often crystallised. The crystals are usually elongated, and of sizes varying from a small pin to several feet in length. Fresange records a crystal from Madagascar measuring 20 feet in circumference. Dauphiné (Bourg d'Oisans) is famous for its groups of Rock Crystal (Fig. 12). The Alps generally have afforded fine specimens, and a notable group in the museum at Naples may be mentioned. In 1719 a cavity was found at Zinken, in the Bernese Oberland, from which crystals weighing altogether 50 tons were taken, and sold for some £60,000, some of the crystals weighing up to 8 hundredweight. In Upper Valais, crystals were found in a cavity which were of extraordinary size, up to over half a ton in weight. The Carrara marble quarries have also afforded good specimens. A specimen in Paris, taken by the French in Italy in 1797, weighs 8 hundredweight and is 3 feet in diameter. The Caucasus, Siberia, Brazil, and particularly Japan, have produced fine specimens. In North America, Moose Mountain, in New Hampshire, may be cited as a locality' (Goodchild, 149-50).

'The fashionable ladies of ancient Rome', continues the same writer, 'used it to cool their delicate hands with, for this purpose carrying small spheres of Rock Crystal in hot weather.....

In ancient times it was highly valued, especially perhaps by the Romans, for the production of vases and cups, some of which were of remarkable size, for it is recorded by Ben Mansur that at the capture of Ghasna in 1159 four vases made of Rock Crystal were found, each of which would hold two skinfuls of water. Pliny records that the material then used came from the Alps, and at that time it was believed to be water frozen so hard that it could not be thawed at ordinary temperature; this is said to have led the Romans to only use it for cold liquids. One of the most beautiful pieces of work in this material was a vase belonging to the French Kings; it was 9 inches high and $9\frac{1}{2}$ inches in diameter, and was carved with figures illustrating the intoxication of Noah. It cost some £4,000.....

The Indians seem to have had some secret method of *uniformly* staining Quartz' (Goodchild, 150-52).

Articles made of rock-crystal, both for use and decoration, were in great favour at the Mughul court. In Persian histories we are often coming up against mentions of pure, stainless crystals and articles of all kinds made of them. Cups and other things are of common occurrence. Occasionally we hear of 'looking-glasses' of Aleppo in gold and jewelled cases, and of Venetian crystal boxes and cups.

In his account of Cambaia (*i.e.*, Kambhāyat), Linschoten says: 'They have likewise a kind of mountain Christall, wherof they make many signets, buttons, beades, and divers other devises.'[1]

Yet from a remark by the same writer (II, 138) it appears that rock-crystal was not found in India nor in any other Oriental country. But we are told in Watt, *Dictionary of the Economi Products of India* (II, 170) that rock-crystals are abundant in South India, and are found in the Bombay Presidency and all over the country.

[1] Linschoten, I, 61.

On the Fifth New Year's Day, Mahābat Khān offered ' two European boxes, the sides of which were made with slabs of glass, so that whatever was placed inside could be seen from outside in a way that you might say there was nothing between them ' (*Tūzuk*, 79 ; R. & B., I, 165).

Among the articles offered by Prince Khurram to his royal father on one occasion (early in X R. Y.) was, ' a little crystal box of Frank work, made with great taste ' (*Tūzuk*, 140 ; R. & B., I, 286).

' When the merchant ' Abdu-l-Karīm left Iran for Hindustan, my exalted brother Shāh 'Abbās sent me by his hand a rosary of cornelian from Yemen and a cup of Venetian workmanship, which was very fine and rare ' (*Tūzuk*, 152 ; R. & B., I, 310). They were placed before the Emperor on the 9th *Bahman*, X R. Y.

' On the 21st [*Farwardīn*, XII R. Y. =1026 *A. H.*],' says Jahāñgīr, ' I gave leave to Muhammad Rizā, ambassador of the ruler of

Irān, and bestowed on him 60,000 darbs, equal to 30,000 rupees, with a dress of honour. As an equivalent to the souvenir (*yādbūdī*) that my brother Shāh 'Abbās had sent to me, I forwarded with the aforesaid ambassador certain presents of jewelled things which the ruler of the Deccan had sent, with cloths and rare things of every kind fit for presentation, of the value of 100,000 rupees. Among these was a crystal cup that Chelebī had sent from 'Irāq. The Shāh had seen this cup and said to the ambassador that if his brother (Jahāñgīr) would drink wine out of it and send it to him it would be a great mark of affection. When the ambassador represented this, having drunk wine several times out of the cup in his presence, I ordered them to make a lid and a saucer for it and sent it along with the presents. The lid was of enamel (*mīnā-kārī*). I ordered the Munshis of mercurial writing (*'Utārid-raqm*) to write in due form an answer to the letter he had brought' (*Tūzuk*, 185 ; R. & B., I, 374).

'Lately,' writes Roe in a letter to the East India Company dated Ajmīr, 25 January, 1615 [-16], 'the King of Bisampore sent his

ambassador with 36 elephants, two with all their chaines of wrought beaten gould, two of silver, the rest brasse, and 40 rich furnished horses, with jewells to the valew of 10 *lecks* of *rupias*; yet withall he sent China wares and one figure of christall, which the King accepted more then that masse of wealth' (Roe, 99).

On March 12, 1616, Roe was brought before Jahāñgīr, to whom he delivered as a most welcome present 'a purse which cost in England 24*s*., containing "a little boxe of cristall, made by arte like a rubie, and cutt into the stone in curious workes, which was all inameld and inlayde with fine gould. Soe rare a peece was never seene in India, as can wittnes all your servants resident at Adsmere. I can sett noe price, because it was geven me; but I could have sould it for a thousand rupees, and was enformed that had it beene knowne how highlye the King esteemed it, I mought have had 5,000 rupees. The King the same night sent for all the Christians, and others his owne subjects, artificers in gould and stone, to demand if ever they sawe such woorke or howe it could be wrought: who generallie confessed

they never sawe such arte, nor could tell how to goe about it, whereat the King sent me woord he esteemed it above a diamonde geven him that day of 6,000 *li.* price.[1].....
.....Within the boxe (which I presented to keepe the jewells in which others gave him) I putt a chain of gould of double lincks veary small, wheratt was hanged a whyte emrald cutt in the forme of a seale, and therein engraved, no bigger then a penny, a Cupid drawing his bowe, with this motto *Guardes*: being a curiositie not easilie matched, and esteemed by the King for exellent woorke. The stone was unsett, pendent and veary lardge, above halfe an inch in length. The gould wayed 46*s*.....
There being noe man in London, much lesse here, that can enamell upon stone, and therfore I knowe not what it [the box] coste; and the seale stone uncutt, I bought in the West Indies, and had it pollished and carved in London; it cost noe great matter rough" '
(Roe, p. 127, f.n. I). This seems to be rather an overdrawn picture of an article of considerable beauty and workmanship. There is no mention of it in the *Tūzuk*, however.

[1]There is, however, no mention of this stone in *Tūzuk*.

Among the articles required by the John Company factors for presents, we have 'two or three Venice crystal boxes' (*Letters*, III, 88).

On Thursday, the 13th *Tīr*, XIV R. Y., Sayyid Hasan, the ambassador of Shāh 'Abbās of Persia, placed before Jahāngīr, with a letter from his master 'a crystal drinking-cup, on the cover of which was [set] a ruby' (*Tūzuk*, 273; R. & B., II, 93-94).

*Aurangzeb*

Tavernier once presented to Aurangzeb 'a battle mace [*gurz* or *shash-par*] of rock-crystal, all the sides of which were covered with rubies and emeralds inlaid in gold in the crystal. This piece cost 3,119 livres [£233 18*s*. 6*d*.] (Tavernier, I. 114).

'I remember seeing the Emperor drink upon three different occasions while seated on his throne,' says the same writer in another place. 'He had brought to him on a golden saucer, enriched with diamonds, rubies and emeralds, a large cup of rock-crystal, all round and smooth, the cover of which was of gold, with the same decoration as the saucer. As a rule no one sees the Emperor eat except

his womenkind and eunuchs, and it is very rarely that he goes to dine at the house of any of his subjects, whether it belongs to a Prince or to one of his own relatives' (I, 309-10).

'Vessels made of rock-crystal,' adds the editor, 'were much esteemed by the Emperors. Ball saw some very fine examples of large size which were found in the palace at the capture of Delhi after the Mutiny. Possibly some of the fine specimens preserved in the Green Vaults at Dresden came from India. See Watt, *Commercial Products*, 561: *Enc. Brit.*, xxiii. 433. Some splendid examples of modern work in rock-crystal are illustrated in *Country Life*, 16th April 1921, p. lxxii' (Tavernier, I, 309, f.n. 3).

The following story from the *Storia* is just worth quoting:

Prince Shāh 'Ālam once ordered Manucci 'to send at once to procure him some crystal vessels for drinking water from. I sent off a man to Bombay to bring some. This order he executed —nay, those he brought were very handsome. These I presented to the prince.

He seemed to be astonished to see so many crystals at once—more than he had ever seen in all his life—for he imagined them to be of rock-crystal, which is extremely costly in the Mogul country. This is the reason of his asking me what the whole might be worth. Quite happy, I answered him that it was a present from me, and that Doctor Nicolas stated no prices to kings' (*Storia*, II, 401). Nor, apparently, did Doctor Nicolas scruple to play tricks on kings when opportunity served. Shāh 'Ālam then gave Manucci a valuable set of robes and a very nice horse.

Here is a report from the same source of a rather large crystal found in the Ganges near Patna: 'When Dā'ūd Khān was in charge of Paṭnah, as I have already said (II. 61), there was found one morning in the Ganges river, near the English Factory adjoining the city gate, a rock crystal eight palms in length and thirty palms in circumference. As it was a rarity, it was sent to the king in a boat. I saw it myself, and measured it in the year one thousand six hundred and sixty-three (1663)' (*Storia*, III, 133).

# CHAPTER IV

## NOTICES OF SEMI-PRECIOUS STONES AND OTHER SUBSTANCES

## CHAPTER IV

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We have been able to deal specifically only with the so-called precious stones. It is not to be inferred by any means that the treasury contained no other stones. Probably semi-precious stones went to make up a much larger quantity in the treasury.

One would think that exceptionally good and large specimens of these were assiduously collected and jealously guarded. We have no doubt the treasury contained specimens remarkable for beauty and colour, purity and size, of amethysts, garnets, chrysolites, turquoises, agates, moss-agates, sphenes, jaspers, opals, cornelians, onyxes, sardonyxes, cat's-eyes, corals, chalcedony, lapis lazuli, and vermilion.[1] And presumably there was

[1]. These names are not chosen at random. I have taken most of them from Fryer's list of 'Precious Stones of the East' (II, 142) and Linschoten's accounts of stones found in various places in India. These I have supplemented with such others as have been actually mentioned by Persian and English historians and other European travellers.

no dearth of such curiosities as the bezoar-stones, the so-called snake-stones, the porcupine stones, and the *yadatāsh* or rain-stones. Nor is this cursory catalogue by any means exhaustive.

We may now take up some of these and string together a few interesting remarks about each made either by scientists who have specialized in the subject or by European travellers like Linschoten, Tavernier and Fryer, who comment on them with special regard to Indian conditions.

## AMETHYST

It is a species of quartz, and has beautiful violet, purple or blue shades.

The word is derived from the Greek and means non-intoxicant, testifying to the old belief that the wine drunk out of a cup of amethyst would not intoxicate.

On exposure to heat amethyst generally turns yellow.

'The amethyst was used as a gem-stone by the ancient Egyptians, and was largely employed in antiquity for intaglios it is now used for episcopal rings' (*Enc. Brit.*, I, 807).

This mineral is widely distributed, but good specimens of pure amethyst fit for ornamental purposes are comparatively rare.

'The Amethist,' says Fryer, 'is a Stone of three several Colours, some of them are of a Violet Colour, some are of a more Oriental Colour, therefore called (*Amethist* Oriental) which bears a very good Price, few of these being to be found, but are the pleasantest Colour of all Stones. Another sort being Pale is called the White *Amethist*, or *Amethist* of *Carthagena*: This naturally is of a quick or sparkling Water, and very good Colour, having for the most part a Blush of Red, which Stones in Perfection bear a tolerable Price' (II, 148).

In *Tarikh-i-Yamin* (E. & D., II, 45) we have mention of a stone, which is identified by Mr. Hodivala[1] as a very fine specimen of amethyst.

[1] *Studies in Indo-Muslim History*, 148.

It weighed 450 *misqāls* or about $4\frac{2}{3}$ lb. av. or $5\frac{5}{8}$ lb. troy.

## AGATE

'In India, Agate is abundantly found in the Deccan rocks in the Kathiawar Peninsula to the West of the Gulf of Cambay, and is largely cut at Cambay (Kanbayat). Also in Rajpipla, and in the Rajmahal Hills' (Goodchild, *Precious Stones*, 170).

The Royal Scottish Museum contains a fine collection of Agates from various places in Scotland.

'There are many purposes besides those of ornament to which this material is put; such are, its use for the knife-edges of chemical balances, for the pivots for marine compasses, in the manufacture of pestles and mortars for grinding hard substances, for burnishing metals, rollers for use in textile industries, dies for moulding plumbago for lead pencils, etc. But by far the greater part produced is wrought into vases, bowls, paper-knives, trays, signet rings, seals, brooches, beads, sleeve links, and other such articles' (*Ibid.*, 170-71).

'Many very beautiful works of art have been produced in this material. France possesses a complete service in Agate, valued at one time at £ 20,000; and many fine examples of this work are to be seen in most of our larger museums' (P. 171).

The price of rough agate runs from £ 5 to £250 per hundredweight according to quality.

The Surat factors say that they can supply Agate or *bābāghori*[1] beads, and also speak of agate cups which the Ahmadābād factors have sent them (*E.F.I.* 1618-1621, p. 52).

Fryer says (II, 148) that agate is used for handles of knives, which is corroborated by a statement on p. 231 of *E.F.I.* 1637-1641, where we read of a case of knives with agate handles being presented to the king of Bījāpur.

It appears that agate pictures were imported into India and offered for sale both by the East India Company and by the Venetians, for we are told on p. 327 of *E.F.I.* 1618-1621,

[1] 'The white agate of Cambay, so called from the patron saint of the district in which the mines are situated' (*Ibid.*, f.n. 1).

that ' the aggatt pictures come farr shorte of your esteeme of them, by reason of quantities brought in by the Venetians; those that are allready sould of the said aggatt pictures doe produce but fifty per cent. proffitt, whereas in tymes past such yeilded three for one.'

On p. 99 of *E.F.I.* 1668-1669 we read of ' a small agate box containing three cornelian rings' being presented to Lord Arlington.

Moss-agates, which Fryer calls ' Tree-stones,' have, he says, a lively representation or form of a tree on them, and are esteemed (II, 147).

## CAT'S-EYE

Cat's-eyes ' come out of Cambaia, but the best out of Seylon and Pegu: they are little brought into Portingal, for there they are not esteemed, and likewise because they are worth more in India then in Portingall, for the Indians esteeme much of them, specially the Chinos, and thether they are caryed, better esteemed, and sold there then any other stones: the Indians say that this stone hath a certaine

propertie and vertue to preserve and keepe a man in the riches which he hath, and that they shall not lessen, but stil increase' (Linschoten, II, 141-42).

## TURQUOISE

Turquoise 'occurs in various shades of green and blue, sometimes rather grey or white.' The most valued colours among Western races are the rich sky blue, but among many of the Eastern people the more abundant green shades are preferred' (Goodchild, 284). 'The best specimens are known as Oriental Turquois or "stones of the old rock"' (*Ibid.*, 286).

The turquoises, says Linschoten, 'in India are little esteemed, for that the Indians and Portingals do not weare many of them, and make small account of them.'[1]

'Turquoise occurs only in Persia, and it is obtained in two mines. One of them which is called "the old rock" is three days' journey from Meshed towards the north-west and close

[1] Linschoten, II, 141.

to a large town called Nichabourg [Nīshāpūr]; the other, which is called "the new", is five days' journey from it. These stones from the new are of an inferior blue, tending to white, and are little esteemed, and one may purchase as many of them as he likes at small cost. But for many years the King of Persia has prohibited mining in "the old rock" for anyone but himself, because there are no gold workers in the country except those who work in thread, who are ignorant of the art of enamelling on gold, and without knowledge of design and engraving, and he uses for the decoration of swords, daggers, and other work, instead of enamel, these turquoises of "the old rock" which are cut and arranged in patterns like flowers and other figures which the jewellers make. This catches the eye and passes as a laborious work, but it is wanting in design' (Tavernier, II, 81).

## LOADSTONE OR MAGNETITE

Although Sir Thomas Roe categorically asserts that there are no loadstones in India (p. 91, bottom), Linschoten assures us that

it is found in great quantity and in many places in India. 'The Indians say, that if a man use dayly to eate a little of that stone, it preserveth him and maketh him look yong, and that he shall never looke olde: wherefore the Kinges and great Lordes of India use it in pottes and vesselles, therein to [eate and] seeth their meate, thereby as they beleeve to preserve their youthes' (Linschoten, II, 142).

## BLOODSTONE

In an inventory of the Old Joint Stock on p. 61 of *E. F. I.* 1618-1621 we have 119 *mahmūdis* as the price of 8,500 bloodstones.

## CORAL

'Although coral does not rank among precious stones in Europe,' remarks Tavernier, 'it is nevertheless held in high esteem in the other quarters of the globe, and it is one of the most beautiful of nature's productions, so that there are some nations who prefer it to precious stones' (II, 104). The Japanese, who esteem neither pearls nor precious stones, value beautiful beads of coral. The Portuguese,

who formerly did a large trade in Japan, could obtain for a coral as much as 20,000 écus or £4,500. 'The common people wear it and use it as an ornament for the neck and arms throughout Asia, but principally towards the north in the territories of the Great Mogul, and beyond them, in the mountains, of the Kingdoms of Assam and Bhutān' (*Ibid.*, II, 106-7).

Coral came chiefly from the Red Sea and the Mediterranean. [1]

The run of prices, the quality of the articles and the conditions of demand and supply in India may be gathered from scattered notices in the *E.F.I.* and *Letters Received*.

The best market for polished coral was Surat.[2] But as regards actual consumption, while great quantities of coral beads were absorbed by Bengal,[3] the Deccan was the greatest buyer of red coral, which was much

[1] *E.F.I.* 1618-1621, p. 131 and *E.F.I.* 1624-1629, p. XXXV.

[2] *E.F.I.* 1618-1621, p. 326.

[3] *Ibid.*, p. 259.

worn by the people and buried with them when they died.[1]

The superior coral known as the " Grezio " or " Gretzo " was in great request.[2] We are also told that coral in round or long beads and branches sold best ;[3] likewise coral of deepest colour and in thickest pieces, though short.[4]

Between 1622 and 1648 the price of good coral was 9 to 10 rupees a seer (of $\frac{3}{4}$lb.);[5] and in the years 1665-1668 it ranged between 10 and 16 rupees per seer.[6] Coarse coral was, however, available at all prices from $\frac{3}{4}$ of a rupee to about 7 rupees a seer.[7]

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[1] *Letters Received*, I, 307.

[2] *E.F.I.* 1642-1645, p. 174.

[3] *Letters Received*, III, 10.

[4] *E.F.I.* 1618-1621, p. 326.

[5] *E.F.I.* 1622-1623, p. 8; *E. F.I.* 1634-1636, p. 24; *E.F.I.* 1637-1641, p. 204; *E.F.I.* 1642-1645, p. 210.

[6] *E.F.I.* 1665-1667, p. 31 ; *E.F.I.* 1668-1669, p. 3.

[7] *E.F.I.* 1630-1633, p. 31 ; and 84. *E.F.I.* 1634-1636, p. 23 ; and 69. *E.F.I.* 1642-1645, p. 210; *E.F.I.* 1665-1667, p. 31 ; *E.F.I.* 1668-1669, p. 3.

Prices of coral beads in Bengal ran as follows :—

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Beads of | 12 | beads to a | *tānk* | at | 6 | *tānks* | for a rupee | |
| ,, | 6 | ,, | ,, | | 2 | ,, | ,, ,, ,, | |
| ,, | 4 | ,, | ,, | | $1\frac{3}{4}$ | ,, | ,, ,, ,, | |
| ,, | 3 | ,, | ,, | | $1\frac{1}{2}$ | ,, | ,, ,, ,, | |

(*E.F.I.* 1618-1621, p. 259).

Enclosing a copy of the custom-house valuation of the coral, the factors write to the Company, ' By this it will be seen that the sort called " recaduti " of 8*s*. or 9*s*. the ℔., yields most benefit ; the small sort now sent, called " tiraglia brutura," is not so much in demand. A hundred chests of coral will sell yearly, *viz*., fifty of from 2*s*. to 8*s*. the ℔. and fifty of from 8*s*. to 15*s*.' (*E.F.I.* 1630-1633, p. 31). We are informed in a footnote that 'recaduti' means 'dead coral,' and that 'tiraglia brutura' signifies the rough growths and crusts that form on the plant.

A fine ornament of coral which Ṣāfī Khān meant to present to Jahāngīr on his birthday is thus described in *E.F.I.* 1622-1623 : ' The principall thinge in her [the junk belonging to

Ṣāfī Khan, the Governor of Cambay] is a tree currall sett in gould by artt, made to distill watter from the topp unseene, rounde aboutt the branches. Itt is contayned in five chestes, and beinge by us vallued itt was thought to bee worth 2,000*l.*, itt beinge procured by the Governor of Cambaya to bee made in Goa against the beirthdaye of the Greatte Mogull and to him to bee presented, for which intentt this juncke was purposely sentt ' (P. 215).

We learn incidentally that the charge for polishing coral at a place in the Bījāpur kingdom was 10 pagodas, *i.e.*, about 40 rupees, a *man*.[1]

## LAPIS LAZULI

Lapis Lazuli, says Goodchild, ' has been known from very remote times, being much used by the Egyptians, and to a lesser extent by the Assyrians. Epiphanius, Bishop of Salamis, says the Tables of the Law given to Moses were inscribed on Lapis Lazuli. The Romans used it to some extent as a material for engraving on ' (P. 240).

[1] *E.F.I*, 1618-1621, p. 265.

'It is cut as a flat plaque, or *en cabochon*; more often it is worked into vases and other small ornamental objects, though now the solid material is not so often used as thin slices, which are veneered on. It is largely used, too, for mosaics and in the ornamentation of luxurious buildings such as the palaces of the Russian Czars. Formerly it was the sole source of the beautiful pigment ultramarine, which was greatly esteemed on account of the purity of its colour and permanence. Now, however, the pigment is made artificially, though the artificial product does not command nearly the same price' (*Ibid.*, 242-43). The columns of St. Isaac's Cathedral at Petrograd present a fine example of the use of lapis lazuli for architectural decoration.

Clavijo, writing in Tīmūr's time, speaks of 'the city of Aquivi, which is in the country where the lapis lazuli comes from :..... This city of Aquivi is.....ten days' journey in the direction of India the Less, but it lies rather to the southward of Badakhshán.'[1] The

[1] *Embassy to Tamerlane*, 274. For the whole of this quotation see pp. 262-64 above.

translator, however, cannot trace the place on the modern maps.[1]

The lapis lazuli mine in Badakhshān (Afghānistān) is mentioned by Tavernier and Marco Polo.

On 21 *Zi'l-qa'd*, 1044, the envoy of Nazr Muḥammad Khān, ruler of Balkh, presented to Shāh Jahān, on behalf of his master, 100 horses, 50 camels, male and female, 100 maunds of lapis lazuli, some brocades of Tūrān, sables, carpets, rugs, Russia leather, some pieces of porcelain, etc.—total price, Rs. 70,000.[2]

Soon after Aurangzeb had brought the war of succession to a successful issue, says Bernier, the ambassadors of the Khāns of Balkh and Samarkand waited on the Emperor, ostensibly to offer congratulations, really to conciliate his good will. Among the presents they brought were some boxes of lapis lazuli[3] (Bernier, 118). The translator adds under

[1] *Ibid.*, p. 360.

[2] *B.N.*, I, ii, 89 ; *A. S.*, II, 99-100.

[3] Manucci also refers to this present (*Storia*, II, 37).

this text: 'Lapis-lazuli was largely used in the pietra dura work in the Táj; and these Tartar ambassadors may have been bringing some of it as a tribute or offering to the Mogul Court for this very purpose. This tomb, although finished in 1648 as far as the mere structure is concerned, was probably worked at for many years afterwards (' built by Titans, finished by jewellers'), as much of the exquisite detail of its decorations could not have been carried out in any other way ' (p. 118, f. n. 1). This suggestion, I am afraid, is unacceptable. In the first place the Tāj was completed not in 1648 A.C., but towards the end of 1052 A.H., which corresponds to January-February, 1643 A.C. Secondly, when we are told definitely by ' Abdu'l-Hamīd that the mausoleum took nearly twelve years to build, and was finally completed, at the total cost of 50 lakhs of rupees, about *Zū'l-qa'd*, 1052,[1] we have no justification whatever for supposing that the finishing and decoration of the tomb straggled on till early in Aurangzeb's time, *i.e.*, for another eighteen years. It is much more reason-

[1] *B. N.*, II, 330.

able to assume that the earlier consignment of 100 maunds of this mineral, which was presented to Shāh Jahān (mentioned in the last paragraph) was used in the pietra dura work in the Tāj. In fact it must have come quite handy for use, and may actually have been sent for the express purpose of being used by the builders of the famous monument, the renown of which must have travelled beyond the Indian frontiers.

## MOTHER-OF-PEARL

This is the substance which lines the interior of many species of molluscs, and is similar in nature to the pearl (*Enc. Brit.*, XV, 852). It is cut out and used extensively for such purposes as making buttons, handles of cutlery, etc. It is also used in the inlaying of Japanese and Chinese lacquers, European lacquered papier-mâché work, and trays, etc., and as an ornamental inlay generally (*Ibid.*, XVII, 422).

'Its beautiful iridescence and lustre are due to that well-known optical phenomenon, the interference of light' (*Ibid.*, XV, 852).

About the mother-of-pearl Linschoten has the following :—

The Indians know how to prepare and clean it. ' They bring many of them into Portingale to serve for to drinke in, and to keepe for an ornament, [and for pleasure] specially those that come out of China and Bengalen, some guilt and painted with colours [very faire some] wrought with branches and other figures, as we dayly see them brought thether [Orig. Dutch : 'hither']. In India they make divers thinges of them, as deskes, tables, cubbards, tables to play on [backgammon boards], boxes, staves for women to beare in their hands, and a thousand such fine devises, which are all inlaid and covered with this Chanco or Mother of Pearle, very faire to beholde, and very workmanlike made, and are in India so common that there is almost no place in those countries but they have of them. It is likewise much caried abroad, both into Portingale, and els where, but they are most used in India, for there the women, speciallie those of Bengala use to weare manillias, or bracelets of them about their armes, that is to say, those of most account, and they

must not take a maidens maidenhead from her that is of any estate or degree, but she must have some of these mother of Pearle bracelets about her armes, which at this day is yet much used, [and observed,] whereby it is verie much worne ' (II, 135-36).

Linschoten is apparently confusing mother-of-pearl with ivory in the latter part of this passage.

Perhaps the finest specimen in India of mother-of-pearl inlay on a large scale is the canopy of the mausoleum of Hazrat Salīm Chishtī at Fatḥpur Sīkrī, which is thus described by E. W. Smith :

' Salîm's cenotaph is of white marble surmounted by a wooden canopy inlaid with mother-of-pearl tesseræ.....

The outside of the canopy is entirely encrusted with mother-of-pearl, laid in geometrical designs, bound at the corners and sides with copper. The cornice is worked with the favourite fish-scale ornament so common to the period in which the mausoleum was built.

Running through it is an embattlemented pattern in ebony, which material is also freely used upon the four-armed bracket capitals the sub-caps and the bases of the columns. The capitals and brackets are very intricately and delicately carved, and, in order to protect the fine inlaying upon them, the *arrises* of the mouldings are bound with copper. To show clearly the nature of the inlaying, a portion of the eaves around the top of the canopy has been omitted on the drawing. The brackets project up two tiers and beneath each is a circular pendant, tipped with copper; across the centre of the lower of the two brackets is a band of copper and one of ebony inlaid with quatrefoils in mother-of-pearl. The combination of the mother-of-pearl and ebony is very pleasing. The full effect of the treatment is seen upon the bases of the columns one of which is illustrated on Plate XLII. As it is impossible to reproduce the peculiar nacrous sheen of the mother-of-pearl upon a drawing, it has been shown in white upon the illustration ; whilst the ebony is in black.

The same design, or nearly the same, appears

on each of the bases, but that upon one side of the base is unlike that on the other. The inlaying is so intricate that it looks like damask-work, but in mother-of-pearl instead of gold or copper wire. Each little piece of mother-of-pearl is exactly shaped and fitted into the allotted position previously prepared for it, and then secured with minute brass pins and shellac. The minute strips of ebony between each piece of mother-of-pearl are secured in like manner and are perfectly flush with the face of the mother-of-pearl. It is impossible to describe the effect of the mother-of-pearl as seen in the dim light of the mortuary chamber. It is one of those things which defy description, and in order to realize its beauty it must be seen. The inlaying is most minutely and beautifully executed. There is nothing like it elsewhere in Northern India, and it is very doubtful whether such an elegant piece of like workmanship exists in any other part of India' (E. W. Smith, *The Moghul Architecture of Fathpur-Sikri*, Pt. III, 21-22).

## CHINESE PORCELAIN

Porcelain is an important subject. Not

only is it interesting in itself, but we know that the Imperial Treasury contained some 25 lakhs' worth of 'most elegant vessels of every kind in porcelain and coloured glass.' We are, I think, justified in according it a more extended treatment than to the majority of other articles.

In the passages selected here we have been at pains to avoid specialized treatment and technical terminology. It is hoped the reader, who requires an introduction to the subject, will find the following smooth and interesting reading :—

'Every connoisseur and every unprejudiced potter,' says Mr. Burton in his monograph on Porcelain, 'will admit, in his lucid moments that the porcelain of the Chinese marks the very crowning point of the potter's achievements. We may single out the glazed work of the ancient Egyptians or Assyrians, the painted terra-cotta vases of the Greeks, the brilliantly-enamelled faïence of the Persians, or the majolica of the Italians, as worthy of our high regard, yet Chinese porcelain surpasses all these as much in sheer beauty of

colour as in technical skill and in the wide range of its accomplishment' (46).

'The idea that a cup of porcelain changed colour and flew into pieces directly a poisonous draught was poured into it, was implicitly believed for many centuries. This belief was current not only in Europe but in Persia, India, and other Asiatic countries where porcelain was not made, so that we should probably be justified in regarding these false notions as the fables invented by cunning dealers, whether Chinese or Arab, anxious to enhance the value of their wares' (*Ibid.*, 47).

The chinaware in favour in the better Mughul days was chiefly that of the Ming period (1368-1644), though there may also have been pieces of the time of the Sung dynasty (960-1259). So in the account that follows we shall confine ourselves to the history and characteristics of the porcelain of the Ming period.

The famous chinaware of the Ming period (1368-1644) was manufactured in the imperial factory at Ching-tê Chên, near the Po-yang

lake in Kiangse, rendered famous throughout the world by the fine white porcelain made there. 'As this ware lent itself peculiarly well to painted decoration,' says the *Enc. Brit.* article, 'the vogue for painted porcelain rapidly replaced the old Sung taste for monochromes' (*Enc. Brit.*, XVIII, p. 366).

Hitherto, says Mr. Burton, 'all the colour effects were in the nature of coloured glazes applied either on plain shapes or on vessels that had previously been decorated with incised or embossed ornament. The first new departure, and a most natural one, was to decorate the piece with ornamental schemes, either of conventional foliage or of figure subjects, in which the different patterns of the design, isolated by raised lines, could be filled in with different glazes so as to produce an effect roughly analogous to that of a design in cloisonné enamel' (W. Burton, *Porcelain*, 66).

'With the discovery and the extended use of the materials of true porcelain, *kao-lin* and *pe-tun-tse*, the possibility must soon have pre-

sented itself to the delighted potter of preparing an absolutely white translucent porcelain, and when once this possibility had been realised there can be no doubt that everything else would give way before it.....We read at an early period of pure white porcelain made of the utmost thinness and delicacy, so that its translucence might be most apparent, and decorated only with delicate patterns, generally of dragons, waves or clouds, sharply engraved with a steel point in the dry clay before it was glazed and fired. Ware of this kind is said to have been produced at the famous factory of Ting-chou early in the twelfth century of our era. Occasionally the same ware was produced with a bright purple glaze having a tint like that of ripe grapes, and more rarely still with a beautiful clear black glaze. Dr. Bushell has translated a description of some of these early pieces left by a Chinese connoisseur of the sixteenth century, who, in describing a duck-headed vase of this Ting-chou porcelain, says: "I have seen hundreds of specimens of the white, scores of the purple-brown, but only this one of black in all my life" ' (*Porcelain*, 67-68).

'The Chinese esteem most highly the blue-and-white of the Hsüan-tê period (1426-1435), and of the period Ch'êng-hua (1465-1487), while they relegate to the third place the blue-and-white produced during the reign of Yung-lo (1403-1424)' (*Ibid.*, 68).

The cobalt used during these reigns is known as the Mohammedan blue, probably obtained from Baluchistan, where deposits of the purest cobalt ore, a mineral sometimes called cobalt bloom, has been found, which might be used without any other preparation than that of grinding and levigation.

Supply of the Mohammedan blue failed in the latter part of the fifteenth century, when the Chinese potter had to fall back upon his native ore. With this the character of the blue colour at once deteriorated. During the Chêng-tê period (1506-21), however, further supplies of the Mohammedan blue were arranged for at a cost of twice its weight in gold; and at this exorbitant price it remained available down to the middle of the sixteenth century. After this date the Chinese had to depend again on the cobalt pigment prepared by many

refinings of their native ore. It must be said that nothing ever equalled in brilliance the Mohammedan blue, which is often spoken of as rivalling the blue of the sapphire (*Ibid.*, 68-69).

Again, an underglaze red, made from copper, was used by the Chinese at a very early date. When we remember how difficult it has proved, even for the most expert of modern scientific potters, to produce this underglaze red colour, we bow before the Chinese in respect and admiration (*Ibid.*, 69). 'This magnificent underglaze red appears to have been obtained in its utmost perfection during the early part of the Ming dynasty, for we find it especially mentioned in the Hsüan-tê period (1426-1435)' (70).

The wonderful eggshell porcelain pieces, which the Chinese called "Bodyless," first appeared during the early times of the Ming dynasty. 'The true eggshell porcelain must always have required the utmost skill and dexterity of manipulation, for its substance has been reduced to so thin a layer that in a fine specimen it almost seems as if there could be no clay left between the two layers

of glaze. At all events, from the Yung-lo period (1403-1424) eggshell porcelains of varying degrees of delicacy, attesting the skill of different generations of potters, have been made practically without interruption. In spite of the extreme thinness of such pieces, the finest specimens had elaborate designs engraved, with a steel tool, in the paste before firing. The designs generally take the form of dragons in the midst of clouds or waves, the whole work being executed with such delicacy and precision as to leave us absolutely amazed at the audacity which could conceive, and the patient skill which could execute such marvels of technique. The finest early eggshell pieces, covered with incised patterns of this nature, were generally in pure white; so that the design is barely visible unless the vessel be held against the light or filled with a liquid. Considering that the difficulties of manufacturing such pieces must always have been formidable, it was only natural that a similar style of incised or engraved decoration should have been used on vessels of ordinary thickness, and these were often covered with delicately coloured glazes,

of which a beautiful pale-yellow seems to have been most highly prized, especially in the Hung-Chih period (1488-1505), and the Chèngtê period (1506-1521).

At the same early date, too, another delicate and difficult method of decorating white porcelain was invented. This is the decoration so often known among modern collectors as "grain of rice" pattern, where the design is actually cut out of the vessel while it is yet in the clay state, and then, when the glaze-coating is applied, the glaze fills up the perforations, which become like so many window-openings in the piece. This particularly charming method of decoration, which was also adopted by the Persian potters for their transparent ware, has excited the greatest interest among modern European porcelain-makers' (P. 71-72).

Some European manufacturers have in the nineteenth century made creditable attempts to imitate that kind of ware, but, in justice to the Chinese potter, it must be admitted that 'they can never rank for subtle beauty and delicacy with the dainty white Chinese pieces' (72).

Towards the close of the Ming dynasty the Chinese use of on-glaze colours in the decoration of porcelain comes in, thus foreshadowing the course which the decoration of pottery has practically taken in all the great pottery-centres of the world. This new manner of working, *i.e.*, painting on the fired glaze, 'replaces the freedom and abandon as well as the rich depths of colour of the earlier work by finer, more delicately drawn, more precise, and, as an artist would say, " tighter " work, inevitable from the changed technical method ' (72).

## CHINAWARE IN MUGHUL INDIA

The Imperial Treasury, as we have said, had huge stores of Chinese porcelain of the most valuable kind ; and in contemporary paintings we see chinaware of the Ming period reposing in niches in Mughul interiors. So we notice that China was used not only on the table but also for purely decorative purposes.

There must have been, among the rest, a considerable amount of the willow-green porcelain known as Celadon, which has been so popular among Muslim countries throughout the ages

as actually to suggest a Muslim origin. This last view, however, is discredited by modern authorities, who hold that the old celadon, which must be regarded as one of the earliest forms of porcelain, originated in China (Burton, *Porcelain*, 64).

Colonel T. H. Hendley has the following on celadon ware in India: 'In old Mogul towns in India, until lately, a good many specimens of celadon plates or vases might be purchased. It is said that this ware was in great demand even so far back as the Sung Dynasty—that is, from the tenth to the thirteenth centuries. The want was most largely met with, however, in the days of the East India Company, by importation from China. It was thought that it possessed in common with rhinoceros horn, the quality of splitting or breaking when brought into contact with poisoned food; hence the value attributed to it by Mohammedans, and especially by the Moguls. Dr. Bushell informs us that the presence of poison was said to be revealed by the exudation of a white humour from the cup or from the surface of a rod of rhinoceros horn put into the liquid to test it.

The belief was prevalent from very early times in China and Sumatra. The ware is extremely heavy. The basis is red and the glaze, which is very thick, has a dark willow-green colour. The vases are generally crackled, and the plates or dishes are deep and sometimes have fluted or gadrooned edges. Beneath the glaze there are usually bouquets of flowers (generally chrysanthemums), fishes and other designs.....

.....

.....The bright grass-green celadons of the Sung Dynasty (960-1280 A. D.) are certainly rare in India, but the greyish-green or sea-green of later dynasties, as the old Lung Ch'uan of the Ming period (1368-1644), which Dr. Bushell says are quite in the style of the antecedent Sung Dynasty, are common. Some of the dishes purchased at Delhi thirty years ago, of which one is illustrated (Plate 2), are exactly like that shewn in Plate II, Vol. II of his work, though they are generally more worn. As the Sung productions vary from pale sea-green to deep olive, and those of later periods are also of the latter colour, it is not easy to distinguish

them, especially as both may exhibit plain and crackled surfaces. Most of the Delhi specimens are dark grey-green and crackled. The glaze is generally very thick and runs down at the foot or border. The paste is usually red or brown, and is very hard. The popular Mogul or Delhi name was Ghori ware' ("Foreign Industrial Art Products imported into India" in *The Journal of Indian Art and Industry*, No. 129, for Jan., 1915).

We are not prepared to endorse the view that the *ghoris*, as they are known in India, are all celadon ware.

Clavijo tells us that Tīmūr carried away from Damascus, among other artisans, 'craftsmen in glass and porcelain, who are known to be the best in all the world. From Turkey he had brought their gun-smiths who make the arquebus, and all men of other crafts whereso-ever he found them, such as the silver-smiths and the masons.'[1]

'On Thursday, the 22nd [*Sha'bān*, 1016 *A.H.*],' says Jahāngīr, 'on the invitation of Āṣaf Khān, I went with my ladies to his house and passed the

[1] *Embassy to Tamerlane*, 288.

night there. The next day he presented before me his own offerings, of the value of ten lacs of rupees, in jewels and jewelled things, robes, elephants, and horses. Some single rubies and jacinths and some pearls, also silk cloths with some pieces of porcelain from China and Tartary, were accepted, and I made a present of the rest to him.'[1] The words in the text are *Faghfūrī* and *Khatā'ī* porcelain. The china of Faghfūr (according to Steingass, a place in China celebrated for its porcelain) and that of Khatā (*i.e.*, North China) would thus seem to be different kinds of ware, specifically named according to their provenance. This is corroborated by the entries that follow.

On VII New Year's Day the presents sent by Khān Daurān were placed before Jahāngīr. They included 45 horses, two strings of camels, porcelain of Khatā (or Northern China), fur-coats[2] of sable and other rarities of Kābul and its neighbourhood.[3]

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[1] *Tūzuk*, 63; R. & B., I, 132.

[2] This is correct, if the reading *postīnhā* be accepted. Some MSS. have *posthā*. In that case the meaning would be 'skins of sable.'

[3] *Tūzuk*, 100; R. & B., I, 206.

In the records of X R. Y. we have the presentation by Lashkar Khān of three strings of Persian camels, twenty cups and plates of *Khatā'ī* porcelain, and twenty greyhounds.[1]

Under date 5 *Urdībihisht*, XI R. Y., Jahāngīr writes as follows: 'On the 5th (Urdībihisht) 30 Iraq and Turki horses that Murtazā Khān had sent from Lahore were brought before me, as also 63 horses, 15 camels, male and female, a bundle of crane's (*kulang*) plumes,[2] 9 '*āqirī* (?),[3] 9 veined fish-teeth, 9 pieces of china from Tartary [*Khatā'ī*], 3 guns, etc., from Khān Daurān, which he had sent from Kabul, were accepted.'[4]

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[1] *Tūzuk*, 143.

[2] Is not 'a bundle of plumes for the aigrette' a better translation? The translators apparently read the word *kulangī* instead of *kalgī*, which latter is found both in the printed texts and the P. U. L. MS.

[3] The word '*āqirī* is correct, as it is found in all MSS. The translators' note on this passage (p. 452) is on the right track. '*Āqirī* is connected with '*uqār*, which is a bird whose feathers are used for aigrettes (*Bahār-i-'Ajam* and Seingass)—perhaps a heron.

[4] *Tūzuk*, 158; R. & B., I, 322-23.

*Faghfūrī* porcelain is also mentioned in *Qawā'id-i-Salianat-i-Shāh Jahān* (P. U. L. MS., f. 21*b*).

Some pieces of porcelain, sent by Nazr Muḥammad Khān of Balkh have already been mentioned under Lapis lazuli.[1]

Among the events of the year 1094 we read in *Ma'āsir-i-'Alamgīrī* that on the death of Hāfiz Muḥammad Amīn Khān, governor of Ahmadābād, his possessions were brought to court. They included, besides cash and animals, ten cases of porcelain of all kinds (P. 226).

On Pl. XIX (*a*) of *L.E.A.* we find two china dishes, one (No. A. 368) blue and white China Dish, said to have belonged to Mīrzā Jahāñgīr, s/o Akbar II, the other (No. A. 369) blue and white China Dish, said to have belonged to Akbar II.

European notices can be taken up now:

Sir Thomas Roe assures us that chinaware was in great request in India.[2]

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[1] See p. 397 above.
[2] Roe, 445 and 459 (bottom).

He tells the East India Company in one place that 'faire China bedsteeds' would be rich presents at the Mughul court (P. 99).

We have already seen (under Rock-crystal) that the King of Bisampore's ambassador brought to Jahāñgīr's court, among other very valuable things, 'China wares and one figure of christall, which the King accepted more then that masse of wealth' (Roe, 99).

Roe, it appears, wante, when going home, to buy some china to take home with him. In a letter to Nicholas Bangham dated April 1, 1617, he says: 'I heare yow have fine and curious China ware. If you will spare me some dozen fine cupps and dishes (such as yow will choose), I will give as much as any man. All these I desier yow will keepe for mee till wee meete; for I hope to pass downe by Brampoor toward England in October, and I would not trouble yow soe much but that I am resolved homward, and would willingly carry somewhat. My stock will not reach to things of profitt and trade; therefore, seeing I shall not gett riches, I would yet pleasure my frends'

(P. 360). So he wanted these for presentation at home.

Bangham apparently bought only two cups for him, and those dearly; for, says Roe, in a letter to Bangham written three months later, 'I thancke yow for the two China cupps, and doe extreamely like them for the curiositye. Their price I must bee content with, because the buyer cannot make yt; but they are dearer here at that rate by much then in England. I doe not desiere any more of that sort so small; but if yow can fitt mee out of the rest with a parcell of fine dishes or cupps for use, or any peece, as a bottle or eywer, and of the best sorts.....to make up this summe 100 or 80 *rup.*, I desier yow to make your choyce for mee' (P. 367).

It appears that the cups bought by Bangham were for ornamental purposes, while Roe wanted some china for use. Still Roe appreciates the beauty of the articles bought. One of these two cups, we are informed in another place, cost eight rupees (p. 400, f.n. 1). We thus learn incidentally that Roe desired to get a

dozen cups and dishes for 80 or 100 rupees, but could not.

On October 12, 1617, Roe saw Prince Shāh Jahān in his private room, where Āṣaf Khān had taken him, and presented him with 'a small China gold-chaine, in a China cup' (P. 400). This was one of the two cups Bangham had bought for the ambassador.

Under January 13, 1618, we have the following entry in Roe's diary: 'The Dutch came to court with a great present of China ware, sanders [*i.e.*, sandalwood], parrots and cloaves' (P. 427). This is supported by other reports to the effect that the Dutch were strong in the porcelain trade.[1]

Hawkins narrates the story of a 'faire China dish (which cost ninetie Rupias, or fortie five Rials of eight)' belonging to Jagāñgīr, which was broken by a mischance, when the Emperor was out in camp. The officer in charge, 'knowing how deerely the King loved this dish above the rest,' sent a trusty servant to 'China-

[1] See below.

machina'[1] over land, hoping that the dish would come before the Emperor remembered it. After a lapse of two years, before the new dish had arrived, the Emperor thought of the old one. When told that the dish was broken, he very nearly flogged the life out of the nobleman, and was sending him to prison for life when, on the intercession of a prince, he was ordered not to come before him till he had procured a similar dish. The Emperor advanced him five thousand rupees towards his expenses of a journey to China, and a quarter of his *jāgīr* was restored to him. Hawkins says that he had been fourteen months travelling, and had not yet come back; but the King of Persia, it so happened, had a like dish, and on hearing this pitiful tale, had sent it to the officer, who, at the time of Hawkins' departure, was going home (Purchas, III, 39-40).

[1] Māchīn, a popular corruption of Mahāchīn, is a very old Hindu name. It means Great China, and was vaguely used for the Chinese empire.

With Persian writers Mahāchīn, strictly, is South China while Khaṭā (English, Cathay) is North China; but Chīn Māchīn is often used in the vague sense of China. And that is how it is used here.

The E.I. Company had no porcelain trade in India worth speaking of. Consequently very little information about this trade in India is available in the E. I. Company's correspondence (*E.F.I.* and *Letters*). From the constant complaints of the factors that the china is bad and 'crazed' and broken and unvendible,[1] we are led to infer that their packing was careless and their buying defective. On their own showing the Dutch enjoyed a prosperous trade in this commodity. We are told that, 'at present all their estate [at Masulipatam] is in chinaware, "which is as britle as their harts to us are fickle."'[2] Again, 'the Chinaware which either Cartwright or Clark took in exchange for lead will not sell for a tenth of what it is rated at. No more should be sent, for the Dutch supply this place [Masulipatam] at such cheap rates that it does not pay to bring such brittle ware.'[3]

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[1] *E.F.I.* 1618-1621, pp. 47, 203 and 263;
*E.F.I.* 1624-1629, pp. 281, 284 and 297;
*E.F.I.* 1637-1641, pp. 256 and 266.
Also *E.F.I.* 1642-1645, p. 284, which, however, is written from Basra.

[2] *E.F.I.* 1637-1641, p. 45.

[3] *Ibid.*, p. 190. Also see *Ibid.*, p. 241.

As for prices, the following quotation gives the cost price of each of the articles mentioned, at Bantam (in Java) :—' From a note on the latter [the cargo list] we find that of the porcelain the prime cost was : saucer dishes, nearly 2*d.* apiece : flat sallet [salad] dishes, about 3½*d.*; sallet cups, 3½*d.*; posset dishes, 4*d.*; small ("quarter") basins, 1*s.* 9*d.*; larger (" half ") basins, 2*s.* 6*d.*; largest (" whole ") basins, 5*s.*' (*Letters*, III, 324-25).

From the low run of prices detailed here, we gather that the E.I. Co. did not go in for higher lines in the porcelain business. No wonder that they derived small profit and lost heart.

The following is part of a letter, dated May 15, 1617, and written by the factors at Ispahan to Bantam. The requirements appertain no doubt to the Persian Court, but the social customs and domestic conditions in the two countries were so similar that we may presume the requisitions to apply quite as much to India as to the country to which it owed its civilization and culture: ' I have been entreated by the King's treasurer and favourite to procure him divers necessaries and toys for

the King's use, according to a remembrance he hath given me. Part of them being what Suratt and India can furnish, I have to them written for. These hereunder specified in your Southern parts are only to be found; pleasing you to order their sending accordingly:

Cheney [China] dishes in sorts, 200 pieces to serve meat at table. Their dishes here are like our English, broad and not deep, and such ones he desireth.

Cheney dishes, 50 pieces of the largest and fairest can be gotten of the same making. These are intended when the King feasteth.

6 basins and ewers of Cheney.

100 small coffa dishes [coffee cups].

.....

We give you to understand that Cheney ware of all sorts is here a good commodity, being much in request; but we doubt in no great quantity. Besides, the brittleness of the commodity is considerable' (*Letters*, V, 246).

'In obedience to instructions from Sir Thomas Chamberlain to purchase rarities for presenta-

tion to King Charles, Buckeridge bought twelve China dishes: "a sort reported to breake if any poyson bee put into them, but I dare not affirme that as a truth" ' (*E.F.I.* 1661-1664, p. 392).

## IVORY

A term properly confined to the material which forms the tusk of the elephant, and, for commercial purposes, almost entirely to that of the male elephant, but often extended to a similar substance obtained from the walrus, hippopotamus, narwhal, cachalot or sperm-whale, etc., although only the first two of these are really important.

## ELEPHANT IVORY

These tusks are sometimes of tremendous size, a single specimen occasionally weighing 200 lb. ' The ivory from the African elephants is the most esteemed on account of its superior density and whiteness, but a certain amount is also obtained from India, Ceylon, Burma, and the islands of the Eastern Archipelago. In African elephants both the males and females have tusks, although those of the males are

larger, but in the Indian species the females are practically tuskless' (*Everyman's Encyclopaedia*, VII, 718).

The quality of ivory varies according to the districts whence it is obtained, the soft variety of the eastern parts of Africa being the most esteemed.

The price varies with size and soundness of the tusks, ranging from £10 to £90 per cwt.

Special qualities of ivory, which have been recognized from the earliest times, are its beautiful texture, and tints, its perfect elasticity and adaptability to the carver's tools.

As for modern industrial application, ivory is used at present in the manufacture of billiard-balls, cutlery handles, piano-keys, brushware and toilet articles, chessmen, carved figures, and other useful and ornamental articles.

Ivory carving is a highly interesting art. 'Since earliest times ivory has been used either alone or in conjunction with silver and bronze as a decorative material, and it has been both carved and engraved. Ivory has always been

used considerably for the decoration of palaces, and the Romans sent an ivory throne to Porsena, while, in the nineteenth century, an Indian Prince sent one to Queen Victoria. Ivory has also been used a great deal for religious purposes in such things as crucifixes, the heads of pastoral staves, liturgical combs, and even altar-pieces. Secular works of art, in which ivory has been employed, include seals, hunting horns, knick-knacks, snuff-boxes, toilet combs, mirror cases, chessmen, and draughts. Prehistoric man used pieces of bone, horn, and ivory for his sketch-book, and scratched on it drawings of animals The ancient Egyptians and Assyrians used ivory for domestic purposes and for the decoration of furniture but Egyptian ivory statuettes have also been found. The Greeks used ivory for the decorations on the trappings of their horses and for the bosses of their shields and for small boxes and caskets, but we possess few examples of Greek ivories, especially of the early period. Of Roman ivories we have a great number of consular diptychs, often from writing tablets and plaques which are beautifully carved in relief. The subjects of these carvings were usually classical myths or pictures of Roman

gods. The earliest Christian ivories in existence date from the time of Constantine and among these we have pyxes carved from ivory tusks, plaques, and book-covers. Byzantine ivories are very numerous and beautiful, and if the figure of Christ, so often portrayed, is inclined to be stereotyped, the decorative designs of these ivories are excellent. Up to the end of the fourteenth century, ivory carvings were usually of religious subjects, although often used for secular purposes, but after this date hunting scenes, deeds of chivalry, and pictures of tournaments were depicted, the sculptures being influenced by the romantic literature of the period. In India, ivory has been much used for caskets, many of which are extremely beautiful and elaborate. Chinese ivories are often more clever than beautiful, and consist chiefly of elaborately carved balls and models of villas; in the latter, however, some very beautiful work is to be found. Japanese ivories are usually very small, but very well designed and finished. Most Japanese ivories are comparatively modern, and the Japanese have used ivory a great deal for "netsukes," which are a kind of toggle used in connection with their

smoking gear. In modern times ivory has been used for sculpture, either alone or in conjunction with bronze and jewels. One modern example of ivory sculpture that may be mentioned is the "Lama" by George Frampton. This piece is the bust of a woman. The face is life-size and carved out of ivory, while the headdress and dress are of bronze (*Ibid.*, pp. 718-20).

The ivory throne sent by the Indian Prince to Queen Victoria (referred to in this passage) is a little more fully described in the following quotation from a monograph[1] published by the Government of India in 1883:

'Some will no doubt remember the ivory throne and footstool exhibited in 1851, the gift of the Raja of Travancore to Her Majesty the Queen. It is a remarkable specimen of carved ivory, displaying skill in the design and execution. The ornament of the back and sides is very elaborate, and consists of bands and compartments of conventional foliage, human figures

[1] *Fifty-one Photographic Illustrations taken by order of the Government of India of some selected objects shown at the Third Exhibition of Native Fine and Industrial Art opened at Simla by His Excellency the Viceroy on the 24th September, 1881. London*, 1883.

and animals, the style and arrangement of which derives its character from the carved architectural ornament of Dravidian art' (P. 5).

The rest of the note on Carved Ivory is not devoid of interest: 'India has always been famed for ivory carvings, which are applied to furniture and to all descriptions of useful and ornamental objects. The modern work is produced mostly at Murshedabad in Bengal, and at Shahpur, Amritsar and Delhi in the Punjab, at Bhurtpur, Jodhpur and Udaipur in Rajputana, in Bombay, in Assam, and in Burma, and at Vizagapatam and Travancore in Madras. Small statuettes, models of elephants and other animals, carved paper-cutters, chowris or fly whisks, sword and knife handles, chess-boards and chessmen, tankards, combs, and all descriptions of boxes, are among the most commonly produced articles. Carving in ivory produced in India is done for the most part by hand, and is much to be admired for elaboration of detail and for picturesque grouping of figures and animals. The geometrical and foliated ornament is always first-rate,

and the production of carved ivory suitable for the application to furniture and to useful objects should be developed and encouraged' (*Ibid.*).

## IVORY AND IVORY WORK IN INDIA

Now we can jot down some bits of information about ivory and articles of ivory in India during the Mughul period :—

Ivory, especially the best kinds, came chiefly from Africa in the first instance.[1] It was, however, also imported from England, though sometimes the commodity was rather dearer in England than in India.[2] The ivory brought from England was not so white as that which came from Mozambique.[3] 'The largest teeth', says Milburn, 'are said to come from Africa, and are most esteemed, being of a closer texture, and less liable to turn yellow than those from the East Indies.'[4]

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[1] *E.F.I.* 1624-1629, p. XXXV and Milburn, *Oriental Commerce*, I, 62.

[2] *E. F.I.* 1630-1633, p. 5.

[3] *Letters*, III, 10.

[4] Milburn, *Oriental Commerce*, I, 62.

'The ivory from the islands of Ceylon and Achīn [he means Sumatra]', says Tavernier, 'has the peculiarity when it is worked that it never becomes yellow like that from the Peninsula and the West (*sic*) Indies; this causes it to be more esteemed and dearer than the other' (1,222-23). No elephants are found in the West Indies!

So also Ovington: 'The *Achen* Elephants are most looked upon for their Teeth, because that Ivory they say, maintains its Whiteness, and turns not Yellow, as other does' (P. 192).

The elephants of Ceylon, says Linschoten, are the best (I, 80).

These remarks are corroborated by Watt, *Dictionary of the Economic Products of* India:

'It is said that Indian ivory has an opaque dead-white colour, and manifests a tendency to become discoloured. The Ceylon ivory is distinguished by fine grain, small size, and pearly bluish tint. Siam ivory is in the trade regarded as much superior to the Indian in

appearance and density. It has been remarked of Africa that the nearer the equator the smaller the elephants but the larger the tusks. The finest *transparent* ivory is collected along the West Coast, between latitudes 10°N. and 10°S. The best *white* ivory is obtained from the East Coast. African ivory is said to be best when recently cut. It has a mellow warm transparent tint, as if soaked in oil, and has very little appearance of grain or texture' (Watt, *Dict.*, III, 227).

We gather from scattered remarks by the John Company factors that the quality of ivory depended on weight, length, and whiteness, as well as on the perfect roundness and soundness of the tusks.[1]

According to Fryer there were three qualities of ivory :

' *Muyn*, such are the greatest, free from Flaws.

*Muyda*, which are the lesser, or the great ones with Flaws.

[1] *Letters*, II, 181 ; III, 10 ; IV, 296.

*Sera*, the least, or worst sort ' (II, 140).

I am not able to trace the words, *Muyn*, *Muyda* and *Sera* : nor am I able to suggest whether they are of Portuguese or Oriental origin.

' The Weights by which they are bought,' continues Fryer, ' are *Baharrs* and *Frasslees* ; each *Baharr* 20 *Frasslees*, each *Frasslee* 12 *l.* and they call the *Baharrs Gross*.

Of *Muyn*, $\frac{1}{2}$ *Baharr* of 20 *Frasslees*, makes 1 *Baharr Gross*.

Of *Muyda* and *Muyn* they hold equal Price, in regard that though the Teeth of *Muyn* be bigger than the other, yet the *Muyda* giving more Weight, they balance Account' (II, 140).

This means apparently that *Muyn* and *Muyda*—the first and second qualities—were quoted nominally at the same price, but as the *Baharr Gross* of the former was half the weight of the *Baharr Gross* of the latter, the price of the former was really double that of the latter.

Formerly, says Fryer, *Muyn* and *Muyda* were worth 260, 270 and 280 *Cruzado* per *Baharr Gross*. A *Cruzado*, according to Fryer, is $\frac{4}{5}$ of the Roy of $\frac{8}{8}$, or $\frac{8}{5}$ (or $1\frac{3}{5}$) rupees,[1] since a royal (or rial or real) of eight = Rs. 2. The price of a *Baharr Gross* would thus be Rs. 416, 432 and 448 respectively; that is to say, for *Muyn* Rs. 416 to 448 per 120 ℔., and for *Muyda* Rs. 416 to 448 per 240 ℔.

Of the third quality, *Sera*, the current price, says Fryer, is 150, 160 and rarely 180 *Cruzado* per *Baharr Gross*. Presuming that the *Baharr Gross* of this quality was 240 ℔., the quoted price would come to Rs. 240, 256 and 288 respectively for 240 ℔.

Further, at Surat the following rule was observed in the ivory trade: 'All over 16 *Sear* sell at 40 *Sear* to the *Maund*; from 10 to 16, at 60 *Sear* to the *Maund*; from 10 *Sear* and under, 80 *Sear* allowed to the *Maund*' (*Ibid.*).

[1] This result is not consistent with the value assigned by Dr. Ball to a crusado, which ranges between 2*s.* 3*d.* and 2*s.* 10*d.* But when we are taking Fryer's statements and weights we must accept his values.

Here the figures refer apparently to the total weight of the particular tusk, a larger one being far more valuable than a smaller one, other things being equal.

As Fryer is talking of Surat, by seer he means presumably the Surat seer, which was $\frac{3}{4}$ of a pound or a little under ; so that 16 seers would be 11 or 12 ℔., and 10 seers about 7℔.

William Milburn, who was in India in the end of the eighteenth and beginning of the nineteenth century, supports this statement, with the further subdivision, that while the tusks weighing from 10 to 5 seers each went 80 seers (or 2 maunds) to the maund, those weighing under 5 seers went 160 seers (*i.e.*, 4 maunds) to the maund (Milburn, *Oriental Commerce*, I, 62).

Milburn also is talking of Surat and Cutch, but he makes his 16 seers equal to 15 ℔., which is an unusual value.

The E. I. Company factors give a widely different scale of weights for the various kinds

Surat factors, writing under date 26 Feb., 1616 [1617], place in the first class tusks weighing two, three, or four to a hundred-weight, in the second those weighing four to eight to a hundredweight, and in the third such as weighed 27 per cwt. (*Letters*, V, 105).

This would assign tusks weighing 28 to 56 lb. to the first class, those weighing 14 to 28lb. to the second, and those weighing 4 lb. and under to the third.

Again, we are told that tusks weighing under 16lb. lose a third in value (*E. F. I.* 1651-1654, 140), the hollow of the teeth being worth little (*Letters*, II, 181).

We learn that the medium kinds of ivory found the best market in Gujarāt, while the largest specimens, as one would imagine, were in demand at Agra and Lahore (*Letters*, V, 105). In another place we are told that tusks weighing 16 to 30lb a piece were most vendible at Surat (*E. F. I.* 1651-1654, p. 140).

The following run of prices can be gathered from the notices in *E. F. I.* and *Letters* :—

| Quality | Price in rupees per *Akbari* maund (of 55 lb.) |
|---|---|
| Large | 40 to 50, with a possible rise to 60.[1] |
| Medium | 30 to 35.[2] |
| Small | 16 to 30.[3] |

The smaller sort is called "Chan-dahare."[4]

Linschoten speaks in glowing terms of the skill and workmanship of Cingalese artificers in gold, silver, ivory, iron, and other metals. 'They make the fairest barrels for péeces that may be found in any place,

[1] *E.F.I.* 1622-1623, p. 108;
,, 1624-1629, p. 326;
,, 1630-1633, p. 132;
,, 1646-1650, pp. 8 and 250.
*Letters*, I, 28, 33 and 238;
II, 100, 218, 248, 260;
III, 8, 86;
IV, 296; V, 105; VI, 159.

[2] *Letters*, III, 41; VI, 159;
*E.F.I.* 1622-1623, p. 8.

[3] *E.F.I.* 1661-1664, p. 211; *E.F.I.* 1665-1667, p. 31;
*Letters*, I, 299 and 304;
*Letters*, V, 105; VI, 159.

[4] *E.F.I.* 1618-1621, p. 189.

which shine as bright as if they were Silver'. The same writer thus describes a crucifix of ivory: 'My maister the Archbishop had a crucifixe of Ivorie of an elle long, presènted unto him, by one of the inhabitants of the Ile, and made by him so cunningly and workmanly wrought, that in the hayre, beard, and face, it séemed to be alive, and in al [other parts] so neatly wrought and proportioned in limmes, that the like can not be done in [all] Europe: Whereupon my maister caused it to be put into a case, and sent unto the King of Spaine, as a thing to be wondered at, and worthy of so great a Lord, to be kept among his [costliest] Jewels' (1, 81).

'Their teeth which is the Ivory bone, is much used in India, specially in Cambaia, whereof they make many curious peeces of workemanship, the women weare manillas, or arme bracelets thereof, ten or twelve about each arme, whereby it is there much worne, and are in great numbers brought out of Aethiopia, Mosambique and other places' (Linschoten, II, 3).

In this connection the following passage in the E. F. I. chronicle relating to the Surat

Presidency in 1668 is of interest: 'Elephants teeth have fallen in price these five yeares, and hath not that good esteeme as in former tymes; which made us very inquisitive to finde out the reason, and are told that much of the use they were putt to is taken off; as, uppon the death of the husband, the wife, putting herselfe into widowhood, not onely layes by all her jewells and ornaments, but breakes her ivory braceletts, which are 8 or 10 uppon each wrist; and soe did the whole kindred, mourning certain dayes, and then were again supplyed with new from the deceaseds kindred; which superstition was soe universall that it caused a vast expense of teeth. But they of late are become wiser and make silver in their stead, which att funeralls they lay by for a tyme and then putt them on again; and this is now become soe generall that little or noe ivory is worne' (*E.F.I.* 1668-1669, p. 26).

Jahāñgīr tells with his usual unction the story of a slave's workmanship in ivory carving: 'One of the royal slaves who was serving in the seal-cutting departments prepared and laid before me a design such as I had never

seen or heard of before. As it is exceedingly strange, a detailed description of it is given. In the shell of a filbert four compartments had been carved out of ivory [strictly, elephant bone]. The first compartment was one of wrestlers, in which two men were engaged in wrestling, a third was standing with a spear in his hand, a fourth with a hard stone ['a stone and a cord', *i.e.*,a sling]. Another was sitting with his hands placed on the ground, while in front of him were laid a piece of wood, a bow and a pot. In the second a throne had been made above which a *shamiyāna* (a tent-fly or canopy) was depicted, and a man of wealth (a prince) was seated on the throne with one leg placed over the other and a pillow at his back. Five servants were standing around and before him, and tree-boughs threw a shade over the throne. In the third compartment is a company of ropedancers, who have raised upright a pole with three ropes fastened to it. A rope-dancer upon it (qu. on the ropes ?) has taken hold of his own right foot with his left hand behind his head, and standing on one foot has placed a goat on the top of the

pole.[1] Another person has thrown a drum on his neck and is beating it, whilst another man is standing with his hands lifted up and looking at the rope-dancer. Five other men are also standing, of whom one has a stick in his hand. In the fourth compartment there is a tree, below which the figure of the revered (*ḥazrat*) Jesus is shown. One person has placed his head at Jesus' feet, and an old man is conversing with Jesus and four others are standing by. As he had made such a master-piece, I honoured him with a present and with increased salary' (*Tūzuk*, 97-98; R. &B., I, 200-1).

From the likeness of Jesus Christ in the fourth compartment, Sir Sayyid Aḥmad argues that this piece of carving was probably

[1] The translator makes a correction in the text, which is not warranted by the readings of the MSS. extant. The I.O. MS., to which the translator refers in a footnote, and the finely-written, though incomplete, copy of the *Tūzuk* in the P. U. L., agree with *Iqbālnāma* (p. 58), which reads *buzbāzī*, and not *barbāzī*, as the translator construes it. Sir Sayyid Aḥmad's reading is incorrect. The meaning clearly is that a *buzbāz* is standing and is making a goat stand on the pole, while a person who has a drum round his neck beats it. A *buzbāz* is a performer (quite common in India) who goes about with a goat showing its tricks.

the work of a European artist ; the royal slave having got hold of it and passed it off as his own handiwork.

Among the annals of XII R. Y. we read in the *Tūzuk* : ' On this day [Sunday, the 24th *Dai*] Amānat Khān presented two elephants' tusks ; they were very large, one of them being 3 cubits 8 *tassū* (finger-breadths) in length and 16 *tassū* in circumference ; it weighed 3 maunds and 2 seers, or 24½ Irāq maunds.'[1] At 55 lb. to the maund, this comes to over 165 lb. The weight and size given here may be taken as the maximum weight and size of a tusk in Mughul India. Elsewhere we learn that a tusk weighs up to 200 lb. That may apply to an African elephant.

Another couple of giant tusks is mentioned below.

The King of Ethopia, Bernier informs us, sent some presents to Aurangzeb at his accession, in token of his goodwill. These included ' a couple of elephants ' teeth, of a size so pro-

[1] *Tūzuk*, 209 ; R. & B., I, 423.
[2] P. 426 above.

digious that it required, it seems, the utmost exertion of a strong man to lift either of them from the ground' (P. 135). None of the presents, however, ever reached Delhi, owing to a series of mishaps on the way.

## WALRUS IVORY OR THE "FISH-TEETH"

These are the two long canine teeth or tusks in the upper jaw of the walrus, also called sea-horse or morse. The tusks of the female are slightly longer, though not stouter, than those of the male, and may attain a maximum length of three feet.[1]

The ivory obtained from walrus-tooth is white like elephant ivory, though somewhat more yellowish; but there seem to have been extant some parti-coloured (veined or spotted) specimens of it, which, when produced before Jahāṅgīr, drew his enthusiastic admiration.

Presents of Khān Daurān from Kābul, which included nine veined (*jauhar-dār*) fish-teeth, have already been given under Chinaware in Mughul India.[2]

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[1] J. A. Thomson, *New Natural History*, II, 542.
[2] See p. 417 above.

Shāh 'Abbās, King of Persia, had bestowed on "Khān-i-'Ālam" a dagger the hilt of which was made of a walrus-tooth with black spots (or veins). "Khān-i-'Ālam", thinking that the best use he could make of the fine arm was to present it to the Emperor, sent it to court through a servant. The dagger was placed before Jahāñgīr on Thursday, the 20th *Tīr*, XIV R. Y. He was delighted with it, and records that it is a rare present, and that he has never seen a spotted specimen of walrus-tooth before. In fact it so whetted his zest for the article that he, ever keen-set for the unusual in nature, sent out men in search of the specimen. But let us hear the rest of the story in his own words: 'A strange circumstance was that I was so much delighted with a jewelled dagger-hilt of piebald teeth which Khān 'Ālam had got from Shāh 'Abbās and sent to me, that I appointed several skilful men to go to Irān and Tūrān to look for them and to be consistently searching for them, and to bring some from anywhere and any person, anyhow, and at any price. Many of my servants who knew my disposition, and dignified Amīrs in

the course of their duty, engaged in the search. It happened that in this city a stupid stranger bought in the open bazaar a coloured tooth of great beauty and delicacy for a trifle; he believed that some time or other it had fallen into the fire, and that the black on it was the mark of burning! After some time he showed it to one of the carpenters on the establishment of my prosperous son Shāh-Jahān, desiring that he should take off a piece of the tooth in order to make a ring (*shast*) [rather, thumb-stall worn by archers], and pointed out that he should remove the marks of burning and the blacknesses, being ignorant that the blackness enhanced the value and price of the whiteness. Those moles and patches were what the tire-woman of destiny had given as an adornment of its beauty. The carpenter at once went to the Superintendent of his workshop, and gave him the good news that such a rare and precious thing, in search of which people were wandering and going long distances, and hastening to all corners and in all directions in various countries, had fallen for nothing into the hands of an ignorant man, who did not know its value. It could be easily and cheaply obtained from

him. The Superintendent went off with him and immediately procured it, and next day produced it before my son. When my son Shāh Jahān came to wait on me, he at first showed great delight, and after his brain had become free from the intoxication of the wine of joy, produced it, and greatly pleased me'—

May thy time be happy that thou hast made mine happy!

'I invoked so many blessings on him that if one of them out of a hundred obtain acceptance, it will suffice for his spiritual and material well-being' (*Tūzuk*, 275; R. & B., II, 96).

The story is continued a page or so lower: 'On the 1st of the Divine month, out of the veined (*jauhar-dār*) spotted tooth (walrus) which my son Shāh-Jahān had given me as an offering, I ordered to be cut off sufficient for two dagger-hilts and a thumb-stall: it came out of a beautiful colour and was very choice. I ordered the *Ustāds* (masters) Pūran and Kalyān, who had no rivals in the art of engraving, to make dagger-hilts of a shape that was approved at this time, and has become known as the Jahāngīrī fashion. At the

same time the blade and the sheath and fastenings were given to skilful men, each of whom was unique in his age in his art. Truly, it was all carried out according to my wish. One hilt came out coloured in such a way as to create astonishment. It turned out of all the seven colours, and some of the flowers looked as if a skilful painter had depicted them in black lines round it with a wonder-working pencil. In short, it was so delicate that I never wish it to be apart from me for a moment. Of all the gems of great price that are in the treasury I consider it the most precious. On Thursday I girded it auspiciously and with joy round my waist, and the masters who in their completion had exercised great skill and taken great pains were rewarded. Ustād Pūran with the gift of an elephant, a dress of honour, and a golden bracelet for the wrist, which the people of India call *Kara*, and Kalyān with the title of ' Ajā'ib-dast (wondrous hand), and increased mansab, a dress of honour, and a jewelled bracelet (*pahūnchī*), and in the same way every one according to his circumstances and skill received favours' (*Tūzuk*, 276-77; R. & B., II, 98-99).

But this was not the end of the matter. The vigorous search for the " fish-teeth " which the Emperor instituted soon bore fruit in another quarter. In the annals of the next year he has the following information to give us : ' As at this time I was much inclined to parti-coloured veined teeth, the great Amirs exerted themselves greatly in looking out for them. Of these, 'Abdu-l-'Azīz K. Naqshbandī sent a servant of the name of 'Abdu-llah with a letter to Khwāja Hasan and Khwāja ' Abdu-r-Raḥīm, ss. Khwāja Kalān Jūybārī, who are to-day the leading holy men of Transoxiana, containing a request for these things. By chance Khwāja Hasan had a perfect tooth, exceedingly delicate, and immediately sent it with the aforesaid (servant) to the Court, which it reached this day. I was greatly pleased, and ordered them to send the value of Rs. 30,000 in choice goods to the Khwājas, a service for which Mīr Baraka Bukhārī was fixed upon' (*Tūzuk*, 310; R. & B., II, 166).

The translator thinks that tortoise-shell, and not walrus-tooth, is referred to in these

passages; because 'there is nothing black or piebald about walrus-teeth, and Jahāñgīr would surely not admire greatly a kind of ivory which was inferior to that of the elephant' (II, 94, f. n.). I am rather inclined to think that what is meant *is* walrus-teeth. We cannot imagine that Indian emperors did not know the difference between walrus-tooth and tortoise-shell. And it was just because walrus-tooth is usually white, and just because the particular specimens obtained bore the beautiful black-and-white veins or spots (which, he says, are rare), that Jahāñgīr was so enthusiastic over them, and was so keen for more.[1]

On Thursday, the 15th *Ab n*, XIV R. Y., Jahāñgīr presented to Sultān Parwīz a *tupchāq* horse, a waist-dagger with a black-and-white *jauhardār* handle [of walrus-tooth], a *khāṣṣa* sword and a *khāṣṣa* shield (*Tūzuk*, 280).

## TORTOISE-SHELL

It consists of the horny plates of the hawks-bill turtle (*Chelonia imbricata*), the smallest

[1] See Addendum on p. 300 of R. & B., II.

of the sea turtles. These plates ' are harder, more brittle and less fibrous than ordinary horn. Their value depends on the rich mottled colours they display—a warm translucent yellow, dashed and spotted with rich brown tints—and on the high polish they take and retain. The finest tortoiseshell is obtained from the Eastern Archipelago, particularly from the east coast of Celebes to New Guinea ; large supplies come from the West Indian islands and Brazil' (*Enc. Brit.*, XXII, p. 310).

' Tortoiseshell, ' continues the writer of the same article, ' has been a prized ornamental material from very early times. It was one of the highly esteemed treasures of the Far East brought to ancient Rome by way of Egypt, and it was eagerly sought by wealthy Romans as a veneer for their rich furniture. In modern times it is most characteristically used in the elaborate inlaying of cabinetwork known as buhl furniture, and in combination with silver for toilet articles. It is also employed as a veneer for small boxes and frames. It is cut into combs, moulded into snuff-boxes

and other small boxes, formed into knife-handles, and worked up into many other similar minor articles. The plates from certain other tortoises, known commercially as turtle-shell, possess a certain industrial value, but they are either opaque or soft and leathery, and cannot be mistaken for tortoise-shell. A close imitation of tortoise-shell can be made by staining translucent horn or by varieties of celluloid' (*Ibid.*).

'Torteauxes [tortoises] there are likewise in great numbers throughout all India: of their shelles they make many curious devises, as Combes, Cuppes, and Boles to drinke in, with tablemen [men at backgammon] and divers such like thinges, knowing howe to give it a faire and shining colour most pleasant to behold, and is more esteemed of in India, then the mother of pearle, by reason of the beautiful colour they set uppon it' (Linschoten, II, 136). The same writer in another place speaks of shields made of tortoise-shell 'wrought and inlaide very workemanlike' (*Ibid.*, I, 61).

Tortoise-shell seems to have come mainly from Bantam, and also from Ceylon.[1]

The Sūrat factors declare that the blackest colour and thickest shells are most in request.[2]

Sūrat quotations extending from 1619 to 1649 give a nearly uniform price of just over two rupees a seer (of 7/10lb.).[3]

When the shell of a single animal weighed 1½ or 2lb., says Fryer, it sold for 30 or 36 *cruzado* per *frasslee* (II, 140). This price comes to Rs. 48 to 57⅜ per *frasslee*.

We assume the *frasslee* to be equal to about 22½lb., which is the usual value; although on the same page, in connection with ivory, Fryer makes the *frasslee*=12lb., which is presumably the special value of the *frasslee* of ivory.

[1] *E.F.I* 1634-1636, pp. 49 and 296;
„ 1642-1645, pp. 86 and 211;
„ 1655-1660, p. 56.

[2] *E.F.I.* 1618-1621, p. 55.

[3] *E.F.I.* 1618-1621, p. 55;
„ 1642-1645, p. 211;
„ 1646-1650, p. 234.

This calculation would yield the price 2½ rupees to the pound —a rate which tallies roughly with that deduced from the factors' reports (given above); although Fryer's time is late in the century, *viz.*, 1672-81.

## MISCELLANEOUS

As a supplement to the above are appended the following notices of articles made of ivory, tortoise-shell, ebony, jet, amber, and crystal:

Linschoten, speaking of the industries and trade of Cambay, says that there are found there 'fine playing tables, and Chessebordes of Ivory, and shields of Torteur shelles, wrought and inlaide very workemanlike, many fayre signets, ringes, and other curious worke of Ivorie, and sea horse téeth, as also of Amber, whereof there is great quantitie: They have likewise a kind of mountain Christall, wherof they make many signets, buttons, beades, and divers other devises' (I, 61).

Roe thus narrates the presents he made to Āghā Nūr, the *Kotwāl* of Agra, who, he says, was one of his best friends:

'I gave him according to the custome two knives, one of amber and one of jett, cost x*s*., and a pare of tables of ebonie and eliphants tooth, worth 30*s*. Then hee desired mee to give his brother a pare of knives, which I did, of vi*s*. price. After that hee desired some greater knives, and I shewed him fower, which hee tooke every one, without restooring the former. Though this was somewhat unmannerly, yet I was content, because hee is one of the best frends wee have in India and did keepe the English house from being taken from them in Agra' (Roe, 143, f. n. 1).

Tavernier's general remarks about the course of trade in coral and lapis lazuli beads, yellow amber, tortoise-shell, etc., are interesting.

'Those merchants who come from Bhutān and Kābul go to Kandahār and on to Ispahān, and they generally take back coral beads, yellow amber, and lapis wrought into beads when they can obtain them. The other merchants, returning from the regions about Multān, Lahore, and Agra, take calicoes, indigo, and an abundance of carnelian and crystal beads. Finally, those who return by

Gorakhpur, and have an understanding with the customs officer, take from Patna and Dacca coral, yellow amber, tortoise-shell bracelets, and others of sea shells, with numerous round and square pieces of the size of our 15-sol coins, which are also of the same tortoise-shell and sea shells. When I was at Patna four Armenians, who had previously made a journey to the Kingdom of Bhutān, came from Dantzic, where they had had made numerous images of yellow amber, which represented all kinds of animals and monsters; these they were taking to the King of Bhutān to place in his pagodas, he being, like his people, exceedingly idolatrous. Wherever the Armenians see that money is to be made they have no scruple about supplying materials for the purposes of idolatry, and they told me that if they had been able to get an idol made which the King had ordered from them they would have been enriched. It was a head in the form of a monster, which had six horns, four ears, and four arms, with six fingers on each hand, the whole to be of yellow amber, but the Armenians could not find sufficiently large pieces for the purpose' (Tavernier, II, 203-204).

## SOME CURIOSITIES

We have so far dealt with substances and articles commonly known and recognized as useful or ornamental. But there is another class of things which stands by itself. Some substances were credited in good old days with certain curative and other properties, for which they were highly prized. They are interesting as a study in superstitions that we have outlived. Indeed, there is something picturesque about the ignorant credulity of a great and civilized people, to whom we owe so much. And yet who knows, there may be some stray particles of truth in popular superstitions and exploded beliefs.

### (1) Rhinoceros-horn

Mysterious properties were supposed to belong to the horn of the rhinoceros from ancient times.

The medical dictionaries like the *Muḥit-i-A'zam* tell us in detail how various diseases could be cured, some by the patient wearing a ring cut out of the horn, others by grinding the

horn and drinking the juice, or again by drinking from a cup made of it, or else through vapours rising from the horn held on fire (*Muḥit-i-A'zam*, Cawnpore, 1313 *A.H.*, IV, p. 61).

Cups made of rhinoceros-horn indicated the presence of poison, and were consequently held in high esteem among nations where poisoning was a common form of taking life. Besides drinking-cups, knife-handles and rings were carved out of the horn.

'*Aja'ibu'l-Makhlūqāt* has a long article on the rhinoceros, where the wonderful properties of its horn are set out in detail.

We find there was a similar belief current in the West, which continued down to the seventeenth century; but there the horn was known as the "unicorn's horn"; that is to say, the Europeans ascribed imaginary properties to the horn of an imaginary animal. This was natural enough, since we know that the rhinoceros did not exist in Europe.

We learn from Fuller's *Worthies of England* that there was a "unicorn's horn" in the

Tower as well as another in Windsor Castle. As for its properties, he says, it is reputed to be not only an antidote against several poisons, but it resists 'poisons which kill by second qualities, that is, by corrosion of parts.' Dr. Fuller himself heard a report of a successful experiment made with it, where some grains of the horn proved an effective antidote against poison.[1]

Whether these horns were of the rhinoceros, or of the narwhal, or of some other animal, is entirely a matter of conjecture.

It has been remarked that the belief about the properties of a "unicorn's horn" was later transferred to the horn of the rhinoceros, when no unicorn was found to exist.[2] Obviously this cannot apply to the eastern peoples, who from the beginning stuck to the rhinoceros, and in whose mythology the unicorn had no place.

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[1] Thomas Fuller, *History of the Worthies of England*, London, 1840, II, 338 and 340.

[2] Linschoten, II, p. 9, footnote 2.

But we are concerned chiefly with the rhinoceros-horn in Mughul India and the popular belief about its virtues in that country.

After describing the rhinoceros and its horn, Linschoten says: 'The Portingales and those of Bengala affirme, that by the River Ganges in the Kingdome of Bengala, are many of these Rhinoceros, which when they will drinke, the other beasts stand and waite upon them, till the Rhinoceros hath drunke, and thrust their horne into the water, for he cannot drink but his horne must be under the water because it standeth so close unto his nose, and muzzle: and then after him all the other beastes doe drinke. Their hornes in India are much esteemed and used against all venime, poyson, and many other diseases: likewise his teeth, clawes, flesh, skin and blood, and his very dung, and water and all whatsoever is about him, is much esteemed in India, and used for the curing of many diseases and sicknesses, which is very good and most true, as I my selfe by experience have found; but it is to be understood, that all Rhinocerotes are not a like good, for there are some whose hornes are

sold for one, two, or three hundred pardawes the peece, and there are others of the same colour and greatnes that are sold but for three or foure Pardawes, which the Indians know and can discerne. The cause is that some Rhinocerotes, which are found in certaine places in the countrie of Bengala have this vertue, by reason of the hearbes which that place only yeeldeth and bringeth foorth, which in other places is not so, and this estimation is not onely held of the horne, but of all other things in his whole body, as I saide before (II, 9-10).

William Finch has the following: ' Here [near Ajodhyā] is great Trade, and such abundance of Indian Asse-horne, that they make hereof Bucklers, and divers sorts of Drinking Cups. There are of these Hornes, all the Indians affirme, some rare of great price, no Jewell comparable, some esteeming them the right Unicornes Horne ' (Purchas, IV, 66).

' Great Prices ', says Fryer, ' are offered for those [rhinoceros-horns] that are inadulterate ; which they in *India* pretend to try by the

Liquors presently fermenting in them; but notwithstanding that Experiment they are often deceived by false Horns made into drinking Cups' (II, 298).

'They ascribe very much likewise to the Rhinoceros Horn in *India*', says Ovington, 'as it is an Antidote against all poysonous Draughts, and hugely extol in it that Medicinal Excellence and singular Quality. The Character of this Horn prevail'd so far with a former President of ours at *Suratt*, that he exchang'd for a Cup made of this Horn a large capacious Silver Bowl of the same bigness.'[1]

We read in an Armenian's report that 'there are many beasts with one horn in their forehead like unto an unicorn, which horn they say is good against poison, there are of them which weigh 8 ℔., some 7, 6, 4, and 3 ℔., the greatest and fairest worth some 4 rials per piece, and those of a lesser sort worth less. Amongst the Turks and Moors in Arabia every ℔. is worth one rial of 8' (*Letters*, 1, 193).

[1] Ovington, *Voyage to Suratt*, London, 1696, p. 297.

Bābur tells us that ' out of one of the largest of these horns I had a drinking-vessel made, and a dice-box, and about three or four fingers' bulk of it might be left ' (*Memoirs of Bābur*. tr. Leyden, Erskine and King, II, 210).

Sir Thomas Roe once laid a nice little plot against Prince Shāh Jahān. He tried to win his good graces by offering him a " unicorn's horne " at a price, pretending that he did not speak of it to Jahāngīr since he wanted to give him (the Prince) an opportunity of securing it and offering it in due course to the Emperor. The ambassador spoke in glowing terms of the virtues of the horn, and represented that it was so valuable that he had no power to sell it, and that the merchants made a secret of it, and did not allow it to come out of the ship. He made an offer, however, that if the Prince wished to buy it and would accede to certain demands of Sir Thomas's then pending, he could let the Prince's officer see the horn. ' This I hoped,' continues the ambassador, ever a clever diplomat, and at this moment at his best, ' would both sett an extreame appetite on the Prince to passe it at a

high price, and would insinuate an extraordinary desire in mee to doe him service; and if hee reavealed it to the King, I would answere: because it was not in my power to give His Majestie, I was ashamed to name yt, but had mooved the Prince to buy it for his use' (P. 255).

The Prince, always a match for the tactician, was in this case too clever for him. He returned formal thanks, but matters proceeded no further.

The above entry is under October 16,1616. Eight months later Roe records that 'the unicornes horne was returned as without vertue' (P. 366). It was then sent on to Sūrat and then to Ahmadābād, where John Browne, a factor, showed it to Muqarrab Khān, asking 5,000 rupees for it. The factor says that he tried the efficacy of the horn on the lives of 'a pigeon, goate, and man, which they loosing, itt also lost his esteeme, and soe I returned it aboard from whence I had ytt.'[1]

[1] *E. F. I.* 1618-1621, p. 12.

Muqarrab Khān not buying it, the horn was sent to Achin,[1] and then on to Bantam.[2] Finally it passed into the hands of the Dutch, and was sold in Holland for £400.[3]

## (2) Bezoar-stone

Bezoar-stone (from Pers. *pād-zahr*, lit., protecting from poison, *i.e.*, an antidote) is a concretion found in the stomach and intestines of ruminants and some other animals. We are here concerned only with the Oriental species, and not with the Occidental, which is obtained from the llamas of Peru, nor with the German, which is obtained from the chamois.

We may note in passing, however, that Ben Jonson had heard of the bezoar-stone: 'Body o'me, a shrewd mischance! why, had you no unicorn's horn, nor bezoar's stone about you, ha?' (*Every Man out of his Humour*, V, 4).

[1] *E. F. I.* 1618-1621, p. 58.
[2] *Ibid.*, p. 184.
[3] *Ibid.*, p. 11, f. n.

The Oriental bezoar was supposed to possess powerful medicinal qualities, being specially used as an antidote in Persia, India and other eastern countries.

Dr. Kunz tells us that a bezoar-stone upon which a scorpion's figure had been engraved during the time when the constellation Scorpio was in the ascendant, was considered an effective cure for a scorpion's bite (*Curious Lore of Precious Stones*, 340).

This intestinal calculus appears to have been in great request in India, and the early European travellers (including Garcia da Orta) seem to believe in its efficacy not only as an antidote, but as a useful therapeutic agent and an aphrodisiac.

The Oriental bezoar is found in the wild goat of Persia and in various kinds of antelopes. But we are specially concerned with India, about which information from contemporary observers is available :

In this country, in the seventeenth and eighteenth centuries, the bezoar was obtain-

able chiefly from goats, but also from cows and monkeys, and geographically was strictly localized.

The following is from Linschoten :—'The Bezar stone commeth out of Persia, from the land or Province called Carassone [Khurāsān], and also out of other places in India: they grow within the maw of a sheepe or Goat, about a little straw, that lyeth in the middle [of the maw], for by experience the straw is often found within them: the stone is very slicke & smooth without, of a darke greene colour' (II, 142).

'This Bezars stone is very costly, and is much used in India against all poyson, and [other] diseases, and is more esteemed then Unicornes horne, in Europe, for it is much tryed and sold very deare: the greater and heavier they are, the better and of more vertue they are: the common sorte are of three foure or five octaves weight, some more, some lesse: they are much brought into Portingal, and greatly esteemed: the place where they are most found, is (as I said before) in Persia and

also in the Island called Insula das Vacas, or the Island of Cowes: It lyeth before the mouth of the river, entering into Cambaia, hard by the coast where the Portingall navie often putteth in to refresh themselves, and [being there], kill divers of the sheepe or Goats, wherein they finde many of these Bezars stones: likewise in the lande of Pan [Pahang] by Malacca there are many found' (*Ibid.*, 143-44).

'The Bezars stone is as hard as [any] stone, but not very heavie: It is thought that these stones doe grow in the mawes of sheepe by vertue of the grasse [or hearbes] whereon they pasture and feed, as we have declared of the Rhinoceros, because they doe onely breede in those places above named, and in no place els, where these kinds of beastes are' (144).

One of the quotations in *Hobson-Jobson* (91*a*) runs as follows:—'The King of Bantam sends K. James I. "two *beasar* stones"'.—Sainsbury, I, 143.

Manucci tells us how he once fed on chicken-broth and bezoar-stone a patient who had been weakened with enema and purgatives. The

patient, who was a *qāzi's* wife, steadily gained strength, and was, in a few days, restored to perfect health (*Storia*, II, 178).

Roe, Tavernier, and Manucci seem to agree that the bezoar-stone was found in what is now the Masulipatam district in the Madras presidency; though Manucci is quite wrong in deriving the name *pād-zahr* from Bezwada in that district. Manucci says that in that part the goats are 'very numerous', and that 'the goat-herds who tend them are aware of how many [bezoar-stones] there are in each goat, and the weight of each' (*Storia*, II, 431).

Roe adds Bengal as another Indian locality. But his remarks are worth quoting in full. 'For Bezars', he says, 'ther are three sorts; the best are of Persia, others from Malacca, the last of Masolapatan and Bengala.....The best .....are a blackish greene of Persia.....The prices in England are about 3 *li.* an ounce; if the stones be great and whole they are woorth 5 *li.*.....To avoid counterfaytes.....with a very hot needles poynt peck them. If it make noe signe, they are not false; if the nedle enter

or burne them, they are made ones. The best triall of the virtue is to lay them in buffles, milke, and the best will turne it like runnett and those are rich ' (Roe, 157, f.n. 1).

We are told in the *Relations of Golconda* that where they are found, the bezoar-goats are killed for their skins and the stones in large numbers, so that the flesh is mostly thrown away. Two, three, and sometimes as many as four small stones are found in a single goat, some long, others round in shape. The concretion forms round a woody nucleus (P. 34).

From an experiment reported in the same place one may infer that the formation of a bezoar-stone depends more upon the kind of vegetation on which the goat feeds in that region, than on any peculiarity of the species (P. 35). This seems to be corroborated by Tavernier who refers to a particular tree on which the goats feed, though, he says, he has forgotten the name of it. ' This plant,' he continues, ' bears little buds, about which, and also on the tips of the branches, which the goats eat, the bezoar concretes in the bellies of these animals. It assumes a form accord-

ing to the shap · of the buds and the ends of the branches, and this is why one finds it in so many different shapes. The peasants, by feeling the belly of the goat, know how many bezoars it contains, and they sell the goat for a price in proportion to the number which are therein. In order to ascertain this, they run both hands under the belly of the goat and beat the paunch along both sides, so that all the stones fall to the middle, and they then estimate exactly, by touch, how many bezoars are in it. The value of bezoar depends on the size, although the small possess no less virtue than the large. But in this respect one is often deceived by the fact that there are people who enlarge the bezoar with a kind of paste made of gum and other materials of the same colour as the bezoar. They understand, even, how to give as many coats as the natural bezoar ought to have. One can detect this fraud easily by two methods. The first by weighing the bezoar and placing it to steep for some time in lukewarm water ; if the water does not change its colour, and if the bezoar does not lose weight, it has not been adulterated. The other means is to touch the bezoar with a

pointed hot iron; if the iron enters it and makes it fry, it is a sign that it is a mixture, and that it is not genuine. For the rest, the larger the bezoar the higher the price, which rises in proportion like that of the diamond. For if 5 or 6 bezoars weigh an ounce, the ounce will be worth from 15 to 18 francs, but if it is a bezoar of one ounce, the ounce will be worth fully 100 francs. I have sold one of 4¼ ounces for as much as 2,000 livres [£150]' (Tavernier, II, 116).

These prices work out as follows:

| Weight of single stone. | Price. |
|---|---|
| ⅙ to ⅕ of an oz. | 2*s.* to 2*s.* 10½ *d.* |
| 1 oz. | £4. |
| 4¼ oz. | £150. |

We have seen that Roe quotes £3 to £5 an oz. as the price in England, which is considerably lower. This is vague, but it may support Fryer's statement that owing to a heavy demand in India the stones cannot be bought there to yield profit in England enough to repay for the trouble (Fryer, II, 34).

William Methwold bought at Masulipatam in 1621 a few bezoar-stones, some at 24 rialls (=48 rupees) per seer (of 12 oz.) and some dearer (*E. F. I.* 1618-1621, p. 255).

In a communication dated Jan. 6, 1648, from Sūrat, we have the following remark:—'Bezoar stones cannot be got from Golconda (where the "pagode" is now worth, exchange included, $4\frac{3}{4}$ rupees) under 33 and 36 mahmūdīs per ounce' (*E. F. I.* 1646-1650, p. 182). So the price at Golconda was Rs. 13 or 14 per oz.—a very high price compared with the last quotation; but we may explain it by supposing that here the stones were larger, and therefore much more costly;—besides the dates are 27 years apart.

Again, in a Sūrat report for 1668, Rs. $3\frac{1}{2}$ per *tola* is quoted for bezoar-stone. This is equivalent to Rs. $8\frac{3}{4}$ per oz. (*E. F. I.* 1668-1669, p. 3).

Tavernier visited Golconda several times and was interested in the bezoar-goats. He once purchased as much as about 60,000 rupees' worth of bezoar for the servants of the English

and Dutch Companies. Considering Roe's quotation and Fryer's remark, the English could not have bought it for importation to England. Possibly they did so for local disposal.

It appears that export of bezoar-goats from Golconda was prohibited on pain of death, the king of Golconda farming out the trade for a yearly payment of 6,000 old pagodas, or 45,000 livres.[1] It was with great difficulty, therefore, that Tavernier once succeeded in procuring six bezoar-goats, which he examined at his leisure. 'They are beautiful animals', he says, 'very tall, and having fine hair, like silk.' He had to pay 3 rupees for a goat with one bezoar only, 4 rupees each for another two, and $4\frac{1}{4}$ each for the remaining three. The last five had from two to four bezoars each (Tavernier, II, 116-18).

Jahāñgīr relates that an Afghān once 'brought from the Carnatic two goats that had *pāzahar* (bezoar stones, an antidote against

[1] This equation is untenable on Tavernier's own showing; since 6,000 old pagodas=£2,700, and 45,000 livres=£3,375. But with Tavernier this is a small matter.

poison). I had always heard that an animal that has pazahar is very thin and miserable, but these goats were very fat and fresh. I ordered them to kill one of them, which was a female. Four pazahar stones became apparent, and this caused great astonishment' (*Tūzuk*, 117; R. & B., 1, 240). The Carnatic, as the reader is aware, borders on Golconda.

Bezoars are also obtained from cows, which weigh up to 17 or 18 French ounces. But these are not esteemed. A bezoar from a monkey, which is round in shape, is particularly efficacious, but rare, and proportionately costly. One of the size of a nut would cost more than 100 écus (*i.e.*, £22-10-0) (Tavernier, II, 118-19).

Methwold (*Relations of Golconda*, 34) and Fryer (II, 141) are at one with Tavernier in thinking that the monkey bezoars are the best; though Fryer says they are long, while Tavernier makes them round. 'Those that are rough', continues Fryer, 'prove commonly faulty, breaking with Stones in the middle: Others in form of Tares, somewhat flat, which break in smaller Stones in the middle, are better than the rough ones' (*Ibid.*).

Manucci has the following interesting, if fantastic, account of the origin of the bezoar in monkeys: 'They [the monks] told me that in that country [Borneo] was an island where there were many baboons. The natives inflict wounds on them with a small poisoned arrow shot from a *zarvatana* (blow-tube). The baboon, aware that the wound is poisoned, takes to flight at once, and goes to find a certain herb which is an antidote. The blood is then stanched and the wound closes, but at the spot, instead of flesh, the blood congeals into a stone which possesses the virtue of the plant that was eaten. The natives recognise these baboons by their height, and killing them, withdraw the stone which has greater potency than any others' (*Storia*, III, 191-92).

Fryer suggests the following methods of detecting fraudulent manufactures: '*Bezcar* is tried sundry ways: As the rubbing Chalk upon a Paper, then rubbing the Stone hard upon the Chalk, if it leave an Olive-Colour it is good. Also touch any with a Red-hot Iron, which you suspect because their Colour is lighter than ordinarily they use to be, and

if they fry like Resin or Wax, they are naught. Sometimes they are tried by putting them into clear Water, and if there arise upon them small white Bubbles, they are good, and if none, they are doubtful. The use of the Hot Iron is esteemed infallible' (II, 141).

The reader will notice that at least one test, *viz.*, that of the pointed hot iron, is common to Roe, Tavernier and Fryer, and the last writer calls it infallible.

### (3) Porcupine stone

The bezoar leads on naturally to the 'porcupine stone', which was another much-esteemed antidote, and, according to Tavernier, 'more efficacious against poison than bezoar.' It was found in the head of the porcupine. 'When it is placed to steep in water for a quarter of an hour,' continues Tavernier, 'the water becomes so bitter that there is nothing in the world to equal it in bitterness. This animal has also sometimes, in its belly, a stone which is of the same nature and equally good as that which comes from the head, except with this difference, that it loses nothing of its

weight or size by steeping in water, while there is diminution of the other. During my life I have bought three of these stones. One cost me 500 écus [£112-10-0], and I disposed of it subsequently with advantage to the Ambassador Dominico de Santis, of whom I have spoken in my accounts of Persia. I paid 400 écus [£ 90] for another, which I still keep; and the third was sold to me for 300 écus [£67-10-0], and I made a present of it to a friend' (Tavernier, II, 119-20).

The editor's footnote to this passage is worth quoting: 'It seems probable that the substance supposed to be obtained in the head of the porcupine was a vegetable drug, to which that mythical origin was ascribed (Garcia da Orta, 470 f.). Castanheda mentions a stone obtained in the head of an animal called bulgoldorf, which was exceedingly rare, and was said to be an antidote against all kinds of poison (Kerr, *Voyages and Travels*, ii, 439). A. Hamilton (in Pinkerton, viii, 450) says that at Lingen, near Johore, he has seen pieces of porcupine bezoar as big as, and shaped like, a walnut, valued at 600 pieces of eight.' It is

only necessary to add that a piece of eight had the same value as an *écu*, *viz.*, 4*s.* 6*d.*

### (4) Snake-stone

*Hobson-Jobson* has the following: 'This is a term applied to a substance, the application of which to the part where a snake-bite has taken effect, is supposed to draw out the poison and render it innocuous. Such applications are made in various parts of the Old and New Worlds. The substances which have this reputation are usually of a porous kind, and when they have been chemically examined have proved to be made of charred bone, or the like. There is an article in the 13th vol. of the *Asiatic Researches* by Dr. J. Davy, entitled *An Analysis of the Snake-Stone*, in which the results of the examination of three different kinds, all obtained from Sir Alex. Johnstone, Chief Justice of Ceylon, is given. (1) The first kind was of round or oval form, black or brown in the middle, white towards the circumference, polished and somewhat lustrous, and pretty enough to be sometimes worn as a neck ornament; easily cut with a knife, but not scratched by the nail. When breathed

on it emitted an earthy smell, and when applied to the tongue, or other moist surface, it adhered firmly. This kind proved to be of bone partially calcined. (2) We give below a quotation regarding the second kind. (3) The third was apparently a *bezoar*, rather than a snake-stone ' (P. 847*b*). The quotation referred to under No. 2 is from Dr. Davy's *Asiatic Researches*, xiii, 318, and runs as follows : 'Another kind of *snake-stone*.....was a small oval body, smooth and shining, externally black, internally grey; it had no earthy smell when breathed on, and had no absorbent or adhesive power. By the person who presented it to Sir Alexander Johnstone it was much valued, and for adequate reason if true, " it had saved the lives of four men " ' (P. 848*b*).

There seem to be two kinds of snake-stones : (1) Artificial, and (2) Natural :—

(1) *Artificial snake-stone.*—A kind of artificial snake-stone manufactured in Diu is thus described by Thevenot : 'C'est dans cette Ville de Diu que se font les *Pierres de Cobra* si renommées : elles sont composées de racines qu'on brûle, et dont on

amasse les cendres pour les mettre avec une sorte de terre qu'ils ont, et les brûler encore une fois avec cette terre ; et après cela on en fait la pâte dont ces Pierres sont formées..... 11 faut faire sortir avec une éguille, un peu de sang de la plaie, y appliquer la Pierre, et l'y laisser jusqu'à ce qu'elle tombe d'elle même'.— Thevenot, v. 97.[1]

Fryer speaks of 'the Venom of a certain Snake, for which the *Jangies* [*Jog'is*] or Pilgrims furnish them [the Christians on the Malabar Coast] with a Factitious Stone (which we call a Snake-stone) and is Counterpoyson to all deadly Bites ; if it stick, it attracts the Poyson ; and put it into Milk, it recovers it self again, leaving its virulency therein, discovered by its Greenness.'[2]

Tavernier winds up his long account of miscellaneous stones with the following passage : 'I shall finally make mention of the snake-stone, which is nearly the size of a double [? doubloon, a Spanish gold coin, larger than the English

[1] This quotation is copied from *Hobson-Jobson*, the French text of de Thevenot being not available to me.

[2] Fryer, I, 138-39.

penny, formerly worth 33 to 36s., now slightly over £1], some of them tending to an oval shape, being thick in the middle and becoming thin towards the edges. The Indians say that it grows on the heads of certain snakes, but I should rather believe that it is the priests of the idolaters who make them think so, and that this stone is a composition which is made of certain drugs. Whatever it may be, it has an excellent virtue in extracting all the poison when one has been bitten by a poisonous reptile. If the part bitten is not punctured it is necessary to make an incision so that the blood may flow; and when the stone has been applied to it, it does not fall off till it has extracted all the venom which is drawn to it. In order to clean it it is steeped in woman's milk, or, in default of it, in that of a cow; and after having been steeped for ten or twelve hours, the milk, which has absorbed all the venom, assumes the colour of matter. One day, when I dined with the Archbishop of Goa, he took me into his museum, where he had many curiosities. Among other things he showed me one of these stones, and in telling me of its properties assured me that but three

days since he had made trial of it, and then he presented it to me. As he traversed a marsh on the island of Salsette, upon which Goa is situated, on his way to a house in the country, one of his pallankeen bearers, who was almost naked, was bitten by a serpent and was at once cured by this stone. I have bought many of them ; it is only the Brahmans who sell them, and it is that which makes me think that they make them. You employ two methods to ascertain if the snake-stone is good, and that there is no fraud. The first is by placing the stone in the mouth, for then, if good, it leaps and attaches itself immediately to the palate. The other is to place it in a glass full of water, and immediately, if it is genuine, the water begins to boil, and small bubbles ascend from the stone which is at the bottom, to the top of the water' (Tavernier, II, 120-21).

Ovington tells a story of a snake-bite and the cure of it effected with a snake-stone, which he follows up with a description of composition and virtues of a snake-stone, and the methods of putting it to the test: ' A Peon of mine, named *Gemal*,' he says, ' walking abroad in the

Grass after the Rains, was unfortunately bit on a sudden by one of them. The latent Snake twisted unawares about his Leg, and in a short time brought him to the Ground, by causing in him an immediate deliquium of Spirit, almost even to Expiration. The Servants who were standing by, amaz'd at the accident, called immediately upon an *English* Merchant, who hasten'd towards him with a special Medicine for his Recovery. The thing which he carried about him, and which instantly applyed, is a Specifick against the Poison of Snakes, cured him, and therefore obtains the Name of Snake-stone. It is a small artificial Stone, almost flat, only with a little protuberance in the middle, and of a gray Colour. The Composition of it is Ashes of burnt Roots, mixt with a kind of Earth, which is found at *Diu*, belonging to the *Portuguese*; and those are burnt together again, out of which Paste the Stones are formed. They are not all alike Colour'd, but those that have receiv'd more of the Fire, are thereby inclin'd to a lighter Gray, the others are a little more dark. This Stone Cures by the application of it to the part invenom'd, to which it immediately sticks

fast, and by its powerful Attraction sucks back the infus'd Venom, 'till its Pores are full. Then like a glutted Horse-Leach it falls off, and disgorges the replenisht Pores in Milk (the properest liquor for this purpose) which by discolouring, it renders livid. Upon this it recovers new strength, and its Alexipharmick quality again, and is speedily prepar'd for a fresh Draught of Poison, if any remains in the affected part, 'till it quite extracts whatever the venomous Serpent had immited; which makes those Counterpoisons in great esteem against all external Attacks upon the Body; as the Cordial Antidotes are most valuable for expelling or subduing any Poyson inwardly receiv'd. The double Excellence of this Stone recommends its worth very highly, in that a little of it scraped off, and mixt with Wine, or some other proper vehicle, and inwardly taken, is reputed one of the most powerful Medicines against any Malignant Fevers or Infectious Diseases, that is known; and much excels the deservedly fam'd *Gasper Antoni*, or Goa Stone. The trial of these Stones is made by fixing them to the Roof of the Mouth, to which if they stick fast, 'tis a sign they are

genuine, if they easily fall off, fictitious. Another method for knowing the true Stones from the Counterfeit, is to immerse them in a Glass of Water, where, after a while, if some light Ebullitions rise from them, and ascend through the Body of the Water, this likewise is an approv'd Sign that the Stone is not spurious. The *Europeans*, for the Security of themselves against the Danger of these Serpents, which are every where so common in *India*, carry always about them one of these Stones inclosed in a Heart of Gold, fixt to a Golden Chain, which hangs about their Necks' (P. 260-63).

The reader will have remarked that the author is speaking here of the artificial snake-stone. He knows nothing apparently of the 'natural' snake-stone.

The following quotation is taken from *Hobson-Jobson*, as it stands: 'The use of the *Pamboo-Kaloo*, or *snake-stone*, as a remedy in cases of wounds by venomous serpents, has probably been communicated to the Singhalese by the itinerant snake-charmers who resort to

the island from the Coast of Coromandel; and more than one well-authenticated instance of its successful application has been told to me by persons who had been eye-witnesses'..... (These follow.) '.....As to the *snake-stone* itself, I submitted one, the application of which I have been describing, to Mr. Faraday, and he has communicated to me, as the result of his analysis, his belief that it is "a piece of charred bone which has been filled with blood, perhaps several times, and then charred again." .....The probability is, that the animal charcoal, when instantaneously applied, may be sufficiently porous and absorbent to extract the venom from the recent wound together with a portion of the blood, before it has had time to be carried into the system.....'—Tennent, *Ceylon*, I, 197-200.

(2) *Natural snake-stone.*—Tavernier, judging from the quotation already given, seems to doubt the existence of natural snake-stones, and credits the Brahmans with the pious fraud of their manufacture. Yet, in the following passage which immediately follows the earlier quotation, he describes, under the name

" stone of the hooded snake ", what we cannot distinguish from a natural snake-stone :

' There is still another stone,' continues Tavernier, ' which is called " stone of the hooded snake." It is a kind of snake which has, as it were, a hood which hangs behind the head, and it is behind this hood that the stone is found, the smallest being of the size of a hen's egg. There are snakes in Africa and in Asia of an enormous size, and up to 25 feet in length, as was that one whose skin is preserved at Batavia. This snake had swallowed a girl of eighteen years, of which fact I have elsewhere given an account. You find these stones only in snakes which are, at the least, two feet in length. The stone, which is not hard, when rubbed against another stone yields a kind of slime which, when dissolved in water and drunk by a person who has some poison in his body, has the property of driving it out at once. These snakes are only to be found on the coasts of Melinda, and you can obtain the stones from Portuguese sailors and soldiers on their return from Mozambique' (Tavernier, II, 121).

The snake-stone described by Dr. Davy (already quoted) may be a natural one.

Under the year 1772 *Hobson-Jobson* has a quotation from Thunberg, *Travels*, which is also worth reproducing: 'Being returned to Roode-Zand, the much celebrated *Snake-stone* (*Slangesteen*) was shown to me, which few of the farmers here could afford to purchase, it being sold at a high price, and held in great esteem. It is imported from the *Indies*, especially from Malabar, and cost several, frequently 10 or 12, rix dollars. It is round, and convex on one side, of a black colour, with a pale ash-grey speck in the middle, and tubulated with very minute pores.....When it is applied to any part that has been bitten by a serpent, it sticks fast to the wound, and extracts the poison; as soon as it is saturated, it falls off of itself' (*Hobson-Jobson*, 848). We are unable to judge whether this is a natural or an artificial stone.

To the foregoing reports we can add two more opinions: Lt.-Col. T. Lewin (*A Fly on the Wheel*, 91-92), after recording a cure which was effected in his presence, says, 'I was thus

effectually convinced that snake-charming is a real art, and not merely clever conjuring, as I had previously imagined. These so-called *snake-stones* are well known throughout India' (*Hobson-Jobson*, 848*b*). We are not told in this case if the stone was a natural or an artificial one. On the other hand, Patrick Russell has no faith in the curative qualities of a snake-stone (*Account of Indian Serpents*, 77); and Fayrer, speaking of snake-stones (*Thanatophidia of India*, 38 and 40), says (without distinguishing between natural and artificial ones) that 'a belief in their efficacy is a dangerous delusion' (*Hobson-Jobson*, 849*a*).

Muzaffar Husain Mīrzā came from Kandahar to the Mughul court on 5 *Shahriwar*, XL R. Y. Among the presents he offered were 100 *'Irāqī* horses and a wonderful *muhra* (snake-stone), which when rubbed on a snake-bite became active and sucked out the poison, curing the patient.[1]

(5) *YADATĀSH* OR RAIN-STONE

According to the *Farhang-i-Anandrāj*, it was a stone which, when incantations were recited

[1] *A.N.*, III, 671; Tr., III, 1030. I have given my own translation.

over it, and the stone placed on the hand and put up to the sky, was believed to bring clouds and rain in abundance. This belief was widely current among the Turks. It is to be traced to the following incident in sacred history, which, however, is not to be found in the *Old Testament*.

It is related that when Japheth got leave from his father Noah, to proceed towards the east and the north with his family and relations, he requested his father to teach him a prayer which should bring rain whenever he wished it. The patriarch Noah gave him a stone which had that virtue, and either recited, or made a show of reciting, the *ism-i-a'zam* over it (*Akbarnāma*, I, 58). According to another version, Noah taught him the *ism-i-a'zam* and traced it on the stone (*Shajrat ul Atrak*. 24).

Japheth then set out on his journey, and produced rain with the help of that stone whenever he required it.

'It is said that this secret was disclosed to Noah by Gabriel, and that he was instructed, when he wanted rain, to repeat the name of God,

to breathe on the stone, and throw it in water, and rain would then fall' (*Shajrat ul Atrak*, 24).

On Japheth's death the stone passed to his eldest son, Turk, who succeeded him.

This, we should remember, was the first stone of its kind.

This stone, which was called *jada-tāsh* or *yada-tāsh* by the Turks, *sang-i-yada* by the Persians, and *ḥajaru'l-maṭar* by the Arabs, was reported to be common among the Turks in later times—which presumably means that a *kind* of stone came in succeeding ages to be credited with similar properties, and was supposed to be descended in some mysterious way from the celebrated stone of Noah (*Akbar-nāma*, I, 58; *Shajrat ul Atrak*, 24).

Later on, the *yada*-stone was believed to bring not only clouds, wind and rain, but hail, snow, excessive cold and violent tempests.

An instance where the stone was merely thrown into water, and snow and hail appeared is cited in *Shajrat ul Atrak* on p. 66.

Another instance : When Tūlī Khān, son of Chingīz Khān, during the Mughuls' invasion of China in 627 *A.H.* (=1230 *A.C.*), was driven by the Chinese to Khatā, and was reduced to an extremity, he used the *sang-i-yada*, which brought snow and rain and intense cold. He thus scored a victory and put a large number of the enemy to the sword, taking some prisoner (Ghiāsu'd-Dīn "Khwand Mīr," *Ḥabību's-Siyar*, Bombay, 1857, III, Pt. i, 29).

Bābur often speaks of this stone in his *Memoirs*; and mention of it in Mughul history is frequent.

Abū'l-Fazl, while describing Lār in the *sarkār* of Kashmir, speaks of a large lake on the mountain. 'If the flesh of an animal fall into it,' he says, 'a heavy fall of snow and rain ensues.'[1]

Rain-making with this stone, however, was not a common thing within the power of every tiro. It was an esoteric art and was practised

[1] *Ā'īn*, I, 569 ; Jarrett, II, 363-64.

professionally. Those who knew the use of the stone were called *yadahi* or *jadahi*.

The following paragraph is quoted from Leyden and Erskine's interesting note in the Introduction to their *Memoirs of Bábur*: 'Izzet-ullah,.....in giving a description of Yārkand, mentions the *yadeh*-stone as on of the wonders of the land. He says that it is taken from the head of a horse or cow; and that, if certain ceremonies be previously used, it inevitably produces rain or snow. He who performs the ceremonies is called *yadehchi*. Izzet-ullah, though, like Bābur, he professes his belief in the virtues of the stone, yet acknowledges that he was never an eyewitness of its effects; he says, however, that he has so often heard the facts concerning its virtues stated over and over again, by men of unimpeachable credit, that he cannot help acquiescing in their evidence. When about to operate, the *yadehchi*, of whom there are many at this day in Yārkand, steeps the stone in the blood of some animal, and then throws it into water, at the same time repeating certain mysterious words. First of all, a wind is felt

blowing, and this is soon succeeded by a fall of snow and rain. The author, aware of the incredulity of his readers, attempts to show that, though these effects certainly follow in the cold country of Yārkand, we are not to look for them in the warm region of Hind; and, further, ingeniously justifies his opinions regarding the unknown and singular qualities of the rain-stone by the equally singular and inexplicable properties of the magnet.'[1]

Rai Anand Rām "Mukhlis" reports that a Turk, who understood the art of the *yada*-stone, was once on a visit to Nawwāb "Saifu'd-Daula" 'Abdu's-Ṣamad Khān, who was *Nāzim* of Multān in the reign of Muḥammad Shāh. At the Nawwāb's request he gave the performance once, and produced plenty of cloud, and rain and hail.

The Emperor Muḥammad Shāh, having heard of it, directed his immediate attendance at Delhi; but by the time the orders reached Multān, the Turk had left for Turkistān, his home (*Mir'ātu'l-Iṣtil* , P.U.L. MS., f. 136*b*).

[1] *Memoirs of Bābur*, tr. Leyden, Erskine and King, Introduction, pp. xci-xcii.

The *Shajrat ul Atrak* wrongly identifies this stone with, or at least assimilates it to, the bezoar-stone, and thus has misled many European scholars of repute. *Hobson-Jobson* (p. 445*a*) and *Tārikh-i-Rashīdi* (Engl. Tr., 32, f. n. 4 (p. 33) are examples. Nor is the word *jada* connected with jade (see *Hobson-Jobson, ibid.*).

The reader , who is interested in the question, and wants further information, is referred to a comprehensive note on the subject by Mr. Hodivala,[1] where the superstition is traced from Budhist times to quite a recent date.

### (6) Philosophers' stone

Talking of stones, we might as well mention the philosophers' stone—the dream of the alchemist—of which just one record is available: While speaking of the buildings at Māndū, Jahāñgīr relates a story of how this stone was once found, used for a long time, and then lost. The naturalist-emperor cannot be expected to believe in such twaddle. Just as

[1] *Studies in Indo-Muslim History*, 134-36.

he gives one story for all it is worth, so do we his account—and his personal opinion:

'They say that before the time of Rāja Bikramājīt there was a Raja of the name of Jai Singh Deo. In his time a man had gone into the fields to bring grass. While he was cutting it, the sickle he had in his hand appeared to be of the colour of gold. When he saw that his sickle had been transmuted, he took it to a blacksmith of the name of Mādan [Māndan] to be repaired. The blacksmith knew the sickle had been turned into gold. It had before this been heard that there was in this country the alchemist's stone (*sang-i-pāras*), by contact with which iron and copper became gold. He immediately took the grass-cutter with him to that place and procured the stone. After this he brought to the Raja of the time this priceless jewel. The Raja by means of this stone made gold, and spent part of it on the buildings of this fort and completed them in the space of twelve years. At the desire of that blacksmith he caused them to cut into the shape of an anvil most of the stones that were to be built into the wall of the fort.

At the end of his life, when his heart had given up the world, he held an assembly on the bank of the Narbada, which is an object of worship among the Hindus, and, assembling brahmins, made presents to each of cash and jewels. When the turn of a brahmin came who had long been associated with him, he gave this stone into his hand. He from ignorance became angry and threw the priceless jewel into the river. After he came to know the true state of the affair he was a captive to perpetual sorrow. However much he searched, no trace of it was found. These things are not written in a book; they have been heard, but my intelligence in no way accepts this story. It appears to me to be all delusion.'[1]

Jahāñgīr, however, is not right in saying that the legend is not in the written book. In fact he seems to have taken it almost verbatim from *Ā'in* (Text, I, 456; Jarrett, II, 197). Considering his relations with Abū'l-Fazl, one would not expect the emperor to acknowledge his source.

[1] *Tūzuk*, 180; R. & B., I, 364-65.

# CHAPTER V

# THE ACTUAL CONTENTS OF THE JEWEL TREASURY FROM THE INVASION OF BĀBUR TO THAT OF NĀDIR SHĀH

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Now that we have surveyed the historical notices of precious and semi-precious stones and other valuable substances, we are in a position to try and form an idea of the actual amount of the total treasure; for while fragments, diarists' entries and anecdotes may be good history, they fail to produce an *impression* unless they are synthesized into a concrete and self-sustaining whole, and visualized as such.

It is as if after witnessing the presentations in court and other individual accretions to the Treasury we were now entering the Treasury itself, and trying to take stock of the wealth that has accumulated there.

The Indian Mughuls had a great reputation for wealth, which, as far as the Jewel Treasury is concerned, was well deserved. While the contents of the Cash Treasury waxed and waned with the exigencies of the Mughul Empire and with the habits and temperament of the Emperor, the Jewel Treasury grew without abatement, at least from the accession of Akbar down to Nādir Shāh's invasion in 1739.

The impressions of foreign travellers can be gathered from the following excerpts :

' Of these precious stones the Mogul has a quantity inherited from Taimūr-i-lang and the other kings, his predecessors, also those obtained in the conquests of the Bījāpur and Gulkandah kingdoms. In addition there are those he is daily buying. This takes no account of the fact that in these days he has become master of the diamond mines, and there is no stint of stones, the largest and best. For, although King Humāyūn was dethroned and expelled from his kingdom by Sher Shāh, he did not thereby lose his jewels, for he took

them away and brought them back with him' (*Storia*, II, 343).

We are not sure about the 'Mogul' inheriting precious stones 'from Taimūr-i-lang.' Nor is any importance to be attached to the last sentence, which stands unsupported by any evidence.[1]

The following is more sensible: '*Chah-Jehan*,' says Bernier, 'who was a great economist, and reigned more than forty years without being involved in any great wars, never amassed six *kourours* of *roupies*.[2] But I do not include in this sum a great abundance of gold and silver articles, of various descriptions, curiously wrought, and covered with precious stones; or a prodigious quantity of pearls and gems of all kinds, of great size and value. I doubt whether any other Monarch possesses more of this species of wealth; a throne of the great *Mogol*, covered with pearls and diamonds, being alone valued, if my memory be correct,

[1] See below, pp. 509-14.

[2] A remark already dealt with under "Cash Treasury."

at three *kourours* of *roupies*.[1] But all these precious stones, and valuable articles, are the spoils of ancient princes, *Patans* and *Rajas*, collected during a long course of years, and increasing regularly under every reign, by presents which the *Omrahs* are compelled to make on certain annual festivals' (P. 223).

But this is only by way of introduction.

It is now time we attempted some stock-taking of the Mughul Jewel Treasury. We should love to have before us an authentic report of the contents of the Treasury for each of the major reigns, duly signed and verified by the Treasurer in charge at the time, setting forth, as was the rule, the number and the weight of the stones and pearls with the quality and the value of each clearly indicated. Unfortunately such a report, extremely desirable as it would be, is not available. But we possess a few documents of comparatively minor importance with which we shall have to shift as best we may. But we must begin at the beginning.

[1] For criticism of this, see Author's *Thrones, Chairs and Seats.*

The swingeing victory of Panipat placed at Bābur's disposal the cumulated 'treasures of five kings.'[1] We have no doubt that huge quantities of jewels fell into Bābur's hands at Delhi and Agra, but we know also that Bābur showered money and jewels recklessly on his followers—princes, nobles, soldiers and the rest —just as he squandered the cash hoarded for generations by a line of thrifty kings before him. Some idea of the scale of munificence can be gathered from the following, which is only a part of the general distribution, which chances to be recorded :

Khwāja Kalān Beg repeatedly asked for leave to proceed to Kābul, as the climate of India did not suit him.

Bābur reluctantly gave him permission and by his hands sent the following presents for his relations at Kābul, with the instruction that all begums should set up their various tents in the garden of the audience-chamber, celebrate the occasion properly and thank God for the great

[1] *Humāyūn Nāma*, 12.

victory, accepting these presents from the Emperor.

To each begum was to be presented one of Sultān Ibrāhīm's special dancing girls with a gold plate full of jewels—ruby, pearl, cornelian, diamond, emerald, turquoise, topaz and cat's-eye—two small mother-of-pearl trays full of *ashrafis* and two other trays full of *shāhrukhis* and all kinds of stuffs in sets of nine—four trays and one plate in all. And to the elder relations were sent a dancing girl, a plate of jewels, and a tray each of *ashrafis* and *shāhrukhis*—the dancing girl with the plate to be presented first, and the rest later. Jewels, *ashrafis*, *shāhrukhis* and stuffs were to be given to sisters, children, harams, kinsmen, begums, *āghās*, nurses, foster-brothers, *āghāchas* and others.

These instructions were carried out, and there were great doings for three days in the audience-hall garden at Kābul.[1]

[1] *Humāyūn Nāma*, 12-13. I have here freely translated, and slightly condensed, the passage, as a literal translation does not read well in English.

Humāyūn apparently carried about with him in his wanderings as many of the jewels as he could remove from the Jewel Treasury.

We do not hear much of them, however. On his way to Persia, near Bābā Hājī fort (in the south of Afghanistan), Humāyūn offered a ruby, a pearl and a few things to a Balūch chief, who had treated him kindly and shown devotion.[1]

Abū'l-Fazl has already told us how after his arrival in Persia Humāyūn offered to Shāh Tahmāsp Bābur's famous diamond with 250 rubies.[2]

Gulbadan Begum has a different story to tell of the presentation of the jewels to the Shāh. She tells us that Humāyūn kept his collection of precious stones in a purse or pocket-book which he carried on his person, and which he left in charge of Hamīda Bānū Begum when he went out. The existence of

[1] *Humāyūn Nāma*, 68 [168].
[2] See p. 186 above.

it was known to none other than those two. One day the Begum went for a bath, and, wrapping up the purse in a handkerchief, put it on the Emperor's bed. Raushan Kūka, finding his opportunity, abstracted five rubies from the purse. He made common cause with Khwāja Ghāzī, another traitor, entrusted the rubies to him, and the two together made plans for their disposal. They went to a horse-coper and bought *tupchāq* horses for themselves, promising them the rubies in consideration.

When the Begum returned from the bath, the Emperor handed her the purse. Finding it too light, she at once suspected foul play and spoke to her husband. They were alarmed. The Begum acted promptly, took her brother, Khwāja Mu'azzam, into her confidence and asked him to make inquiry into the matter without making fuss. Khwāja Mu'azzam acted silently and skilfully. He interrogated the horse-merchants and Khwāja Ghāzī's servant, with the result that the little plot was discovered and the rubies located. Ultimately the rubies were tactfully recovered

from Khwāja Ghāzī and restored to the Emperor.

Khwāja Ghāzī and Raushan Kūka, thus balked and disgraced, could think of no better plan of avenging themselves than carrying tales to the Shāh, and trying to poison his mind against their master. The Emperor noticed that the Shāh's manner towards him cooled and there were signs of estrangement. Humāyūn ' at once sent to the Shāh all the rubies and jewels that he possessed ',[1] and explained the whole matter. The Shāh then admitted that Khwāja Ghāzī and Raushan Kūka were entirely responsible for the strained relations. The old cordiality was then restored, and the two mischiefmongers were handed over by Humāyūn to the Shāh, who cast them into prison (*Humāyūn Nāma*, 70-73).

As this is the only occasion on which presentation of jewels is mentioned in *Humāyūn Nāma*, this must be the great presentation including ' Bābur's diamond'. So thinks also Mrs. Beveridge (Tr., 173, f.n. 1).

[1] Mrs. Beveridge's rendering is not sufficiently clear on this point.

This story is only partially corroborated by Jauhar in the following passages. He writes: Humāyūn always carried 'his valuable diamonds and rubies in a purse in his pocket; but when he was performing his ablutions he generally laid them on one side; he had done so this day, and forgot them: it so happened that when the King was gone, and the humble servant *Jouher* was about to remount his horse, he saw a green-flowered purse lying on the ground, and a pen-case by the side of it: he immediately took them up, and as soon as he had overtaken the King, presented them'. Humāyūn was much astonished when he saw them, and was delighted (Stewart, 66-67; *Tazkara*, P.U.L. MS., f. 56*b*). Then he goes on to say that Humāyūn kept these valuables about him because he had formerly entrusted them to Raushan Beg, who had been guilty of dishonesty (Stewart, 67; *Taẓkara*, f. 56*b*). This last is at variance with the version in *Humāyūn Nama*. Probably the facts of the matter did not come to Jauhar's knowledge, and when Jauhar heard that Raushan Kūka had stolen the jewels he thought he had been in charge of them.

The fullest account of the presentation of the jewels to the Shāh that we possess is found in the following passage in Jauhar :—' We remained several days encamped on the hunting grounds ; during this time his Majesty ordered his diamonds and rubies to be brought to him ; and having selected the largest diamond, placed it in a mother-of-pearl box ; he then added several other diamonds[1] and rubies ; and having placed them on a tray, gave them in charge of Byram Beg to present them to the Persian monarch, with a message, " that they were brought from Hindūstān purposely for his Majesty."

When Shāh Tahmāsp saw these precious stones he was astonished, and sent for his jewellers to value them. The jewellers declared they were above all price ; on which the Persian signified his acceptance, and conferred on Byram Beg the title of *khān*, with permission to use the kettle-drum and standard.[2] The diploma and insignia were sent the next

[1] The MS. does not mention diamonds here.

[2] No 'standard ' in the MS.

day; but from that time, for two months, there was no intercourse of any kind between the monarchs' (Stewart, 68; *Tazkara*, f. 57 *a-b*). The last statement is cryptic. Probably Jauhar is thinking of the coolness caused by Raushan Kūka's backbiting, and has got mixed up about the time and the occasion.

Jauhar's account also refers to the great presentation. Major Stewart thinks the same (P. 68, f.n.). Excepting the slight discrepancies already noticed, there is nothing really inconsistent in the accounts of Gulbadan Begum and Jauhar. The reader has no doubt noticed that Raushan Kūka's episode occurred some time before Jauhar found the purse, and the presentation followed some days later.

## AKBAR

We are emerging into daylight as we approach the reign of Akbar. Thanks to Abū'l-Fazl's encyclopaedic mind and method, we have some definite information about the contents of the Mughul Treasury, their arrangement and valuation. Akbar's great minister thus outlines the establishment of the Jewel Treasury

and the method of classification and storing followed :

A treasurer, a clerk (*bitikchi*), a *dārogha* and a few experienced jewellers constituted the staff of the Treasury. The jewels were classified according to value in an elaborate system. Rubies were put in twelve classes, diamonds, emeralds, and red and blue *yāqūts* also in twelve classes, and pearls in sixteen.

The value of the rubies in each class ran as follows :

| Class | Value |
|---|---|
| 1 | From 1,000 *muhrs* upwards |
| 2 | „ 999 „ to 500 *muhrs* |
| 3 | „ 499 „ „ 300 „ |
| 4 | „ 299 „ „ 200 „ |
| 5 | „ 199 „ „ 100 „ |
| 6 | „ 99 „ „ 60 „ |
| 7 | „ 59 „ „ 40 „ |
| 8 | „ 39 „ „ 30 „ |
| 9 | „ 29 „ „ 10 „ |
| 10 | „ 9¾ „ „ 5 „ |
| 11 | „ 4¾ „ „ 1 *muhr* |
| 12 | „ ¾ *muhr* „ ¼ rupee |

The diamonds, emeralds, and red and blue *yāqūts* were likewise classified thus :—

| Class | Value | | | | | |
|---|---|---|---|---|---|---|
| 1 | From | 30 | *muhrs* | | upwards | |
| 2 | ,, | 29¾ | ,, | to | 15 | *muhrs* |
| 3 | ,, | 14¾ | ,, | ,, | 12 | ,, |
| 4 | ,, | 11¾ | ,, | ,, | 10 | ,, |
| 5 | ,, | 9¾ | ,, | ,, | 7 | ,, |
| 6 | ,, | 6¾ | ,, | ,, | 5 | ,, |
| 7 | ,, | 4¾ | ,, | ,, | 3 | ,, |
| 8 | ,, | 2¾ | ,, | ,, | 2 | ,, |
| 9 | ,, | 1¾ | ,, | ,, | 1 | *muhr* |
| 10 | ,, | A quarter rupee less than a *muhr*. | | ,, | 5 | rupees |
| 11 | ,, | 4¾ | rupees | ,, | 2 | ,, |
| 12 | ,, | 1¾ | ,, | ,, | ¼ | rupee |

We don't know the weight of the stones assigned to the various classes either in this or in the previous list ; but the reader will see that while rubies ranging in price from 30 to 1000 *muhrs* and upwards are classified under eight heads, diamonds, emeralds and *yāqūts* of the same prices are all grouped together in the first class. In other words, rubies of *over*

30 *muhrs* and diamonds and other stones of *under* 30 *muhrs* are elaborately classified. From this one would be inclined to think that rubies or at least the high class ones, were, weight for weight, more valuable than other stones. But this is not true, for we learn a little lower down that a diamond worth 1 lakh of rupees weighed less than half as much as a ruby of the same price; though emeralds were several degrees cheaper than either.[1]

Pearls had sixteen classes:

| Class | Value | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | From | 30 | *muhrs* | upwards. | | | |
| 2 | ,, | 29¾ | ,, | to | 15 | *muhrs* | |
| 3 | ,, | 14¾ | ,, | ,, | 12 | ,, | |
| 4 | ,, | 11¼ | ,, | ,, | 10 | ,, | |
| 5 | ,, | 9¾ | ,, | ,, | 7 | ,, | |
| 6 | ,, | 6¼ | ,, | ,, | 5 | ,, | |
| 7 | ,, | 4¾ | ,, | ,, | 3 | ,, | |
| 8 | ,, | 2¾ | ,, | ,, | 2 | ,, | |
| 9 | ,, | 1¾ | ,, | ,, | 1 | *muhr* | |
| 10 | From under | 1 | *muhr* | ,, | 5 | rupees | |
| 11 | ,, ,, | 5 | rupees | ,, | 2 | ,, | |
| 12 | ,, ,, | 2 | ,, | ,, | 1¼ | ,, | |
| 13 | ,, ,, | 1¼ | ,, | ,, | 30 | *dāms* | |
| 14 | ,, ,, | 30 | *dāms* | ,, | 20 | ,, | |
| 15 | ,, ,, | 20 | ,, | ,, | 10 | ,, | |
| 16 | ,, ,, | 10 | ,, | ,, | 5 | ,, | |

[1] See below.

The way these pearls were stored and strung is given in detail: Twenty pearls were placed on each of the strings in the first class. The actual number of the strings in this class is not given, since that probably varied from time to time. Next we are told that the total number of strings in each class corresponded to the class itself, *i.e.*, the second class contained two strings, the third class three strings, and the sixteenth class sixteen strings. In this case the number of pearls on each string is not known. Presumably it was kept elastic on purpose. This arrangement apparently did not apply to the first class, where the number of pearls on each string was fixed, and the total number of strings was left undetermined. The reader observes that in both cases room was left for fresh acquisitions and disbursements.

At the end of every string the royal seal was affixed, to guard against replacement or fraud.

Abū'l-Fazl then goes on to detail the charges for boring pearls, which varied with the class of the pearl bored.

Next follow the prices of jewels of unusual weight and value in Akbar's Treasury :

| Kind of Jewel | Weight | | Price |
|---|---|---|---|
| Ruby. | 11 *tunk.* 20 *ratis* | | Rs. 100,000 |
| Diamond. | 5 ,, 16 ,, | | ,, 100,000 |
| Emerald. | 17 ,, 21 ,, | | ,, 52,000 |
| *Yaqūt.* | 4 ,, 7¾ ,, | | ,, 50,000 |
| Pearl. | 5 ,, 0 ,, | | ,, 50,000 |

(Āīn, Text, I, 11-12; Blochmann, 15-16).

The weight and price of the ruby correspond beautifully to those of (1) a ruby purchased by Mahābat Khān from a European and offered to Jahāngīr (Jahāngīr's Reign, No. 15),[1] and (2) the engraved ruby sent by Shāh ' Abbās to Jahāngīr and ultimately set on the rail of the Peacock Throne (*Ibid.*, No. 22).[1]

As regards the value of diamonds, No. 10 of Jahāngīr's reign in our list[2] weighed less than 80 *ratis* and was valued at one lakh of

[1] Table I of Rubies on pp. 292-95.
[2] Table I of Diamonds on pp. 230-35.

rupees, while Nos. 1 and 2 of Shāh Jahān's reign (which may be one and the same stone) weighed 100 *ratis* each and were priced at one lakh likewise; whereas No. 3, which had the same weight, carried the price, 1,50,000 rupees. It thus appears that the prices of diamonds ruled much higher in the reigns of Jahāngīr and Shāh Jahān than in Akbar's time.

## JAHĀNGIR

As the reader is aware, we possess the De Laët-Manrique inventory of the treasure left by Akbar in 1605, the cash part of which was given and discussed in the chapter on 'Cash Treasury.' The remaining portion of it can now be set forth.

For convenience of treatment the inventory of the Jewel Treasury is given entire, although it comprises besides precious stones and gems, ornaments, furniture, gold and silver plate and utensils, statues, porcelain, books, cloths and woollens, tents and curtains, arms and accoutrements, harness and housings. These items will be severally treated of elsewhere.

But with the details of gems and jewels fresh in the reader's mind, I have considered it worth while to attempt an estimate of the entire contents of the Jewel Treasury at this stage, although it includes a great deal of miscellaneous wealth not usually counted as treasure. This course seems better than breaking up the lists into individual items, and distributing them over the various treatises dealing with those details. Nor would it be possible to discuss the value and utility of these lists if their contents were so dissipated. These considerations have led the writer to place this chapter on the 'Actual Contents of the Jewel Treasury' immediately after gems and jewels, the fuller details of many of the articles summarized here being reserved for future treatment.

| Articles | Value in rupees |
|---|---|
| Diamonds, rubies, emeralds, sapphires, pearls, and similar gems. .. | 60,520,521 |
| Wrought gold, including necklaces. .. | 19,006,745 |
| Golden furniture (*supellex*); all kinds of gold plate; various images of elephants, horses, camels, and similar animals, made of gold. .. | 9,507,992 |
| Wrought silver, such as goblets (*scyphi*), dishes (*disci*), candlesticks, columns, and other vases and utensils of every kind. .. | 2,225,838 |

| Articles | Value in rupees |
|---|---|
| Brazen (*aenea*) vessels and furniture of every kind and fashion. .. | 51,225 |
| Most elegant vessels of every kind in porcelain (Manrique adds 'and also of coloured Glass,' *i.e.*, crystal). .. | 2,507,747 |
| Books written by great men, and adorned with extremely valuable bindings (24,000 volumes). .. | 6,463,731 |
| Cloths interwoven with gold and silver, from Persia, Turkey, Gujarat, and Europe; also silks of various kinds; with cotton goods from Bengal and other provinces. .. | 15,509,979 |
| Woollen cloths, European, Persian, and Tartar. .. | 503,252 |
| Tents, hangings, umbrellas (*canopea*), rugs, and all things needed for the adornment of houses or for camp use. .. | 9,925,545 |
| Engines of war (*tormenta bellica*), mortars (*bombardae*), balls, and gunpowder—as well as other military material. .. | 8,575,971 |
| Weapons—shields, swords, daggers, bows, arrows, and the like. .. | 7,555,525 |
| Harness, bits of gold and silver, and everything else pertaining to horse furniture. .. | 2,525,646 |
| Housings decorated with gold and silver (*tunicae equestres*) [Mandelslo: 'covering-clothes for horses and elephants']; cloaks of every kind, and royal arms (*arma regalia*) ['Various kinds of coats and equestrian ornaments, worked and embroidered with gold, silver, and precious stones, including the arms borne and insignia carried before the Imperial person and those of the Royal house.'—Manrique]. .. | 5,000,000 |
| Total .. | 149,879,717 |

De Laët, 108-9; Manrique, II, 293-94; Smith, *J.R.A.S.*, 1915, 241-42).

It is to be noticed that thrones and chairs are not specifically mentioned in De Laët's list. We must presume them to be included under 'Golden furniture (*supellex*).'

It is now fairly established that Manrique, who is much over-estimated by V. A. Smith, only copied out De Laët's list, so that his document has no independent—and at best only a corroborative—value. De Laët's *De Imperio Magni Mogolis* was published in 1631, while Manrique's *Itinerario* appeared in 1640. But these dates should not mislead us, as the two documents are only copies of the identical official record, which represented the state of things at the death of Akbar.

It may be noted in passing that in Mr. Hoyland's translation the amounts have been carelessly transcribed in one or two cases, though the total given by him tallies with the true total of the sums, showing that the former are only clerical errors. For this and other reasons I have considered it safe to adopt Smith's translation, which is made after collation of original texts, not entirely excluding even Mandelslo's, which he considers spurious.

This can be followed up with Hawkins' account of the contents of Jahāñgīr's Treasury about 1610, when Hawkins was at the Mughul court.

| Precious stones and pearls. | Weight or number. |
|---|---|
| Diamonds of not less than 2½ car., 'rough, of all sorts and sizes, great and small'. .. | 1½ battmans or 82½ lb. |
| 'Ballace rubies little and great, good and bad.' .. | 2,000 pieces |
| Pearls of all sorts. .. | 12 battmans or 660 lb. |
| Rubies of all sorts. .. | 2 battmans or 110 lb. |
| Emeralds of all sorts. .. | 5 battmans or 275 lb. |
| *Yashm* or jade, which comes from Cathay. .. | 1 battman. or 55 lb. |
| Stones of Yemen [1](which is a red stone). | 5,000 pieces. |
| All other sorts, such as corals, topaz, etc. .. | 'An infinite number.' |

| Ornaments and Jewelled Gold and Silver Ware. | Number or weight. |
|---|---|
| Chains of pearls and chains of all sorts of precious stones. .. | 'An infinite number.' |
| Rings 'with Jewels of rich Diamants, Ballace Rubies, Rubies and old Emerods'. .. | ,, |

[1] Probably '*aqīq* (cornelian or agate).

| Ornaments and Jewelled Gold and Silver Ware. | Number or weight. |
|---|---|
| 'Swords of Almaine Blades, with the Hilts and Scabberds set with divers sorts of rich stones, of the richest sort.' .. | 2,200 |
| Poniards of two sorts. .. | 2,000 |
| Saddle drums, used in hawking: very rich ones of gold, set with stones. .. | 500 |
| Brooches 'for their heads, where-into their Feathers be put': very rich. .. | 2,000 |
| Saddles of gold and silver set with stones. .. | 1,000 |
| Teukes (great lances) covered with gold, and the fluke (point) set with stones ('These instead of their colours, are carryed, when the King goeth to the warres'). .. | 25 |
| K'ttasoles (umbrellas, *i.e.*, the *chatr*) of state. 'None in his Empire dareth in any sort have any of these carryed for his shadow but himselfe.' | 20 |
| Chairs of state (De Laët calls these thrones, and probably rightly) | |
| of silver 3 } .. | 5 |
| of gold 2 } .. | |
| Other chairs of silver and gold. .. | 100 |
| Rich glasses (*i.e.*, mirrors). .. | 200 |
| Vases for wine, 'very faire and rich, set with Jewels.' .. | 100 |
| D'rinking cups (Fifty of these very rich, being 'made of one piece of Ballace Ruby, and also of Emerods, of Eshim, of Turkish stone, and of other sorts of stones'). .. | 500 |
| Plate (dishes, cups, basins, pots and beakers) | |
| of silver .. | 2,000 battmans or 110,000 lb. |
| of gold .. | 1,000 battmans or 55,000 lb. |

Hawkins (Purchas, III, 32-33).

The thrones and chairs are all expressly included and separately enumerated in this list.

The reader will notice that although these two independent accounts refer to very nearly the same period, the dates being only five years apart, yet it is not possible for us to compare or verify the items; since De Laët gives only the total value of each set of articles in rupees, while Hawkins gives the total number of the articles, and sometimes their total weight.

For comparison or verification we have to fall back upon *Muntakhabu'l-Lubāb*. The reader has already seen that, according to Khāfī Khān, the Emperor's jewels (*jawāhir-i-khāṣṣa*), at Akbar's death, weighed one maund and were worth over three crores of rupees (*M. L.*, I, 243). Now De Laët places the total value of diamonds, rubies, emeralds, sapphires, pearls and other gems, at well over six crores, which is just about double Khāfī Khān's estimate. As for the weight, Hawkins gives weights for five gems out of eight in his list:

these total 21½ *battmans* or maunds. Counting in the other gems, at a guess, the total weight of precious and semi-precious stones and pearls would be over 30 maunds—as against one maund of Khāfī Khān. No reconciliation between these authorities is possible even by assuming that Khāfī Khān is counting only precious gems, and ignoring all semi-precious stuff; for diamonds, rubies, pearls and emeralds (in Hawkins' list) alone exceed 20 maunds, even leaving 'ballace rubies' out of account. The result is utter chaos. The present writer has more respect for the two inventories elaborately copied out by the European travellers than for Khāfī Khān's irresponsible statements.

## SHĀH JAHĀN

Shāh Jahān's reign represents the heyday of material splendour and prosperity, and with his accession the art of collecting, valuing and classifying jewels entered on a new career. The leading spirit of the age, the Emperor himself, was a great connoisseur of pearls and stones.

Let us for a moment step backward to get a true perspective.

Vicissitudes had come to an end with Humāyūn, and the sledgehammer strokes of Akbar's victories gave a rough outline to an empire, which fifty years of wise and tolerant government was gradually to make shipshape and tolerably homogeneous.

The opportunities offered by the settled government and peace left behind by Akbar were not however used to the best advantage by his son. With all the advantages of a strong and healthy constitution, high education and a mind delicately responsive to the appeal of natural phenomena, he had a fine temperament, a healthy curiosity, highly developed tastes and an extensive range of interests. With all this to his credit, his intemperate habits, specially in the latter half of his reign, reduced him to the condition of a *roi fainéant*, the real power being vested in the hands of Nūr Jahān, who, considering her disabilities, steered the ship of state with remarkable ability and talent.

Against this background Shāh Jahān's accession stands out in conspicuous relief. The increasing resources of a peacefully progressing empire were at once placed at the disposal of a man who understood the true meaning and value of wealth—who did not spend a pice where no return was assured, and who did not scruple to spend millions where to his mind a real need was being satisfied.

Shāh Jahān had a great passion for art and a particularly well-balanced aesthetic judgment. His attachment to precious stones has often been misinterpreted as grasping cupidity, whereas, in point of fact, that emperor was the most liberal and the most generous in the whole line of Mughul kings, not only with his money but in his ideas and sympathies, his daily dealings and actions. Bernier describes him as a great economist. [1]

On whatever he has left us we see an indelible impress of unapproachable ideals and an unerring eye for effect. Designs and proportions of his buildings and gardens, quality

[1] P. 223.

and symmetry of their patterns and decorations, even furnishings of his halls and chambers, and dispositions and arrangements in his durbars, and finally the miracles of the jeweller's art—in all these we find a master mind trying to realize its dreams of beauty and perfection in terms of brick or stone here, of line and colour there, of gold and jewels and precious stuffs, using the costliest material with nonchalant ease and seemingly reckless extravagance. The noble band of designing architects, painters and jewellers played up to his ideas and plans in a way that does credit to all concerned.

We must not forget that both as prince and even after his deposition Shāh Jahān was considered a great connoisseur of pearls and precious stones. The reader remembers how Jahāngīr was once worried over finding a match for a pearl to put on an armlet, and Prince Khurram rootled out a beautiful one from an old disused *sar-pech* of Akbar's, which nobody knew of.[1] It shows that the Prince from a boy had an eagle's eye for jewels, and

[1] Pp. 270-72 above.

did not forget one when he had once seen it.

The reader will also remember the occasion when Aurangzeb and his court jewellers were puzzled by a ruby, and the question of its genuineness or otherwise was referred to Shāh Jahān in prison, as the greatest living authority on the subject, his verdict being accepted as final by all parties.[1]

Things being what they are, we approach this reign with high hopes and a whetted curiosity. But as far as the actual figures of treasury totals are concerned these hopes are doomed to be foiled. Unfortunately we do not possess any reasonably authentic catalogue of the contents of Shāh Jahān's Jewel Treasury.

Mandelslo, who came in 1638, has the following: 'I was credibly informed, that the *Mogul*, who lived in my time, had a Treasure, which amounted to above fifteen hundred Millions of Crowns' (P. 37): This appraisement of the total wealth at the end of the first decade

[1] See pp. 286-88 above.

comes to 300 crores of rupees. And this, even if it includes both cash and jewels (which probably it does), is, on the face of it, a gross exaggeration based on unverified rumours.

Again, after giving the inventory of Akbar's treasure, which is the De Laët-Manrique document, he continues: 'But this came not any thing near the Treasure which *Scach Choram* was possessed of, at the time of my Travels in those Parts. This Wealth is more and more augmented every day, not so much out of the ordinary Revenue coming in from the great Kingdoms he hath..... as by the Presents which are made him, and the Escheats falling to him at the death of great Lords and Favourites' (P. 38). It is to be noted that this passage does not form part of the earlier German edition (1656) of Mandelslo's work, and is adjudged to be spurious by critics. But as Mr. Commissariat remarks, though these 'elaborate additions' 'are not from Mandelslo's pen, they have nevertheless a historical importance of their own, for the information given in them is based on the best

books on eastern travels available to Olearius or to de Wicquefort in the middle of the seventeenth century.'[1]

For a more sober estimate we must resort to Shāh Jahān's court historian. Mulla ʿAbdu'l-Hamīd of Lahore, after speaking (under XVIII R.Y.) of the *sar-pech* which consisted of five rubies and twenty-four pearls and was valued at 12 lakhs, and of the *tasbīḥ* comprising five rubies and thirty pearls, valued at 8 lakhs, and of two other *tasbīḥs* of pearls and *yʿqūts* (total price, 20 lakhs),[2] goes on to say that although most of these gems have come down from Akbar's time, additions continued to be made during the reigns of Jahāngīr and Shāh Jahān, so that in this reign a wealth of gems and jewels has accumulated, to which the treasury of no other monarch in the world can present a parallel. The total value of this wealth, not counting 2 crores' worth of gems presented to princes and others during this reign, is 5 crores. Out of this total

[1] M. S. Commissariat, *Mandelslo's Travels in Western India* (*A.D.* 1638-39), pp. xv-xvi.

[2] See pp. 281-84 above.

gems and jewelled articles to the value of 2 crores of rupees are worn on the Emperor's person, and are kept in charge of trustworthy servants in the *mahal*; and the remainder worth 3 crores is kept outside in charge of *chelas* (slaves) (*B. N.*, II, 391-93).[1]

After the earlier statement in the superlative these figures seem tame and read almost like an anti-climax. But both statements are accurate, and there is no attempt at creating an impression.

But in a reign like Shāh Jahān's, disbursements should also be taken into account. The same writer, when reviewing Shāh Jahān's cash treasure at the end of XX R.Y., remarks that since the beginning of this reign

[1] Khāfi Khān says Shāh Jahān inherited 10 crores' worth of gems and jewelled things. Up to XVIII R.Y. 2 crores' worth had been given away in gifts and presents, and a half crore in charity (*ma'jūnāt*, *ṣadqa* and *nisār* on weighments and festivals), while the value of 5 crores was present in the Jewel Treasury at this date, the rest, worn on the Emperor's body, being in the *toshak khāna* among the royal wardrobe (*M.L.*, I, 605). Where this account agrees, or can be reconciled, with the authentic and explicit statement in *B.N.*, cited above, it is welcome, and where it differs it is to be received with caution.

Rs. 9,50,00,000 in cash and kind has been given away as *in'ām*, nearly half in cash, and a little over half in articles.[1] These articles mean, besides horses, elephants, etc., gems, jewelled arms, housings, stuffs and the like, and came to some 5 crores in value. In view of the remark already quoted we can readily understand that this sum included the two crores' worth of pearls a id stones given away to princes etc.

These no doubt include the gems and jewels given away on the following occasions, of which only a passing mention can be made here.

We know that from Shāh Jahān's Coronation (8 *Jumādá* II, 1037) to the end of the first Nauroz (beginning of *Sha'bān*)—in seven weeks odd—jewels, dresses and arms, and horses, elephants and cash to the value of 1,80,00,000 rupees were disbursed.[2] This included 76 lakhs' worth presented to Mumtāzu'z-Zamānī, the empress. Most of this wealth

[1] B. N., II, 713.

[2] *B.N.*, I, i, 192. Author's *History of Shāh Jahān's Reign*, Ch. iii.

must have reverted to the Treasury on her death. Deducting that amount from the total, we have well over a crore of rupees left. Half of this, we know definitely, was the price of jewellery presented to Jahān Ārā Begum and the princes. So out of this total we may assume some 60 lakhs to stand for gems and jewels.

Next we may notice the weddings of the first princes of the blood. The amount spent on Dārā Shukoh's marriage (1042 A.H.) on the Emperor's side was 22 lakhs of rupees, which included approximately some 10 lakhs' worth of gems and jewels,[1] and the expenditure on the occasion of Shāh Shujā''s wedding (same year) would be in the neighbourhood of 12 lakhs, half of which we may assume to be the price of jewels.[2] Similarly on the weddings of Aurangzeb[3] (end of 1046) and Murād Bakhsh[4] (1052 A. H.) the Emperor gave them Rs. 10 lakhs and 5 lakhs in cash respec-

[1] *B.N.*, I, i, 454 and 460 ; *A.S.*, I, 524.
[2] *B.N.*, I, i, 462 ; *A.S.*, I, 540.
[3] *B.N.*, I, ii, 267.
[4] *B.N.*, II, 304.

tively, to make the necessary purchases and arrangements. The total expenses therefore would come to some 20 lakhs for the two weddings, half or nearly half of it being represented by the price of gems.

Another large item we can notice is the ornaments and jewelled articles worth 10 lakhs given away to Jahān Arā Begum and a similar value bestowed on princes, princesses and nobles at the time of the celebration of her recovery (*Shawwāl*, 1054 A.H.).[1] The latter amount included some cash and animals, so that it will be safer to place the jewels at some 7 lakhs out of this sum. The total value of gems disbursed on this occasion would thus come to some 17 lakhs of rupees.

This feast and the weddings thus account for some 40 lakhs, and with the 60 lakhs disbursed at the opening of the reign, would come to just a crore's value in jewels. But these are only a few of the outstanding items.

[1] *B.N.*, II, 397.

There was, throughout the reign, a stream of costly presents constantly flowing from the Emperor to the princes and nobles, and back again to the Emperor.

It must not be forgotten that we are considering the treasure as it existed at the end of the second decade of this reign. The third decade was perhaps the most prosperous in Mughul Indian history: a larger value in gems and jewels changed hands at the court of Delhi during the years 1648-58 than at any period of Indian history before or since.

Some rough indications can be gathered from the following facts: On the first durbar held in the newly-built Delhi palace, which fell on a Nauroz (Monday, 18 *Rabi'* I, 1060, and following days) presents worth 15 lakhs were accepted. Again, the value accepted from princes and nobles in XXVIII R. Y. totalled nearly 15 lakhs[1] and that in XXIX R.Y. came to 20,[2] while in R.Y. XXX the maximum of nearly 1 crore was reached.[3]

[1] *B.N.*, III, P.U.L. MS., f. 99*a*.
[2] *B.N.*, III, P.U.L. MS., f. 108*a*.
[3] *B.N.*, III, P.U.L. MS., f. 123*b*.

Jewels of course only constituted a proportion of these figures, and yet a goodly proportion.

It is a pity that the total of the collection at the end of the reign is not recorded either by Muḥammad Wāris or by Muḥammad Ṣāliḥ, the prime contemporary authorities for this period. Nor is there available an estimate of total disbursements either during the third decade or during the whole reign.

All that we can offer the reader is the following : According to Khāfī Khān, Shāh Jahān left in the Treasury uncoined gold and silver, and gold and silver vessels and jewels worth 15 or 16 crores.[1] The price of bullion is not separately given, but, taking Khāfī Khān's account of Akbar's treasure[2] as our guide, and allowing for the higher price of gold at this date and for acquisitions in Shāh Jahān's reign, we can guess that it would be somewhere near 2 crores.

The items that go to make the remaining 14

[1] *M.L.*, I, 758, and p. 51 above.

[2] *M.L.*, I, 243 and Chapter on Cash Treasury above.

crores are not given, but this total of the treasure in 1658 comes so close to the De Laët-Manrique total for 1605 that we are tempted to square off the two, and declare that all these documents corroborate each other, and we have at last arrived at a reliable grand total of the Mughul jewel treasury.

But then we are assuming that the prosperity and resources of the Mughul empire were marking time during the palmiest half-century of its history—which is contrary to known facts. One is inclined to look for a great advance on the previous figures towards the latter end of Shāh Jahān's reign. Judging from the wording of Khāfī Khān's statement, one would confine his total to gold and silver vessels and gems and jewelled things, which he actually names, so that the value of such items as porcelain, books, stuffs, tents, weapons and housings, which are included by De Laët-Manrique, will have to be added to Khāfī Khān's estimate before we can place the two totals side by side. These latter come to nearly six crores, and should be well over 7 crores at the end of

Shāh Jahān's reign. This would bring the total value of Shāh Jahān's wealth (about the year 1658) to a figure in the neighbourhood of 23 crores, besides 24 crores of coined money. To this grand total of 47 crores is to be added some 3 crores, more or less, spent by that emperor on his programme of building operations; and another 5 crores as a rough valuation of animals and birds in the royal stables, menageries, aviaries, etc., and of carts, carriages, boats and similar articles, which were not costly enough to be included in the inventories already given.

This amount of 55 crores, measured in purchasing power, is equivalent to some 250 crores to-day, which compares very favourably with the gold reserve in the issue department of the Bank of England on November 2, 1927, which was 149·7 millions[1] or, roughly, just over 200 crores of rupees at £1=Rs. 13-8 a.

[1] *Encyclopaedia Britannica*, III, 54.

For the actual contents of Aurangzeb's jewel treasury we have no official or non-official record to guide us. Of course we know that the priceless gems and rarities of the age, which Shāh Jahān's well-known discrimination and patronage attracted from far and near and which he sedulously gathered and cherished during thirty years of unexampled prosperity—all this and all that had descended to him from the times of Akbar and Jahāñgīr passed peacefully into Aurangzeb's hands.

To the inherited treasury Aurangzeb must have added considerably during the long reign of nearly fifty years, in which the frontiers of the empire were extended and the revenues increased. It is true that the royal patronage for this class of goods diminished in this period and the efforts for artistic creation missed the incentive they had received during the preceding three reigns; but it is also true that Aurangzeb was a thrifty and sound administrator and, although large cash gifts were frequent in his reign, he was not

nearly so lavish of jewels as his father; so that we may be sure that the contents of the existing jewel treasury were sedulously guarded, while the customary stream of presents continued unabated to swell the total hoard. In particular, the conquest of Bījāpur and Golconda (in 1686-87) must have meant accession to the treasury.

This monarch inherited the major portion of his father's treasury at the time of his accession. But quite a large number of valuable items remained outside, and came in at subsequent dates.

Many costly jewels, arms and ornaments were bestowed on Dārā Shukoh on various occasions during Shāh Jahān's reign. The climax was reached when during the latter's fateful illness ornaments and jewelled arms and articles to the value of some 35 lakhs of rupees were bestowed on that prince on a single occasion (1068 *A. H.*).[1] The accretion of wealth in the hands of Dārā Shukoh by this time must have been immense.

[1] See below, and *B.N.*, III, 141*b*-142*a*.

Khāfī Khān states on the authority of an assistant *mushrif* of the Jewel Treasury, whom he describes as a 'reliable witness', that Dārā Shukoh, before the battle of Samūgarh, left jewels and pearls worth 27 lakhs of rupees belonging to the ladies of his haram[1] in the *mɪbal* jewel-house in Agra fort. Shāh Jahān was privy to it, but Dārā Shukoh, after his defeat, got no time in his precipitate flight to get possession of them. Aurangzeb came to know of it and insisted on the restoration of the valuables to the Treasury. After some unpleasantness between father and son, Shāh Jahān had to surrender them; and, what is more, the messenger who carried them to Aurangzeb was also the bearer of the deposed monarch's letter pardoning Aurangzeb for his undutiful conduct. Khāfī Khān quotes in full Aurangzeb's letter acknowledging the "pardon" and the gift (*M. L.*, II, 104-6).

At the time of the battle at Deorāi (near Ajmīr) we catch a glimpse of Dārā Shukoh's

[1] In an earlier part of the passage the author describes them as belonging to Dārā Shukoh's dress (p. 104).

treasure, and gold and silver vessels and other movables loaded on elephants, camels and horses, with ladies of his haram on elephants,[1] all left under a guard of cavalry and infantry on the banks of the Anā Sāgar tank near Ajmīr (*'Alamgīrnāma*, 409). Much of this was plundered by the guards themselves after the defeat of the unfortunate prince (*Ibid.*, 410).[1]

Most of Dārā Shukoh's jewels probably found their way into the state treasury sooner or later. Aurangzeb appropriated them, says Tavernier, 'after he had caused his [Dārā Shukoh's] head to be cut off' (I, 317).

Shāh Shujā' also had his collection of valuables, which he carried about with him in his adversity and wanderings. On 7 *Muharram*, 1071, Ikhlāṣ Khān Khweshgī brought to court his ladies, cash and jewel treasure, and other goods (*'Alamgīrnāma*, 573).

Jahān Ārā Begum was Shāh Jahān's favourite daughter and had been constantly receiving presents during the thirty years of her father's illustrious reign. She must have built up

[1] See also *M.L.*, II, 72-73 and 80-81.

quite a tidy collection of valuables, which remained with her during her self-imposed incarceration with her father.

Towards the end of 1070 Jahān Ārā Begum paid a visit to Aurangzeb and offered a string of pearls and 5 rubies worth Rs. 2,80,000 (*'Ālamgīrnāma*, 568); and again sent some jewels and jewelled articles to him in *Shawwāl*, 1072 (*Ibid.*, 743).

Tavernier, talking apparently of the course of events before Aurangzeb's coronation, remarks nonchalantly that Aurangzeb 'took possession of all the wealth which she [Begum Ṣāḥib] had received from her father's liberality' (I, 274). But only on the next page, where the author is speaking of the happenings immediately after Shāh Jahān's death, we read, 'The Begam Sāhib also had a quantity of precious stones, which he had not taken from her when he placed her in the fortress, as he was then satisfied with securing the gold and silver with which her chests were full' (P. 275). So 'all the wealth' in the first passage does not include the 'quantity of precious stones'

in the second. Tavernier's vague and inexact ways of talking do not enable us to feel any confidence even where he makes a perfectly definite and precise statement. The reader doubtless remembers the many occasions, on which this author has been judged and found wanting.

Bernier's remark is entitled to more respect, though it does not carry us far: He tells us that when, after the death of Shāh Jahān, Aurangzeb visited Agra fort, Jahān Ārā Begum received him with much courtesy and 'presented him with a large golden basin, full of precious stones—her own jewels, and those which belonged to *Chah-Jehan*' (P. 199). This may, and probably does, refer to only a small proportion of the treasure which had been in possession of the late emperor and his daughter.

As for the division of Jahān Ārā Begum's belongings after her death Manucci has the following: 'At the time of her death this princess divided her property and jewels among her nieces, leaving to each a good deal of money and jewels. Nor did she overlook her

beloved Jānī Begam, to whom she bequeathed her finest jewels and a greater share of money' (*Storia*, II, 256).

Now we come to the gems and jewels in Shāh Jahān's possession in Agra fort.

We know that Shāh Jahān sent to Aurangzeb (1 *Rajab*, 1072) jewels to the value of 16 lakhs by the hands of Fāẓil Khān, *Mīr Sāmān*, who had been sent to Agra (presumably for the purpose) by Aurangzeb a month earlier (*'Ālamgīrnāmā*, 660-62; *M.L.*, II, 129-30). It is possible that these were the precious stones mentioned by Bernier (on p. 166) in the passage quoted below.

Khāfī Khān reports that Shāh Jahān had a rosary of 100 round pearls all of the same colour and weight, which was worth 4 lakhs of rupees. The pearls had been got together after much care and research. Besides there was an *ārsī*[1] of diamond which he always wore round his neck. Aurangzeb sent a

[1] An *ārsi*, as we know it today in India, is a ladies' thumb-ring set with a small mirror. We hope there is no misprint in the text.

eunuch with the message asking for these ornaments. The aged monarch was furious: he gave away the *ārsi*, but concerning the rosary sent back the reply that it was used in his devotions, and it could only be surrendered after it had been pounded in a mortar. It was never asked for again (*M. L.*, II, 106-7). This reminds us of the following passage in Bernier, though it refers apparently to a different occasion.

Aurangzeb once asked his father for some precious stones, which he wanted, he said, to complete a piece of workmanship that he was adding to the peacock throne. 'The captive Monarch indignantly answered that *Aureng-Zebe* should be careful only to govern the kingdom with more wisdom and equity: he commanded him not to meddle with the throne; and declared that he would be no more plagued about these jewels, for that hammers were provided to beat them into powder the next time he should be importuned upon the subject' (Bernier, 127).

But later, we are informed, the relations

between father and son improved. Aurangzeb paid the aged monarch every attention, indulged all his wishes, and afforded him every facility consistent with close confinement. 'Indeed, *Aureng-Zebe's* behaviour was throughout kind and respectful, and he paid attention to his aged parent in every possible way. He loaded him with presents, consulted him as an oracle, and the frequent letters of the son to the father were expressive of duty and submission. By these means *Chah-Jehan's* anger and haughtiness were at length subdued, insomuch that he frequently wrote to *Aureng-Zebe* on political affairs, sent *Dara's* daughter to him, and begged his acceptance of some of those precious stones, which he had threatened to grind to powder if again importuned to resign them' (*Ibid.*, P. 166).

Tavernier has a different version of this matter: Aurangzeb begged Shāh Jahān, 'as he was about to ascend the throne in a few days, to have the kindness to send some of his jewels to be used on that day, so that he might appear before his people with the same magnificence as the other Emperors, his predecessors,

had done. Shāh Jahān became so enraged at this demand of Aurangzeb, which he regarded as an insult levelled at him in his prison by his son, that for some days he was like a madman, and he even nearly died. In the excess of his passion he frequently called for a pestle and mortar, saying that he would pound up all his precious stones and pearls, so that Aurangzeb might never possess them. But the Begam Sāhib, his eldest daughter, who had never left him, threw herself at his feet, and besought him not to proceed to such an extremity, and as she had full power over him in consequence of the intimate relations which existed between them[1], she appeased him, rather with the object of keeping the precious stones for herself than to give pleasure to her brother, her mortal enemy who might one day become their possessor. Thus, when Aurangzeb ascended the throne he had only one jewel on his cap (*toque*) ; but if he had desired more he did not lack them, as I have elsewhere said, and he asked for the stones from his father only with the intention of retaining them permanently' (295-96).

[1] An unwarranted libel.

Probably every statement in the latter half of this passage is historically incorrect. From the points common to the two accounts we are disposed to think that the passages already cited from Bernier constitute an accurate record of events as they occurred, and Tavernier has mistaken the occasion on which the dispute took place, and mixed up things in general. Knowing Tavernier as we do, this is not surprising.

Of course we could guess that all valuables which remained with the imprisoned monarch were, on his death, restored to Aurangzeb's Treasury, even if Tavernier did not tell us, as he does, that 'as soon as Aurangzeb had news of it [his father's death] he came to Agra and seized all the jewels of the late King, his father, which he had not secured during his life' (I, 275).

Although we possess no inventory of Aurangzeb's Jewel Treasury, we happen to have a somewhat detailed list of the Delhi treasure plundered by Nādir Shāh. Nādir's invasion came only 32 years after the death of

Aurangzeb, and nobody will think that any appreciable addition was made to the store during those years. So the quantity and value of Nādir's plunder may be safely taken as the measure of the treasure left by Aurangzeb.

The following passages from James Fraser's *History of Nadir Shah* are extremely interesting:

'*Nadir Shah*, after his Victory, and having established his Power, had demanded of *Nizam al Muluck*, twenty *Crore* [1] of *Rupees* (exclusive of the Jewels, Gold Plate set with precious Stones, and other fine Goods, seized of the King's, and other *Omras*) to be collected in the best Manner he could out of the King's Treasury, his own Effects, and all the other *Omras*, wealthy People and Inhabitants. Such a Sum was not to be raised out of the King's Treasury, or the *Omras* Effects; for, in the King's, the Gold and Silver Coins did not exceed three Crore:[2] But, in the inward Vaults (which had been shut up and sealed for many Years, no Body knowing by whom they

[1] 'Twenty *Crores* are 25 millions Sterling' (Footnote).
[2] '3,750,000 *l*' (Footnote).

were sealed, or what they contained) there was found of Gold and Silver to a much larger Amount than the Money in the Treasury' (P. 192-93). Later on, summing up the situation, he says: 'Since the Battle of *Karnal*, until *Nadir Shah's* Departure from *Shahjehanabad*, the Loss sustained by the Emperor and the People within and without the City, in Jewels, Treasure, Goods, Effects, and destroying of Fields, setting aside the Loss of the Buildings, amounted to very near one *Arrib*[1] of *Rupees*, out of which *Nadir Shah* carried away to the Value of 70 *crores*[2] in Jewels and other Effects; and his Officers and Soldiers 10 *Crores*.[3] The Charges of his Army, while he continued there, the Arrears, Pay and Gratuity advanced them, with what Goods were destroyed by Fire, and Fields laid waste, made near 20 *Crores* more.[4]

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[1] '125,000,000 *l*' (Footnote).

[2] '87,500,000 *l*' (Footnote).

[3] '12,500,000 *l*' (Footnote).

[4] '25,000,000 *l*' (Footnote).

The Particulars of what *Nadir Shah* carried away with him :

| | *Crore* |
|---|---|
| Jewels from the Emperor and *Omras*, valued at ... | 25 |
| Untensils and Handles of Weapons set with Jewels, with the *Peacock* Throne, and nine others set with precious Stones | 9 |
| Money Coined in Gold and Silver *Rupees* | 25 |
| Gold and Silver Plate which he melted down and coin'd ... | 5 |
| Fine Cloths and rich Stuffs of all Kinds ... | 2 |
| Household Furniture, and other valuable Commodities ... | 3 |
| Warlike Weapons, Cannon, etc. ... | 1 |
| | 70[1] |

(P. 219-21).

Hanway (*Travels*, II, 383) only copies, and slightly condenses, these details, and is therefore no independent authority.

Granting this estimate of Nādir's booty to be substantially correct, while money and bullion (with gold and silver plate) amounted

[1] The quotation ends here.

to 30 crores, the jewel treasure was valued at 40 crores and comprised 25 crores' worth of jewels (including the blackmail from the nobles), the rest being jewelled arms, articles, furniture and stuffs. Out of this 70 crores the value of some 5 to 10 crores may be the levy on the nobility, while the balance came from the *khāṣṣa* and the state treasuries.

These details of the treasure and their relative proportions are credible. There is just the advance on Shāh Jahān's treasure under all heads that one would expect after Aurangzeb's 50 years of careful management and simple habits.

In Mīrzā Mahdī Khān's *Tārīkh-i-jahān-kushā-i-Nādirī*, however, we read that Nādir Shāh obtained the equivalent of 15 crores from the state treasuries and through presents from nobles and governors from far and near (Edn. of 1265 *A.H.*, p. 207). This brief statement claims to give the total value of Nādir's booty, including the contributions from the aristocracy. In view of the low total figure and of the fact that no details are attempted we are disposed to attach more credit to Fraser's

report, which has the air of an original and authoritative record.

While on the subject of Nādir Shāh's spoils we may remark that although a historian has no business to deplore transfer of wealth from one country or nation to another, and in fact may cheerfully grant that 'none but the brave deserve the fair' as well as the spoils of war, yet when a great country's entire artistic output extending over some two centuries of its best period is taken away at one blow, not to find a place in the secure vaults or show-cases of a palace or a museum, but the gold and silver articles of vertu to be melted into ingots, and the thrones, crowns, and jewelled furniture to be broken to pieces and distributed among the wild and hungry hordes of wandering shepherds and their descendants, not to speak of books, pictures, etc., which were probably used to feed the melting furnace or else thrown out on the streets as unworthy of the space they occupied—then the scandalized annalist may perhaps be forgiven if the limit of his patience is reached. Political vicissitudes have their horrors even for the denizens of the sequestered vale of art and letters.

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## SOME SELECTED OPINIONS

*Dr. Sir Shafaat Ahmad Khan, Allahabad University, Allahabad. Now High Commissioner for India in South Africa.*

My attention to Mr. Abdul Aziz's work was drawn by his excellent articles in the Journal of Indian History, Madras, in, I think, 1932 or 1933. I followed these articles with the greatest interest, as they dealt with an exceedingly difficult period in a style of striking lucidity and scientific precision. They contained none of the vague, obscure and inaccurate theories and facts which has sometimes impelled me to ask the author, why do you mumble ? I am glad to find that Mr. Abdul Aziz has collected together these articles and intends to publish them in a book form. I think it is a wise decision, and will be welcomed by all students of Mughul India.

Mr. Abdul Aziz's monograph on " The Imperial Treasury of the Greater Mughuls " is a work of solid research, sound judgment and great industry, and he has laid all students of the period under a deep debt of gratitude by his researches. Only those who have been through the novitiate of a trained historical scholar can appreciate the wealth and variety of the material he has collected together. His introductory chapter on the Imperial Household is excellent, and he has discussed the material with discrimination and tact. It does not pretend to be an exhaustive account, and he had perforce to content himself with the chief offices and departments....

Mr. Aziz then discusses the sources of revenue in the time of greater Mughuls and calculates their value, with his customary caution, detachment and precision.

The other articles deal with precious stones, and discuss the nature and quality of various kinds of stones, and trace the history of the Koh-i-Nur diamond. . . . The section on Rubies is excellent while other sections that will appeal to readers are those on Ivory and Ivory Work in India . . . The chapter headed Actual Contents of Jewel Treasury from the invasion of Bābur to that of Nādir Shāh is a work of rare power,and should be read by all . . .

This brief analysis of a brilliant work will show at a glance how solid is Mr. Abdul Aziz's contribution to the knowledge of the Mughul India. Mr. Abdul Aziz's account of the Thrones, Chairs and Seats of the Great Mughuls makes fascinating reading, and there is a very fine account of the Peacock Throne. . . .

Mr. Abdul Aziz has also published articles on the Mansabdārī System and the Mughul Army. In these articles Mr. Aziz deals with a subject which has been the focus of acute controversy, and discusses the theories of Dr. Paul Horn, Blochmann,'and others on the nature and origin of Mansabdārī.

The subject bristles with difficulties, and no writer can claim infallibility. I am, however, inclined to agree with the author that Dr. Paul Horn's whole account of the Mansabdārī System suffers from a fundamental misunderstanding. The author's explanation of the significance of Zat and Sawar ranks is plausible, as it represents a very dispassionate and thorough analysis of the works of previous writers on the subject. The reader will find Mr. Abdul Aziz's account of Mughul aristocracy as a social phenomenon interesting. . . .

In conclusion, I may add that few works published during the last twenty years have dealt so thoroughly and ably with an extremely important aspect of Mughul administration. Mr. Abdul Aziz's work is a pioneer undertaking and he has brought to his task all the qualities which are indispensable in a historian—sound judgment, care and caution in the handling of material, thorough study of the data and a lucid style. I am sure that the work will be welcomed by all students of this period with enthusiasm.

*J. F. Bruce, Esq., University Professor of History, Panjab University, Lahore.*

I have been rather closely aware, during the past eight years, of the studies of Mr. Abdul Aziz in Mughul history: and have read the published results with much interest. He is well equipped for the enquiries to which he has devoted himself for a good many years past, as he possesses not only an exact knowledge of Persian, but also a very wide and critical knowledge of the original contemporary sources from which alone a genuine understanding of that period can be derived. He has also a command of the language of French and German scholars of the subject.

Mr. Abdul Aziz is a very meticulous student, who insists upon a precise examination of the *minutiæ* of his subject, which gives his reader confidence in the originality and authenticity of his work. If he can give us a reflective summary of the result of his years of patient scholarship, he will make a valuable contribution to Indian history. He has, too, a clear and pleasant English style.

*K. B. M. Afzal Husain, Vice-Chancellor, Panjab University.*

Mr. Abdul Aziz has sent me for opinion reprints of his articles on various subjects connected with the history of the Mughul period. I have read these entertaining articles with great interest. Scientific precision regarding the authenticity of facts is the characteristic of these valuable contributions. The style is lucid and elegant. I have been struck by the extensive amount of labour which this study must have entailed and the thorough mastery of the subject which the author possesses.

So far history has been dealt with as the story of kings. Mr. Abdul Aziz has rendered valuable service to our country in dealing with the history of the people of the Mughul period. A king may be good or he may be bad, and to base the entire conception of the evolution of society on the personality of the king cannot historically yield important results. The common people are the real material of which history is built, and I congratulate Mr. Abdul Aziz that he has constructed his story from such material.

*Dewan Bahadur Dr. S. Krishnaswami Aiyangar, Editor, "Journal of Indian History," Madras.*

Mr. Abdul Aziz, Bar-at-Law, Batala, Punjab, began rather a large scale history of perhaps the most brilliantperiod of the Mughul Empire in India, the empire under Shah Jahan. He contributed a series of articles as a preliminary to his work on the Manṣabdārī System of the Mughuls, and the Treasury and the Jewels of the Mughuls. In both of these subjects, he made a most thoroughgoing study of the topics he chose for treatment. Had he had the chance of completing the work without interruption, he should have succeeded in publishing a magnificent work on the Mughul Empire . . . . I may say that Mr. Abdul Aziz's work as a student of history deserves all commendation. I only hope that he will have, for this part of the work, such an encouraging reception as would stimulate him to go forward and complete the work, notwithstanding all the inconveniences, which his professional work as well as the other calls upon his time might interpose. I wish him all success in his enterprise.

*The Hon'ble Sir Azizul Huque, Vice-Chancellor, Calcutta University, and Speaker, Bengal Legislative Council. Now High Commissioner for India in London.*

I have gone through the reprints of your articles on the "Imperial Treasury and the Mughul Army" and I congratulate you on your careful collection of materials available in scattered works. I wish there were similar studies on the Mughul administration in India by other research workers.

*S. H. Hodivala, Esq., Principal and Professor of History (retired), Bahauddin College, Junagadh, author of Historical Studies in Mughal Numismatics, Studies in Indo-Muslim History.*

I am very greatly obliged to you for letting me see an advance copy of the Table of Contents of the Series of Monographs which you have projected on the Court and Institutions of the Indian

Mughuls. Your plan is an ambitious one and may take some years to complete but it is a task well worth performing and I devoutly hope that you will be able to complete it and get the extra treatises published, as you hope to do, during the next three years. To judge from the two dissertations which have been already printed, it is sure to be of great value for the intensive study of the subject. No one who has read those Essays on the Mansabdari System and the Imperial Treasury can fail to be most favourably impressed by your patient industry, wide knowledge of the original authorities, meticulous zeal and avidity for facts and the judgment and good sense you have brought to bear on the interpretation of the crabbed and frequently cryptic phraseology of the contemporary chroniclers. This is specially true of the disquisition on the Mansabdārī System—a subject which has been greatly perplexed by the guesses and theories of previous writers. It is possible that we shall never be able to understand it completely, but your elucidations of some of the obscure and controversial points may be justly described as honest and intelligent attempts to arrive at the truth and they deserve to be carefully considered by all earnest students of the subject.

*Muhammad Shafi, Esq., Principal, University Oriental College, Lahore.*

For many years Professor Abdul Aziz has been devoting himself almost entirely to a critical study of the problems connected with the history of Mughul India. His extensive reading of the original authorities of the first rank, with a judicious use of contemporary paintings and other illustrative materials has enabled him to give us a vivid and life-like picture of the Mughul times. His abundant sympathy with his subject, controlled by his critical capacity, has given his narrative the rare quality which is found only in the very best histories of the period. Students of the period will thank him for his deep researches into the period.

*The late Mr. W. H. Moreland of the I. C. S., author of Jahangir's India, Agrarian System of Moslem India, etc.*

It gave me great satisfaction to see that you had changed from the conventional style, which merely produces more "chronicles", and were trying to make history out of the chronicles and the other material available. . . . With all good wishes for the success of your work (Letter dated 31st January, 1933).

It is always pleasant to hear from anyone who is trying to find facts in Indian history, where so many people are content to make guesses (Letter dated 4th April, 1933).