

GOVERNMENT OF INDIA
ARCHAEOLOGICAL SURVEY OF INDIA
ARCHAEOLOGICAL
LIBRARY

ACCESSION NO. 20866

CALL No. 750.901/Ann/Gso

D.G.A. 79.

20866

~~2150~~

~~2150~~

~~2150~~

THE ISLAMIC BOOK



THE ISLAMIC BOOK

A CONTRIBUTION TO ITS ART AND HISTORY
FROM THE VII-XVIII CENTURY

by

SIR THOMAS W. ARNOLD
AND PROFESSOR ADOLF GROHMANN

C165(2)
186/18

20855

~~C165(2)~~

750.901
Arn/Gro

THE PEGASUS PRESS · MCMXXIX



PRINTED IN GERMANY

Ah. 899

CENTRAL ARCHAEOLOGICAL
LIBRARY, NEW DELHI.

Acc. No. 26866

India . . . 27. 55

Call No. 750.901/Am/Gro

CONTENTS

	Page
PREFACE	IX
LIST OF PLATES	XIII
LIST OF ILLUSTRATIONS IN THE TEXT	XXI
PART I: THE EARLY ISLAMIC PERIOD FROM THE VII-XII	
CENTURY by Professor A. GROHMANN	
I. MINIATURES	I
II. DECORATION AND ORNAMENTATION	14
III. BINDINGS	30
PART II: THE PERIOD FROM THE XIII-XVIII CENTURY by SIR	
THOMAS W. ARNOLD	
I. SURVIVALS IN PERSIAN PAINTING	61
II. THE MONGOL AND TIMŪRID PERIODS	69
III. BIHZĀD AND HIS SCHOOL	74
IV. RIẒĀ 'ABBĀSĪ AND THE DECLINE OF PERSIAN PAINTING	82
V. ISLAMIC PAINTING IN INDIA	84
VI. ISLAMIC PAINTING IN TURKEY	94
VII. ISLAMIC BOOKCRAFT	97
NOTES AND REFERENCES	101
BIBLIOGRAPHIES	116
TABLE OF PAPYRI, MANUSCRIPTS AND OTHER PIECES DIS-	
CUSSED IN THE TEXT	117
ABBREVIATIONS	119
INDEX OF SUBJECTS, PERSONS AND PLACES	121

PREFACE

THE present work was planned some years ago and is connected with the official duties of the author of the first part of the book, when in 1918 and 1919 he had to make a thorough examination of the whole of the well-known Archduke Rainer collection of Papyri in the National Library, Vienna. On this occasion, a number of pieces among the finds from the Fayyûm and al-Ushmûnayn came to light, consisting of fragments of miniatures, pen-drawings, sketches, book-ornaments, specimens made from engraved blocks, inlaid filigree works and book-bindings, — of great importance for the history of the art of book-making in the Islamic world —, a treasure that called for publication. In this collection all the pieces belonged to the earliest centuries of the Muslim era, and whereas the student of painting had hitherto been unable to find any examples from MSS. earlier than the thirteenth century, specimens could now be made available from the ninth and tenth centuries, which throw light on the development of this branch of art and offer parallels from Egypt to the frescoes of Sāmarrā, reproduced in Professor E. HERZFELD'S admirable publication. Materials of the same kind for the history of Islamic art had also to be sought for in other collections, and some slight, but important, results were obtained by means of similar researches in the Papyrus collections of the Staatliche Museen in Berlin, as well as in the Library of the University of Heidelberg and in the Royal Library of Cairo.

Some progress had already been made in the preparation of a monograph dealing with these materials, when the Pantheon S.A., which had already expressed its readiness to undertake the publication, suggested that the whole period of Islamic art should be covered, and that examples should, wherever possible, be obtained from collections outside Austria and Germany. Under these circumstances, it was found desirable to divide the whole work into two periods, (I) the early Islamic, from the seventh to the twelfth century inclusive, and (II) from the thirteenth to the eighteenth century. The latter period was undertaken by SIR THOMAS W. ARNOLD, and thus a comprehensive account is furnished by our joint labours, to which we have given the title of *The Islamic Book*.

The publishers have generously provided illustrative material in the form of plates, and illustrations in the text, ten of which are in colour. The reader is hereby not only enabled to form a clear idea of the magnificent colouring of the Persian miniatures, but a special difficulty is removed in connection with the examples belonging to the early Islamic period. In their case, the colours have suffered severe chemical changes, partly in consequence of the process of disintegration to which they have been exposed for almost a thousand years, so that it is not possible in every instance to be sure of the original shades of colour. Wherever possible, a description of them has been given in the text. But since even the most minute description, which

in spite of all efforts must leave room for uncertainty, cannot entirely replace the shades of colour themselves, the most important pieces have been given here in colour, and the firm of MAX JAFFÉ of Vienna has in a masterly manner succeeded in reproducing the appearance of the originals.

In the case of the references to MSS., when only a number is given, the recto is meant; the verso is indicated by *b*. In note 71 only, *a* and *b* denote the columns of the text.

For the spelling of oriental words and names we have followed, in the German and English editions, the system of transliteration adopted in the oriental journals of these respective countries. It was originally proposed to add a bibliography of works on Islamic art that have appeared since 1914, but the comprehensive critical bibliography by W. BJÖRKMAN and E. KÜHNEL has made this superfluous. So the reader will find on p. 116 merely a list of the most important bibliographies. The work by Dr. H. IBSCHER, mentioned at the end of note 178, has been published now in *Berichte aus den preuß. Kunstsammlungen XLIX* (1928), pp. 86–90, under the heading "Koptische Bucheinbände aus Ägypten". Here are discussed:

No. I, P. Berol. 14022 (with reconstruction), p. 87f. (cf. here p. 40)

" II, " 14021 (with picture of the original and reconstruction), p. 88f.
(cf. here p. 41)

" III, " 14023 (with picture of the original and reconstruction), p. 88f.
(cf. here p. 40)

" IV, " 14016 (with reconstruction), p. 88–90 (cf. here p. 42).

Finally, it is our pleasant duty to express our gratitude to all those who have in various ways promoted the course of this work. In the first place acknowledgement must be paid to the munificent and appreciative assistance rendered to the author of the first part of this book by the President of the Republic of Czechoslovakia, Professor Dr. T. G. MASARYK, who enabled him to remain for several months in Egypt. Thanks are due to him for making it possible to acquire for the present book valuable material from the Royal Library in Cairo. The Ministry of Education in Prague kindly granted leave of absence from academic lectures during this visit and made an extra allowance for the expenses of the journey. For obtaining materials from Berlin and Heidelberg, the author of the first part of the present work received from the *Notgemeinschaft der deutschen Wissenschaft* a grant for his Papyri studies in Germany, and desires to express his grateful thanks to His Excellency Staatsminister Dr. SCHMITT-OTT and to Kultusminister Professor Dr. C. H. BECKER, who has always shown the liveliest interest in these studies. Thanks are also due to the authorities of the Nationalbibliothek in Vienna, Director-General Professor Dr. J. BICK, as well as to Professor Dr. O. SMITAL, Dr. H. GERSTINGER and Dr. E. WALLNER for facilities in the use of the collections under their charge, — to Privat-Dozent Dr. Th. SEIF for information which he readily provided on several occasions,

— to Professor Dr. A. STIX and Dr. K. RATHE for their assistance in determining the colours. Further, we desire to thank the authorities of the Austrian Museum of Art and Industry in Vienna, the Directors of the Oriental Department and Department of Manuscripts of the Prussian Staatsbibliothek in Berlin, — Professor Dr. W. SCHUBART, Keeper of the collection of Papyri in the Staatliche Museen in Berlin, Conservator Dr. H. IBSCHER; — Professor Dr. F. BILABEL, in charge of the Schott-Reinhardt collection of Papyri in the University Library, Heidelberg, and Professor Dr. W. SILLIB, Director of the same Library, the Directors Dr. E. GRATZL and Dr. G. LEIDINGER of the Bavarian Staatsbibliothek, Munich; ABOU HAIF-BEY, Director of the Royal Library, Cairo, — who unfortunately retired so soon —, Conservator ALY FIKRI and Librarian AHMED RAMY; Dr. R. NOVAK, Keeper of the Library of the Museum of Arts and Crafts in Prague —; and the Directors of the following Libraries, University of Edinburgh; British Museum, India Office, Royal Asiatic Society, and Victoria and Albert Museum, London; Bibliothèque Nationale, Paris; Accademia dei Lincei, Rome; and Royal University, Upsala, for the use of photographs of objects in their respective collections; — to the Austrian Government Press, Vienna, Captain A. CRESWELL, Cairo, Director H. NÜTZEL, Professor Dr. F. SARRE and Professor Dr. J. STRZYGOWSKI for the use of photographs and plates; — Mr. J. NITTMANN for his careful drawings of the reconstructions, — the self-sacrificing publisher for his willing acquiescence in our wishes in regard to the get-up of our book, — the printing-press of A. PRIES in Leipzig and the art-establishment of F. BRUCKMANN in Munich, as well as M. JAFFÉ of Vienna, for their careful and admirable technical work. — Lastly the authors desire to acknowledge their indebtedness to Mr. J. ALLAN for the excellence of his translation of the first part originally written in German and to Mrs. M. GROHMANN, Mr. J. ALLAN, Dr. TH. SEIF and C. WILKINS for reading of proofs.

LIST OF PLATES

1. Fragment of an illustrated manuscript of the IX–X cent. A. D. (Vienna, Rainer Collection, Inv. Chart. Ar. 25612).
2. Fragment of an illustrated erotic manuscript of the IX–X cent. A. D. (Vienna, Rainer Collection, Inv. Chart. Ar. 25613a–e).
3. A. Fragment of an illustrated collection of anecdotes IX–X cent. A. D. (Vienna, Rainer Collection, Inv. Chart. Ar. 25615).
B. Pen-drawing on vellum (Vienna, Rainer Collection, Inv. Gr. Pap. 30511).
4. A. Fragment of an illustrated manuscript of the X cent. A. D. (Vienna, Rainer Collection, Inv. Chart. Ar. 13682).
B. Frontispiece of an illustrated manuscript of the X cent. A. D. (Vienna, Rainer Collection, Inv. Chart. Ar. 25751).
C. Fragment of a literary text of the X–XI cent. A. D. (Vienna, Rainer Collection, Inv. Chart. Ar. 7322).
5. Design for an Ornament, pen-drawing on papyrus, IX–X cent. A. D. (Vienna, Rainer Collection, Inv. Ar. Pap. 10047).
6. A. Design for Ornaments, pen-drawing on paper, X–XI cent. A. D. (Vienna, Rainer Collection, Inv. Chart. Ar. 25641).
B. Design for an Ornament, pen-drawing on paper, from al-Ushmūnayn, XI–XII cent. A. D. (Vienna, Rainer Collection, Inv. Chart. Ar. 25620).
7. Pen-sketches from the Rainer Collection, Vienna. A. Inv. Ar. Pap. 10053, IX–X cent. A. D. B. Inv. Ar. Pap. 10052, IX cent. A. D. Studies for arabesques from the Fayyūm. C.–D. Inv. Chart. Ar. 12514, XII cent. A. D. Studies for flowers, arabesques and birds.
8. A. Amulet of the X cent. A. D. (Vienna, Rainer Collection, Inv. Chart. Ar. 25616). B. Amulet of the XI cent. A. D. (Vienna, Rainer Collection, Inv. Perg. Ar. 322). C.–D. Fragment of a work on Tradition, XI–XII cent. A. D. (Vienna, Rainer Collection, Inv. Chart. Ar. 1924+25647).
9. Vellum leaf of a Qur'ān manuscript of the VIII cent. A. D. with ornamental Sūra divisions (Vienna, National Library, Mixt. 814, fol. 14).
10. Ornamented page from a Qur'ān on vellum of the VIII–IX cent. A. D. (Vienna, National Library, Mixt. 814, fol. 6b).
11. A. Ornamented page from a Qur'ān on vellum of the VIII–IX cent. A. D. (Cairo, Egyptian Library, Maṣāḥif No. 194, fol. 62b).
B. Title page of a Ms. of the *Burda* of al-Būṣīrī, dated 1345 A. D. (Vienna, National Library, A. F. 4, fol. 1).
12. Title page of a Ms. of the *Burda* of al-Būṣīrī, dated 1340–41 A. D. (Vienna, National Library, N. F. 381, fol. 1).
13. Amulet of the X cent. A. D. (Vienna, Rainer Collection, Inv. Chart. Ar. 7265).

14. A. Vellum roll with Amulet text of the X cent. A. D. (Cairo, Egyptian Library, P. Inv. 89).
 B. Amulet of the X cent. A. D. (Vienna, Rainer Collection, Exhibition No. 942).
 C. Amulet of the X cent. A. D. (Berlin, Staatliche Museen, Papyrus Collection, P. 11970).
15. Vellum roll with Amulet text of the X cent. A. D. (Heidelberg, University Library, Schott-Reinhardt Collection, No. 1126).
16. Coptic leather binding of the VIII–IX cent. A. D. (Vienna, Rainer Collection, Inv. No. 34).
17. A. Fragment of a Coptic shoe (Vienna, Rainer Collection, Inv. Ar. Pap. 10150).
 B. Fragment of a shoe of the X–XI cent. A. D. Arabic. (Vienna, Rainer Collection, Inv. Chart. Ar. 28003).
 C. Coptic binding of the VII cent. A. D. (British Museum, Department of Manuscripts, Papyrus IV).
 D. Coptic binding of the VIII–IX cent. A. D. (Vienna, Rainer Collection, Inv. Gr. Pap. 30502).
18. Coptic binding of the VIII–IX cent. A. D. (Berlin, Staatliche Museen, Papyrus Collection, P. 14018).
19. A. Coptic binding of the IX cent. A. D. (Berlin, Dr. H. Ibscher's Collection).
 B. Coptic binding of the IX–X cent. A. D. (British Museum, Department of Manuscripts, Or. 5000).
 C. Fragment of a Coptic binding of the IX–X cent. A. D. (Heidelberg, University Library, Schott-Reinhardt Collection, No. 1240).
20. Coptic binding of the IX cent. A. D. (Berlin, Staatliche Museen, Papyrus Collection, P. 14019).
21. Fragments of painted vellum end-papers of Coptic bindings. A. P. 14020, VII cent. A. D. (Berlin, Staatliche Museen, Papyrus Collection). B. Inv. Gr. Pap. 30504 (Vienna, Rainer Collection).
22. Arabic bindings of Qur'ān manuscripts of the IX cent. A. D. in the Egyptian Library in Cairo. A. Maṣāḥif No. 188. B. Maṣāḥif No. 192.
23. A. Fragment of an Arabic binding of a Qur'ān X–XI cent. A. D. (Vienna, Rainer Collection, Inv. Chart. Ar. 14100b–c).
 B. Reconstruction of the binding.
24. A. Fragment of an Arabic binding of a Qur'ān. X–XI cent. A. D. (Vienna, Rainer Collection, Inv. Chart. Ar. 28002). B. Reconstruction of the binding.
25. A. Arabic binding of the XI–XII cent. A. D. (Vienna, Rainer Collection, Inv. Chart. Ar. 28001).
 B. Reconstruction of the binding.

26. A. Fragment of a painted Coptic binding (Vienna, Rainer Collection, Inv. Perg. Ar. 336).
 B. Fragment of an Arabic end-paper X–XI cent. A. D. (Vienna, Rainer Collection, Inv. Chart. Ar. 25630).
 C. Reconstruction of the circular ornament of Inv. Chart. Ar. 25630.
 D.–E. Fragments of vellum end-papers of Arabic bindings X cent. A. D. (Vienna, Rainer Collection, Inv. Perg. Ar. 335, 357).
27. Fragments of Arabic end-papers X–XI cent. A. D. (Vienna, Rainer Collection). A. Inv. Chart. Ar. 25629. B. Inv. Chart. Ar. 25627. C. Inv. Chart. Ar. 25631.
28. Fragments of Arabic end-papers X–XI cent. A. D. A. Berlin, Staatliche Museen, Papyrus Collection, P. 12802. B. Reconstruction. C. Vienna, Rainer Collection, Inv. Chart. Ar. 25653. D. Reconstruction.
29. Fragments of Arabic end-papers X–XI cent. A. D. (Vienna, Rainer Collection). A. Inv. Chart. Ar. 14100. B. Inv. Chart. Ar. 5604. C. Inv. Chart. Ar. 25640b, filigree work. D. Inv. Chart. Ar. 25640a, filigree work.
30. Fragments of Arabic end-papers X cent. A. D. (Vienna, Rainer Collection). A. Inv. Chart. Ar. 25636. B. Inv. Chart. Ar. 25654. C. Inv. Chart. Ar. 25639. D. Inv. Chart. Ar. 25635. E. Inv. Chart. Ar. 25638.
31. Frontispiece of a translation into Arabic, ascribed to Johannes Grammaticus, of the first book of Galen's treatise on Electuaries (Vienna, National Library, A. F. 10, fol. 1).
32. The reverse of the same fol. gives the portraits of nine physicians who from time to time compounded the theriac.
33. A. (id. fol. 2b). A boy bitten by a snake, cures himself by means of the berries of the laurel-tree, and thus gives Andromachus the first idea of the composition of the theriac.
 B. (id. fol. 12b). A man bitten by snake calls two labourers to his rescue.
34. A. (id. fol. 15b). Snakes being made to bite images of men, so as to extract their venom.
 B. (id. fol. 128b). The story of a snake that rotted away when shut up in a glazed jar of wine.
35. Al-Qazwīnī, *'Ajā'ib al-Makhlūqāt*. Munich, Bayerische Staatsbibliothek, Cod. arab. 464, dated 678 A. H. (1279 A. D.).
 A. (fol. 16b). The planet Jupiter represented as an old man reading a book.
 B. (fol. 59b). Wild hairy men who live in the tops of the trees on an island in the China Sea.
 C. (fol. 60b). The queen of the island of Wāqwāq, in the China Sea, with her attendants.

36. From *al-Āthār al-Bāqiya* by al-Birūnī. Edinburgh, University Library, No. 161, dated 707 A. H. (1307–8 A. D.).
 A. (fol. 7b). Muḥammad preaching his farewell sermon.
 B. (fol. 102b). Abraham destroying his father's idols (Qur'ān, XXI, 59).
37. A. (id. fol. 111b). The false prophet, Bahāfrīd, telling a peasant that he had just come down from heaven and had been commissioned by God to teach a new religion.
 B. (id. fol. 153b). Hindus sitting together in a pleasure-garden on a festival day.
38. A. (id. fol. 17). Physicians performing the Caesarian operation.
 B. (id. fol. 105). The dead body of Mānī exposed after his execution outside the gate of the city of Jundī-Shāpūr.
39. (id. fol. 194). Muḥammad declaring 'Alī, who carries his celebrated two-pointed sword, his successor.
40. A modern copy (probably of the XVII cent.) in a MS. of the same work, Paris, Bibliothèque Nationale, Fonds arabe 1489, fol. 87.
41. Rashīd ad-Dīn, *Jāmi' at-Tawārīkh*. Edinburgh, University Library, dated 714 A. H. (1314 A. D.).
 A. (fol. 9). The Annunciation (Qur'ān, III, 37–43).
 B. (fol. 14). The birth of Muḥammad.
42. Mu'izzī, *Diwan*. London, India Office Library, Ethé No. 912, dated 714 A. H. (1314 A. D.).
 A. (fol. 1b). The poet Mu'izzī who was court-poet in the service of Sultan Sanjar (ob. 1157 A. D.), going out with his royal master to see the new moon at the end of the fast of Ramaḍān.
 B. (fol. 14). The poet Mu'izzī reading his poems to the Sultan.
43. (fol. 1). Al-Harīrī, *Maqāmāt*, frontispiece. Vienna, National Library, A. F. 9, dated 734 A. H. (1334 A. D.).
44. A. (id. fol. 6b). Abū Zayd, after preaching a sermon against self-indulgence, is found feasting on a roast kid and white bread, with a jar of wine.
 B. (fol. 8b). Abū Zayd discussing poetry in the public library of al-Baṣra.
45. A. (id. fol. 42b). Abū Zayd among the revellers in the wine shop of 'Ana.
 B. (fol. 44b). Abū Zayd asking for alms, in the disguise of an old woman with two starving children.
46. A. (id. fol. 48). While the narrator is on the pilgrimage to Mecca, Abū Zayd and his son beg for food and a camel, to enable them to continue their journey.
 B. (fol. 59). The merchant of Sinjār bidding farewell to the guests he had entertained at a banquet.
47. A. (id. fol. 64b). Abū Zayd recovering from fever, is visited by his friends; his son stands behind his father's pillow.

- B. (fol. 87b). The narrator, having fallen into great poverty, seeks assistance at the tent of a wealthy traveller, whom he discovers to be Abū Zayd, who had been richly rewarded for composing a eulogy on the governor of Tūs.
48. Amīr Khusrāw Dihlawī, *Khamsa*. Berlin, Preuß. Staatsbibliothek, Or. fol. 187.
 A. (fol. 41). Khusrāw in the guise of a shepherd, meeting his rival, Farhād.
 B. (fol. 112). The conflict with the elephant-eared hosts of Gog and Magog.
49. A. (id. fol. 18). A young man visiting a hermit.
 B. (id. fol. 61b). Shīrīn and an attendant mourning over the dead body of Khusrāw, while the murderer escapes through the door of the bedchamber.
50. Farīd ad-Dīn 'Aṭṭār, *Manṭiq at-Tayr*. Berlin, Preußische Staatsbibliothek, Or. oct. 268 (1456 A. D.).
 A. (fol. 96b). The phoenix burning in the fire, while the other animals look on.
 B. (fol. 114). The brethren of Joseph, suffering from famine, come to beg corn from their brother in Egypt.
51. Nizāmī, *Haft Paykar*. New-York, Metropolitan Museum, Persian MSS. No. 10.
 (fol. 17b). Bahrām Gūr exhibiting his skill in shooting to his lutist, Fitna, who is seated on a horse in the centre of the picture.
52. Hātifī, *Laylā and Majnūn*. Berlin, Preußische Staatsbibliothek, Or. oct. 149, dated 941 A. H. (1534 A. D.).
 A. (fol. 13b). A prince visiting a hermit.
 B. (fol. 44). Majnūn rubbing his face on the foot of a dog that had trodden on the path along which Laylā had walked.
53. Nizāmī, *Khamsa*. London, British Museum, Dep. of. MSS., Or. 2265, fol. 15b. Nūshīrwān and his minister, Buzurjmīhr, riding past a ruined palace.
54. Nizāmī, *Khamsa*. London, Library of the Royal Asiatic Society, MS. 246.
 A. (fol. 227). Alexander and Plato.
 B. (fol. 246). Alexander and Socrates.
55. Nizāmī, *Haft Paykar*. Berlin, Preußische Staatsbibliothek, Diez. A. fol. 7, fol. 201, probably of the early XVI cent. A. D. Bahrām Gūr visiting the Princess of India in the Black Palace.
56. Ḥusayn al-Kāshifī, *Rawḍat ash-Shuhadā*. Berlin, Preußische Staatsbibliothek, Diez. A. 5, fol. 28. The sale of Joseph in Egypt.
57. (id. fol. 141b). The wife of Hārith imploring her husband to spare the lives of the children of Muslim, the envoy of Imām Ḥusayn.
58. Album of Sultan Murād III. Vienna, National Library, Mixt. 313.
 A. (fol. 6). A young man, probably intended to represent Joseph, seated in a pavilion in a garden, with men and women in attendance.
 B. (fol. 8). Female musicians and attendants.

59. (id. fol. 36). A Šafawid prince, wearing a gown of figured velvet, leaning on a staff and reading a book.
60. (id. fol. 29). The entrance to the harem of a palace, the front of which is decorated with coloured tiles; the ladies are looking out of a balcony, while a female servant at the door speaks to one of the door-keepers.
61. (id. fol. 48, 51). Two lacquered pictures, one representing ten persons practising archery, and the other, lions in various attitudes.
62. Ishāq b. Ibrāhīm b. Maṣṣūr b. Khalaf an-Nishāpūrī, *Qisaṣ al-Anbiyā* (Biographies of the Prophets). Berlin, Preußische Staatsbibliothek, Diez. A. fol. 3, fol. 23, dated 984 A. H. (1577 A. D.). Noah in the ark.
63. (id. fol. 41). Abraham, just about to sacrifice Ismael, is checked by the angel who brings a ram.
64. (id. fol. 55b). Joseph discovered in the well by the servants of the merchant travelling to Egypt.
65. Firdawsī, *Shāh-nāmā*. Berlin, Preußische Staatsbibliothek, Diez. A. fol. 1, fol. 197, dated 1001 A. H. (1593 A. D.). Rostam at the court of the Shāh.
66. Niẓāmī, *Khamṣa*, copied about 1590 A. D. Rome, Accademia dei Lincei, A. B. 9, fol. 303.
Alexander comes upon the auditory of a religious teacher who has smitten his hearers with insensibility as a punishment for their lack of attention.
67. Mirkhwānd, *Rawḍat aṣ-Šafā*. Berlin, Preußische Staatsbibliothek, Or. fol. 169, fol. 110, copied 1604 A. D.
Marriage rejoicings in the reign of Alp Arslan (1063–1072 A. D.).
68. (id. fol. 148b). When Sultan Tukush, the Shāh of Khwārizm, in 1192 marched on Rayy to attack the Saljūq Sultan Tughril, Bahā ad-Dīn Muḥammad, great-grandfather of the historian Juwaynī, recited a quatrain in his honour; this so delighted the Shāh that he had it sung to him while he sat drinking wine, until he emptied a whole wine-jar.
69. (id. fol. 256). A convivial gathering.
70. An old man, resting, by Riẓā ‘Abbāsī, dated 1031 A. H. (1621 A. D.). Paris, Bibliothèque Nationale, Suppl. Persan 1572.
71. Niẓāmī, *Khusraw and Shīrīn*. South Kensington, Library of the Victoria and Albert Museum, dated 1091 A. H. (1680 A. D.), illustrated by Riẓā ‘Abbāsī.
(fol. 73). Khusraw entertained by Shīrīn.
72. (fol. 88). Khusraw in battle makes his elephant trample on the body of the fallen enemy.
73. (fol. 134). Shīrīn giving Farhād a cup of water to drink.
74. (fol. 166). Khusraw, on a hunting expedition, visits the castle of Shīrīn.
75. Portrait of Riẓā ‘Abbāsī, by Mu‘īn Muṣawwir.

76. Naw'ī, *Sūz u Gudāz*. Paris, Bibliothèque Nationale, Suppl. Persan 1572, about the middle of the XVII century.
 A. (fol. 15). Prince Dāniyāl, son of the Emperor Akbar, trying to dissuade the Hindu girl from her intention of self-immolation.
 B. (fol. 17). The Hindu girl throwing herself of the blazing pyre of her dead betrothed.
77. Fath 'Alī Khān Kāshī, *Shāhinshāh-nāma*. London, India Office Library, Ethé 901.
 (fol. 32). Fath 'Alī Shāh on his throne receiving revenue.
78. Prince 'Imād ad-Dawla, by Mīrzā Abu'l-Hasan Ghaffārī Qāshānī (about the middle of the XIX cent. A. D.). London, British Museum, Album, Or. 4938, p. 7.
79. Firdawsī, *Shāh-nāma*. Berlin, Preußische Staatsbibliothek, Or. fol. 172, fol. 423. Rustam shooting Shaghād, through whose treachery he and his horse had fallen into a consealed ditch and had become impaled on the spears set up in it.
80. (id. fol. 448). Queen Qaydāfa receiving the portrait of Alexander.
81. (id. fol. 456b). Alexander is entreated to give help against the savage hosts of Gog and Magog.
82. *Wāqī'āt-i-Bāburī* translated from Turki into Persian by 'Abd ar-Rahīm. London, British Museum, Dep. of MSS., Or. 3714, fol. 180b. Bābur laying out a garden in a village near Kābul.
83. Jahāngīr holding in his hands a portrait of his father Akbar. By Abu'l-Hasan Nādir as-Zamān. Paris, Musée du Louvre.
84. Amīr Khusraw Dihlawī, *Khamsa*. Berlin, Preußische Staatsbibliothek, Or. fol. 1278 A. D., fol. 43.
 The poet presenting his work to his patron 'Alā ad-Dīn Muḥammad Shāh Khaljī, Sultan of Dihlī (1296–1316).
85. (id. fol. 95). This picture like that on fol. 43, occurs at the end of a poem and represents exactly the same subject, treated somewhat differently.
86. (id. fol. 147b). An artificer, named Hasan, imprisoned for defrauding his sovereign, is rescued from the dungeon by his wife.
 Painted by Hāshim, one of the court-painters in the reign of Jahāngīr.
87. (id. fol. 157). A youth who has lost his way in the forest tells the story of his wanderings.
88. Portrait of Bāqir Khān (ob. 1637), a Persian of noble birth, who took service in India under the emperors Jahāngīr and Shāh Jahān. Painted by Bōlchand, in the reign of Shāh Jahān. London, India Office Library, Johnson Collection, XXV, 9.

89. Portrait of Mirzā Kahāsī Tīrandāz. London, India Office Library, Johnson Collection, I, 15.
90. Portrait of Nawāb Asad Khān (ob. 1716), a favourite noble of Shāh Jahān, and later chief minister of Aurangzīb. London, India Office Library, Johnson Collection, I, 13.
91. Portrait of Husayn Pāshā Islām Khān Rūmī, formerly Beglarbeg of al-Baṣra. London, India Office Library, Johnson Collection, I, 11.
92. The prince introducing his fairy bride to his father. London, India Office Library, Johnson Collection, XXXVIII, fol. 111.
93. Album of Sultan Murād III. Vienna, National Library, Mixt. 313, fol. 43, 47. Two drawings by Walī Jān. A. A cup-bearer. B. An archer.
94. From a MS. of *Khusraw and Shīrīn* by Shaykhī, probably of the latter part of the XV cent. London, British Museum Dep. of MSS., Or. 2708.
A. (fol. 17). Shīrīn looking at the portrait of Khusraw.
B. (fol. 62). Farhād carrying Shīrīn and her horse.
95. Madhī, Turkish translation of Firdawsī's *Shāh-nāma*. Upsala, University Library, Cels. I, fol. I. 'Osmān II (1618–1622) and his court.
96. Tūlū'ī, *Pāshā-nāma*. London, British Museum, Dep. of MSS., Sloane 3584, fol. 20, about 1630 A. D. Ken'ān Pāshā marching through the province of Rumili in March 1627, in order to put down the brigands that infested it, and being welcomed by the inhabitants.
97. Album of Sultan Murād III. Vienna, National Library, Mixt. 313, fol. 8b, 9. Two ornamental pages, with commentionalised flowers and birds.
98. (id. fol. 12b). Garden scenes, made of perforated paper cut out and pasted on a paper background.
99. Front cover of a binding in black leather. Vienna, Austrian Museum for Art and Industry, Inv. No. 16649 (3601).
100. Cover of a Qur'ān, brown leather with gold-pressing. Vienna, Collection of Dr. Figdor, Inv. 644.
101. The inner cover of Plate 100. Vienna, Collection of Dr. Figdor, Inv. 644.
102. Lacquer binding made by Hājī Muḥammad Taqī of Iṣfahān, for Nāṣir ad-Dīn Shāh of Persia (1848–1896). Vienna, Austrian Museum for Art and Industry, Inv. No. 77 (1143).
103. Lacquer binding, also by Hājī Muḥammad Taqī, dated 1270 A. H. (1854 A. D.). Vienna, Austrian Museum for Art and Industry, Inv. No. 1142 (66).
104. Inside of a lacquer binding, by Hājī Muḥammad Taqī. Vienna, Austrian Museum of Art and Industry, Inv. No. 7722.

LIST OF ILLUSTRATIONS IN THE TEXT

Figure	Page
1. Carved Arabic board of the IX—X cent. A. D. (Paris, Louvre)	4
2. Stucco ornament from the intrados of an arch of the north-east nave of the Mosque of Ibn Ṭūlūn in Cairo	7
3. Middle ornament in the carved wings of a south-west door of the Haram of the Mosque of Ibn Ṭūlūn in Cairo	7
4. Arabic picture of a horseman of the tenth century A. D. (Vienna, Rainer collection of papyri, Exhibition, No. 954)	7
5. Ornament on the back of the pen drawing PERF. No. 954 (completed)	7
6. Portrait-coin of the Caliph al-Muqtadir billāh (Berlin, Kaiser Friedrich Museum)	10
7. Sasanian silver coins. A. A half drachma of Artaxerxes V (before 226 A. D.), B. A drachma of Hormisdas I (271—272 A. D.), C. A drachma of Artaxerxes II (379—389 A. D.)	10
8. Portrait-coin of the Caliph al-Mutawakkil of the year 855 A. D. (Vienna, Kunsthistorisches Museum)	11
9. Post-Sasanian silver dish in the Stroganoff Collection. (Leningrad, Museum of the Hermitage)	11
10. Reconstruction of the design PER. Inv. Chart. Ar. 25641	15
11. Reconstruction of the design PER. Inv. Chart. Ar. 25620	16
12. Ornament from a piece of Arab linen in the Rainer collection of papyri (Inv. Ar. Lin. No. 30)	17
13. Stucco covering of the intrados of an arch in the north-east liwān of the Mosque of Ibn Ṭūlūn in Cairo	17
14. Ornament from Inv. Ar. Pap. 9998 of the Rainer collection of papyri	19
15. Arabic tombstone of 845 A. D. (Cairo, Arabic Museum, Inv. No. 1201)	27
16. Front-cover of an inlaid Qur'ān binding (Berlin, Kaiser Friedrich Museum)	33
17. Arabic parchment end-paper (Vienna, National Library, Rainer Collection, Inv. Perg. Ar. 294)	51
18. Reconstruction of the ornament on the end-paper Inv. Chart. Ar. 7264 in the Rainer Collection	53
19. Reconstruction of the ornamentation of the Arabic end-paper PER. Inv. Chart. Ar. 14100	55

PART I

THE EARLY ISLAMIC PERIOD
FROM THE SEVENTH TO THE TWELFTH
CENTURY

by

DR. ADOLF GROHMANN

Professor in the German University of Prague

MINIATURES

Hitherto very little has been known about early Islamic painting. H. LAMMENS has, it is true, shown in his brilliant essay *L'attitude de l'Islam primitif en face des arts figurés*¹ that primitive Islam was by no means so hostile to pictures as was originally supposed. Frescoes and mosaics continued to adorn the houses of the young Muslim aristocracy for several decades after Muḥammad's death and even the pious did not refrain from adorning their walls in this way, and even portraits of Persian kings and pictures of the Virgin were sometimes found in the dwellings of Muslims. Of all this, however, nothing has survived. Only the frescoes dating from a late period in the country palace of Quṣayr 'Amra² discovered by ALOIS MUSIL, which according to E. HERZFELD³ was built between 712 and 715 A. D. by al-Walīd I, and the no less splendid wall-paintings of Sāmarrā (begun in 836 A. D.)⁴ may perhaps enable us to imagine what the frescoes in the palaces in the city of the Prophet may have looked like and give an idea of how the palace of al-Mukhtār, built and adorned with pictures by al-Mutawakkil (847—861 A. D.), may have been decorated.⁵ But al-Mu'taṣim and al-Mutawakkil were not the only 'Abbāsids to embellish their palaces with pictures, for, if we may rely upon the *1001 Nights*, Hārūn ar-Rashīd before them had built in the midst of the garden of his palace in Baghdād a great hall which was adorned with pictures in the Persian fashion, the work of Persian painters summoned to the court of the Caliph for this special purpose.⁶ When art had found a new home at the court of the Fāṭimid Caliph al-Mustanṣir billāh (1035—94 A. D.), the latter's minister, the artistic al-Ḥasan b. 'Alī b. 'Abd ar-Raḥmān al-Yāzūrī, a connoisseur of books and pictures, became the most notable patron of a series of distinguished artists, among them al-Quṣayr and the 'Irāqī Ibn 'Azīz, who were considered to rank as artists with the celebrated calligraphers Ibn Muqla and Ibn al-Bawwāb. AL-MAQRIZI has given us in detail the story of the rivalry between these two and à propos of this work made some mention of a third master, al-Kutāmī.⁷ We should probably know more about this school of painting and its artists, if his "Book of the Classes of Painters" had survived to us.⁸ We have therefore to be satisfied with the meagre list of artists' names, which H. LAVOIX has put together,⁹ and we only know further that the Fāṭimid Caliph al-Āmir bī-aḥkām Allāh (1101—1129 A. D.) had the portraits of various poets placed in the arches of his *manṣara* of lacquered wood in Cairo.¹⁰

If we know very little about the painting of the first six centuries of the Hijra, i. e., to the end of the twelfth century A. D., the state of our knowledge of miniature-painting of this period has been even worse. AL-MAS'ŪDĪ tells us that he saw in Iṣṭakhr in 303 A. H. (915—16 A. D.) a manuscript which contained the portraits of

27 Sasanian kings, painted on paper or parchment¹¹ and perhaps it was the same work that ḤAMZA B. AL-ḤASAN AL-IṢFAHĀNĪ (d. 967 A. D.) mentions in his *History*¹² as "the Book of the Portraits of the Sasanian Kings". To judge from his account¹³ these portraits must have been executed in colours and illuminated with gold leaf, and, as A. V. LE COQ suggests,¹⁴ were probably closely connected in style with Manichaean miniatures, precious relics of which have been brought back by the German expedition to Ṭurfān. When we further add that towards 900 A. D. the Baṣrī Ibn Wahhāb, an Arab, was shown at the court of the Emperor of China, a whole set of pictures, representing a series of Prophets including Muḥammad,¹⁵ we see how the products of Muslim painting had already travelled, and how early the art of the miniaturist had already seized upon religious subjects, in contrast to the attitude of strictly orthodox circles, but no conclusions beyond the actual facts can be drawn from this story. We do not know whether these pictures were still executed in the spirit of Hellenistic art or were rather in the style of the Sasanian-Persian or Central Asiatic schools. One suggestion may, however, be made in this connection, namely, that the Manichaean school of painting must almost certainly have had a strong, if not exactly deciding, influence on these early Muslim specimens of the painter's art, although I would not go so far as A. V. LE COQ,¹⁶ who calls the Manichaean miniatures the basis of almost all Islamic miniature painting. The influence of Manichaeism was fought by Muslim orthodoxy with means no less barbaric than were used in the West; and St. Augustine surely never thought that his challenge *Contra Faustum* Lib. XIII, Chap. 18 *incendite omnes illas membranas elegantesque tecturas decoris pellibus exquisitas* would one day find an echo in the Muslim east; yet in 311 A. H. (923 A. D.) at the public gate of the palace in Baghdād, Mānī's portrait was burned with 14 sacks of heretical works, out of which fell gold and silver.¹⁷ The prosecution some two years before of al-Hallāj and his sect, which was much influenced by the Manichaeans, certainly inflicted a heavy blow on painting, which in 'Irāq was probably still influenced by Manichaean art, and whatever other manuscripts with miniatures still existed perished for the most part in the catastrophes that fell with increasing frequency upon Muslim states after the fall of the 'Abbāsīd Empire.¹⁸

It is therefore intelligible that even the earliest codices with miniatures in the domain of Muslim art that have so far become available for study do not date beyond the thirteenth century A. D.¹⁹ But as not one of these manuscripts comes from Egypt it was concluded that mediaeval Arab book-illumination was apparently confined to Syria and Mesopotamia.²⁰ Why Egypt in particular should have had no share in this "Arabic" book-illumination was really not obvious on the face of it. If anywhere fragments of early Islamic illuminated manuscripts had escaped destruction, this was most likely to occur in Egypt, the soil of which has faithfully preserved memorials and documents of its history and culture thousands of years old, which have been yielded up in increasing numbers in recent decades from the protection

of its soil; and in fact the find in the Fayyūm²¹ which created such a sensation at the time, actually gave us several fragments of Arab miniatures of the early middle ages, to which FRIMMEL called attention in a brief notice in September 1885²² and which are preserved with the no less valuable documents from al-Ushmūnayn in the Erzherzog Rainer collection of papyri in the National Library of Vienna.

The oldest specimen of these fragments PER. Inv. Chart. Ar. 25612 (Plate 1), 16×14,5 cm, represents the remains of the last quire, folded in the middle, of a paper manuscript which had perhaps had miniatures throughout. The right leaf still shows in recto the remains of four lines in Arabic, which are probably in the same hand as the rest of the text but written rather more hastily. In verso are twelve lines continued in four lines on the left leaf, the reverse of which is empty. Below as an end-vignette is a tree in strong bright colours with vermilion fruits between two low hills sloping down in three stages, which like the branches and trunk are painted dull green edged a dull yellow. The coarse wavy lines which fill the separate stages as ornaments remind FRIMMEL of the conventional hills in illuminated manuscripts of Spanish provenance of the eleventh or twelfth centuries A. D. Below this picture there was originally the colophon of the writer as the conclusion of the manuscript, of which there only survives the beginning *hādha 'l-kitāb* and the illegible first word of the second line. The vigorous, educated hand of the text written throughout in dark brown ink, the contents of which can unfortunately no longer be ascertained, points to the third century A. H. (ninth-tenth century A. D.²³). FRIMMEL had also dated the fragment in the tenth century, apparently on the authority of J. KARABACEK, who, it is remarkable to note, seems to have paid no particular attention to the fragment.

The miniature, which is hurriedly done with coarse strokes of the brush and in technique recalls the paintings in Greek papyri²⁴ is as essentially different from the pictures of trees in Greek manuscripts, such as the Vienna Dioscurides Cod. Med. Graec. 1, as from those in late Arabic translations of medical or botanical works, for example the Vienna manuscript of Galen, A. F. 10 (cf. Plate 31), and the representations of trees on Syrian glass of the twelfth and thirteenth century A. D., e. g. on the fragment of glass, said to come from Aleppo (Inv. No. 2440) in the Kaiser Friedrich Museum in Berlin. It recalls Egyptian pictures²⁵ by the primitive style of composition, which makes the tree look like a pressed plant, and makes the branches come out to right and left of the straight trunk in the middle at approximately equal angles, with the foliage, indicated by thick dots and the fruit scattered among the leaves, apparently without any connection with the tree.

If it is not possible in the case of the fragment just described to make out a connection between text and picture, it is very different with the fragment Inv. Chart. Ar. 25613 a-e (Plate 2), which is also said to have come from the find in the Fayyūm. It consists of five scraps of paper turned yellow, which I only found piece by piece

in the collection of the Erzherzog Rainer papyri, and when united they give a leaf 14,1 × 16 cm. The text which is written with dark brown ink in a heavy vigorous hand of about the end of the third cent. A. H. (c. 900 A. D.) is arranged in recto in three and five lines, enclosing a representation of a symplegma of a long-haired woman and a bearded kneeling man, and continued in 14 lines on the verso, gives a portion of the 46th chapter of an erotic manuscript. It gives first a brief description of the scene represented by the picture below and then adds the full



Fig. 1. Carved Arabic board
of the IXth-Xth cent. A. D.
(Paris, Louvre).

description of an amorous adventure. The picture, the coarse clumsy sketchy drawing of which is in keeping with the heavy hand of the text and which is perhaps by the writer of the manuscript, has obviously only been added after the text was written. The space left for the picture was, in any case, too small, so that the two heads almost touch the last line of the text and the outlines of the foot go over the top of the *lām* of *al-mithālu*.

Here we have a picture of a woman presumably to be imagined sitting, who thrusts her legs adorned with anklets, straight up so that the toes approach the forehead. Her left hand holds the man, kneeling on the other side, firmly by the shoulder, her right is presumably laid on his left fore-arm, the hand of which grasps her breast while the man's right hand is round her right shoulder. The man's hair and beard and the woman's locks which hang down to the seat are painted a vigorous black; the undulating treatment of the woman's hair recalls in technique the very similarly drawn head of a worshipper by a Coptic artist, which J. KARABACEK illustrates in the *Führer durch die Ausstellung der Papyrus Erzherzog Rainer*, p. 93.²⁶ The woman's hair is probably meant to be parted in the middle, as worn by the noble ladies praying represented in the miniature illustrated by A. v. LE COQ,²⁷ Kat. No. I B, 4937 from Chotscho (ninth century?). As in the latter there are two ringlets hanging down over the forehead, on left and right. In the physiognomy the strong emphasis on the eyebrows and the large eyes are striking. They give life to the expression of the head, in the way we are accustomed to, not only in old Egyptian paintings but also in Coptic²⁸ and Ethiopic²⁹ miniatures and in Hellenistic portraits.³⁰ The peculiarity that the two figures, although facing each other, are represented with breast and face facing while the feet are drawn in profile, so that only the eyes directed to one another indicate they are facing each other, is a feature our picture has in common with Coptic and Ethiopic painting. The drawing which borders the black outlines with parallel contours, ori-

ginally vermilion but now reddish brown,³¹ while only the hair and cheeks of the woman are painted in a black or reddish brown colour, does not enable one to make any deduction about the kind of original. It is very probable that it was one of the kind of obscene pictures which we know from Pompeian wall paintings, which also adorned the obscene books of the hetaira Elephantis.³² In view of the Egyptian provenance of the piece, however, the suggestion must not be rejected off-hand that the painter had perhaps before him a model, which had at least vague connections with the well-known erotic papyrus of Turin of the period of the Ramasids, of the twelve pictures of which Rossi³³ has given three in a modified form. The fragment is in any case important, for text and picture alike, as the sole survival of the older erotic literature of the Arabs.³⁴

The same technique as in the pen and ink drawing just discussed is seen in PER. Inv. Chart. Ar. 25615 (Plate 3a), although artistically it is on a much higher level than Inv. Chart. Ar. 25613. The very yellow paper, 9,8 × 13,1 cm, came from the find of al-Ushmūnayn and forms the left half of a leaf which may have belonged to an illustrated collection of anecdotes. In recto seven lines of text have survived, which are continued in verso in two lines below the drawing. The writing, in parts much faded but originally dark brown, points to the end of the ninth or beginning of the tenth century A. D. The standing bearded male figure in long clinging robes on the left side of the page, which unfortunately is more than half destroyed, is sketched in with bold vigorous strokes in black, outlined with vermilion, the dress done in chrome yellow, changing to greenish, mixed with vermilion. Only the right half can still be seen of the long face, placed almost perpendicular, set in black hair and a pointed beard, in which again the strongly emphasised large eye strikes the observer. The figure looks up at a flat object strongly drawn with the brush, and points towards it with the outstretched fore-finger of the right hand, but it can no longer be identified as the upper part is torn away. On the right is an area enclosed in sharp black lines edged with vermilion drawn with a ruler, divided into two halves by a line down the middle. The left is filled by spiral flourishes, the largest of which, twisted in the form of an S, recalls the ornament on a carved Arabic board in the Louvre (ninth-tenth century A. D.) which J. STRZYGOWSKI³⁵ has published (fig. 1), although the latter much more strongly emphasises the bird's head termination.

The right half portion has at the top an endless network of lozenges, unfortunately only partly preserved, formed of sets of parallel wavy lines intersecting one another. In the centre of the compartments formed by the intersections, a small trefoil is placed. The same pattern is seen on the lower garment of a figure wearing a long robe on a Coptic fresco of the temple of es-Sebū'a in Nubia, transformed into a church.³⁶ The endless criss-cross pattern is terminated by a frieze which has in its centre a heart-shaped leaf with a trefoil inlaid, which is contained on right and left by an acanthus leaf forming a kind of arabesque with spiral involutions. The whole

pattern seems to be cut out of an intermittent undulating series and is found again on the intrados of an arch of the north-eastern aisle of the Mosque of Ibn Ṭūlūn in Cairo (fig. 2).³⁷

The lower part of this frieze is formed by a square which shows a flower motive formed of spirals, such as are found again on the carved wings of a south-western gate of the Haram of the Mosque of Ibn Ṭūlūn (fig. 3).³⁸

The drawing therefore shows the same principles—creating a whole ornament by a few spiral lines and filling the entire surface—that E. HERZFELD³⁹ has described as the characteristic features of the Ṭūlūnid ornamentation. The date above suggested on palaeographical grounds is thus supported by considerations of style.

I should like next to discuss the Arabic picture of a horseman on PERF. No. 954 (fig. 4), which J. KARABACEK in 1892 made the subject of a thorough study,⁴⁰ which he reprinted in shortened form in the *Führer durch die Ausstellung der Papyrus Erzherzog Rainer*, p. 251f. It also belongs to the tenth century, and represents a bearded warrior in a flowing robe and a peaked head-dress, leaning forward with the upper part of his body, holding out his round shield for protection with his left arm and his sunk lance in the right. KARABACEK suggests that the picture was perhaps intended to be placed as an illustration to the text in a hippological work or one on military science. The yellow-brown strong paper 9.4 × 7.1 cm has below the picture the explanatory note *al-faras bi-ʿṣ-ṣādī[m]* 'the horse vigorous in onslaught'; the other side contains five effaced lines of Arabic running parallel to the margin, below them a knot as ornament (fig. 5), half of which however only survives.

Below is a quotation from the Qurʾān Sūra II, 90:

*wa-mā taufiqī 'illā
billāhi wa-ʿalayhi
tawakkaltu*

My success is
in God alone and in Him
have I placed my trust,

and below it:

*al-ḥamdu lillāhi shukran al-ḥamdu lillāhi waḥdahu
[mimmā ṣawwa]ra Abū Tamīm Haydara.*

Praise be to God and thanks; Praise be to God alone.

Abū Tamīm Haydara painted this.⁴¹

The text on both sides is obviously by one and the same hand and, like the drawing, is done in deep black ink. We have here the signature of the artist, the only one that has survived to us of the tenth century, to which the hand shows it to belong.

From the point of view of style, in the drawing of the horse on PERF. No. 954 we are at once struck by the peculiar treatment of the joints and the clumsy position of the thigh, while the drawing of the head and mane are quite in keeping with the type which we know from Coptic pictures of mounted saints.⁴² These qualities are found in a much higher degree in a drawing which we must esteem one of the

best of the early Muslim period and which has also already been reproduced by J. KARABACEK⁴³ PER. Inv. Chart. Ar. 13682 (Plate 4a). The dingy white piece of paper 5,7×8,1 cm, which probably came from al-Ushmūnayn is the very well preserved remnant of a manuscript with pictures in the text, the contents of which can

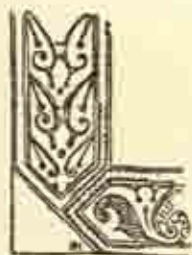


Fig. 2. Stucco ornament from the intrados of an arch of the N. E. nave of the Mosque of Ibn Tulūn in Cairo.



Fig. 3. Middle ornament in the carved wings of a south-west door of the Haram of the Mosque of Ibn Tulūn in Cairo.



Fig. 4. Arabic picture of a horseman of the tenth century A. D. (Vienna, Rainer collection of papyri, Exhibition, No. 954.)



Fig. 5. Ornament on the back of the pen drawing PERF. No. 954 (completed).

no longer be ascertained, as there only survive five lines of the text in verso and the remains of two lines above the picture in recto, the second of which was perhaps the title of the picture and below the picture the remains of one line. The text is written in dark brown ink in an extraordinarily careful hand; the end of the third or beginning of the fourth century A. H. (tenth A. D.) is indicated as its probable date by a series of characteristic peculiarities.⁴⁴ The drawing, which reveals the

hand of a skilled draughtsman, perhaps the writer of the text, shows a dog squatting on its haunches, which, as Professor C. CORI tells me, is of a breed closely connected with the pariah dog. Before it is a slender clay jug with a broad mouth of the typical form with which we are familiar from Upper Egypt.⁴⁵ The outlines of the dog and of the jug are drawn in black ink and given a little life with dark yellow and ruby parallel lines. The haunches and stomach are done in a dull white colour, as is the large goggle-eye which is drawn in exactly the same way as in the bird on the Greek parchment Inv. Gr. Pap. 30511 (Plate 3b) from the Fayyūm. The hair of the head and of the tail are done in grey and the rest of the body and the jug is bright yellow ochre. The various parts of the body were obviously drawn with separate lines, which show a marked preference for curves; thus, for example, the head is clearly made up of three strokes one of which makes the head proper while a second forms the snout and a third adds the ears. The body of the animal is evidently too small. The strongly marked muscles of the legs recall specimens of Mesopotamian plastic art; the joints which resemble scale-like excrescences, show here, as on PERF. No. 954, a style of representation very similar to what we find on the dragon-pattern in the drapery of the equestrian statue of Chosroes II at Tāq-i-Būstān,⁴⁶ where we also find the figures so to speak dissected in a remarkable way,⁴⁷ which together with the fondness for flourishes in the drawing of the mane and tail recalls the work of Eastern Asiatic schools.⁴⁸ If H. GLÜCK's suggestion is correct, that it was the Turks who brought the dissecting principle from the East to nearer Asia, its appearance in our miniature from Egypt is all the more intelligible, if we remember that just at the time we have suggested for the date of this picture, the Turkish element with the Tūlūnids and Ikhshīdids had begun to prevail.

Another specimen of the Rainer Collection, Inv. Chart. Ar. 25751 (Plate 4b) seems also to point to the east; it may unquestionably be described as artistically the most valuable of the early Muslim period. The very yellow paper, 12,5 × 11,8 cm, which is unfortunately much worm-eaten was found by me rolled up in a shapeless ball among the documents from al-Ushmūnayn, then carefully unfolded and cleaned and put under glass by Dr. H. IBSCHER. It comes from the central part of the first page of a splendid MS. the subject of which can no longer be ascertained, as the few remnants of the three lines of Arabic written in brown ink in recto, which I suppose were the title of the manuscript, are now completely faded. The recognisable remains of letters belong to a hand which we know to be usual in the third century A. H. Below is written by another hand in a script related to that of PERF. No. 961 but rather later, still however of the tenth century A. D.:

[*ḥa*]sbunā Allāhu wa-ni'ma 'l-[wakīlu]
 [sallā 'llāhu] 'alā sayyidinā Muḥammadini n-na[biyyi wa-'a]l[ā ālihi]
 God is [suf]ficient for us and the best [helper].
 [God bless] our Lord Muḥammad the Pro[phet and his family].

The reverse of the first page was originally completely filled except for a narrow margin with a picture, which perhaps if we may make a deduction from the analogy of A. F. 9 and 10 (Plate 31, 43) represented a dedication scene. The frame of the picture consists of polygonal areas enclosed by dark green borders, black outside and bright red inside, of which two alone in part survive, the tops of which are joined together by a knot decorated with a crimson rosette. The inner surface of the better preserved hexagon has a dark green background covered with yellowish green and against it are seen two parrots facing each other,⁴⁹ significantly free from any floral accompaniment, the right one of which probably had originally dark greyish-green wings, dull white tail-feathers and a head and breast of the same hue, the left had crimson wings and pale red head-and breast-feathers. The wings of both were originally covered with gold leaf on which the feathers were indicated in bright red. In a triangular corner on the left beside the rosette is a third bird on a dark background with dark green wings with a touch of gold, and dull white breast and body, the feathers of which are indicated by bright red lines. On the right above on a crimson background is a richly clothed male figure, seated with folded legs on a dark green low couch, which has short square legs and a dull yellow wicker pattern. The face, set in black locks, probably with a pointed beard, still has traces of gold leaf on the chin. The figure wears a tight-fitting robe, originally dark dull green, with short sleeves trimmed with gold and of a rich pattern which is indicated, like the drapery, by dull white lines. The under-garment which is seen on the left arm is pale crimson of a simple lozenge pattern. The right hand holds a dark dull green beaker, the left hand apparently grasps the dagger in the narrow girdle. On the left beside the figure is a vessel painted dark dull green on a stand, the object of which is not clear to me.

Below this figure, which probably represents a distinguished individual, immediately adjoining the somewhat conventionally represented couch, is an only partially preserved border perhaps representing quatrefoil. This consists, of a fairly broad dark dull green band, which has black edges, which are the result of the original broad border done in a dark colour with thick strokes of the brush being coloured over with dark dull green so that only the edges remain of the original colour. Inside, parallel to this band, is a narrower dull white strip enclosed in two crimson lines, which encloses a surface probably originally painted over a dull green out of which rises the picture of a beardless, still more richly dressed man. He wears a tight-fitting dark grey-green under-garment with sleeves which are ornamented on the upper arm with *firds* edging and show the remains of gilding. This under-garment leaves the neck free, on which remains of gilding can also be seen, which apparently belonged to a necklace. Over this he wears a crimson tunic with a lozenge pattern with short sleeves. The right hand holds a dark dull green beaker of the same form as the upper figure; the left hand, which is wanting,

probably gripped the dagger in the belt as in the latter, an attitude which is also found on the coin with the portrait of the Caliph al-Muqtadir billāh (908—932 A. D.) in the coin-cabinet of the Kaiser Friedrich Museum³⁰ in Berlin (fig. 6).

Another possibility is suggested to us by the dedication picture in the Vienna Ms. of al-Harīrī, A. F. 9, fol. 1 (1334 A. D. Plate 43), on which we see the left hand of the prince resting on the upper thigh.

That the legs are folded is evident from what remains of the contours of the upper garment. They rested presumably

covered by the drooping locks, may belong to ear-rings, such as the Sasanian princes too used to wear (fig. 7).³² On the head is a round cap with a brim curving upwards, and two dingy-white bands hanging loose at the side. It is drawn in carmine-red and shows clear traces of gilding. There can therefore be no doubt that we have here a kind of crown. The connection with the crown or tiara of the Sasanians, as



Fig. 6. Portrait-coin of the Caliph al-Muqtadir billāh (Berlin, Kaiser Friedrich Museum).

on a seat supported by short pillars, as in Plate 43 or in the upper figure, or in fig. 6. The beardless face represented directly facing is surrounded by flatly smeared hair which falls down on the shoulders, a style which is familiar from Hellenistic representations.³¹ The traces of gold below the ears, which are almost entirely



Fig. 7. Sasanian silver coins. a) A half drachma of Artaxerxes V (before 226 A. D.). b) A drachma of Hormisdas I (271—272 A. D.). c) A drachma of Artaxerxes II (379—383 A. D.).

we find it in various forms especially on coins and silver vessels, does not seem to be established by the loose hanging band merely. A very similar form of crown with a smooth round cap and a brim of a volute shape, is shown on a drachma of Hormisdas I, surmounted by a globe-shaped knob (fig. 7 b), though this does not always form part of the crown (fig. 7 a). We find an interesting example of the borrowing of a Sasanian form of crown by an 'Abbāsīd in the silver portrait-coin of the Caliph al-Mutawakkil of the year 241 A. H. (855 A. D., fig. 8),³³ and of this ruler we know that he dressed in Persian fashion.³⁴ The round cap with a string of pearls, is of just the same form as on the drachma of Artaxerxes II (fig. 7 c); moreover, al-Mutawakkil wears the same pendant ear-rings, as we see in fig. 7 b.

The deliberate way in which the figure is made to stand out from the rest of the picture by the frame, which is further emphasised by the choice of colours, the rich garment, the crown and not least the typical, almost hieratic attitude, obviously done under the influence of earlier pictures of rulers, leave no doubt that we have here a ruler, in all probability a Caliph. His attitude and to some extent the dress also recall at once not only the already mentioned title-picture of A.F. 9 and the coin of al-Muqtadir but also the fresco of Ajantā that possibly represents Chosroes II, and



Fig. 8. Portrait-coin of the Caliph al-Mutawakkil of the year 855 A. D. (Vienna, Kunsthistorisches Museum).

the seated prince on the post-Sasanian silver dish in the Stroganoff Collection in the Museum of the Hermitage in Leningrad (fig. 9).⁵⁵

A further link with the latter seems to me to be found in the couchant dog done in crimson with a bright red collar, and I would suggest that the latter takes the place of the lion at the feet of the prince

and for some reason was placed by the artist not below but beside the Caliph. It seems not impossible that there was also a dog on the right, facing in the opposite position. Of the few representations of the "Commander of the Faithful" that we possess this is undoubtedly not only one of the earliest but certainly also one of the



Fig. 9. Post-Sasanian silver dish in the Stroganoff Collection. (Leningrad, Museum of the Hermitage).

most interesting. The technical execution is admirable. The outlines of the figures are drawn partly in red and partly in black, the folds of the garments stand out in brighter lines from the darker background. The colours are carefully done with a fine brush, the drawing is firm and shows the skilled hand of an undoubtedly quite important artist. If any comparison is possible, I should like to call attention to the miniatures and wall-paintings of the Buddhist and Perso-Manichaean school of Central Asia,⁵⁶ which the picture, which is undoubtedly essentially different from the hitherto known specimens of Islamic art, rivals in colouring. Whether the manuscript to which it belonged was prepared in Egypt or was perhaps brought thither from the east⁵⁷ cannot be established.

If, in conclusion, we attempt briefly to characterize the miniatures we have discussed according to the technique applied in them, the first statement that can be made is that only one by its composition and frame can be considered a typical decorative page, Inv. Chart. Ar. 25751. The others are simply text-illustrations without any background, which are either simply drawn in outline or coloured, just as we know them from ancient Egyptian papyrus texts downwards. Among them Inv. Chart. Ar. 25612 clearly stands out on account of its technique which recalls Hellenistic models; the representation of the tree is here daubed in colours in quite an impressionistic style, without the outlines having been previously drawn in.

Among the colours, red is most frequently used, which we find in a pale red shade, a brilliant vermilion, crimson or ruby. At the same time yellow is also found, as a dingy yellow, chrome yellow and bright ochre, and green in the shades of dark dull green, yellowish-green and dark green, as the dominant colours. That these are the colours most used seems to show a certain dependence on the traditions of Coptic art. In Coptic manuscripts yellow and red are of course the predominant colours, usually associated with some green.⁵⁸ In the decorations in the early Muslim Qu'rāns the combination red-yellow-green continually occurs, and even to-day there is still an undeniable preference for these colours. Any one who takes the trouble to look around among the Arab carpenters at the Bāb Zuwēle in Cairo, for example in the Shārī' Taht er-Rebā'a, will very often come upon trunks painted in bright red, yellow and green, which are part of the furnishings of a bride of the people. Next to these main colours we have a dingy-white, a bright crimson to represent flesh and for outlines usually a deep black. We therefore have the same colours used in the Arab period as were contained on the palettes of Egyptian painters and Greek masters of the Hellenistic period.⁵⁹

Only two of our miniaturists have attempted to tackle the problem of light and shade: the painter of the dog on Inv. Chart. Ar. 13682, who put bright lights in the goggle-eye, and enlivened the bright parts of the body with dull white colours, and the painter of Inv. Chart. Ar. 25751, who endeavoured to bring out the folds of the drapery by brighter strokes of colour. The latter also used gold leaf to re-

present gold ornaments. Its use in painting goes back to ancient Egyptian times.⁶⁰ The splendid Book of the Dead, Eg. 10110 of the Rainer Collection in the National Library of Vienna, shows Osiris in the judgment scene outlined in black, and the pattern of his garment indicated by bright red dots. The golden neck-ornament and the crown are inlaid in gold and the outlines are drawn in black ink which also marks the borders. Here we have already the same technique which was later in use among the Manichaeans⁶¹ and with which Muslim illustrators also show themselves familiar, as we shall see (p. 19). Our miniaturist, it is true, does not seem to have used this technique but simply to have imitated the trinkets by laying on thin gold.

DECORATION AND ORNAMENTATION

In discussing the pen drawing PERF. No. 954 above (p. 6) we have seen that the activity of the miniaturist was not confined to the production of illustrations for books but that he also carried out the decorations of the manuscript; and in the case of Inv. Chart. Ar. 25613 (p. 4) at least it is possible to assume that the same hand did text and illustrations. This may well have been frequently the case in the early centuries. We actually have, to mention only the earliest dated examples, two manuscripts with miniatures of the first half of the XIIIth century A. D., in which the scribes expressly state that they also did the pictures. One is the MS. (referred to in note 19) of 619 A. H. (1222 A. D.) of the translation of the third treatise by Dioscurides on medicine and botany;⁶³ the other is the famous and valuable codex of al-Ḥarīrī from the Ch. Schefer Collection in the Bibliothèque Nationale in Paris of 634 A. H. (1237 A. D.) which was written and provided with miniatures by Yaḥyā b. Maḥmūd b. Yaḥyā b. Abī'l-Ḥasan of Wāsiṭ.⁶⁴ We may safely assume that the scribe, the miniaturist and certainly also the artist who made the ornaments in the titles, the beginnings of the chapters, on the margins and the decorative leaves etc. were often one and the same person. The art of making a book had not yet become the work of a number of specialists, as it became in the later period so fully described in the *Menāqib-i-Hünervārān*,⁶⁵ which mentions besides the painter (*muṣawwir*) the leaf-cutter (*qāṭi*), the gilder (*mudḥahhib*), the draughtsman (*farrāḥ*), the binder (*mujallid*), the preparer of the gold-sprinkled paper, the designer of the lined borders, the restorer of old manuscripts, and the master who put together the wonderful albums called *muragga'āt*, as separate craftsmen. The art of cutting out paper in the period with which we are concerned was, as we shall see, much used in the service of the book-binder and the draughtsman covered not only the whole field of decoration but was also a calligrapher and painter.⁶⁶ Specimens of his skill are preserved in a series of pen-drawings which are preserved in Vienna in the Rainer Collection in Nos. Inv. Ar. Pap. 10006, 10047, Inv. Chart. Ar. 25620, 25641, 25656. We shall discuss and reproduce the three best pieces here. Inv. Ar. Pap. 10047, a leaf of papyrus, 10,9 × 21,6 cm, of the third century A. H. (IXth–Xth A. D.) contains in verso the rather hurriedly drawn ornament shown on Plate 5 which was probably intended to be reproduced in wood or stone, mosaic or glazed tiles. Another splendid design perhaps also intended for a tile, also drawn with a free hand in black ink, is found on the piece of paper, 14,5 × 5,2 cm, Inv. Chart. Ar. 25641 (Plate 6a). Only about a quarter of the design has survived. What it looked like originally may be seen from the reconstruction drawn by J. NITTMANN on fig. 10. Inv. Chart. Ar. 25620 (Plate 6b) which was found in al-Ushmūnayn is drawn with the help of the ruler. This paper 20 × 10 cm, which from the Arabic calculation on the front must date

from as early as the XIth–XIIth century A. D., gives only a part of a drawing, originally probably $29,3 \times 19,7$ cm. But as fortunately it is a corner piece that has survived it can be reconstructed, with fair certainty (fig. 11). In addition to such designs as we have just discussed, the Rainer Collection possesses a few sketches which are probably studies for designs. The oldest one, Inv. Ar. Pap. 10053 (Plate 7a) shows two intersecting quadrilaterals—one with loops at the corners—and a bird in the centre drawn in black ink on a piece of papyrus, $5,8 \times 6,6$ cm. If we compare it with the relief from the Acropolis published by J. STRZYGOWSKI in *Altai-Iran und Völkerwanderung*, p. 77, fig. 69, the idea suggests itself that our drawing is a cursory sketch for a similar design which was to be carried out in relief, on a mosaic or a tile. The sketch was probably made in the IXth–Xth century. Of particular importance in the history of decoration, is an insignificant looking piece of papyrus from the Fayyūm, Inv. Ar. Pap. 10052, which the Coptic text on one side shows to be of the IXth century A. D. This piece of papyrus, $12,1 \times 10,1$ cm, has on the other side (Plate 7b) studies for arabesques which were done with a reed pen. Among them two rapidly drawn sketches stand out. The one, on the left in the second place, consists apparently of the body of a bird without feet drawn in straight, curved and zigzag strokes; the other above on the right is a head of an animal rising out of a half palm-leaf. This heralds the free use of the bodies of animals in decoration, which later became unexpectedly popular⁶⁴ in the marginal decorations and initials of Coptic and Armenian manuscripts. Compared with the almost contemporary carved board in fig. 1 on which the bird's head still forms part of the

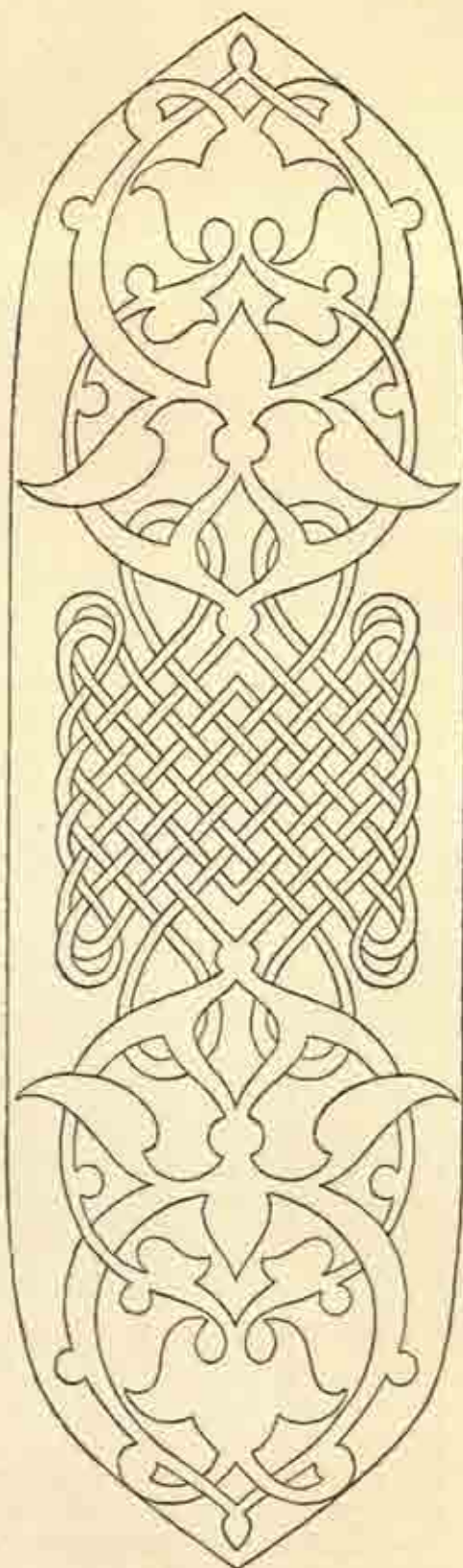


Fig. 10. Reconstruction of the design
PER. Inv. Chart. Ar. 25641.

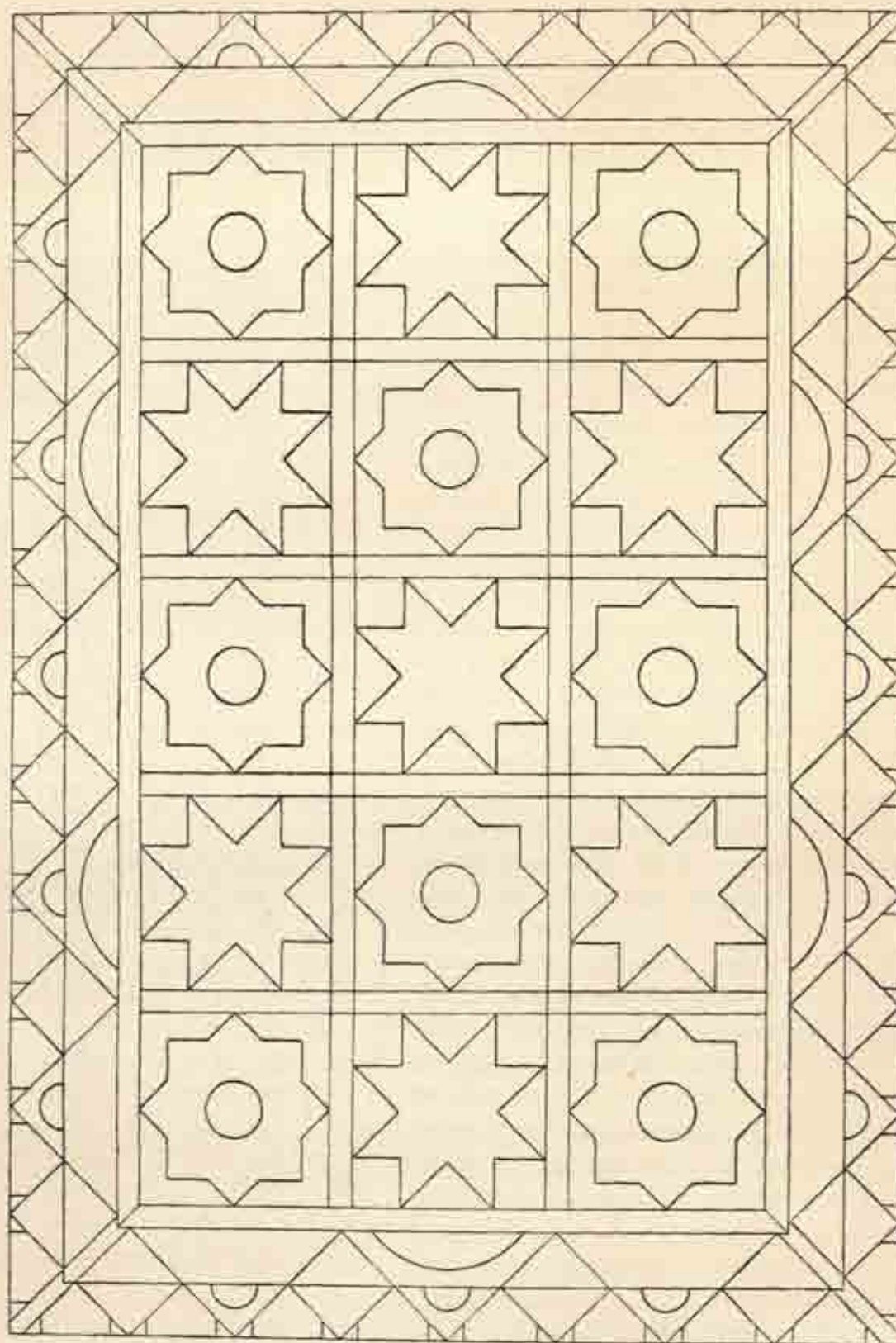


Fig. 11. Reconstruction of the design PER. Inv. Chart. Ar. 25620.

scroll-work the animal's head is here deliberately treated as a separate part, and does not for example seek to adapt itself to the involutions of the palm-leaf, for which the horns of the animal might have afforded an opportunity.

In another case the artist has not been so unassuming. The bird which was pressed in rows with a pattern dipped in black ink on a piece of prepared reddish-brown linen (fig. 12), of which the Rainer Collection possesses a piece in 14,5 x 9 cm, has its head adorned with a tendril of arabesques which recalls the motif of our pen-draw-



Fig. 12.
Ornament from
a piece of Arab linen
in the Rainer collec-
tion of papyri. (Inv.
Ar. Lin. No. 30).

ing. A counterpart to this is found on the plate from Rayy which CH. VIGNIER, published in *The New Excavation at Rhages* in the *Burlington Magazine* XXV (1914), pp. 212—213 (Plate II D) and discussed. The tail of the animal here ends in a forked palm leaf divided into several lobes. The picture obviously follows an ancient type.

The piece of linen just mentioned probably came, like Inv. Ar. Pap. 10052, from the Fayyūm and may belong to about the same time. J. V. KARABACEK considers the last piece to be mentioned in this connection to be some 300 years later, Inv. Chart. Ar. 12514 (Plate 7 c, d). This piece of paper 9,1 x 8,8 cm, has been used by a skilful and versatile artist, who has also given us a specimen of his hand-writing in the beginning of an Arabic line, for drawing a whole series of pen-and-ink sketches. Here we have studies in tendrils with flowers, arabesques and birds, of which one, a duck, was reproduced by J. V. KARABACEK in the *Führer durch die Ausstellung der Papyrus Erzherzog Rainer*, p. 12. I shall return to this again. Here we are specially interested in the comma-like lobes inside a circle within which the body of the bird is placed. It runs over it to the right in a circle, which is divided into two equal lobes by a regular spiral. Both formations in the same typical form are also found on a wall-decoration in plaster from Sāmarrā in the Kaiser Friedrich Museum in Berlin (IXth cent. A. D.)⁶⁷ and on the stucco of the intrados, now destroyed except for a few fragments, of an arch of the north-east liwān of the Mosque of Ibn Ṭūlūn in Cairo (fig. 13)⁶⁸ but are also found on later monuments.



Fig. 13. Stucco covering of the intrados of an arch
in the north-east liwān of the Mosque of Ibn Ṭūlūn
in Cairo.

Its connection with the body of the bird or with the body of an animal at all is however entirely confined to this one duck-ornament.

The Muslim art of decorating books, which later became so highly developed, grew out of modest beginnings like the ancient and early mediaeval Christian art. In literary texts of the second and third century A. H. (VIIIth—IXth A. D.) the end of a section of any size was occasionally marked by a row of ornamental dots.⁶⁸ The literary fragment Inv. Ar. Pap. 600a already shows quite a simple ornamental border in the form of a long narrow rectangle with a zigzag band at the conclusion of a large section; in Inv. Ar. Pap. 600b the top of a poem is marked by a similar but broader band, a rectangle with two intersecting zigzag bands. Both may be dated about the end of the second and beginning of the third century A. H.

At the end of the whole book such ornaments as were used with the text to divide the larger sections might become more elaborate, somewhat in the style we see in PERF. No. 954 (fig. 5).⁷⁰ Occasionally perhaps a bird ornament was placed at the end of the whole text perhaps just like the coronis of Greek manuscripts.⁷¹ The duck ornament on Plate 7c was perhaps intended for this purpose. In place of the simple ornaments with which the larger paragraphs were marked, at quite an early date combinations of geometrical figures were used, sometimes in combination with leaves or knots; these sometimes, as in Christian manuscripts, took up considerable space and effectively enlivened the monotonous appearance of the text. The final piece of a tendril, which may have been intended for a marginal decoration or as a vignette, perhaps survives in the ivy leaf with a face drawn in it and terminating in a trefoil, which is preserved on the piece of papyrus, 5,6 × 4,6 cm, Inv. Ar. Pap. 9998 (fig. 14). The drawing is done in brown ink, and may be as early as the third century A. H. (IXth—Xth A. D.). It comes from the Fayyūm.

I cannot produce here from the profane manuscripts of the period which I have now to discuss, any specimen of the decorative framework of the first page of a text or of a title-page, such as we may presuppose existed in late classical manuscripts and are not at all rare in Christian manuscripts.⁷² The former, to say the least, do not seem to have been at all usual. But there is no reason to doubt that fine manuscripts even then must have distinguished the beginning of the text by an artistic border or other decoration. If we remember that in manuscripts with miniatures, the title-page, e. g. in Inv. Chart. Ar. 25751 (Plate 4b) was opposite the front page of the text, it seems unlikely that the miniaturist would have placed a plain page of text opposite this tastefully framed picture. He would presumably have done away with any such contrast between text and picture by a corresponding decoration of the page of text, a style of decoration for which the frame and head pieces later so popular in Muslim manuscripts were well fitted. The artistic title-vignette which the calligrapher Aḡbak b. 'Abd Allāh as-Sayfī (746 A. H. = 1345 A. D.) places on the first page of the splendid manuscript of al-Būṣīrī's *Burda* (Plate 11b)

strikes one as being only one in a long series of developments. Framework and decoration point to much older models and we shall later discuss their connection with the Sūra divisions and prefatory leaves of the old manuscripts of the Qur'ān.

Writing in gold and silver, in keeping with the illuminated Sūra titles of the Qur'ān codices, was used quite early to emphasise the titles and chapter headings in profane manuscripts; frameworks also were used for emphasis. An example of this is found in Inv. Chart. Ar. 7322 of the Rainer Collection (Plate 4c), a fragment, $3,5 \times 8,5$ cm, of a text the contents of which unfortunately can no longer be ascertained. Here we have a border running from top to bot-



Fig. 14.
Ornament from
Inv. Ar. Pap. 9998
of the Rainer collection of papyri.

tom. That the artist first laid on the gold leaf and then drew the ornaments in black ink is seen from the fact that there are gaps in the black lines where the gold has fallen off. This technique has already been mentioned above (p. 13). The fragment is unfortunately not only torn off at top and bottom but is also very much worm-eaten. So far as it is possible to suggest a date from the writing, I should put it as early as the tenth or eleventh century A. D.

We still have however an early specimen of the framing of the page of text in a manuscript by decorated inscribed borders. This again we owe to the incomparable Rainer Collection. Plate 8c-d shows a fragment of a leaf from a work on Tradition (*Hadīth*), which is probably to be allotted to the XIth—XIIth century A. D. It is composed of the two fragments of Inv. Chart. Ar. 1924 and 25647⁷² which now that they are joined together measure $9,7 \times 7,6$ cm and consist of yellow, originally probably white paper. The text itself is written with brown ink by a skilled hand; both sides of the leaf, which from the *bismillāh* formula on the front was probably the first of the manuscript or of a new section, are framed in borders of script written in a beautiful *Tīmār* hand in black ink. The text of the reverse is enclosed in a lined frame, which consists of an outer and an inner line, between which runs the strip of calligraphy. On the right the border was divided by parallel lines into long narrow strips. The surviving fragment has in the central field an arabesque pattern which recalls elaborate Kūfic; the outer frame is marked by crescent-shaped lobes inside a circle such as we find in the border of the decoration of the parchment end-paper Inv. Perg. Ar. 294, illustrated in fig. 17.

tom, formed by a black line, a thick stroke in oxydised silver ink and a vermillion line on both sides of the text, which is written in black, which of course can only have been inserted later. Below this in the same border is a frieze of writing with black edging covered with silver paint, the diacritical points of which are done in gold with black borders. In the text, above the strip of writing, we have two double circles with spirals inlaid, which are drawn on a ground of gold

Here I only want to suggest that the decorative borders of writing-tablets may have served as a model for the simple framing of the page of text. The beautiful border of the miniature on Plate 4b on the other hand, I would rather connect with those ornamental frames which in classical or early Christian manuscripts surrounded the picture of the author, which was placed like our miniature at the beginning of the text. That the latter itself might also have been enclosed in a similar ornamental border has already been mentioned. The composition of the frame like the picture itself shows a perfection and a degree of art such as we would hardly have expected at so early a period. It already foreshadows the almost incredible development found in later manuscripts in the extravagant decoration, which surrounded text and titles with the most wonderful arabesques and floral designs on the first two pages and often even on the first four pages of the manuscript.

The ornamentation so far dealt with is found only in profane manuscripts; the sacred book of Islam, the Qur'ān, has not been touched upon, as it of course must have a special place to itself in the development of book decorations. It was advisable first of all to ascertain what style of decoration for manuscripts had to be considered at all. Used as the only source for this investigation, the Qur'ān might easily give a distorted picture of the limitations and possibilities of the development of decorative art. Its use in public worship and the esteem, amounting almost to adoration, in which the Qur'ān was held could not be without influence on its external form. That there was a good deal of influence from models used among "the people of the book", as the Christians and Jews were called, was natural in view of the frequent intercourse between the members of the three world religions. Thus the large format of the Qur'āns kept for reading in the mosque, recalls the folio missals of the Christian Church.

From the very first considerable emphasis was laid on a fine calligraphy for the text of the Qur'ān. The first who gained distinction in this respect was the contemporary of 'Umar II (d. 720 A.D.), Khālīd b. Abi'l-Hayyāj, who, as MUHAMMAD B. ISHĀQ AN-NADĪM tells us, also prepared the inscription in golden letters from Sūra XCI on the south wall of the mosque of the Prophet in al-Medīna.⁷⁴ It is quite probable that the sacred text in manuscripts of the Qur'ān too was written in gold ink at quite an early date. Khālīd himself perhaps gave the stimulus to this. The incomparable library of the Fātimids in Cairo possessed several Qur'āns written in letters of gold. They were placed in the so-called old mosque⁷⁵ in 403 A.H. (1012—13 A.D.) along with 1298 manuscripts of the Qur'ān. A fragment of 52 leaves written in the *Thuluth* hand in gold is still preserved in the Egyptian library in Cairo.⁷⁶ One of the finest copies is undoubtedly the Qur'ān written on dark blue parchment in gold ink which al-Ma'mūn (813—837 A.D.) presented to the chief mosque of Meshhed. F. R. MARTIN possesses a leaf of this splendid manuscript, a part of which came into the market in Constantinople during the war.

Later this gorgeous method of production was applied to other literary works also, first of all to collections of prayers apparently in imitation of the splendid manuscripts of the Qur'ān. In F. R. MARTIN'S Collection is such a book of prayers written in gold in the *Thuluth* hand dated 1486 A. D., which came from Persia,⁷⁷ and to quote another example the manuscript of the *Burda* of al-Būṣīrī of the year 1345 A. D. mentioned on p. 18 above, contains on each page three verses written in gold in *Thuluth Rayḥānī*. The poems of the Caliph al-Mu'tamid (870—892 A. D.) were also written in gold.⁷⁸ I must not omit to mention that the sect of al-Hallāj (executed 921—22 A. D.) who were influenced by Manichaeism, produced books of Chinese paper, some written in gold ink.⁷⁹ The custom of writing in gold ink seems to come from the east and is first found in Jewish literature.⁸⁰ That it was also used for the Scriptures by Christians, often along with purple vellum, aroused the misgivings of the fathers of the Church,⁸¹ just as Muslim theologians of the stricter school disapproved of writing the Qur'ān in gold ink.⁸² Among the latter the imitation of a custom used among Jews and Christians probably aroused disapproval besides being a breach with the traditional simplicity of the sacred book. Nevertheless that such illustrated Christian and Jewish manuscripts were read and disseminated in Muslim circles is seen from a story in IBN IYĀS⁸³ who relates that the Caliph al-Mutawakkil (847—861 A. D.) had in his hand a roll in which the revelation of Daniel was written in ink of gold, on the occasion of the visit of the governor of Egypt, Maḥfūz b. Sulaymān, who had been summoned to render account of his governorship.

The use of blue or violet vellum with gold and silver writing was specially prevalent for diplomas and official documents of the Byzantine emperors⁸⁴ and such missives were sent to the court of the 'Abbāsids in Baghdād and to that of the Umayyads in Cordova. The preference for the combination of blue and gold which we already have seen expressed in al-Ma'mūn's copy of the Qur'an dominated practically the whole of Muslim book decoration. One can open hundreds of illuminated manuscripts and always find gold on a blue ground as the prevailing combination of colours. I do not think it correct to seek its origin only in the east, because blue and yellow were the favourite colours in ancient Mesopotamia.⁸⁵ I would also point out that there was a decided preference for these two colours in Egypt also. One need only think of the splendid articles of gold, in which we continually find lapis-lazuli in a gold setting⁸⁶ and of the decoration of the royal tombs of the new kingdom in which very often yellow appears painted on blue ground.⁸⁷ That the Ṭūlūnids had also a preference for these colours — the "golden house" of their palace was so called on account of its walls inlaid with gold and lapis-lazuli⁸⁸ — may be due to an imitation of Mesopotamian models in their case but might well have also been influenced by Egyptian patterns. Splendid Qur'āns like that of the mosque of Meshhed might very well, however, have been rarities in the third century A. H. In the first century A. H. the methods

of production were still very simple. The sheet of vellum Inv. Perg. Ar. 2, 27 × 22 cm, in the Rainer Collection, the hand of which belongs to the first century A. H. still has the simple method of dividing verses by 6 dots and no trace of the elaborate *‘āshira* marks (ten verse divisions), which appear in the second century A. H. It will be legitimate to assume that the titles of the Sūras, when such existed, did not here stand out from the text either by special colour or decoration. In the manuscript of the Qur’ān, Maṣāhif No. 139 of the Egyptian Library in Cairo, which I was able to examine carefully on my last visit to Egypt, the titles of the Sūras have certainly been added by a later hand. B. MORITZ has reproduced a number of pages from this precious codex, which was written about 725 A. D. and comes from the mosque of ‘Amr, in the volume of plates to his *Arabic Palaeography*,⁸⁹ from which this fact is perfectly evident. The writer has left at the end of each Sūra an empty space which was rather broader than the space occupied by a line; the decorations separating the Sūras were then drawn in these empty spaces. The space left was often rather small so that the tops of the high letters ran into the decoration or a space had to be left for the letters with tails in the decoration.⁹⁰ The latter consists of a decorative scroll which runs across the whole page and is filled with trellis-work, knots, square or circular patterns and rows of arches and is obviously intended to mark the ends of the Sūras. Similar decorations are found in Christian manuscripts used in the same way.⁹¹ Characteristic of this particular copy of the Qur’ān, however, is the crowning of the individual scrolls by the colonnade of a mosque partly hung with lamps, the triangular pinnacles of which are replaced in certain sections by winged palm-leaves.⁹² These, occasionally surrounded by other accessories, also mark off the narrow ends of the decorative scroll.⁹³ All these terminal ornaments are executed in bright ochre yellow, dark green and crimson ink and therefore show the same combination of colours which we have already (p. 12) learned was characteristic of Coptic manuscripts. In the fragment of the Qur’ān in the Gotha Library (Cod. Ar. 36), according to E. KÜHNEL⁹⁴ the geometric patterns, “which apparently go back to older Coptic traditions, and have analogies in Coptic manuscripts of the Bible with parallel Arabic text” are executed in red and green and yellow. We have still to mention that in the Qur’ān of the mosque of ‘Amr there are already ornamental *‘āshira* marks, but without numerals. The most popular form is a quatrefoil in a quadrilateral frame, such as is illustrated on Pl. 1-2 of MORITZ’ book. Here again the same colours are used as in the terminal ornaments.

We have already mentioned that the oldest codices of the Qur’ān, e. g. the one just discussed, originally had no titles written above the Sūras. This had, however, its disadvantages and they very soon began, at least as early as the second century, to mark the beginning of a new Sūra by a suitable formula. In a vellum leaf, Inv. Perg. Ar. 186 of the Rainer Collection (IInd cent. A. H. = VIIIth cent. A. D.) which

from its format (38,5 × 27 cm) and its calligraphy must be regarded as a mosque rather than a hand copy, the formula *fātiḥatu sūratī 'l-'a[ḥzābī]* "Beginning of the Sūra al-A[ḥzāb (the Confederates)]" is written in crimson ink but without any adornment immediately after the close of Sūra XXXII, which ends with a ten verse-division. The *āshira* marks, which stood out effectively from the black text of the Sūra are also simply decorated. In a red or black square frame the numeral, written in crimson, is placed surrounded by crimson dots, which are also used to enclose the frame.⁹⁶

It was an easy step to combine such Sūra titles with the terminal decorations which we have seen in the Qur'ān of the Mosque of 'Amr. From this combination which probably developed in the first half of the second century A. H. there grew those richly decorated Sūra divisions which gave calligrapher and draughtsman alike a welcome opportunity for displaying their skill. Soon they were no longer content simply to emphasise the Sūra headings by red ink but used gold for the inscription in artistic Kūfic, the framework of which became more and more elaborate. The fine Qur'ān codex Maṣāḥif No. 1 of the Egyptian Library (see p. 44 f.) written before 765 A. D. already shows the Sūras separated by delicate designs.⁹⁷ The ten verse marks are no less beautifully executed. The numeral written in words is followed by a star formed of two intersecting double-lined squares, which in turn is inserted in a regular polygon. The golden script here again stands out from a blue ground and the border is in gold. If as an exceptional case I again mention the simple verse-divisions, which are formed throughout of two concentric circles filled with gold, it is because I think I can give interesting evidence of the origin of this ornament. On Pl. 26 and 27 of the *Arabic Palaeography* (IIInd—IIIrd cent. A. H.) we see circles — added it is true later — used in the text as stops, which enclose four or more strokes placed closer together, which mark the end of a verse and are sometimes replaced by dots. In Arabic literary texts on papyrus I have frequently found a plain circle used as a full stop.⁹⁸ This, therefore, was a method of separating sentences which must be called quite usual. When we next find that in the literary Pehlevi text on papyrus, exhibited under No. 446 in the Rainer Collection, as in P. Berol. 4442, a plain circle continually interrupts the text, apparently to punctuate it, it is natural to ask whether we have here a borrowing of a Persian method of punctuation in Arabic writing, which is certainly not impossible. We need not then be surprised that the Sasanian winged palm-leaf was used in decorating the Qur'ān⁹⁹ and we must admit that perhaps other borrowings from Pehlevi books are within the range of possibility.¹⁰⁰ Connections with Sasanian decoration are in any case to be found elsewhere in the patterns used to separate the Sūras. I will quote only one example, the terminal ornament on Pl. 15 of MORITZ' *Arabic Palaeography*. The lozenge pattern with palm-leaves that fills the whole area of the decoration in an endless pattern strikingly recalls the Sasanian leaf pattern of Tāq-i-Būstān which has been

reproduced by J. J. TIKKANEN¹⁰⁰ and has been connected with marginal patterns on ivory carvings and in Arabic manuscripts. A similar ornament is found on a piece of lace, from Egypt in the Austrian Museum of Art and Industry in Vienna.¹⁰¹ The network of lozenges with palm-leaves is there replaced by a design of leaves with six smaller ones between each.

Textiles played an important part in the transmission of decorations from Persian designs. They were certainly not without influence on designs for book ornamentation. The design of arches in *Arabic Palaeography*, Pl. 6, has in any case a parallel in Coptic textiles of the IVth—Vth cent. A. D.¹⁰² The frequent enclosure of the terminal decorations to the Sūras in a woven band recalls the ornaments on the edge of Coptic pieces.¹⁰³ The same design for the terminal decorations is repeatedly found in different copies of the Qur'ān. Two specimens of such decorated leaves of the Qur'ān from the manuscript of mixed contents Mixt. 814 of the National Library of Vienna (VIIIth—IXth cent.) are given on Plate 9—10. The outline is usually done in sepia brown ink, the writing is left in white or written in gold ink, the ornaments are inlaid with a liberal use of gold with an enamel-like crimson, ultramarine, grass-green, or bright green and clay-brown. The first leaf of the Qur'ān manuscripts had usually, like the last, a decoration which encloses the whole area of the writing (cf. Plate 10). Festoons with spirals, arabesques, and network of lozenges form the principal motives of the often very rich ornamentation. The separate vellum leaves of this manuscript are of very different sizes. Fol. 14 (Plate 9), 21 × 31,7 cm, recalls in the ornamentation of the written area the decoration on Coptic materials,¹⁰⁴ and the marginal decoration of the narrow side allied forms on the wall decorations of Sāmarrā.¹⁰⁵ Fol. 6b (Plate 10), 21,1 × 28,5 cm, has in the centre an arabesque design in gold on a frame hatched with carmine, framed in a festoon left in white, with the interstices filled with carmine and grass-green. The two outer frames are done in gold and brown, the circle in carmine and green, the interstices of the scroll filled with carmine. The ornamentation of the narrow side is an arabesque in gold adorned with carmine and green.

The decorated Qur'ān leaves that we have so far dealt with have been finished off on the narrow side in a kind of peak of arabesque tendrils, which rise up out of a vase formed of winged palm-leaves, or complete leaves in a circular frame; this finish to a page is with one exception (Mixt. 814, fol. 1) always associated with the rectangular field of decoration and is to be imagined as growing out of a leaf. It again reminds us of Coptic materials, the ornaments and *clavi* of which very often show a leaf-like finish to the side.¹⁰⁶ The leaf-like form of this peak is very clearly seen in the ornament (fol. 62b) of the vellum Qur'ān 8,7 × 13,9 cm, Maṣāḥif No. 194 of the Egyptian Library (Plate 11a). The leaf, drawn in brown ink is filled with an arabesque now unfortunately much destroyed and enclosed in a

light green frame. In the rectangular area of the ornament, we first pick out a frame the sides of which meet diagonally, and which is vertically cut through on both the long sides and is divided into two trapeziums and four trapezoids and is outlined in brown ink. The braiding and the chain around it are covered with shell-gold. In the central area, two intersecting dark brown zigzag strips are overlaid by a similar undulating band, forming a fish-bladder pattern. The compartments thus formed in the loops of this fish-bladder pattern are inlaid with bright green. From the hand this Qur'ān can be dated in the VIIIth—IXth cent. A. D. To the same period belongs a decorated vellum leaf from the F. R. MARTIN Collection¹⁰⁷ which I would like to mention here on account of its arrangement, which is connected with Coptic bindings. The inner field of the ornament enclosed in a rectangular frame is divided into three parts; in the centre a square area, right and left a narrower rectangular area. The square area has in a circular frame two superimposed squares, which have in their centre a double circle with palm-leaves arranged in a whorl, which are arranged in a small double circle filled with leaves. It forms a Muslim parallel to the splendid frame of the picture of Juliana in the Vienna Dioscurides and was probably evolved from Syriac or Coptic models.

This style of Qur'ān ornamentation came in time to influence the decoration of profane manuscripts. The title vignette, 12,1 × 23,7 cm, of the manuscript A. F. 4 of the National Library in Vienna (Plate 11b) already mentioned above (p. 18) shows the usual ornament of decorated leaves of the Qur'ān with the title left white in the central area. The peak-like tendril ornament is here transformed into a circular medallion, such as we find, it may be mentioned, on Coptic stuffs finishing off the pattern.¹⁰⁸ If we emphasised the possibility of such ornaments having influenced the form of the Sūra divisions and the initial and final ornaments of the Qur'āns, I must not forget to point out that there is also a kind of writing tablet with knoblike handle — I have illustrated it in my *Allgemeine Einführung in die Arabischen Papyri*, p. 61, fig. 3b — which might have served as a model for such ornaments and I may add that writing tablets were often elaborately ornamented.

By bringing in A. F. 4 I have really passed the chronological bounds which I set myself. But I cannot refrain from briefly setting out the further development of this interesting ornament. Chance has preserved for us in the Vienna National Library a second manuscript of al-Būṣīrī's *Burda* (N. F. 381, Plate 12), which was written by Aqbā'ī in 741 A. H. (1340 A. D.) and is therefore five years older than A. F. 4. The copy was, as the round vignette tells us, written for the Bahrī Mamlūk Sultan al-Malik an-Nāṣir Muḥammad b. Qalā'ūn (1309—1340 A. D.). Here we already have the title vignette enclosed in a rectangular frame and finished off at the top by an ornamental border. The round medallion thus comes to be on the edge and is at the same time a marginal decoration. The same thing is found on the splendid

large Qur'āns of the Mamlūk period. The first and last page in them is usually ornamented in such a way that two of the usual kind of preliminary leaf ornaments with scrolls of writing form the top and bottom of the ornamentally framed page.

In addition to gorgeous manuscripts of this kind early specimens of a simple nature have also been preserved. In the fine vellum Qur'ān which J. V. KARABACEK ascribed to the library of the Mamlūk Sultan Kayqubādī and which belongs to the ninth century A. D. the titles of the Sūras are written in red, the numbers marking ten verses enclosed in a red-green circular ornament.¹⁰⁹ The gold of the titles of the Sūras is frequently replaced by chrome yellow as in the Maghribī Qur'āns. The vellum leaf No. 728 of the Exhibition of Rainer papyri (ninth century A. D.) has the title of the Sūra XX in chrome yellow while the *'āshira* marks consist of two small dark green circles with a larger circle in chrome yellow between them.

Along with the above investigation of book decoration of the first six centuries of the Muhammadan era, I should like to deal with a group of texts which, not being in the form of books, do not therefore strictly come within the range of our title, namely amulets. Their contents give them an intermediate position between the profane texts and the Qur'ān, and we may expect to find that their ornamentation has relations with both sides. It is just this that makes these relatively early texts so valuable that I cannot omit them from my discussion, especially as some of them are among the earliest precursors of printed books.

Analogous ornaments in Christian manuscripts are recalled by the top of the amulet-text written in dark brown ink on the piece of paper 11.1 × 4.7 cm, Inv. Chart. Ar. 25616 of the Rainer Collection (Plate 8a), which from the hand must be allotted to the tenth century A. D. The text is bounded on the top by a frieze which is delineated by a double line below and a thick stroke above with a woven ribbon as ornament; on the top on the left is an angular peak, in the centre a simple palmette and on the right there probably was a similar peak opposite. This ornamental finish with a palmette arch in three parts was very usual, especially in a much more developed form on Greek tomb steles.¹¹⁰ A similar top is very often found on Arabic tombstones of the third century A. H. (IXth—Xth A. D.). In the centre we usually have two inclined half-palm-leaves with the lobes turned inwards, with a half palmette on each side usually with a second palmette turned in the other direction which glides into the wavy frame of the longer sides.¹¹¹ We find the latter type on a tombstone in the Arabic Museum in Cairo, Inv. No. 1201, of Rabī' II, 231 A. H. (Dec. 845 A. D.) which I illustrate for comparison on fig. 15. A simplified form of this top is found on the amulet Inv. Perg. Ar. 322 of the Rainer Collection which is written with dark brown ink on a strip of vellum 14.4 × 4.8 cm in size, and belongs to the same period as Inv. Chart. Ar. 25616 (Plate 8b). Here the strip of text left white on a dark brown ground, enclosed in a frame outlined in brown and over-painted in light brown,

which takes the place of the strip of ornament in Inv. Chart. Ar. 25616, is crowned only by a central peak, which seems to be a crude representation of a palmette rising from a leafy cup. On the scroll traces of light green can still be seen.



Fig. 15. Arabic tombstone of 845 A. D. (Cairo, Arabic Museum, Inv. No. 1201.)

The contents of the amulets, which often consist of very different texts, like verses from the Qur'ān, the beautiful names of Allāh, magic words and arrangements of magic signs as well as regular conjuration texts, made it very natural

for the separate parts to be divided by friezes of tendrils, geometrical ornaments or strips of text. Here also purely ornamental cross-bars were used at first to separate the sentences within the columns of text and to mark the top and bottom. Thus, for example, the white parchment P. 12796 of the papyrus collection of the Staatliche Museen in Berlin measuring $14,3 \times 4,6$ cm, has above the two amulet-texts written in brown ink, a zigzag border between double lines, the triangular areas within which are filled alternately with dark green and crimson dots. This simple top border recalls a very similar ornament on Inv. Ar. Pap. 600a which we have discussed above on p. 18. This specimen may be as early as the IXth—Xth century A. D. The amulet Inv. Chart. Ar. 7265 of the Rainer Collection (Plate 13) from al-Ushmūnayn, is presumably not much later; the terminal ornament of the separate sections is a scroll of tendrils, ornamented with crabs with nine-leaved rosettes in the convolutions. The strip of paper, $28 \times 8,5$ cm, shows this pattern four times repeated in a rectangular frame and done in white on an alternately black and red ground. It is interesting to note that these ornaments were not done with the pen but imprinted from four engraved stamps in two colours, black and bright red.¹¹² The writer of the text of the amulet which is done in brown ink left the necessary spaces for them. The specimen has been much worm-eaten and the original bright red is now weathered to a rusty colour and the beginning and end have disappeared. Another contemporary allied example is also in the papyrus collection of the University Library of Heidelberg (PSR. 778). The strip of paper, $30,7 \times 8,4$ cm, has again an amulet text written in brown ink interrupted by two scrolls of writing done from a stamp, which are left white on a black ground. A similar scroll in elaborate Kūfīc without a border, over-painted with brown, is found on the black amulet text also done with a stamp on the thin white piece of paper 11×6 cm, (Plate 14b) exhibited in the Rainer Collection (No. 942). J. V. KARABACEK has given a brief description of it in the *Führer durch die Ausstellung*, p. 247. Scrolls of this kind occasionally took the place of the ornamental top, which we have seen on p. 26. On the amulet stamped on a piece of paper $25 \times 6,2$ cm numbered P. 11970 of the papyrus collection of the Staatliche Museen in Berlin (Plate 14c) the text printed in black is enclosed on the top by a scroll printed from a stamp, which gives Sūra CXII of the Qur'ān in white on a black ground. The block may have originally been intended for a larger format, and in order to fit the space here had to be turned round 90° so that the text is now perpendicular, which is found nowhere else.

Geometrical ornaments and framed scrolls are found alternately as terminal ornaments in the separate parts of the text on the amulet P. Inv. 89 of the Egyptian Library in Cairo (Plate 14a) written with brown ink in 191 lines on fine white vellum. The strip originally continuous is now in three parts $39,2 \times 6,4$, $33,8 \times 6,6$ and $42,8 \times 6,2$ cm and pasted on paper. Of the four scrolls of writing three are

enclosed in a double-lined rectangular frame, and one has a border above and below consisting of a row of pearls running between two lines. The writing is left white on a brown ground. The amulet may be as early as the tenth century A. D., to which period the majority of the specimens done from engraved blocks belong.

A geometrical ornament with scrolls of writing is also found on the fine amulet, also of the tenth century A. D., PSR. 1126 of the Heidelberg papyrus collection (Plate 15), which was folded parallel to the lines and presumably carried in a little case. This strip of vellum, 46×4.5 cm, is unfortunately not complete. Only 93 lines of the text, originally no doubt much longer, made from a stamp and printed in black survive. This specimen is peculiar among amulets inasmuch as the various sentences are separated from one another by small circles as in old literary manuscripts and codices of the Qur'ān (cf. p. 23). The borders of writing in lapidary Kūfic are as usual framed in double lines and the last one is finished off with a zigzag border. Special care has been devoted to the final ornament of the first section preserved. Here we have in a double-lined square frame, the corners of which are divided by a double line, a double-lined rhombus but with divided angles in which a second double-lined square with rounded corners is inserted with an eight-leaved conventional rosette in the middle. The space between the outer frame and the rhombus is filled with a Kūfic inscription left white on a black ground. The corners of the quadrilaterals and the octagon in the centre are covered with a lacquer-like crimson; the white rosette stands out from the crimson ground. This specimen is the only Arabic amulet which is made in its entirety by stamping from a pattern on vellum and therefore is of considerable rarity.

In conclusion we may add a few words on the framing of amulet texts. Examples of the enclosure of the whole column in a scroll of text such as we have seen in Inv. Chart. Ar. 1924 and 25647 need hardly be mentioned. It is also not probable that the whole text was enclosed in a written scroll. On the other hand we have at least one example of the framing of the text in an ornamental border, which is very frequent in Christian texts. Amulet No. 773 of the Schott-Reinhardt collection of papyri in Heidelberg printed from a block shows the text enclosed in an arcade of horseshoe arches. This recalls similar borders on Arabic tombstones of the later type¹¹³ and I would also point out that this amulet seems to be later and perhaps should be allotted to the eleventh century A. D. Whether there is more than chance in this coincidence must be left to be decided when more ample material is available.

BINDINGS

The learned Arab philologist AL-JĀHIZ says in one of his works¹¹⁴ that the Abyssinians claimed the credit of having introduced to the Arabs, along with other things, the codex or bound book (*muṣḥaf*), the form in which its contents are most easily, most strongly and most beautifully kept. We have no reason to doubt the truth of this statement, all the less as the Arabic word *muṣḥaf* or *miṣḥaf*, (the philologists say the correct and older form *maṣḥaf* is dialectic) is actually borrowed from the Ethiopic.¹¹⁵ According to tradition Sālim b. Ma'qil, the client of Abū Hudhayfa was the first after Muḥammad's death to put the Qur'ān together into a book (*muṣḥaf*) and adopt the Ethiopic name for it.¹¹⁶ According to other stories the loose leaves, on which the parts of the Qur'ān were written, had already been placed between two wooden boards (*lawḥāni*, *daffatāni*) in the life-time of the Prophet and were then copied in book form by Zayd b. Thābit in the time of Abū Bakr.¹¹⁷ In any case we can safely assume that by the beginning of the seventh century A. D. the codex form was known in the Muslim community, even if it only consisted of two rough boards between which the separate leaves or folded sheets were placed.

The book was by no means a thing unknown in Arabia at this time. The poets of the pagan period already show themselves acquainted with it when they compare the tracks in the camp with the faded writing in books, which they might have seen in the monasteries or churches of the Christian communities of Syria, Mesopotamia, al-Yamāma or South Arabia.¹¹⁸ That books were used there¹¹⁹ was all the more likely as they had been used since the third century A. D. not only in the classical world but had been widely disseminated through Christianity. Byzantium, Egypt and Syria brought the book along with Christianity to the new converts in Arabia and Africa, and the young Muslim community, which at first had been in particularly active intercourse with Abyssinia, would readily use the book-form for the Qur'ān. Along with the latter the roll-form seems also to have been known,¹²⁰ which may have come to Arabia equally well from Egypt where the writing-material (papyrus) suggested it as the ideal form, as from Mesopotamia and Persia where parchment and skin rolls were in use. A later epigone of this kind, a roll of Traditions (*ṣaḥīfa*) of papyrus, 183 cm long of the middle of the third century A. H., is preserved in the papyrus collection of the University Library of Heidelberg.¹²¹

If we may assume that the Arabs had already at an early period at least the rudiments of book binding among them, it is certain that this art received a great impetus from the ancient leather industry which had been on a high level in South Arabia from quite an early period. From AL-HAMDĀNĪ¹²² we learn that Sa'da, later also famous for its leather, even in the days of darkest paganism

was a land of tanners. The Persians, who had liberated South Arabia from its Abyssinian conquerors about 570 A. D. only however to incorporate it in their vast empire, probably contributed most to develop and raise the leather trade. IBN AL-MUJĀWIR¹²³ records that they built tanneries in every new town they founded. Tanning in any case assumed from that time on such a development that the raw material, the hides, were brought even from Kirmān in Persia, Zayla' in Africa and other lands, was tanned, and the fine Yemen leather exported as far as to Transoxania. Only the closing of the frontiers and the prevention of trade brought about the decline of this flourishing industry. In addition to Jurash, Sa'da already mentioned, the Morocco leather of which went to the Yemen and Hijāz, and Najrān the leather factories of which provided the main business and exports of the country,¹²⁴ Zabīd was particularly noted for its red kid-leather¹²⁵ while San'ā, where there were for example no less than 33 tanneries working in 381 A. H. (991—92 A. D.), produced white and yellow striped Cordovan leather which rivalled in the market the celebrated Morocco leather of aṭ-Ṭā'if.¹²⁶ In the latter town, however, they were not confined to tanning leather, but produced excellent bindings. ABU'L-QĀSIM ḤUSAYN B. MUHAMMAD AR-RĀGHIB AL-IṢFAHĀNĪ (d. 1108 A. D.) mentions with praise a book of Kūfic vellum bound in two boards from aṭ-Ṭā'if.¹²⁷ The manufacture of this particular leather was also carried on in Egypt at the beginning of the XIIIth century A. D., which had always had a flourishing leather trade, and continued to export a great deal under Muslim rule.¹²⁸ People from the Hijāz had settled in the Hārat al-Ḥusayniyya before the Gate of Victory in Cairo and built tanneries here, in which leather was manufactured after the style of that of aṭ-Ṭā'if.¹²⁹ The bookbinder and geographer AL-MUQADDASĪ (wrote in 985—86 A. D.), who on one of his long journeys visited South Arabia and practised his handiwork there is proud of having received a rich reward for his fine bindings which aroused admiration, sometimes as much as 2 dinārs for a volume of the Qur'ān; good bindings were therefore much esteemed at this time in the Yemen. Al-Muqaddasī also mentions a noteworthy point of technique. The quires were glued together and the volumes cased with wheat-starch¹³⁰ as in Egypt, and when Muqaddasī enquired for the asphodel paste (*ashrās*) with which he was familiar, which was used in Palestine, the druggists knew nothing of it. In Yemen only paste of wheat-starch (*nashā*) was known.¹³¹

If the existence of an excellent raw material formed a basis for the prosperous development of the bookbinder's art, it was obvious that with the increasing power of the Muslim empire, the splendour of the bindings and their decoration would also grow. What Christians, Manichaeans and Zoroastrians had done in this respect was as far as possible surpassed by Muslim artists. Particularly in 'Irāq (Mesopotamia) and Andalus (Spain) special stress was laid on the binding of books.¹³² In Spain, Malaga was above all a treasure-house of exquisite leather-

work.¹³³ Private collectors and the really grandiose magnificence of Muslim princes (who encouraged the foundation of great libraries) contributed not a little to this unparalleled development of the art of book-making in the Middle Ages.¹³⁴

We gain some idea of the book production of this period when we learn that a copyist could copy 100 pages in a day and a night.¹³⁵ Fantastic prices were paid for valuable literary works, especially autograph copies by the author,¹³⁶ and a gold *dinār*, the amount of rent for example of a wine-bar for a whole year,¹³⁷ seems to have been the average price for one of the better books.¹³⁸ The business of the *warrāqūn* who were usually paper-makers and dealers, copyists and book-binders in one and also supplied pens and ink,¹³⁹ flourished. Their shops formed the rendezvous of the cultured classes¹⁴⁰ just as in ancient Rome the literary connoisseurs met in the booths of the *librarii*. Booksellers and paper-makers had their own sections in the bazaars like the other trades.¹⁴¹

That we hear as early as the third century A. H. of masters of the binder's art is in these circumstances not surprising. AN-NADIM¹⁴² mentions in 987—88 A.D. a famous book-binder Ibn Abī'l-Ḥarīsh who worked in the library of al-Ma'mūn (813—33 A. H.), also Shifat al-Miqrāḍ al-Ujayfī, Abū 'Isā b. Shīrān, Dimyāna al-A'sar b. al-Hajjām, Ibrāhīm and his son Muḥammad and al-Husayn b. aṣ-Ṣaffār. None of their bindings have survived; but we have occasional references to valuable bindings of this period. The followers of al-Ḥallāj possessed books of Chinese paper, partly written in gold ink, cased in satin and silk and bound in fine leather.⁷⁹ Allāh's book, the Qur'ān, in particular was bound in splendid covers apparently in imitation of the beautifully bound liturgical books and Holy Scriptures of the Christians. For example in 1174 A. D. Saladin sent to Sultan Nūr ad-Dīn Maḥmūd as a present along with other valuable gifts five Qur'āns, one of them in 30 fascicules bound in blue satin enclosed in sheets of gold and provided with golden clasps, on which were engraved inscriptions by the hand of Yānis; the second, written by Rāshid, was bound in pistachio-coloured satin and contained 10 fascicules, a third, written by the celebrated calligrapher Ibn al-Bawwāb, was in one volume provided with a golden clasp.¹⁴³ For such precious Qur'āns, coverings of no less value were prepared. Thus the jurist Abū Ṭāhir (d. 1335 A. D.) had an embroidered satin covering costing 4500 dirhams prepared for the copy of the Qur'ān in Damascus, believed to date back to 'Uthmān.¹⁴⁴

Unfortunately almost nothing has survived of these bibliographical treasures. When we read in the historians that the library at Tripolis, said to contain 3000000 volumes, was burned by the Crusaders¹⁴⁵ or that that of the 'Abbāsids was destroyed in Baghdād when the Mongols stormed it¹⁴⁶ or how the great library in Alamūt, the residence of the Grand-Master of the Assassins perished in the flames in 1257 A. D.¹⁴⁷ or lastly how the rich library of the Mosque of the Prophet in al-Medīna was destroyed in 1237 A. D. through the carelessness of a sa-

cristan who dropped a lighted candle in it,¹⁴⁸ we can have some idea of how many precious volumes have perished through stupidity or malice and we see how it comes about that almost nothing except a few manuscripts of the Qur'ān has survived to our day from the early centuries of the Hijra. The fate of the library of the Fāṭimids in Cairo was not much better. At the sack of this, the most important library of the Muslim world, in 1068 A. D. the precious leather bindings were torn from the manuscripts to make shoes for negro slaves; the leaves of the manuscripts were simply burned and what escaped the flames was covered with dirt by the wind and blown into heaps, which could still be seen near the ruins in Maqrīzī's time and were known as the „mounds of books",¹⁴⁹



Fig. 16. Front-Cover of an inlaid Qur'ān binding (Berlin, Kaiser Friedrich Museum).

It may seem to be a bold undertaking to devote a special chapter here to early Muslim bindings, but we do still possess such bindings or at least fragments of them, for which we have again to thank the almost inexhaustible soil of Egypt.

Of really first-rate importance in this connection is the splendid binding of cedar-wood with a mosaic of ivory, bone and different coloured woods fastened on it and in part inlaid, in the Kaiser Friedrich Museum in Berlin, which F. SARRE has published.¹⁵⁰ The upper cover 49,3 × 67 cm (fig. 16), the original length of which Sarre puts at 95 cm — of the back board only the middle part is preserved, — is closely connected by its ornamentation with the art of the contemporary Ṭūlūnid period. The outer border of the row of arches — two strips with intersecting zigzag bands — recalls the same pattern on Coptic bindings, for example, British Museum Papyrus IV (p. 36), and is presumably taken over from the latter, while the architectonic *motif* of the row of arches, as SARRE points out, is frequently used to

ornament the divisions between the Sūras in contemporary manuscripts of the Qur'ān, although not in the same typical form (cf. p. 22).

There seems to me to be no doubt that this cover was made in Egypt and I shall give below further examples of the use of wood for bookbinding.¹⁵¹ As we shall see later, in this land by no means rich in wood, papyrus pulp was generally used to make book-boards. The three Qur'ān bindings discussed on p. 44 ff. are not made of papyrus pulp, but cedar wood was used instead and covered with leather. When in this case we have no leather but the cover itself has the ornamentation put directly upon it, this seems to me to be a further development quite natural on Egyptian soil, where we find the technique of making mosaics from different coloured woods, ivory and bone on an extraordinarily high level even from the New Kingdom, as the very recent finds from the tomb of Tut-ankh-amon have shown.¹⁵² In dealing with large formats such as we have in the Qur'āns for mosques it was a very natural idea to use ornamented covers of wood, papyrus millboard being quite unsuitable for these, as the heavy body of the book would in quite a short time break down such brittle material. In spite of a considerable thickness many smaller book-covers of papyrus pasteboard with leather covers have not been able to resist destruction.

If, as a transition to the leather bindings, I first of all briefly discuss a few types of those Coptic bindings made entirely of papyrus millboard, which probably all came from monastery workshops,¹⁵³ this is because early Muhammadan bindings show as regards form and technique some relation to Coptic bindings¹⁵⁴ in which the leather covers are decorated. The latter fall into the following groups:

1. COVERS WITH SEWN LEATHER APPLIQUÉ WORK. The best representative of this group is still the splendid board from the Fayyūm, Inv. No. 34 of the Rainer Collection, which TH. GOTTLIEB has fully discussed and reproduced and allotted to the sixth century A. D.¹⁵⁵

The back board which measures 26,5 × 20 cm is reproduced on Plate 16. Here we have a leather cover, stretched over papyrus pulp, consisting of a piece of dyed skin,¹⁵⁶ which shows a pattern cut in fretwork and is sewn with chain stitches on a foundation covered with gold leaf and rolled pieces of skin averaging 2,5 cm × 11,5–12 cm laid one over another in a criss-cross pattern. The same technique but of a different pattern is found in a binding in the Pierpont Morgan collection (M. S. IV), the front cover of which is reproduced by H. HYVERNAT.¹⁵⁷ The cover is supposed to belong to the VIIIth–IXth century A. D. Here again above and below the square centre we have a right-angled strip of ornament. The upper part is divided into five fields by strips across, the two outer each have a rosette, the central a cross, while the second and fourth are filled with two interlacing zigzag lines. The sole ornament in the lower strip is a double band that forms circles

around circular knobs.¹⁵⁸ The square central area has two intersected crosses enclosed in a circle, which are adorned by a quatrefoil in the centre. The spaces between the circle and square are filled with four heart-shaped leaves as in Plate 16.

This appliqué work was by no means confined to the bindings or even first used for them. GOTTLIEB at the end of his description of the Vienna binding Inv. No. 34 has already called attention to the exactly similar leather appliqué work on Coptic shoes of the VIth—VIIth cent. A. D., which came from tombs at Akhmīm.¹⁵⁹

The Rainer collection of papyri also possesses two fragments of shoes which are ornamented by the same process. The one, Inv. Ar. Pap. 10150 (Plate 17a), measuring 9,5 × 6,9 cm, still possesses traces of the papyrus millboard of which, however, only two coarse pieces 1 mm thick fastened crosswise still exist. On this papyrus foundation, the applied piece of crimson calf leather underlaid with gilt calf-parchment was tied with dark brown threads and embroidered with dark blue silk. The elaborate tendril-pattern with sleeping birds recalls the specimens illustrated in H. FRAUBERGER, on Pl. IX, 32, 33 and XX, 86, but is much more finely composed. As a *terminus ante quem* for the date I would propose the cessation of papyrus-manufacture, i. e. about 950 A. D.; that this artistic work could be very much older, I do not believe. The second specimen, Inv. Chart. Ar. 28003 (Plate 17b), is decidedly later. It consists of a piece of paper-pasteboard 7 × 5,5 cm, 1 mm thick, which is made up of blank leaves and to make it stronger has been sewn together with thin threads. On this pasteboard is laid the calf-leather appliqué work, which lies upon gilt calf-parchment and shows a gazelle among tendrils, about to spring on a tree. The gazelle is sewn on it with blue silk, the tendrils with yellow silk embroidery and in places stitched with thin linen thread. If it is difficult to ascertain a date in this case in view of the lack of definite data, one can assume from the kind of paper that the specimen can scarcely have arisen before the end of the tenth century A. D. and is in any case much later than the shoe-covers published by FRAUBERGER. The high degree of technical excellence and the fine taste in the choice of decorative motives, which we find in an equal degree on shoes and bindings, betrays in any case a training through many generations, which we value all the more highly when we remember that the worker had only the simplest tools at his disposal, with which to do the cutting out and the still more difficult embroidery. We have, however, to do with an art which had reached an equal height of perfection in Egypt by the second millenium B. C. Among the very perfect specimens of leather work found in the Valley of the Kings, is a quiver from the tomb of Meherpra, which is ornamented with artistic appliqué work of differently coloured leather (rose, green, white and black)¹⁶⁰ and from the tomb of Thutmosis IV, comes a small ornament embroidered and cut out of leather, on which we already have a square filled with two opposed palm-leaves, spirals attached to a vertical stem.¹⁶¹

2. BINDINGS WITH LEATHER APPLIQUÉ AND REPOUSSÉ WORK. The most important specimen is the binding P. 14018 from al-Ushmūnayn of the papyrus collection in the Staatliche Museen in Berlin (Plate 18), which H. IBSCHER¹⁶² and P. ADAM¹⁶³ have already made the subject of thorough examination. The binding consists of two pieces (32,5×27 and 33,8×14 cm) and is decorated by the same process and with quite a similar pattern to PER. Inv. No. 34, but the ornamentation of the back, 5,6 cm broad, is not done in appliqué work like the Vienna volume but in repoussé work with a three lined iron.¹⁶⁴ Lines stamped with this tool were also used for the outer border, sometimes to enclose or adorn the ornament cut out, which was relieved with large and small circles stamped out with a hole-iron and, as ADAM recognised, also underlaid with thin gilt layers. The fragment, 9×5,8 cm, PSR. 1241 of a leather covering drawn over papyrus pasteboard with a repoussé lined border and parallel slits, through which a still well preserved vellum band 4 mm broad is drawn, also belongs to a very similarly worked back cover. On the left margin are still to be seen remains of the appliqué work of the centre. It is preserved in the papyrus collection of the University of Heidelberg.

3. BINDINGS WITH LEATHER APPLIQUÉ WORK AND INCISED WORK. A very interesting specimen (Papyrus IV) of this group is in the Mss. department of the British Museum and has been fully described by H. IDRIS BELL.¹⁶⁵ The leather covering of the binding measuring 12,5×18,2 cm belonging to a papyrus codex, is placed over papyrus millboard, which from traces of writing on its component leaves seems to belong to the VIIth cent. A. D. The front cover (Plate 17c) has a geometrical lined ornament¹⁶⁶ incised with a sharp instrument, in which the noteworthy features are two intersecting zigzag bands and a series of rhombuses separated by two parallel lines. The outer frame is formed by broad strips of leather stitched on with narrow little thongs of leather. A similar narrower strip stitched on parallel to the long side divides the central area into two unequal rectangles; the back cover is plain except for the strip of leather applied in the same way.

4. BINDINGS WITH INLAID FRETWORK, REPOUSSÉ WORK AND PUNCHING. The finest specimen of this is a binding in the possession of H. IBSCHER (Plate 19a) which occupies a special position both on account of its decoration and its method of manufacture. This splendid specimen has already been fully discussed by P. ADAM¹⁶⁷ and illustrated in a drawing which also contains an attempt at a reconstruction. This binding is of such particular importance for its relation to our early Muslim bindings that I must once more go into it very fully. The binding, of which only the front cover with the back and flap has survived, has been restored and completed by P. ADAM. Under careful examination the old leather parts can be distinguished from the new additions even on Plate 19a.

The front board 40×32 cm which was made of papyrus pasteboard, of which nothing now survives, is covered with coarse-grained brownish red kid-leather, which stretched 2,6 cm over on the inside of the board. The decorations on the cover consist firstly of an outside frame with three hammered lines. Next comes a plain strip 1,4 cm broad, then a series of stamps 1,2×1 cm in size, enclosed by four stamped lines outside and three inside. These stamps form two concurrent opposed spirals which in their con- and divergence form a continuous series of heart-shaped configurations filled with trefoils, a pattern which from ancient mosaics we know very well to have been used as a frame border¹⁶⁸ and which is found in a very similar form on Muslim bindings. This series of stamps is separated from the central area by a strip 1,5 cm broad, which is plain. The inner field is framed by a series of parallel slits enclosed by three stamped lines on both sides, such as we see on Plate 18;¹⁶⁹ through the slits strips of parchment were drawn. The very marked delineation of the inner area by this arrangement of parallel slits is still further emphasised by three smaller stencilled circles which are placed at the corners and fastened behind with thin gilt plates. A similar arrangement of parallel slits encloses the central area 19,2×12,8 cm in size which is inside this inner field. The space between the two is filled with a riband prepared from a three line tool. The ribands are ornamented with short striped parallel lines. The central area strikes one at once with its asymmetrical decoration, a lozenge-shaped figure, the left half of which is formed by two segments of a circle, which are intersected by two successive segments of circles in the opposite direction. The centre is occupied by a circular mandorla.¹⁷⁰ This ornament is again formed by a series of parallel slits which are enclosed on either side by a three line pattern done with a tool. The angles between the lozenge and the outer plaited frame, are relieved with narrow bands cut out with a knife, which are connected by little strips with the outer frame and, stamped with the three line tool, expand themselves to a long rectangle. The inner surface of the lozenge is ornamented with little stencilled circles and heart-shaped openings. These also have gilt plates inserted below them like the whole of the openwork.¹⁷¹

Along the margins of the board, at almost regular intervals in three places, are three holes forming a triangle, which held the eyes through which plaited thongs were drawn to close the book. The 4 cm broad back is apparently plain and pasted over with coarse blue linen. The back of the book was also stiffened with this material, which came well over on to the boards on either side. On the edges the binding had three flaps with an overlap 3,2 cm broad, which covered the edges. Of these only the one at the top has survived. It is 29,9 cm long and 2,6 cm broad, hammered on the edges with a three line tool and within this border are three areas bounded on the inside by six vertical lines with a series of the same stamps as adorn the cover. It is beyond question that the two other

sides had also similar flaps, as on the right at the corner of the surviving flap there is still fastened a little piece of leather from the adjoining flap, which was fastened to the cover by a plait-like woven thong, which was threaded through the overlap — a piece 2 cm in size is still left. Traces of sewing on the overlap of the leather of the cover further suggest that there was a flap there also. These flaps were, as we have mentioned, intended to protect the edge and are found similarly made on an early Muslim Qur'ān binding (see p. 45).

The binding just discussed, which probably belongs to the ninth century A. D., shows a very different principle of dividing the surface of the cover from the volumes previously discussed. The surface hitherto had been broken up by two cross-strips forming a quadrilateral in the centre which was splendidly ornamented, but here we have for the first time the division of the surface into long rectangles placed within one another and running parallel to the edges. This is already the transition to the Muslim bindings. The central area is here also emphasised by the deliberate asymmetry, perhaps even more than in bindings with leather appliqué work. But this principle of emphasising the central area by an effective ornament is also found in an early Muslim binding (see p. 47). It of course remained the definitive type for the decoration of later Muslim bindings.

To this group also belong two fragments of bindings which were brought back by the German Turfān expedition from Chotscho and are exhibited in the Anthropological Museum in Berlin. The one Kat. No. I. B. 6268, 4.6 × 9 cm, of the VIIIth—IXth century, has on the front cover fine filigree work laid upon gold leaf and surrounded by stamped lines and stencilled circles. The back cover is simpler and ornamented with stamped rectangles with diagonals. The centre seems to have been occupied by a stencilled circular ornament. A. V. LE COQ, who published the piece¹⁷² rightly emphasised that the fragment seems to point to Egypt in technique and in decoration. In view of the active intercourse between Central Asia and Egypt, it is not going too far to say that in all probability this typically Egyptian leatherwork was taken from the Nile to Eastern Turkistān. This is all the more probable as, in the Buddhist painting of Turfān, there are undeniable echoes of ancient Egyptian forms of art,¹⁷³ which can only be explained by close contact between the two art-centres. In the splendid fretwork laid on coloured leather or paper, which ornaments the covers and the inside leaves of Persian bindings of the Timūrid and Safawid period — they have been aptly described as leather filigree work — this fretwork technique reached its zenith (cf. Plate 99). The second fragment to be mentioned, Kat. I. B. 6267,¹⁷⁴ consists of parchment dyed violet-red, ornamented with punches, and also came from the Manichaean building in Chotscho. The series of stencilled circles on the right side may have lead up to fretwork.

5. BINDINGS WITH LACED, STAMPED OR PUNCHED WORK. J. v. Karabacek has already called attention briefly to the only example of this group so far known (Rainer Collection Inv. Gr. Pap. 30502, Plate 17 d).¹⁷⁵ This board which is 1 cm thick, is, like P. Berol. 14018, made of two pieces half as thick, which are made of rough papyrus millboard and covered with reddish brown sheepskin. The outer half is entirely covered with leather with a 3,1 cm broad overlap on the inside, while the inner cover is only edged with leather and has a well-made piece of papyrus pasted on the inside as an end-paper,¹⁷⁶ which also covers the 3 cm broad leather margin. Both millboard covers were fastened at the corners by 2 mm broad knotted leather laces, which also tied the leather cover, as the surviving corner clearly shows.¹⁷⁷

The fragment 14×10,1 cm in size represents at most a quarter of the original size. The decoration of the cover is simple but very effective. Four punched lines form the outer frame, then comes an inner frame, a series of parallel slits enclosed by three hammered lines on the sides and two above and below. Through the slits a strip of parchment 0,5 cm broad was drawn which is still partly preserved. The decoration of the central area is composed of diagonally drawn lines punched and decorated with double circles. The three angles in the corners were in part filled with quadrangular punched impressions 1 cm wide the pattern of which is no longer recognisable. The edge of the side was also stamped with the punch.

6. COVERS WITH INCISED WORK WITH STENCIL PATTERNS. Of the best binding of this group, P. 14019 (Plate 20) which the papyrus collection in the Staatliche Museen in Berlin possesses, unfortunately only the two covers 32,4×26,2 and 23,5×18 cm survive, but these are not complete.

The binding has been published by H. IBSCHER¹⁷⁸ and P. ADAM.¹⁷⁹ The black leather covering is here again stretched on a pasteboard 1,2 cm thick, the topmost leaf of which comes from a Coptic liturgical manuscript and is dated by C. SCHMIDT¹⁸⁰ in the VIth—VIIth century A. D. IBSCHER has suggested, probably rightly, the date of the volume to be about 800—850 A. D. On the inside of the cover a fine yellow parchment leaf was pasted, which seems to have been blank; a portion 5×6,8 cm in size still survives. The outside of the cover in the partition of its surface recalls P. 14018 and the Vienna binding Inv. No. 34. We have first of all an outer frame of three punched lines which enclose a blank 1,3 cm broad; then comes a broad frame incised with the knife, consisting of a zigzag line between two lines surrounded by three punched lines, which divide the inner area into a square central area and two rectangular fields. The former is decorated with a St. Andrew's cross executed in incised work, into which a square is woven so that a second upright cross is formed, the ends and centre of which are emphasised by stencilled quatrefoils. The other areas are also enlivened by stencilled larger and smaller circles. These, like the quatrefoils, had gilt plates below them.

The binding of Or. 3367 in the British Museum¹⁸¹ of which I have a photograph before me, probably should be discussed here. The central area has almost the same decoration as P. Berol 14023 but is adorned with punched circles, apparently originally inlaid with little plates. The upper and lower rectangle are filled with rhombuses; the outer frame is formed of two parallel lines with incised bars, — recalling the lacing on P. Berol 14018 and PER. Inv. No. 34, which is also recalled by the partition of the surface, — a zigzag band forms the framework of the central area; the areas left right and left of the central area are adorned with a network of lozenges and bounded inside by the same border as the outer frame. The inside of the board is covered with a leaf of parchment which bears a Coptic text.

7. BINDINGS WITH STAMPED AND PUNCHED WORK. This group is so richly represented that I must confine myself to a brief description of the most important specimens. First place must be given to the five fragments of a binding in the papyrus collection of the Staatliche Museen in Berlin, which I have taken together under the inventory number P. 14023 and have already mentioned above.¹⁸²

The first thing that strikes one about this is the pronounced horror of a vacuum which has filled the artist. The principal ornament, an artistic knot arrangement hammered with a three line tool, two interwoven knots such as we know from Coptic stuffs,¹⁸³ is decorated with double circles and the so-called running dog pattern; in the angles and squares thus formed, very finely cut punches are stamped; the centre has a round mandorla; this knot is surrounded by a circle, which reaches up to the margin of the cover and is surrounded by a double square. The angles here are also filled with punches, the spaces between the circle and the knot which forms an eight pointed star are filled with segments of circles enlivened with a square stamp. Richly executed work and punching of the triangular areas are also found on the two binding covers P. 14017 and 14022 of the same collection.¹⁸⁴ A specimen, allied to P. 14023 in the principle of its decoration, is in the British Museum;¹⁸⁵ it is remarkable for the rich use of different stamps with geometrical figures, intricate work, rosettes and figures of animals.

Quite remarkable work is also shown in the binding of the manuscript of Coptic Homilies Or. 5001 in the Dept. of Or. Mss. in the British Museum, which has been published by Sir E. A. WALLIS BUDGE.¹⁸⁶ The front cover has an outer frame of four stamped lines; the area enclosed by these is divided into a square central area filled with an artistic knot representing a cross placed obliquely with an interwoven square, and two other rectangular areas above and below. The latter have a vine-leaf ornament, interrupted by animal figures in round stamps; the bands forming the cross are ornamented with stamped double circles and those of the square with conventionalised trefoils; in the centre of the cross is a dove, surrounded by four round stamps with swans, the triangular areas are filled with

round stamps with antelopes, and the square areas formed by the intersection of the cross and the square with double circles and double lined lozenges. The inner area is enclosed by a square with hammered lines. The outer strips are separated from the central area by three hammered lines. The back cover shows an artistic network of lozenges with punched areas. Of quite special interest, however, is a fragment of a binding 4.1×3 cm of the papyrus collection of the University Library in Heidelberg PSR. 1240 (Plate 19c). The left margin of the strong brown leather binding is notched, close to the edge, then come three hammered lines followed by a series of rhombuses filled with trefoils.¹⁸⁷ The triangles are ornamented with halved trefoils (half-palmleaves). Five lines then form the transition to a perpendicular row of round stamps which contain a standing oryx antelope. On the right then come two stamped lines, still quite recognisable. Similar rows of small stamps placed beside one another and separated by parallel lines are of course also found on English and French bindings of the XIIth—XIIIth centuries A. D.¹⁸⁸ The same kind of decoration also came to Germany. Perhaps it was brought from the east by the Crusades, with which GOTTLIB also connects these bindings. The transition from the boards with simply stamped punches to those with a series of punches seems to be found in one of the few completely preserved old Coptic bindings, that of the papyrus Codex Or. 5000¹⁸⁹ of the British Museum (Plate 19b). Here we have in the two areas above and below the central area which contains an eight pointed star, a series of round stamps interrupted by small punched circles, which show the same animal as PSR. 1240.

8. BINDINGS WITH INCISED AND PUNCHED WORK. An example of this is a fragment of a binding 15.6×14.1 cm in the papyrus collection of the Staatliche Museen in Berlin, P. 14021, which belonged to a board probably originally measuring 22×30 cm, which has been reconstructed and discussed by P. ADAM.¹⁹⁰ On the inside there are still remains of papyrus millboard. The reddish-brown leather covering shows the same partition of the area as we have already seen on the covers with appliqué work and on P. Berol. 14019, an almost square central area with incised lines which give an accumulation of rhombuses enclosed by an incised lined frame; the central four squares are divided by two intersecting lines into four lozenges, the ornamentation on the other is done with the hole-iron. The transition to the rectangular areas above and below fitted into a network of lozenges is formed by two parallel lines with incised cross bars. The binding may belong to the IXth century A. D.

9. BINDINGS WITH TOOLED WORK. A very simple representative of this group is I no. Gr.Pap. 30503, the fragment 12.5×6.3 cm of a binding in the Rainer collection of papyri. The thin fine grained reddish-purple calf- or lamb-skin, is stretched over

papyrus pasteboard and has only two bands 5—7 mm broad, each of 4 blind tooled lines, parallel to the edges. Presumably we have here a volume for everyday use, in which motives of economy naturally avoided a richer decoration. This is probably also true of P. 14028 in the Berlin collection of papyri. The piece of a binding 27,5×31,5 cm consists of papyrus millboard, over which a brown leather cover was drawn, completely filled by a network of lozenges in three stages formed of intersecting blind tooled lines. The overlap 2×2,3 cm broad is, as in PER. Inv. Gr. Pap. 30502, fastened to the millboard by small leather thongs, which are knotted on the inside.

10. PAINTED COVERS. Nothing remains of the splendid codices bound in green, red, blue or yellow leather which in the middle of the fifth century A. D. used to be carried in public processions of Byzantine emperors, which were adorned with the painted portrait of the Emperor and richly ornamented in gold,¹⁹¹ but there survive however among Coptic bindings a few fragments, the leather covers of which are not ornamented in any of the ways above described but have an ornament painted upon them in black ink. One such specimen in the British Museum made after 716 A. D. has been fully described by H. I. BELL.¹⁹² I should like to quote four further examples of this peculiar decoration of bindings from the papyrus collections of Vienna and Berlin. They show us that the ornamental decoration of the cover was done in two ways: the ornament was either placed on it in ink with vigorous strokes of the brush or it was left in the basic colour on the leather covering, which was painted with black ink.

The former method is illustrated on the leather binding P. 14016 of the papyrus collection of the Staatliche Museen in Berlin. It measures 30,8×22,5 cm and is 1,3 cm thick and consists of papyrus millboard, which like P. 14018 contains inside it quite large coarser pieces as filling, while the outer layers are of better quality. Over this millboard is stretched a cover of brown leather; the inside has a piece of papyrus pasted over it, of which pieces still survive. Judging from the remains of Coptic writing preserved on one of the pieces pasted on the right side the volume belongs to the VIIth—VIIIth cent. A. D. The back 4,5 cm broad is, as in H. IBSCHER'S binding, covered in the inside with coarse blue linen which stretches some distance over on the covers. The leather covering has in the central area, which is enclosed in a thick black rectangle, a cross with curved arms within a double lined circle. The central area is intersected diagonally and through the middle by straight lines, which recall stylised branches and is enclosed in an outer frame which consists of a system of parallels connected by cross-bars and arcs arranged in a continuous series with a chessboard pattern in the corners and bounded on the edges by a thick black line. The reddish brown leather cover of the complete binding, 18 by 15 cm, Inv. Gr. Pap. 30501 in the Vienna papyrus

collection, was worked in the same way and pasted upon papyrus millboard made of rough blank papyrus leaves pasted together. The pattern of the cover is unfortunately no longer legible on the much darkened leather. A double lined zigzag pattern is still quite recognisable on the overlap of the inside.

The second method is seen in a small fragment of binding in the same collection Inv. Perg. Ar. 336 (Plate 26a). Brown lamb-skin is pasted on this piece of papyrus millboard 2 mm thick and $4,7 \times 4,4$ cm large. The decoration consists of a row of pellets enclosed in two lines, with presumably a cross in the centre, the ends of which are adorned with double circles. Similar double circles are also placed between the arms of the cross.

The use of both forms on one piece is seen in the binding P. 14025 of the papyrus collection of the Staatliche Museen in Berlin of which several fragments are preserved. They are of papyrus millboard covered with brown leather. The inner side of the cover had a leaf of fine yellow parchment pasted over it. The outside has in the centre a cross of bow-shaped bars, on to which a second smaller one with narrow bars having knoblike ends is laid crosswise painted with thick brush strokes and surrounded by a double circle. The almond-shaped spaces between the former and the circle-border are ornamented with an undulating line. Only a corner fragment of the outer frame has survived. The pattern, a perpendicular cross placed in a square, is like the square outer frame which went around the whole cover parallel to the edge, left open on the brown background and defined by thick lines; the remaining surface is painted black. Between the edge and the outer frame a broad band is left blank, into which an undulating thick line runs from the outer frame.

✧ The splendid decoration of the leather cover, the various styles of which we have now seen, was in many cases accompanied by a no less rich ornamentation of the inside of the cover, which we call the end-paper. The latter, probably in order to conceal the ugly overlap of the leather cover and to give the inside of the cover a more pleasing appearance, had a leaf of papyrus or parchment pasted over it, probably at first quite plain. The less careful workmen were even content to use leaves for this purpose that had been written upon. In note 176 we had occasion to show an example, for which protocol leaves were used. Very soon, however, the discrepancy between the showy outer cover and the simplicity of the end-paper must have been found distasteful. This was remedied by putting an ornament on the leaf pasted on the inside. A fragment of a binding in the papyrus collection of the Staatliche Museen in Berlin (P. 14020, Plate 21a), a $19 \times 12,7$ cm piece of papyrus pasteboard covered with deep brown kid-leather, still has on the inside a piece of strong parchment pasted upon it, which we may regard as the precursor of our patterned end-papers. This was covered with painting now unfortunately for the most part destroyed. Only a part of the frame drawn in sepia brown and black ink, which surrounded it, still survives and shows an

intertwining and winding ribbonlike design enclosed by two thick lines such as we find as a decorative border not only on Coptic grave steles¹⁸² and classical woollen designs from Egypt¹⁸⁴ but also in similar form and use as an ornament of Coptic bookbindings, e. g. in the Pierpont Morgan volume (p. 34f.). From the remains of two lines in Coptic on the margin of the parchment, the piece, as Prof. D. C. SCHMIDT tells me, may be dated in the seventh century A. D. To a similar parchment endpaper belong also the two fragments Inv. Gr. Pap. 30504 (10,7 × 7,6 and 5,3 × 4 cm) in the papyrus collection of the National Library in Vienna (Plate 21 b). The parchment leaf of fine quality, apparently dyed saffron yellow, came from a Coptic manuscript of the sixth century A. D., as the brown writing which has been washed off shows, and was painted with black ink after the Coptic text had been washed off. Of the apparently purely ornamental design only a piece of the frame can still be seen and it shows a ribbon-like design enclosed in two broad bands such as is quite usual in Coptic texts.¹⁸⁵ The pattern is left in the original yellow on the ground painted black.

On p. 30 it has already been mentioned that according to tradition two wooden boards were used even in Muḥammad's life-time to enclose the loose leaves on which the separate sections of the Qur'ān were written. How these wooden covers were made is not here mentioned and we do not know whether they were simply two boards, which served to protect the pile of leaves or whether the covers were joined by a leather back to form a kind of case. The idea of using wooden covers in this way probably, like the form of the book itself, came from Abyssinia, where books had long been bound (and still are bound) in wooden covers. I have repeatedly found the various stages of development of this kind of binding in different collections: first the quite primitive method of tying the body of the book without the use of a leather back to the blank wooden covers by strings of gut, then the more advanced method with the back pasted on to a strip of leather which is fastened to the two boards, and lastly the wooden boards artistically covered with an ornamental leather cover and inside covered with silk or cloth.¹⁸⁶ A similar use of wooden covers in the Muslim world was until quite recently known only from the unique example in the Egyptian Library in Cairo, which among its treasures has a manuscript of the Qur'ān in format 34 × 23 cm written by the Imām Ja'far b. Muḥammad aṣ-Ṣādiq (d. 765 A. D.) now numbered Maṣāḥif No. 1, containing the first half of the sacred book of Islam on 209 leaves of gazelle parchment.¹⁸⁷ L. STERN¹⁸⁸ dated the specimen about 720 A. D. B. MORITZ, who published specimens from this manuscript on Pl. 31—34 of his *Arabic Palaeography*, puts it in the second or third cent. A. H. (VIIIth—IXth A. D.) I examined the Ms. very thoroughly on my last visit to Cairo and will now give a resumé of the results of my examination. The book is bound in wooden boards 1 cm thick, 34,3 × 20,6 cm in size, with a brown leather cover, which like the plain leather back by another

hand, is of more recent date. On the front cover, much worm-eaten, the leather cover is torn off on the outside while inside there are still remains of an older overlap, over which a brown leather end-paper is pasted. On the better preserved back cover, the leather cover survives on the outside as does the original covering and the leather end-paper inside. The outside shows rich decoration, blind tooled and punched: in the centre a mandorla enclosed by a tooled line filled with punched rosettes and circles; the outer frame is formed by a system of tooled lines and punched series of curves which are interrupted by a band of successively punched rosettes and circles. The inner corners of this frame are ornamented by a finely executed punched arabesque pattern which is four times stamped with the punch to form a lozenge. The whole scheme of decoration points to the VIIth century A. H. (XIVth A. D.) at the earliest. Although the leather covering is considerably later than the wooden boards, there can be no doubt that the latter are to be considered the original bindings of the codex.¹⁹⁹ There are however in the same Library two further manuscripts of the Qur'ān bound in the same way in wooden boards, which still bear the old leather covering. I now give a description of these two specimens; they are the two oldest completely preserved Arabic leather bindings of this kind that we possess. The one Maṣāḥif No. 188 (Inv. No. 22910, Plate 22a) now contains only a parchment leaf 7,1 × 11,6 cm, which comes from a Qur'ān manuscript in fine Kūfīc of the third century A. H. The manuscript is bound in two wooden boards, 7,6 × 12 cm, over which is stretched a very well preserved, rather coarse grained, light brown leather cover. On the outside of the two covers the latter has as outer frame an intertwining band stamped from a patterned punch enclosed by two lines in tooled work. Then comes a frame of tooled lines which contains the inner area 5,1 × 9,1 cm. This is filled with a double lined arrangement of ribands, enclosed by straight tooled lines, while the curves are stamped with a tool specially made for the purpose. The intertwining ribands are ornamented with little punched cross lines²⁰⁰ which are obviously intended to give the impression of such a band threaded through a series of parallel slits as we have already seen on Coptic fretwork (see p. 37). The area of the inner surface, broken up into triangles, squares and spherical polygons, is covered with large, punched dots. On the inside of the back cover is fastened a folding flap completely covering the 1,6 cm broad edge on three sides, which is fastened over the 1,9—2,5 cm broad overlap of the leather cover. It is tooled on the inside and outside with double lines at a regular interval of 3 mm, at right angles to the edges. The method of making this flap can be easily seen from the reproduction of the inside of the binding in B. MORITZ, *Arabic Palaeography*, Pl. 42 b. A similar overlapping flap has already been mentioned on p. 37 f. from the Coptic binding in the possession of H. Ibscher and there can be no doubt that this very practical arrangement came from the bookbinders' workshops in Coptic monasteries along with many other things into the workshops of Muslim

bookbinders. The back, 1,8 cm broad, was left blank and the binding was closed by a leather clasp now torn off, which was fastened to an iron nail in the centre of the edge of the back cover; three holes still show where it was attached. At the corresponding place on the front cover is a hole which probably held a metal knob on which the clasp running straight over the edge was fastened.

The insides of the covers have parchment leaves pasted on them, such as we are familiar with in Coptic bindings and the end-paper of the back board forms with the last leaf of the fascicule of the Qur'ān, which the binding contained, a quire, the only one that has survived out of a whole manuscript of the Qur'ān. Both parchment end-papers have been written upon; that of the back cover bears the usual formula, describing the copy of the Qur'ān as a pious donation for God's sake, which cannot be sold or purchased. More interesting to us is the text of the front end-paper, which contains a record of the donation, showing that the druggist Muḥammad b. Ibrāhīm b. Aflah bestowed the Qur'ān upon the chief mosque in Damascus in the year 270 A. H. (883—84 A. D.). How the book found its way to Egypt is unknown. From the style of manufacture and the decoration of the covers it seems, however, fairly certain that the binding was worked in Egypt.

A second similar binding is found in Maṣāḥif No. 192 (Inv. No. 25 524. Plate 22 b, c). Here we have the sixth fascicule of a Qur'ān, of 77 parchment leaves $12,4 \times 8,6$ cm bound in wooden boards covered with dark brown leather. On the overlap of the back cover, measuring $8,9 \times 13,2$ cm, a protective flap was sewn with dark green silk and worked like that of Maṣāḥif No. 188 but it has been torn off up to the stitching on the overlap. The inside of the cover has a parchment end-paper pasted on it. The front cover, $8,9 \times 13$ cm, has also a similar parchment lining which formed one sheet with the last leaf of the Qur'ān now cut off. A thin leather lining was later pasted over both end-papers. The outer decoration of the two covers is not the same as is the case in Maṣāḥif No. 188 but different, as we have already noticed in old Coptic bindings. The front cover has in the central area, $5,6 \times 9,5$ cm, enclosed by a framework done with a tool, an engraved floral ornament on a hatched ground, four almond-shaped buds, in the form of a cross, and overlaid diagonally by four cup-shaped leaves which have perhaps arisen out of palm-leaves. An allied design is found filling up the looped square on a piece of Coptic material in the Rainer Collection. The hatches are done with the knife like the arrow in the centre of the rosette. The back cover is divided into more numerous compartments. The outer frame consists of two parallel tooled lines, which enclose a strip, 7 mm broad, of hatched area at top and bottom. The central area, $4,2 \times 9,1$ cm, is divided by two parallel lines and the resulting rectangles adorned with two opposed rudely executed lotus leaves. Two triangles parallel to each other are placed on the two dividing lines in the middle and form a lozenge. The area between the leaves is again hatched with the knife. The back, 2,5 cm broad, was

stamped with a lining tool but the scheme of decoration can no longer be recognised as the back is torn and much damaged. In the centre on the edge of both the covers three holes may still be seen which held eyes for the clasp which closed it. The manuscript is carefully written in fine Kūfic in black ink, the vowel points are red and green and the verse divisions gold. From the hand the manuscript probably belongs to as early as the third century A. H. (IXth cent. A. D.).

The simple leather bindings that we have so far discussed are in rather striking contrast to the internal adornments of the contemporary manuscripts with their golden punctuation marks separating the verses, *sajda* rosettes and the splendid colours of the Sūra divisions and decorated leaves. We are not justified in assuming that the outer covering of such Kūfic Qur'āns was always so simple and unattractive. That this was not the case is evident from the fine wooden boards discussed on p. 33 f. It is only due to accident that no better pieces have come down to us from the third century A. H. What such bindings looked like may be seen from a fragment of a back-board, 7.5 × 5.5 cm large, presumably part of the binding of a Qur'ān, in the Rainer Collection, Inv. Chart. Ar. 14 100 b, c (Plate 23 a), which, to conclude from the texts which formed the material of the millboard, probably belonged to the fourth century A. H. (Xth—XIth cent. A. D.), to which period J. v. KARABACEK also dates it.²⁰¹ The fragment is of special value to us, if only because it belonged to a binding, which was already prepared in the same way as the usual Muslim bindings of to-day.²⁰² A piece 1.1 cm broad still survives of the strap of the probably triangular flap which was inserted below the front board and thus protected the book. The cover of dark brown completely dyed calfskin, of the now about 1 mm thick back cover has a lined border done with a tool. This is followed by a parallel strip of palm-leaves 95 mm broad with dots stamped at the corners; the points of the leaves are turned towards the centre and they recall a very similar frieze on a carved board from the al-Mārdānī Mosque in the Arabic Museum in Cairo.²⁰³ Only on the right, the long side, where the strap of the flap meets it, the maker has made a slip, for after using the stamp three times in the right direction, he uses it reversed. In the reconstruction proposed by J. NITTMANN (Plate 23 b) this slip is corrected. That it can only be a slip is certain from the stamps on the two other sides which show no such reversal of the punch. It may be added that the artist began the stamping of the tendril on one edge of the central area as far as the angle of the next lined border continuing the process down the other edge and so on, thus dispensing with any special treatment of the corners. This kind of punching thus gave a frame the sides of which do not meet diagonally but are at right angles to one another. The same system is familiar from wood carvings and carpets. The central area, 1.5 cm broad, enclosed in a double lined border, is filled with an artistic cross-hatched system of intertwining bands, the gaps between which are filled with dots stamped from a hollow punch. Whether these, like the dots in the palm-leaf strip,

were filled with some colour or with gold, as was later usual, it is no longer possible to tell. The adornment with dots is found in the same typical fashion on Coptic embroideries.²⁰⁴

A very similar cross-hatched system of intertwining bands is found on the outer border and back of Cod. Arab. 113 (XVth cent. A.D.) in E. GRATZL, *Islamische Buch-einbände*, Pl. II, and the outer border of Cod. Ar. I, (ibid. Pl. III). It has a surprising parallel in an English binding of the end of the XIIth century A.D. which TH. GOTTLIEB, *Bucheinbände*, illustrates on Pl. 29 and discusses in col. 45. The hatched nooses are arranged not in three but in four rows there, but on the other hand the English volume shows the typical decoration of the gaps with punched dots such as we saw in the Maṣāḥif No. 188, about 200 years older. It can hardly be assumed that this striking agreement in decoration of the English volume with the two Muslim ones is the result of chance. In view of the well-known relations between Irish-Anglo-Saxon bookmaking and Coptic-Egyptian²⁰⁵ it is much more probable that the design was borrowed from Egypt in which process perhaps the early Muslim art of Egypt, which utilises not only Coptic elements but also art traditions of the East, may have played a not unimportant part as intermediary.

The remnant of the strap of the flap 3,5 cm long and 1,1 cm broad agrees perfectly in design with the adjoining cover. It was apparently comparatively broad so that we must suppose it bore three adjacent punches of the palm-leaf border which here formed a frieze. With two the reconstruction could not be completed, as attempts shewed, because the hypotenuse of the right-angled triangle in its prolongation strikes the exact centre of the second palm-leaf punch, so that if the row of punches is symmetrically built up, as we must suppose from the example of the cover, the upper and lower palm-leaf frieze must have consisted of three punches. The hatching on the segment of the circle enclosed by the crescent in the angle on the left was made by stamping a three-lined punch in different directions. The blank area before the edge was presumably symmetrically divided by a double line corresponding to the bar across the end of the inner area. Nothing unfortunately of this has survived. The transition to the back on the other side of the cover is given by three lines in repoussé which finish off the outer margin on the left. Three further repoussé parallel lines lead up to the line-decoration on the back, which we perhaps may imagine to have been similar to P. Berol. 14018 (Plate 18). Here we may note that the maker very skilfully made up for the inequality of the spaces on either side, the result of the irregular stamping of the palm-leaf design in which the intervals were not even, by borders of little bars of varying breadth with which he filled the spaces, to restore the outer margin.

The work may have begun with the decoration of the central area followed by the making of the strips of palm-leaf. The piece is in technique and decoration far superior to the two oldest Muslim leather bindings above discussed (p. 45 ff.)

and enables us to see what heights the binder's art had already reached in the fourth century A. H.. We are strengthened in this opinion by the following specimen which likewise comes from the Rainer collection of papyri in the Vienna National Library and belongs to the same period, Inv. Chart. Ar. 28002 (Plate 24a). The cover, 2 mm thick, of sheepskin on paper millboard, now measuring $6,3 \times 16,4$ cm is torn at the side on which the back was. Probably a strip about 2 cm wide is missing. The millboard is made of strong brown sheets of paper, that have been written upon, belonging from the hand to the IIIrd–IVth cent. A. H. (IXth–Xth cent. A. D.). The now almost black leather covering overlaps the pasteboard by 6–9 mm and the latter has an empty sheet of paper pasted inside of it as an end-paper. The volume was obviously in constant use and has also suffered from moisture. It was of the *Safina* form usual in Qur'ān manuscripts; the cover was later folded in the middle and used as a binding for a note-book or something similar and is remarkable for its rich decoration in three styles.

The outer frame consists of two lines stamped close to the margin, followed by another three parallel to them. This system of lines encloses an arrangement of punches 8 mm high in a square, which form a similar pattern to that which we saw in IBSCHER'S volume. Here, however, the heart-shaped compartments are filled alternately with palm-leaves and trefoils. This strip of decoration 8 mm broad is ended towards the centre by a single and a double tooled line, while the central area itself is enclosed in a tooled line. The inner area is divided into two rectangular areas $1,8 \times 2,3$ cm and $1,9 \times 2,4$ cm, which again are enclosed in a tooled line and each separated by two lines from the rectangle in the middle, $2,3 \times 7,9$ cm, the two little rectangles are filled with six punched circles of 5 mm diameter arranged round a similar seventh one in the centre; they have the legend well known on Arabic seals *Allāhu hasbī*. „God is sufficient for me.“²⁰⁶ The corners of the rectangles as well as the spaces between the circles are ornamented with punched dots, which were perhaps once covered with leaf gold or paint. The long rectangle in the centre has two mandorlas with the points turned towards one another cut out of leather, which are cross-hatched by tooled lines and have the same circular ornament in the centre as we have seen it in the two small rectangles on the sides. This rectangle also has dots stamped in the corners.

A counterpart to the less carefully executed arrangement of stamps on Inv. Chart. Ar. 28002 is found on the border of the binding of Inv. Chart. Ar. 28001 (Plate 25a). The worm-eaten board of paper pulp, $10,6 \times 11,6$ cm, torn at the bottom and originally much larger from the remains of writing in the pulp belongs to the IVth–Vth cent. A. H. (XIth–XIIth cent. A. D.); only a fragment, $2,6 \times 5,2$ cm of the dark brown calf covering has survived with the overlap. At a distance of 8 mm from the margin is a frame 1 cm broad enclosed in two tooled lines, which is made of regularly arranged punches, which form an alternating pattern of heart-shaped leaves filled with trefoils, such as we have already seen on IBSCHER'S volume and

is again found on the end-paper Inv. Chart. Ar. 14100. The same pattern was frequently used for margins on Muslim bindings; I quote only one example, E. GRATZL, *Islamische Bucheinbände*, Pl. XIV. As the fragment still shows a tiny piece of the corner, it is to be seen that likewise here no attempt was made to treat the corners in a special way, any more than in Inv. Chart. Ar. 14100b, c. A blank area 3 mm broad is followed by other two tooled lines, which enclose the area, apparently hatched, probably filled with a geometrical ornament.

We have seen above (p. 43 f.) that the rich ornamental decoration of the outside of Coptic bindings was often accompanied by a no less tasteful decoration of the inside, which sometimes had painted leaves of parchment pasted upon it (the end-paper). The remains of such parchment leaves have survived to us from the Muslim period also. One, Inv. Perg. Ar. 294 of the Rainer Collection, is made of strong saffron yellow parchment with rich decoration unfortunately much destroyed. This did not, however, extend to the margin but the artist left a blank strip about 9 mm broad parallel to the edge, of which a piece still survives on the extant fragment. The object of this space left blank is fairly clear. The overlapping part of the leather cover was pasted over the end-paper, which really was much rarer than the reverse process, cf. p. 39. As, in view of the bad state of preservation of the piece, 18 × 6,3 cm in size, it is impossible to reproduce it in colours, I give in fig. 17 a tracing of the polychrome ornament, which I owe to J. NITTMANN. Here again we must suppose that, in keeping with the usual Coptic leather covers, there was in the centre a polygonal ornament, framed in two double lined concentric circles with an intertwining band running between them, the whole placed in a star formed by two interlacing squares. The outer frame was formed by a zigzag band with a similar filling of the triangles to that which we see in the corners of the squares²⁰⁷ surrounded by probably two bands of lattice work enclosed in double lines. The area between the outer frame and the star seems to have been filled with scattered animals — a bird can still be recognised. The leaf must, from the ornament, have been originally of considerable size and have belonged to a manuscript of the largest format. To heighten the effect of the colours, the painted surface was in places covered with a thin transparent coating of varnish, a technical artifice, which was later also popular and much used.²⁰⁸ Thus Inv. Perg. Ar. 335 of the same collection (Plate 26d), a yellow piece of sheepskin, 7,8 × 4,3 cm, shows a line ornament in black Indian ink on a bright red ground, thickly laid on. The drawing and the painting are covered with strong varnish. A still more complicated process is seen in Inv. Perg. Ar. 357 (Plate 26e) which has already been reproduced and discussed by J. V. KARABACEK²⁰⁹ and comes from the find of al-Ushmūnayn. The lambskin, 7,5 × 6,5 cm, originally white, thin and dyed with alum, was first covered with a glossy black lac, which now shows a crackly surface. On this ground the design was executed, the frame of which is a sulphur yellow and bright red system of lines; the inner area is

divided into squares by bright red lines, the diagonal dividing similarly coloured strokes of which are crossed by a double spiral of bright red and sulphur yellow. The design which covered the whole surface in an endless pattern is executed in thick colours, almost of the constituency of paste, and covered with a varnish, which, however, is not glossy. As remains of papyrus still stick to the other side of the fragment there can be no doubt that it is a portion of a papyrus board and, as J. V. KARABACEK has already observed, is at the latest of the tenth century A. D. In disagreement with KARABACEK, who saw in our fragment the remains of a painted and lacquered book binding and drew far-reaching conclusions therefrom regarding the age of lacquered bindings, I think the piece is only one of those vellum end-papers such as are frequently used to ornament the inner side of the binding.

When papyrus and parchment were replaced as writing materials by paper, the latter was naturally also used in place of sheets of parchment and papyrus, to cover the inside of the board and was painted with artistic decorations, just as the parchment endleaves had been. I have chosen a few specimens from a whole series of such brightly painted end-papers. P. Berol. 12802 (Plate 28a), a piece of paper 4.5×7.5 cm from the papyrus collection of the Staatliche Museen in Berlin shows an artistic geometrical figure, unfortunately not completely preserved, composed of segments of circles and done with the compasses. The design in black lines consists of four circles arranged round a central point (cf. the reconstruction by J. NITTMANN, Plate 28b), and two spheroids placed diagonally in a square frame. Vermilion, chrome yellow, blue and a dark

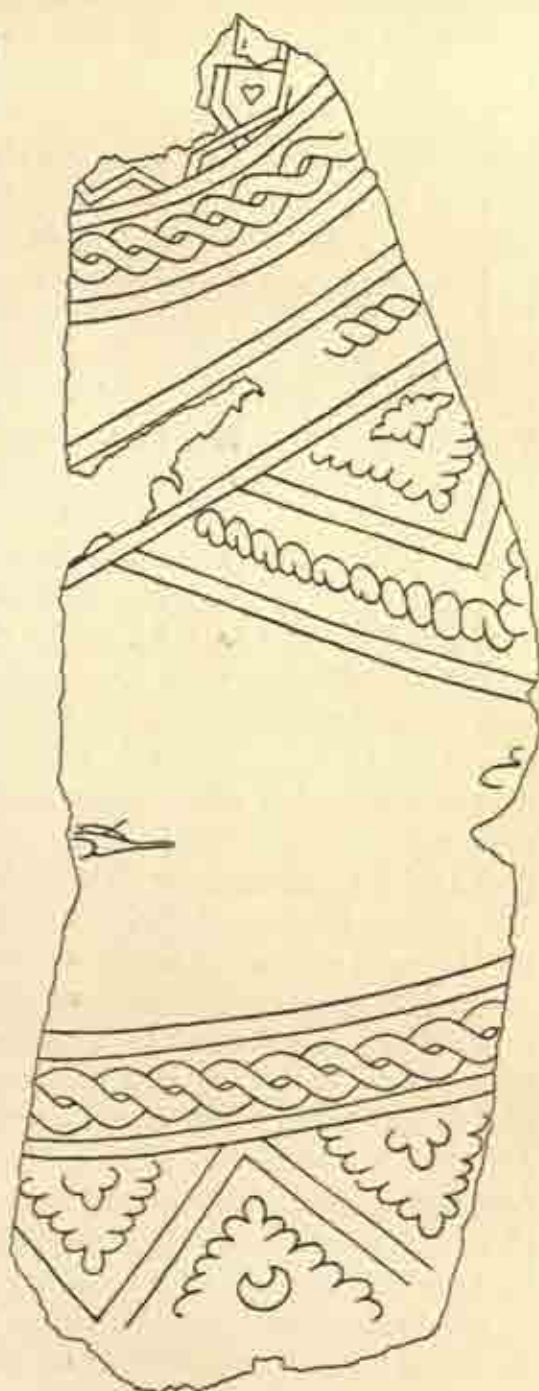


Fig. 17. - Arabic parchment end-paper
(Vienna, National Library, Rainer Collection,
Inv. Perg. Ar. 294).

brown are the colours used; the continuation of the ornaments at the bottom seems to have consisted of arabesques, white and red. The centre piece, however, is usually not square but a double circle elaborately ornamented within. The examples shewn on Plate 27 all come from the Rainer Collection and were found in al-Ushmūnayn along with book-bindings, scraps of books and documents, the contents of which also definitely relate to al-Ushmūnayn. They are, like all such specimens, painted on one side only, the back being left blank. From the general circumstances of the find, we have to allot all the pieces dealt with here from this find, almost all well preserved, to the IIIrd–IVth cent. A. H. (Xth–XIth cent. A. D.).

Inv. Chart. Ar. 25629 (Plate 27a), 13 × 5 cm, shows vermillion spirals divided by bands of the same colour with crab-like tabs around a double circle with red and yellow fields. Inv. Chart. Ar. 25627 (Plate 27b) 16 × 5,6 cm, like Inv. Chart. Ar. 25631 (Plate 27c) a fragment of paper 11,8 × 5,1 is remarkable for the profusion of confused tendrils, in friezes above one another enclosed in a thick frame, which are done in the former in a deep black and on the latter in a crimson which has faded to a brownish tone. But while in Inv. Chart. Ar. 25631 the area between the two concentric circles, which have been drawn with compasses are touched up with chrome yellow, merging in places into olive-green, and the decoration inside this border is dark green, in Inv. Chart. Ar. 25627, the area between the circles, in this case also drawn with the compasses, is painted a pronounced chrome yellow, the knoblike ornaments of the inner circle dark olive-green and the spaces between vermillion. Inv. Chart. Ar. 25630 (Plate 26b) 7,6 × 6,5 cm, has vermillion tendrils, and a rich polychrome ornament in a rectangular frame on a brown ground. We must assume that the centre piece consisted of nine intersecting circles again crossed by two concentric circles (cf. the reconstruction Plate 26c). These are framed in four concentric circles. The outlines are here all dark brown, the areas are covered vermillion, and for the shield-shaped sections of circles in the centre bluish grey is used. The remarkable feature here is the early appearance of the ninefold division of the circle; the Coptic parallels as a rule shew an even number of divisions, for example the relief in the church of the temple of Amon in Luxor with six intersecting circles in A. GAYET, *L'Art Copte* (Paris 1902), p. 282. For the use of this ornament, it is significant that this motif is also used to adorn the leather covers. Thus, for example, the South Arabian binding of the XVth century A.D. in E. GRATZL, *Islamische Bucheinbände*, Pl. XII, has eight intersecting circles with a punched central area. Here again we have the preference for even numbers.

We have already seen above on p. 50 in Inv. Perg. Ar. 357 an example of the use of the endless pattern to fill the area of the painted endleaf of a binding. A counterpart to this from the series of end-papers from al-Ushmūnayn in the Rainer Collection is Inv. Chart. Ar. 25653 (Plate 28c), 8 × 4,8 cm. The endless pattern is here formed of rhombuses, which are linked up by crosses so that each four empty hexagons

surround one square. The squares are filled with orange yellow and light green dots, and the sides are drawn in brown ink. It was natural to make such an endless pattern mechanically by stamping from a pattern, a process, which was used not only in the production of cloth stuffs with a pattern (cf. p. 17), but also for ornamenting leather, as we see it on Inv. Perg. Ar. 337 of the Rainer Collection. The only example of this kind known survives in Inv. Chart. Ar. 7264. This piece of paper $12,6 \times 6,6$ cm, which, like the two pieces to be discussed below, comes from al-Ushmūnayn and belongs to the Rainer Collection has two rows of six superimposed squares linked up by crosses with two interlaced ovals which like the narrow frame are left white on a dark brown ground.²¹⁰ The design has again the same polygonal frame that we have seen in Inv. Chart. Ar. 25653 (cf. p. 52 and Plate 28c). As only the three topmost squares are well preserved I have not reproduced the specimen, but give in fig. 18 a reconstruction which I owe to J. NITTMANN. The use of a wood block (see p. 28) to prepare ornamental binding linings is seen in Inv. Chart. Ar. 5604, a paper $5,7 \times 3,2$ cm carefully smoothed on the front, which has a design in black ink on the back. On the front (Plate 29a), we have a very finely executed arabesque ornament of tendrils with cup-shaped palm-leaves, drops and crescents. The printing, which is done in black, is fairly perfect although the very delicate lines have in places not come out well. An endless pattern related to that of Inv. Chart. Ar. 7264 printed from stamps is again seen on Inv. Chart. Ar. 14100 (Plate 29b). This paper, $7,5 \times 5,5$ cm, which was obviously originally pasted on to some material, as the marks of the weaving can be seen on the reverse, has already been reproduced and discussed by J. V. KARABACEK²¹¹ who in 1894 published a reconstruction of the whole page on p. XXIV of his *Führer durch die Ausstellung der Papyrus Erzherzog Rainer*, which I reproduce in fig. 19. The outer frame is an already well-known design, an arrangement of stamps with two parallel double spirals, which, as they converge and diverge, form heart-shaped figures filled with a small trefoil. Over the whole of the central field stretches a net-like endless pattern that consists of long hexagons ornamented with a toothed pattern and a scroll, which are so arranged around a round stamp with a bird or rosettes as to form octagonal compartments. This arrangement

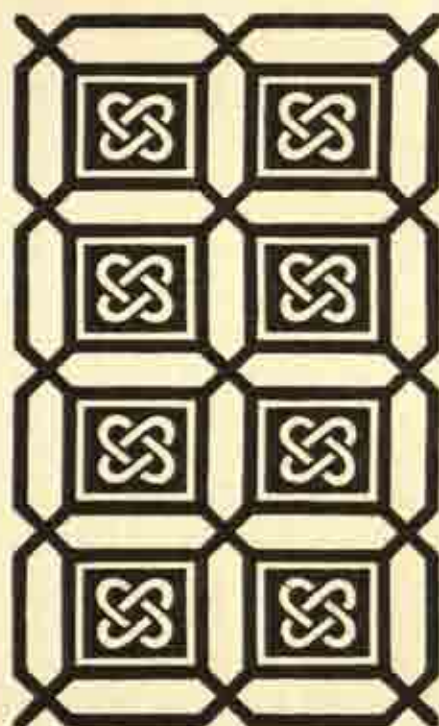


Fig. 18. Reconstruction of the ornament on the end-paper Inv. Chart. Ar. 7264 in the Rainer Collection.

is a well-known one. We know it from the ornamentation of the lunette of the gateway of the courtyard of the Jāmi' 'Alī in Dashlūt, which arose out of the ruins of the ancient monastery of Apollo,²¹² and also from the wooden pillar from Bāwīt (fifth cent. A. D.) in the Egyptian Museum in Cairo,²¹³ finally from a frieze decorating a wall in Sāmarrā, which F. SARRE²¹⁴ only lately published. The latter parallel is particularly valuable to us because in it we have again a bird—a hen—used to fill the square central area.

So far we have found end-papers, painted, stamped from patterns, from wood blocks, and punches. But this does not exhaust the technical means of decorating the surfaces. The very finest and most effective patterns were prepared in another way already well known from Coptic bindings i. e. in inlaid filigree work. J. V. KARABACEK²¹⁵ connected this art with an ancient method of lace-making indigenous to Egypt and thought it was later extended from textiles to leather work. I cannot agree with this view. I rather think that we only have in the open work of these end-papers the last survival of a technique, which I showed above (p. 35) to be old Egyptian and which was simply transferred from leather to paper, this being the more readily done, as it had also to serve as a decoration for the outer covers. The simplest pattern, which we have already several times seen used to ornament leather covers for bookbindings,²¹⁶ appears on Inv. Chart. Ar. 25654 (Plate 30b). This dingy white piece of paper, 17 × 1.2 cm, is pasted on a brown foundation of paper and shows a series of rhombuses which are separated from each other by two strips. Artistically cut out arabesques are found on two other specimens already briefly mentioned by J. V. KARABACEK.²¹⁷ One Inv. Chart. Ar. 25635 (Plate 30d), a yellowish brown faded piece of paper 4.6 × 9.1 cm, has on a glossy deep-black ground with dark red undercoating, arabesques cut out of dingy white paper, each surrounded by a woven band and a toothed pattern of the same material. The narrow side is finished off by a frieze with an arch pattern, and has an undercoating of glossy deep black. This piece was found, like the following, among a number of papyri and may therefore belong at latest to the fourth century A. H. (Xth cent. A. D.). Inv. Chart. Ar. 25638 (Plate 30e), may have belonged to the same end-paper; it is a piece of yellowish brown faded paper, 4.3 × 6.7 cm, and has arabesques cut out of dingy white paper in the same framework as Inv. Chart. Ar. 25635, partly on a black ground with an undercoating of dark red and partly on a ruby ground, which was probably originally dark red. Two specimens probably from the same hand Inv. Chart. Ar. 25640a, b (Plate 29c, d) already discussed by J. V. KARABACEK²¹⁸ show a series of conventional lām-alifs placed one above the other in a rectangular frame. The palm-leaf like conventional design with convolutions recalls the decoration of a Sasanian pillar, which A. RIEGL (*Stilfragen*, p. 301, fig. 164) has illustrated and discussed. Of the two pieces, the larger, Inv. Chart. Ar. 25640a, 19 × 3.4 cm, is preserved in an unfinished state. The openwork of dingy white paper is laid on

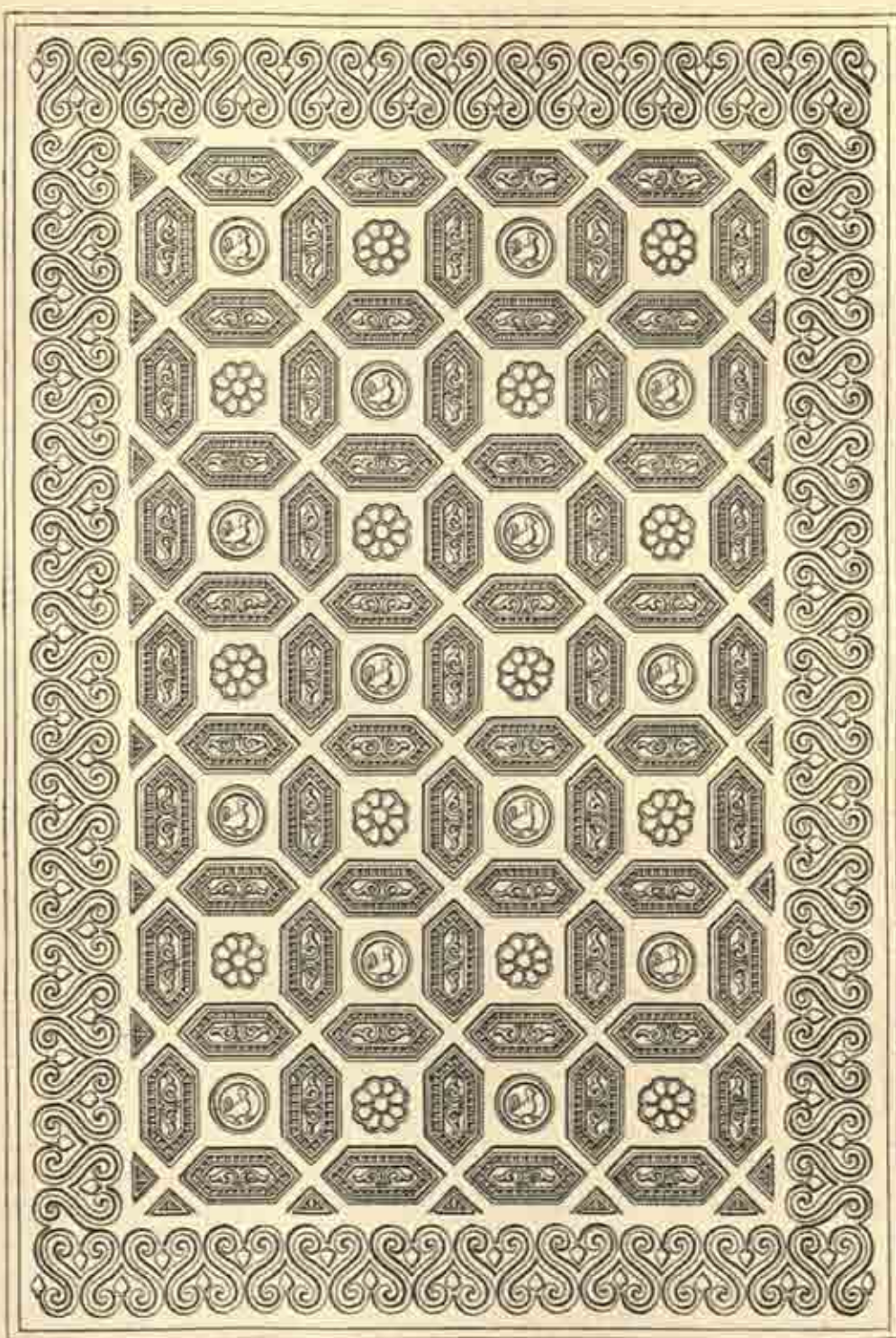


Fig. 19.

Reconstruction of the ornamentation of the Arabic end-paper PER, Inv. Chart. Ar. 14 100.

a foundation of paper of natural coloured yellowish brown material. Inv. Chart. Ar. 25640 b, 12,5 × 3,2 cm has openwork cut out of dingy white paper in part still dark, probably originally stained a uniform black, on naturally yellowish brown paper with an undercoating of originally dark red, now faded to light reddish brown. Each is underlaid with a dark coloured little strip of paper at the base, parallel to the narrow side.

The two last mentioned specimens lead to a series of end-papers which have scrolls of Kūfic writing enclosed in decorated borders, prepared in fine openwork. One such specimen Inv. Chart. Ar. 14100a has already been illustrated and discussed by J. V. KARABACEK.²¹⁹ The fragment 2,5 × 4,2 cm is of reddish brown paper, painted over with a lacquer-like reddish brown paint; on this foundation were pasted the woven bands of the border cut out of dingy white paper, while the scroll of writing cut out of the same material was applied upon a lacquer-like black colour painted over the red under-surface. The splendid openwork specimen Inv. Chart. Ar. 25636 (Plate 30a) was similarly prepared. This specimen 4,4 × 20,7 cm, is of thick light brownish-red paper which had a dark red undercoating. The written scrolls, the heart with inlaid palm-leaf, found again exactly on the Dresden binding²²⁰ and the intertwining ribbons are cut out of dingy white paper. The inscription in elaborate Kūfic of the central area rests on a dark red ground, the palm-leaf within the heart-shaped leaf and the scroll on the narrow side on a deep black lacquer-like undercoating of paint. The narrow strips along the sides enclosing the ribbons of the narrow side are in the same colour and the undercoating of the same pattern in white paper on the long sides. On the reverse on the edges may still be clearly seen traces of a paste which fixed the piece on the inside of the board. To whom the name 'Abd Allāh b. 'Itr in the central scroll belonged, it is impossible to say. A band of writing cut out reversed is found on Inv. Chart. Ar. 25639 (Plate 30c), 3,5 × 16 cm. The foundation for the openwork is a dingy white paper originally written on both sides, which has been painted over with light brown. The scroll is cut out of a dingy white paper which shows traces of blue or perhaps oxidized silver. The small border of writing cut out of dingy white paper on the narrow margin is laid upon a bluish green ground, while the likewise whitish intertwining band on the right side stands out from a light brown ground. A similar piece, unfortunately much destroyed, is preserved in the Rainer Collection under the number Inv. Chart. Ar. 27553.

When at the conclusion of this section we now endeavour to give from the available material a brief survey of the development of Muslim binding in the first six centuries A. H., we may take the opportunity to develop a little an idea already put forward on p. 34 and show the connections between the early Muslim and late classical art of the book.

The first fact to be established is that the Arabs followed the classical model not only in the form of the book but also in its format. Their codex, too, was at first

a rectangle, the height of which was very little more than the breadth.²²¹ This format is already found in the unique literary Arabic book written on papyrus, the already mentioned *Kitāb al-Jāmi' fi 'l-Hadīth*²²² of the Egyptian Library in Cairo, the pages of which measure 25 × 23 cm. In literary texts this format, rectangular approaching square, was retained till the manufacture of papyrus ceased (c. 950 A. D.), as numerous leaves from parchment and papyrus manuscripts show. Even the oldest manuscripts of the Qur'ān are no exception, so far as they occur in the first century A. H. The format, which may be described as oblong folio, found in the oldest mosque copies of parchment,²²³ was already in use by the end of the first century A. H. It may have been influenced from Mesopotamia and is presumably of Persian origin ultimately. In hand-copies of the sacred book of Islam, a format soon became usual which extended the breadth of the book at the expense of the length. The two volumes discussed on p. 45 ff. already show this format from which the *Safīna* must have developed, of which Inv. Chart. Ar. 28002 (p. 49) is an example.

The ancient tradition was retained in the binding of the quires as well as in the format of the book. I have had an opportunity of examining late classical and early Muslim bindings in various collections and have been able to ascertain that the method is exactly the same in both. To give only one example, I may quote the fact that the sewing together of the leaves of the book before putting on the boards in the Coptic binding P. Berol. 14018 (see p. 36) is exactly the same as in that of a little Arabic volume of seven leaves of papyrus of the IIIrd to the IVth century A. H. in the Rainer Collection (Inv. Ar. Pap. 10130). Late Muslim bookbinding also shows even in sewing together by a chain-stitch and in the pasting of blue linen on the boards, echoes of the late classical and Coptic technique.²²⁴

Of the methods used to adorn the leather cover, tooled work, stamping, incised work and leather-cutting can also be found on early Muslim volumes, but not so the leather appliqué work. That this technique was not forgotten in Egypt also is seen from early Muslim shoes and the splendid end-papers in inlaid openwork, discussed on p. 54 ff. I have shown that it probably found its way from Egypt to Turkistān, and thence to Persia, where it reached its greatest perfection in the splendid bindings and filigree leather work of the Harāt school.²²⁵ The arrangement of the field with longish rectangles set within each other parallel to the sides, which first appears on H. IBSCHER'S (p. 38) Coptic binding is retained not only on early Muslim bindings but long remained usual on South Arabian bindings (cf. E. GRATZL, *Islamische Bucheinbände*, Pl. I, VI, XI—XIV); indeed it looks as if the fine leather covers with endless geometrical patterns of the XIVth to the XVth centuries, of which E. GRATZL, id., Pl. I, VII, has published beautiful examples, ultimately go back to models of which the Coptic binding P. Berol. 14019 gives us a good idea. The practice of choosing different decorative materials for the adornment of the front and back covers is also taken from late classical times. That certain patterns and

stamps survived along with certain technical arrangements such as the protecting flap around the edges and the triangular flap of the back cover need not surprise us.

I have elsewhere²²⁵ shown how strongly the Arab administrative processes in Egypt were influenced by the Coptic-Greek, how often customs practised there were taken over completely, and only at a comparatively late period did new forms force a way in from other sources. Almost the same might be said of the early Muslim art of book-production. The ancient cultural traditions of the subjected peoples were here, too, at first taken over.²²⁶ The independent development, which attained a high level of art of permanent value in almost all fields, was at first slow and hesitating, and was probably stimulated by influences brought by the Tūlūnids from the East. If this phenomenon is particularly well marked in the art of binding, it may be explained by the fact that this craft, which had attained high perfection in monastery workshops, had developed fixed forms and a technique which could not quickly be superseded. Coptic artists must have long plied their craft and worked for Muslim employers or have been the teachers of Muslim bookbinders. It may also have been the same with early Muslim painting. The Arab ruling section of the community could hardly have produced at once a sufficient contingent of working artists. The picture we receive is in the main based on Egypt and is therefore provincial. This is bound to be the case as our material is almost exclusively derived from Egypt. Until we have from Syria, Mesopotamia, and particularly Persia, equally plentiful material from the early centuries of the Muhammadan era, we shall be confined to conjectures regarding the art of book-production of this period in these lands. But we may assume that the development was similar to what we know took place in Egypt. Here the art of the subjected people must have very definitely decided the course of development of art in Islam.²²⁷ How far this can still be traced Sir Thomas W. Arnold's exposition will shew.



PART II

THE PERIOD FROM THE
THIRTEENTH TO THE EIGHTEENTH
CENTURY

by

SIR THOMAS W. ARNOLD, LITT. D.

Professor in the University of London

SURVIVALS IN PERSIAN PAINTING

The year 1258 — the date of the capture of Baghdād by the Mongol army under the command of Hūlāgū — marks a distinct era in the history of the Muhammadan world, and incidentally in that of Muhammadan art, for political history enters on a new phase with the settled domination of the Mongols over Persia, and in the realm of art the linking-up of China with the eastern provinces of the Muhammadan world brought in a flood of artistic influences, the survivals of which may be traced in Muslim painting for centuries, even up to modern times. The crowning horror of the sack of the historic centre of the 'Abbāsīd Caliphate marked the culmination of a series of appalling acts of devastation, as the invading host of Mongols swept over the centres of Muslim civilisation from the borders of the Chinese empire through Transoxiana and Persia into Mesopotamia. Wherever they passed they left ruin behind them, for one of the chief features of their military policy seems to have been that of total destruction. It was commonly their practice to follow up the capture or surrender of a city by the massacre of all the inhabitants, with the exception of such small numbers as they chose to carry off into captivity. In order to make devastation more complete the Mongols would sometimes pretend to have retired altogether from a ruined city, and then send back a detachment of troops to kill such poor wretches as had managed to survive the first massacre e. g. in the city of Marw, where as many as seven hundred thousand had been massacred or, according to another authority, as many as 1 300 000 corpses had been counted on the first occasion, five thousand survivors were afterwards put to death by a cruel strategem of this fashion. In 1219 the famous geographer Yāqūt visited the city of al-Jurjāniyya, which was situated in the neighbourhood of the modern city of Khīwa, and put on record that he had never seen a greater city or one more wealthy or more beautiful; in the following year, Chingiz Khān captured it after seven days of desperate street fighting, set it on fire and made a general massacre of the inhabitants, with the exception of the young women and children who were set aside as slaves and the artisans who were saved on account of their special skill; the site was then rendered uninhabitable by opening the dykes of the Oxus, so that the waters of the river submerged the charred remains. In the following year the city of Nishāpūr, which had been described as the healthiest and most populous town in Khurāsān, was razed to the ground by the Mongols and the site of it sown with barley; in the massacre of the inhabitants as many as 1 747 000 persons are said to have perished. The city of Bāmiyān was so utterly destroyed, every living creature, animal as well as human, being killed and their dead bodies being piled up like a mountain,

that for a hundred years it remained a desert, void of inhabitants. In the following year the ancient city of Harāt, which is said to have contained 444 000 inhabited houses with 12 000 shops and 359 colleges,²²⁸ was captured after a siege of six months; for a whole week the Mongols continued to kill and destroy, and as many as 1 600 000 are said to have been killed. The savage conquerors then retired, but shortly afterwards sent back an armed force to seek out and destroy such of the inhabitants as had managed to hide and had thus escaped the first massacre; over two thousand persons were discovered and butchered in the same merciless fashion. When the Mongols finally left, forty miserable wretches crept out of their hiding places and collected together in the great mosque, — a pitiable remnant left out of so vast a population — gazing with horror on the ruins of their beautiful city. A long list might be given of cities that suffered a similar fate; but here it is enough to lay stress on the significance of this destruction in its relation to the study of the history of Islamic art, for in this widespread ruin of the organised centres of civilised life were of course involved those precious manuscripts which might otherwise have provided us with materials for the study of the pictorial art of the pre-Mongol period. Whatever care these ruthless invaders may have taken to rescue from death artists and craftsmen, the early Mongols appear to have cared nothing at all for books. In Bukhārā, famous for centuries on account of its men of learning, when they stabled their horses in the great mosque, with studied contempt of all that the inhabitants held most sacred, they tore up the priceless manuscripts of the Qur'ān, to serve as litter for their horses. One of the last of the great centres of civilisation to suffer in this manner was Baghdād, which in 1258 was given up to plunder for a whole week; during the sack of the city eight hundred thousand of its inhabitants were put to death and the same ruin that fell upon them embraced also the literary treasures that had been accumulating there for centuries. The library of the Caliph must have been rich in examples of the art of calligraphy and of painting, for the library of his chief minister, Ibn al-'Alqamī, is said to have contained as many as ten thousand volumes. Some of this may have been saved by such few lovers of books as accompanied the Mongol armies, e. g. that eminent scholar Nāṣir ad-Dīn Ṭūsī — theologian, philosopher, astronomer and mathematician — is said to have accumulated a library of more than four hundred thousand volumes out of the plunder of the many libraries that were at the mercy of the conquerors. But vast as this collection was, it is unlikely that the possessor of it took any interest whatsoever in works of pictorial art, and the destruction that is so characteristic of the period is mainly responsible for the scanty knowledge that we possess of the works of painting produced in the period preceding the Mongol conquests; for few examples have survived to the present day that can with certainty have assigned to them a date earlier than the thirteenth century.

But art has a vitality that survives the fall of dynasties and the devastating march of invading armies, and in the period posterior to the Mongol conquests there clearly emerge in pictorial art survivals of the earlier art of Persia of a distinctive and easily recognisable character. First among this may be mentioned the art of the Nestorian and Jacobite Churches that flourished within the boundaries of the old Persian Empire, which fell beneath the victorious advance of the Arab arms in the VIIth century. It must not be forgotten that these Churches—so far as their adherents living under Persian rule were concerned—owed a certain measure of their popularity to racial antipathy for Byzantine rule and for the dominance of the Orthodox Eastern Church, the centre of whose ecclesiastical organisation was in Constantinople; it was thus therefore easily possible for the characteristics of the indigeneous Persian painting to win favour in these ecclesiastical circles, particularly within the Nestorian Church, which had not failed on occasion to emphasise its loyalty to the Sasanian Shāhinshāh as against the claims of the Roman Emperor, who was supported by the rival Church over the border. It would no doubt be easy to show that the paintings in the service books of the Nestorian and Jacobite Churches are ultimately connected with those of the Byzantine school, but the painters who belonged to the schismatic oriental Churches carried on their work for centuries with little direct connection with the sources from which they ultimately derived the traditions of their art. Under the Umayyad and 'Abbāsid dynasties these Churches retained the allegiance of large sections of the population under Arab rule in Syria, Mesopotamia and Persia, their patriarchs were wealthy and powerful and at times exercised considerable influence at court; particularly were the Christian physicians who enjoyed the patronage of successive Caliphs in Baghdād, prominent personages in the life of the capital. Some estimate may be formed of the wealth enjoyed by these Christian communities from the record of the magnificent churches they from time to time erected, and a special indication of their vitality is given by the rapid expansion of the Nestorian Church into Central Asia, after the Mongol conquests had brought under one sceptre Persia and the neighbouring countries that lay to the east of it. There must have been an ecclesiastical art corresponding to the wealth and extension of these two Oriental Churches, but very little evidence of it appears to have survived in the form of pictorial art, and the scanty examples of paintings to be found in the service books either of the Nestorian or of the Jacobite Church have received little attention from students of the history of art.

In view of the general disapproval felt by orthodox Muslims towards any representations of the human figure or indeed of any living being whatsoever, it might naturally have been expected that Christian artists would be employed as illustrators of such works of Arabic literature as their owners wished to have decorated with pictures. There is indeed no historical evidence that the painters

so employed were Christians, but in a certain group of paintings, commonly described as belonging to the Baghdād or the Mesopotamian school, we find certain characteristics and conventions which bear a striking resemblance to corresponding features in illustrations found in service books of the Oriental Churches, in spite of the dissimilarity of the subject matter of the pictures in either case. This particular group of paintings comprises illustrations of treatises on astronomy and medicine, — collections of fables, especially that popular cycle of animal stories that originated in Buddhist India and thence has wandered half the world over, being known in its Arabic form as *Kalila and Dimna*, — and notably illustrations of the *Maqāmāt* of al-Harīrī, one of the most renowned works in Arabic belles-lettres, describing the adventures and rascalities of a needy, wandering scholar, full of puns and witticisms of a learned type, and thus from its subject matter affording suitable material for a painter with a sense of humour. The incidents depicted were not such as could in their entirety derive their origin from illustrations in a church service book, but in a Lectionary of the Jacobite Church—a MS. belonging in all probability to the XIIIth century—there is found in a picture of Christ before Pilate,²²⁹ a group of figures that would quite readily fit into any illustration of the *Maqāmāt* of al-Harīrī produced by a painter of the so-called Mesopotamian school; there is the same type of feature, with large prominent nose and a heavy cast of countenance, and a similar kind of costume and attitude. The conventional representation of a tree, such as is found in the Schefer MS. of al-Harīrī in the Bibliothèque Nationale, is reproduced in the same Lectionary,²³⁰ as well as in an Arabic Evangelium of the Jacobite Church, probably of the XIIth century.²³¹ In a copy of the Gospels in Arabic²³² (dated A. Mart. 1053=1337 A. D.) we find reproduced a characteristic convention in the Schefer Harīrī viz. that of indicating the outline of the nose with a prominent line of white paint. Of the painters of the so-called Baghdād or Mesopotamian school nothing whatsoever is known, apart from the work they produced. There does not appear to be any special reason to connect them either with Baghdād or even with Mesopotamia, for there are close affinities between their work and that which is found on the pottery of Rayy,²³³ in the north of Persia. After making due allowance for the different technique of the miniaturist and of the painter on pottery, it is easy to recognise similarities in the types of figures depicted, in the textile patterns, and in the representations of plants and animals. Naturally the pottery painter, generally working more rapidly than the miniaturist, adapts himself to his material and omits everything in the way of a background and does not range over so large a variety of subjects as the miniaturist, but when they come to depict the Sultan at his ease with his cupbearers, his singing girls, dancers and musicians, or when they represent games of polo or hunting scenes, then the analogies between their artistic methods and their technique become strikingly manifest; they both adopt

a bold, simple linear style, heightened by strong colours, and make their figures stand out clearly from the rest of the picture. It is noteworthy also that the work of neither group of artists ever exhibits the slightest trace of Chinese influence, probably owing to their roots being so firmly fixed in an indigenous art with a long-lived tradition behind it. That such a relationship can be recognised between artists working in districts geographically so far removed from another, becomes easily understandable if the hypothesis be accepted that we are here concerned with an art that is ultimately of Christian origin. In this connection it is not without interest to note that Rayy was at one time the seat of a Nestorian metropolitan, and since it was one of the finest cities in the 'Abbāsīd empire (for its walls had a circuit of 12000 paces), it probably still in the XIIIth century contained a large Christian population, in spite of a decline in the number of the Christians, which seems to be indicated by the fact that in the XIth century it had been for purposes of ecclesiastical administration joined to Hulwān and after 1175 to the metropolitan see of Hamadān.²⁹⁴ Whether the artists who produced the pottery of Rayy and the miniatures that have come down to us, were Christians, or converts (or the descendants of converts) from Christianity to Islam is immaterial; what is certain is, that they worked under the influence of an artistic tradition that was Christian in its source and origin.

But while these Christians, dwelling in territories that had once formed part of the Persian empire, reproduced for secular purposes a technique and an artistic tradition which they had learned from the ecclesiastical art of their church, they were likewise (in Rayy at least) under the influence of the indigenous art that formed part of the national inheritance of the Persian race. It is a phenomenon — almost miraculous in its character — in the painting of this period, that in the art of the thirteenth century there re-emerge in the designs on this pottery of Rayy characteristics which primitively belonged to the art of the Sasanians, whose empire had been swept away by the Arab conquerors in the middle of the seventh century. In some mysterious manner, the same motifs and traditional methods as flourished under a Zoroastrian regime succeeded in remaining alive for a period of six centuries, and present themselves again under an alien rule, in the midst of an Islamic culture fundamentally unsympathetic to one of the most characteristic features of this art, — the representation of the human form. We find a remarkable example of that intense national feeling which has, with irrepressible vitality, refused to be crushed under successive epochs of foreign domination. In the Sultan upon his throne, as depicted on the pottery of Rayy, with his singing girls or cupbearers on either side of him, we meet again the Sasanian prince who was represented in similar manner on silver dishes of the sixth and seventh centuries. Bahrām Gūr with his lutist uncomfortably perched behind him on his riding camel, still performs his clever feats of shooting the wild deer; just as the Persian silver-

smith portrayed him centuries before, for the delectation of his Sasanian overlord. Many other motifs and conventions, such as the halo, the decoration of the prince's throne, the lion and other animals, can be traced back to their Sasanian prototypes. How this artistic tradition was kept alive during the long period that elapsed between the disappearance of the Sasanian dynasty and the earliest examples of the pottery of Rayy that have been preserved to us, is a mystery which cannot be cleared up, until some discoveries are made of works of art in which the same tradition found embodiment during the intermediate centuries. But there are a few scattered notices of pictures that survived into the Muhammadan era from Sasanian times, which suggest at least that the Sasanian models were sometimes preserved and carefully guarded. In any consideration of this strange survival of Sasanian art it is important to remember that not only was there a large and flourishing community of Persian Christians belonging to the Nestorian Church, as well as a smaller group which was Jacobite, but that also there were large bodies of Zoroastrians among whom the national consciousness of the old Persian stock would find a still more fruitful soil. The adherents of these two faiths, just as they had remained true to the religion of their fathers before the Arab conquest, so would they be likely to cherish other memorials of an earlier age, more congenial to their ideals than the newly imported interests of the epoch of the conquerors. One of the early Muhammadan geographers who was of Persian origin, as his name indicates, though he wrote in Arabic, — AL-ISTAKHRI — about the middle of the tenth century, mentions having seen some volumes of annals of the ancient Persian kings, illustrated with pictures of each of them; they were preserved in the castle of Shīz, near the famous site of one of the most sacred fire temples of Zoroastrian times. Another geographer, IBN HAWQAL writing a little later (in 977 A.D.), makes mention of a great building in the district of Iṣṭakhr, and describes it as adorned with statues and pictures.²³⁶ That indefatigable collector of miscellaneous information, the encyclopaedist AL-MAS'ŪDĪ tells us how in the year 303 A.H. (915—916 A.D.) he saw in the possession of a noble Persian family in the city of Iṣṭakhr a huge volume containing a history of the kings of Persia with an account of the chief events of their reigns and of the various monuments they had erected. Pictures of each monarch of the royal Sasanian family were given in it, to the number of twenty seven, two of them being women; each was represented as he appeared at the moment of death, in his royal robes and his crown upon his head; each feature was carefully delineated, even to the hairs of his beard. Apparently the originals of these portraits had formed part of a royal picture gallery, since it had been the custom during the Sasanian period for the portrait of each king to be painted on his demise and placed in the treasury, with the avowed object of enabling the reigning monarch to have knowledge of the physiognomy of each of his predecessors.²³⁸ But according to IBN KHALDŪN,²³⁷ the Persian kings used not to wait for the hour of death to

have their portraits painted, for they had them woven into the stuff of their garments, — probably after the fashion of the figured velvets of the XVIth century, which are now reckoned among the treasures of our museums. How common were such collections of portraits as al-Mas'ūdī saw in *Iṣṭakhr*, cannot now be determined, for lack of evidence; it is only by a casual reference that we learn that even in Baghdād a Zoroastrian priest could satisfy the curiosity of al-Ma'mūn by showing the Caliph a portrait of Anūshīrvān,²²⁸ the Sasanian monarch who was of especial interest to Muhammadans since it was in his reign that the Prophet had been born. Such evidence, scanty as it is, is enough to show how in one respect at least the tradition of Sasanian art was preserved, in spite of the prevalence of an intellectual atmosphere hostile to any form of pictorial representation whatsoever and in spite of the suspicion of disloyalty that it might excite. It is not difficult to understand how these traditional forms of art, never entirely forgotten, might once more come to the surface when the depressing weight of Arab domination was removed by the Mongol conquests.

There was still one more distinctive tradition of book illustration, with a separate history and character of its own, — the Manichaean. By the date of the Mongol invasion, Persia had known the name of Mānī for nearly a thousand years; but just at the Manichaeans had suffered persecution under the Sasanian kings, so the Arab Caliphs continued the same cruel policy towards them; when towards the end of the eighth century the Muhammadan government was putting thousands of Manichaeans to death, the persecuted adherents of this faith fled into Turkistān and other parts of Central Asia, and so successful was this persecution that by the end of the tenth century there were hardly any Manichaeans left in the country that had witnessed the birth and first expansion of their faith. Now, in the Manichaean church the art of painting was held in high honour; the founder of the religion had himself decorated his writings with pictures, and had recognised the advantage to be derived from pictorial representation for the purposes of religious propaganda; the members of this sect followed the example set by their founder, and there are many references both in Western and Oriental literature to the magnificent manuscripts of the Manichaeans, with their fine leather bindings. But so ruthless has been the destruction of them that no authentic example of Manichaean art was known to have survived up to modern times until the discovery, in 1904, by Professor A. V. LE COQ, of a few fragments of Manichaean paintings in a ruined city near Turfān (in what is now Chinese Turkistān) and some frescoes on the walls of what had once been a Manichaean temple. But the reputation of Mānī as a painter long outlived all remembrance of him in Persia as the founder of a religion (except, of course, in the case of serious students of religious history) and his name came to be proverbially used to describe any skilful artist, long after the disappearance out of Persia of all representatives of the faith that he had taught.

The highest praise that could be bestowed by a Persian upon the illustrious Bihzād was to describe him as painting with the brush of Mānī.

In consideration of the persistence with which the art of the Sasanian period managed to survive, it is not all improbable that in a similar manner the art of the Manichaeans continued to linger on in the territories that had once belonged to the ancient Persian empire, and that the traditional methods of it were kept alive by the Muslim descendants of the old Manichaean artists who had practiced it; thus the movement in art which the adherents of the faith of Mānī had initiated and had carried on for so many centuries might well have continued to exist in the service of other masters. The picture book of Mānī known in Persian literature by the name of *Arzhang* was almost as familiarly referred to as the name of Mānī himself, and a reproduction of this picture book was recorded by the author of a work on the various systems of religion, who wrote in the year 1092, to be still in his day preserved in the treasury of the capital city of Ghazna.²³⁹ Al-Bīrūnī had already, some time before, compiled, about the year 1000 A. D. his great work on the different systems of chronology of the world — *al-Āthār al-Bāqīya* — and it is not impossible that the artist who illustrated the manuscript of this work, which is now preserved in the Library of the University of Edinburgh, may have seen the actual reproduction of the *Arzhang* in Ghazna or have had a copy of it before him while he worked; for this manuscript was copied in the year 1307 — little more than two centuries after the date of the record of the existence of the *Arzhang* in the treasury of Ghazna. In this connection it is not without interest to note that the pictures in the Edinburgh MS. or some other MS. exactly resembling it, were reproduced by a late copyist working some time in the XVIIth century.²⁴⁰ It is not so easy to detect examples of the survival of the Manichaean type of book illustration as it is in case of a Christian or Sasanian tradition,²⁴¹ but it would be contrary to expectation if such did not exist, though naturally they would not be likely to occur so frequently as in the two other cases.

THE MONGOL AND TĪMŪRID PERIODS

In the preceding chapter an attempt has been made to indicate the artistic directions that may be held to have been operative in Persian painting during the period that immediately followed the Mongol conquests. Examples of painting to which an earlier date may be assigned, as having been produced under Muhammadan rule in any district that once formed part of the dominions of the Persian King, are few in number. Some of the earliest of these are found in a manuscript of a Persian translation of the fables of Kalila and Dimna, copied and decorated in Ghazna about the middle of the twelfth century;²⁴² to approximately the same date belong two manuscripts of the Arabic version of the same collection of fables;²⁴³ lastly there are three manuscripts of the *Maqāmāt* of al-Ḥarīrī, belonging respectively to the latter part of the thirteenth century, and to the years 1222 and 1237.²⁴⁴ All these manuscripts are now in the Bibliothèque Nationale, Paris, and exhibiting as they do affinities with the decoration on the pottery of Rayy and with miniatures of the so-called Mesopotamian school, they may be regarded as having been produced by artists who worked under the influence of traditions derived from a Christian source, connected either with the Nestorian or with the Jacobite Church.

The Mongol conquests incorporated Persia within the borders of an empire the capital of which was in China, so that the old eastern borders ceased to exist and a way was opened for cultural influences from China such as had never existed before. Hūlāgū Khān brought with him Chinese painters and illustrated books into Persia, and it is not improbable that the large numbers of artists who were carried away to the east by the Mongols from the cities, the rest of whose population they so ruthlessly massacred, may in some cases have succeeded in returning to their native land, after working for their new masters in Qaraqorum or elsewhere. Whatever other ruin they might work, in their insane passion for destruction, the Mongols were capable of recognising the value of the trained artisan and craftsman. When Chingiz Khān swept the city of al-Jurjāniyya out of existence in 1220, he spared the lives of over 100,000 skilled workmen to be transported into Mongolia, and the only persons saved out of the general massacre of the inhabitants of Nishāpūr in 1221 were 400 artisans. When order was again restored and a settled government established in Persia under the dynasty of the Ilkhāns, one ruler after another brought painters and other artists into their newly acquired kingdom. It is under the rule of the Ilkhāns that Chinese characteristics appear on the Persian pottery of Sulṭānābād, in contrast with the pottery of Rayy, in which there is not the slightest evidence of any Chinese influence what-

ever, for its delicately conceived and charming industry seems never to have recovered from the destruction of the city by the Mongols in 1220. Similarly in the art of painting for a brief period under the early decades of Mongol domination in Persia, Chinese influences were in the ascendant. Persian painters had to adapt themselves to the taste of their new rulers, and they sometimes were set to work to make copies of Chinese paintings. The sinister figures of the Mongol princes had to be represented in their characteristic costume, either in the stiff Mongol armour or the royal robes of state, and scenes of bloodshed and executions appear to have been the subjects of their predilection. During this period of its history, therefore, Persian art was clearly and definitely subjected to Chinese influences, and so many conventions of Chinese origin remained as permanent characteristics of Persian paintings that the nature and extent of this influence demand special consideration. It is possible roughly to distinguish different periods in which this artistic fashion came prominently to the front, — the pre-Mongol period, the period of Mongol domination, and the sporadic examples in later ages.

An admiration for Chinese painting had been a commonplace of literary phraseology long before the Mongol invasion had broken down the barriers that separated Persia from its eastern neighbour, but the early Persian poets and prose stylists who belauded the skill of the Chinese painters probably knew as little of actual examples of Chinese art as they did of the products of the wonder-working brush of Mānī, which was in like manner one of their favourite literary commonplaces. The isolated reference (which M. BLOCHET²⁴⁵ has published) to the activity of Chinese painters on Persian soil in the reign of the Sāmānīd prince, Naṣr ibn Aḥmad (about the year 920), records how this monarch ordered the poet Rūdagī, the forerunner of modern Persian poetry, to write a metrical version of the fables of Kalila and Dimna, and how Chinese artists afterwards added pictures to it, so that all persons might take delight in seeing and reading it. The relations which the Sāmānīds, one of the earliest of the independent Persian dynasties which broke away from the overlordship of the Caliph in Baghdād, in the remote north-east beyond the Oxus, entertained with the Chinese court, no doubt rendered such an importation of Chinese talent possible, but it appears to have been an entirely isolated phenomenon, without any influence whatever on the development of Persian art. When Niẓāmī in the latter part of the XIIth century wrote his fanciful disputation between the men of Rūm and the men of Chīn in the presence of King Alexander and the Khāqān of China, the only achievement that he has to record on the part of the Chinese artist is that he had so brilliantly polished the side of the arch of the dome, which had been assigned to him to display his skill upon, that it reflected in its brilliancy the picture which his rival had painted on the opposite arch.²⁴⁶ As little real knowledge of any actual examples of Chinese art lay at the back of the frequent references to "the picture gallery of Chīn" and similar

phrases which became mere rhetorical expressions empty of all real meaning, running through the whole of Persian poetry from Nizāmī to modern times.

But the pre-Mongol and the post-Mongol period have this in common that the flood of Chinese influence brought in by the Mongols exercised as little influence on the fundamental character of Persian painting as did the conventional rhetoric of the poets and stylists. The influences that survived as a permanent part of Persian painting were superficial merely, and though they became fixed conventions, they in no way interfered with the continuance of the inherited characteristics of the national art. Among these was the Chinese *Tai* or 'cloud form' with its strange, sinuous, undulating shape, and from this time forward the Persian painters, instead of taking the trouble to notice the shape of such clouds as they could see for themselves in the sky, almost invariably represented clouds under this conventional form, as they had seen it in Chinese paintings or on Chinese pottery. The fantastic dragons with their irregularly shaped wings and the strange appendages that project from their bodies in unexpected places, appear to have fascinated the imagination of the Persian painters, and when they had once adopted them, they devised constantly varying new varieties of the same type and used them especially to decorate the margins of their manuscripts. A similar borrowing from China gave the magnificent bird that trails a long tail across the sky, sometimes appearing as an object of terror, sometimes as coming to the rescue of a hero in distress. The Mongol period is further distinguished by a change in the form of the halo, which now ceases to be round and takes on the appearance of a tapering mass of flame, such as Central-Asian and Chinese art gave to representations of the Buddha.

The Mongol conquest and the subsequent establishment of the Ilkhān dynasty in Persia, were soon to be followed by another period of suffering for this unhappy country. In the fourteenth century, Tīmūr set out on a career of conquest, in which he left ruined and depopulated cities behind him, as the Mongols had done. When in 1383 he took Zaranj, the capital of Sīstān, he massacred all the inhabitants, razed the walls to the ground and destroyed the houses, so that this rich and flourishing city, which had escaped the devastation of the Mongols, has remained to this day a nameless ruin; for centuries it had supported a vast population and had grown to a great size, until its walls, even in the ninth century, were four leagues in circumference, and the outer wall which enclosed the suburbs had thirteen gates. Tīmūr ruined the canal system which supplied the city and its beautiful gardens with abundance of water. In similar manner he caused the city of Turshīz, one of the chief cities of Qūhistān, to disappear entirely from the map. To these might be added the names of many another city which the desolating march of Tīmūr's armies left in ruins behind them. Harāt, which had apparently recovered from the effects of the Mongol invasion, had to suffer from the new conqueror who

destroyed its walls and sent most of its craftsman and artificers to work at the rebuilding of the town of Shahr-i-Sabz, his birthplace.

Though Tīmūr seems to have been capable of appreciating fine workmanship, and sought to beautify the chief centres of the empire he founded, it would be rash to suppose that the status of the artist was thereby improved. The picture of the building of his great mosque in Samarqand — so often published,²⁴⁷ — shows the overseer of the works threatening with a long and formidable stick the artisans at work on the exquisite mosaics, which are still among the glories of the ruined grandeur of Samarqand. With the reign of Tīmūr, however, begins one of the most brilliant periods in the history of Persian painting, and under the patronage of his successors some of the finest examples of Persian art were produced — not merely paintings, but carpets, ivories and metal-work, and magnificent monuments of architecture.

Like the Italian princes of the quattrocento who were their contemporaries, the Tīmūrid princes found time in the midst of their interminable wars, for the cultivation of the fine arts. Shāh Rukh (1404—1447), the son and successor of Tīmūr, encouraged men of science and learning to frequent his court, and spent large sums of money on restoring and beautifying his capital city, Harāt; his interest in painting may be judged by the fact, already mentioned, that he included in the embassy which he sent to the emperor of China, a painter, who submitted a report of the expedition on his return. His son, Ulugh Beg, was a mathematician and a student of astronomy and collected together in Samarqand a number of astronomers who compiled the tables called after the name of this prince; in the Bibliothèque Nationale is a copy²⁴⁸ of a treatise on the constellations, compiled at a much earlier date, which had once been in the possession of Ulugh Beg; the designs are obviously directly copied from Chinese originals and are distinguished by that paucity of strong colouring which is characteristic of the Chinese manner of the period — in striking contrast to the brilliant colours used by the Persian painters in Harāt. Ulugh Beg also had architects brought from China and made them build for him a tower covered with Chinese tiles. Another son of Shāh Rukh, Mirzā Bāysunqur, who died in 1433, before his father, was a great bibliophile and collected around him a group of the most distinguished calligraphists from all parts of Persia.²⁴⁹ He is credited with having compiled the commonly accepted recension of Firdawsī's Shāh-nāma, and in the preface to many manuscripts of this epic he is represented as engaged in this undertaking.

The painting of this period still retained some of the characteristics of the school of painting from which it sprang, as exemplified in the work of Rashīd ad-Dīn's atelier; there is still something of the same archaic character, the same stiffness in the elongated figures, but there is a growing brilliancy of colour which gives a prevision of the out-blossoming in the latter half of the century, under Sultan

Husayn Mirzā. The change had undoubtedly begun before the period of this last of the Timūrid Sultans in Harāt, whose long reign covers the greater part of the second half of the fifteenth century,²⁶⁰ but it was the artists who worked under his patronage who created a style and a fashion in painting that dominated the Persian schools for a whole century. Grace and elegance and a larger freedom of movement take the place of the rigidity and dourness of the earlier style, and an unsurpassed brilliancy and range of colour are achieved. This second Timūrid period is noteworthy for another feature, new in the history of Persian painting, viz. the placing on record of some biographical details — though unhappily meagre and insufficient — concerning the great artists of the time.

BIHZĀD AND HIS SCHOOL

One noticeable feature of the earlier Tīmūrid period — as indeed of the whole preceding period of Persian art — is the lack of any biographical details as to the creators of even the greatest of these masterpieces. Not a single Persian painting bears a signature nor is there any indication as to its authorship or any literary record of the activity of individual artists, until the time of Bihzād. The appearance of this incomparable artist marks an epoch in the history of Persian painting. The charm and delicacy of his workmanship created such an impression upon his contemporaries that their enthusiastic appreciation affected succeeding generations also, until the name Bihzād became a symbol for the height of perfection in the painter's art, and unnamed pictures were from quite an early period ascribed to him without any warrant whatsoever, and the practice became ludicrous when applied to works that obviously belong to the XVIIth or even the XVIIIth century. But such procedure is significant of the great fame that Bihzād achieved — and his workmanship shows how fully he deserves so high a reputation. He represents the almost complete deliverance of genuinely Persian art from the oppressive tradition of the Mongol period, and it is possible to appreciate the relief of Bihzād's fellow-countrymen at no longer having the grim and sinister figures of the conquerors put before them, reminding them of the foreign domination by every detail of their costume. Moreover, how much more sympathetic to the Persian temperament were the tender grace and attractiveness of his figures, the delicacy of his drawing, and the pleasing character of his composition. A picture by Bihzād is entirely in harmony with the lyrical and romantic spirit of Persian poetry and can thus like this poetry make a direct appeal to the sympathies of this emotional people. His composition shows a skilful grouping of the principal figures and a characterisation of individuality such as few other painters of his race ever attained to. He had got beyond the *horror vacui* of primitive art, and knew how to make a skilful use of empty spaces, and showed himself especially successful as an illustrator, — the function that the painter of his age was most frequently called upon to fill. A portrait of him in the Yildiz Kiosk represents him as a tall lean figure, with a long neck and prominent eyes; his eyesight must have been extraordinary, for the minuteness of his work can be submitted to the scrutiny of the most powerful magnifying glass without losing anything of its fine quality. He shows himself a master also in the richness and variety of his colour scheme, — another respect in which he breaks away from the somewhat drab and monotonous Mongol tradition.

A contemporary historian, KHWĀNDAMĪR, has made brief reference to him, in a "Compendium of History"²⁴¹ — an abridgement of his grandfather's

more famous work, the *Rawdat as-Ṣafā*, — as follows: "Master Kamāl ad-Dīn Bihzād is the most perfect painter of the age, — nay more, he has brought this art to the summit of perfection" — but fortunately he is less jejune in his *Habīb as-Siyar* (completed about the year 1523), where he writes: "He sets before us marvellous forms and rarities of art; his draftsmanship which is like the brush of Mānī has caused the memorials of all the painters of the world to be obliterated, and his fingers endowed with miraculous qualities have wiped out the pictures of all the artists among the sons of Adam. A hair of his brush, by its mastery, has given life to the lifeless form. My revered master attained to his present eminence through the blessing of the patronage and of the kind favour of the Amīr Nizām ad-Dīn 'Alī Shīr, and His Majesty the Khāqān showed him much favour and kindness; and at the present time too this marvel of the age, whose belief is pure, is regarded with benevolence by the kings of the world and is encompassed by the boundless consideration of the rulers of Islam. Without doubt thus will it be for ever".²⁵³

This passage tells us little beyond the fact that Bihzād's contemporaries were capable of appreciating his merits. Of his origin it tells us nothing at all; elsewhere Pīr Sayyid Aḥmad of Tabriz is said to have been his teacher, but of this earlier painter nothing is known but his bare name. Bihzād's first patron was Mīr 'Alī Shīr, whose poetical name was Nawā'ī, the talented minister and confidant of Sultan Husayn Mīrzā Bāyqarā, who ruled in Harāt from 1468 to 1505.

At what date Bihzād's activity began, it is impossible to determine. After Mīr 'Alī Shīr retired into private life about the year 1477, Bihzād enjoyed the patronage of Sultan Husayn Bāyqarā, but when the latter died at the age of 70 while on the march to resist the Uzbek invader, Muḥammad Khān Shaybānī, who conquered Harāt in 1507, Bihzād probably passed like all the other employees of the palace into the hands of the new master of the city, according to the traditional fate of artists, — as described above. The Uzbek conqueror was an uncouth, illiterate barbarian, and just as he did not hesitate to correct the penmanship of the greatest calligraphist of the period, Sulṭān 'Alī Mashhadī, — an intolerable outrage in the eyes of a generation that attached an almost sacred character to the art of calligraphy, — so would he take up his pen to correct the drawing of Bihzād. Such is the story that Bābur²⁵⁴ tells us, and he also records his own rather ludicrous judgment of Bihzād as a painter: "His work was very dainty, but he did not draw beardless faces well; he used greatly to lengthen the double chin; bearded faces he drew admirably".²⁵⁴ Muḥammad Shaybānī and Bābur, each in his own way, enable us to understand something of what the Persian painter had to suffer from his princely patrons!

It must have been some relief for Bihzād to pass into the service of the new conqueror, Shāh Ismā'īl, the founder of the Ṣafawid dynasty who defeated Muḥam-

mad Khān Shaybānī in the battle of Marw, Dec. 1510. Shāh Ismā'il seems to have had a genuine appreciation for Bihzād — at least he did not wish any other conqueror to get possession of him — if the story is true that, when he was starting off on a campaign against the Ottoman Turks, he had Bihzād carefully concealed, and that the first enquiry he made after his return to his capital after the Ottoman Sultan had defeated him in the disastrous battle of Chāldirān in 1514 was: "Is Bihzād still alive?"²⁵⁵ Toward the close of his reign, in 1522, Shāh Ismā'il conferred on Bihzād the post of director of the Royal Library, with control over all "the copyists, painters, gilders, margin-drawers, gold mixers, gold-beaters, and washers of lapis-lazuli".²⁵⁶ But Bihzād probably did not live long to enjoy this mark of royal favour — and if the portrait in Yildiz Kiosk gives any reliable indication of character, such an administrative post could hardly have been very congenial to him —, for the last picture that can with certainty be assigned to him is of the date 1524, though there is another that may possibly have been painted one or two years later.²⁵⁷ His death would thus have taken place in the early part of the reign of Shāh Tahmāsp, who moreover is said to have taken lessons in painting from him.

Since every detail that has been recorded concerning this great artist is of interest, it may be mentioned that in a work compiled in the year 1521 an account is given of one of Bihzād's pupils, named Darwish Muḥammad Naqqāsh, who was first a maker of oil-colours, but afterwards, having attached himself to Bihzād, he acquired a taste for drawing and painting; whereupon Bihzād himself undertook the training of Darwish Muḥammad, "and now entrusts his own work to him".²⁵⁸ What exactly is meant by this last phrase is doubtful; could it have implied a sense of falling powers? — for if the Emperor Jahāngīr is to be believed, the earliest work of Bihzād was executed so long before as 1467; though in this case there are weighty reasons for doubting the accuracy of the Emperor's ascription of the pictures concerned to the great artist;²⁵⁹ or was it a case of the Master's partiality for a favourite pupil? Like many other facts in Bihzād's biography, the solution of the problem must wait for the possibility of further information.

A still more enigmatical figure is Mīrak, who (according to Khawāndamīr²⁶⁰) "had no equal in the art of painting and gilding, and uplifted the standard of unsurpassedness in the art of writing inscriptions; the greater part of the inscriptions on the buildings of Harāt were written by him. He died when Muḥammad Khān Shaybānī obtained sovereignty over Khurāsān" (i. e. in April 1507). The identification of paintings by his hand is even more difficult than in the case of those ascribed to Bihzād, and he is often confused with a painter of the same name who worked for the Safawid princes, so, for one reason or another, pictures of an impossible date have been attributed to him;²⁶¹ but the evidence of Khawāndamīr as to the date of his death is decisive in such cases.

It is unfortunate too that not a single picture is known to have survived, by the painter of whom the historian gives the fullest account, — Mawlānā Hājī Muḥammad Naqqāsh. KHWĀNDAMĪR says of him: "He was a master of the arts of his time, and with the brush of imagination he depicted marvellous things and wonderful forms upon the pages of the age. He attained a high degree of skill in the art of painting and gilding. Several times he made an attempt to bake Chinese vessels and after much trial and unremitting effort, the form of the vessels he made closely resembled those of China; but the colour and the purity of them were not as they ought to have been. Among the inventions of Mawlānā Hājī Muḥammad was the case of a clock which he fixed in the library of Niẓām ad-Dīn 'Alī Shīr. In this case he put a statue with a stick in its hand, and one hour after sunrise the statue beat its stick once on the drum in front of it, and after the lapse of two hours it did so twice and so on. Mawlānā was for a long time superintendent of the library of Amīr 'Alī Shīr, but at last having fallen out with him, in one of the months of 904 (=1498—9 A. D.), when Mīrzā Badī' az-Zamān was engaged in besieging the city of Harāt, he ran away and attached himself to that Prince, and was appointed to the same post. He died in the beginning of the conquest of Abu'l-Fath Muḥammad Khān Shaybānī".²⁶² FAKHRI (writing about 1521) also mentions this erratic genius as one of the painters of Harāt and as being a man of an agreeable disposition; he adds "He has strange ideas and there is hardly any art on which he does not form an opinion, whether right or wrong. At present, he is in 'Irāq".²⁶³ A man of such independence of character might well have produced some original work in painting, and it is therefore the more to be regretted that no work of his is known to have survived.

Another painter who with Bihzād enjoyed the patronage of 'Alī Shīr Nawā'i, namely Shāh Muẓaffar, is mentioned by Bābur as working in Harāt under Sultan Husayn Mīrzā, but no painting of his can be identified; according to Bābur "he painted dainty portraits, representing the hair very daintily; short life was granted him; he left the world when on his upward way to fame".²⁶⁴

The Uzbek invasion of Harāt broke up the group of painters who had worked in that city with such distinguished success. Some of them were transported by their uncouth conqueror to Bukhārā, the capital of the Shaybānīd dynasty, and there carried on for a time the fine traditions of the school of Bihzād. Others escaped the servitude to such barbarians by seeking the patronage of the rising power of the Ṣafawids; such, as we have already seen, was the wise course of action adopted by Bihzād himself after he had some experience of the intolerable ways of Muḥammad Khān Shaybānī. A few unwilling to leave their homes in what was possibly their native city, continued to drag out a miserable existence in Harāt, which passed into the hands now of the Ṣafawids, now of the Shaybānīds, and was exposed again and again to the horrors of siege and assault.

Under the barbarous rule of the Shaybānids the art of the school of Bihzād did not survive the lifetime of those unfortunate painters who had been carried off from Harāt to Bukhārā or Samarqand; the refined and delicate traditions they had brought with them barely continued for half a century, for apparently they could find no pupils among the Turkomans and Sarts, who sank more and more into barbarism under the rule and brutal of these descendants of Chingiz Khān, and the kingdom founded by Muḥammad Khān Shaybānī broke up into a number of warring principalities in which all the arts of civilisation perished, when these lands across the Oxus became cut off from contact with the Persia from which they had derived their culture.

The fate of the painters who sought the patronage of the Ṣafawids, was much happier. The generous appreciation that Shāh Ismā'il showed of the genius of Bihzād is typical of the welcome which he accorded to the artists from Harāt, and in the royal atelier of the Ṣafawid Shāh, the Timūrid school was able to carry on its traditions and Bihzād's pupils continued to work in accordance with the manner and technique of the master. From this period onwards, biographical details regarding individual artists become occasionally available, in contrast to the absolute darkness that veils the personality of the painters of the earliest schools. Among the painters who followed the example of Bihzād in migrating from Harāt to the court of Shāh Ismā'il, were Muẓaffar 'Alī, of whom it is definitely stated that he was a pupil of Bihzād, and Master Qāsim 'Alī. Whether the other great exponents of the Bihzād school, — Sulṭān Muḥammad and Āqā Mīrak — had learned of the master in Harāt or became his pupils after he had taken service under Shāh Ismā'il, there is not sufficient evidence to determine; but their work certainly carried on the best traditions of Timūrid art. All four of them formed part of the galaxy of talent that created the masterpieces that have made the reign of Shāh Ṭahmāsp (1524—1576) so illustrious in the annals of Persian painting. The most splendid memorials of this period are the copy of the Shāh-nāma, now in the possession of Baron Edmond de Rothschild, and the *Khamṣa* of Niẓāmī in the British Museum (Or. 2265). In the former MS. there are 285 miniatures in some of which some critics have claimed to be able to recognize the handiwork of Bihzād, though there is no written evidence of authorship in regard to any one of them; but in mastery of execution, variety and excellence of design, and richness of colouring this truly regal volume marks the highest attainment of the period of Persian painting that began under the patronage of the Timūrid princes in Harāt. Illustrations of the Shāh-nāma are often most wearisome in their monotony; the subject matter of this vast epic, consisting as it does largely of recitals of battles and scenes of carnage, leaves only a narrow range for the imagination of the artist, and a study of the innumerable copies of this popular work, to be found in the libraries of Europe and Asia, would seem to suggest that only artists

of inferior talent as a rule undertook this wearisome task. But in the present instance it is obvious that the most accomplished artists in the library of Shāh Ṭahmāsp combined in the preparation of this great monument of art for their royal master, and the technical skill, the careful and patient execution of details and the wide range of imagination displayed, set this manuscript in a place apart from all other copies of the same work. In the *Khamṣa* of Nizāmī, which had once formed part of the treasures in the Imperial Library in Dihlī and is now numbered Or. 6810 in the British Museum, there are inscribed on the lower margin below the miniatures the names of some of the greatest artists of the period, but these inscriptions have certainly been added at a latter date, probably by the librarian of some royal owner; in one instance, the names both of Bihzād and of Mīrak are written below a picture, but in the narrow margin between the two columns of the text is found the name of Qāsim 'Alī, a painter of whose work examples have only been noted in this one manuscript in the British Museum. *KHWĀNDAMĪR* makes a brief mention of him, as follows: "Master Qāsim 'Alī, a painter of faces, is the cream of the artists of the age and the leader of the painters of lovely pictures; he acquired this art in the library of Sultan Ḥusayn Bāyqarā, and through the instruction he received from this prince he came to surpass all his contemporaries and remained continuously in his service".²⁴³ Of the 16 miniatures in this manuscript, Qāsim 'Alī had allotted to him the following subjects: King Alexander visiting a hermit (fol. 273), Majnūn at school (fol. 106b), Majnūn in the desert (fol. 145b), and some others. In all of them he displays a fine sense of composition and of what is expected of an illustrator, and each picture is entirely satisfying as a representation of the particular incident chosen, — whether it is a quiet, peaceful scene like that in which the distraught lover is making friends with the wild animals, and lion and jackal lay aside their savage instincts and leave the timid hares and deer undisturbed in the presence of the victim of love, — or such a lively, dramatic incident as that in which the gallant monarch fearlessly gallops across the picture to slay the dreadful monster, which the painter has made horrible enough, while avoiding the error into which many of his confrères have often fallen, of exaggerating horror to the point of caricature.

There in another picture in the same volume (fol. 15b) which may with some degree of assurance be considered to bear the signature of that elusive artist, Mīrak. This name is not in itself a personal name, and is so little distinctive in meaning (signifying as it does merely "little Sir"), that it is not surprising that difficulty has been experienced in assigning to the various painters so designated, the pictures that properly belong to them. Mention is made of this Mīrak in an account of the poets of his own time, written by Sām Mīrzā, a younger brother of Shāh Ṭahmāsp, and dedicated to that sovereign about the year 1550. "Āqā Mīrak the painter was one of the Sayyids of Iṣfahān, and was unsurpassed and

unrivalled in craftsmanship and painting; at present he is in the service of His Majesty and is the leader and head of this group."²⁶⁶ The only reason for the inclusion of a painter's name in the Prince's anthology was that Mīrak was also a poet; his fellow-workers, Muẓaffar 'Alī and Qāsim 'Alī, receive no mention in this work, because apparently they had not added verse-making to their other accomplishments; and Mīrak was not merely a composer of occasional verse, but had written a whole Dīwān, a copy of which is to be found in the British Museum (Or. 4912), compiled in 927 A. H. — about nineteen years before the date on this picture, 946 (=1538). Now one of the remarkable features of this picture is that we find written on the ruined wall of a building the following:

*Build up the desert heart of those deprived of bliss;
There is no better building in the ruined world than this.
Inscribed by Mīra[k] the painter, 946.*

The presence of any inscription at all in such a place in a picture is an unusual fact in itself, and it seems improbable that anyone but the painter would have ventured to put it there. The paint has flaked off the surface of the paper, carrying with it the last letter of the painter's name, but this is the only letter which it seems possible to supply. The story illustrated in this picture is that of the rebuke administered to King Nūshīrvān by his wise minister who could understand the language of birds and animals. We see them passing a ruined palace; the walls are shattered into a state of melancholy decay; the magnificent tile-work with its gorgeous greens and blues and yellows still in places adorns the walls, but large fragments of it lie scattered on the ground. Perched on a topmost corner of the ruin sit two owls, and the king asks what they are talking about; the minister wishing to reprove his royal master for his insensate love of conquest, explains that they are arranging a marriage and that the father of the bride promises as the dowry of his daughter as many ruined cities as the other may care to ask for, if only the king continued in his present career of devastation. The whole scene is finely conceived: the deer feeding within the quietude of the grass-grown hall of the palace, add a touch of pathos which is characteristic of the whole spirit of the picture. There is another feature of this picture which occurs again in other miniatures in this volume and would seem to indicate a characteristic attitude of mind in the painter, namely, in the foreground we find represented a commonplace incident in the life of simple working folk, — one man waters his ass, while his companion cuts wood for the fire; they have nothing to do with the main subject of the picture, they pay no heed to the great personages so near them, and are apparently brought in merely because the artist wished to escape from the grandeur of the court and get in touch with the facts of simple life.

As explained above (p. 78), the school of painters whose talents adorned the court of the early Ṣafawids was made up of those hapless persons who had been involved

in the ruin of the Tīmūrids of *Khurāsān*. The generous patronage which the founder of the new dynasty, Shāh Ismā'īl, extended to them was continued by his son Ṭahmāsp, who in his early days had himself been a student of the art of painting, though it would be rash to accept in its entirety all that his panegyrist, ISKANDAR MUNSHI,²⁶⁷ says in praise of his sovereign's achievements in this art. He describes him "as an incomparable artist, a delicate painter with a fine brush, whose work was like magic, — though it is almost a piece of insolence to count His Majesty among the artists of the age, yet as his life's page was adorned with this marvellous painting, it is not overboldness to give an account of it. His Majesty was a pupil of the celebrated painter, Master Sulṭān Muḥammad; he attained perfection in designing and in the delicate use of the brush; in his early youth he had a great enthusiasm and love for this art and established in his well-equipped library the incomparable masters of it, such as Master Bihzād and Sulṭān Muḥammad, who had reached the greatest height in this noble art and had attained world-wide fame for the delicacy of their brush; and Aqā Mīrak, the painter, from Iṣfahān, was his special friend and intimate boon-companion. His Majesty was very friendly with this group; whenever he was at leisure from the business of government and the cares of state, he would devote his attention to practising painting."

In this brilliant group of court painters who worked under the patronage of Shāh Ṭahmāsp, Sulṭān Muḥammad has been selected by Dr. MARTIN as the most productive, and he appears to have established a convention which was followed by his imitators with monotonous iteration. Besides the illustrations to the works of the classical Persian poets, the favourite subjects which this group of painters depicted were hunting scenes, and drinking parties seated under blossoming trees in the open air, and it is difficult to detect any trace of originality or individuality in the majority of these oft-repeated motifs. With these painters of Shāh Ṭahmāsp's reign, the influence of the school of Bihzād died out. There came into favour a type of painting less costly in its method of production and more characteristic of the workmanship of those artists who had been employed by the less cultured princes who ruled in the west and south-west of Persia,

RIZĀ 'ABBĀSĪ AND THE DECLINE OF PERSIAN PAINTING

The Ṣafawids had fixed their capital in the north of Persia and the victorious progress of their arms swept away the remnants of such petty dynasties as had survived the ruin of Tīmūr's empire, such as the Turkmans in Ādharbijān and Diyār-Bakr. To the new dynasty which was bringing some unity into Persia, such painters as had grown up under traditions unlike those that had prevailed in the court of the Tīmūrids had to resort for patronage. Painting had had an independant development in the west and south-west of Persia, with a technique inferior to that of the Tīmūrid school. Unfortunately this style gained the ascendancy in the latter part of the reign of Ṭahmāsp, and the finer traditions of the Tīmūrid painters for some unexplained reason died out. ISKANDAR MUNSHI²⁸⁸ gives a hint of these causes in his account of Ṭahmāsp's study of painting — "In the latter part of his reign the multitude of his occupations left him no leisure for such work, and he paid less attention to the work of those masters who bestowed life on the beautiful forms produced by their mixing of colours. Some of the officers of the library who were still alive, were permitted to practise their art by themselves." It is probable that the aggressions of Uzbeks on the east and of Turks on the west necessitated some retrenchment in expenditure, and the painters may have ceased to be paid officials of the state, able to devote an adequate amount of time and care to their artistic creations; at the same time they would have lost the use of the large establishment of "the gilders, margin-drawers, gold-mixers, gold-beaters, and washers of lapis-lazuli", such as are enumerated in the diploma of Bihzād's appointment. To say nothing of the gold so lavishly employed in the paintings of the Tīmūrid manner, the colours themselves must have been in many cases costly and have demanded considerable labour and time in the preparation of them. Painters, therefore, had to look to the nobles and others for their support, and Persian painting largely ceased to be a courtly art and was obliged to become cheaper and more popular.

The characteristic representative of this new direction, is Rizā 'Abbāsī. Much controversy has raged round the personality of this artist; his name is the same as that of the martyred eighth Imām of the Shī'as, and was very common in that period of enthusiastic devotion to the Shī'a cause which marked the establishment of the Ṣafawid dynasty and the recognition of the Shī'a faith as the state religion of Persia, and various attempts have been made to identify this prolific painter with one or other of the numerous artists bearing the name Rizā. The appellation, 'Abbāsī, was probably adopted by him in token of the service he owed to the celebrated Shāh 'Abbās (1587-1629). The historian of the reign of this famous monarch gives an account of a Rizā whose

character appears to fit in with the distinguishing features of the many paintings bearing the signature, Rizā 'Abbāsī, and to indicate exactly the most predominant traits of his work. After a brief notice of Mawlānā 'Alī Aṣghar of Kāshān, a painter who was employed on the staff of the library of Shāh Ismā'il (1576-1578), ISKANDAR MUNSHI goes on as follows: "His son, Āqā Rizā, became the marvel of the age in the art of painting and in the drawing of single figures and the deliniation of faces; and he has a firmly established reputation in these days. In spite of the delicacy of his touch, he was so uncultured that he constantly engaged in athletic practices and in wrestling, and became infatuated with such habits. He avoided the society of men of talent and gave himself up to association with such (low) persons. At the present time he has repented a little of such idle frivolity, but still pays very little attention to his art and, like Šādiq Beg, he has become ill-tempered, peevish and unsociable; but there is a strain of independence in his character. In the service of his present majesty,²⁶⁸ the shadow of God, he has been the receiver of favours and kindnesses and consideration; but on account of his evil ways he has not taken warning and he is consequently always poor and in distress. The following verse is applicable to his condition:

"All the kings of the earth are seeking after me, while in Iṣfahān my heart has turned to blood in my search for a livelihood".²⁷⁰

In this brief account there are several details emphasised, which exactly fit in with the work of the painter who signs himself as Rizā 'Abbāsī. His genius certainly impressed his contemporaries, and his enormous output testifies to his popularity, as doubtless, also, to the necessity imposed upon him of working for his living, for the obscure reference to his having lost the royal favour would seem to imply that he was (for a certain part of his career, at least) not employed on the regular staff of the royal atelier. With the exception of the manuscript of Nizāmī's *Khusraw and Shirin*, in the library of the Victoria and Albert Museum, which he may possibly have illustrated in order to show that he was capable of producing illustrations equal to those of his more fortunate rivals who drew a regular official salary, almost the whole of his work, as we know it, appears to have consisted of drawings of individual figures or groups of two or more personages. In his obstinacy and independence of character we may find an explanation of his practice—so unusual in the case of his predecessors—of signing his pictures, and, in many examples, of adding long inscriptions giving the exact date and the circumstances under which the picture was drawn. The reference to Šādiq Beg is interesting, as this painter, a successful pupil of the famous Muzaḥḥar 'Alī, at one time took to the life of a wandering dervish, and it was just this class of itinerant devotees that appears to have excited the interest of Rizā 'Abbāsī, for they are found deliniated in some of his finest and most impressive drawings.

Rizā 'Abbāsī had many imitators, but with him the series of the great Persian painters came to an end. From the XVIIth century onwards, the fashion of imitating European models set in, and the decline of Persian painting rapidly followed.

ISLAMIC PAINTING IN INDIA

The Mongol conquests did not extend into India, for this country had only to suffer from sporadic raids made by small bodies of Mongol troops who never succeeded in effecting a permanent settlement. Still the development of Islam in India was profoundly influenced by the rise of the Mongols, though in quite a different way from the rest of the Muhammadan world. Panic-stricken refugees fled into India before the terror of the Mongol invasion, from 'Irāq, Persia, Khurāsān, Turkistān, etc., and an important chapter in the religious history of India begins with the arrival during this period of a number of saints and ascetics, who established in that country religious orders and institutions that have played an important part in the religious life of the Indian Muhammadans from that date onwards. Some estimate of the influence of these refugees may be formed from the fact that in the reign of Sultan Balban (1265—1287) as many as 15 wards of the city of Dilhī took their names from such refugees. Whether among them there were to be found any painters, the historian has not cared to note, but artists could hardly have failed to come to know that there was a wealthy Muhammadan court in India which had escaped the ruin that had overwhelmed so many centres of culture in Persia and adjoining countries. For more than half a century before the destruction of Baghdād in 1258, Muhammadan rule had been firmly established over the whole of northern India as far to the east as Bengal, and as far to the south as the Vindhya Mountains. Whether the fine feeling for architectural grandeur, displayed in the mosques and other buildings erected by successive Sultans in India, had had its counterpart in any appreciation of the art of painting remains entirely unknown, from lack both of memorials and historical record; and it is not until the beginning of the Mughal period, when Bābur conquered Hindūstān in 1526, that we hear of any encouragement of painters on the part of any of the Muhammadan rulers of India. By that date five successive dynasties had ruled from Dilhī as their capital, and independent kingdoms had been established in Bengal, Jaunpur, Mālwa, Gujarāt and the Deccan. Each one of these kingdoms has left behind architectural memorials of great magnificence, testifying to the wealth and enlightened patronage of the rulers, but what was their attitude towards the art of the painter, we have no means of knowing. Similarly we know very little of the activity of Hindu painters during this period, or indeed from the date of the frescoes of Ajantā (about 100 to 628 A. D.) and Bāgh (in the VIth or first half of the VIIth century) down to the XVIth century. Yet there can be no doubt whatsoever that the Hindu artistic traditions in painting were kept alive and that the art of painting, which ample literary evidence proves to have formed an integral part

of the cultural life of the Hindus, must have continued to derive support from the definite approval given to it by the Hindu scriptures and by the living manifestations of Hindu religious feeling; apart, too, from the place which painting has filled in the religious life, there must also have been a folk-art such as is actively alive to the present day. The ample evidence from the reign of Akbar shows how this enthusiastic patron of painters was able to make use of Hindu genius for the illustration of his manuscripts and for the adornment of his palaces. But no examples of their work during the earlier Muhammadan period have survived to show whether any of the pre-Mughal rulers took a similar enlightened interest in the art of painting.

But there is no doubt that Bābur shared the same delight in painting as characterised the Tīmūrid princes from whom he was descended. In spite of the perils of his adventurous life, he evidently regarded finely illuminated manuscripts as amongst his most precious possessions, to be preserved at all costs. When he had to flee before the invading army of Muḥammad Shaybānī, he carried off to Kābul with him manuscripts which had been adorned by some of the greatest painters of Harāt, and they still bear his seal and those of his successors, who thus showed their appreciation of these fine works of art.²⁷¹

Quite possibly Bābur extended his patronage to some of the painters who were scattered after the death of Sultan Ḥusayn Bāyqarā; but the only evidence that we have of painters working under his patronage is in the manuscript of the Persian version of Bābur's memoirs, which is now in the possession of the Mahārājā of Alwar; the date given in the colophon of this manuscript is the same as that of Bābur's death, and the illustrations in it were therefore probably executed by painters in his employ.²⁷²

In his memoirs Bābur makes mention of Bihzād and Shāh Muẓaffar, and draws special attention to painting as being among the accomplishments of some of the distinguished persons referred to in his memoirs, e. g. the son of Ḥaydar Mīrzā Dughlāt, the author of the *Ta'rikh-i-Rashīdī*, and his cousin, Bāysunqur Mīrzā.²⁷³

Bābur would hardly have been likely to have made such references unless he had taken a special interest in such an accomplishment. He does not appear himself to have ever studied painting, as several of the Tīmūrid princes are known to have done, and indeed his troubled and adventurous life hardly gave him sufficient quiet or leisure for such a pursuit, but the alertness of his aesthetic faculties comes out clearly in many pages of his Memoirs when he describes the beauty of natural scenery and the charm of a garden or of an individual flower. Even in a moment of grave personal danger he could note in an orchard that "one young apple-tree had turned an admirable autumn-colour; on each branch were five or six leaves in regular array; it was such that no painter trying to depict it could have equalled".²⁷⁴

Bārbur's son and successor, Humāyūn, did not inherit the military genius of his father, and for fifteen years he was a wanderer and an exile, while a successful rival occupied his throne. In 1544 he appears to have abandoned hope of regaining his kingdom in India and took refuge with Shāh Ṭahmāsp in Persia. At that period the court of Shāh Ṭahmāsp was thronged with some of the greatest painters that Persia ever produced; Bihzād must certainly have been dead before the date of Humāyūn's visit, but several of his pupils enjoyed the liberal patronage of the Shāh and their works may have been set out for the admiration of the exiled monarch. We know from the autobiography of Gulbadan Begam, Humāyūn's sister, that the Persian king extended to his guest a generous hospitality and "every day sent presents of rare and strange things," and made special arrangements for him to visit places of historic or artistic interest, such as the ruins of Persepolis; his sister records that "in Khurāsān His Majesty visited all the gardens and the flower gardens, and the splendid buildings put up by Sultan Ḥusayn Bāyqarā and the grand structures of olden days".²⁷⁵

Whatever artistic influence may have been incited in Humāyūn's mind by his contact with the great painters of Ṭahmāsp's court, during his sojourn in Persia, he had little opportunity of extending his royal patronage to the encouragement of artists, for only a few months after he had recovered the throne of Dihlī he died in consequence of an accidental fall down the steep steps leading to the library in his palace.

One great monument of his interest in painting has survived in the illustrations of the Romance of Amīr Ḥamza,²⁷⁶ the greater part of which is preserved in Vienna, while twenty-five pages are in the Indian Museum, South Kensington. Several artists must have collaborated in this vast undertaking, which was to consist of twelve volumes of one hundred folios each, with a picture on each folio. The unusual size of the page (22" × 28³/₄") necessarily implied a large method of treatment and presentation, differing considerably from the minute and delicate work of Bihzād and the painters of his school. It is probable that one may here recognise something of the character of the frescoes with which the palaces of the Persian monarchs of the fifteenth and sixteenth centuries were decorated. One of the artists engaged upon this work was a native of Tabriz, named Mīr Sayyid 'Alī, who also attained some reputation as a poet, but how far that was due to his own poetic merit it is difficult to say, for he was accused of having published the work of others in his own name.²⁷⁷ He had learnt the art of painting from his father, Mīr Maṣṣūr, in his native city, and appears to have attracted the notice of Humāyūn, who took him under his patronage and showed his appreciation of the painter's talent by conferring on him the title of "Nādir al-Mulk" (The Marvel of the Realm). As many as fifty painters are said to have worked at the illustrations of "The Romance of Amīr Ḥamza" under the superintendence of Mīr Sayyid

'Ali.²⁷⁸ His place was afterwards taken — possibly after his death — by another Persian painter, 'Abd aṣ-Ṣamad, a native of Shīrāz and son of one of the ministers of Shāh Shujā'. It is interesting to note that a member of so high-placed a family could take up the profession of painting, and this is an indication of the respect with which, at this period at least, the profession was regarded; and, as will be seen, painters could also attain high position among the officers of the state, quite apart from the proficiency they might exhibit in their art. Humāyūn had made the acquaintance of 'Abd aṣ-Ṣamad in Tabrīz, during his exile in Persia, and he invited the painter to enter his service, but it was not until the fortunes of Humāyūn had begun to recover and he had established himself in Kābul, that 'Abd aṣ-Ṣamad entered his service, in the year 1549.²⁷⁹ It is unlikely that this vast undertaking was completed during the lifetime of Humāyūn, since it is expressly stated that it was Akbar who had illustrations made for the story of Amīr Ḥamza, as he was particularly fond of it and used, himself, to recite the stories contained therein to the ladies of his palace.²⁸⁰ The great work, therefore, projected by Humāyūn, was probably completed under the patronage of his more illustrious son, and it was during the reign of Akbar that 'Abd aṣ-Ṣamad gained so much influence at court until, about the year 1577, he was appointed Master of the Mint in Fathpur Sikrī, with general control over that department; and 'Abd aṣ-Ṣamad, who was also an expert calligraphist, doubtless deserves the credit for the artistic excellence of Akbar's coinage. Nine years later Akbar appointed him Dīwān, or Revenue Commissioner, in the important city of Multān.

As a boy, Akbar is said to have studied the elements of drawing under the tuition of 'Abd aṣ-Ṣamad, and his art master appears to have exercised a more profound influence upon his royal pupil than any other of his teachers, for none of them ever succeeded in getting him to learn even the letters of the alphabet, so that to the end of his days this illustrious monarch was unable to read or even sign his own name. Of Akbar's establishment of the royal atelier there is no record whatsoever, and it hardly seems possible that he could have devoted much attention to such a matter during the early part of his reign, for when he succeeded his father in 1556 he possessed no definite territory whatsoever, and five years were spent in almost continuous fighting before he could establish his dominion over Hindūstān. When his great minister and panegyrist, Abu'l-Faḥl, wrote an account of the administration of the kingdom and of his master's personal interests and characteristics, between the years 1596 and 1601 when Akbar had already been on the throne for forty years, the account that he gives of the painters who worked for the Emperor shows that there was an elaborately organised and well-equipped establishment. In many respects such an establishment must have followed the same lines as those formerly existing in the capital cities of the Sultans of Harāt or the Ṣafawid Shāhs, but there is no evidence that any of these previous royal

patrons had the same strong feeling towards the art of painting as Akbar expressed. As Abu'l-Fazl informs us, he had shown a great predilection for this art from his earliest youth, and looked upon it as a means both of study and amusement. The work of all the painters was submitted to him every week and he then conferred rewards according to the excellence of the work done, and, if he thought fit, increased the amount of the monthly salaries. "One day at a private party of friends, His Majesty remarked: There are many that hate painting, but such men I dislike. It seems to me that a painter has quite peculiar means of recognising God; for a painter in sketching anything that has life, and in devising its limbs, one after the other, must come to feel that he cannot bestow individuality on his work, and is thus forced to think of God, the giver of life, and will thus increase in knowledge".²⁸¹ How far removed this sentiment is from the common judgement of the Muhammadan world, is obvious to anyone who compares it with the accepted doctrine of the theologians of Islam, and Akbar's predilection undoubtedly exercised an influence on the character of the painting during his reign. His painters appeared to have been mainly occupied in illustrating the works of literature which their imperial master delighted to have read to him. Among these was the history of the house of Tīmūr, from which he himself was descended, and of the dynasty of Chingiz Khān, with which Tīmūr claimed relationship. Akbar's fondness for romance has already been referred to, and besides the Amīr Ḥamza he was fond of listening to story books such as that of Kalīla and Dimna. His interest in the religion and mythology of the Hindus caused him to have translated into Persian the great Sanskrit epics, the Mahābhārata and the Rāmāyaṇa; Akbar's own copy of the first of these two, the execution of which is said to have cost £ 40000, is still preserved in Jaipur and contains 169 pictures.²⁸² These are but a few of the manuscripts illustrated for Akbar's own use in the Imperial library, which, according to a Spanish priest who visited Agra in 1641, in the reign of Akbar's grandson, contained as many as 24000 volumes. Fortunately some of the books once in Akbar's possession have survived to the present day. Besides the Persian translation of the Mahābhārata in Jaipur, already mentioned, the most noteworthy are the Akbar-nāma in South Kensington, the Khamsa of Nizāmi belonging to Mr. Dyson Perrins, and several manuscripts in the British Museum.²⁸³

Abu'l-Fazl tells us that more than one hundred painters at the court of Akbar had attained fame as being masters in their art, and that there was a large number of others who had not reached the same degree of proficiency.²⁸⁴ He especially singles out the Hindus among them as deserving of commendation. Since the majority of the pictures in manuscripts illuminated for the royal library that have come down to us, have inscriptions showing the names of the artist or artists (for in many cases two or even three artists collaborated in the work), it has been possible to ascertain the names of as many as seventy-five, though Abu'l-Fazl himself mentions

only seventeen of them by name. Out of this total of seventy-five only twenty-eight appear to have been Muhammadans — to judge merely from their personal names, though in the case of natives of India it sometimes happens that a Muhammadan of Hindu origin retains his original Hindu designation. This large body of Hindu painters brought a very distinctive contribution of their own into the art of the Mughal period. They had a long tradition behind them, and, with that tenacity which is so characteristic of Hinduism, they refused to abandon their native methods and technique even while working for the foreign conqueror. On the other hand, the superintendents of the royal atelier had come from Persia and had brought with them the conventions of the school of Bihzād.

Another distinct influence made itself felt in the work of Akbar's artists, though it became much more prominent during the reign of his successor, Jahāngīr, namely, influence coming from the West. Jesuit missionaries at the court of Akbar brought with them from Europe pictures, especially woodcuts, and these naturally excited interest in the mind of this monarch to whom painting was a subject of such enthralling delight. The court painters were set to copy these foreign importations, and innumerable details taken from these woodcuts find a place in many of the pictures of the reigns of Akbar and Jahāngīr. Especially is this the case in landscape: in many a picture representing a hunting scene or a drinking party, though the personages depicted conform in dress, features and other characteristics to contemporary oriental types, there is visible in the distance a little town or village entirely incongruous in character, having been transported into the oriental landscape from some Flamish or German woodcut of the period.²⁸⁵ Jahāngīr (1605—1628) had an especial fondness for European pictures. Sir Thomas Roe, who was sent as an ambassador from King James I. to negotiate a commercial treaty between India and England, records the excited interest which the Emperor took in some English miniatures that the ambassador had in his possession. He had apparently not previously seen examples to this particular form of art, and at once set his own painters to work to copy them. His interest was also excited in the religious pictures which the Jesuit missionaries had brought with them, and in one Indian picture representing the Emperor seated in his palace, it is possible to make out among the decorations of the room a minute copy of a European picture of the Annunciation.

Jahāngīr's Memoirs contain frequent references to his painters and their work. He prided himself on his critical appreciation of works of art, and tells us: "I am very fond of pictures, and have such discrimination in judging them, that I can tell the name of the artist, whether living or dead. If there were similar portraits finished by several artists, I could point out the painter of each. Even if one portrait were finished by several painters, I could mention the names of those who had drawn the different portions of that single picture. In fact I could declare, without

fail, by whom the brow and by whom the eyelashes were drawn, or if anyone had touched up the portrait after it was drawn by the first painter".²⁸⁶ He appears to have often carried some of his painters along with him during his tours through his dominions and especially on his hunting expeditions, and they were called upon to make pictures of any particular incident of which the Emperor wished to preserve a record. He would at time recognise their merit by gifts of especial liberality, and in his Memoirs he makes mention of Farrukh Beg, who had been one of the painters employed by his father, and records that he made him a special grant of two thousand rupees on the occasion of the marriage celebration of the heir apparent.²⁸⁷ As in former reigns, artists of Persian or Central Asian origin came to India to enjoy the liberal patronage of the Mughal emperor. In Jahāngīr's reign, one of the most noteworthy of these was Muḥammad Nādir, from Samarqand, whose portraits are among some of the finest examples of Mughal portraiture that have survived to us and have frequently been reproduced in various works upon Indian painting. Another painter of Jahāngīr's reign, of whose work we are able to judge from several signed examples, is Ustādḥ Maṇṣūr, to whom he refers as "the wonder of the age" and as unique in his generation in the art of drawing. Maṇṣūr was especially successful as a painter of birds and animals, and in the Wantage collection there are some fine examples of his work, e. g. two cranes, and a turkey cock which the Emperor had described in his Memoirs as a particularly strange and wonderful animal brought to him from Goa in the year 1612.²⁸⁸

A striking piece of evidence of the enthusiasm which Jahāngīr felt for fine works of art, is the fact, that on the very day of his accession he had brought to him some of the finest illuminated manuscripts in his father's library, and he has recorded, with his own hand, the date on which he turned over their pages.

Another characteristic feature of the painting of Jahāngīr's reign is the fact that he appears to have employed his artists not so much to illustrate manuscripts, as his father had done, but rather to make separate pictures on pieces of paper which were afterwards bound up into albums; it is in this form that the majority of the paintings of his period have survived. Similarly, the art of portraiture appears to have received a great impulse in this reign, and the Emperor used to have the portraits of the chief officers of his court drawn by the artists in his employ. Besides these separate portraits which enable us to learn something of the personality of the principal nobles of the period, there are many pictures of the formal audiences technically known as *Darbārs*, which were of daily occurrence in the court of the Mughal emperors as in that of Louis XIV in his palace at Versailles. The Emperor is generally represented as seated on a raised balcony, with his sons and one or two of his chief ministers in close proximity to him, while in front of him, on a lower level, are massed the courtiers standing in two groups, facing one another, so that their countenances are almost invariably in profile. Formal and

monotonous as these pictures sometimes are, they are of considerable historical importance, as the artist in many cases has added the name of each of the personages present.

Such Darbār scenes occur also for the reign of Shāh Jahān (1628—1659). This Emperor continued to keep up a group of court painters, though there is no evidence that he had inherited his father's special enthusiasm for pictures; on the other hand, the great increase in the number of separate portraits of individuals who were not members of the royal family, would seem to indicate that the painters had to seek for patronage elsewhere than in the royal atelier. Indeed, from this reign onwards the art of painting appears to have taken on a more popular form: the example of the ruler had set a fashion, and individual nobles offered employment to the painters, who had increased in numbers beyond the possibility of official employment. But so far from this popular demand contributing to the raising of the status of these artists, their lot appears to have deteriorated step by step. To Bernier, a French physician who travelled in India between the years 1658 and 1668, we owe some illuminating information as to the social condition of the painters during the latter part of the reign of Shāh Jahān. Those who were fortunate enough to be taken into the service of some wealthy noble, probably enjoyed a regular stipend, for he tells us that the chief Omrahs (or nobles) kept a number of artists in their pay, who worked in their houses, taught their children and were stimulated to exertion by the hope of reward; they were accommodated in large halls or workshops, as other artisans were: "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."²⁹⁹ But the lot of the unfortunate artist who did not in this way succeed in entering the household of a wealthy patron, but had to live in a house of his own, appears to have been very wretched. Bernier tells us: "These unhappy men are contemned, treated with harshness, and inadequately remunerated for their labour. The rich will have every article at cheap rate. When an Omrah or Mansubdar requires the services of an artisan, he sends to the bazaar for him, employing force, if necessary, to make the poor man work; and after the task is finished, the unfeeling lord pays, not according to the value of the labourer but agreeably to his own standard of fair remuneration; the artisan having reason to congratulate himself if the *korrah* has not been given in part payment".³⁰⁰ Further he adds, "no artist can be expected to give his mind to his calling in the midst of a people who are either wretchedly poor, or who, if rich, assume an appearance of poverty, and who regard not the beauty and excellence, but the cheapness of an article; a people whose grandees pay for a work of art considerably under its value and according to their own caprice, and who do not hesitate to punish an importunate artist or tradesman with the *korrah*, that long and terrible whip hanging at every Omrah's gate. Is it not enough also to damp the ardour of any artist when he

feels that he can never hope to attain to any distinction; that he shall not be permitted to purchase either office or land for the benefit of himself and his family; that he must at no time make it appear he is the owner of the most trifling sum; and that he may never venture to indulge in good fare, or to dress in fine apparel, lest he should create a suspicion of his possessing money?"²⁸¹

The culmination of this unhappy condition of the Indian artists was reached in the next reign, that of Aurangzib (1659—1707), whose puritan temperament and rigid observance of Islamic law and institutions led him to adopt the common orthodox attitude towards the art of painting and to withdraw his patronage from those whom the Traditions of the Prophet had condemned inexorably to the fires of hell. Consequently we find that the art of painting suffered a lamentable decline during the long reign of Aurangzib, and none of the paintings of this period exhibit the same refinement or technical skill as we find in the works of the artists who had enjoyed the patronage of the three preceding emperors. But though painting no longer flourished under the royal patronage, it did not any the less continue to be cultivated, as is evidenced by the large number of pictures belonging to the latter part of the seventeenth century. It would appear that Aurangzib's subjects liked to possess representations of their ruler, because pictures of him riding at the head of his army or hunting or reading or, in his later years, when he was bowed down with age, being carried in his litter, exist in abundance; but in the majority of examples, both drawing and colouring are poor, and the brilliant days of the school of Mughal painting are obviously at an end.

From this decline, Indian painting under Muhammadan patronage never entirely recovered, though at a later period there was one brief revival which is worthy of note, for in the reign of Muhammad Shāh (1719—1748), during the early decades of the eighteenth century, there appears to have been a short-lived renaissance of Indian painting. Its characteristics and its significance in the history of Muhammadan culture form an interesting parallel to the work of a French painter of almost the same period. Watteau died in the year 1721, during the early part of the reign of Muhammad Shāh, and, like the Indian painters who were his contemporaries, he takes refuge in the world of imagination from the distressful times in which he lived. There were no more glorious victories for the French artist to depict, since the armies of France were now continually in retreat; famine stalked the land, and the poor were crushed under an ever-increasing burden of taxation. Watteau himself was not one to derive pleasure from his surroundings, even had they been more inspiring, for he was of a melancholy temperament, always discontented with himself and with others, nervous and restless. So he turned to an ideal world, where his fancy was unhampered by hard fact; he paints the gods and goddesses of Olympus, and when he comes again to earth, depicts pastoral scenes, — but pastoral scenes such as no human eye ever saw, peasants

of an exquisite refinement, dancing with grace and ease, as though they were fine ladies and gentlemen of some sylvan court. In a similar and even more distressing manner, a great civilisation was, in India, also rushing to its ruin. The Mughal empire was breaking up and the raids of the Mahrattas rendered life and property insecure, and it was unsafe for women to go to the wells outside the city walls for fear of being carried off by these marauders. The weakness of the central government left the taxpayer a victim to any local magnate who could attract to himself a body of mercenaries, and life was full of uncertainties and anxiety. So, like the French painter, his Indian contemporary no longer goes to sober history or to living personages for the subject matter of his pictures, and he consequently adds nothing to our knowledge of the times he lived in, for he turns from the miseries and troubles that surround him to the realm of fancy. He illustrates fantastic romances, full of fairies and strange monsters, and the adventures of imaginary lovers moving in an unreal world.

Apart from its special choice of subject matter, this school of painting has certain distinctive features of its own — brilliancy and vividness of colouring, set off by large white spaces — and is in pleasing contrast to the somewhat drab and uninteresting colouring of the majority of Indian paintings since Aurang-zib's puritanical attitude towards art had withdrawn the imperial patronage from painters. These pictures were painted before the crowning horror of Nādir Shāh's invasion in 1739, but this disaster, followed a few years later (1756) by the invasion of Aḥmad Shāh Durrānī, struck the death knell of Mughal culture, and painting perished with the other arts that mainly lived on the patronage of the court.

ISLAMIC PAINTING IN TURKEY

The Ottoman Turks are probably the least original of the races that have played any great part in the history of the Muhammadan world; but they have displayed a remarkable readiness to learn from others, and have known how to make a skilful use of the talents of the more richly endowed peoples who passed under their rule or otherwise came into close contact with them. Making their way first into Asia Minor as a body of nomads unacquainted with the method of orderly government, they learned from their Greek subjects how to administer the territories that bit by bit fell into their hands, and as soon as they had crossed over into Europe they became more and more dependent upon the subject nations in the organisation of their empire and the orderly direction of the life of cities, — in fact, in all matters that required a trained intelligence and wise foresight. The elaborate ceremonial of the court and the intricate officialism of the seraglio, with its exactly subordinated grades and degrees, they took over almost in its entirety from their predecessors on the throne of Constantinople. For the efficiency of their fleet, the Ottoman Sultans depended on their sea-faring Greek subjects, and they owed their success in some of their most decisive land-battles to their Christian troops, e. g. it was the Serbian reinforcements which assured victory on the field of Nicopolis in 1394, and it was by means of his Portuguese artillery that Salīm the Grim in 1516 scattered the Mamlūk squadrons in the battle of Marj Dābiq, which opened the way for his conquest of Egypt. The poetry of the Ottomans which forms the richest part of their literature (with the possible exception of their history) is frankly and obviously based upon Persian models; it deals with just the same themes, adopts the same conventions, and moves within the same circle of ideas. There was a similar dependence upon the intelligence of others in the domain of art; in the realm of architecture, the debt of the Ottomans to their predecessors is obvious to every student of the mosques of Constantinople, but it is not so well known that the architects they employed were in a large number of cases either Christians or of Christian origin. In painting their masters were the Persians, and it is a remarkable testimony to the genius of the Persian painters that they could cause their art to be adopted in countries so far from one another as India in the east and Turkey in the west.

The earliest evidence of Ottoman interest in Persian painting belongs to the period after the conquest of Constantinople, and the models that the Ottoman painters set themselves to copy were the contemporary manuscripts produced under the patronage of the later Timūrid princes of Harāt. An impulse to this artistic direction was given by the fine works of art brought to Constantinople by the son of Sultan

Husayn, *Badī az-Zamān Mirzā*, who made a vain attempt to wrest from the conquering Uzbeks his father's capital, and after his failure took refuge with the Ottoman Sultan, bringing with him some of the precious manuscripts from his father's library. The miniatures of this fine period of Persian painting served as models for the Ottoman artists, until, towards the end of the XVIIth century, fashion changed and they began to imitate the new manner of the *Ṣafawid* painters.²⁹²

As might well be expected, Persian artists made their way to Constantinople to place their talent at the disposal of the new Muhammadan power that had achieved such dazzling success on the shores of the Bosphorus. One of the best known of these was *Walī Jān*, a native of *Tabriz*, who obtained an appointment as court painter in the latter part of the XVIth century (sometime before 1587); he appears to have been well received and to have gained a great reputation, but he damaged his career through his overweening conceit and arrogance. The magnificent album of Sultan *Murād III*, compiled in 1572, now one of the treasures of the State Library in Vienna, contains two examples of his work, — a cupbearer and a young man holding a bow. In *Husāmzāda Ṣan'ullāh* we meet a painter of genuine Turkish stock; he was born at *Brussa* and flourished in the reigns of *Murād II* and *Muhammad II*; as often happens, it is owing to the fact of having been a poet (his poetic name was *Ṣan'ī*) that he received that attention from the biographer which his achievement in the mere art of painting might have failed to obtain for him; and it is probably for the same reason that his dexterity as a painter won for him the applause of a fellow poet. To the reign of *Sulaymān the Magnificent* belongs the fine work of a painter named *'Osman*, who illustrated a history of the reign of his imperial master.

Another of the court painters of Sultan *Sulaymān* was *Haydar*, who made copies of portraits by *Francois Clouet*,²⁹³ for apparently *Sulaymān* was influenced by the same curiosity for the Christian art of the West as his great-grandfather had been. *Muhammad II* had taken a very special interest in the work of Italian painters and medallists, and as many as six of them are known to have been in his employ; the most famous of these was *Gentile Bellini*, who in response to the request of the Sultan for a good painter, was sent by the Venetian Signoria to Constantinople in September 1479 and remained there until November 1480, during which period he completed a large number of pictures for his imperial patron.²⁹⁴ *Bellini* trained one Turkish pupil, a native of *Brussa*, named *Shiblīzāda Aḥmad*, but not a single example of his work has come to light, though he was accounted to be one of the most noteworthy of Turkish painters in the reign of *Muhammad II*. Perhaps his work fell a victim to the fanatical reaction that set in under the reign of *Bāyazīd II*, who turned all *Bellini's* pictures out of the palace so that they were sold in the bazaar and bought up by the Italian merchants.²⁹⁵

The fanatical hostility to pictorial representation in Turkey appears to have been an effectual obstacle to the growth of a successful school of painting, and those amateurs who collected pictures had to keep this predilection a profound secret; such seems to be a legitimate conclusion from the story of the secret cabinet in which were found the pictures collected by the Grand Vizier, Qara Muṣṭafā, when he fell from power in 1683.²⁹⁶ But the Imperial Seraglio was safe from such depredation, and from the latter part of the XVIth century onwards it became a common practice to paint the portraits of the Sultans. Series of such portraits were included in the so-styled *Subḥat al-Akḥbār*, which claimed to give illustrated genealogical tables of the Ottoman imperial family, in the majority of cases beginning with Adam. For such family tables, which often take the form of rolls, the artist had ample opportunity to draw upon his imagination and therefore probably felt little hesitation in setting down purely fictitious representations of the earlier Ottoman Sultans, since it is unlikely that there was any authentic portrait of an earlier date than that of Muḥammad II. The inventor of such illustrated genealogies is said to have been a certain Sharīf Shafī' who lived in the reign of Sulaymān the Magnificent.²⁹⁷ But there is no evidence of any such generous and sympathetic patronage of painters in Turkey as in Persia and India, and the art of painting never attained anything like the same fine achievement as in the two latter countries. Even those Sultans who disregarded the religious prejudices of their co-religionists — failing to find adequate skill and talent among native artists — preferred to employ Christian painters, as Muḥammad II had done; so that what little skill the Turkish painters might have been able to achieve, seems to have declined and finally perished from lack of intelligent patronage. Such little originality as any Turkish painters showed, consisted in the representation of the characteristic costume of the Sultans and the grandees of their court, and in their pictures of battles and especially sea-fights, for which the Persian pictures they were so fond of copying provided no models.

ISLAMIC BOOKCRAFT

Of the craftsmen who took part in the preparation of an Arabic or Persian manuscript, the calligrapher was held in highest esteem by his contemporaries. His art enjoyed the approval of religion, for had not God himself deigned to swear „By the pen and what they write!“ (Qur’ān, Sūra LXVIII, 1) and what action could be more meritorious than the copying of the word of God itself? Even princes sought to win for themselves divine approval by transcribing copies of the Qur’ān, and thus added dignity to an art that was already assured of reward in heaven. Extravagant stories are told of the payments made to expert calligraphers: one is said to have received 10000 dinārs for 1000 verses.²⁹⁸ A craft so amply rewarded was clearly one with a recognised status and there is ample evidence that in the Muhammadan world it was appreciated more than any other art; for where search is made in vain for any record of architects, painters, metal-workers, and other artists, whose works have survived for our admiration even to the present day, there are ample biographies of calligraphers; and the Muhammadan annalist reckons them among the glories of an illustrious reign and gives them a place in his pages along with statesmen, generals, poets and men of learning. Those who could not afford to pay for a whole manuscript, were proud in the possession of a single specimen of the penmanship of a distinguished calligraphist, and these (generally a verse from the Qur’ān or a quatrain of poetry) came to be eagerly sought for by amateurs and often fetched high prices. They find an honoured place in royal albums and private collections, and unlike the majority of pictures, they quite commonly bear the signature of the artist, since he had no ground for fearing the condemnation of the righteous.

Next in dignity to the calligraphist came the decorators of the written page; among these the *mudhakkib*, the worker in gold, appears to have been highly esteemed, for many painters when they sign their names to a picture add "*mudhakkib*" after it, as an appellation that was clearly intended to imply a claim to respect, and the historian often makes special note of the fact that a painter was at the same time a worker in gold also.

In the Muhammadan world decorative art as applied to the written page makes an early appearance in copies of the Qur’ān (cf. p. 22 f.). It begins quite simply with added emphasis to the headings of the chapters, the titles of which in early manuscripts are written on the same line as the rest of the text, but later they receive a separate place and in their isolation become more and more rich in colour and elaboration. In the most highly elaborated examples of such decoration, special care is devoted to the *Fātiha*, the opening chapter of the Qur’ān, until the text almost becomes lost in a blaze of gold and colour.

In manuscripts of a secular content it is often the titles of separate works or of successive books or chapters that are selected for this special treatment. Thus in the case of the two works of Persian literature most commonly adorned with paintings, the *Shāh-nāma* of Firdawsī and the Quintet of Nizāmī, the headings of the cantos of this epic and of the separate romances that make part of the *Khamsa*, are often set in panels which assume a vast variety of design and colour; sometimes the title is written on a background of gold, at other times the colour used for the title is in contrast to that of the panel, and different styles of calligraphy and of ornament testify to the active inventive genius of the illuminators.

M. BLOCHET has suggested that the term *tarrāhī* is used as a technical term to denote the designing of such a *sarlawh* or heading, but in the elaborate pictures of the Mughal school, upon which more than one painter used to work, this term seems to have been used of the artist who sketched in the original design, leaving the filling in of the details, especially the painting of the faces (for which a separate term *chihra-nāmī* is used) to one of his colleagues. It seems better therefore to take *tarrāhī* as indicating sketching or designing generally and not merely one particular variety of it.

The early history of Islamic bookbinding has already been dealt with on p. 30 ff.; here only a few references can be made to examples of a later period; among the finest of these are the superb copies of the Qur'ān that once belonged to the Mamlūk Sultans of Egypt. It was doubtless on account of his concern with the word of God that the bookbinder received a consideration that was often refused to the painter. The binder was thus justified by the common opinion of his co-religionists in feeling a pride in his work and in inscribing his name on a prominent place in the binding. In Turkey, the bookbinders formed a recognised guild of their own, which is said to have been established by Sultan Bāyazīd II (1481—1512).²⁹⁹

If any Persian bindings have survived from the period preceding the Mongol conquest, attention has not been drawn to them. In the Museum of the Awqāf in Constantinople some bindings are preserved that were made for the Mongol princes of Persia in the early part of the XIVth century; they are characterised by a severe simplicity in the use of the geometrical ornament, and the absence of any use of gold for decorative purposes.³⁰⁰

By the beginning of the next century, a characteristic mark of Persian binding, which was destined to appear in a variety of forms for several centuries, makes its appearance in a binding executed in Baghdād in the year 1407, namely, a piece of perforated leather, cut into an intricate pattern and superimposed on a ground of blue and gold. Up to the Timūrid period, the ornamentation appears to have been either of geometrical patterns or to have been made up of conventionalised forms of leaves and flowers; but later a more naturalistic character

was given to the decoration of the covers by the introduction of various varieties of animal life.

Naturally, when the different styles of binding had once been introduced, they occurred concurrently, and while we find among the oldest examples of Timūrid bindings some in which no use at all is made of gold, the artist entirely depending for decorative effect on an elaborately designed geometrical pattern, for more precious manuscripts gold was sometimes lavishly employed, until the outside cover of a book might be entirely made up of tooled gold work; in such an instance, the pattern might consist of a central panel, repeated once or twice, the space between these enclosing lines being filled up with an intricate design of leaves or flowers, — repose and dignity being secured by enclosing the central panel of the cover within straight lines, alternating with varied patterns, either floral or geometrical. Or else the binder might borrow his motifs from the animal world and cover the page with antelopes, wild goats, and jackals, careering all over it; — or if he effected a Chinese style of ornament, he might fill up the centre of his page with a magnificent *simurgh*, the mysterious bird so often referred to in Persian poetry, or with fiery dragons elaborated into a variety of fantastic forms, — such as constantly appear on the margin of Persian manuscripts in forms borrowed from Chinese silks or pottery.

The minute elaboration of detail devoted to the decoration of such covers may be realised from the calculation that has been made that in the preparation of the covers of a MS. of the date 838 (= 1434 A. D.), believed to have been made for Shāh Rukh, as many as 550000 impressions were made by the binder's tool, and that the whole work must have taken two or even three years to complete.¹⁰¹

The inside cover is generally of corresponding richness and elaboration, and having for obvious reasons been protected from rough usage, preserves the original freshness of the binder's handicraft; but if the outside has received an especially rich decoration, the inside cover, by way of contrast, sometimes receives a different treatment; for, as explained above, though these binders sometimes filled the whole page with elaborate detail, — yet generally so skilfully conceived that there is no resultant feeling of overloading or monotony, — still they knew how to make a skilful use of blank spaces, and between the outside borders and the central geometrical panel there is often left a broad space of smooth leather with a brilliant polish.

A considerable variety in colour was introduced by the use of dyed leather, — black or dark-red, or blue, or olive green. By the insertion of thin strips of dyed leather into a series of panels set in the borders, brilliant effects of colour were obtained, and such strips were sometimes afterwards impressed with patterns filled in with gold. A similar device might also be employed for the central decoration. About the middle of the XVIth century, when there was a demand for cheaper bindings, white paper cut into delicate lace patterns was substituted for strips of leather,

and the new material rendered possible a corresponding minuteness and a daintiness of pattern. Such a form of decoration was naturally much more perishable than the original leather, but on the inside covers its pleasing effect, so unlike the severity of the designs of the earlier work, has survived in a number of examples, almost unaltered.

A variation in this style of binding was introduced by the use of panels depressed below the surface of the leather of the cover, sometimes as deep as half the thickness; the arrangement of these depressions would of course vary according to the general geometrical scheme of the design; inside these cavities in the thickness of the leather were set thin, gilded strips of leather stamped with any of the designs in common use, — animals, or flowers, or conventionalised patterns. Sometimes, on the other hand, the gilded decorative work was tooled bit by bit on the raised portions of the leather, while the depressed portion of the leather surface was left plain and polished.

At what date painted covers began to take the place of tooled or stamped leather work, is uncertain, but examples are found as early as the XVIth century, and they became very common in Persia towards the close of the XVIIIth century. At first, the pictures were painted on leather, but this practice was probably abandoned when it was recognised that the paint on such a background had a tendency to crack. Painted covers of papier-maché are much more common, a thick layer of gesso being first laid on as a basis for the colour. The choice of subject often corresponds to the contents of the text of the manuscript, e. g. a *Shāh-nāma* will have on its covers a warrior or some battle scene; for a volume of romantic poetry some well-known incident in the story is selected. In other cases we find naturalistic representations of flowers or some purely conventional design. Plate 103 gives a good modern example of these latter types; it was designed by Hājī Muḥammad Taqī in the year 1270 (=1854 A. D.). In the central panel, a young Persian in the national dress of the middle of the XIXth century is seen offering a girl a glass of wine which a female attendant has just brought on a salver; above and below, two tiny panels represent a building with water, two still smaller panels contain the bust of a young man with his head bare; the greater part of the central panel is filled in with a conventionalised design of flowers, with five pairs of birds, — parrots, partridges and peacocks, — each bird facing the other bird of the same type, in accordance with a convention of Persian art which is as old as the Sasanian period.

NOTES AND REFERENCES

1. *Journal Asiatique* XI. série, tom. VI (1915), pp. 239—279, especially pp. 263—265.
2. Kaiserliche Akademie der Wissenschaften, *Kuṣejr 'Amra*, Vienna 1907.
3. Mshattā, Ḥira und Bādiya, die Mittelländer des Islam und ihre Baukunst: Jahrbuch d. preuß. Kunstsammlungen XLII (1921), p. 126.
4. Ibid. p. 135f., and fig. 7, 10, Pl. 3b, 4b; F. SARRE, Die Ergebnisse der Ausgrabungen in Samarra im Kaiser Friedrich Museum (Berlin 1922), p. 7f. and fig. 8; E. HERZFELD, Erster vorläufiger Bericht über die Ausgrabungen von Samarra (Berlin 1912), Pl. XIII, XIV, and Die Malereien von Samarra: Forschungen zur islamischen Kunst hrsg. von F. SARRE II, Die Ausgrabungen von Samarra Bd. III (Berlin 1927), p. 5.
5. Cf. YĀQUT, Mu'jam, ed. F. WÜSTENFELD IV, p. 44.
6. Tausend und Eine Nacht, übers. v. M. HABICHT, FR. H. V. DER HAGEN und C. SCHALL IV (Breslau 1840) p. 3. Cf. J. KARABACEK, Über das angebliche Bilderverbot des Islām, Vortrag geh. im Bayr. Gewerbemuseum in Nürnberg am 7. Febr. 1876: Kunst und Gewerbe X (1876), p. 299.
7. *Khiṭaʾ II* (Būllāq 1270), p. 318, 32—32; cf. H. LAVOIX, Les peintres arabes: Gazette des Beaux-Arts, année XVII (1875), II^e pér. tom. XII (XXXVII), pp. 312, 313 (17, 18); J. KARABACEK, Über das angebliche Bilderverbot des Islām, p. 299; A. v. KREMER, Culturgeschichte des Orients unter den Chalifen II (Vienna 1877), p. 303f.; CL. HUART, Les Calligraphes et les Miniaturistes de l'Orient musulman (Paris 1908), p. 328.
8. Quoted in *Khiṭaʾ II*, p. 318, 26.
9. Les peintres arabes, p. 426 (29f.).
10. AL-MAQRIZI, *Khiṭaʾ I*, p. 486, 35ff.; cf. also J. KARABACEK, Über das angebliche Bilderverbot des Islām p. 299.
11. Cf. p. 66 and E. BLOCHET, Les origines de la peinture en Perse: Gazette des Beaux-Arts XLVII (1905), III^e pér. tom. XXXIV, p. 119.
12. *Kitāb ta'rīkh sinnī mulūk al-Arḍ wa-'l-Anbiyā'* (Berlin, Kavian-Verlag, 1340 A.H. = 1921/22 A.D.), p. 34.
13. Cf. G. FLÜGEL, Mani, seine Lehre und seine Schriften (Leipzig 1862), p. 146, note 45.
14. Die buddhistische Spätantike in Mittelasien von A. v. L. COQ II. Die manichäischen Miniaturen (Berlin 1923), p. 19f.
15. Cf. H. LAVOIX, Les peintres arabes, pp. 108—110 (12—14).
16. Die buddhistische Spätantike in Mittelasien II, p. 20.
17. A. MEZ, Die Renaissance des Islāms (Heidelberg 1922), p. 167.
18. Cf. E. BLOCHET, Les miniatures des manuscrits musulmans: Gazette des Beaux-Arts III^e pér. tom. XVII (1897), p. 294, 295.
19. Cf. G. MARTEAU-H. VEYER, Miniatures persanes I (Paris 1913), Pl. I and XXXVIII, two leaves from the translation of the third treatise of Dioscorides on botany and medicine, dated 619 A.H. (1222 A.D.) ascribed to the Baghdad school, and ibid. Pl. III *Kalīla wa-Dimna*, dated 633 A.H. (1236 A.D.). The Arabic translation of the tractate on the Water Automata of Philo of Byzantium (Pl. II, XXXIX—XLII) attributed to the XIIIth century, which, formerly in the possession of F. R. MARTIN, belongs, like the well known seated figure of Saladin, according to HERZFELD, not to the time of the great Saladin but to the time of one of the two Bahri-Mamlūk Sultans Maḥmūd as-Sāliḥ Ṣalāḥ ad-Dīn Ṣalāḥ (1351—1354 A.D.) or Maḥmūd as-Sāliḥ Ṣalāḥ ad-Dīn Ḥajjī (1381—1382 A.D.) more probably the former. HERZFELD, probably rightly, thinks the work an Egyptian copy of the XIVth century and rejects the attribution to the Baghdad school. Cf. *Archäologische Reise im Euphrat- und Tigris-Gebiet* von F. SARRE und E. HERZFELD II (Berlin 1920), p. 247, note 2.
20. E. KÜHNEL, Die Buchkunst auf der mohammedanischen Ausstellung in München 1910: Kunst und Kunsthandwerk XIII (1910), p. 496.
21. Cf. thereon *Corpus Papyrorum Raineri* III, Series Arabica ed. A. GROHMANN I, 1: Allgemeine Einführung in die arabischen Papyri (Vienna 1924), pp. 3—6. From the same find comes a piece of

- papyrus (P. 5004), which contains a Greek drawing, in the Egyptian section of the Staatliche Museen, Berlin. Cf. A. BAUER and J. STRZYGOWSKI, *Eine Alexandrinische Weltchronik: Denkschriften d. K. Akademie d. Wissenschaft in Wien, Phil. Hist. Kl. LI, 2* (Vienna 1906), p. 175, fig. 25.
22. Zum Funde von El Faijûm: *Zeitschrift für Kunst- und Antiquitäten-Sammler II* (Leipzig 1885), No. 24, p. 242.
23. Cf. B. MORITZ, *Arabic Palaeography. A collection of Arabic texts from the first century of the Hidjra till the year 1000* (Publications of the Khedivial Library, No. 16., Cairo 1906), Pl. 41 and E. TISSERANT, *Specimina codicum orientalium* (Bonn 1914), Pl. 55.
24. Cf. J. STRZYGOWSKI, *Eine Alexandrinische Weltchronik*, p. 174.
25. Cf. F. PREISIGKE, *Altägyptische Malerei und Zeichnung: Zeitschrift für allgemeine Geschichte I* (1884), p. 86 f. That certain representations of trees with pear-shaped tops in manuscripts of the so-called Baghdad school of the XIIIth century A. D. (Pl. 34 b) quite recall the trees on the celebrated wall-paintings in the palace of Amenophis IV in Tell el-'Amarna, — cf. H. SCHÄFER and W. ANDRAE, *Die Kunst des alten Orients* (Berlin 1925), Pl. XVII facing p. 360 — may be mentioned here.
26. This pen drawing is, as J. STRZYGOWSKI, *Eine Alexandrinische Weltchronik*, p. 177, suggests, not to be dated in the third cent. A. D. but belongs to the fifth or an even later period. Cf. also H. HYVERNAT, *Album de Paléographie Copte* (Paris 1888), Pl. XVI.
27. *Die buddhistische Spätantike in Mittelasien II*, Pl. 6c and p. 44, cf. also Kuşejr 'Amra II, Pl. XXXIV centre.
28. Cf. H. HYVERNAT, *Album de Paléographie Copte*, Pl. XI, XVI and the plates in J. STRZYGOWSKI, *Eine Alexandrinische Weltchronik*.
29. Cf. C. KELLER, *Über Maler und Malerei in Abessinien: Jahresbericht der Geograph.-Ethnograph. Gesellsch. in Zürich* (1903/04), pp. 24, 30 (reprint 6, 12).
30. Cf. the plates in P. BUSERL, *Die griechisch-ägyptischen Mumienbildnisse der Sammlung Th. Graf* (Vienna 1922) and F. SARRE, *Die Ergebnisse der Ausgrabungen von Samarra im Kaiser Friedrich Museum*, p. 7 f. and fig. 8.
31. On this technique cf. A. v. LE COQ, *Die buddhistische Spätantike in Mittelasien II*, p. 18.
32. Cf. TH. BIRT, *Die Buchrolle in der Kunst* (Leipzig 1907), p. 285; W. v. CHRIST, *Geschichte der Griechischen Literatur II* (Munich 1920), p. 240.
33. Papyrus de Turin, Facsimilés par F. Rossi de Turin, et publiés par W. PLEYDE de Leide (Leiden 1869—1876), Plates CXLV and Text pp. 203—206.
34. The works of Shihāb ad-Dīn Abū'l-'Abbās Ahmad b. Yūsuf at-Tifāshī (d. 1253 A. D.) to be mentioned here belong to a literary period nearly 300 years later. Cf. C. BROCKELMANN, *Geschichte der arabischen Litteratur I* (Weimar 1898), p. 405.
35. *Altai-Iran und Völkerwanderung* (Leipzig 1917), p. 90, fig. 86. Similar bird-heads are also found associated with tendrils in Coptic manuscripts. Cf. H. HYVERNAT, *Album de Paléographie Copte*, Pl. XXXVI, XXXVII. For the loan of the block for fig. 1, I am indebted to Hofrat Professor Dr. J. STRZYGOWSKI and the firm of J. C. HINRICHS.
36. Photograph No. 2042 of the expedition to Nubia undertaken by H. JUNKER and H. SCHÄFER on behalf of the Royal Prussian Academy of Sciences in Berlin. For permission to use the still unpublished picture I am indebted to Prof. Dr. H. JUNKER. The same pattern is also used as marginal decoration of Codex Or. 5001, fol. 80 in E. A. WALLIS BUDGE, *Coptic Homilies in the Dialect of Upper Egypt* (London 1910), p. XIX.
37. Fig. 2 is from E. HERZFELD, *Die Genesis der islamischen Kunst und das Mshatta-Problem: Islam I* (1910), p. 41, fig. 4 and fig. 3 is from a photograph which I owe to Captain A. CRESWELL of Cairo. Cf. also K. A. C. CRESWELL, *Some newly discovered Tūlūnide Ornament: Burlington Magazine XXXV* (1910), p. 184, Pl. II F, No. 8, G, No. 9. Captain CRESWELL informs me that the stucco ornament (fig. 2), copied by E. HERZFELD is on the last arch of the outer row of pillars of the Riwāq on the N.-E., as one goes towards the N.-W. Only a half of the piece on the left still remains. The motif from fig. 2 is repeated on the arch of the Qibla of the mosque of Ibn Tūlūn, see S. FLURY, *Die Orna-*

mente der Hakim- und Ashar-Moschee (Heidelberg 1912), Pl. XV, and on a carved board in the Arab Museum in Cairo, which E. HERZFELD reproduced on p. 44, fig. 61a of his *Der Wandschmuck der Bauten von Samarra und seine Ornamentik* (Forschungen zur islamischen Kunst, hrsg. v. F. SARRE, II. Die Ausgrabungen von Samarra, I, Berlin 1923). Cf. also *ibid.*, p. 41, fig. 54, 175, fig. 251 and Pl. V, LXXXV, where almost the same motif recurs on the stucco walls of private houses in Samarra. A very similar ornament is used in a miniature in H. HYVERNAT, *Album de Paléographie Copte*, Pl. XLVIII, to fill up the tripartite arch of a pillar.

38. Cf. E. HERZFELD, *Die Genesis der islamischen Kunst und das Mshatta-Problem*, p. 37, fig. 1; and *Der Wandschmuck der Bauten von Samarra und seine Ornamentik*, Pl. XXIX above.

39. E. HERZFELD, *Die Genesis der islamischen Kunst und das Mshatta-Problem*, p. 48.

40. Cf. J. KARABACEK, *Ein arabisches Reiterbild des X. Jahrhunderts: Mitteilungen aus der Sammlung der Papyri Erzherzog Rainer V* (1892), pp. 123—126. The equestrian figure is reproduced in T. MANN, *Der Islam einst und jetzt: Monographien zur Weltgeschichte* Vol. 32 (Bielefeld 1914), p. 38, fig. 43 and in a coloured reproduction in J. v. PFLUGK-HARTUNG, *Weltgeschichte III, Geschichte des Orients* (Berlin 1910), p. 161.

41. KARABACEK read "[amī]la Abū Tamīm Haydarā" 'executed by Abū Tamīm Haidarā'. The first letter was however not a *lām*, the curve that still survives may rather belong to a *ra*. *Mimmā* I complete it according to the formula so usual in artists' signatures.

42. Cf. H. HYVERNAT, *Album de Paléographie Copte*, Pl. XVI.

43. *Führer durch die Ausstellung*, p. 54. The jug is omitted from the reproduction.

44. To this belongs the cursive initial form of the *sin*, the pointing to the left of the *sa* which is much inclined to the right. Cf. my *Allgemeine Einführung in die arabischen Papyri*, p. 70. J. KARABACEK, *Führer durch die Ausstellung* p. 54, dates the piece in the XIth cent. A. D.

45. Cf. the reproduction in J. KARABACEK, *Führer durch die Ausstellung*, p. 185.

46. Cf. F. SARRE, *Die Kunst des alten Persien* (Berlin 1922), Pl. 94.

47. Cf. H. GLÜCK, *Die beiden sassanidischen Drachenreliefs: Publikationen der kaiserlich osmanischen Museen IV* (Constantinople 1917), pp. 57—59 and Pl. IV.

48. Cf. the fabulous animal in the style of hippocampi in PH. W. SCHULZ, *Die persisch-islamische Miniaturmalerei* (Leipzig 1914), Text Pl. B with p. 16.

49. Remains of two crouching men surrounded by a frieze of parrots are also found in a fresco in a private house in Samarra. Cf. E. HERZFELD, *Mshattā, Hira und Bādiya*, p. 134, *Erster vorläufiger Bericht über die Ausgrabungen von Samarra*, Plate XIII and *Die Malereien von Samarra*, p. 39, fig. 23. Top-pieces with tendrils and birds occasionally quite the same as in our miniature, were especially popular in Armenian miniatures. Cf. A. RIEGL, *Stilfragen* (Berlin 1893), p. 329, fig. 185.

50. H. NÜTZEL, *Eine Porträtmedaille des Chalifen el-Muktadir billah: Zeitschrift für Numismatik XXII* (Berlin 1900), p. 259 (with figure). Direktor H. NÜTZEL kindly lent me the block, for which I here repeat the expression of my gratitude.

51. Cf. the equestrian picture of St. Phoibammon in Bāwīt in J. STRZYCOWSKI, *Eine Alexandrinische Weltchronik*, p. 186, fig. 31.

52. Fig. 7 is from J. DE MORGAN, *Manuel de numismatique orientale de l'antiquité et du moyen âge II* (Paris 1924), pp. 288, fig. 372, 306, fig. 379 and 314, fig. 391.

53. E. v. BERGMANN, *Eine abbasidische Bildmünze: Numismatische Zeitschrift I* (Vienna 1869), pp. 445—456 with fig. and H. NÜTZEL, *Eine Porträtmedaille des Chalifen el-Muktadir billah*, p. 265 (with figure). The Caliph's portrait on this coin has been reproduced by J. KARABACEK in the *Führer durch die Ausstellung*, p. 206 in a drawing, unfortunately not accurate in its detail.

54. Cf. A. v. KREMER, *Culturgeschichtliche Streifzüge auf dem Gebiete des Islam* (Leipzig 1873), p. 33.

55. The Ajantā fresco was first published by JAS. FERGUSSON, *On the Identification of the Portrait of Chosroes II, among the paintings in the Caves at Ajanta: Journal of the Royal Asiatic Society, New Series XI* (1879), pp. 155—170 with coloured plate. Cf. also VINCENT A. SMITH, *A History of Fine Art in India and Ceylon* (Oxford 1911), p. 290 and 291, fig. 210. FERGUSSON's very attractive

explanation of the picture as the portrait of the Sasanian Khusrāu Parwiz (591—628 A. D.) and his Queen Shīrīn which was made between 625—26 and 628 A. D. SMITH regards as not proven. For the Stroganoff silver dish, see J. STRZYGOWSKI, *Altai-Iran und Völkerwanderung*, pp. 156—158 and fig. 132. Fig. 9 is from a photograph which I owe to Professor F. SARRE.

56. Cf. A. V. LE COQ, *Die buddhistische Spätantike in Mittelasien II und III, Die Wandmalereien* (Berlin 1924), IV, *Atlas zu den Wandmalereien und beschreibender Text* (Berlin 1924).

57. For the active intercourse between Egypt and Persia cf. RH. GUEST, 'Relations between Persia and Egypt under Islam up to the Fātimid Period' in *A Volume of Oriental Studies presented to Edward G. Browne* (Cambridge 1922), pp. 163—174.

58. Cf. J. STRZYGOWSKI, *Eine Alexandrinische Weltchronik*, p. 187.

59. Carmine and brick-red, sulphur-yellow, dark-green, dark greyish green and dull-white were found by me on the Greek textile designs P. 9922, 9923, 9924 and 13275 of the Papyrus collection of the Staatliche Museen in Berlin. The splendid Egyptian Papyrus P. 3006 B shows red and black with chrome-yellow, dull-white, vermillion and dark green as coatings for filling the areas.

60. On gilding with gold leaf among the Egyptians cf. W. THEOBALD, *Blattgold*; *Archiv für Buchbinderei XI* (1912), p. 161. The gold-beater's art flourished here for long. AL-MAQRIZI (d. 1442 n. Chr.) records in his *Khitaṭ II*, p. 35, 30f., that in his time gold-beaters followed their trade in the Funduq al-Mahmandār in Cairo.

61. Cf. A. V. LE COQ, *Die buddhistische Spätantike in Mittelasien II*, p. 18.

62. Cf. E. KÜHNEL, *Die Buchkunst auf der mohammedanischen Ausstellung in München 1910*, p. 496.

63. Cf. H. LAVOIX, *Les peintres arabes*, p. 430 (p. 32); the MS. now bears the reference number *Arabe 5877*.

64. MS. H. O. 131 of the National Library in Vienna, Ch. 5, fol. 57.

65. Cf. F. R. MARTIN, *Miniaturen und Buchkunst in 'Die Ausstellung von Meisterwerken muhammedanischer Kunst in München 1910'*, I (Munich 1922), p. III. As MARTIN *ibid.* p. 16 emphasises, the calligraphers had also to produce models for the inscriptions to be placed on monuments. A few specimens of these in the original elaborate Kāfic on papyrus and paper are preserved in the Rainer Collection (Inv. Ar. Pap. 10013, 10017—10019, Inv. Chart. Ar. 25042, 25043).

66. J. J. TIKKANEN, *Tre armeniska miniatyrhandskrifter*, p. 73 (Off-print from the Finnish Museum [Finski Museum], 1898, No. 9—12), has already called attention to the birds in certain Arabic foliage patterns, which PRISSÉ D'AVENNES reproduced in his *L'Art Arabe d'après les monuments du Kaire depuis le VII^e siècle jusqu'à la fin du XVIII^e*, Vol. III (Paris 1877), Pl. CLXXVII (XIIIth cent. A. D.), for comparison with the Armenian bird alphabet. The animal's head which rises from the half palmette has an interesting contemporary companion-piece in the ceramics from Sāmarrā, to which F. SARRE calls attention. On a sherd which in technique copies East Asiatic stoneware with colourless glaze is scratched a pattern with ribbons and leaf designs with a small animal-head between them. Cf. *Forschungen zur islamischen Kunst* hrsg. v. F. SARRE II, *Die Ausgrabungen von Samarra Bd. II*, F. SARRE, *Die Keramik von Samarra* (Berlin 1925), p. 68, fig. 138.

67. Cf. E. HERZFELD, *Der Wandschmuck der Bauten von Samarra und seine Ornamentik*, fig. 255 facing p. 156, and Pl. LXXXI, LXXXII.

68. Cf. K. A. C. CRESWELL, *Some newly discovered Tūlūmide Ornament*, p. 187. I am indebted to Captain A. CRESWELL for the photograph for fig. 13.

69. A. GROHMANN, *Allgemeine Einführung in die Arabischen Papyri*, p. 73.

70. A similar ornament is found in the centre of the pattern on a piece of Coptic material in M. DIMAND, *Die Ornamentik der ägyptischen Wollwirkereien* (Leipzig 1924), Pl. XI, fig. 36.

71. Cf. V. GARDTHAUSEN, *Griechische Paläographie II* (Leipzig 1913), p. 403; W. SCHUBART, *Das Buch bei den Griechen und Römern* (Berlin 1921), pp. 86, 182; J. STRZYGOWSKI, *Eine Alexandrinische Weltchronik*, p. 172 ff.; H. GERSTINGER, *Die griechische Buchmalerei* (Wien 1926), p. 16b, 23b, 24a.

72. Cf. thereon V. GARDTHAUSEN, *Griechische Paläographie*² I (Leipzig 1911), p. 222 ff.; E. DIEZ, *Die Miniaturen des Wiener Dioskurides: Byzantinische Denkmäler*, hrsg. v. J. STRZYGOWSKI III/2 (Vienna 1903), p. 57 ff.; H. GERSTINGER, *Die griechische Buchmalerei*, p. 15b, 21, 23, 25b, 35b.
73. The first, Inv. Chart. Ar. 1924, was noted by J. v. KARABACEK. I found the second in going through the collection again on the 26, III. 1922 among the uncatalogued papers from al-Ushmūnayn.
74. *Kitāb al-Fihrist mit Anmerkungen herausgegeben von G. FLÜGEL* I (Leipzig 1871), p. 6.
75. AL-MAQRIZI, *Khitaṭ* II, p. 250, 30f. Cf. also *ibid.* I, p. 408, 28 ff.
76. *Fihrist al-Kutub al-'Arabiyya al-Mahfūza bi'l-Kutubkhāna al-Khedīwiyya* I (Cairo 1310), p. 10, No. 17994.
77. E. KÜHNEL, *Die Buchkunst auf der mohammedanischen Ausstellung in München 1910*, p. 488.
78. A. MEZ, *Die Renaissance des Islāms*, p. 167.
79. 'ARIF b. SA'D, *Siḥa ta'rikh at-Tabari*, ed. M. J. DE GÖJE (Leiden 1897), p. 90. Cf. H. F. AMEDROZ and D. S. MARGOLIOUTH, *The Eclipse of the 'Abbasid Caliphate* (Oxford 1920—1921) I, p. 79, IV, p. 87; A. MEZ, *Die Renaissance des Islāms*, pp. 167, 288.
80. V. GARDTHAUSEN, *Griechische Paläographie*² I, p. 215.
81. *Id.*, pp. 100—103.
82. RUKN AL-ISLĀM MUHAMMAD b. ABĪ BAKR IMĀMZĀDA AḤ-SHARGHĪ AL-ḤANAFĪ (d. 1177 A. D.), *Shir'at al-Islām*, fol. 44b: *wa-kariha ba'dhum kitābata 'l-qur'āni bi-dh-dhahabi wa-'l-fiddati wa-tahlitahu bihimā fa'innahu yad'u 'ilayhi s-sāriqa wa-'l-ghāṣiba*. J. v. KARABACEK, *Zur orientalischen Altertumskunde IV, Muhammedanische Kunststudien: Sitzungsber. d. K. Akademie d. Wissenschaften in Wien, Phil.-Hist. Kl. CLXXII, 1* (1913), p. 37, note 2.
83. *Kitāb ta'rikh Maṣr* I, (Būlāq 1311), p. 36.
84. V. GARDTHAUSEN, *Griechische Paläographie*² I, pp. 103, 216f.; A. MEZ, *Die Renaissance des Islāms*, p. 167.
85. J. STRZYGOWSKI, *Mschatta: Jahrbuch d. kgl. preuß. Kunstsammlungen XXV* (1904), p. 253.
86. A walk through the fine exhibition of Egyptian goldsmiths' work in the Egyptian Museum in Cairo will convince everyone. Cf. also PRISSE D'AVENNES, *Histoire de l'Art Égyptien*, Atlas tom. II (Paris 1878); E. VERNIER, *Bijoux et orfèvreries: Catalogue Général des Antiquités Égyptiennes du Musée du Caire XXXVIII* (Le Caire 1907), and XLVIII (Le Caire 1909); H. CARTER and A. C. MACR, *Tut-ench-Amun, Ein ägyptisches Königsgrab* (Leipzig 1924), Pl. 16, 34, 51 and pp. 211, 242.
87. For example, in the tomb of Thutmōsis III and Amenophis II the ceiling of the sarcophagus-room is decorated with yellow stars on a blue ground. Yellow ornaments on blue ground may be seen in several places in the corridors of the Royal Tombs.
88. AL-MAQRIZI, *Khitaṭ* I, p. 316, 35f.
89. *Arabic Palaeography*, Pl. 1—12.
90. Cf. *ibid.*, pl. 1, 3, 4, 5, 7, 8, 11.
91. Cf. V. GARDTHAUSEN, *Griechische Paläographie*² I, p. 226f.
92. *Arabic Palaeography*, Pl. 1, 2 (fol. 241b), similar by Pl. 5, 11. On series of arches on Sasanian capitals cf. J. STRZYGOWSKI, *Mschatta*, p. 354, fig. 117c.
93. *Arabic Palaeography*, Pl. 4.
94. *Ausstellung von Meisterwerken muhammedanischer Kunst in München* (Mai bis Oktober 1910): *Der Islam I* (1910), p. 186.
95. Cf. also B. MORITZ, *Arabic Palaeography*, Pl. 15.
96. Cf. *Arabic Palaeography*, Pl. 31—34.
97. Cf. A. GROHMANN, *Allgemeine Einführung in die arabischen Papyri*, p. 73.
98. I disagree with what J. v. KARABACEK, *Zur orientalischen Altertumskunde VI, Ein Koranfragment des IX. Jahrhunderts aus dem Besitze des Seldschukensultans Kaikubad: Sitzungsber. d. K. Akademie d. Wissensch. in Wien, Phil.-Hist. Kl. CLXXXIV, 3* (1917), p. 12f. says about the wing

palmette in the codex Maṣāḥif No. 139 as well as with the conclusions regarding the date which he draws from it. At the beginning of Islam, hostility to things Persian was not so great as KARABACEK thinks (cf. p. 1). If people were not afraid to have pictures of Persian kings in their houses at that time, there was certainly no objection in the second century A. H. to an ornament already quite stereotyped in which it was hardly any longer possible to recognise the traditional crown and helmet ornament of Chosroes. Cf. E. HERZFELD, *Die Genesis der islamischen Kunst und das Mshatta-Problem*, II, pp. 140, 141; J. STRZYGOWSKI, *Mshatta*, p. 320 ff.

99. E. BLOCHET, *Les miniatures des manuscrits musulmans*, p. 288 f. has already suggested Iranian influence in the decoration of the title.

100. *Tre armeniska miniatyrhandskrifter*, p. 86 and fig. 51.

101. A. RIEGL, *Die ägyptischen Textilfunde im k. k. Österreich. Museum* (Wien 1889), p. 23 and Pl. II, 210.

102. Cf. M. DIMAND, *Die Ornamentik der ägyptischen Wollwirkereien*, Pl. XVI, fig. 57, 58.

103. *Ibid.*, Pl. VIII, fig. 27. Particularly striking for its finely worked woven border is the Sūra divider on a parchment leaf in the Kaiser Friedrich Museum in Berlin, the pattern of which is in gold and black; the page 21,5 × 32,4 cm was originally in the possession of Freiherr v. LANNA and was presented to the Museum; it belongs to the VIIIth—IXth century A. D., is Egyptian or Mesopotamian work and belongs to a Qurʾān fascicule of 22 leaves. This leaf was first published in *Auktionskatalog XXXIII* of GILHOFFER and RANSCHBURG (Vienna 1911) on a plate facing page ii, to No. 28, and was recently reproduced by E. KÜHNEL, *Islamische Kleinkunst; Bibliothek für Kunst- und Antiquitäten-Sammler XXV* (Berlin 1925), p. 27, fig. 3.

104. Cf. M. DIMAND, *Die Ornamentik der ägyptischen Wollwirkereien*, Pl. I, fig. 1, 2.

105. Cf. E. HERZFELD, *Der Wandschmuck der Bauten von Samarra und seine Ornamentik* pp. 311, fig. 300, 215, fig. 305 and Pl. XCIV. The marginal decoration on fol. 14 is reproduced by J. KARABACEK, *Führer durch die Ausstellung*, p. 236. He ascribes the leaf to the tenth century A. D.

106. Cf. M. DIMAND, *Die Ornamentik der ägyptischen Wollwirkereien*, Pl. III, fig. 5, VII, fig. 19, XI, fig. 36—38, 40, XV, fig. 54.

107. F. R. MARTIN, *The miniature Painting and Painters of Persia, India and Turkey from the 8th to the 18th century I* (London 1912), p. 96 and II, Pl. 234 above. Cf. also E. DIEZ, *Die Miniaturen des Wiener Dioskurides*, p. 24 and Pl. IV.

108. Cf. M. DIMAND, *Die Ornamentik der ägyptischen Wollwirkereien*, Pl. II, fig. 3, 4, V, fig. 11, XIV, fig. 49. The Rainer papyrus collection has in the Greek section under Inv. Gr. Pap. 30516 a very fine tapestry design on papyrus for such an ornament. The edge is united by a straight line with the circular terminal ornament.

109. Cf. J. V. KARABACEK, *Zur orientalischen Altertumskunde VI*, p. 31 f.

110. Cf. A. CONZE, *Die attischen Grabreliefs I* (Berlin 1893), Pl. L, III (Berlin 1906), Pl. CCLXXIX.

111. Cf. J. STRZYGOWSKI, *Ornamente altarahabischer Grabsteine in Kairo: Der Islam II* (1911), pp. 312, fig. 7, 314, fig. 12, 14, 317, fig. 22, 23, 318, fig. 25, and *Altai-Iran und Völkerwanderung*, p. 85, fig. 78, 86, fig. 80.

112. On this technique, cf. the very thorough work by THOMAS FRANCIS CARTER, *Invention of Printing in China and its Spread Westward* (New York, 1925), pp. 23 ff. esp. 112—115, 133—138.

113. Cf. J. STRZYGOWSKI, *Ornamente altarahabischer Grabsteine in Kairo*, p. 321, fig. 32.

114. *Tria opuscula*, ed. G. VAN VLOTEN (Leiden 1903), p. 71. Cf. A. MEZ, *Die Renaissance des Islams*, p. 422.

115. TH. NÖLDEKE, *Neue Beiträge zur semitischen Sprachwissenschaft* (Strassburg 1910), pp. 49, 50.

116. *As-Suyūṭī, Itqān*, ed. SADEEDOOD-DEEN KHĀN and BASHEEROOD-DEEN (Calcutta 1852—1854), p. 135. Cf. A. SPRENGER, *Das Leben und die Lehre des Mohammad² III* (Berlin 1869), p. XLIV; TH. NÖLDEKE-F. SCHWALLY, *Geschichte des Qorāns II* (Leipzig 1919), p. 25, note 2.

117. *Al-Makīn, Taʾrīkh al-Muslimīn* (Historia Saracenicæ), ed. TH. ERPENIUS (Lugd. Batav. 1625), p. 18. L. MARACCIUS, *Prodromus in refutationem Alcorani I* (Romae 1691), p. 257; Obser-

vations de Mirzā Alexandre Kazem-Bey sur le Chapitre inconnue du Coran, publ. et trad. par M. GARCIN DE TASSY: *Journal Asiatique* IV, série tom. II (1843), p. 375; AD-DĀNĪ, *Mukhtasar al-Muqni' fi rasm al-Qur'an*, M. S. of the National Library in Vienna A. F. 413b, fol. 2: *babu dhikri man jama'a l-qu'ana mini-l-suhufi 'awwalan wa-man 'adhalahu bayna 'l-lawhayni*. Otherwise SILVESTRE DE SACY, *Recueil de différents Traités relatifs à l'Orthographe et à la lecture de l'Alcoran in Notices et Extraits des Manuscrits de la Bibliothèque Impériale* VIII (1810), p. 357 (Ms. Ar. 260, fol. 47): "Le grand soin qu'ils apportent à apprendre ce livre, et le nombre considérable de ceux qui le savent par cœur, les dispensent d'en former un recueil relié entre deux ais."

118. Cf. Imra' al-qais, 65, in W. AHLWARDT, *The Divans of the six ancient Arabic poets* (London 1870), p. 160.

119. Of Najrān we know this by chance from Islamic sources. Cf. TH. NÖLDEKE, *Geschichte der Perser und Araber zur Zeit der Sasaniden* (Leiden 1879), p. 188; IBN HISHĀM, *Shra*, ed. F. WÜSTENFELD, I (Göttingen 1858), p. 402.

120. Cf. A. SPRENGER, *Das Leben und die Lehre des Mohammad*² III, p. XLI.

121. C. H. BECKER, *Papyri Schott-Reinhardt I* (Heidelberg 1906), p. 9 (PSR. 50—53). The roll form remained usual for Qur'āns. At the Munich Exhibition of 1910 there was exhibited one of these Qur'ān rolls from the F. R. MARTIN collection, which, according to E. KÜHNEL, *Ausstellung von Meisterwerken muhammedanischer Kunst in München, Mai bis Oktober 1910: Der Islam I* (1910), p. 187, may be not earlier than the XVIth century. Another similar Qur'ān roll is exhibited in the Egyptian Library in Cairo.

122. *Shifā Jazīrat al-'Arab*, ed. D. H. MÜLLER (Leiden 1884—1891), pp. 67, 113.

123. A. SPRENGER, *Die Post- und Reiserouten des Orients* (Abhandl. f. d. Kunde des Morgenlandes III, 3, Leipzig 1864), p. 149f.

124. *Bibliotheca geographorum arabicorum* ed. M. J. DE GOEJE III (Leiden 1906), pp. 87, 98, VI (Leiden 1889), p. 135f.; A. JAUBERT, *Géographie d'Édrisi I* (Paris 1836), pp. 143, 144.

125. *Bibliotheca geographorum arabicorum* III, p. 98.

126. C. LANDBERG, *Études sur les dialectes de l'Arabie méridionale I* (Leiden 1901), p. 283; C. RITTER, *Vergleichende Erdkunde von Arabien I* (Berlin 1846), p. 723; *Bibliotheca geographorum arabicorum I*, p. 24.

127. *Kitāb Muḥadarāt al-Udabā' wa-muḥāwarāt ash-shu'arā' I* (Cairo 1287), p. 70; A. V. KREMER, *Culturgeschichte II*, p. 309f.; AL-HAMDĀNĪ, *Shifā Jazīrat al-'Arab*, p. 120.

128. *Bibliotheca geographorum arabicorum* III, p. 203.

129. AL-MAQRIZĪ, *Khitaṭ II*, p. 21, 34—38; cf. J. V. KARABACEK, *Zur orientalischen Altertumskunde IV*, p. 39.

130. P. ADAM in *Archiv für Buchbinderei XIV* (1924), p. 3, has shown how this is to be interpreted.

131. *Bibliotheca geographorum arabicorum* III, p. 100; J. KARABACEK, *Das arabische Papier: Mitteilungen aus der Sammlung der Papyrus Erzherzog Rainer II—III* (1887), pp. 138—140; *Zur orientalischen Altertumskunde IV*, p. 39; A. MEZ, *Die Renaissance des Islāms*, p. 422. On the technique of arab bookbinding in the XVIIth century A. D. see the recently published monograph of ABU'L-'ABBĀS AHMAD B. MUḤAMMAD AS-SUFYĀNĪ, *Shinā'a tasfir al-kutub wa-hall adh-dhahab* (Art de la Reliure et de la Dorure) ed. P. RICARD, 2nd edition (Paris 1925) written in 1619 A. D.

132. IBN KHALDŪN, *Muqaddama I* (Bulāq 1284), p. 351f.; ḤABĪB, *Khataṭ wa-khattātān* (Stambul 1306), p. 258.

133. M. J. MÜLLER, *Beiträge zur Geschichte der westlichen Araber I* (Munich 1866), p. 5; cf. J. V. KARABACEK, *Zur orientalischen Altertumskunde IV*, p. 39.

134. Cf. A. GROHMANN, *Bibliotheken und Bibliophilen im islamischen Orient: Festschrift zum zweihundertjährigen Jubiläum des Bestandes des Gebäudes der Nationalbibliothek in Wien* (Vienna 1926), pp. 431—442; O. PINTO, *Le biblioteche degli Arabi nell' età degli Abbassidi* (Off-print from *La bibliofilia diretta dal comm. L. S. OLSCHI*, vol. XXX anno XXX [Florence 1928], p. 7ff.).

135. *Kitāb al-Fihrist I*, p. 264; A. MEZ, *Die Renaissance des Islāms*, p. 176.

136. For example, in al-Baṣra 50 gold dinārs were paid for the Kitāb al-'Ayn of Abū 'Abd ar-Rahmān al-Khalīl b. Ahmad, which a bookseller brought from Khurāsān, said to be from the library of the Tahirids (Kitāb al-Fihrist I, p. 24).

137. Cf. A. GROHMANN, Allgemeine Einführung in die arabischen Papyri, p. 51.

138. In the letter PERF. No. 1072, 3f. (tenth century A. D.) a man orders two books, the Kitāb ar-Rabūn and the Romance of Alexander for 2 dinārs. The Secretary of State Nāsir ad-Dīn Muḥammad al-Bārīzī in 819 A.H. (1416—17 A. D.) presented to the mosque founded by al-Malik al-Mu'ayyad (1412—1421 A. D.) 500 volumes valued at 1000 dinārs. See AL-MAQRIZI, *Khitaṭ* II p. 329, 9—12.

139. Cf. J. KARABACEK, Das arabische Papier, p. 124; also B. DORN, Reise nach Masanderan im Jahre 1860, I. Abschnitt, St. Petersburg-Aschref (St. Petersburg 1895), p. 165, note 1, notes in the description of the bazaars in Ashref, that the bookseller (*ṣaḥḥāf*) was also a bookbinder (*mufallid*).

140. IBN 'ABD RAHHIM, al-'Iqd al-Farīd II (Būlāq 1293), p. 223; cf. also A. MEZ, Die Renaissance des Islāms, p. 339.

141. On the book-market in Cairo, cf. AL-MAQRIZI, *Khitaṭ* II, p. 102, 11f. It is worth noting that the makers of cases for Qur'āns (*ṣandūq*) worked not far from them (*Khitaṭ* II, p. 102, 22).

142. Kitāb al-Fihrist I, p. 10; cf. also C. HUART, Les Calligraphes et les Miniaturistes de l'Orient musulman, p. 322f.

143. SHIHĀB AD-DĪN ABŪ MUḤAMMAD 'ABD AR-RAḤMĀN b. ISMĀ'IL b. IBRĀHĪM AL-MAQRIZI ASH-SHĀFI'Ī, Kitāb ar-Rawḍatayn fī akhbār ad-Dawlatayn I (Cairo 1287), p. 219; E. BLOCHET, Histoire d'Égypte de Makrizi: Revue de l'Orient Latin VIII (1900—1901), p. 512. Cf. J. V. KARABACEK, Zur orientalischen Altertumskunde IV, p. 37. Silk covers were known in Byzantium as early as the reign of the Empress Irene (797—802 A. D.); cf. V. GARDTHAUSEN, Griechische Paliographie² I, p. 178.

144. IBN AL-WARDĪ, *Ta'rikh* II (Būlāq 1285), p. 309; J. V. KARABACEK, op. cit. p. 37.

145. Cf. J. V. HAMMER-PURGSTALL, Geschichte der Ilchane I (Darmstadt 1842), p. 233.

146. Ibid. I, p. 157.

147. J. V. HAMMER-PURGSTALL, Geschichte der goldenen Horde in Kiptschak (Pesth 1840), pp. 156—157.

148. J. V. HAMMER-PURGSTALL, Geschichte der Ilchane I, p. 143. Further material on the destruction of early libraries was collected by J. V. HAMMER-PURGSTALL in his Übersicht der Literaturgeschichte der Araber: Denkschriften d. K. Akademie d. Wissensch. in Wien, Phil.-Hist. Kl. II (1851), p. 48. Cf. also O. PINTO, Le biblioteche degli Arabi nell'età degli Abbassidi, p. 23ff.

149. AL-MAQRIZI, *Khitaṭ* I, p. 408, 28ff. Cf. also M. LANDAU, Von alten Bibliotheken, ihren Freunden und Feinden: Zeitschrift für Bücherfreunde VI (1902—1903), p. 464f. and A. GROHMANN, Bibliotheken und Bibliophilen im islamischen Orient, pp. 436, 437.

150. Buchkunst des Orients I, Islamische Bucheinbände by F. SARRE (Berlin 1923), p. 11 and fig. 1, Pl. I.

151. In the Manichaean miniature of the VIIIth—IXth century A. D. reproduced in A. V. LÉ COQ, Die buddhistische Spätantike in Mittelasien II, Pl. 8b, fig. a and described on p. 54, we see a book splendidly bound in red and gold in the hands of a priest; its boards seem to be decorated on the margins with green and white ivory or bone, so is perhaps to be regarded as made of wood. In view of the active relations between Central Asia and Egypt it is quite possible that the technique of inlaying book covers here was influenced by Egypt.

152. H. CARTER and A. C. MACE, Tut-ench-Amun, Pl. 45, 48, 59 and pp. 236, 239, 250.

153. Cf. P. ADAM, Der Einfluß der Klosterarbeit auf die Einbandkunst: Buch und Bucheinband, Aufsätze und graphische Blätter zum 60. Geburtstag von HANS LOUBIER (Leipzig 1923), pp. 148—169; H. IESCHER, Alte koptische Einbände: Archiv für Buchbinderei XI (1911), p. 113. That the craft of book-binding was occasionally here learned along with calligraphy is seen from the Vita of Psen-thius, bishop of Ermont. Cf. H. E. WINLOCK and W. E. CRUM, The Monastery of Epiphanius at Thebes (The Metropolitan Museum of Art Egyptian Expedition: New York 1926), p. 194.

154. A connection between Coptic and early Islamic boards has already been suggested by E. GRATZL, *Islamische Bucheinbände des 14.—19. Jahrhunderts* (Leipzig 1924), p. 4, note 3, and F. SARRE, *Islamische Bucheinbände*, p. 11, has correctly pointed out that the former may have served as models for the latter.

155. K. K. Hofbibliothek, *Bucheinbände: Auswahl von technisch und geschichtlich bemerkenswerten Stücken, 100 Tafeln in Licht- und Steindruck mit Einleitung von THEODOR GOTTLIEB*, Vienna 1910, col. 33f. and Pl. 1, 2. The board has already been briefly discussed by FRIMMEL, *Zum Funde von El Faijūm: Zeitschrift für Kunst- und Antiquitätensammler* II (1885), No. 24, p. 242. Frimmel also was the first to call attention to the relationship of the ornamentation in the centre to that of the dedication picture of the Vienna Dioscurides, and suggest the contemporaneity of the cover with the latter M. S. (beginning of the VIth century A. D.). That the VIth century is decidedly too early was pointed out by H. IBSCHER, *op. cit.* p. 114. I would allot it to the VIIIth or IXth century A. D. to which period also belongs the cover (mentioned p. 34f.) in the Morgan collection. F. SARRE, *Islamische Bucheinbände*, p. 165, note 7, also dates the volume in the IXth century A. D. The ornaments in the centre of back and front board and the borders are illustrated by J. KARABACEK, *Führer durch die Ausstellung*, pp. 121, 98, 87, 99. P. ADAM, *Beiträge zur Entwicklung der frühislamischen Einbände: Archiv für Buchbinderei* XIV (1914), p. 93, has given a reconstruction of the front cover. The back board was also briefly described by J. MANTUANI in S. DE VRIES, *Codices Graeci et Latini tom. X Dioscurides I* (Leiden 1906), p. 258 and reproduced in fig. 2.

156. I have to thank Restaurator A. M. LIŠKA, for identifying the material.

157. In the Check-list of Pierpont Morgan Manuscripts, Pl. II, p. XV a brief description of the covers is given. I have to thank Dr. W. E. CRUM for the use of this publication which was privately printed.

158. On the use of this old oriental motif popular on Assyrian glazed tiles, brick and ivory plates, in Coptic art cf. J. STRZYGOWSKI, *Koptische Kunst: Catalogue Générale des Antiquités Égyptiennes du Musée du Caire* XII (Vienna 1904), No. 7298, p. 41f and fig. 49.

159. Cf. H. FRAUBERGER, *Antike und frühmittelalterliche Fußbekleidungen aus Achmim-Panopolis* (Düsseldorf, s. a.), p. 12f.

160. G. DARESSY, *Fouilles de la Vallée des Rois: Catalogue Général des Antiquités Égyptiennes du Musée du Caire*, V (Cairo 1902), Pl. X, No. 24072.

161. H. CARTER and PERCY E. NEWBERRY, *The Tomb of Thoutmôsis IV, Catalogue Général des Antiquités Égyptiennes du Musée du Caire* XV (Westminster 1904), p. 36, No. 46109, fig. 28.

162. *Alte koptische Einbände*, pp. 113—116, and *Bucheinbände aus Ägypten: Amtliche Berichte aus den Kgl. Kunstsammlungen XXXIII Berlin* (1911—12), col. 46—51, and fig. 23, 24. IBSCHER's reconstruction of the large board with back (p. 115) is also given in W. SCHUBART, *Das Buch bei den Griechen und Römern*², p. 142, fig. 33.

163. *Beiträge zur Entwicklung der frühislamitischen Einbände*, p. 92; *Die griechische Einbandkunst und das frühchristliche Buch: Archiv für Buchbinderei* XXIV (1924), pp. 21, 52 and fig. 16; *Der Einfluß der Klosterarbeit auf die Einbandkunst*, p. 154 and fig. 3, Pl. 16, fig. 5.

164. The bookbinder also took over the smoothing iron from the tools of the shoemaker. Cf. H. FRAUBERGER, *op. cit.* p. 10.

165. *Greek Papyri in the British Museum, Catalogue, with Texts* V (London 1917), No. 1909, p. 281.

166. This technique is also familiar to us from Coptic shoes; cf. H. FRAUBERGER, *op. cit.* p. 12.

167. *Die griechische Einbandkunst und das frühchristliche Buch*, pp. 63, 78—80, 82—87.

168. Cf. J. WILPERT, *Die römischen Mosaiken und Malereien der kirchlichen Bauten von IV. bis XIII. Jahrh., III Mosaiken* (Freiburg i. Br. 1916), Pl. 31—38 (Taufkirche St. Johannes, in Naples, second half of the IVth century A. D.). On the ornament cf. also A. RIEGL, *Stilfragen*, pp. 72, 137, 157. The arrangement of the punches is reproduced schematically in P. ADAM, *Die griechische Einbandkunst und das frühchristliche Buch*, p. 79, fig. 70D.

169. The lacing of these coloured strips of leather through holes punched in the material is a common decoration in Coptic shoemaking, cf. H. FRAUBERGER, *op. cit.* p. 10.
170. The hexagram in the centre is completed by ADAM. The original really gives no clue.
171. Inlaid fret-work along with the application of leather is one of the most frequent modes of adorning late classical and coptic shoes; cf. H. FRAUBERGER, *op. cit.* p. 13.
172. Die buddhistische Spätantike in Mittelasien II, p. 40 and Pl. 4e. The piece is also discussed by J. LOUBIER, *Orientalische Einbandkunst: Archiv für Buchbinderei* X (1910), p. 33 with fig. 1 and P. KERSTEN, *Die Durchbrucharbeit*, *ibid.* XIV (1914-15), p. 9, with fig. 1.
173. The markedly Egyptian attitude of the figures of two paintings in the "Cave of the Painters" at Chotscho is striking; the chest is shown facing and the faces are in profile. The hairdressing, too, distinctly recalls Egyptian work. Still more striking is the representation of Gautama with aureole in fillets, quite in the style of an Egyptian mummy, which the chest-like coffin also recalls; cf. A. GRÜNWEDEL, *Altbuddhistische Kultstätten in Chinesisch-Turkistan* (Berlin 1912), pp. 148, fig. 337, 149, fig. 338 and p. 153, also p. 46, fig. 91 and p. 48. On the relations between Eastern Turkistan and Egypt cf. also A. v. LE COQ, *Die buddhistische Spätantike in Mittelasien* II, p. 19.
174. Published by A. v. LE COQ, *Die buddhistische Spätantike in Mittelasien* II, p. 17.
175. *Zur orientalischen Altertumskunde* IV, p. 40 note 1.
176. The fragment of a board, P. Berol. 14026, has on the inside a papyrus leaf with Arabic protocol, second cent. A. H. (eighth A. D.).
177. The same things are also found on the corners of the Greek binding described and reproduced on Pl. I by U. BOURIANT, *Fragments Grecs du livre d'Énoch: Mémoires publ. par les membres de la Mission Archéologique française au Caire* IX (Paris 1892), pp. 93f., 146, 333.
178. *Alte koptische Einbände*, p. 114f. with figg.; *Bucheinbände aus Ägypten*, col. 51 and fig. 25. The better preserved back cover is also reproduced in W. SCHUBART, *Das Buch bei den Griechen und Römern*², p. 143, fig. 34. H. IBSCHER was formerly of the opinion, as indeed was also P. ADAM (v. note 179) that the inner and outer line of each geometrical figure on the binding P. Berol. 14019, as well as the zigzag pattern round the central field and on the marginal borders, had been scratched flat with the knife, but in a letter written to me on the 30th April, 1928, he has entirely abandoned the idea that this is an example of scratching work, but on the contrary is now convinced that the lines made by the hot sleeking iron have in course of time broken out, because the leather has suffered in places, as even nowadays can still happen, if a bookbinder makes the iron too hot when he is blind-pressing, and thus burns the leather through. I am not at present in a position to examine this piece again, and technical details of this kind cannot be clearly recognised from a photograph. If I cannot thus anticipate agreement with IBSCHER's new observations, yet it must be remarked that his judgement in such matters deserves full consideration as that of a skilled specialist. Moreover an essay by H. IBSCHER on Coptic bindings from Egypt may shortly be expected, in which the bindings P. Berol. 14016, 14021-14023 will be briefly dealt with and reproduced in the form of reconstructions.
179. *Der Einfluss der Klosterarbeit auf die Einbandkunst*, Pl. 16, fig. 6; *Die griechische Einbandkunst und das frühchristliche Buch*, pp. 52, 61, 62.
180. For the dating of the papyrus leaves in this volume and in the other volumes of the Berlin Papyrus collection I am indebted to Professor Dr. C. SCHMIDT. The age of the pulp leaves, now put back a century, does not however affect IBSCHER's dating of the volume. Decades might certainly pass before it was decided to turn even much used liturgical texts to pulp.
181. Briefly described by W. E. CRUM, *Catalogue of the Coptic Manuscripts in the British Museum* (London 1905), No. 266, p. 119.
182. A reconstruction of the board is given by P. ADAM, *Die griechische Einbandkunst und das frühchristliche Buch*, p. 63. The very interesting fragments of boards are being restored by H. IBSCHER. As his work is not yet finished I refrain from reproducing the cover.
183. Cf. J. J. TIKKANEN, *Tre armeniska miniatyrhandskrifter*, p. 82 and fig. 42.

184. Reproduced and discussed in P. ADAM *op. cit.* p. 51f., 98 and fig. 87, p. 62 and fig. 51. The stamp on P. 14017, which ADAM calls a ring with a kind of crown or blossoming flower is clearly a pomegranate, which had already played a great part in Assyrian art. Cf. A. RIEGL, *Stilfragen*, p. 96 and fig. 36 and B. MEISSNER, *Babylonien und Assyrien I* (Kulturgesch. Bibliothek I, 3, Heidelberg 1920), fig. 153. For the palm-leaf stamp on P. 14022, I may refer to the palmettes in double-lined circles on the sixth century table of canons of the Gospel Add. 5111 (British Museum) in H. SHAW, *Illuminated Ornaments selected from Manuscripts and early printed books from the sixth to the seventeenth centuries* (London 1833), Pl. 1.

185. Papyrus V, cf. W. E. CRUM, *Catalogue of the Coptic Manuscripts in the British Museum*, No. 325, p. 146.

186. Coptic Homilies in the Dialect of Upper Egypt Pl. IV (facing p. XV) and Pl. V (facing p. XVII).

187. The same strip, enclosed on the right by three, on the left by seven lines, forms the frame of the binding of Papyrus V, just mentioned, of the British Museum.

188. Cf. A. SCHMIDT, *Der Einband der goldenen Bulle von 1356 in der Landesbibliothek zu Darmstadt: Buch und Bucheinband, Aufsätze und graphische Blätter zum 60. Geburtstage von HANS LOUBIER*, pp. 108, 109; TH. GOTTLIEB, *Bucheinbände*, col. 46, and *Englische Einbände des XII. Jahrhunderts in französischem Stil: Belvedere IX—X* (1926), pp. 15—23.

189. Cf. W. E. CRUM, *Catalogue of the Coptic Manuscripts in the British Museum*, No. 940, p. 393.

190. *Die griechische Einbandkunst und das frühchristliche Buch*, p. 62 and fig. 50.

191. W. SALT BRASSINGTON, *A History of the Art of Bookbinding* (London 1894), p. 57.

192. Greek papyri in the British Museum, *Catalogue, with Texts*, IV (London 1910), Nr. 1419, pp. 166, 167; cf. also H. I. BELL's article, *Early Codices from Egypt: The Library, New Series X* (1909), p. 312f.

193. *L'Arte VIII* (1905), p. 448 and fig. 5 (Stele in the Museo Egizio Vaticano); W. E. CRUM, *Coptic Monuments: Catalogue Général des Antiquités Égyptiennes du Musée du Caire IV* (Cairo 1902), Pl. XXXIX, No. 8630, XL, No. 8634, XLVI, No. 8667, L, No. 8685; J. STRZYGOWSKI, *Koptische Kunst*, pp. 41, fig. 49, 86, fig. 120.

194. O. v. FALKE, *Kunstgeschichte der Seidenweberei I* (Berlin 1913), fig. 21, facing p. 18 (sixth cent. A. D.). On the lattice work pattern, cf. also A. RIEGL, *Stilfragen*, pp. 88—90, 194f., 267. RIEGL's work however can only be considered as a beginning in the investigation of this very interesting ornament. The very useful account in M. DIMAND, *Die Ornamentik der ägyptischen Wollwirkereien*, pp. 42—44, by no means exhausts the ample material.

195. Cf. e. g. H. R. HALL, *Coptic and Greek Texts of the Christian Period* (London 1905), Pl. 25, No. 33158.

196. Cf. A. GROHMANN, *Aethiopische Marienhymnen: Abhandlungen d. phil.-hist. Klasse d. sächsischen Akademie d. Wissenschaften XXXIII, 4* (Leipzig 1919), pp. 49, 54, 324.

197. Cf. *Fihrist al-Kutub al-'Arabiyya al-Mahfūza bi'l-Kutubkhāna al-Khediwiyya I*, p. 2, No. 9983. The statement here made that the covers are of palmwood is hardly to be taken seriously. The palm-tree of course is unsuitable for supplying boards of the uniform structure necessary for bindings. One would rather suggest the cedar or spruce (Egyptian *snoubar*).

198. Brief notice in the *Deutsche Allgemeine Zeitung* of March 12, 1874.

199. J. v. KARABACEK, *Zur orientalischen Altertumskunde IV*, p. 36, note 2, felt bound to doubt this, but gave no reason for his scepticism.

200. M. DIMAND, *Die Ornamentik der ägyptischen Wollwirkereien*, p. 44, note 2, thinks this decoration of the ribbons by crosslines may be of Hittite origin.

201. J. v. KARABACEK, *Zur orientalischen Altertumskunde IV*, p. 40, note 2.

202. A still earlier example of a simple unadorned volume for everyday use is found in the much worn calf binding of the Papyrus codex of the *Kitāb al-Jāmi' fi'l-Hadīth* of ABŪ MUḤAMMAD 'ABD ALLĀH b. WAḤB b. MUSLIM AL-QURASHĪ AL-MIṢRĪ (d. 197, A. H. = 812—13 A. D.) in the Egyptian

Library in Cairo, which belongs to the second century A. H. (VIIIth–IXth cent. A. D.) to which E. GRATZL, *Islamische Bucheinbände*, p. 4, note 3 has already called attention. This valuable Papyrus codex was found in the late autumn of 1922 in Edfū wrapped in a ragged linen covering. It contains 87 folios and is incomplete. As the leather cover of the binding bears a title in black ink in a vigorous hand of the second-third century A. H., which cites only a few sections of the *Kitāb al-Jāmi'* it is perhaps doubtful whether we really have the original binding of the Papyrus. Information on this MS., I owe to the librarian AHMED RAMY, as well as a photograph of the leather cover which has on one side the remains of a additional three-cornered piece. Whether this belonged to a triangular flap of the kind with which we are familiar in later Muslim bindings, as is very probable from the form of the binding and as also seems clear from one of RAMY's drawings, or whether we have here perhaps only a piece of the overlap, I cannot yet decide. I regret that I did not see this binding, which is kept separately, on my last visit to Cairo. This cover reminds one of the leather binding of the papyrus manuscript of the two Greek treatises by Philo, belonging to the VIth cent. A. D. and found at Coptos, — now preserved in the Bibliothèque Nationale, Paris. This binding — a plain cover for ordinary use — has been described by V. SCHEIL in the preface, p. 1, to *Deux traités de Philon: Mémoires publ. par les membres de la Mission Archéologique française au Caire IX* (Paris 1892), and an illustration is given opposite p. 216. The square body of the book is enclosed in a leather cover with a flap, as in the case of modern Islamic bindings, (cf. p. 47), and a leather strap, which is carried over the cover and holds the flap in its place. So this is no Islamic invention, but like so much else has been taken over from the art of Coptic-Greek binding.

203. M. HERZ-BEY, *Catalogue raisonné des monuments exposés dans le Musée National de l'Art Arabe*² (Le Caire 1906), p. 122, fig. 28. Quite an inaccurate reconstruction of the fragment of palmette in our binding has been given by J. KARABACEK in the *Führer durch die Ausstellung*, p. 245 as a head-piece.

204. Cf. M. DIMAND, *Die Ornamentik der ägyptischen Wollwirkereien*, Pl. II, fig. 4, IV, fig. 8.

205. Cf. J. STRZYGOWSKI, *Altai-Iran und Völkerwanderung*, p. 293.

206. Cf. A. GROHMANN, *Allgemeine Einführung in die arabischen Papyri*, p. 80.

207. A zigzag band with similar filling of the triangles — without crescent — from an Armenian hymnbook and from an ivory relief are figured in J. J. TIKKANEN, *Tre armeniska miniatyrhandskrifter*, p. 69, fig. 3 and p. 85, fig. 50. From the field of Muslim art I would call especial attention to the zigzag band in the soffit of the fourth arch of the south-west Iwān of the Ibn Tūlūn mosque in Cairo. Cf. K. A. C. CRESWELL, *Some newly discovered Tūlūnide ornament*, p. 181, Pl. I B, No. 4, and as a later example to the acanthising transformation — also used as a frame — in A. RACINET, *L'Ornement polychrome*, German edition (Stuttgart 1880), Pl. XXVIII left below. An interesting early Christian parallel is found in a textile of the Victoria and Albert Museum, which FRANCIS BIRRELL, *Two early Egyptian printed stuffs*, *Burlington Magazine* XXVII (1915), pp. 109 and 108, Pl. II D, E, has published and discussed. Here again the zigzag band serves as a frame which encloses the figures (Communion of the Apostles).

208. Cf. J. V. KARABACEK, *Zur orientalischen Altertumskunde* IV, p. 52f.

209. *Ibid.* pp. 55–57 and fig. 6. The piece is also reproduced by P. ADAM in his review of J. V. KARABACEK's article in the *Archiv für Buchbinderei* XIV (1914), p. 3. On the outer edge of the parchment there are still traces of a line of Arabic writing in brown ink, and the shape of the letters points to much the same period as KARABACEK assumed as the latest probable date, on external evidence. This important indication seems to have escaped KARABACEK's notice.

210. On this motif cf. J. J. TIKKANEN, *Tre armeniska miniatyrhandskrifter*, p. 81f. and fig. 39. Of the examples in Muslim art, I should like to mention specially the splendid carved minbar of wood in the Mosque of Sidi 'Oqba in Qairawān (IXth cent. A. D.). There we find the intertwined ovals enclosed in a square in the second panel of the staircase and on the front in the eighth row from the left. Cf. J. STRZYGOWSKI, *Altai-Iran und Völkerwanderung*, Pl. X and p. 200, fig. 165; in another position also *ibid.*, p. 202, fig. 167.

211. Zur orientalischen Altertumskunde IV, p. 48f., fig. 5. The piece is reproduced by P. ADAM in his review of KARABACEK's publication in the *Archiv für Buchbinderei* XIV (1914), p. 3.
212. Cf. M. v. BERCHEM and J. STRZYGOWSKI, *Amida* (Heidelberg 1910), p. 153f., fig. 75.
213. Ibid. fig. 76 and J. STRZYGOWSKI, *Koptische Kunst*, p. 124, fig. 178 and No. 8730.
214. *Die Keramik von Samarra*, p. 51, fig. 121.
215. Zur orientalischen Altertumskunde IV, p. 42.
216. The double lozenge band which enclosed in two lines binds the narrow ends of an Arab tombstone and is reproduced by J. STRZYGOWSKI, *Ornamente altarabischer Grabsteine in Kairo*, p. 319, fig. 28, may be considered a further development of this pattern. That it was also used as a frame here like the arrangement of quadrilaterals on Coptic bindings is significant. The arrangement of rhombuses and the double row of lozenges is one of the oldest and most widely disseminated motives of old oriental forms. The former is already found on Chinese ceramics of the Neolithic age. Cf. W. PERCEVAL YETTS, *Painted Neolithic Pottery in China*; *Burlington Magazine* XLVII (1925), p. 309, fig. 2.
217. Zur orientalischen Altertumskunde IV, p. 43.
218. Zur orientalischen Altertumskunde IV, p. 43. Inv. Chart. Ar. 25640a is reproduced here on p. 42, fig. 4. P. ADAM used this picture in his review of KARABACEK's work in the *Archiv für Buchbinderei* XIV (1914), p. 2.
219. Zur orientalischen Altertumskunde IV, p. 42, fig. 3; reproduced by P. ADAM, *Archiv für Buchbinderei* XIV (1914), p. 2. Ornament and scroll recall a piece of Spanish-Moorish pottery, which J. PIJOAN, *New Data on Hispano-Moresque ceramics*; *Burlington Magazine* XLIII (1925), p. 77, Pl. IA, has published.
220. Cf. M. BOLLERT, *Ein Kasteneinband mit Lederschnitt in der sächsischen Landesbibliothek zu Dresden: Buch und Bucheinband, Aufsätze und graphische Blätter zum 60. Geburtstage von HANS LOUBIER*, Pl. 10, 11.
221. For the format of the book in ancient times, see W. SCHUBART, *Das Buch bei den Griechen und Römern*², p. 131.
222. B. MORITZ has published a series of pages from such old vellum Qur'āns in his *Arabic Palaeography*, Pl. 1—12.
223. Cf. P. ADAM, *Die griechische Einbandkunst und das frühchristliche Buch*, pp. 23, 27, 42.
224. Cf. F. R. MARTIN, *Miniaturen und Buchkunst*, p. II.
225. *Allgemeine Einführung in die arabischen Papyri*, pp. 20, 21, 77, 80, 87.
226. Cf. also C. H. BECKER's brilliant characterization of the development of Islamic culture in his *Islamstudien* (Leipzig 1924), p. 282.
227. Cf. E. HERZFELD, *Mshattā, Hīrā und Bādiya*, p. 106; *Die Genesis der islamischen Kunst und das Mshatta-Problem*, p. 27f.
228. ḤAMD-ALLĀH MUSTAWFĪ, *Nuzhat al-Qulūb*, translated by G. LE STRANGE (London 1919), p. 151.
229. British Museum, Add. 7170 (fol. 145).
230. Id. (fol. 7).
231. B. M., Add. 7169 (fol. 12b).
232. B. M., Add. 11856 (fol. 95b).
233. For some unexplained reason, it has become a fashion to refer to this city under the Greek form of its name, Rhages; but seeing that the pottery belongs to the VIth or at least the beginning of the VIIth century of the Muhammadan era, such an antiquarian nomenclature seems entirely inappropriate.
234. J. B. CHABOT, *Synodicon orientale* (Paris 1902), p. 619.
235. *Bibliotheca geographorum arabicorum*, ed. M. J. DE GÖRJE I, p. 150, II, pp. 16—17.
236. *Kitāb at-Tanbīh*, ed. M. J. DE GÖRJE (*Bibliotheca geographorum arabicorum* VIII), p. 106.
237. *Prolegomènes d'Ibn Khaldoun*, traduits par M. DE SLANE II (Paris 1865), p. 67.
238. AR-RĀWANDĪ, *Rāhat us-Ṣudūr*, ed. Muhammad Iqbāl (London 1921), p. 72.

239. ABU'L-MA'ĀLĪ MUHAMMAD b. 'UBAYD ALLĀH, Kitāb Bayān al-Adyān (Chrestomathie Persane, publiée par CH. SCHÉFER I [Paris 1883]), p. 145.
240. Bibliothèque Nationale, Man. arabe 1489.
241. An attempt was made by the present writer in 'Survivals of Sasanian and Manichaean Art in Persian Painting' (Oxford 1924).
242. E. BLOCHET, Les peintures des manuscrits persans de la collection Marteau à la Bibliothèque Nationale: Monuments Piot XXIII (1919), pp. 131—132, 141—159.
243. Man. arabes 3465 and 3467.
244. E. BLOCHET, op. cit. pp. 139—140.
245. Notices sur les manuscrits persans et arabes de la Collection Marteau: Notices et Extraits des manuscrits de la Bibliothèque Nationale XLI (Paris 1923), pp. 219—220.
246. Sikandar-nāmah II (Dihli 1316 A. H.), pp. 197—200.
247. PH. W. SCHULZ, Die persisch-islamische Miniaturmalerei II, Pl. 53; E. KÖHNEL, Miniaturmalerei im islamischen Orient: Die Kunst des Ostens VII (Berlin 1922), fig. 51.
248. Man. arabe 5036.
249. DAWLATSHĀH, Tadḥkiratu sh-Shu'arā (London 1901), p. 350.
250. He began to reign in Marw in 1458 but made Harāt his capital from 1468 until his death in 1505; his dominions comprised Khurāsān, Tukhārīstān, Qandahār, Sīstān and Māzandarān.
251. Khulāṣat al-Akḥbār (India Office MS. Ethé 77), fol. 309.
252. Ḥabīb us-Siyar III (Bombay 1857), p. 350.
253. The Bābur-nāma in English, translated by A. S. BEVERIDGE (London 1921), p. 329.
254. Id. p. 291.
255. CL. HUART, Les Calligraphes et les Miniaturistes de l'orient musulman, p. 226.
256. MIRZA MUHAMMAD QAZWINI et L. BOUVAT, Deux documents inédits relatifs à Behzād: Revue du Monde Musulman XXVI (1914), pp. 159 ff.
257. E. BLOCHET, Les peintures des manuscrits orientaux de la Bibliothèque Nationale (Paris 1914—1920), p. 285.
258. *Wa-ḥālun Ustād Bihzād hār-i-khud badū rajū' mikunad*. Supplement to FAKHRĪ SULṬĀN MUHAMMAD'S Laṭā'if-nāma, a translation of MIR 'ALĪ SHĪR's Majlis an-Nafā'is (B. M., Add. 7669, fol. 98).
259. E. BLOCHET, op. cit. pp. 283—284.
260. Ḥabīb us-Siyar III, p. 343.
261. PH. W. SCHULZ, Die persisch-islamische Miniaturmalerei I, p. 114 (where it is suggested that he survived the death of Bihzād); A. V. WILLIAMS JACKSON & ARR. YOHANNAN, A catalogue of the Collection of Persian Manuscripts, including also some Turkish and Arabic, presented to the Metropolitan Museum of Art, New York, by ALEX. SMITH COCHRAN: Columbia University Indo-Iranian Series, ed. by A. V. WILLIAMS JACKSON I (New York 1914), p. 63f.
262. Ḥabīb us-Siyar III, pp. 342—343.
263. B. M., Add. 7669, fol. 97b (cf. note 258).
264. The Bābur-nāma in English, translated by A. S. BEVERIDGE, pp. 272, 291.
265. Khulāṣat al-Akḥbār (I. O. MS. Ethé 77), fol. 309.
266. Tuhfa-i-Sāmī (I. O. MS. Ethé 665), fol. 43b.
267. Ta'rikh-i-'Ālamārā-yi-'Abbāsī, I. O. MS. Ethé 540, fol. 74b; B. M., Add. 16,684, fol. 45b.
268. Cf. note 267.
269. i. e. Shāh 'Abbās, in the last year of whose reign the author completed his work.
270. I. O. MS. Ethé 540, fol. 76b.
271. E. BLOCHET, Monuments Piot XXIII, pp. 176 and 195.
272. Seven of these pictures have been reproduced in 'An Empire-BUILDER of the Sixteenth Century', by L. F. RUSHEROOK WILLIAMS (London 1918).
273. The Bābur-nāma in English, transl. by A. S. BEVERIDGE, pp. 22, 110.
274. Id. p. 418.

275. *Humāyūn-nāma* by Gulbadan Begam (London 1902), p. 169.
276. An elaborate study of this work has been published by H. GLÜCK, *Die indischen Miniaturen des Haemzae-Romanes, im österreichischen Museum für Kunst und Industrie in Wien und in anderen Sammlungen*, Zürich-Wien-Leipzig 1925.
277. *The Ā'in-i-Akbari* by Abul Fazl, translated by H. BLOCHMANN (Calcutta 1873), p. 598.
278. *The Maāşiru-l-Umarā*, being biographies of the Muhammadan and Hindu officers of the Timurid sovereigns of India from 1500 to about 1780 A. D., by Nawāb Şamşāmu-d-daula Shāh Nawāz Khān and his son 'Abdul Haqq, translated by H. BEVERIDGE (Calcutta 1911 ff.), p. 454.
279. H. BLOCHMANN, *op. cit.* p. 495.
280. *The Maāşiru-l-Umarā*, *loc. cit.*
281. H. BLOCHMANN, *op. cit.* p. 108.
282. See T. H. HENDLEY, *Memorials of the Jeypore Exhibition, 1883, Vol. IV* (London 1884).
283. PERCY BROWN, *Indian Painting under the Mughals* (Oxford 1924), p. 108.
284. H. BLOCHMANN, *op. cit.* p. 107.
285. See: *Indische Buchmalereien aus dem Jahāngīr-Album der Staatsbibliothek zu Berlin*, by ERNST KÜHNEL und HERMANN GOETZ (Berlin 1924), pp. 38—42. Examples of Flemish-Dutch woodcuts, copied by Indian painters, are drawings by DÜRER, e. g. the Virgin under the tree, 1513, engraved by JOHN WIERIX (Alvin 625); the standard-bearer, engraved by WIERIX (Alvin 1580 I); Holy Family, engraved by RAPHAEL SADELER after J. ROTTENHAMER in 1601; Massacre of the Innocents after M. DE VOS, engraved by J. SADELER.
286. *Memoirs of Jahāngīr*, translated by A. ROGERS II (London 1914), pp. 20—21.
287. *Id.*, Vol. I, p. 159.
288. Victoria and Albert Museum Portfolios. Thirty Mogul Paintings of the School of Jahangir in the Wantage Bequest. Text by C. STANLEY CLARKE (London 1922), Pl. 14 and 15.
289. *Travels in the Mogul Empire*, ed. VINCENT A. SMITH (Oxford 1914), p. 259.
290. *Id.*, pp. 254—255.
291. *Id.*, p. 228.
292. E. BLOCHET, *Les peintures des manuscrits orientaux de la Bibliothèque Nationale*, pp. 72—73.
293. F. BABINGER, *Quellen zur osmanischen Künstlergeschichte: Jahrbuch der asiatischen Kunst I* (1924), pp. 39—40.
294. J. VON KARABACEK, *Abendländische Künstler zu Konstantinopel im XV. und XVI. Jahrhundert: Denkschriften der K. Akademie d. Wissenschaften in Wien, Phil.-Hist. Kl. LXII, 1* (1918), pp. 24—25.
295. *Id.*, p. 53.
296. J. VON HAMMER, *Geschichte des Osmanischen Reiches III* (Pesth 1835), p. 236.
297. F. BABINGER, *op. cit.* p. 40.
298. A. SPRENGER, *Catalogue of the Arabic, Persian and Hindustani Manuscripts of the Libraries of the King of Oude* (Calcutta 1854), p. 23 (No. 249).
299. L. BOUVAT, *Autour du Monde Musulman, Empire ottoman: Revue du Monde Musulman IX* (1909), p. 172.
300. A. SAKISIAN, *La reliure persane du XIVe au XVIIe siècle: Actes du Congrès d'Histoire de l'Art I* (Paris 1922), pp. 344—345.
301. T. HARRISON, *A Persian binding of the fifteenth century: Burlington Magazine XLIV* (1924), p. 35.

BIBLIOGRAPHIES

- A. RONFLARD, L. BOUVAT and RIOCHE, L'art musulman. Essai de bibliographie: Archives Marocaines III, 3 (Paris 1905), No. 1.
- K. A. INOSTRANTZEV and J. I. SMIRNOV, Materiali dla bibliographie musulmanskoe archeologie: Zapiski Vostočnago Otděleniya Imperatorskago Russkago Archeologičeskago Obščestva XVI, 1 (1906), pp. 79-145.
- A. CRESWELL, A provisional bibliography of painting in Muhammadan art. London (Luzac & Comp.) 1921.
- W. BJÖRKMAN and E. KÜHNEL, Kritische Bibliographie. Islamische Kunst 1914-1927: V. Kunstgewerbe des Islam; B. Kalligraphie und Buchornament; C. Miniaturmalerei: Allgemeines und persische Schulen; D. Indische Miniaturen; E. Bucheinbände: Islam XVII (1928), pp. 183-198.

ERRATA

- p. 4 (Fig. 1): *for* oft he *read* of the
- p. 26, line 23: *for* from te hand *read* from the hand
- p. 31, line 26: *for* were brought *read* was brought
- p. 38, last line: *for* lead up *read* led up
- p. 41, line 36: *for* I no. *read* Inv.
- p. 86, line 21: *for* Bārbur *read* Bābur
- p. 98, line 37: *for* peace *read* piece

TABLE OF PAPYRI, MANUSCRIPTS AND OTHER PIECES DISCUSSED IN THE TEXT

BERLIN, STAATLICHE MUSEEN, PAPYRUS COLLECTION

P. 3006 B.	104, note 59
P. 4442	23
P. 5004	101, note 21
P. 9922	104, " 59
P. 9923	104, " 59
P. 9924	104, " 59
P. 11970	28
P. 12796	28
P. 12802	51f.
P. 13275	104, note 59
P. 14016	42
P. 14017	40
P. 14018	36
P. 14019	39
P. 14020	43
P. 14021	41
P. 14022	40, 111, note 184
P. 14023	40
P. 14025	43
P. 14026	110, note 176
P. 14028	42

ANTHROPOLOGICAL MUSEUM

Kat. No. I. B, 4937	4
Kat. No. I. B, 6267	38
Kat. No. I. B, 6268	38

KAISER FRIEDRICH MUSEUM

Inv. No. 2440	3
---------------	---

CAIRO, EGYPTIAN LIBRARY

P. Inv. 89	28
------------	----

Maṣāḥif No. 1 23, 44f.

" " 139	22, 105, note 98
" " 188	45
" " 192	46
" " 194	24

ARABIC MUSEUM

Inv. No. 1201	26
---------------	----

GOtha, HERZOGliche BIBLIOTHEK

Cod. Ar. 36	22
-------------	----

HEIDELBERG, UNIVERSITY LIBRARY, SCHOTT-REINHARDT COLLECTION OF PAPYRI

PSR. 50—53	107, note 121
PSR. 773	29
PSR. 778	28
PSR. 1126	29
PSR. 1240	41
PSR. 1241	36

LONDON, BRITISH MUSEUM, DEPARTMENT OF MANUSCRIPTS

Papyrus IV	33, 36
" V	111, note 187
Add. 5111	111, note 184
7169	64
7170	64
7669	76f.
11856	64
Or. 2265	78
3367	40
4912	80

Or. 5000	41
Or. 5001	40
Or. 6810	79

INDIA OFFICE LIBRARY

Ms. Ethé 7774f., 79
Ms. Ethé 540	83
Ms. Ethé 665	79f.

PARIS, BIBLIOTHÈQUE NATIONALE, DEPARTEMENT DES MANUSCRIPTS

Ms. arabe 1489	68
Ms. arabe 3465	69
Ms. arabe 3467	69
Ms. arabe 5036	72

VIENNA, NATIONAL LIBRARY, ARCHDUKE RAINER COLLECTION

Eg. 10110	13
Inv. Gr. Pap. 30501	42 f.
" " " 30502	39, 42
" " " 30503	41f.
" " " 30504	44
" " " 30511	8
" " " 30516	106, note 108
Inv. No. 34	34
PERF. No. 446	23
" " 728	26
" " 942	28
" " 954	6, 8, 14, 18
" " 961	8
" " 1072	108, note 138
Inv. Ar. Pap. 600a	18, 28
" " " 600b	18
" " " 9998	18
" " " 10006	14
" " " 10013	104, note 65
" " " 10017-19	104, note 65

Inv. Ar. Pap. 10047	14
" " " 10052	15
" " " 10053	15
" " " 10130	57
" " " 10150	35
Inv. Perg. Ar. 2	22
" " " 186	22f.
" " " 294	19, 50
" " " 322	26
" " " 335	50
" " " 336	43
" " " 337	53
" " " 357	50f.
Inv. Ar. Lin. No. 30	17
Inv. Chart. Ar. 1924+25647	19
" " " 5604	53
" " " 7264	53
" " " 7265	28
" " " 7322	19
" " " 12514	17
" " " 13682	7f.
" " " 14100	53f.
" " " 14100a	56
" " " 14100b, c	47-49
" " " 25042	104, note 65
" " " 25043	104, note 65
" " " 25612	3
" " " 25613a-e	3-5
" " " 25615	5f.
" " " 25616	26
" " " 25620	14
" " " 25627	61
" " " 25629	52
" " " 25630	52
" " " 25631	61
" " " 25635	54
" " " 25636	56
" " " 25638	54
" " " 25639	56
" " " 25640a/b	54

Inv. Chart. Ar. 25641	14
" " " 25653	52 f.
" " " 25654	54
" " " 25656	14
" " " 25751	8-12
" " " 27553	56
" " " 28001	49 f.
" " " 28002	49
" " " 28003	35

NATIONAL LIBRARY, DEPARTMENT
OF MANUSCRIPTS

Cod. Med. Graec. 1 . . . 3, 101, note 19	
A. F. 4.	18, 25
A. F. 9.	9
A. F. 10.	3, 9

N. F. 381	25
Mixt. 814	24

PRIVATE COLLECTIONS

Collection of Dr. HUGO IBSCHER, 36 f.

Collection of Dr. F. R. MARTIN,
20 f., 25, 107, note 121

Collection of PIERPONT MORGAN,
Ms. IV 34

Collection of Baron EDMOND DE ROTH-
SCHILD, Shāh-nāma 78

Collection of Mr. DYSON PERRINS,
Nizāmī, Khamsa 88

ABBREVIATIONS

- P. Papyrus.
P. Berol. Papyrus of the Staatliche Museen in Berlin.
PER. Papyrus of the Rainer Collection, Vienna.
PERF. J. KARABACEK, Papyrus Erzherzog Rainer, Führer durch die Ausstellung,
Wien 1894.
PSR. Papyrus of the Schott-Reinhardt Collection in the University Library in
Heidelberg.

INDEX OF SUBJECTS, PERSONS AND PLACES

- 'Abd Allāh b. 'Itr, 56.
 'Abd aṣ-Ṣamad, 86-87.
 Abū 'Isā b. Shīrān, 32.
 Abū Tamīm Haydara, 6.
 Abyssinian covers, 44.
 acanthus leaf, 5.
 Aḥmad, Pīr Sayyid, 75.
 Ajantā, frescoes of, 11, 84.
 Akbar, 87-89.
Akbar-nāma, 88.
 Akhmīm, 35.
 albums (cf. *muraqqa'āt*), 90, 95.
 'Alī Aṣghar of Kāshān, Mawlānā, 83.
 'Alī, Mīr Sayyid, 86, 87.
 'Alī Shīr Nawā'ī, Mīr, 75, 77.
 Amīr Hamza, Romance of, 86, 88.
 amulets, 26-29.
 animal figures in round stamps, 40.
 animals, in decoration, 15.
 animals, on bindings, 99, 100.
 antilopes, stamps with, 41.
 Anūshīrwān, portrait of, 67.
 appliqué work, 34-36, 57.
 Aqbā'ī, 25.
 arabesques, 5, 24, 45, 52, 54.
 Arabia, tanning in, 30, 31.
 arcade of horseshoe arches, 29.
 arches, horseshoe, 29.
 arches, row of, 22, 23.
 arcs, 42.
 Armenian bird alphabet, 104 note 66.
 Armenian initials, 15.
 arrangement of the field, 57.
 arrangement of quadrilaterals, 113,
 note 216.
 arrangement of ribands, 45.
 arrangement of rhombuses, 113 note
 116.
 art, Central Asian, 71.
 art, Chinese, 70, 71.
 art, Christian, 63-65, 68, 69.
 art, Coptic, 12.
 art, Manichaean, 68.
 art, Sasanian, 65-67.
Arzhang, 68.
 'āshira marks, 22, 23, 26.
 āshrās (asphodel paste), 31.
 asphodel paste, 31.
al-Āthār al-Bāqiya, 68.
 Augustine, St., on Manichaean books, 2.
 Awrangzib, 92.
 Aybak b. 'Abd Allāh as-Sayfī, 18.
 Bābur, 75, 85.
 Badi' az-Zamān Mīrzā, 94.
 Baghdād, school, 64.
 band, intertwining, 45, 50, 56.
 band of writing, 56.
 band, undulating, 25.
 band, woven, 23, 24, 26, 54, 56.
 band, zigzag, 18, 40, 50, 112 note 207.
 bands of lattice work, 50.
 bands, intersecting zigzag, 18, 33,
 34, 36.
 bands, system of intertwining, 47.
 bars, incised, 40.
 Bāysunqur, Mīrzā, 72, 85.
 Bellini, Gentile, 95.
 Bihzād, Kamāl ad-Dīn, 68, 74-79,
 81, 82, 85, 86.
 Bihzād, school of, 76-78, 81, 86, 89.
 bindings, colours of, 99.
 bindings, Coptic, 34-44.
 bindings, English, 41, 48.
 bindings, French, 41.
 bindings, inlaid, 33, 34.

- bindings, lacquer, 100.
- bindings, Mongol, 98.
- bindings of 'Irāq, 31.
- bindings of Malaga, 31, 32.
- bindings of South Arabia, 31, 57.
- bindings of Spain, 31.
- bindings of at-Tā'if, 31.
- bindings of wood, 33.
- bindings, prices of, 31.
- bindings, Tīmūrid, 99.
- bird alphabet, Armenian, 104 note 66.
- bird ornaments, 18.
- bird, stamps with a, 53.
- birds, 50, 53, 54.
- blocks, 28, 53.
- boards, carved Arabic, 5.
- book, cased in silk, 32.
- book, format of the, 56, 57.
- book of the classes of painters, 1.
- book of the portraits of the Sasanian Kings, 2.
- bookbinders, famous, 32.
- bookbinders, guild of, in Turkey, 98.
- bookbinders' art in Yemen, 31.
- bookbinding, 98-100.
- book-clasps, golden, 32.
- bookcraft, Islamic, 97-100.
- book-form, borrowed from the Abyssinians, 30.
- book-form, used for the Qur'ān, 30.
- book illustration, Manichaean, 67.
- book production, 32.
- books, bound in satin, 32.
- books in Arabia in the pagan period, 30.
- books, liturgical Christian, 32.
- books, Pehlevi, 23.
- books, prices of, 32.
- books, precursors of printed, 26.
- booksellers, 32.
- border, artistic, 18.
- border, zigzag, 28, 29.
- borrowings from Pehlevi books, 23.
- buds, almond-shaped 46.
- Cairo, tanneries in, 31.
- calligrapher, 14, 23, 104 note 65.
- calligrapher, esteem of, 97.
- calligrapher, payment of, 97.
- carved Arabic boards, 5.
- carvings, ivory, 24.
- Central Asia and Egypt, relations between, 38, 108 note 151.
- Central Asian art, 71.
- chain (ornament), 25.
- chain-stitch, 57.
- chessboard pattern, 42.
- chihra-nāmi*, 98.
- Chīn, picture gallery of, 70.
- Chinese art, 70, 71.
- Chinese characteristics, 69.
- Chinese influence, 65, 69, 70, 99.
- Chinese, painters and paintings 70, 71.
- Chinese paper, 32.
- Chinese pottery, 71, 77, 99.
- Chinese silks, 99.
- Chinese style of ornament, 99.
- Christian art, 63-65, 68, 69.
- Christian communities in Arabia, 30.
- Christian manuscripts, 18, 20-22, 26, 29.
- Christian painters in Stambul, 95, 96.
- circle, ninefold division of the, 52.
- circle, double lined, 42.
- circles, 51.
- circles, double, 39-41, 43.
- circles, nine intersecting, 52.
- circles, punched, 40, 41, 45.
- circles, segments of, 37, 40, 51.

circles separating the sentences, 23, 29.
 circles, stencilled, 36–39.
 circles, two concentric, 23, 50, 52.
 circles, used as a full stop, 23.
 circular patterns, 22.
 clasps of books, golden, 32.
clavi, 24.
 Clouet, François, 95.
 coating of varnish, 50, 51.
 codex, 30.
 codex form, 30.
 compasses, 51, 52.
 colours, 12, 104 note 59.
 colours of bindings, 99.
 blue-gold, 20, 21, 23, 105 note 87.
 chrome yellow, replacing gold, 26.
 red-green, 12.
 red-yellow-green, 12, 22.
 combinations of geometrical figures,
 18.
 comma-like lobes inside a circle, 17.
 Coptic art, 12.
 Coptic bindings, 34–44.
 Coptic embroideries, 48.
 Coptic grave steles, 44.
 Coptic manuscripts, 15, 22.
 Coptic miniatures, 4.
 Coptic shoes, 35.
 Coptic textiles, 23, 24, 40.
 coronis, 18.
 covers, Abyssinian, 44.
 covers, painted, 42, 43, 100.
 covers, wooden, 44–47.
 crescents, 53.
 crescent-shaped lobes, 19.
 criss-cross pattern, 5, 34.
 cross, 34, 42, 43, 46, 53.
 cross-bars, 28, 41, 42.
 cross lines, punched, 45.
 cross placed obliquely, 40.

cross, St. Andrew's, 39.
 cross strips, 38.
 crosses, intersecting, 35.
 crown of the Sasanians, 10.
 Crusades, 41.

Daffatānī, 30.
darbār, 90, 91.
 decorative scrolls, 22.
 designs, studies for, 15.
 destruction of great libraries, 32, 61,
 62.
 Dimyāna al-A'sar b. al-Hajjām, 32.
 Dioscurides, 3, 25, 101 note 19, 109
 note 155.
 dividing of the surface, 38.
 division of the circle, ninefold, 52.
 dog, running (ornament), 40.
 dots, row of ornamental, 18.
 dove, 40.
 dragon, 71, 99.
 drops, 53.

Edfū, 112 note 202.
 Egyptian paintings, 12.
 Egyptian pictures, 3.
 Elephantis, books of, 5.
 embroideries, Coptic, 48.
 endless pattern, 23, 51–53, 57.
 end-papers, 19, 29, 39, 43, 44–46,
 50.
 end-papers, leather, 45.
 English bindings, 41, 48.
 engraved stamps, 28.
 erotic literature of the Arabs, 5.
 erotic papyrus of Turin, 5.
 Ethiopic miniatures, 4.

Farrukh Beg, 90.
Fayyūm, 3, 8, 15, 17, 18, 34.

- festoons with spirals, 24.
 filigree work, 38, 54, 57, 99, 100.
 fish-bladder pattern, 25.
 flap, triangular, 47, 112 note 202.
 flaps protecting the edge, 36–38, 45, 47, 58.
 Flemish-Dutch wood-cuts, 89, 115 note 285.
 floral ornament, 46.
 flowers on bindings, 99, 100.
 format of the book, 56, 57.
 foundation of libraries, 32.
 framework, 18, 19, 23, 46.
 framework, decorative, of the first page or title-page, 18.
 framing, of the text, 29.
 French binding, 41.
 frescoes, 1.
 frescoes of Ajantā, 11, 84.
 frescoes of Sāmarrā, 1, 103 note 49.
 frescoes of Ṭurfān, 67.
 fretwork, 34, 38.
 fretwork, inlaid, 36, 45.
 friezes of geometrical ornaments, 28.
 friezes of tendrils, 28.

 Galen, 3.
 geometrical figures, combinations of, 18.
 geometrical ornament, 28, 50.
 geometrical pattern, endless, 57.
 German wood-cuts, 89.
 gilding, 9.
 gilt layers, 36, 37.
 gilt plates, 39.
 glass, Syrian, 3.
 gold, replaced by chrome yellow, 26.
 shell-gold, 25.
 gold ink, 19–21, 23, 32.

 gold-leaf, 2, 12, 13, 19, 34, 38, 104 note 60.
 golden bookclasps, 32.
 golden letters, 20.
 grave steles, Coptic, 44.
 Greek paintings, 12.
 Greek tomb steles, 26.
 guild of bookbinders in Turkey, 98.

 Ḥabīb as-Siyar, 75.
 al-Ḥallāj, sect of, 2, 32.
 halo, 66.
 Harāt school of painters, 57, 72, 77.
 Ḥārat al-Ḥusayniyya, 31.
 al-Ḥarīrī, *Maqāmāt* of, 10, 14, 64, 69.
 al-Ḥasan b. 'Alī b. 'Abd ar-Rahmān al-Yāzūrī, 1.
 Haydar, 95.
 Haydara, Abū Tamīm, 6.
 head pieces in manuscripts, 18.
 headings of the chapters in Qur'ān manuscripts, 97.
 heart with inlaid palm-leaf, 56.
 heart-shaped configurations, 37, 49, 53.
 heart-shaped leaf, 5, 49.
 heart-shaped openings, 37.
 Hellenistic portraits, 4.
 Hellenistic representations, 10.
 hexagons, 52, 53.
 hole-iron, 36, 41.
 Holy Scriptures, Christian, 32.
 horror of vacuum, 40, 74.
 hostility to pictural representation, 1, 92, 96, 97.
 Humāyūn, 85–87.
 Ḥusāmzāda Ṣan'ullāh, 95.
 al-Husayn b. aṣ-Ṣaffār, 32.
 Husayn Mīrzā, Sultān, 72, 75, 77, 86.

Ibn Abi 'l-Harīshī, 32.
 Ibn al-'Alqamī, 62.
 Ibn 'Azīz, 1.
 Ibn al-Bawwāb, 1, 32.
 Ibn Muqla, 1.
 Ibn Ṭūlūn, Mosque of, 6, 17, 112
 note 207.
 Ibn Wahhāb, 2.
 Ibrāhīm, 32.
 incised work, 36, 39, 41, 57.
 influence, Chinese, 65, 69, 70, 99.
 influence of European painting on
 Indian painters, 89.
 initials of Coptic and Armenian
 manuscripts, 15.
 inlaid book covers, 33, 34, 108 note
 151.
 intercourse between Central Asia and
 Egypt, 38.
 'Irāq, binding of, 31.
 iron, hole, 36, 41.
 iron, three lined, 36, 37, 40.
 Ismā'il, Shāh, 75-76.
 ivory carvings, 24.

 Ja'far b. Muḥammad aṣ-Ṣādiq,
 44.
 Jahāngīr, 89-90.

Kalīla and Dimna, 64, 69, 70, 88,
 101 note 19.
 Khālīd b. Abi'l-Hayyāj, 20.
 knots, 18, 22, 40.
 knots, interwoven, 40.
 Kūfic, 23, 47, 56.
 Kūfic, elaborate, 19, 23, 28, 56, 104
 note 65.
 Kūfic, inscriptions, 29.
 Kūfic, lapidary, 29.
 al-Kutāmī, 1.

Lace-making, 54.
 laced work, 39.
 lacquer bindings, 100.
 lām-alifs, conventional, 54.
 lattice work, bands of, 50.
lawḥānī, 30.
 leaf, acanthus, 5.
 leaf, first, of the Qur'ān manuscripts,
 24.
 leaf, gold, 34, 38.
 leaf with a face drawn in it, 18.
 leaves, heart-shaped, 5, 49.
 leaves, lotos, 46.
 leather appliqué work, 57.
 leather-cutting, 57.
 leather end-papers, 45.
 leather filigree work, 99, 100.
 leather industry in South Arabia, 30,
 31.
 libraries, destruction of, 32, 61, 62.
 libraries, foundation of, 32.
librarii, 32.
 lining tool, 47.
 lobes, comma-like, 17.
 lobes, crescent-shaped, 19.
 looped squares, 46.
 lotos leaves, 46.
 lozenge band, double, 113 note 216.
 lozenge, pattern, 23.
 lozenge-shaped figure, 37.
 lozenges, 41, 45, 46.
 lozenges, double lined, 41.
 lozenges, network of, 24, 40-42.

Mahābhārata, 88.
 Malaga, bindings of, 31, 32.
 mandorla, 37, 40, 45, 49.
 Mānī, 67, 68, 70, 75.
 Mānī, portrait of, 2.
 Manichaeon art, 68.

- Manichaean book illustration, 2, 67.
 Manichaean school of painting, 2.
 Manichaeans, 67.
 Manichaeans, technique of the, 13.
 Manichaeism, 2, 21.
 Maṣṣūr, Mīr, 86.
 Maṣṣūr, Ustādh, 90.
 manuscripts, Christian, 18, 20–22, 26, 29.
 manuscripts, Coptic, 15, 22.
 manuscripts, initials of Coptic and Armenian, 15.
 manuscripts, Jewish, 21.
 marginal decoration, 18.
 marginal decoration of Coptic and Armenian manuscripts, 15.
 maṣṣaf, 30.
 mechanical stamping from patterns, 33.
 Menāqib-i-Hūnerwerān, 14.
 Mesopotamian school, 64, 69.
 miniatures, Coptic, 4.
 miniatures, Ethiopic, 4.
 miniatures, Manichaean, 2, 67.
 miniatures of the Buddhist and Perso-Manichaean school, 12.
 miniatures, technique applied in the, 12.
 Mirak, Aqā, 76, 78–81.
 miṣṣaf, 30.
 monastery workshops, 34, 58.
 Mongol bindings, 98.
 Mongol painting, 69–71.
 Morocco leather, 31.
 mosaics, 1, 37, 72.
 mosque of Ibn Ṭūlūn, 6, 17, 112 note 207.
 mudhakkiḥ, 14, 97.
 Mughal school, 87–93.
 Muḥammad b. Ibrāhīm, 32.
 Muḥammad Khān Shaybānī, 75–76, 77–78.
 Muhammad Nādir, 90.
 Muḥammad Naqqāsh, Darwish, 76.
 Muḥammad Naqqāsh, Mawlānā Hājī, 77.
 Muḥammad Taqī, Hājī, 100.
 mujallid, 14, 108 note 139.
 al-Mukhtār, palace of, 1.
 Murād III, album of, 95.
 muraqqa'āt (cf. albums), 14.
 muṣawwir, 14.
 muṣṣaf, 36.
 Muẓaffar 'Alī, 78, 80, 83.
 Nashā (wheat-starch), 31.
 Nāṣir ad-Dīn Ṭūsī, 62.
 network of lozenges, 24, 40–42.
 Nizāmī (*Khamsa* of), 78, 88, 98.
 Oblong folio (format of books), 57.
 octagon, 29.
 openwork, 56.
 ornament, floral, 46.
 ornament, geometrical, 28, 50.
 ornament, pressed with a pattern dipped in black ink, 17.
 ornaments, bird, 18.
 ornaments, sketches of, 14, 15.
 ornaments, terminal, 22–24, 28.
 'Osmān, 95.
 ovals, intertwined, 53, 112 note 210.
 Painted covers, 42, 43, 100.
 painters, Chinese, 70.
 painters, Christian, in Sтамbul, 95, 96.
 painters, signatures of, 6, 74, 79, 80, 83.
 painting, Islamic, in India, 84–93.

- painting, Islamic, in Turkey, 94-96.
 painting, Mongol, 69-71.
 painting, pre-Mongol Persian, 61-68.
 painting, Timūrid, 71-73.
 paintings, Chinese, 70, 71.
 paintings, Egyptian, 12.
 paintings, Greek, 12.
 palm-leaf, 23-25, 35, 46-49, 53, 56,
 111 note 184.
 palm-leaf, half, 15, 26, 41.
 palm-leaf, winged, 22-24, 26, 105
 note 98.
 palmette, 26, 27.
 paper, Chinese, 32.
 paper-makers, 32.
 paper millboard, 47, 49.
 papyrus, erotic, of Turin, 5.
 papyrus-leaf as end-paper, 39.
 papyrus millboard, 34-37, 39,
 41-43.
 papyrus pulp (used for book-boards),
 34.
 parchment leaf as end-paper, 39, 40,
 43, 44, 46, 50, 51.
 parchment- and skin-rolls (in Persia
 and Mesopotamia), 30.
 parrots, 9.
 pattern, chess-board, 42.
 pattern, circular, 22.
 pattern, criss-cross, 5, 34.
 pattern, endless, 23, 51-53, 57.
 pattern, fish-bladder, 25.
 pattern, geometrical, 57.
 pattern, lozenge, 23.
 pattern, mechanical stamping from
 a, 53.
 pattern, square, 22.
 pattern, stencil, 39.
 pattern, tendril, 35.
 pattern, toothed, 53, 54.
 pattern, zigzag, 43.
 payment of calligraphers, 97.
 peak, angular, 26.
 peak, central, 27.
 pearls, row of, 29.
 Pehlevi texts, 23.
 pellets, row of, 43.
 pen-and-ink sketches, 17.
 pen-drawing, 14.
 Persian designs, 24.
 Persian Kings, portraits of, 1.
 Persian painting, pre-Mongol, 61-68.
 pictural representation, hostility to,
 1, 92, 95, 96.
 picture gallery of Chīn, 70.
 picture of the author, 20.
 pictures, Egyptian, 3.
 pictures in the Persian fashion, 1.
 pictures of the Prophets, 2.
 pictures of the Virgin, 1.
 pictures, Sasanian, 66, 67.
 plates, gilt, 39.
 polygon, regular, 23.
 polygon, spherical, 45.
 Pompeian wall-paintings, 5.
 portrait-coins, 10, 11.
 portrait of Anūshīrwān, 67.
 portraits, Hellenistic, 4.
 portraits of Persian Kings, 1.
 portraits of poets, 1.
 portraits of the Sasanian Kings, 66,
 67.
 pottery, Chinese, 71, 77, 99.
 pottery of Rayy, 64-66, 69.
 pottery of Sāmarrā, 104 note 66.
 pottery of Sulṭānābād, 69.
 prices of books, 32.
 prices of bindings, 31.
 printed books, precursors of, 26.
 protocol leaf (as end-paper), 43.

punches, 38-40.
punching, 36, 39-41, 45.

Qāsim 'Alī, 78-80.

qāfi', 14.

quadrilaterals, 29, 38.

quadrilaterals, arrangement of, 113
note 216.

quadrilaterals, two intersecting, 15.

quatrefoil, 22, 35, 39.

quatrefoil as a border, 9.

quires, binding of the, 57.

Qur'ān, decoration of, 20, 21.

Qur'ān roll, 107 note 121.

al-Quṣayr, 1.

Quṣayr 'Amra, 1.

Rāmāyana, 88.

Rāshid, 32.

Rawḍat al-Ṣafā, 75.

Rayy, 17, 65.

Rayy, pottery of, 64-66, 69.

rectangle, as the format of books,
57.

relations between Central Asia and
Egypt, 38, 108 note 151.

relations between Muslim and Cop-
tic binding, 34, 36, 45, 56-58.

repoussé work, 36, 48.

rhombus, double-lined, 29.

rhombuses, 40, 52.

rhombuses, accumulation of, 41.

rhombuses, arrangement of, 113 note
116.

rhombuses, double-lined, 29.

rhombuses, series of, 36, 41, 54.

ribands, arrangement of, 45.

ribbons, intertwining, 24, 56.

Rizā 'Abbāsī, 82, 83.

roll-form, 30.

roll of the revelation of Daniel, 21.
roll of Traditions, 30; parchment
and skin-rolls, in Persia and
Mesopotamia, 30; Qur'ān roll, 107
note 121.

rosette, 9, 29, 34, 45, 53.

rosette, eight-leafed, 29.

rosette, nine-leafed, 28.

rosette, *sajda*, 47.

row of arches, 22, 23.

row of ornamental dots, 18.

row of pearls, 29.

row of pellets, 43.

row of stamps, 41, 48.

Ṣādiq Beg, 83.

Ṣafawid school, 78-83.

ṣafīna form, 49, 57.

ṣahhāf, 108 note 139.

ṣahīfa, 30.

sajda rosette, 47.

Sām Mirzā, 79.

Sāmarrā, frescoes of, 1, 103 note 49.

Sāmarrā, pottery of, 104 note 66.

Sāmarrā, wall-decorations of, 17, 24
54.

ṣandūq, 108 note 141.

sarlawh (heading), 98.

Sasanian art, 65-67.

Sasanian Kings, portraits of, 66, 67.

Sasanian pictures, 66, 67.

Sasanian silver dish, 11.

Sasanian tradition, 68.

Sasanians, crown of the, 10.

satin (book-covering), 32.

satin, books bound in, 32.

school, Baghdād, 64.

school, Harāt, 57, 72, 77.

school, Manichaean, 2.

school, Mesopotamian, 64, 69.

- school, Mughal, 87-93.
 school, Safawid, 78-83.
 school, Timūrid, 82.
 school, Turkish, 95-96.
 scroll, 53.
 scroll of tendrils, 28.
 scroll-work, 17.
 scrolls, decorative, 32.
 scrolls of writing, 26, 28, 29, 56.
 Shāh Muẓaffar, 77, 85.
Shāh-nāma, 72, 78, 98, 100.
 Sharif Shafi', 96.
 shell-gold, 25.
 Shiblīzāda Aḥmad, 95.
 Shifat al-Miqrād al-Ujayfi, 32.
 shoes, Coptic, 35.
 signatures of painters, 6, 74, 79, 80, 83.
 silk (books cased in), 32.
 silks, Chinese, 99.
 silver (oxidized), 56.
 silver dish, Sasanian, 11.
 silver ink, 19.
simurgh, 71, 99.
 sketches of ornaments, 14, 15.
 slits, series of parallel, 36, 37, 39, 45.
 smoothing iron, 109 note 164.
 South Arabia, bindings of, 31, 57.
 South Arabia, leather industry in, 30, 31.
 Spain, bindings of, 31.
 spheroids, 51.
 spiral, double, 51, 53.
 spirals, 24, 35, 37.
 square, 45.
 square (format of books) 57.
 square, double, 40.
 square frame, 51.
 square frame, double-lined, 29.
 square, looped, 46.
 square, pattern, 22.
 squares, double-lined, 29.
 squares, interwoven, 40.
 squares, superimposed, 25, 53.
 squares, two interlacing, 50.
 squares, two intersecting double lined, 23.
 stamped work, 40.
 stamping, 57.
 stamps, engraved, 28.
 stamps, row of, 41, 48.
 stamps, series of, 37.
 stamps with a bird, 53.
 stamps with a rosette, 40, 53.
 stamps with animals, 40.
 stamps with antilopes, 41.
 stamps with geometrical figures, 40.
 stamps with intricate work, 40.
 star, 50.
 star, eight pointed, 40, 41.
 stencil patterns, 39.
 stencilled circles, 36-39.
 strips of text, 26, 28.
 studies for designs, 15.
Subḥat al-Akḥbār, 96.
 Sulaymān I, 95.
 Sulṭān 'Alī Mashhadī, 75.
 Sulṭān Muḥammad, 78, 81.
 Sulṭānābād, pottery of, 69.
 Sūra divider, 106 note 103.
 Sūra-divisions, 19, 23, 25, 34, 47.
 Sūra headings, 23.
 Sūra titles, 19, 22, 26.
 swans, 40.
 symplegma, representation of, 4.
 Tahmāsp, Shāh, 78, 81.
 Tai' (cloud form), 71.
 aṭ-Ṭā'if, bindings of, 31.

- tanneries in Cario, 31.
 tanning in Arabia, 30, 31.
 tapestry design, 106 note 108.
 Tāq-i-Būstān, 8, 23.
Ta'riḥ-i-Rashīdī, 85.
tarrāḥ, 14.
tarrāḥī, 98.
 technique applied in the miniatures,
 12.
 technique of the Manichaeans, 13.
 Tell el-'Amarna, wall-paintings of,
 102 note 25.
 tendril, 53.
 tendril pattern, 35.
 tendrils, confused, 52.
 terminal ornaments, 22-24, 28.
 text, framing of the, 29.
 text illustrations, 12.
 text, strips of, 26, 28.
 texts, literary, 18.
 texts, Pehlevi, 23.
 textiles, 24.
 textiles, Coptic, 23, 24, 40.
 thongs, plaited, used as clasps, 37.
thuluth hand, 20, 21.
thuluth Rayḥānī, 21.
 Timūrid binding, 99.
 Timūrid painting, 71-73.
 Timūrid school, 82.
tirāz, 9.
 title-page with framework, 18.
 title-picture, 10, 11.
 title vignette, 25.
 tomb steles, Arabic, 26.
 tomb steles, Coptic, 44.
 tomb steles, Greek, 26.
 tombstones, Arabic, 29, 113 note 216.
 tooled work, 41, 45, 47, 57.
 toothed pattern, 53, 54.
 traditions, roll of, 30.
 trapeziums, 25.
 trapezoids, 25.
 trefoil, 18, 37, 40, 41, 49, 53.
 trellis-work, 22.
 triangle, 45.
 Tūlūnid ornamentation, 6.
Tūmār hand, 19.
 Turfān, frescoes of, 67.
 Turfān, German expedition to, 2, 38.
 Turkish school, 95-96.
 Ushmūnayn, al-, 5, 7, 8, 14, 28, 36,
 50, 52, 53.
 Verse divisions (of the Qur'ān) 23, 47;
 ten verse divisions cf. 'āshira marks
 vignette, 18.
 vine-leaf (ornament), 40.
 Virgin, pictures of the, 1.
 volume for everyday-use, 42, 111
 note 202.
 Walī Jān, 95.
 wall-decorations of Sāmarrā, 17, 24,
 54.
 wall-paintings of Tell el-'Amarna,
 102 note 25.
 wall-paintings of the Buddhist and
 Perso-Manichaean school, 12.
 wall-paintings, Pompeian, 5.
warrāqūn, 32.
 Watteau, 92.
 wheat-starch, 31.
 whorl, 25.
 wood bindings, 33.
 wood block, 28, 53.
 wood covers, 44-47.
 wood-cuts, Flemish-Dutch, 89, 115
 note 285.
 wood-cuts, German, 89.

writing, bands of, 56.
writing, scrolls of, 26, 28, 29, 56.
writing-tablets, 20, 25.

Yahyā b. Muḥammad b. Yahyā b.
Abī'l-Ḥasan of Wāsiṭ, 14.
Yānis, 32.
Yemen, bookbinders' art in, 31.

Zigzag band, 18, 40, 50, 112 note
207.
zigzag bands, intersecting, 18, 33,
34, 36.
zigzag border, 28, 29.
zigzag line, 39.
zigzag pattern, double lined, 43.

PLATES 1-104

I

THE HISTORY OF THE
LIFE OF JOHN DE Witt
BY
JAMES O. HENNING
NEW YORK
PUBLISHED BY
J. B. LIPPINCOTT & CO.
1857

I

I

FRAGMENT OF AN ILLUSTRATED MANUSCRIPT
with a drawing of a tree as a vignette at the end.

See p. 3. From the Fayyūm.

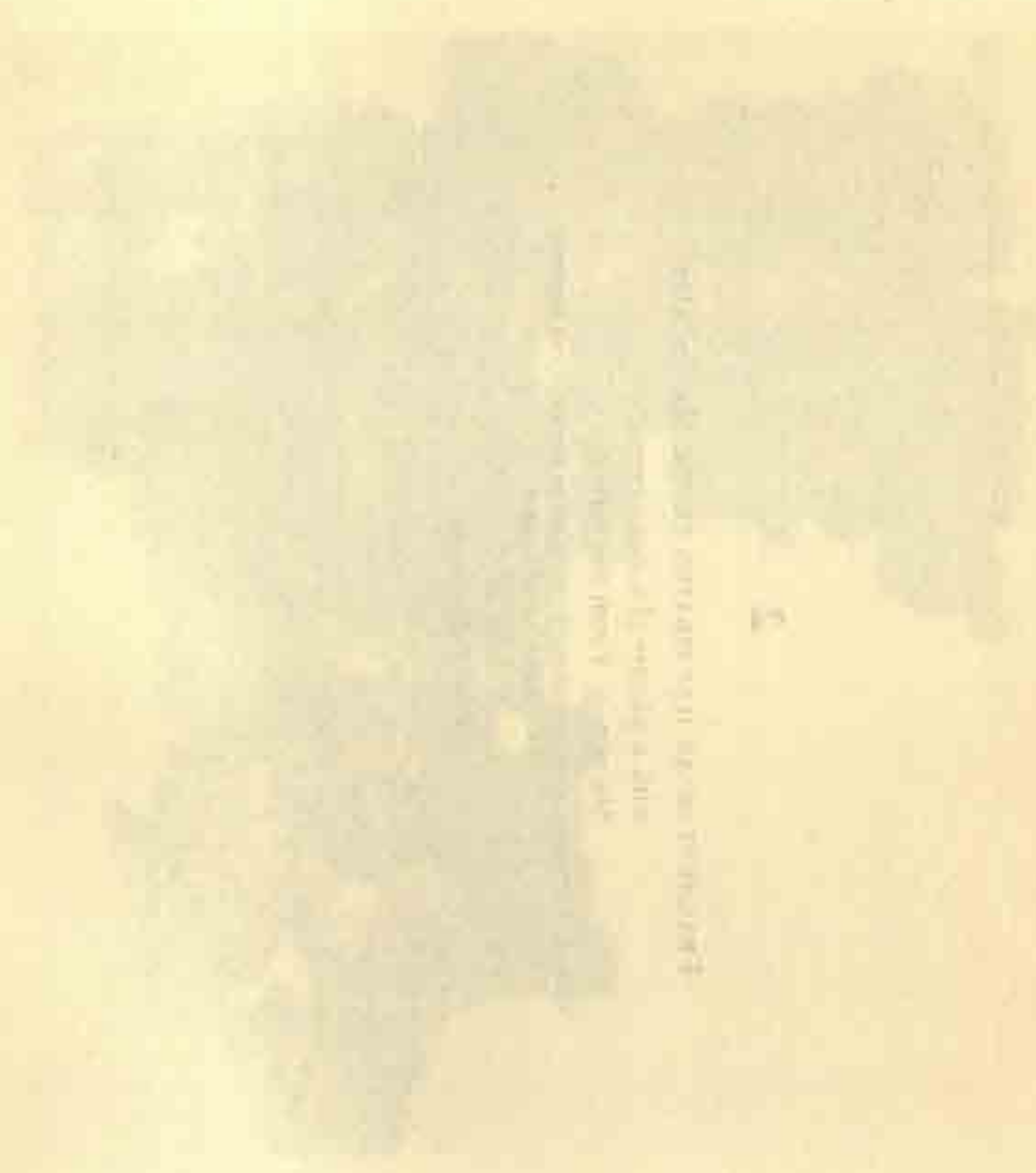
VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.

INV. CHART. AR. 25612.

IX-X CENT. A.D.

Photo Jaffé, Vienna

و امر من
فان
الموسى
سبح الله
و قد هو
علاما
ببر
بوجه



2

FRAGMENT OF AN ILLUSTRATED EROTIC MANUSCRIPT

with a picture of a symplegma.

See p. 3-5. From the Fayyûm.

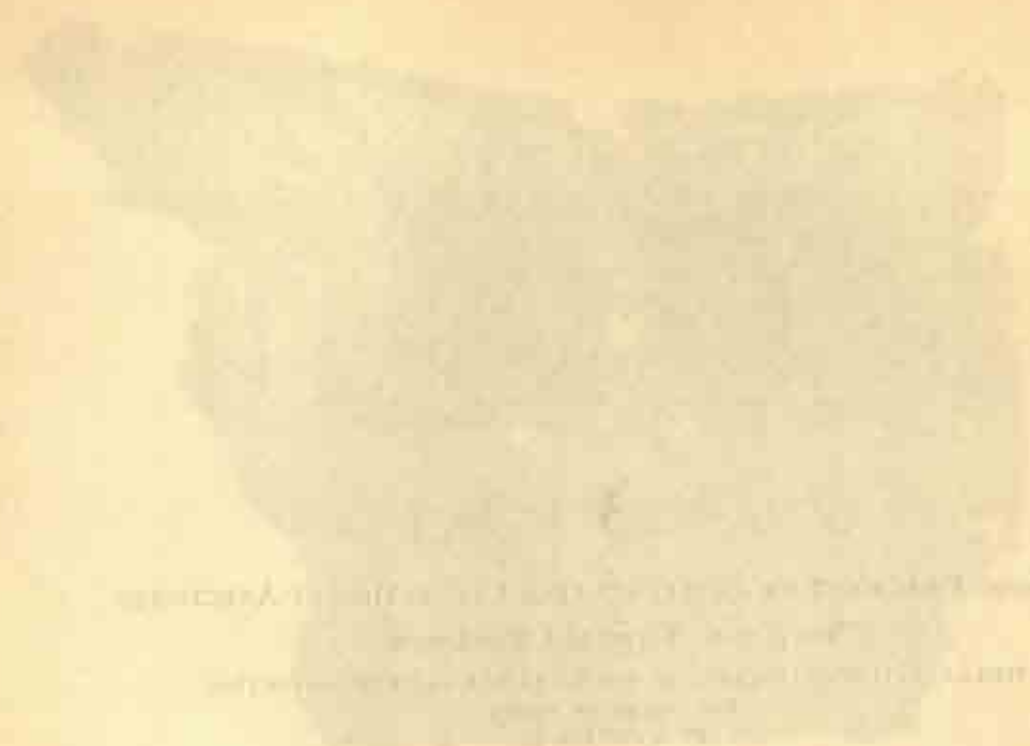
VIENNA, NATIONAL LIBRARY, ARCHDUKE RAINER PAPYRUS COLLECTION.

INV. CHART. AR. 256138-C.

IX-X CENT. A. D.

Photo Jaffé, Vienna





THE UNIVERSITY OF CHICAGO
LIBRARY
1100 EAST 58TH STREET
CHICAGO, ILL. 60637
TEL: 773-936-5000
FAX: 773-936-5001
WWW.CHICAGO.EDU



A. *Above*: FRAGMENT OF AN ILLUSTRATED COLLECTION OF ANECDOTES

See p. 5-6. From al-Ushimūnayn.

VIENNA, NATIONAL LIBRARY, ARCHDUKE RAINER PAPYRUS COLLECTION.
INV. CHART. AR. 25615.
IX-X CENT. A. D.

B. *Below*: PEN-DRAWING ON VELLUM

Greek. See p. 8. From the Fayyūm.

VIENNA, NATIONAL LIBRARY, ARCHDUKE RAINER PAPYRUS COLLECTION.
INV. GR. PAP. 30511.

Photo Jaffé, Vienna



THE UNIVERSITY OF CHICAGO
LIBRARY
540 EAST 57TH STREET
CHICAGO, ILL. 60637

THE UNIVERSITY OF CHICAGO
LIBRARY
540 EAST 57TH STREET
CHICAGO, ILL. 60637

THE UNIVERSITY OF CHICAGO
LIBRARY
540 EAST 57TH STREET
CHICAGO, ILL. 60637

A. *Centre, left*: FRAGMENT OF AN ILLUSTRATED MANUSCRIPT

See p. 7-8. From al-Ushmūnayn.

VIENNA, NATIONAL LIBRARY, ARCHDUKE RAINER PAPYRUS COLLECTION.
INV. CHART. AR. 13682.
X CENT. A.D.

B. *Above, right*: FRONTISPIECE OF AN ILLUSTRATED MANUSCRIPT

See p. 8-12. From al-Ushmūnayn.

VIENNA, NATIONAL LIBRARY, ARCHDUKE RAINER PAPYRUS COLLECTION.
INV. CHART. AR. 25751.
X CENT. A.D.

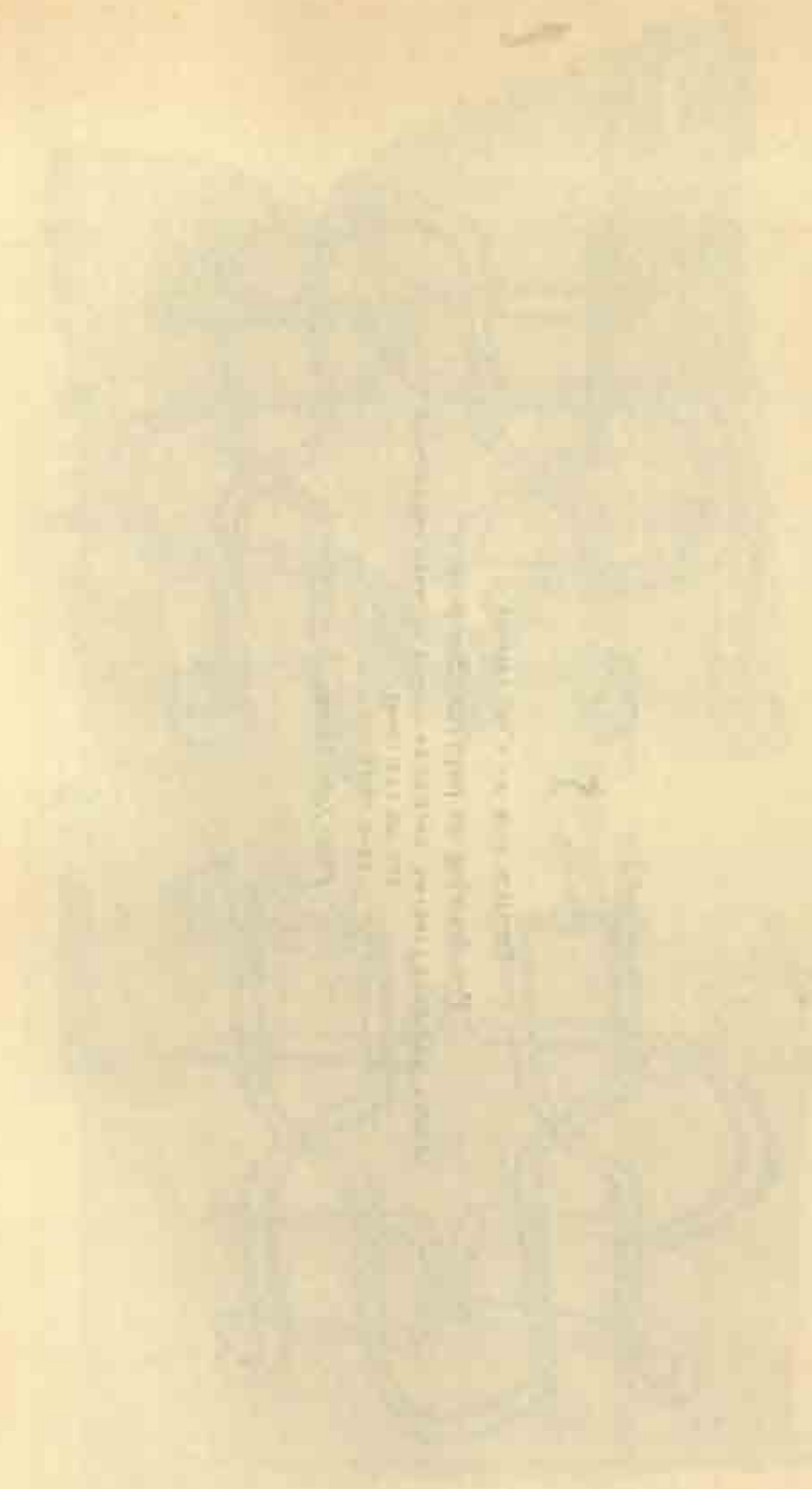
C. *Below, right*: FRAGMENT OF A LITERARY TEXT

with title strip written in silver. See p. 19.

VIENNA, NATIONAL LIBRARY, ARCHDUKE RAINER PAPYRUS COLLECTION.
INV. CHART. AR. 7322.
X-XI CENT. A.D.

Photo Jaffé, Vienna



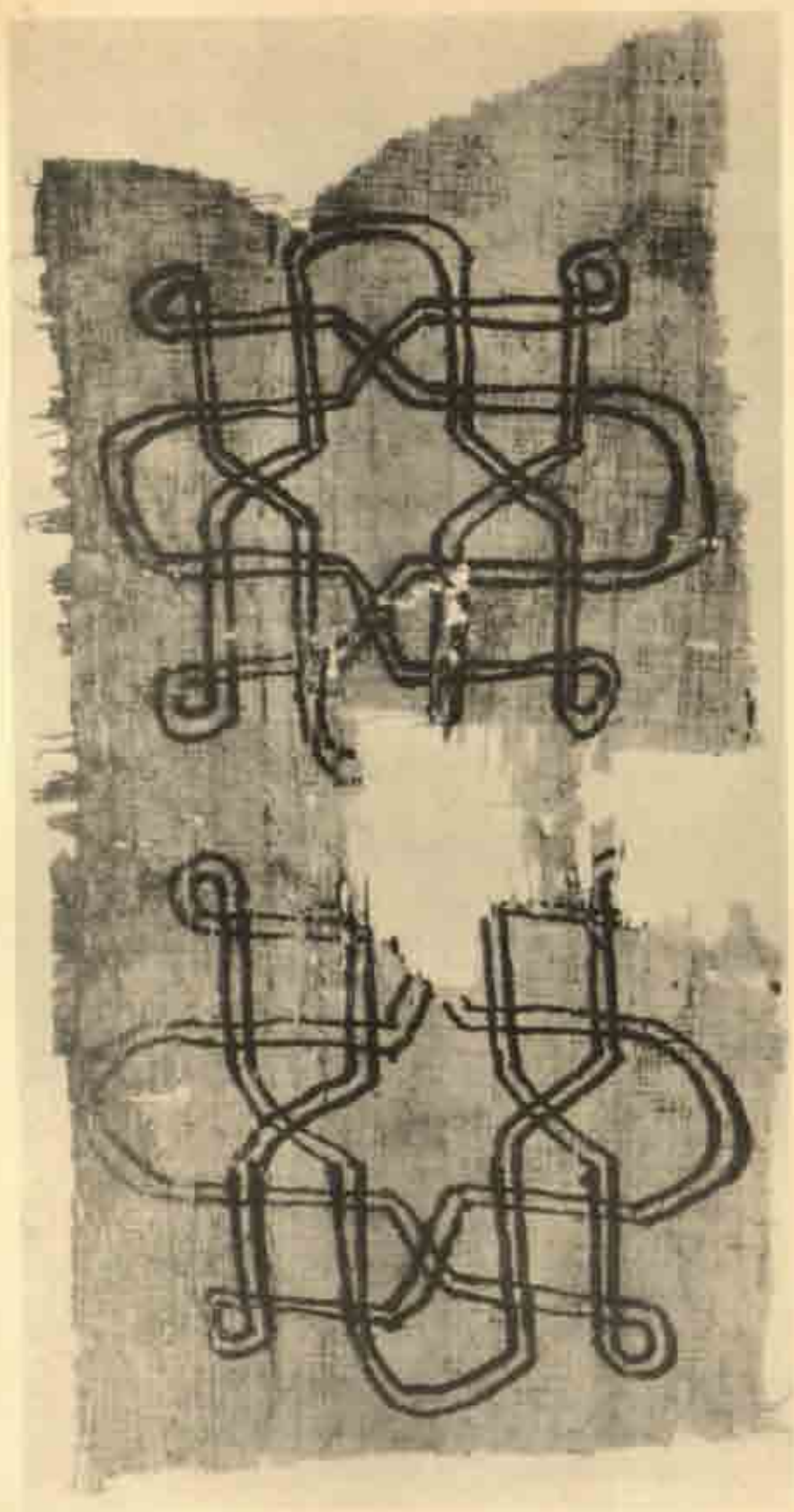


DESIGN FOR AN ORNAMENT

Pen-drawing on papyrus. See p.14.

VIENNA, NATIONAL LIBRARY, ARCHDUKE RAINER PAPYRUS COLLECTION.
INV. AB. PAP. 10047.
IX-X CENT. A.D.

Photo Jaffé, Vienna



THEORY OF ORNAMENT
A NEW SYSTEM OF
DESIGN

BY
J. C. COOPER
OF THE
SCHOOL OF DESIGN, LONDON

LONDON
PRINTED BY
JOHN WATKINS, 15, ABchurch Lane, E.C. 4
1891

6

DESIGNS FOR ORNAMENTS

A. *Left*: PEN-DRAWING ON PAPER

See p.14 and fig.10.

VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.

INV. CHART. AR. 25641.

X-XI CENT. A. D.

B. *Right*: PEN-DRAWING ON PAPER

See p.14-15 and fig.11. From al-Ushmūnayn.

VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.

INV. CHART. AR. 25620.

XI-XII CENT. A. D.

Photo Jaffé, Vienna.



THE UNIVERSITY OF CHICAGO
LIBRARY
540 EAST 57TH STREET
CHICAGO, ILL. 60637
U.S.A.
This is a copy of the original
manuscript of the book
The American Revolution
by J. H. Plumeri
and is a gift of the author
to the University of Chicago
Library.
It is a copy of the original
manuscript of the book
The American Revolution
by J. H. Plumeri
and is a gift of the author
to the University of Chicago
Library.
It is a copy of the original
manuscript of the book
The American Revolution
by J. H. Plumeri
and is a gift of the author
to the University of Chicago
Library.

STUDIES FOR BIRDS, ARABESQUES AND FLOWERS

A. *Above, left*: PEN SKETCH ON PAPYRUS

See p.15.

VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.
 INV. AR. PAP. 10053.
 IX-X CENT. A.D.

B. *Above, right*: PEN SKETCHES ON PAPYRUS

See p.15, 17. From the Fayyûm.

The illustration has been put in upside down and in order that
 it may be seen properly, it should be turned round about 180°.

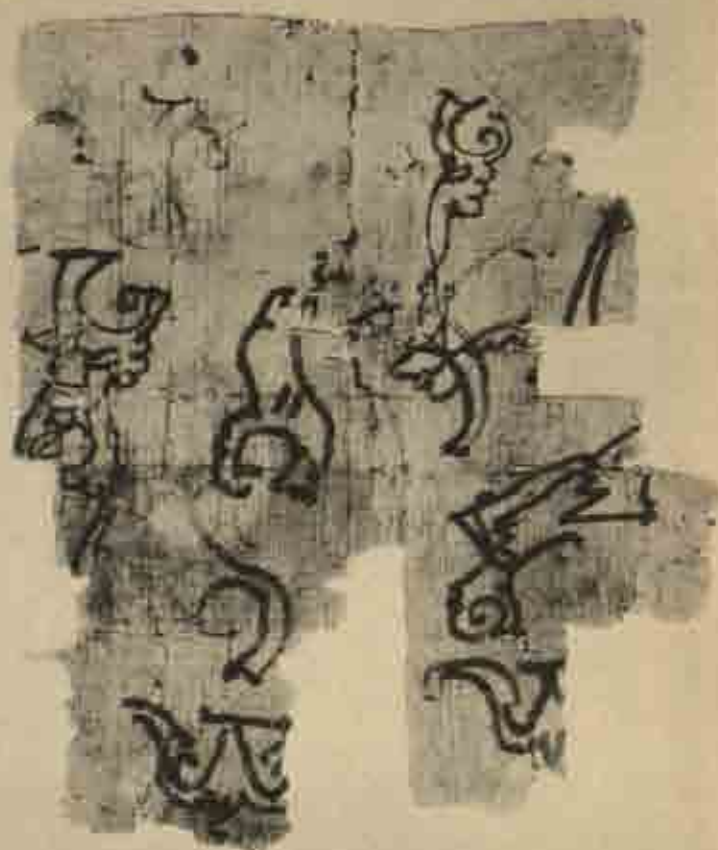
VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.
 INV. AR. PAP. 10052.
 IX CENT. A.D.

C. *Below, left* and D. *Below, right*: PEN SKETCHES ON PAPER

See p.17-18.

VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.
 INV. CHART. AR. 12514.
 XII CENT. A.D.

Photo Jaffé, Vienna



THE UNITED STATES OF AMERICA, New York, N. Y.

1892

RECEIVED OF THE UNITED STATES OF AMERICA, New York, N. Y.

1892

THE UNITED STATES OF AMERICA, New York, N. Y.

1892

RECEIVED OF THE UNITED STATES OF AMERICA, New York, N. Y.

1892

8

A. *Above, left*: AMULET WITH ORNAMENTAL TOP

See p.26.

VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.
INV. CHART. AR. 25616.
X CENT. A. D.

B. *Above, right*: AMULET WITH ORNAMENTAL TOP

See p. 26-27.

VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.
INV. PERG. AR. 322.
X CENT. A. D.

C. *Below, left* and D. *Below, right*: FRAGMENT OF A WORK ON TRADITIONS
with an inscribed border. See p.19.

VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.
INV. CHART. AR. 1924 + 25647.
XI-XII CENT. A. D.

Photo Jaffé, Vienna

VELLUM LEAF FROM A MANUSCRIPT OF THE QUR'AN
with ornamental division of the Sūras.

See p. 24.

VIENNA, NATIONAL LIBRARY. MIXT. 814, FOL. 14.
VIII-IX CENT. A. D.

Photo Jaffé, Vienna





IO

ORNAMENTED PAGE FROM A QUR'AN ON VELLUM

See p. 24.

VIENNA, NATIONAL LIBRARY. MIXT. 814. FOL. 6R.
VIII-IX CENT. A.D.

Photo Jaffé, Vienna





II

THE
LIBRARY OF THE
MUSEUM OF NATURAL HISTORY
AND
ZOOLOGY
OF THE
CITY OF LONDON
1871



II

II

A. *Above*: ORNAMENTED PAGE FROM A QUR'ÂN ON VELLUM

See p. 24-25.

CAIRO, EGYPTIAN LIBRARY. MASĀHIF NO. 194, FOL. 62B.
VIII-IX CENT. A.D.

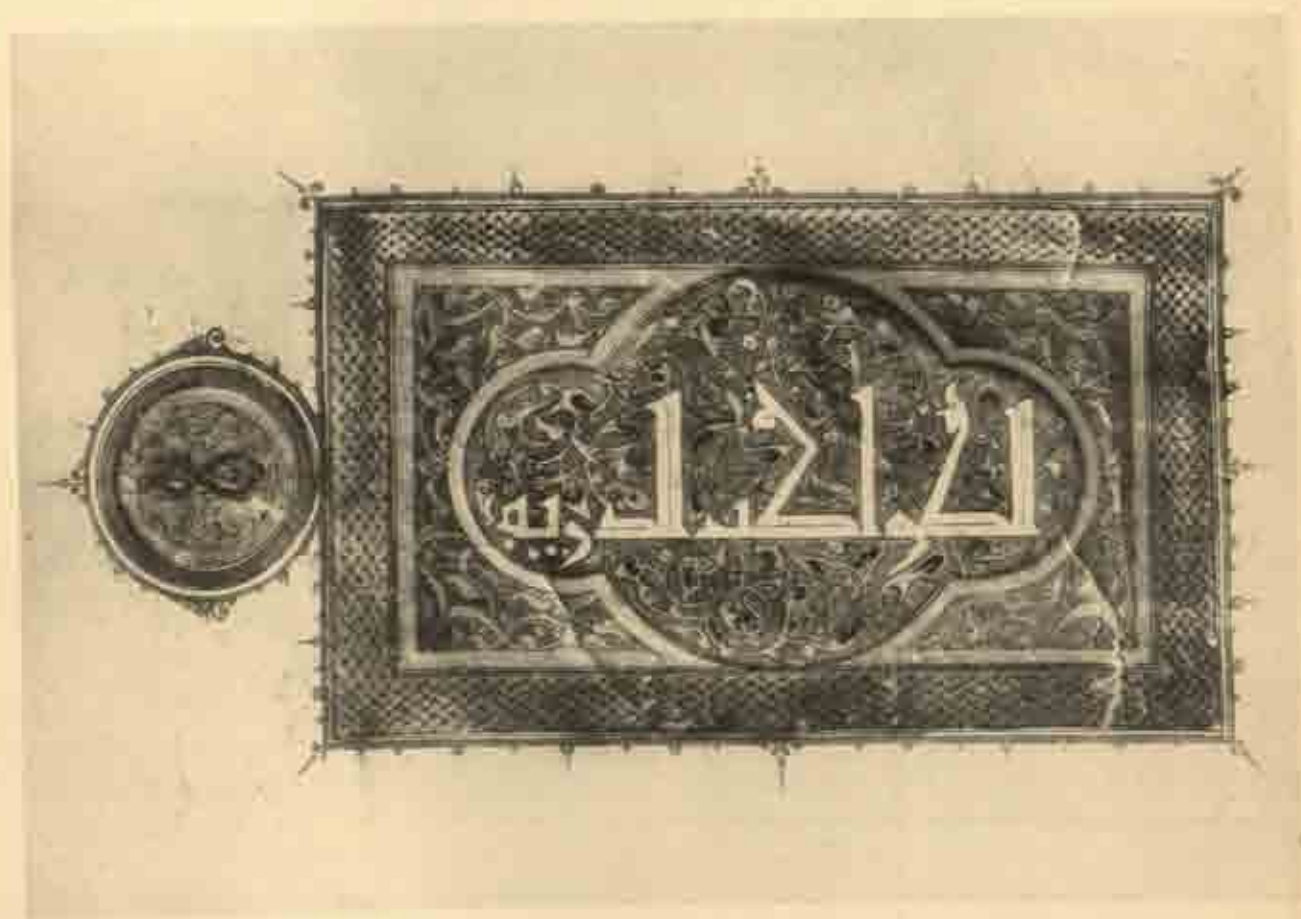
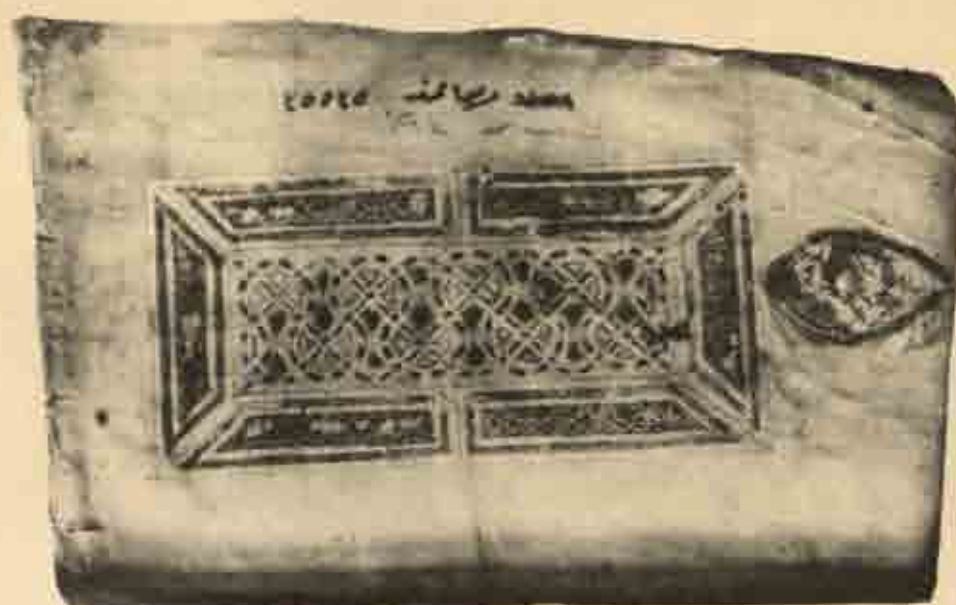
Photo Lehnert & Landrock, Cairo

B. *Below*: TITLE PAGE OF A MS. OF THE BURDA OF AL-BŪSĪRĪ

See p. 18, 25.

VIENNA, NATIONAL LIBRARY. A. F. 4, FOL. I.
DATED 1345 A.D.

Photo Jaffé, Vienna



12

I 2

TITLE PAGE OF A MS. OF THE BURDA OF AL-BUŠIRI

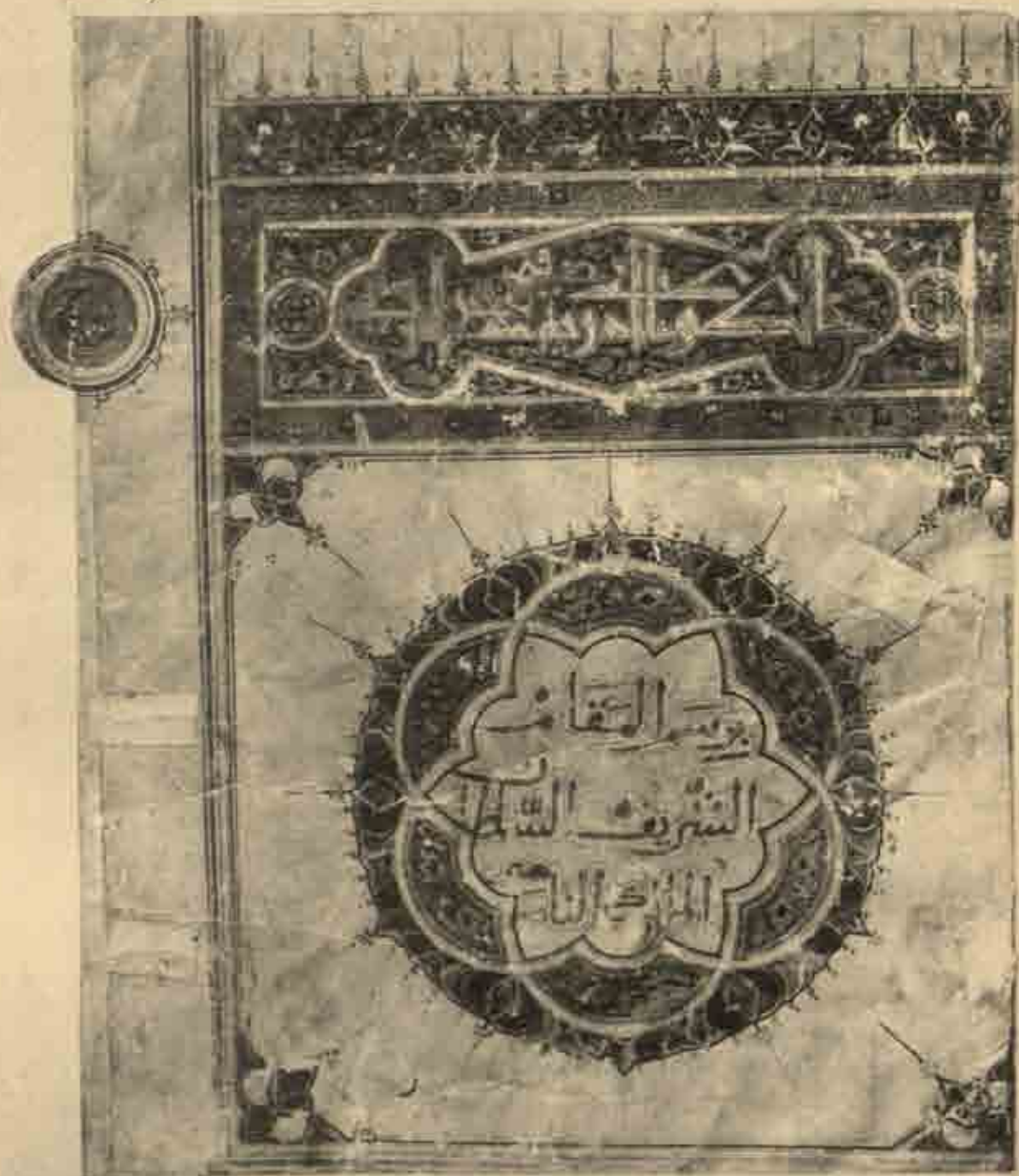
See p. 25.

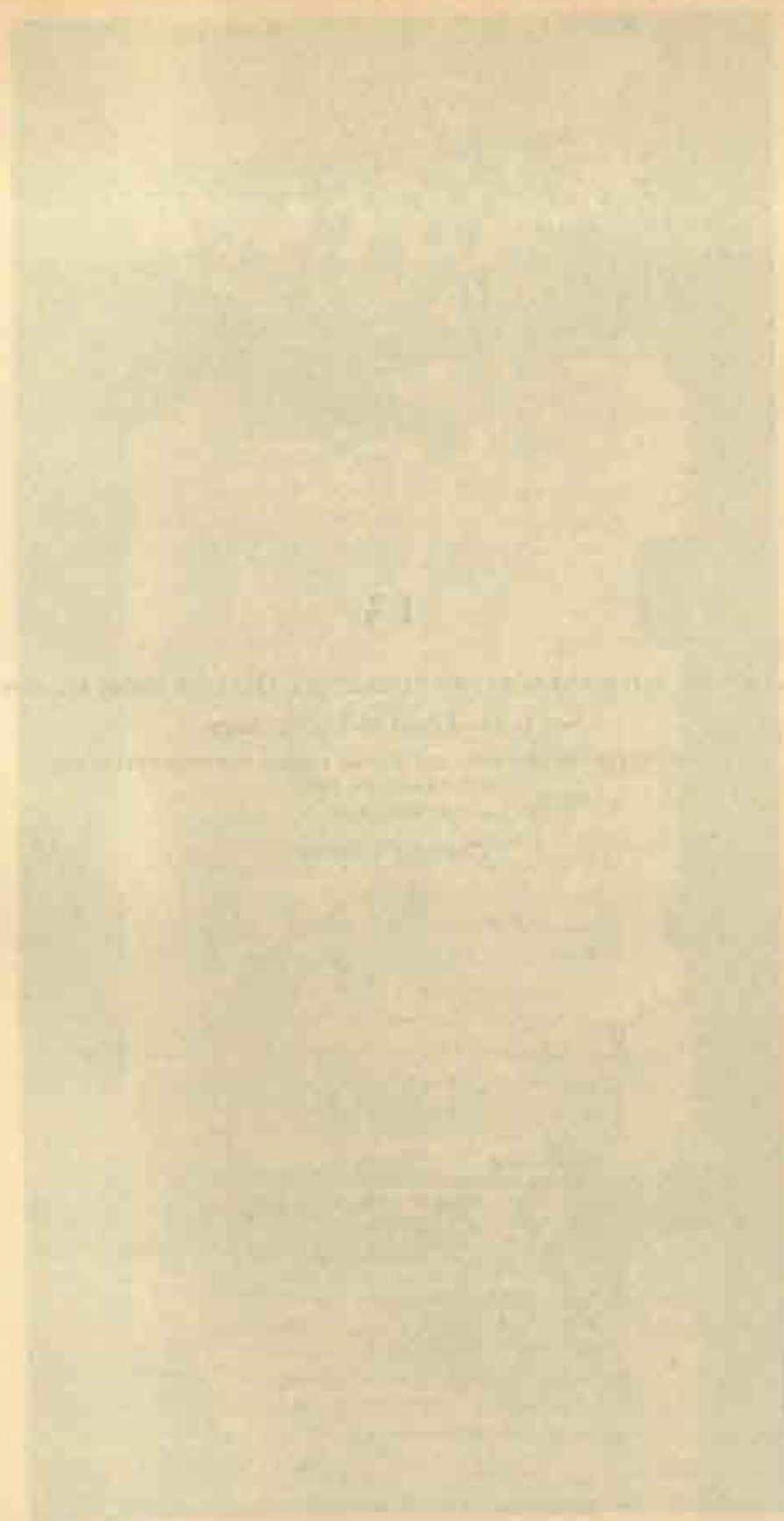
VIENNA, NATIONAL LIBRARY. N. F. 381, VOL. I.

DATED 1340 A. D.

Photo Jaffé, Vienna

1894





AMULET, WITH PARAGRAPHS DIVIDED BY DESIGNS FROM STAMPS

See p. 28. From al-Ushmūnayn.

VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.

INV. CHART. AR. 7265.

X CENT. A.D.

Photo Jaffé, Vienna



14

A. *Left*: VELLUM ROLL.

with amulet with ornamental divisions between the paragraphs. See p. 28, 29.
CAIRO, EGYPTIAN LIBRARY. P. INV. 89.
X CENT. A. D.

Photo Lehnert & Landrock, Cairo

B. *Centre*: AMULET PRINTED FROM A BLOCK with a band of Kūfī writing. See p. 28.

VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION. EXHIBITION NO. 942.
X CENT. A. D.

Photo Jaffé, Vienna

C. *Right*: AMULET PRINTED FROM A BLOCK with ornamental top. See p. 28.

BERLIN, STAATLICHE MUSEEN. PAPYRUS COLLECTION. P. 11.970.
X CENT. A. D.

Photo Staatliche Museen, Berlin

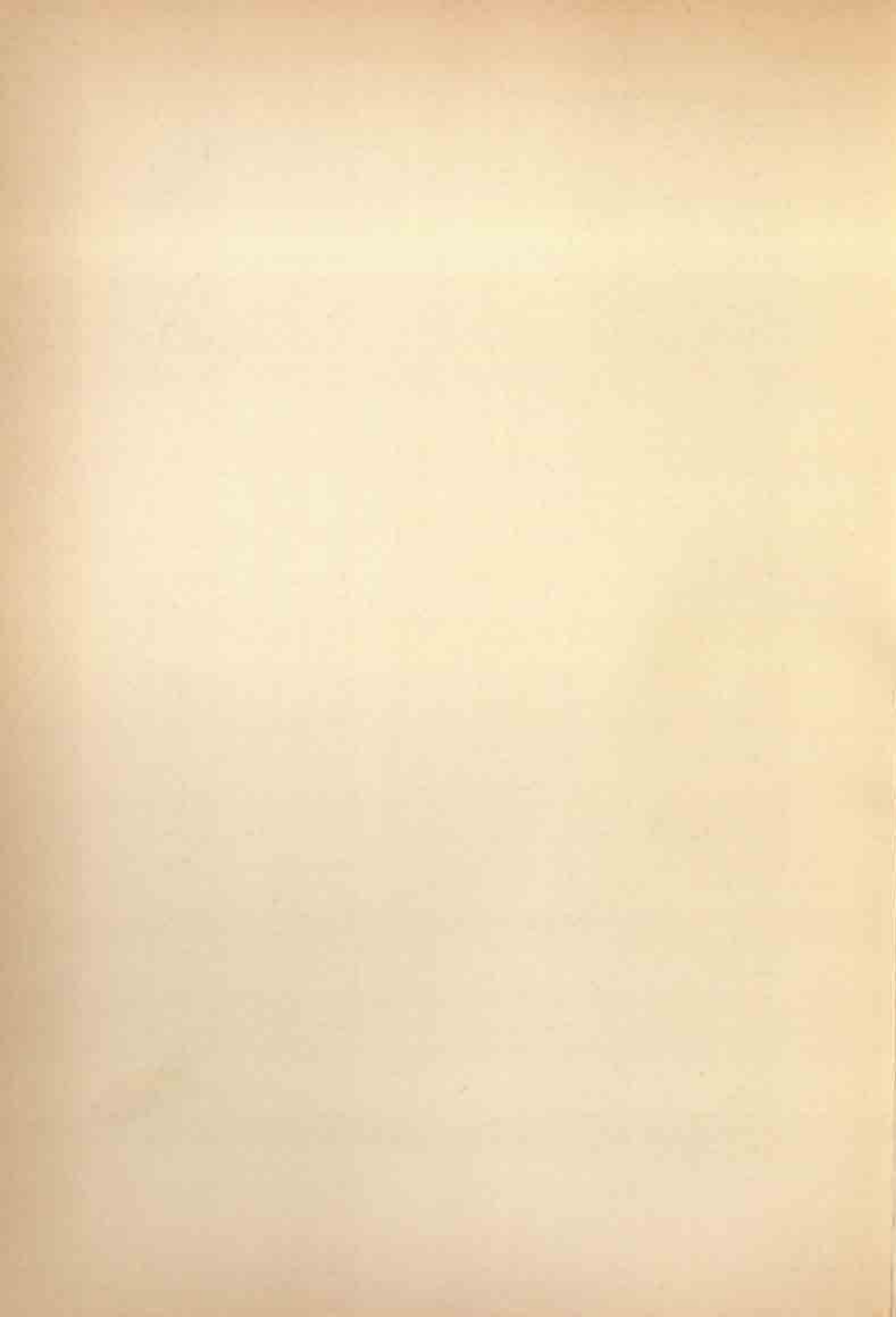


15

VELLUM ROLL, WITH AMULET TEXT

with paragraphs divided by ornamented designs from stamps. See p. 29.
HEIDELBERG, UNIVERSITY LIBRARY. SCHOTT-REINHARDT PAPYRUS COLLECTION, NO. 1126.
X CENT. A. D.

Photo Jaffé, Vienna



10

16

COPTIC BINDING, WITH LEATHER APPLIQUE WORK

See p. 34. From the Fayyūm.

VIENNA, NATIONAL LIBRARY, ARCHDUKE RAINER PAPYRUS COLLECTION. INV. NO. 34.
VIII-IX CENT. A.D.

Photo National Library, Vienna

01



A. *Above, left:* FRAGMENT OF A SHOE

with leather appliqué work. Coptic. See p. 35.

VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.

INV. AR. PAP. 16150.

ABOUT 950 A.D.

B. *Above, right:* FRAGMENT OF A SHOE

with leather appliqué work. Arabic. See p. 35.

VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.

INV. CHART. AR. 28003.

X CENT. A.D.

C. *Below, left:* COPTIC BINDING

with leather appliqué work and incised work. See p. 36.

LONDON, BRITISH MUSEUM. DEPARTMENT OF MANUSCRIPTS. PAP. IV.

VII CENT. A.D.

D. *Below, right:* COPTIC BINDING

with interlacing tooled work and punching. See p. 39.

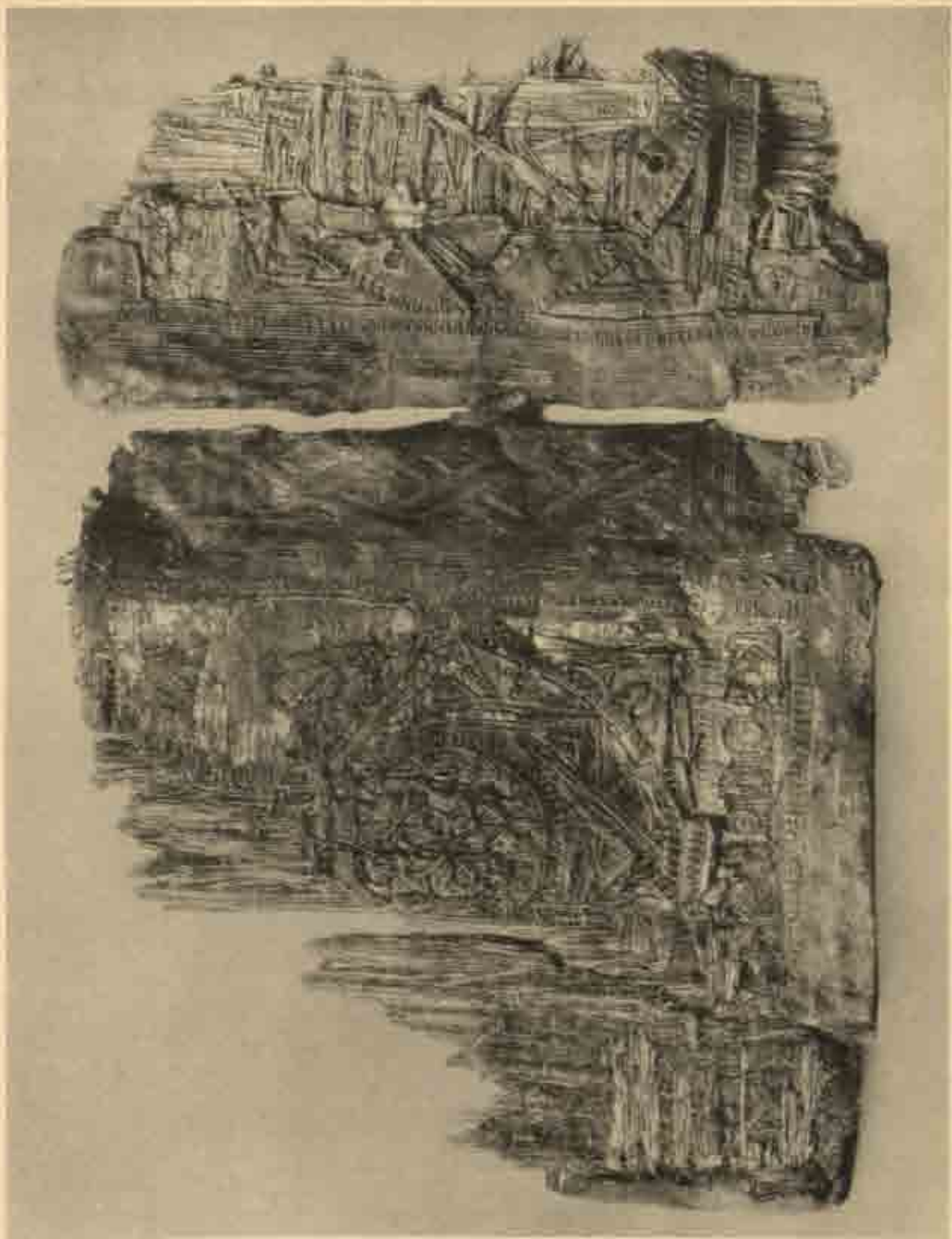
VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.

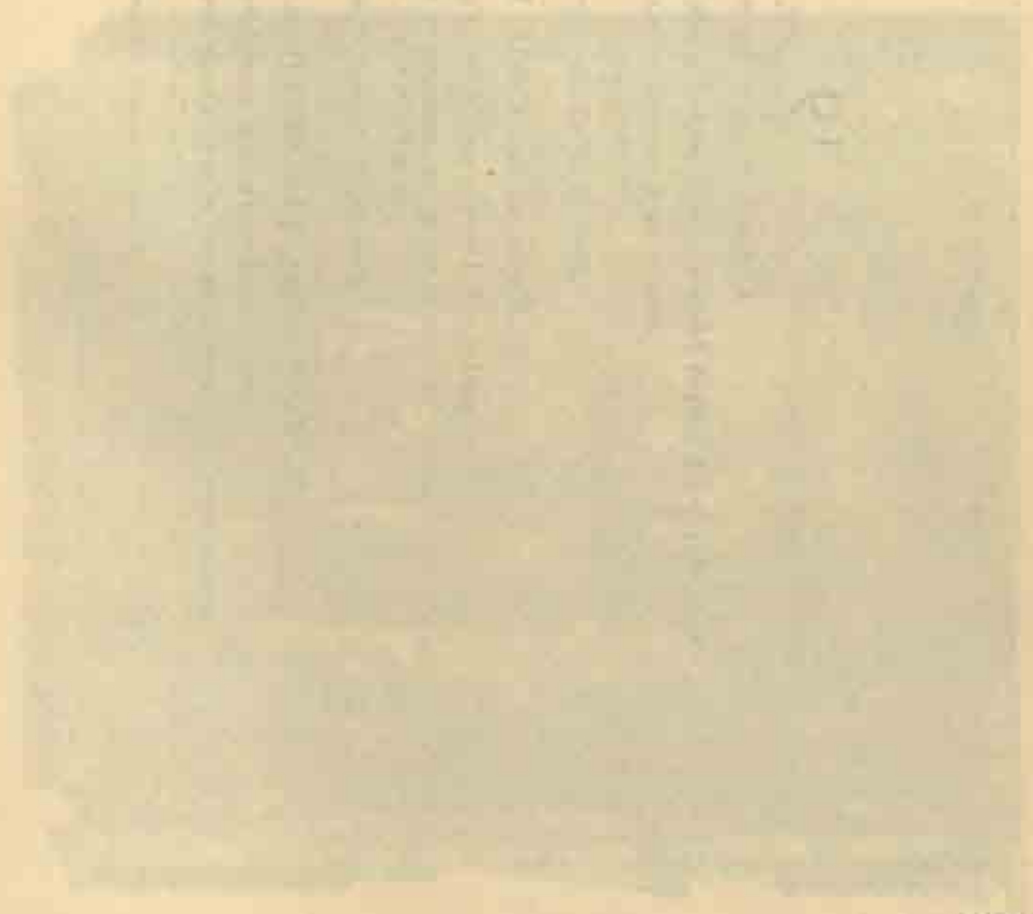
INV. GR. PAP. 30503.

VIII-IX CENT. A.D.

A, B, and D.: *Photo National Library, Vienna*C.: *Photo R. B. Fleming, London*







A. *Left*: COPTIC BINDING

with flap with inlaid filigree work, tooled work and punching. See p. 36-38.
 BERLIN, DR. H. IBSCHEK'S COLLECTION.
 IX CENT. A. D.

Photo Dr. H. Ibscher, Berlin

B. *Right, above*: COPTIC BINDING

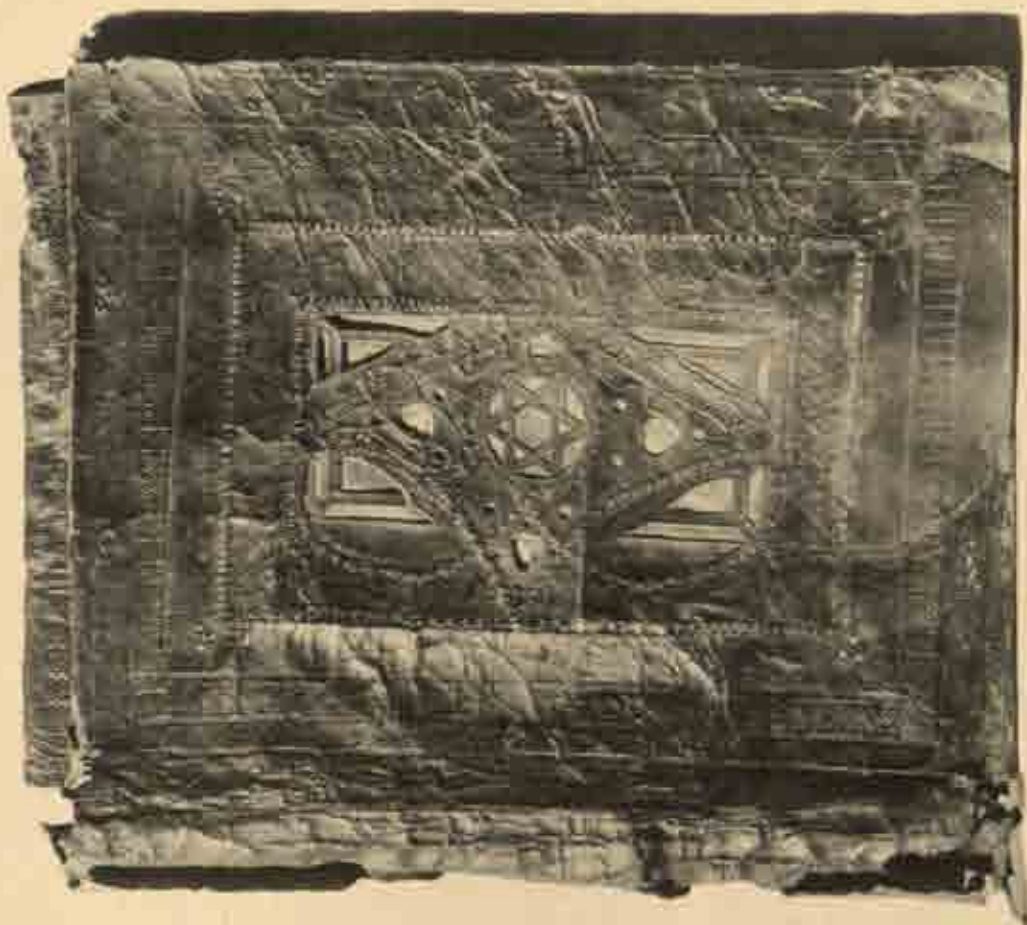
with tooled work and punching. See p. 41.
 LONDON, BRITISH MUSEUM. DEPARTMENT OF MANUSCRIPTS OR. 5000.
 IX-X CENT. A. D.

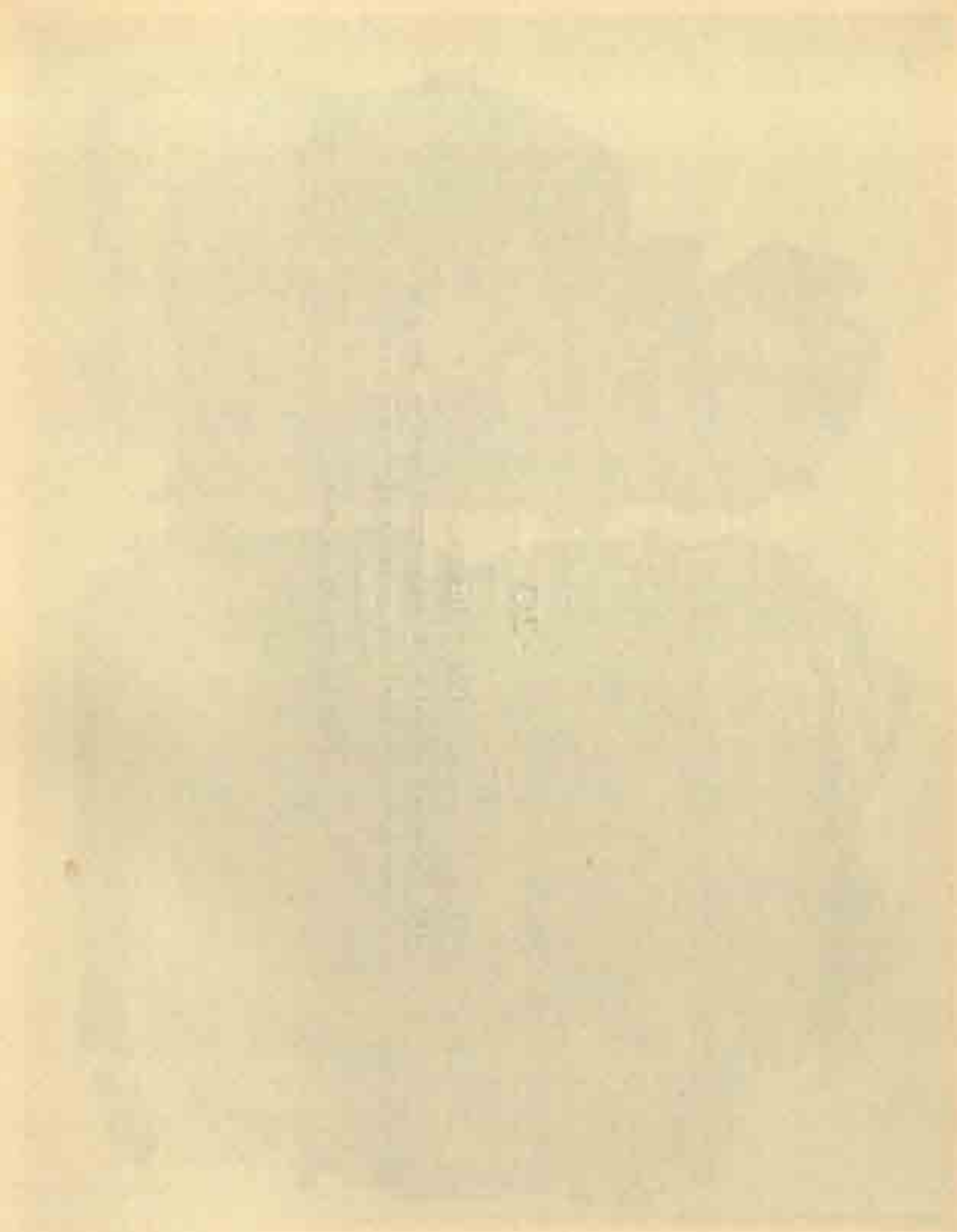
Photo R. B. Fleming, London

C. *Right, below*: FRAGMENT OF A COPTIC BINDING

with tooled work and punching. See p. 41.
 HEIDELBERG, UNIVERSITY LIBRARY. SCHOTT-REINHARDT PAPYRUS COLLECTION, NO. 1246.
 IX-X CENT. A. D.

Photo Nittmann, Vienna





COPTIC BINDING

with tooled and incised work, with stencil patterns. See p.39.

BERLIN, STAATLICHE MUSEEN, PAPYRUS COLLECTION, P.14019.
800-850 A. D.

Photo Staatliche Museen, Berlin



A. *Left:* FRAGMENT OF A PAINTED VELLUM END-PAPER OF A COPTIC BINDING

See p. 43-44.

BERLIN, STAATLICHE MUSEEN, PAPYRUS COLLECTION. P. 14020.
VII CENT. A. D.

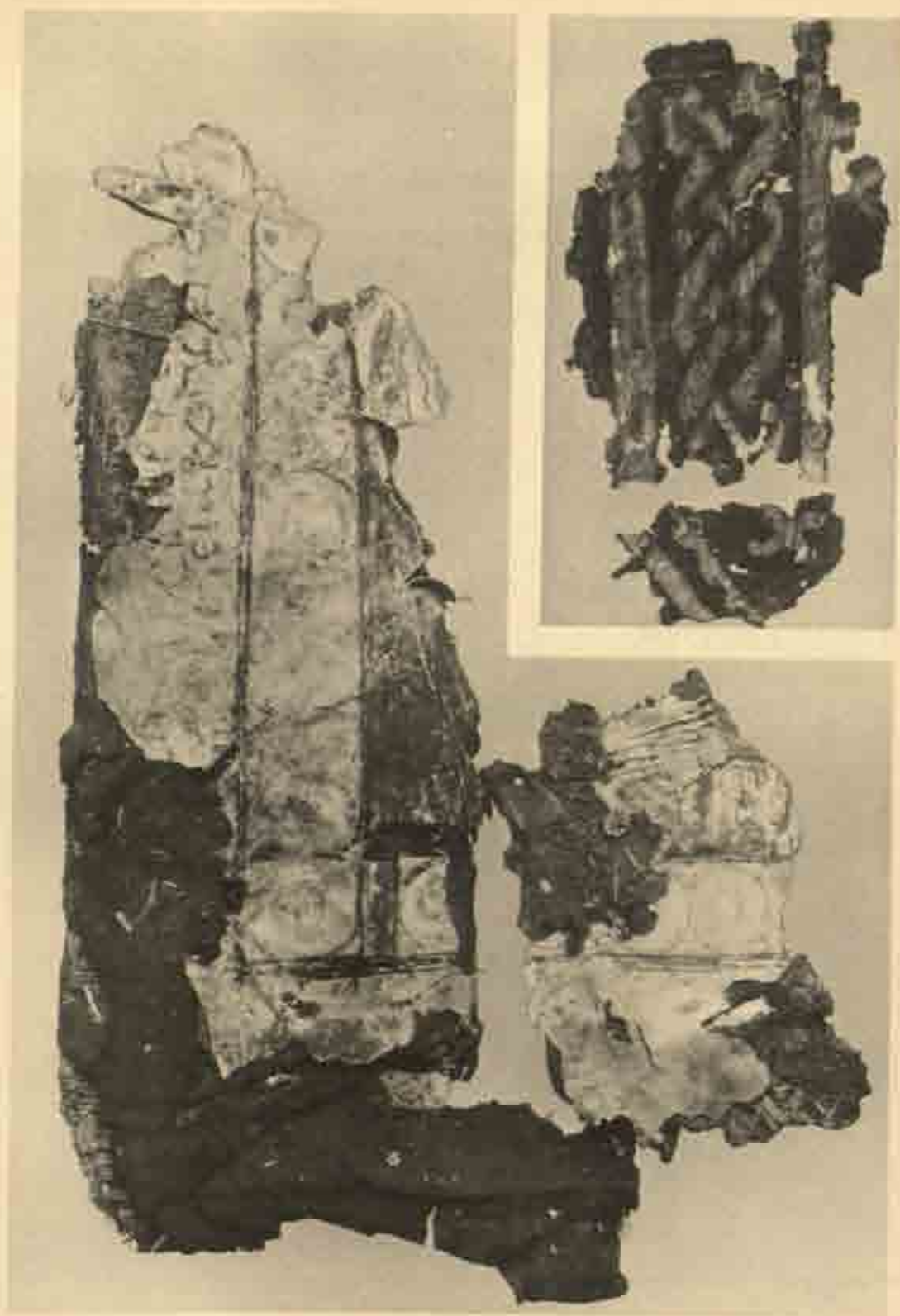
Photo Staatliche Museen, Berlin

B. *Right, above:* FRAGMENT OF A PAINTED VELLUM END-PAPER OF A COPTIC BINDING

See p. 44.

VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.
INV. GR. PAP. 30504.
VI CENT. A. D.

Photo National Library, Vienna



CC

RECEIVED
JAN 14 1964
U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

TO THE DIRECTOR, AGRICULTURAL RESEARCH
SERVICE, U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.
FROM THE DIRECTOR, AGRICULTURAL RESEARCH
SERVICE, U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

A. *Above*: ARABIC BINDING OF A QUR'ĀN
with flap. See p. 45-46.

CAIRO, EGYPTIAN LIBRARY. MASĀHIF NO. 188.
IX CENT. A. D.

B. and C. *Below*: ARABIC BINDING OF A QUR'ĀN
with remains of a flap. See p. 46-47.

CAIRO, EGYPTIAN LIBRARY. MASĀHIF NO. 192.
IX CENT. A. D.

Photo Lehnert & Landrock, Cairo





53

A. *Left*: FRAGMENT OF AN ARABIC BINDING OF A QUR'AN

See p. 47-48.

VIENNA, NATIONAL LIBRARY. ARCHDUCKE RAINER PAPYRUS COLLECTION.

INV. CHART. AR. 14 100 B, C.

X-XI CENT. A. D.

Photo Jaffé, Vienna

B. *Right*: RECONSTRUCTION OF THE BINDING

Drawing by Nittmann



THE
JOURNAL
OF
THE
ROYAL
ANTHROPOLOGICAL
INSTITUTE
OF GREAT
BRITAIN
AND IRELAND
VOLUME
LXXV
PART I
1905

EDITED BY
ALFRED HENRI HODKINSON

WITH
A
GENERAL
INTRODUCTION
BY
ALFRED HENRI HODKINSON

LONDON
PUBLISHED BY
THE
ROYAL ANTHROPOLOGICAL INSTITUTE
21, BEDFORD SQUARE, W.C.2

THE
JOURNAL
OF
THE
ROYAL
ANTHROPOLOGICAL
INSTITUTE
OF GREAT
BRITAIN
AND IRELAND
VOLUME
LXXV
PART I
1905

A. *Above*: FRAGMENT OF AN ARABIC BINDING OF A QUR'ÂN
in Safina form. See p. 49.

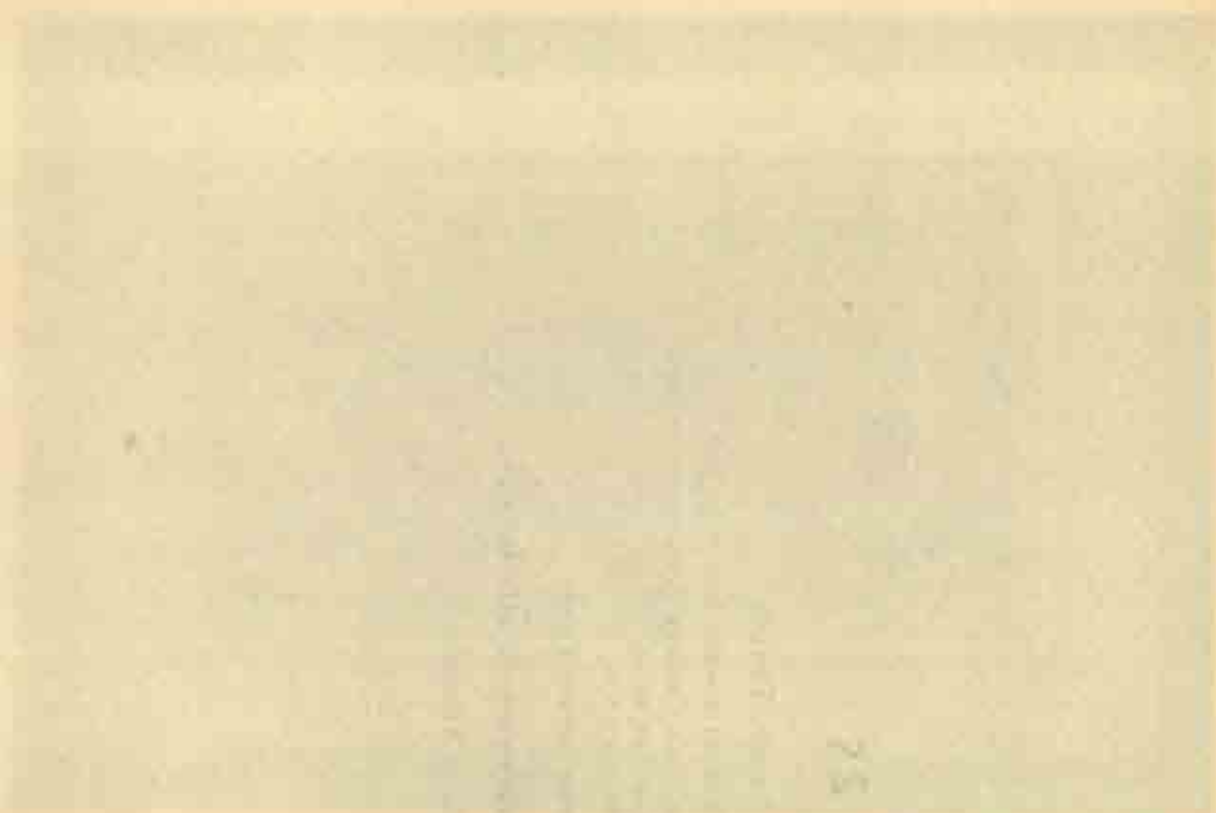
VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.
INV. CHART. AR. 28002.
X-XI CENT. A. D.

Photo Jaffé, Vienna

B. *Below*: RECONSTRUCTION OF THE BINDING

Drawing by Nittmann





A. *Left*: ARABIC BINDING

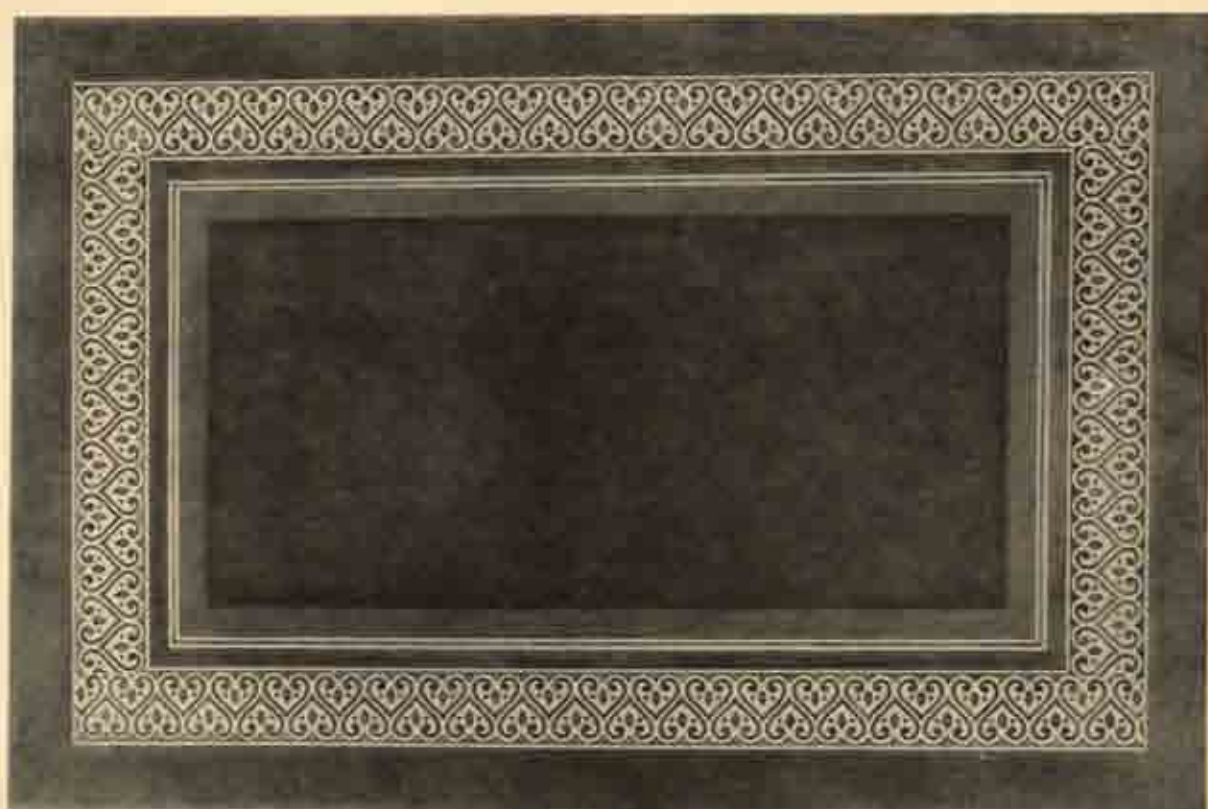
with remains of the leather cover. See p.49-50.

VIENNA, NATIONAL LIBRARY, ARCHIDUKE RAINER PAPYRUS COLLECTION.
INV. CHART. AR. #8001.
XI-XII CENT. A. D.

Photo National Library, Vienna

B. *Right*: RECONSTRUCTION OF THE BINDING

Drawing by Nittmann



A. *Above, right:* FRAGMENT OF A PAINTED COPTIC BINDING

See p. 43.

VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.
INV. PERG. AR. 336.
VIII CENT. A. D.

B. *Centre, right:* FRAGMENT OF AN ARABIC END-PAPER

See p. 52. From al-Ushmūnayn.

VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.
INV. CHART. AR. 25630.
X-XI CENT. A. D.

C. *Above, left:* RECONSTRUCTION

of the circular ornament of Inv. Chart. Ar. 25630.

*Drawing by Nittmann*D. *Below, left:* FRAGMENT OF A VELLUM END-PAPER OF AN ARABIC BINDING

See p. 50.

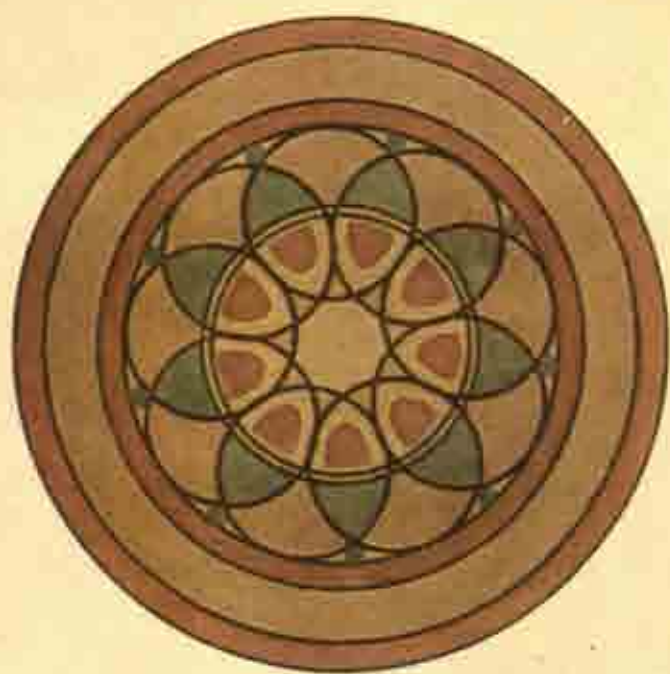
VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.
INV. PERG. AR. 335.
X CENT. A. D.

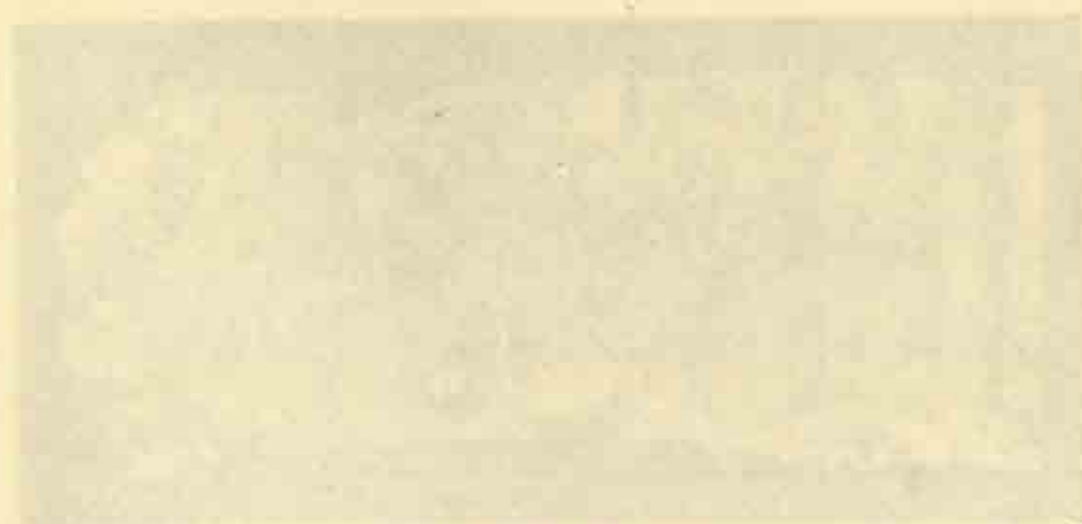
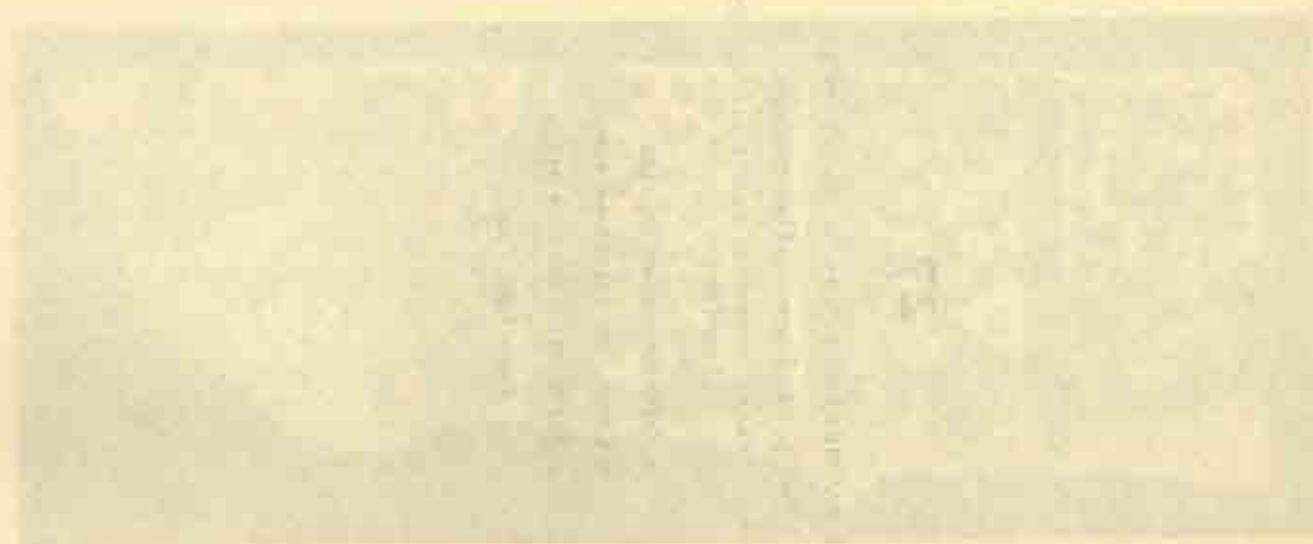
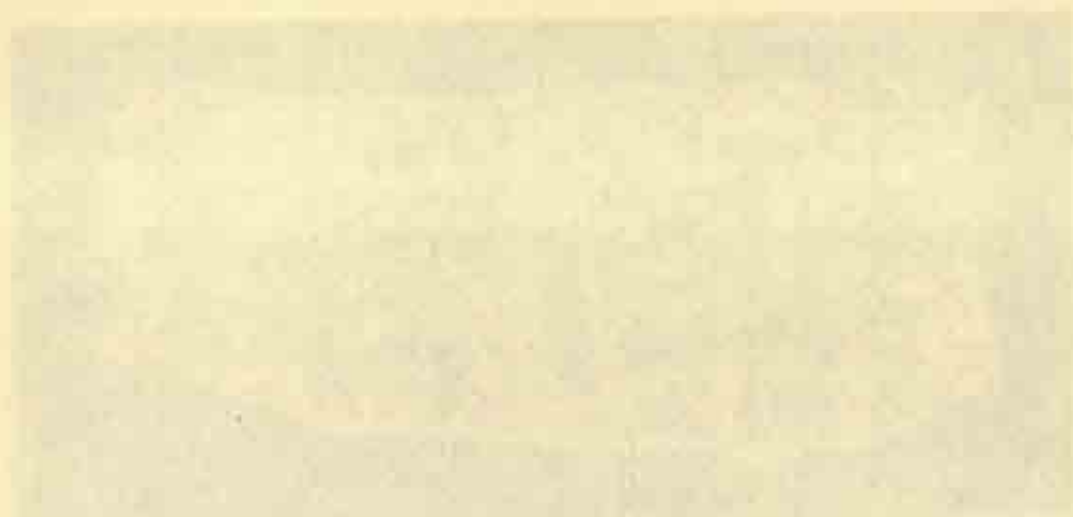
E. *Below, right:* FRAGMENT OF A VELLUM END-PAPER OF AN ARABIC BINDING

See p. 50-51. From al-Ushmūnayn.

VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.
INV. PERG. AR. 357.
X CENT. A. D.

Photo Jaffé, Vienna





FRAGMENTS OF ARABIC END-PAPERS

See p. 52. From al-Ushmūnayn.

VIENNA, NATIONAL LIBRARY. ARCHDUCHE RAINER PAPYRUS COLLECTION.
X-XI CENT. A. D.A. *Left*: INV. CHART. AR. 25 629.B. *Centre*: INV. CHART. AR. 25 627.C. *Right*: INV. CHART. AR. 25 631.*Photo Jaffé, Vienna*





RECEIVED BY THE LIBRARY OF THE

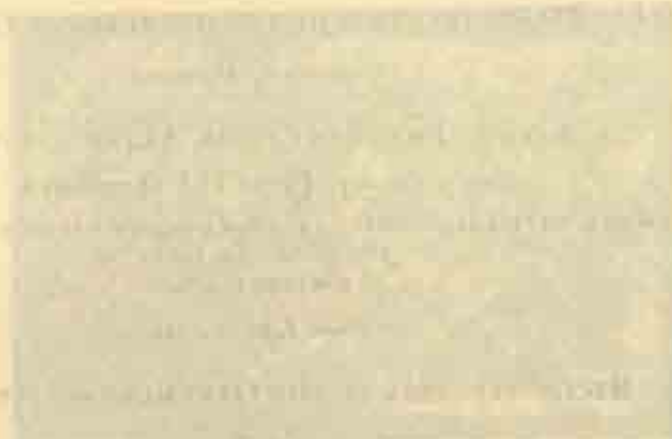
UNIVERSITY OF MICHIGAN

ANN ARBOR, MICHIGAN

NOV 10 1964

LIBRARY OF THE UNIVERSITY OF MICHIGAN

THE UNIVERSITY OF MICHIGAN LIBRARY



THE UNIVERSITY OF MICHIGAN LIBRARY



A. *Above, left:* FRAGMENT OF AN ARABIC END-PAPER

See p. 51-52.

BERLIN, STAATLICHE MUSEEN. PAPYRUS COLLECTION. P. 12802.
X-XI CENT. A. D.

Photo Staatliche Museen, Berlin

B. *Above, right:* RECONSTRUCTION OF THE GEOMETRICAL ORNAMENT OF P. 12802.

Drawing by Nittmann

C. *Centre:* FRAGMENT OF AN ARABIC END-PAPER

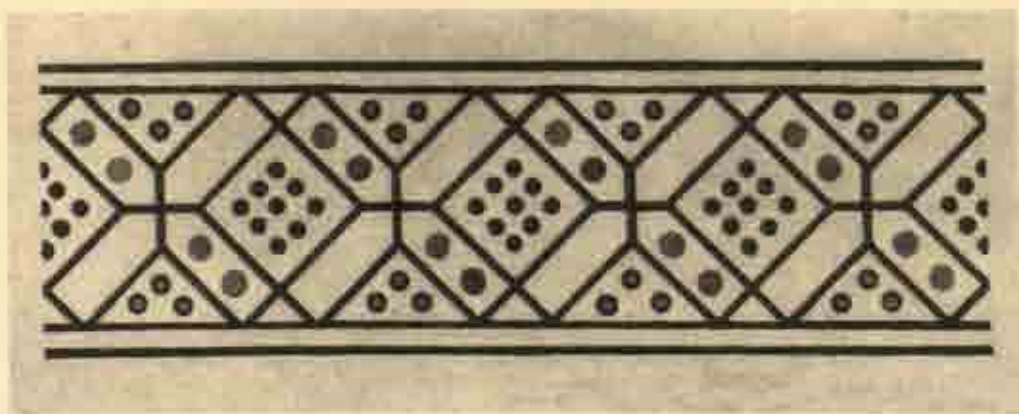
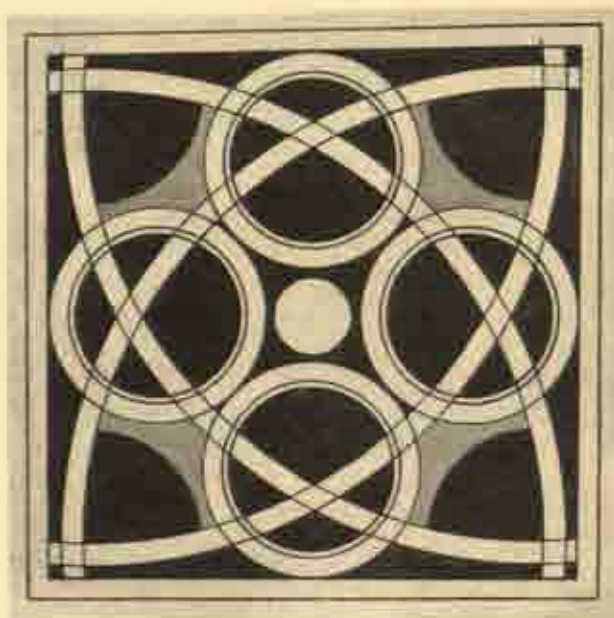
See p. 52-53. From al-Ushmūnayn.

VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION.
INV. CHART. AR. 25653.
X-XI CENT. A. D.

Photo Jaffé, Vienna

D. *Below:* RECONSTRUCTION OF THE ORNAMENT ON INV. CHART. AR. 25653.

Drawing by Nittmann



Q2

FRAGMENTS OF ARABIC END-PAPERS
From al-Ushmūnayn.

VIENNA, NATIONAL LIBRARY. ARCHDUKE RAINER PAPYRUS COLLECTION,
X-XI CENT. A.D.

- A. *Above, left*: INV. CHART. AR. 5604. PRINTED FROM A WOODEN BLOCK. See p. 53.
 B. *Below, left*: INV. CHART. AR. 14 100. IMPRESSION FROM STAMPS. See p. 53-54.
 C. *Centre*: INV. CHART. AR. 25640 B. FILIGREE WORK. See p. 54, 56.
 D. *Right*: INV. CHART. AR. 25640 A. FILIGREE WORK. See p. 54, 56.

Photo Jaffé, Vienna



30

30

FRAGMENTS OF ARABIC END-PAPERS IN FILIGREE WORK

Found at al-Ushmūnayn.

VIENNA, NATIONAL LIBRARY, ARCHDUKE RAINER PAPYRUS COLLECTION,
X CENT. A. D.

- A. *Above*: INV. CHART. AR. 25636. See p. 56.
 B. *Below A*: INV. CHART. AR. 25654. See p. 54.
 C. *Centre*: INV. CHART. AR. 25639. See p. 56.
 D. *Below, left*: INV. CHART. AR. 25635. See p. 54.
 E. *Below, left*: INV. CHART. AR. 25638. See p. 54.

Photo Joffé, Vienna



FRONTISPIECE OF A TRANSLATION INTO ARABIC

Ascribed to JOHANNES GRAMMATICUS,
of the first book of Galen's treatise on Electuaries.

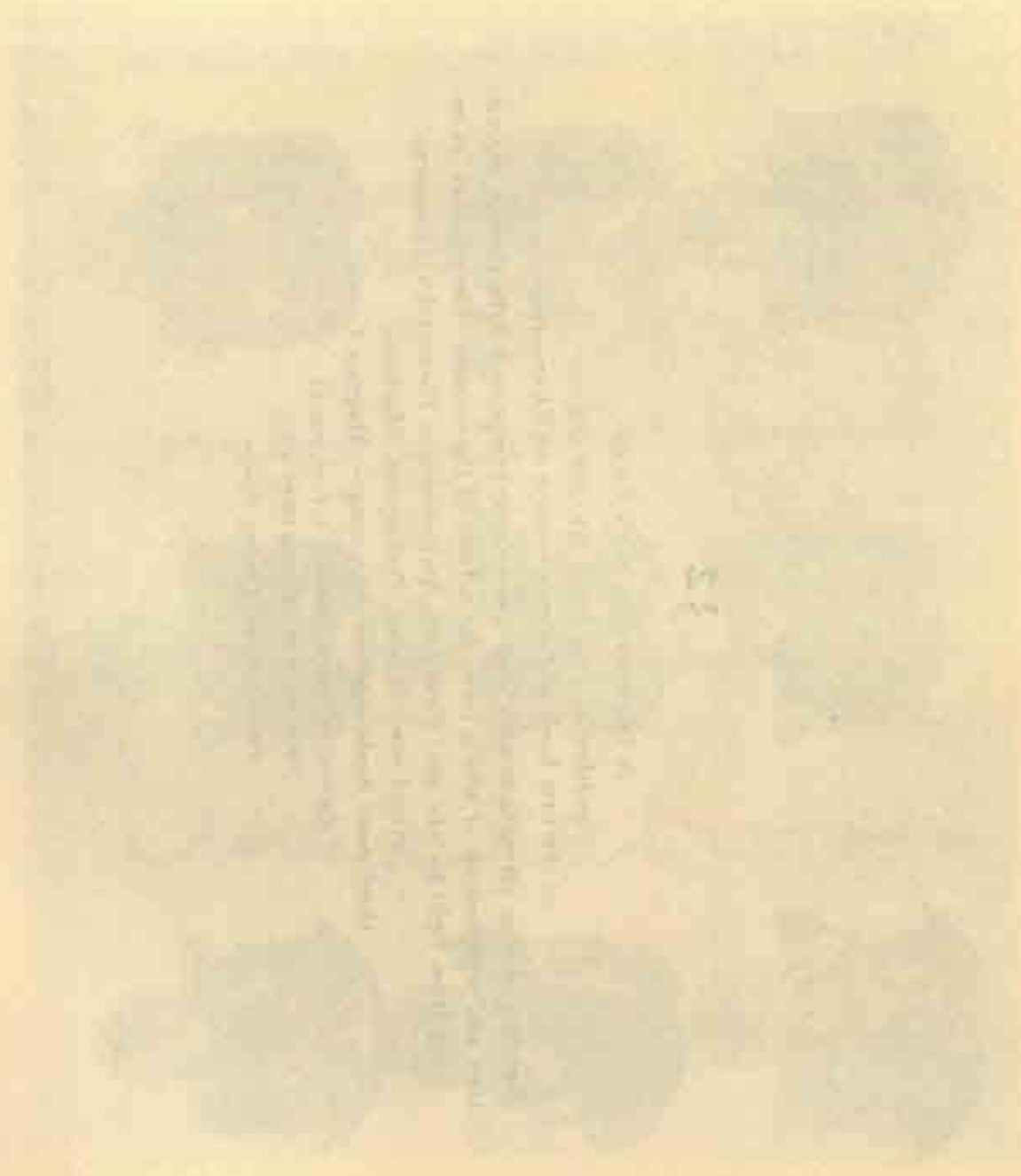
The central figure in the picture probably represents the prince for whose library the manuscript was written and illustrated. An attendant immediately behind the prince, holds some kind of standard, while another attendant, opposite to him, bears the royal sword in its scabbard; in balconies on either side are servants, — on the right, a cupbearer and another holding a bird (a duck or a goose), — on the left a falconer, and a spear-bearer. Along the top of the picture runs a hunting scene, in which the prince with his companions is depicted shooting the wild-ass and the deer. Immediately below this, and over the wooden screen at the back of the prince, are visible the heads of four men who appear to be engaged in agricultural work; the figure on the right is wielding such an implement as is shown in Plate 37a. If this conjecture is correct, we have here such a representation of the life of simple folk as is to be seen in Plate 53 (see above p. 80) and F. R. MARTIN, *Miniature Painting and Painters of Persia*, vol. II, Plates 131, 132, where behind the enclosure in which sit the royal personages a labourer tills the soil. In the lower panel of the picture is a procession of men on horse-back and women on camels. All the figures, even the birds, have haloes of the type familiar in Christian art.

VIENNA, NATIONAL LIBRARY. A. F. 10, FOL. 14.

FIRST HALF OF THE XIII CENT. A. D.

Photo Jaffé, Vienna





A TRANSLATION INTO ARABIC

ascribed to JOHANNES GRAMMATICUS,
of the first book of Galen's treatise on Electuaries.

Portraits of nine physicians who from time to time compounded the theriac, the virtues and composition of which form the subject of the treatise. Their names, in order from right to left, are: (first row) Andromachus, Pherecydes, Pylagoras;

(second row) Pericles, Pythagoras, Marinus;

(third row) Andromachus the younger, Magnus, Galen.

VIENNA, NATIONAL LIBRARY. A. P. 10, FOL. 15.

FIRST HALF OF THE XIII CENT. A. D.

Photo National Library, Vienna

الحمد لله الذي هدانا لهذا
الذي كنا لنهتدي لہ



مختار بن ناصر بن ابراهيم



بِإِذْنِ اللَّهِ



وحدیث قرطی حدیث ابن عباس و قصص ائمه و غیر اینها

A TRANSLATION INTO ARABIC
ascribed to JOHANNES GRAMMATICUS,
of the first book of Galen's treatise on Electuaries.

A. *Above:* A BOY BITTEN BY A SNAKE CURES HIMSELF BY MEANS OF THE BERRIES
OF THE LAUREL TREE, AND THIS GIVES ANDROMACHUS THE FIRST IDEA OF THE COM-
POSITION OF THE THERIAC (FOL. 2B).

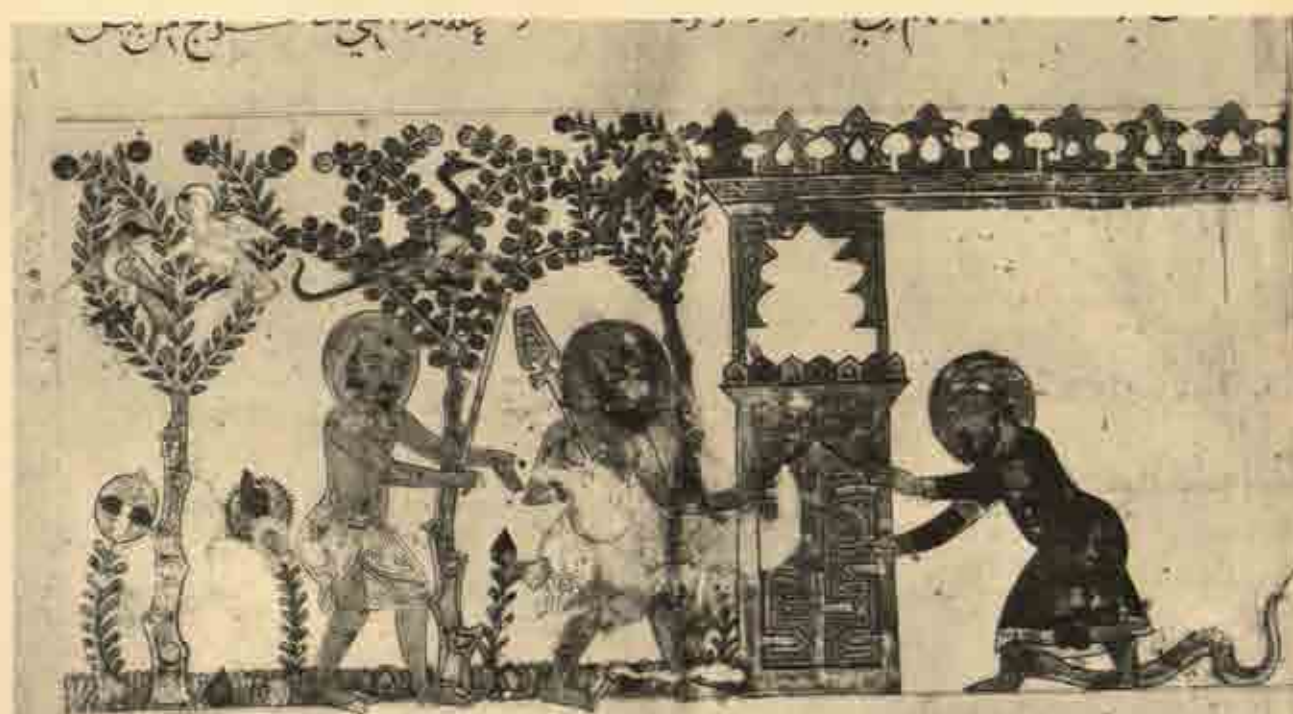
B. *Below:* A MAN BITTEN BY A SNAKE CALLS TWO LABOURERS TO HIS RESCUE
(FOL. 12B).

VIENNA, NATIONAL LIBRARY. A. F. 10.
FIRST HALF OF THE XIII CENT. A. D.

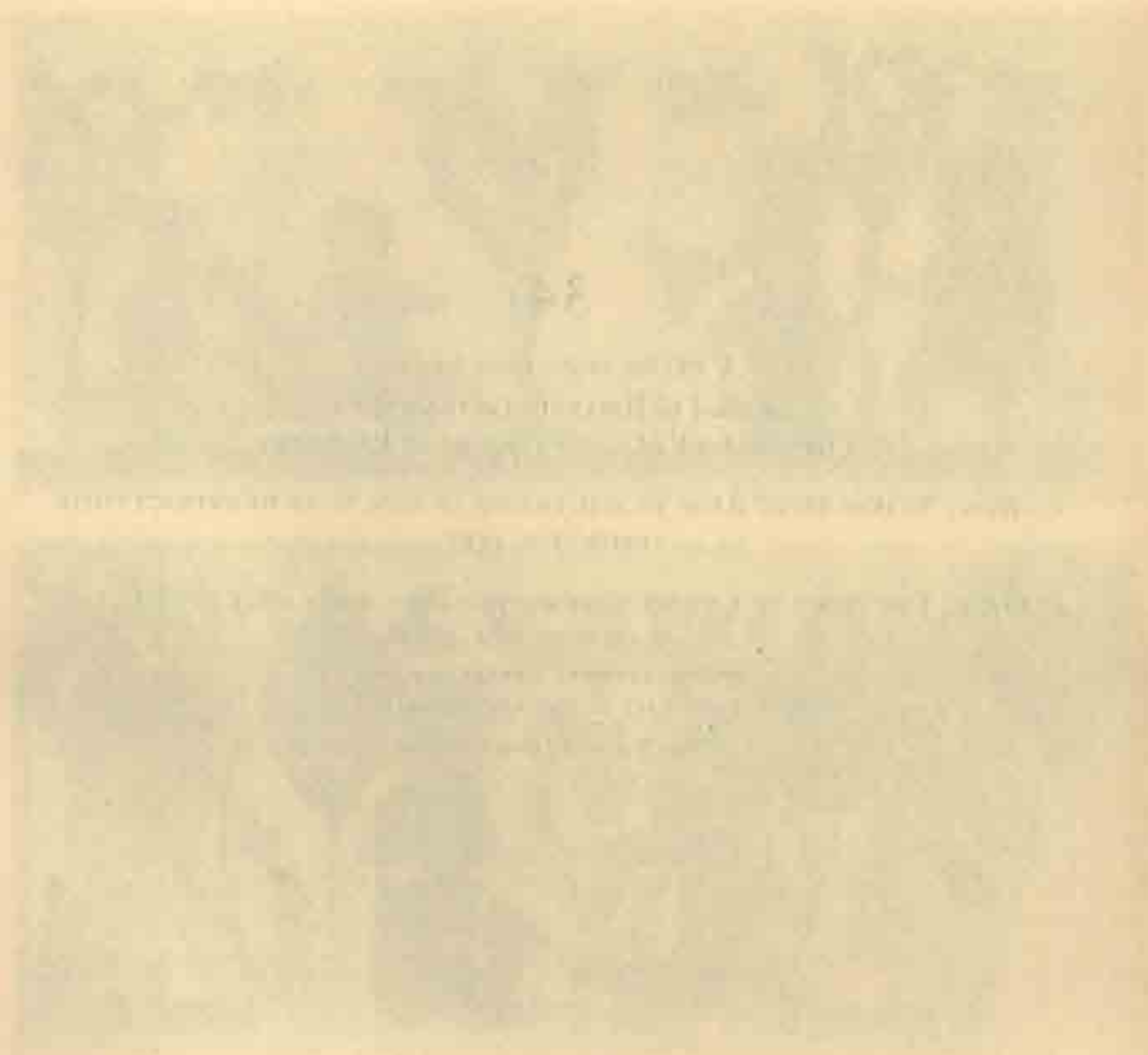
Photo National Library, Vienna



سأله فاجابته فادركه الملائكة فملا به النار فملا به النار فملا به النار



لتجروا داخل البيت الذي كان فيه العلام فلم يقدرُوا ان يدخلوا خلفه اذ يقف له لونه لان



A TRANSLATION INTO ARABIC
 ascribed to JOHANNES GRAMMATICUS,
 of the first book of Galen's treatise on Electuaries.

A. *Above*: SNAKES BEING MADE TO BITE IMAGES OF MEN, SO AS TO EXTRACT THEIR
 VENOM (FOL. 15B).

B. *Below*: THE STORY OF A SNAKE THAT ROTTED AWAY, WHEN SHUT UP IN A GLAZ-
 ED JAR OF WINE (FOL. 128B).

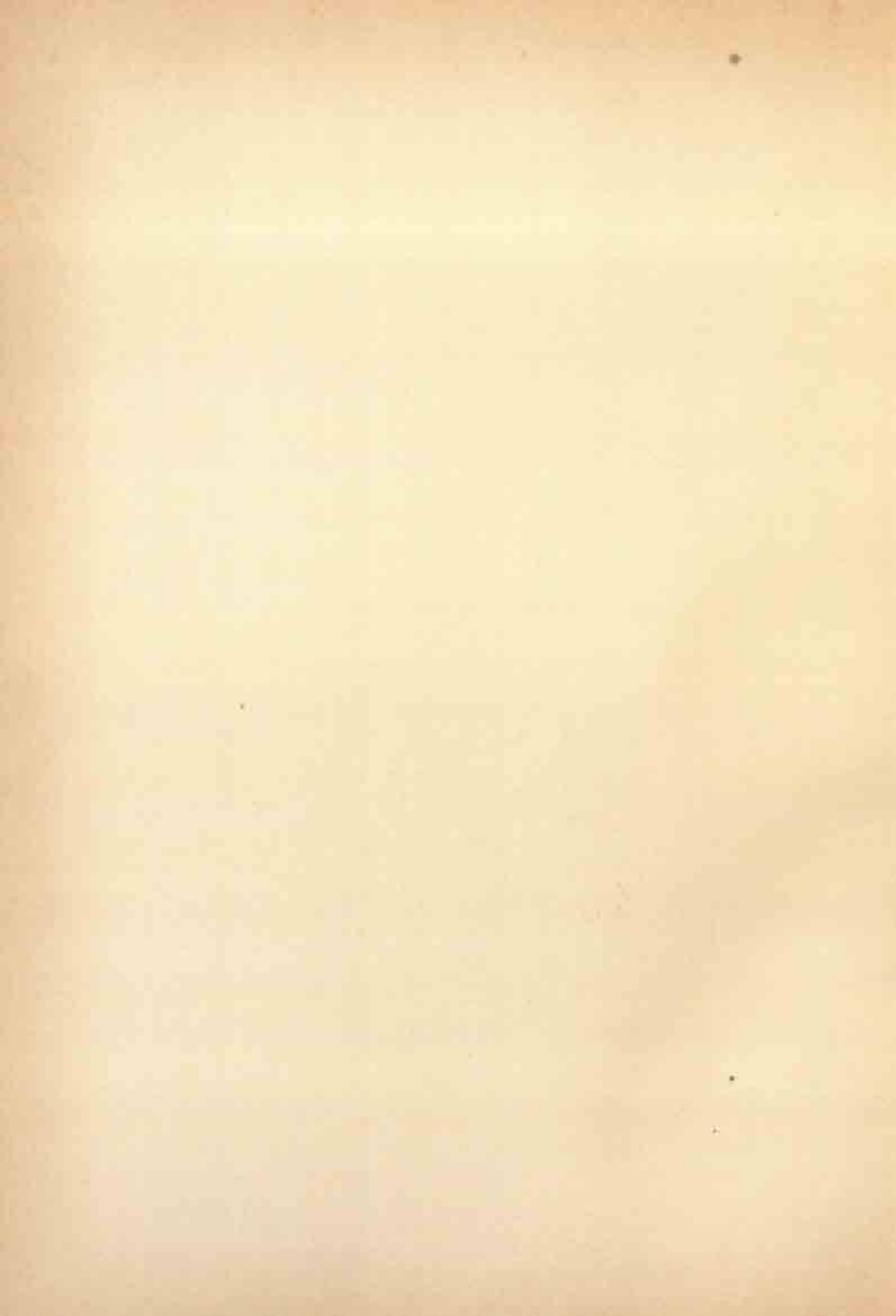
VIENNA, NATIONAL LIBRARY. A. F. 10.
 FIRST HALF OF THE XIII CENT. A. D.

Photo National Library, Vienna



AL-QAZWINI, 'AJĀ'IB AL-MAKHLŪQĀT

- A. *Left*: THE PLANET JUPITER REPRESENTED AS AN OLD MAN READING A BOOK
(FOL. 16B).
- B. *Right, above*: WILD HAIRY MEN WHO LIVE IN THE TOPS OF TREES ON AN ISLAND
IN THE CHINA SEA (FOL. 59B).
- C. *Right, below*: THE QUEEN OF THE ISLAND OF WAQWĀQ, IN THE CHINA SEA,
WITH HER ATTENDANTS (FOL. 60B).
MUNICH, STAATSBIBLIOTHEK. COD. ARAB. 464.
DATED 678 A. H. (1279 A. D.).
Photo Staatsbibliothek, Munich



THE HISTORY OF THE
CITY OF LONDON
FROM THE FOUNDATION
TO THE PRESENT TIME



By JOHN STOW, Esq. of the Inner Temple, Barrister at Law.
AND JOHN VAUGHAN, Esq. of the Middle Temple, Barrister at Law.

Printed by J. Stow, at the Sign of the Sun, in St. Dunstons Church-yard, near St. Dunstons Church, in the County of Middlesex.
MDCCLXXII.



THE HISTORY OF THE
CITY OF LONDON
FROM THE FOUNDATION
TO THE PRESENT TIME

AL-BIRGNI, AL-ATHĀR AL-BĀQIYA

- A. *Above*: MUHAMMAD PREACHING HIS FAREWELL SERMON (FOL. 7B).
 B. *Below*: ABRAHAM DESTROYING HIS FATHER'S IDOLS, SEE QUR'ĀN, XXI, 59
 (FOL. 102B).

EDINBURGH, UNIVERSITY LIBRARY. NO. 161.

DATED 707 A.H. (1307-8 A.D.).

Photo Victoria and Albert Museum, South Kensington

بِرَبِّهِمْ يَسْأَلُونَكَ عَنِ الْكَافِرِينَ الَّذِينَ يَدْعُونَ عِيسَى ابْنَ مَرْيَمَ
 وَنَزَّلْنَا عَلَيْهِ الْإِنجِيلَ ۖ إِنَّمَا الْمَسِيُّ نَزَّلْنَا فِي الْكَفَرِ يُضِلُّ بِهِ الَّذِينَ كَفَرُوا
 وَاجْتَلَوْهُ عَمَّا
 وَنَحْنُ مُؤْتَاهَا ۖ فَخُطِّبَ عَلَيْهِ السَّلَامُ وَقَالَ ۖ إِنَّ الزَّمَانَ تَدَاثَرَتْ أَرْكَشِيَّةُ



فَسَنَعُ صَوْنًا مِمَّنْ صَنَعُوا ۖ لَكُمُ الْيَوْمَ فَجْءٌ مِّنْ عِندِ بَاطِنٍ ۖ وَأُجِدُوا فِي غَيْبَتِهِمْ
 لَخَرِجَ وَلَا يُعَاوَدُ الْحَيُّ إِلَيْنَا عَمَلُهُ الْعَبِيدُ عَلَىٰ أَنْ جَعَلْنَا جَزَاءَ مَا وَخَّصَ مِنْ عَمَلِهِمْ ثُمَّ إِنَّهُ



نَدِيرٌ يُّبَدِّلُ مَا فَعَلَهُ ۖ وَإِذَا دُعِيَ أَنَّهُ لَكَوَيْبُ الْمَشْرِقِ عَلَىٰ عَادَتِهِمْ فِي ذِيحِ أَوْلَادِهِمْ رَعْمَدُ



THE
THE
THE

THE
THE
THE



THE
THE
THE

AL-BĪRŪNĪ, AL-ĀTHĀR AL-BĀQIYA

A. *Above*: THE FALSE PROPHET, BAHĀFRĪD, TELLING A PEASANT THAT HE HAD JUST COME DOWN FROM HEAVEN AND HAD BEEN COMMISSIONED BY GOD TO TEACH A NEW RELIGION (FOL. 111B).

B. *Below*: HINDUS SITTING TOGETHER IN A PLEASURE-GARDEN ON A FESTIVAL DAY (FOL. 153B).

EDINBURGH, UNIVERSITY LIBRARY. NO. 161.

DATED 707 A. H. (1307-8 A. D.).

Photo Victoria and Albert Museum, South Kensington.

وَأَوْحَىٰ إِلَيْهِمْ وَأَنْ يُبَيِّنَ دِينَهُ لِلنَّاسِ ۚ إِنَّهُمْ قَوْمٌ مُّسْلِمُونَ

[illegible]

فَدَعَا عِدَّةً عَظِيمًا لِلْهِدْيَةِ مَنَازِلَ الْمَنَاجِيهِ الْقَرِيبَةِ مَهَادُونَ فِيهِ كُلُّ مَالٍ حَلِيلٍ وَخَوْفُهُ رَمِيعٌ وَمَعْنَى
فِي الْمَنَاجِيهِ وَالْمَنَاجِيهِ الْعِبَادَاتُ الَّتِي يَصِفُ الْهَارِثُ ثُمَّ يَخْرُجُونَ إِلَى مَنَازِلِهِمْ وَيَجْعَلُونَ فِي مَجَالِسِهِمْ



وَمُضْعُونَ لِلزَّهَائِنِ وَمَوَاضِعُونَ لِلَّهِ عَزَّ وَجَلَّ. وَفِي السَّابِعِ عَشَرَ أَطَافُ فِي الْبَحْرِ وَكَرُورَةٌ
فِي الْهَرَاءِ عِنْدَ مَطْلِ ذُو الرِّيشِ. وَفِي الثَّامِ عَشَرَ دُبُورُهُ صَاعِدًا عِنْدَ الْقَيْطِ. وَفِي التَّاسِعِ عَشَرَ بَلَلُ



THE HISTORY OF THE
LIFE OF THE LATE
JAMES HAMILTON, ESQ.
BY
JAMES HAMILTON, ESQ.
OF THE BARRS.



THE HISTORY OF THE
LIFE OF THE LATE
JAMES HAMILTON, ESQ.
BY
JAMES HAMILTON, ESQ.
OF THE BARRS.

AL-BIRŪNĪ, AL-ĀTHĀR AL-BĀQIYA

- A. *Above*: PHYSICIANS PERFORMING THE CAESARIAN OPERATION (FOL. 17).
 B. *Below*: THE DEAD BODY OF MĀNĪ EXPOSED AFTER HIS EXECUTION OUTSIDE
 THE GATE OF THE CITY OF JUNDĪ-SHĀPŪR (FOL. 105).

EDINBURGH, UNIVERSITY LIBRARY. NO. 161.

DATED 767 A.H. (1367-8 A.D.).

Photo Victoria and Albert Museum, South Kensington

ذَلِكَ أَنَّ أُمَّهُ مَاتَتْ جُرَاحَ الْخَاضِ وَكَانَ بِأَمْرِ لَيْلَةٍ فَشَقَّ بَطْنَهَا وَأَفْرَجَ عَنْهُ وَلَقِيَ نَيْصَرَ

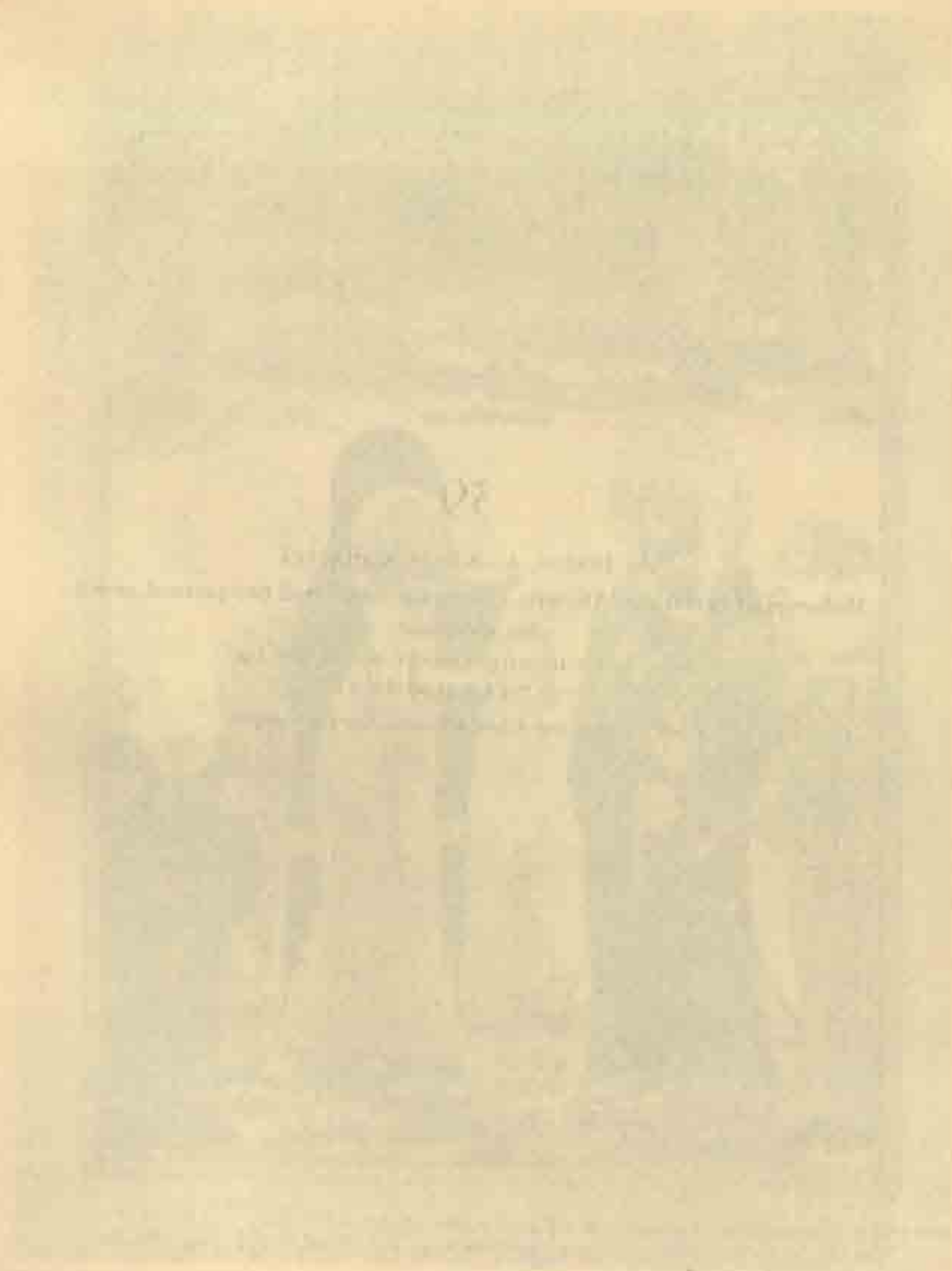


وَكَانَ يَقَعُ عَلَى الْمُلُوكِ بِأَنَّهُ لَا يَخْرُجُ مِنْ نَصْبِهِ أَمْزَأُ كَمَا كَانَ يَقَعُ أَعْدَاءُ نَهْلٍ هَاشِمٍ

أَنَّ بِهِ شَيْطَانًا وَوَعْدَ شَفَاةٍ فَلَمْ يَنْدِرْ عَلَيْهِ فَعَجَلَتْ الْفِتْنَةُ بِرُجُلَيْهِ وَأَحْجَمَتْ فِي يَدَيْهِ



حَتَّى بَرَأَ بِأَخْبَرِ مَنْصَبِ رَأْسِهِ بِأَيِّ السَّرَادِقِ وَطَرَفَتْ جِسْمُهُ فِي الْمَدْرَجَةِ نِكَلًا وَمَيْلًا



AL-BIRŪNĪ, AL-ĀTHĀR AL-BĀQIYA

Muhammad declaring 'Alī, who carries his celebrated two-pointed sword,
his successor.

EDINBURGH, UNIVERSITY LIBRARY, NO. 161, VOL. 194.

DATED 707 A. H. (1307-8 A. D.).

Photo Victoria and Albert Museum, South Kensington

أَيُّهَا النَّاسُ أَسْمِعُوا لَكُمْ مِنْ أَنْفُسِكُمْ مَا لَوْ أَنْبَأَكُمْ قَالَتْ تَمْنِيَتْ مَوْلَاهُ فَعَلِي مَوْلَاهُ



هذه الصورة من كتابي الذي كتبت فيه في تاريخ الإسلام

اللَّهُمَّ وَالْمَرْءُ وَالْأَمْرُ وَعَادِي مَرْءِي وَأَمْرِي مَرْءِي وَأَمْرِي مَرْءِي وَأَمْرِي مَرْءِي

AL-BIRŪNĪ, AL-ĀTHĀR AL-BĀQIYA

Muḥammad declaring 'Alī his successor.

PARIS, BIBLIOTHÈQUE NATIONALE. FONDS ARABE 1489, FOL. 87.

MODERN COPY (PROBABLY OF THE XVII CENT. A.D.).

Photo Lemarié, Paris

أَيُّهَا النَّاسُ إِنِّي جَاءْتُكُمْ بِالْبَيِّنَاتِ فَمَنْ كُنْتُمْ مَوَافِقِي فَعَلَيْكُمْ سَلاَةٌ



اللَّهُمَّ قَالِ مَنْ وَالَا تُؤَاوِئِ مَنْ عَادَاهُ وَانْصُرْ مَنْ نَصَرَهُ وَخُدْ مَنْ خُدَّ لَهُ وَأَقْذِلْ مَنْ مَعَهُ



THE UNIVERSITY OF CHICAGO PRESS



41

RASHID AD-DIN, JĀMI' AT-TAWĀRIKH

A. *Above*: THE ANNUNCIATION, see QUR'ĀN, III, 37—43 (FOL. 9)

B. *Below*: THE BIRTH OF MUHAMMAD (FOL. 14).

EDINBURGH, UNIVERSITY LIBRARY. NO. 26.

DATED 714 A. H. (1314 A. D.).

Photo R. B. Fleming, London



وَالْأَنْبِيَاءُ وَرُسُلُهُمْ أَتَتْهُمْ أَمْثَلُ ذَٰلِكَ فَأَنكَرُوا
وَالَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ لَهُمْ أَجْرٌ كَبِيرٌ



أَعْلَمُ، الَّذِي بَشَّرَ بِجَنَّةٍ عَظِيمَةٍ
وَكَانَتْ مَوَاقِفُ عَامِلِي الصَّالِحِينَ فِيهَا
دَنَى قَلِيلًا وَفَتْ وَلَا ذَهَابًا
لَمَّا كَانَتْ بَحْرِشُ الْعَقَّةِ وَالزَّيْتِ
تُخْرِمُهُمْ وَلَا نَوَافِسُ الْخَسْفِ
لَا تُخْرِشُكَ كَلْبُ الشَّجَرِ وَجَدَّكَ
عَلَيْهِ السَّلَامُ عَلَى سِرَّةِ الْوَحْيِ
مِنْ كَيْدِ نَارٍ يَدُهَا ظَاهِرُ السُّعْيِ
بِأَفْلاكَ هَضْبَةٍ مَهْمُكَ بِأَعْلَى

1121

42

W. H. H. H.

THE FIRST OF THE TWO PARTS OF THE HISTORY OF THE
 UNITED STATES OF AMERICA, FROM THE FIRST
 SETTLEMENTS TO THE PRESENT TIME, BY
 W. H. H. H.

THE SECOND OF THE TWO PARTS OF THE HISTORY OF THE

UNITED STATES OF AMERICA, FROM THE FIRST

SETTLEMENTS TO THE PRESENT TIME, BY

W. H. H. H.

Mu'izzī, Diwān

A. *Above:* THE POET MU'IZZĪ, WHO WAS COURT-POET IN THE SERVICE OF SULTAN SANJAR (OB. 1157 A. D.), GOING OUT WITH HIS ROYAL MASTER TO SEE THE NEW MOON AT THE END OF THE FAST OF RAMAḌĀN. THE POET WEARS A TURBAN; THE SALJŪQ PRINCE AND HIS FOLLOWERS ARE REPRESENTED IN THE DRESS OF THE MONGOLS (FOL. 1 B).

B. *Below:* THE POET MU'IZZĪ READING HIS POEMS TO THE SULTAN (FOL. 14).

LONDON, INDIA OFFICE LIBRARY. ETHÉ NO. 912.

DATED 714 A. H. (1314 A. D.).

Photo R. B. Fleming, London

AL-HARIRI, MAQĀMĀT

Frontispiece: A prince, seated cross-legged on a throne, among his courtiers, and holding a goblet in his hand; in the foreground (centre) is an acrobat performing a feat of balancing on a rounded circular bowl. The attitude of the angels, behind the prince, seem to be a reminiscence of the two-winged Victories on the arch of Tāq-i-Būstān (see E. HERZFELD, *Am Tor von Asien*, Berlin 1920, Plate XXXIII).

See p. 64.

VIENNA, NATIONAL LIBRARY. A. F. 9, FOL. I.

DATED 734 A.H. (1334 A.D.).

Photo Jaffé, Vienna

من عمار
عبد الله
مكة
الحرم



64

of the same kind as the

of the same kind as the
of the same kind as the
of the same kind as the
of the same kind as the

of the same kind as the
of the same kind as the
of the same kind as the
of the same kind as the

AL-HARIRI, MAQĀMĀT

A. *Above:* ABŪ ZAYD, AFTER PREACHING A SERMON AGAINST SELF-INDULGENCE, IS FOUND FEASTING ON A ROAST KID AND WHITE BREAD, WITH A JAR OF WINE.
(FOL. 6B)

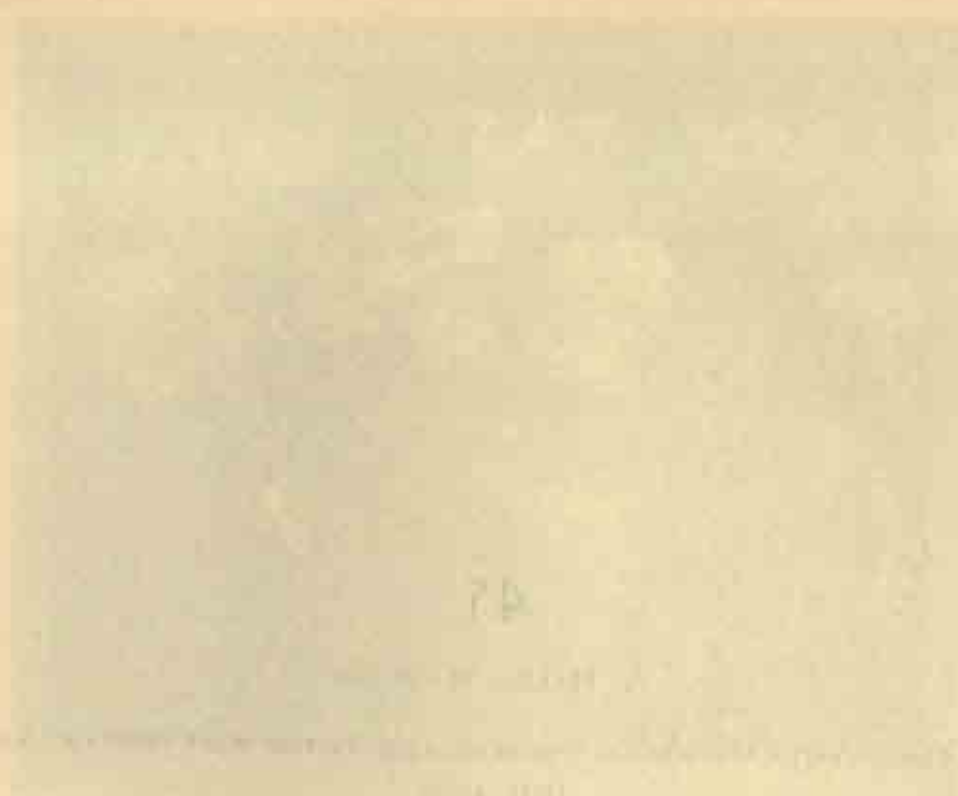
B. *Below:* ABŪ ZAYD DISCUSSING POETRY IN THE PUBLIC LIBRARY OF AL-BAṢRA
(FOL. 8B).

VIENNA, NATIONAL LIBRARY, A. F. 9.

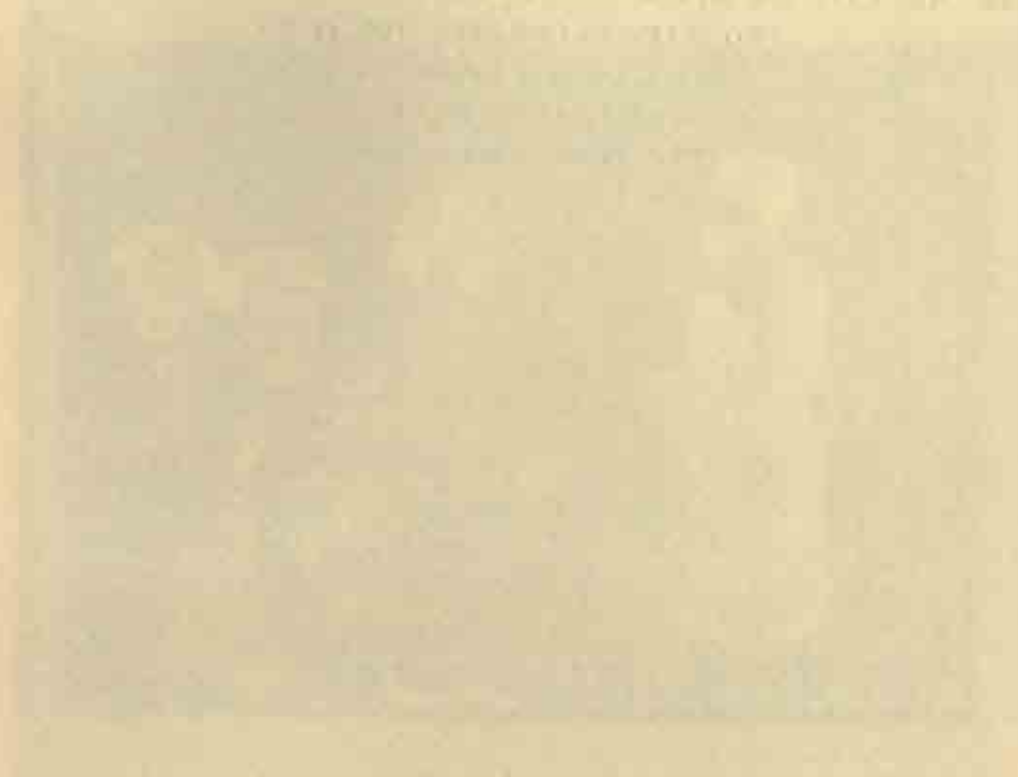
DATED 734 A. H. (1334 A. D.).

Photo National Library, Vienna





THE UNIVERSITY OF CHICAGO PRESS
CHICAGO, ILL. 60637-7099
U.S.A. AND CANADA
OTHER COUNTRIES: SEE LIST OF DISTRIBUTORS



AL-HARIRI, MAQĀMĀT

A. *Above*: ABŪ ZAYD AMONG THE REVELLERS IN THE WINE SHOP OF 'ANA
(FOL. 42 B).

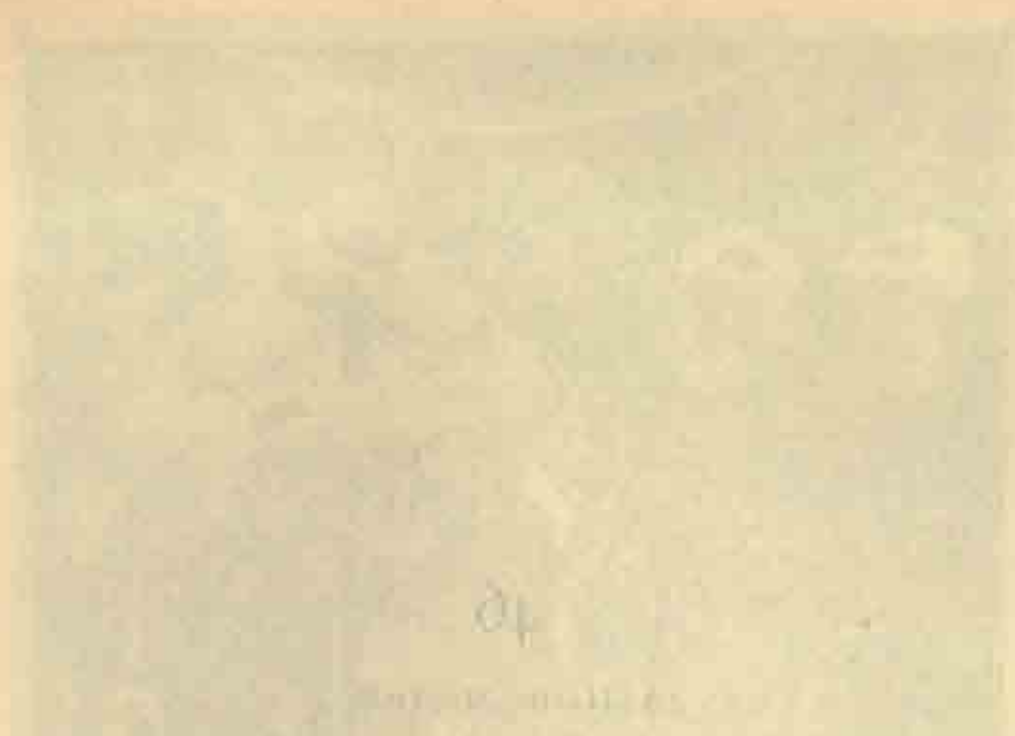
B. *Below*: ABŪ ZAYD ASKING FOR ALMS, IN THE DISGUISE OF AN OLD WOMAN WITH
TWO STARVING CHILDREN (FOL. 44 B).

VIENNA, NATIONAL LIBRARY. A. F. 9.

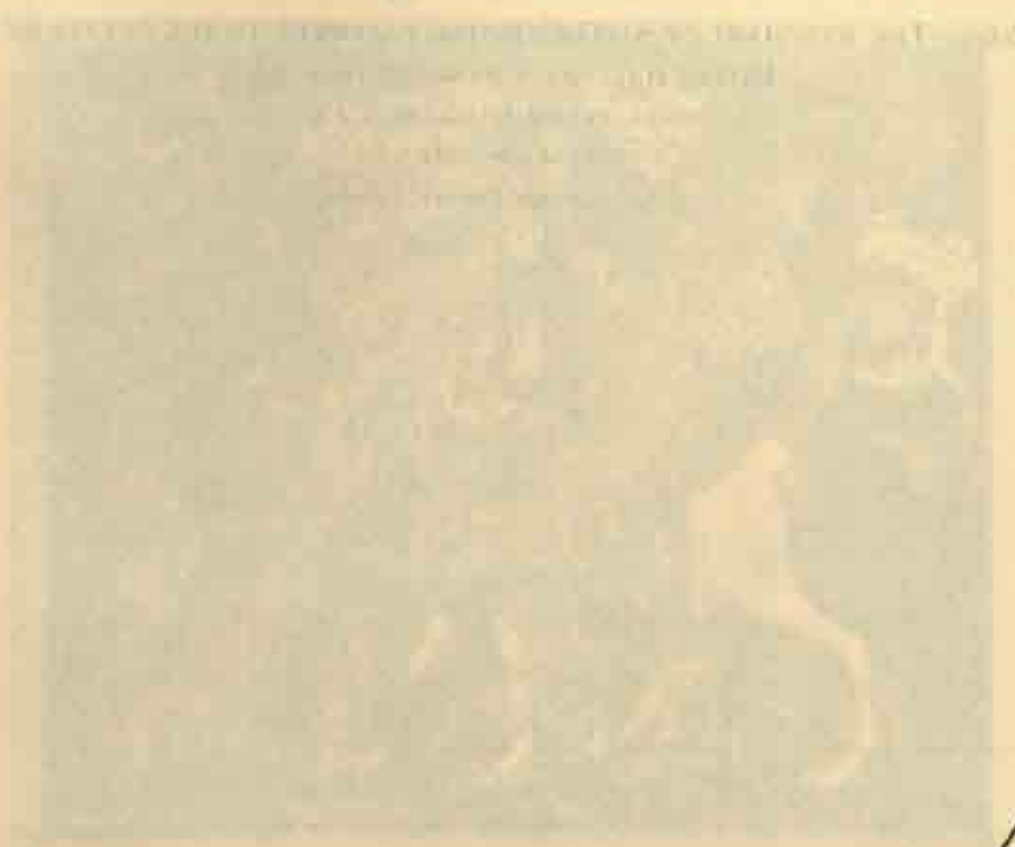
DATED 734 A. H. (1334 A. D.).

Photo National Library, Vienna





A large, faint, light blue rectangular area containing a large, stylized, handwritten-style character, possibly a letter or symbol, centered within the rectangle.



AL-HARIRI, MAQĀMĀT

A. *Above*: WHILE THE NARRATOR IS ON THE PILGRIMAGE TO MECCA, ABŪ ZAYD AND HIS SON BEG FOR FOOD AND A CAMEL, TO ENABLE THEM TO CONTINUE THEIR JOURNEY (FOL. 48).

B. *Below*: THE MERCHANT OF SINJĀR BIDDING FAREWELL TO THE GUESTS HE HAD ENTERTAINED AT A BANQUET (FOL. 59).

VIENNA, NATIONAL LIBRARY. A. F. 9.

DATED 734 A. H. (1334 A. D.).

Photo National Library, Vienna



AL-HARIRI, MAQĀMĀT

A. *Above*: ABŪ ZAYD RECOVERING FROM FEVER, IS VISITED BY HIS FRIENDS; HIS SON STANDS BEHIND HIS FATHER'S PILLOW (FOL. 64 B).

B. *Below*: THE NARRATOR, HAVING FALLEN INTO GREAT POVERTY, SEEKS ASSISTANCE AT THE TENT OF A WEALTHY TRAVELLER, WHOM HE DISCOVERS TO BE ABŪ ZAYD, WHO HAD BEEN RICHLY REWARDED FOR COMPOSING AN EULOGY ON THE GOVERNOR OF TŪS (FOL. 87 B).

VIENNA, NATIONAL LIBRARY. A. F. 9.

DATED 734 A. H. (1334 A. D.).

Photo National Library, Vienna



AMIR KHUSRAW DIHLAWI, KHAMSA

A. *Left*: KHUSRAW, IN THE GUISE OF A SHEPHERD, MEETING HIS RIVAL, FARHĀD
(FOL. 41).

B. *Right*: THE CONFLICT WITH THE ELEPHANT-EARED HOSTS OF GOG AND MAGOG
(FOL. 112).

BERLIN, PREUSSISCHE STAATSBIBLIOTHEK. OR. FOL. 187.

Photo Staatsbibliothek, Berlin

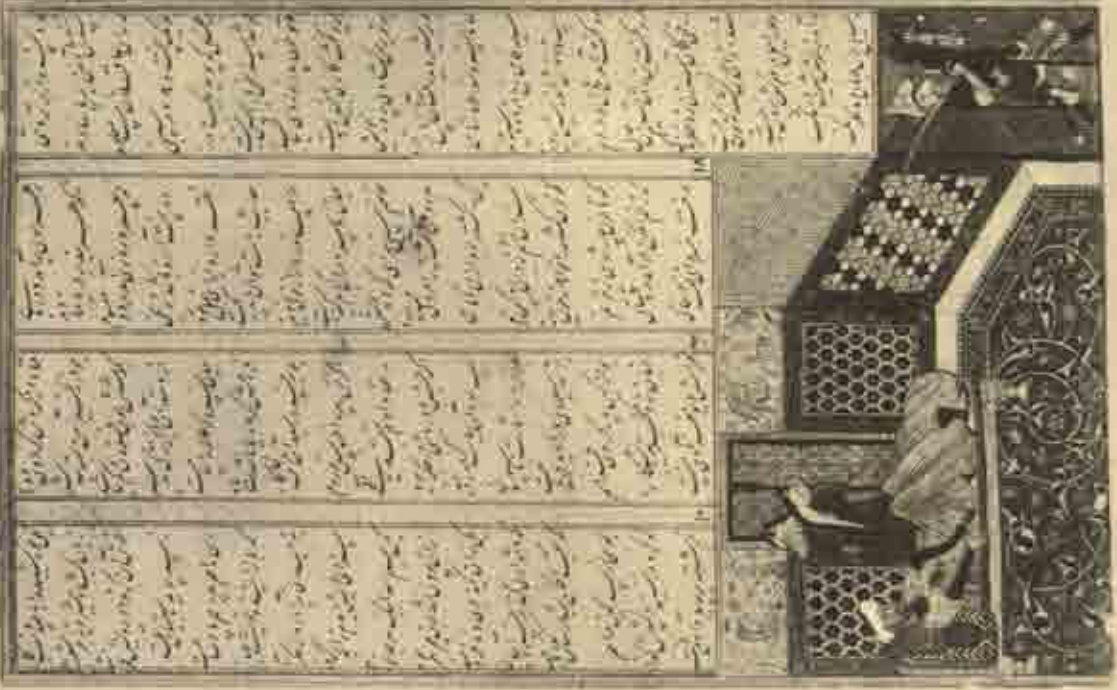
AMIR KHUSRAW DHILAWI, KHAMSA

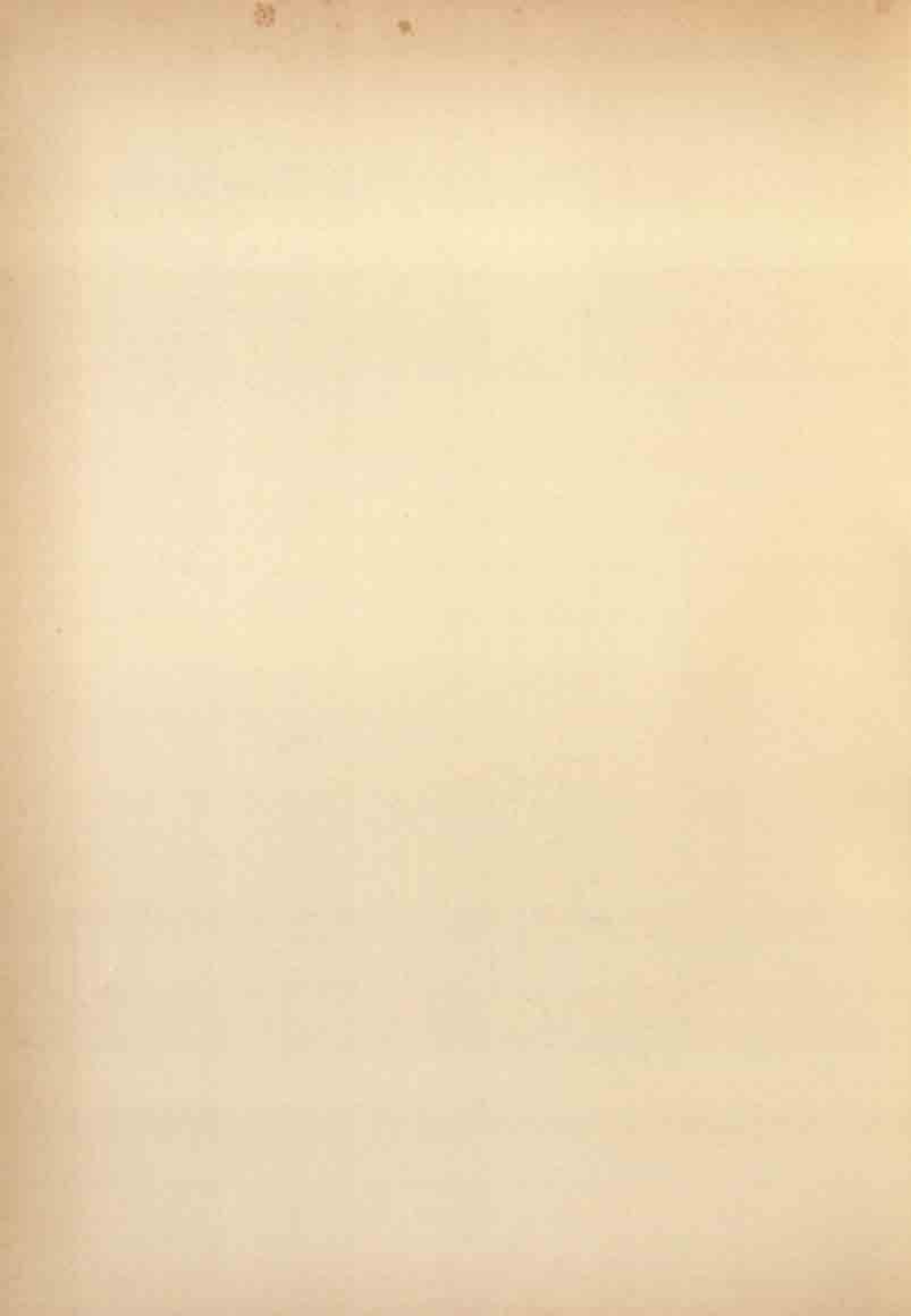
A. *Left*: A YOUNG MAN VISITING A HERMIT (FOL. 18).

B. *Right*: SHIRIN AND AN ATTENDANT MOURNING OVER THE DEAD BODY OF KHUSRAW, WHILE THE MURDERER ESCAPES THROUGH THE DOOR OF THE BEDCHAMBER (FOL. 61 B).

BERLIN, PREUSSISCHE STAATSBIBLIOTHEK. OR. FOL. 187.

Photo Staatsbibliothek, Berlin





FARID AD-DIN 'ATTAR, MANTIQ AT-TAYR

A. *Left*: THE PHOENIX BURNING IN THE FIRE, WHILE THE OTHER ANIMALS LOOK ON
(FOL. 96B).

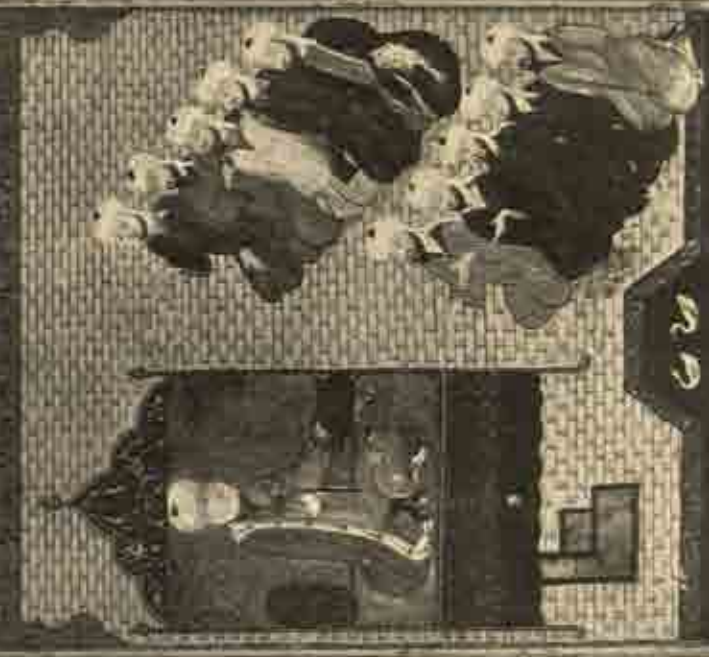
B. *Right*: THE BRETHREN OF JOSEPH, SUFFERING FROM FAMINE, COME TO BEG CORN
FROM THEIR BROTHER IN EGYPT (FOL. 114).

BERLIN, PREUSSISCHE STAATSBIBLIOTHEK. OR. OCT. 268.
DATED 860 A. H. (1456 A. D.).

Photo Staatsbibliothek, Berlin

تست مالی یوسف گفت شناس

برج بهد اید این و از آن کس



ده برادر پرکشت و نه از زمان

بگو گفت نامی عیسی زرق شناس

یوسف گفت که گفت مرغ ام درست

پیش یوسف از عیسی زرقان

کس چو والد تاج پانک یازن

دو کی کو یوسف شناسید

مردی ازادی و حبیب این شود

همی عجب روزی بود این روز

از جوی عیسی زرق شناس

تستی بیسی چون جمد از بال

زود و خشم شد شش می

مهری از پیله قوتی بی جان

خون چکه از گام و لرد

مال پر بر هم زد از پیش و

جد از آن همش کرد و حال

بس جود و خشم شد شش می



مردی ازادی و حبیب این شود

مهری از پیله قوتی بی جان

NIZĀMI, HAFT PAYKAR

Bahrām Gūr exhibiting his skill in shooting to his lutist, Fitna, who is seated on a horse in the centre of the picture. The signature "Biḥzād" may be seen in the extreme left-hand corner, at the bottom of the picture.

NEW YORK, METROPOLITAN MUSEUM OF ART.

PERSIAN MSS. NO. 10, VOL. 17 B.

Photo Metropolitan Museum, New York

سرور که در بهر سبید تو
ز شرف قوت جانان تو
که کشت ایوان و دیوار تو
که کشت ایوان و دیوار تو
که کشت ایوان و دیوار تو
که کشت ایوان و دیوار تو



HÄTIF, LAYLÄ AND MAJNÖN

A. *Left*: A PRINCE VISITING A HERMIT (FOL. 13B).

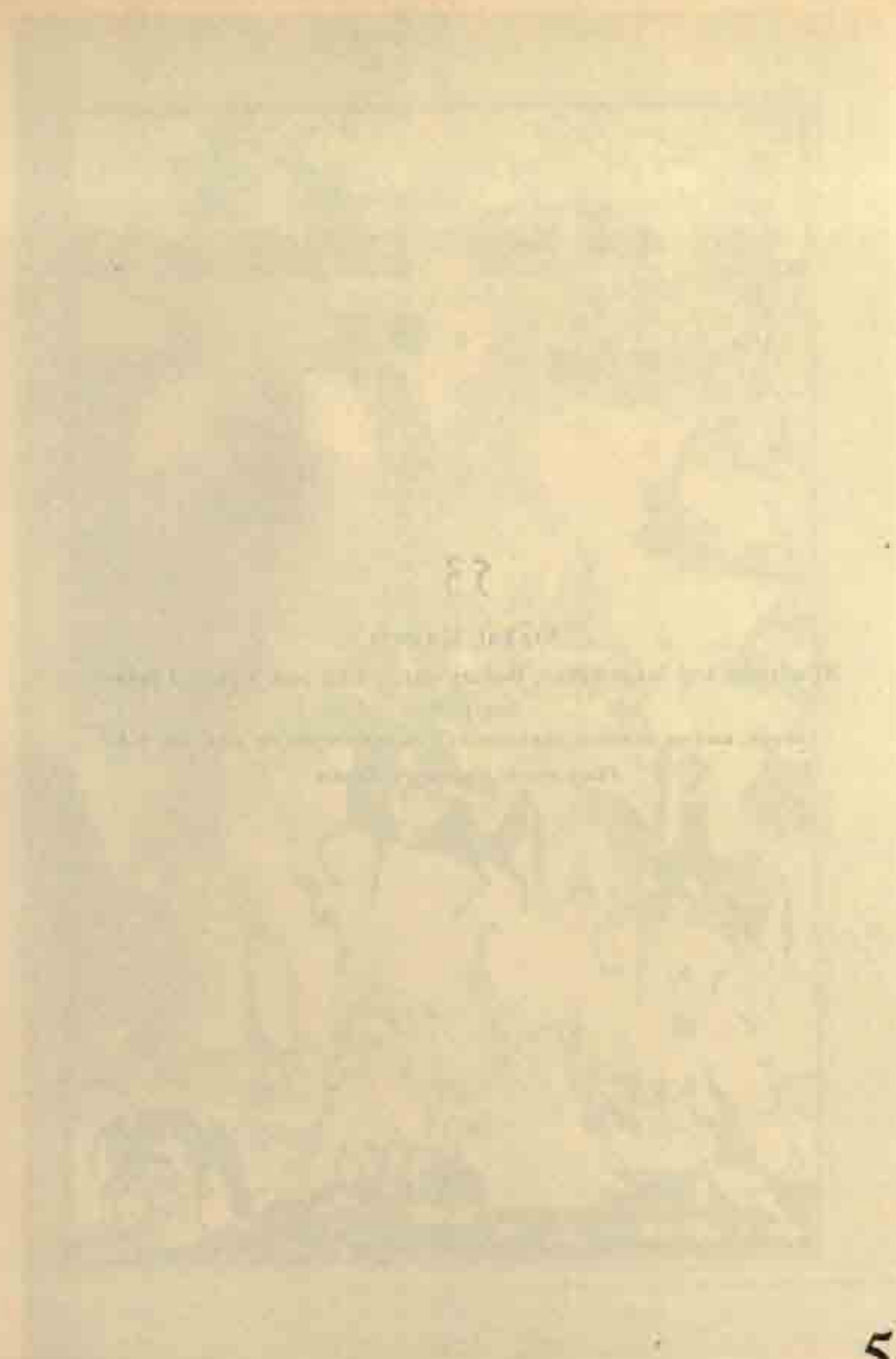
B. *Right*: MAJNÖN RUBBING HIS FACE ON THE FOOT OF A DOG THAT HAD TRODDEN
ON THE PATH ALONG WHICH LAYLÄ HAD WALKED (FOL. 44).

BERLIN, PREUSSISCHE STAATSBIBLIOTHEK, OR. OCT. 149.

DATED 941 A. H. (1534 A. D.).

Photo: Staatsbibliothek, Berlin





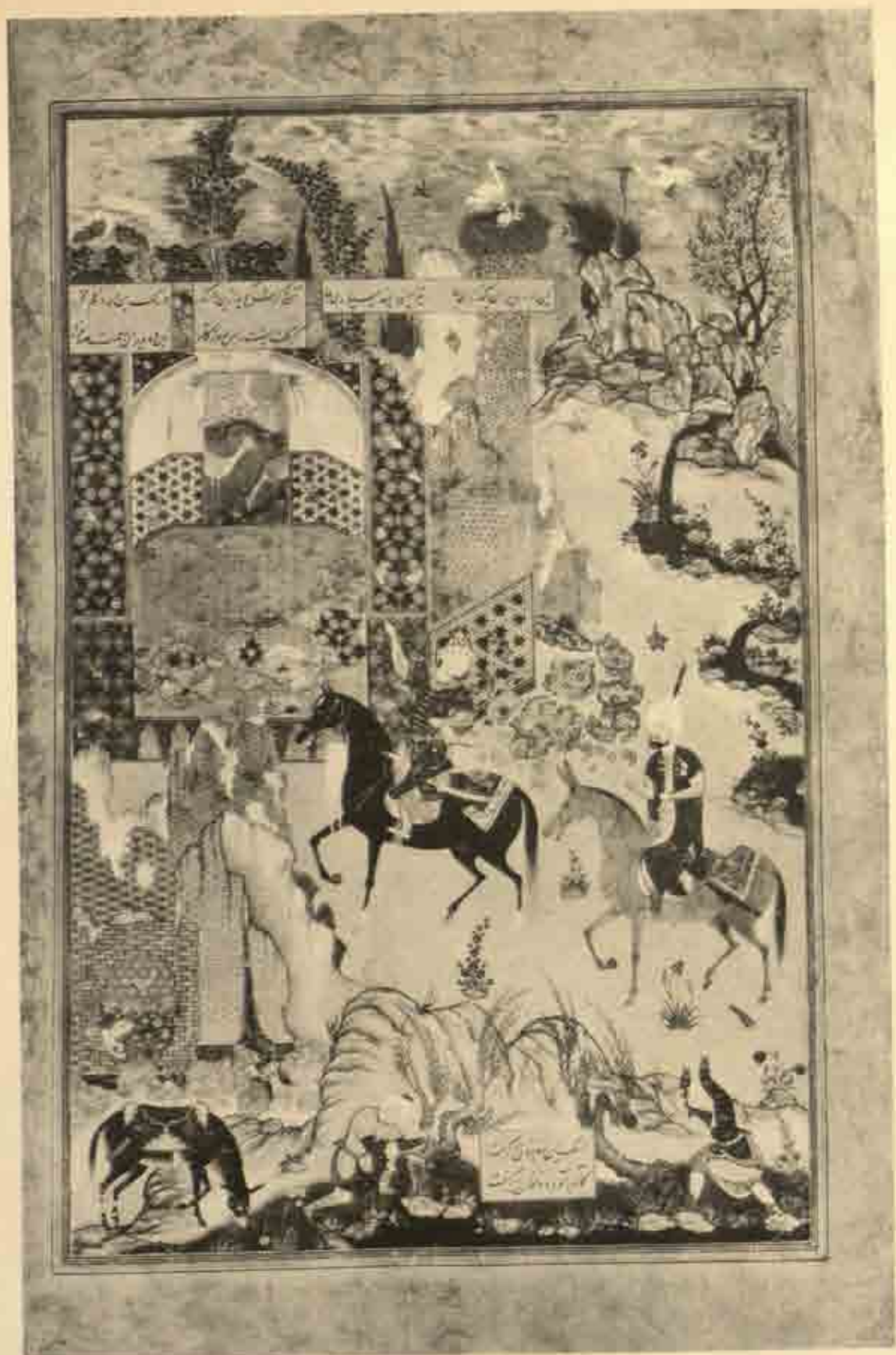
NIZĀMĪ, KHAMSA

Nūshīrwān and his minister, Buzurjmīhr, riding past a ruined palace.

See p. 80.

LONDON, BRITISH MUSEUM. DEPARTMENT OF MANUSCRIPTS, OR. 2265, VOL. 15B.

Photo Artists Illustrators, London



24

NIZĀMĪ, KHAMSĀ

- A. *Left*: ALEXANDER AND PLATO (FOL. 227).
 B. *Right*: ALEXANDER AND SOCRATES (FOL. 246).
 LONDON, LIBRARY OF THE ROYAL ASIATIC SOCIETY, MS. NO. 246.
Photo R. B. Fleming, London

و در این کتاب که از آن
 خود در هر روز بخوان
 همیشه و آنرا که در این
 کتاب است و در این کتاب
 است که در این کتاب
 است که در این کتاب

عنه و اسرارها را که در
چرخ قدرت است به دست
دلی خورشید خفته بود
به باغین انجمنه و مدائن
ایرانی بادیه بیست
عمود کندی می چرخانم
نقشه احوال این گنجینه

[illegible]

که در میان مردم است و هر که از ایشان
چیزی را بداند که در این کتاب نیست



موسم در بهار و تابستان
چهار وقت که در این کتاب
و کتب دیگر مذکور است
در این کتاب که در این کتاب

مجلس اول در بیان احوال و حال
مجلس دوم در بیان احوال و حال
مجلس سوم در بیان احوال و حال
مجلس چهارم در بیان احوال و حال
مجلس پنجم در بیان احوال و حال
مجلس ششم در بیان احوال و حال
مجلس هفتم در بیان احوال و حال
مجلس هشتم در بیان احوال و حال
مجلس نهم در بیان احوال و حال
مجلس دهم در بیان احوال و حال

بروای که در کتب کلاسیک
چون کتب کوفی و کوفی
شماره اول و دوم و سوم
از جمله کتب کلاسیک
در کتب کلاسیک و کلاسیک

۱۰۰
 ۱۰۱
 ۱۰۲
 ۱۰۳
 ۱۰۴
 ۱۰۵
 ۱۰۶
 ۱۰۷
 ۱۰۸
 ۱۰۹
 ۱۱۰
 ۱۱۱
 ۱۱۲
 ۱۱۳
 ۱۱۴
 ۱۱۵
 ۱۱۶
 ۱۱۷
 ۱۱۸
 ۱۱۹
 ۱۲۰
 ۱۲۱
 ۱۲۲
 ۱۲۳
 ۱۲۴
 ۱۲۵
 ۱۲۶
 ۱۲۷
 ۱۲۸
 ۱۲۹
 ۱۳۰
 ۱۳۱
 ۱۳۲
 ۱۳۳
 ۱۳۴
 ۱۳۵
 ۱۳۶
 ۱۳۷
 ۱۳۸
 ۱۳۹
 ۱۴۰
 ۱۴۱
 ۱۴۲
 ۱۴۳
 ۱۴۴
 ۱۴۵
 ۱۴۶
 ۱۴۷
 ۱۴۸
 ۱۴۹
 ۱۵۰
 ۱۵۱
 ۱۵۲
 ۱۵۳
 ۱۵۴
 ۱۵۵
 ۱۵۶
 ۱۵۷
 ۱۵۸
 ۱۵۹
 ۱۶۰
 ۱۶۱
 ۱۶۲
 ۱۶۳
 ۱۶۴
 ۱۶۵
 ۱۶۶
 ۱۶۷
 ۱۶۸
 ۱۶۹
 ۱۷۰
 ۱۷۱
 ۱۷۲
 ۱۷۳
 ۱۷۴
 ۱۷۵
 ۱۷۶
 ۱۷۷
 ۱۷۸
 ۱۷۹
 ۱۸۰
 ۱۸۱
 ۱۸۲
 ۱۸۳
 ۱۸۴
 ۱۸۵
 ۱۸۶
 ۱۸۷
 ۱۸۸
 ۱۸۹
 ۱۹۰
 ۱۹۱
 ۱۹۲
 ۱۹۳
 ۱۹۴
 ۱۹۵
 ۱۹۶
 ۱۹۷
 ۱۹۸
 ۱۹۹
 ۲۰۰
 ۲۰۱
 ۲۰۲
 ۲۰۳
 ۲۰۴
 ۲۰۵
 ۲۰۶
 ۲۰۷
 ۲۰۸
 ۲۰۹
 ۲۱۰
 ۲۱۱
 ۲۱۲
 ۲۱۳
 ۲۱۴
 ۲۱۵
 ۲۱۶
 ۲۱۷
 ۲۱۸
 ۲۱۹
 ۲۲۰
 ۲۲۱
 ۲۲۲
 ۲۲۳
 ۲۲۴
 ۲۲۵
 ۲۲۶
 ۲۲۷
 ۲۲۸
 ۲۲۹
 ۲۳۰
 ۲۳۱
 ۲۳۲
 ۲۳۳
 ۲۳۴
 ۲۳۵
 ۲۳۶
 ۲۳۷
 ۲۳۸
 ۲۳۹
 ۲۴۰
 ۲۴۱
 ۲۴۲
 ۲۴۳
 ۲۴۴
 ۲۴۵
 ۲۴۶
 ۲۴۷
 ۲۴۸
 ۲۴۹
 ۲۵۰
 ۲۵۱
 ۲۵۲
 ۲۵۳
 ۲۵۴
 ۲۵۵
 ۲۵۶
 ۲۵۷
 ۲۵۸
 ۲۵۹
 ۲۶۰
 ۲۶۱
 ۲۶۲
 ۲۶۳
 ۲۶۴
 ۲۶۵
 ۲۶۶
 ۲۶۷
 ۲۶۸
 ۲۶۹
 ۲۷۰
 ۲۷۱
 ۲۷۲
 ۲۷۳
 ۲۷۴
 ۲۷۵
 ۲۷۶
 ۲۷۷
 ۲۷۸
 ۲۷۹
 ۲۸۰
 ۲۸۱
 ۲۸۲
 ۲۸۳
 ۲۸۴
 ۲۸۵
 ۲۸۶
 ۲۸۷
 ۲۸۸
 ۲۸۹
 ۲۹۰
 ۲۹۱
 ۲۹۲
 ۲۹۳
 ۲۹۴
 ۲۹۵
 ۲۹۶
 ۲۹۷
 ۲۹۸
 ۲۹۹
 ۳۰۰
 ۳۰۱
 ۳۰۲
 ۳۰۳
 ۳۰۴
 ۳۰۵
 ۳۰۶
 ۳۰۷
 ۳۰۸
 ۳۰۹
 ۳۱۰
 ۳۱۱
 ۳۱۲
 ۳۱۳
 ۳۱۴
 ۳۱۵
 ۳۱۶
 ۳۱۷
 ۳۱۸
 ۳۱۹
 ۳۲۰
 ۳۲۱
 ۳۲۲
 ۳۲۳
 ۳۲۴
 ۳۲۵
 ۳۲۶
 ۳۲۷
 ۳۲۸
 ۳۲۹
 ۳۳۰
 ۳۳۱
 ۳۳۲
 ۳۳۳
 ۳۳۴
 ۳۳۵
 ۳۳۶
 ۳۳۷
 ۳۳۸
 ۳۳۹
 ۳۴۰
 ۳۴۱
 ۳۴۲
 ۳۴۳
 ۳۴۴
 ۳۴۵
 ۳۴۶
 ۳۴۷
 ۳۴۸
 ۳۴۹
 ۳۵۰
 ۳۵۱
 ۳۵۲
 ۳۵۳
 ۳۵۴
 ۳۵۵
 ۳۵۶
 ۳۵۷
 ۳۵۸
 ۳۵۹
 ۳۶۰
 ۳۶۱
 ۳۶۲
 ۳۶۳
 ۳۶۴
 ۳۶۵
 ۳۶۶
 ۳۶۷
 ۳۶۸
 ۳۶۹
 ۳۷۰
 ۳۷۱
 ۳۷۲
 ۳۷۳
 ۳۷۴
 ۳۷۵
 ۳۷۶
 ۳۷۷
 ۳۷۸
 ۳۷۹
 ۳۸۰
 ۳۸۱
 ۳۸۲
 ۳۸۳
 ۳۸۴
 ۳۸۵
 ۳۸۶
 ۳۸۷
 ۳۸۸
 ۳۸۹
 ۳۹۰
 ۳۹۱
 ۳۹۲
 ۳۹۳
 ۳۹۴
 ۳۹۵
 ۳۹۶
 ۳۹۷
 ۳۹۸
 ۳۹۹
 ۴۰۰
 ۴۰۱
 ۴۰۲
 ۴۰۳
 ۴۰۴
 ۴۰۵
 ۴۰۶
 ۴۰۷
 ۴۰۸
 ۴۰۹
 ۴۱۰
 ۴۱۱
 ۴۱۲
 ۴۱۳
 ۴۱۴
 ۴۱۵
 ۴۱۶
 ۴۱۷
 ۴۱۸
 ۴۱۹
 ۴۲۰
 ۴۲۱
 ۴۲۲
 ۴۲۳
 ۴۲۴
 ۴۲۵
 ۴۲۶
 ۴۲۷
 ۴۲۸
 ۴۲۹
 ۴۳۰
 ۴۳۱
 ۴۳۲
 ۴۳۳
 ۴۳۴
 ۴۳۵
 ۴۳۶
 ۴۳۷
 ۴۳۸
 ۴۳۹
 ۴۴۰
 ۴۴۱
 ۴۴۲
 ۴۴۳
 ۴۴۴
 ۴۴۵
 ۴۴۶
 ۴۴۷
 ۴۴۸
 ۴۴۹
 ۴۵۰
 ۴۵۱
 ۴۵۲
 ۴۵۳
 ۴۵۴
 ۴۵۵
 ۴۵۶
 ۴۵۷
 ۴۵۸
 ۴۵۹
 ۴۶۰
 ۴۶۱
 ۴۶۲
 ۴۶۳
 ۴۶۴
 ۴۶۵
 ۴۶۶
 ۴۶۷
 ۴۶۸
 ۴۶۹
 ۴۷۰
 ۴۷۱



مجلسه اول

المجلد الثانی

22

55

NIZĀMĪ, HAFT PAYKAR

Bahrām Gūr visiting the Princess of India in the Black Palace.

BERLIN, PREUSSISCHE STAATSBIBLIOTHEK. DIEZ A. VOL. 7, FOL. 301.

PROBABLY EARLY XVI CENT. A.D.

Photo Staatsbibliothek, Berlin



56

HUSAYN AL-KĀSHIFĪ, RAWḌAT ASH-SHUHADĀ

The sale of Joseph in Egypt.

BERLIN, PREUSSISCHE STAATSBIBLIOTHEK. DIEZ A. FOL. 5, VOL. 28.

Photo Staatsbibliothek, Berlin

20

توای دیگر دست زبانه و دهان و چشم و گوش و بینی و لب و دندان و زبان و کف و پاشنه و انگشتان و



پیش از آنکه هر چه در این کتاب است که به دست من رسیده است به شما بگویم که اگر چه در این کتاب

57

HUSAYN AL-KĀSHIF, RAWḌAT ASH-SHUHADĀ

The Wife of Hārith imploring her husband to spare the lives of the children of
Muslim, the envoy of Imām Ḥusayn.

BERLIN, PREUSSISCHE STAATSBIBLIOTHEK. DIEZ A. FOL. 5, FOL. 141B.

Photo Staatsbibliothek, Berlin

آلود زبیر خفاشیان | بر مینر کنز و لای ش

۱۰۰ ش با بکس و کما این سخن که دو نوبت آن کس را در جهنم کی می افتد و خود می خندد و می گوید که خدا شوم شد با او که



چون که جهان را شکست نایب و دایه الیق هر برشته آتی و کواکب را پیش ما افشاید
سپهر است تمام انوار از این سپهر و نورانی عالم است نو و چون یک گشت به صبح کشد

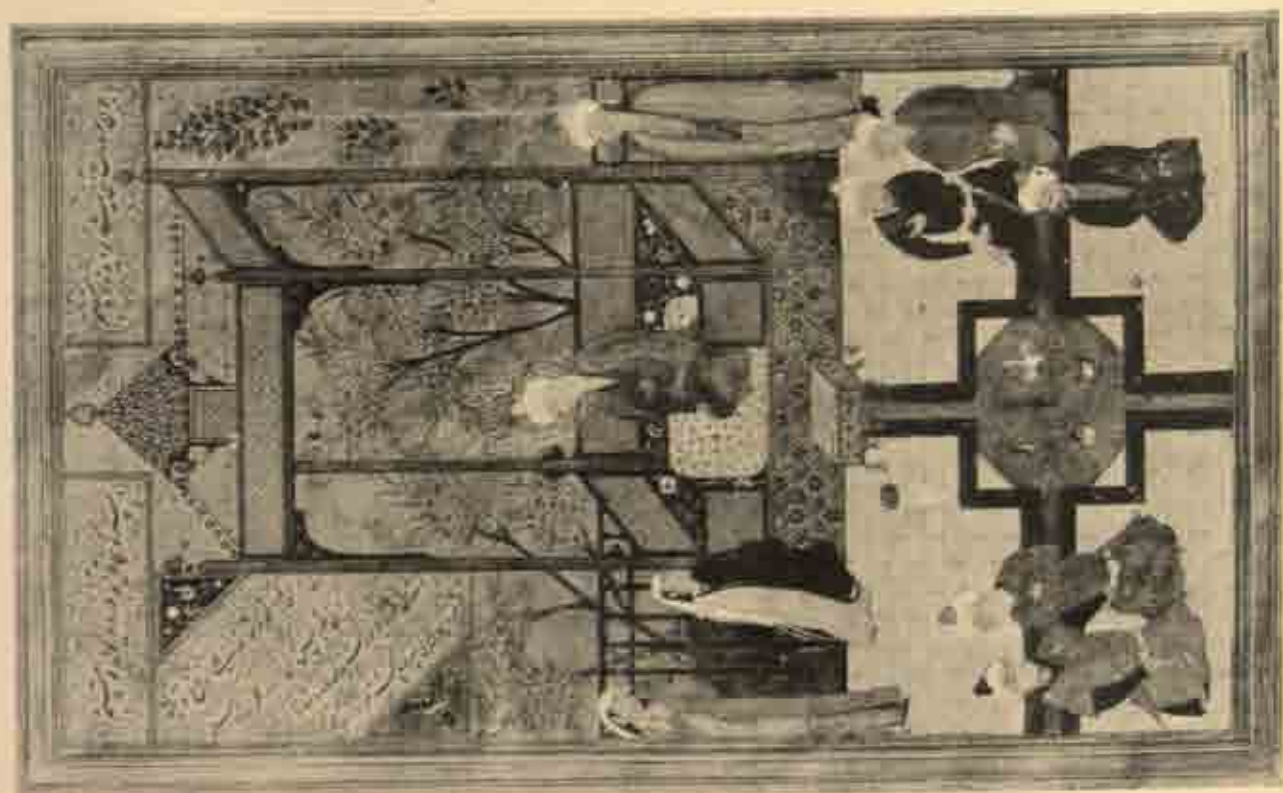
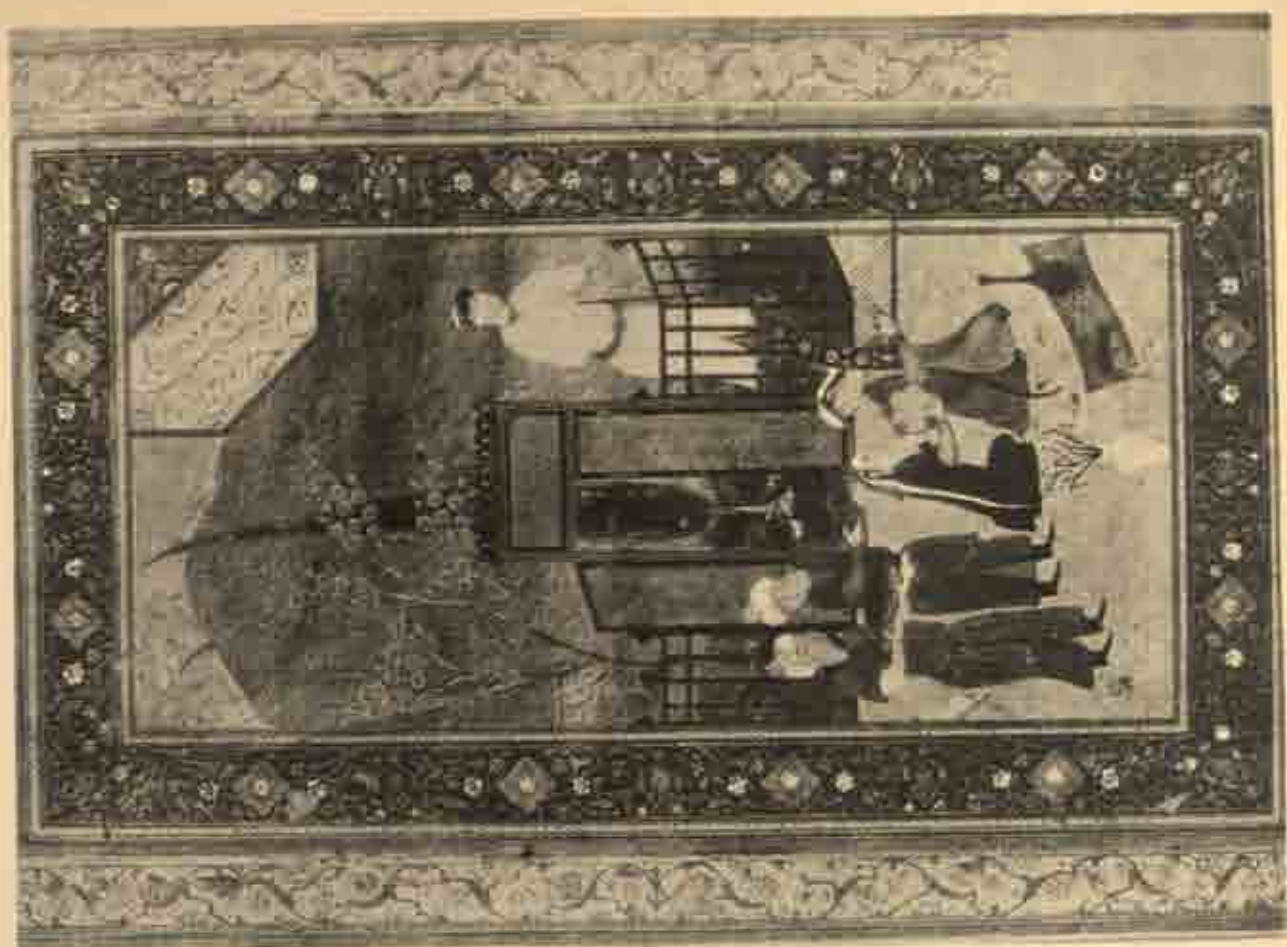
ALBUM OF SULTAN MURAD III

A. *Left*: A YOUNG MAN, PROBABLY INTENDED FOR JOSEPH, SEATED IN A PAVILION
IN A GARDEN, WITH MEN AND WOMEN IN ATTENDANCE (FOL. 6).

B. *Right*: FEMALE MUSICIANS AND ATTENDANTS (FOL. 8).

VIENNA, NATIONAL LIBRARY. MIXT. 343.

Photo National Library, Vienna



07

ALBUM OF SULTAN MURĀD III

A Şafawid prince, wearing a gown of figured velvet,
leaning on a staff and resting and reading a book.

VIENNA, NATIONAL LIBRARY. MIXT. 313, FOL. 36.

Photo Jaffé, Vienna

همانی پاک بزم پاک ره بود

که پاک بزم روسی در کرد

چنین خرم که در دین علم

که در این در افتاد و نام

چو در آید شش است کرد

سواد که در این حالت بید

همی گفت از میان موج و شبنم



چنین خرم که در دین علم

که در این در افتاد و نام

چو در آید شش است کرد

THE UNIVERSITY OF CHICAGO
CHICAGO, ILLINOIS 60637
U.S.A.
TEL: (773) 936-3100
FAX: (773) 936-3100
WWW: WWW.CHICAGO.EDU

ALBUM OF SULTAN MURĀD III

The entrance to the harem of the palace, the front of which is decorated with coloured tiles; the ladies are looking out of a balcony, while a female servant at the door speaks to one of the door-keepers.

VIENNA, NATIONAL LIBRARY. MIXT. 313, FOL. 29.

Photo Jaffé, Vienna



THE UNIVERSITY OF CHICAGO
LIBRARY
540 EAST 57TH STREET
CHICAGO, ILL. 60637

10

ALBUM OF SULTAN MURÂD III

Lacquered pictures, probably book-covers.

A. *Left*: TEN PERSONS PRACTISING ARCHERY (FOL. 48).

B. *Right*: LIONS IN VARIOUS ATTITUDES (FOL. 51).

VIENNA, NATIONAL LIBRARY. MINT. 313.

Photo Jaffé, Vienna



ISHĀQ B. IBRĀHĪM B. MANSŪR B. KHALAF AN-NĪSHĀPŪRĪ
 Qiṣaṣ al-Anbiyā (Biographies of the Prophets)
 Noah in the Ark.

BERLIN, PREUSSISCHE STAATSBIBLIOTHEK. DIEZ A. FOL. 3, VOL. 73.
 DATED 984 A. H. (1577 A. D.).

Photo Staatsbibliothek, Berlin

جای عالی گشت زمین را که ای زمین و آب باز بگو ای آسمان و آب و زمین باز بگو ای آسمان
نویسند که گشت و کشتی نوح عیسی السلام بر کوه و جوی رامت باز بگو ای آسمان و آب و زمین باز بگو



که هر چنان آب گرفتند از شرق تا غرب نام که ای جهان عجز تو به و جلی که آب
از تو بر تو به و عجز که گشت و کشتی نوح عیسی السلام باز بگو ای آسمان و آب و زمین باز بگو

70.

ISHĀQ B. IBRĀHĪM B. MANSŪR B. KHALAF AN-NISHĀPŪRĪ

Qīṣaṣ al-Anbiyā (Biographies of the Prophets)

Abraham, just about to sacrifice Ismael (whom the majority of Muhammadan commentators substitute for Isaac on this occasion),
is checked by the angel who brings a ram.

BERLIN, PREUSSISCHE STAATSBIBLIOTHEK. DIEZ A. FOL. 3, FOL. 41.

DATED 984 A. H. (1577 A. D.).

Photo Staatsbibliothek, Berlin

گفت یاری خواستم آن وقت که بکش روی یک شد و او هم این زمان بگوش بکش و بی خواهم زدم
 برین برسم و واسطه در کش و گرفت و پاورد و گفت اکنون بکنم عرض گفت این نه ای



است این را بکش و زبان کن ابراهیم عبد السلام ان اقربان که و پس از صبح و پس
 شاد شد و اسماعیل ترشای که و مشک که و شد در خدایه و خود جل بران که اویش برانند و او

10

ISHĀQ B. IBRĀHĪM B. MANṢŪR B. KHALAF AN-NĪSHĀPŪRĪ

Qīṣaṣ al-Anbiyā (Biographies of the Prophets)

Joseph discovered in the well by the servants of the merchant travelling to Egypt.

BERLIN, PREUSSISCHE STAATSBIBLIOTHEK. DIEZ A. FOL. 3, FOL. 55B.

DATED 984 A. H. (1577 A. D.).

Photo Staatsbibliothek, Berlin

بر خواست و اندر این دو نشست و دستها برین استدار کرد چون دلو را بر کشیدند گمان
کردند یوسف را دیده اند باین صورت فریاد برآورد و اندک برسی از چاه برآمد و یوسف



نفت آید و مشغول مردمان در سر چاه غرق که اندر برآورد آن یوسف بپیر چاه افتاد و گمان
زند که حال چیست یوسف را دیدند زنده و سلامت گفتند که این مقام یافت و گمان است

२०

65

FIRDAWSI, SHĀH-NĀMA

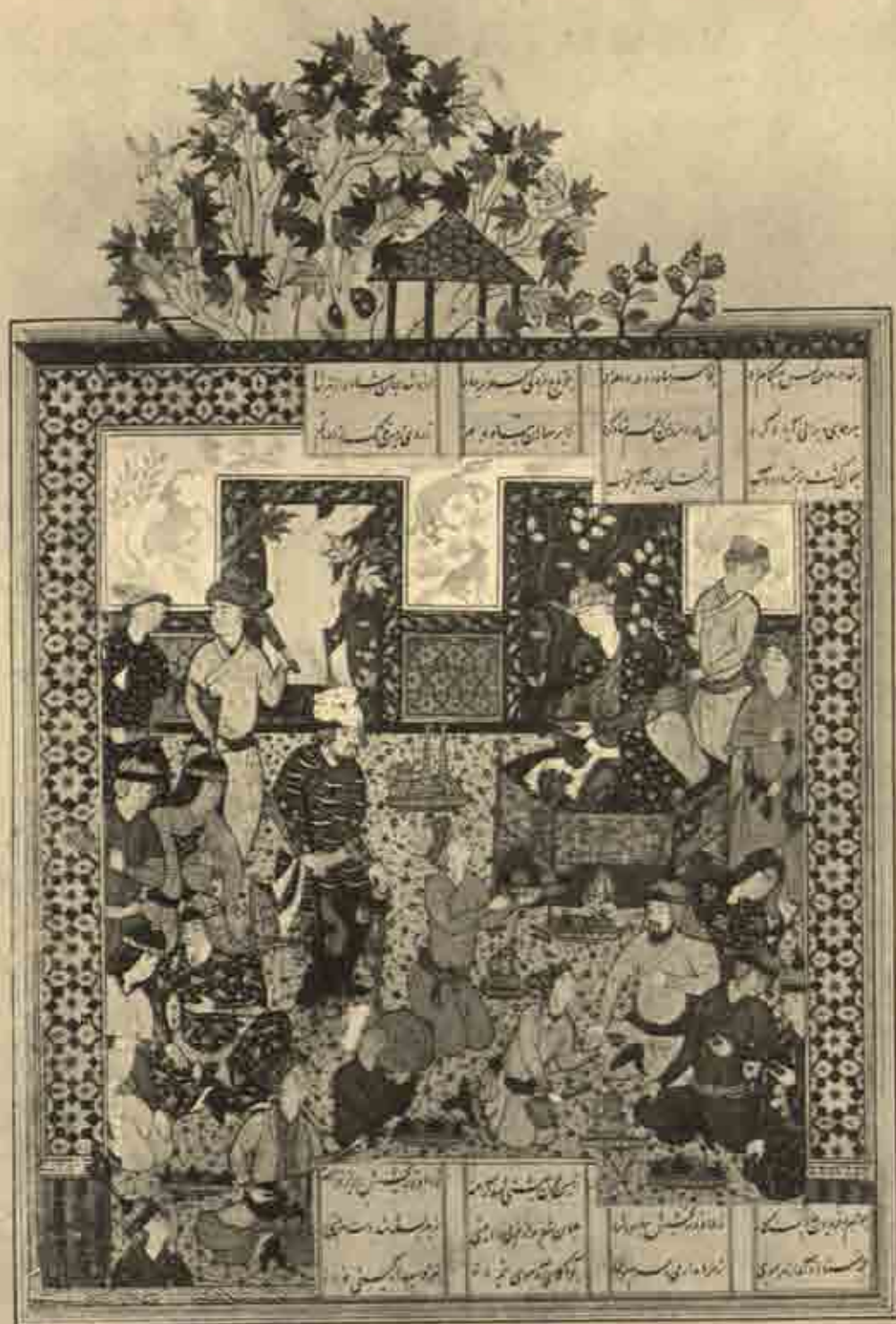
Rustam at the court of the Shāh.

BERLIN, PREUSSISCHE STAATSBIBLIOTHEK. DIEZ A. FOL. I, FOL. 197.

DATED 1002 A. H. (1593 A. D.).

Photo Staatsbibliothek, Berlin

۶۵



dd

NIZĀMĪ, KHAMSA

Alexander comes upon the auditory of a religious teacher who has smitten his hearers with insensibility as a punishment for their lack of attention.

ROME, ACCADEMIA DEI LINCEI MS. A. B. 9, FOL. 303.

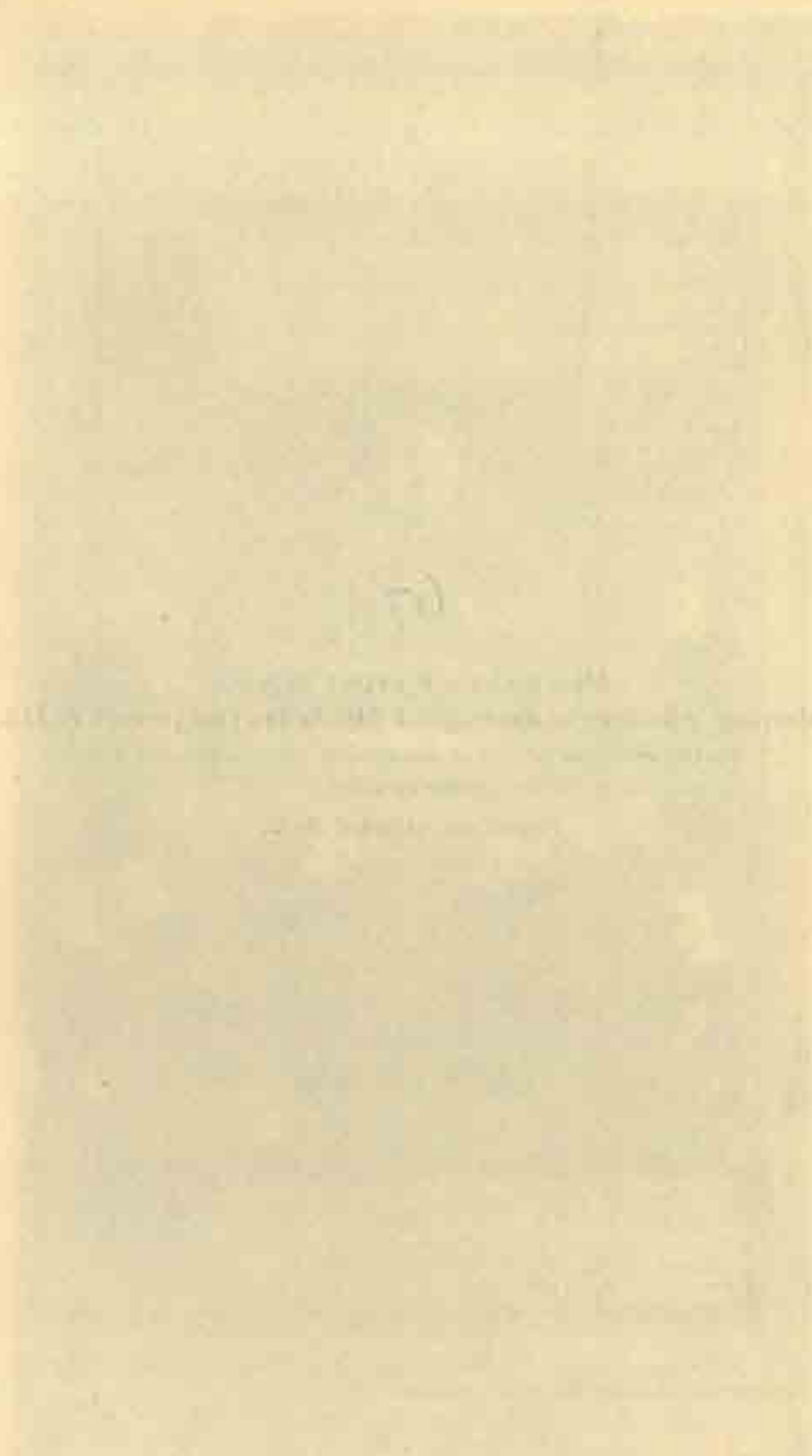
COPIED ABOUT 1590 A.D.

Photo Sansaini, Rome

سوم و دوازدهم که در آن روز	نمود آنچه در آن وقت	مختصانی که پند و اندرز	بر ایشان روزی از آن
ایشان را که در آن روز	سوی در آن وقت	و گویند که در آن وقت	و گویند که در آن وقت
چهارم و پانزدهم که در آن روز	نمود آنچه در آن وقت	مختصانی که پند و اندرز	بر ایشان روزی از آن



پانزدهم و شانزدهم که در آن روز	نمود آنچه در آن وقت	مختصانی که پند و اندرز	بر ایشان روزی از آن
پانزدهم و شانزدهم که در آن روز	نمود آنچه در آن وقت	مختصانی که پند و اندرز	بر ایشان روزی از آن
پانزدهم و شانزدهم که در آن روز	نمود آنچه در آن وقت	مختصانی که پند و اندرز	بر ایشان روزی از آن



MIRKHWĀND, RAWDAT AŞ-ŞAFĀ

Marriage rejoicings in the reign of Alp Arslān (1063—1072 A.D.).

BERLIN, PREUSSISCHE STAATSBIBLIOTHEK. OR. FOL. 169, FOL. 110.

COPIED 1604 A.D.

Photo Staatsbibliothek, Berlin



30

MIRKHWĀND, RAWDAT AS-ŞAFĀ

When Sultan Tukush, Shāh of Khwārizm, in 1192 marched on Rayy to attack the Saljūq Sultan Tughril, Bahā ad-Dīn Muhammad, great grandfather of the historian Juwaynī, recited a quatrain in his honour; this so delighted the Shāh that he had it sung to him while he sat drinking wine, until he emptied a whole wine-jar.

BERLIN, PREUSSISCHE STAATSBIBLIOTHEK, OR. FOL. 169, FOL. 148B.

COPIED 1604 A.D.

Photo Staatsbibliothek, Berlin



98

THE UNIVERSITY OF CHICAGO

LIBRARY

540 EAST 57TH STREET, CHICAGO, ILL. 60637

TEL: 773-936-5000

FAX: 773-936-5000

69

MIRKHWĀND, RAWDAT AS-ŞAFĀ

A convivial gathering.

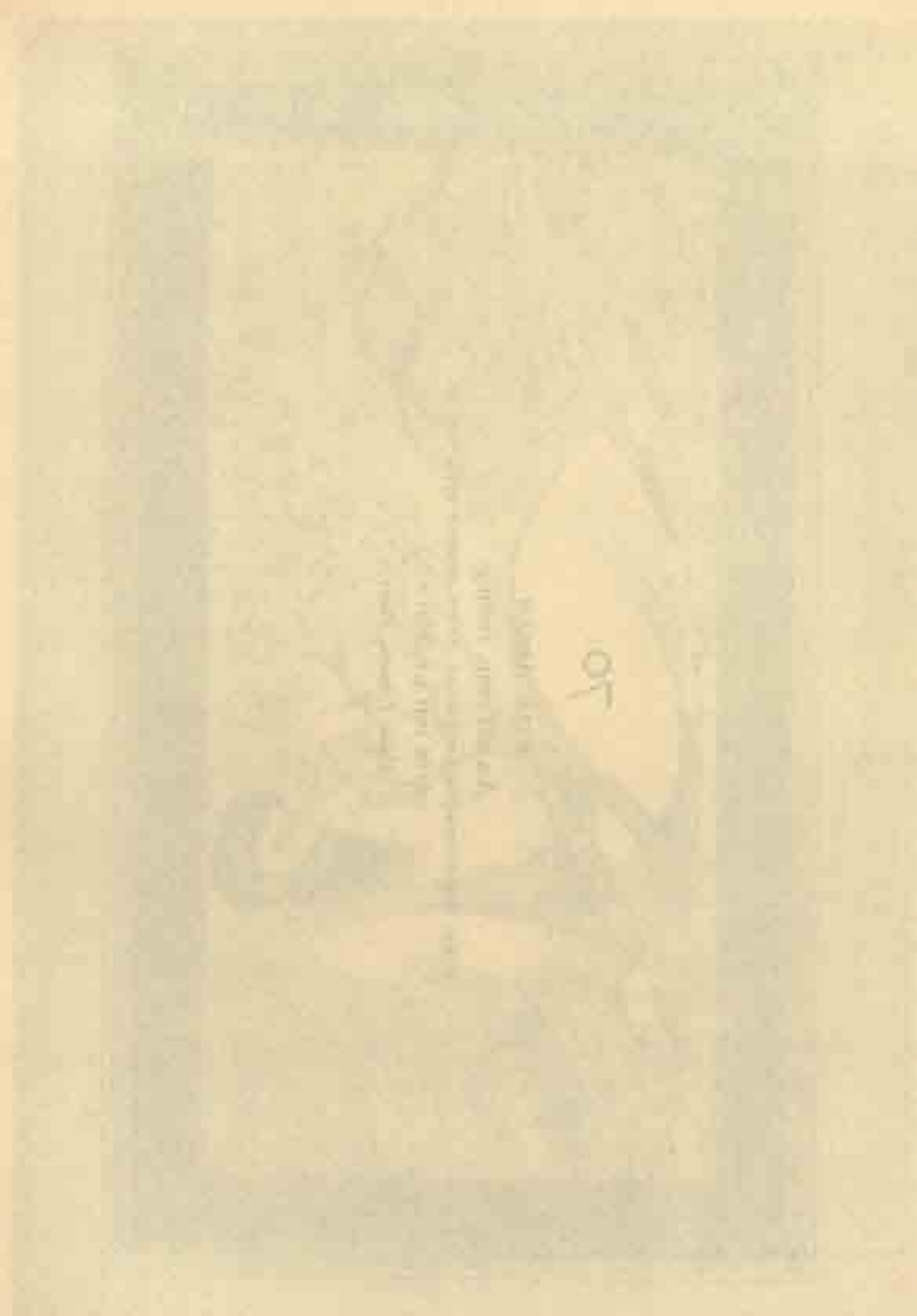
BERLIN, PREUSSISCHE STAATSBIBLIOTHEK. OR. FOL. 169, VOL. 256.

COPIED 1604 A.D.

Photo Staatsbibliothek, Berlin

ed

[illegible]



70

RIZĀ 'ABBĀSĪ

An old man, resting.

PARIS, BIBLIOTHÈQUE NATIONALE. SUPPL. PERSAN 1571, FOL. 22.

DATED 1031 A. H. (1621 A. D.).

Photo Lemaitre, Paris



NIZĀMI, KHUSRAW AND SHĪRĪN

Illustrated by Rīzā 'Abbāsī

A complete description of this MS. is given in *The Burlington Magazine*,
XXXVIII (1920), p. 61 ff.

Khusrāw entertained by Shīrīn.

SOUTH KENSINGTON, LIBRARY OF THE VICTORIA AND ALBERT MUSEUM, VOL. 73.

THE COLOPHON BEARS THE DATE 1091 A.H. (1680 A.D.).

Photo of the Museum

از منوچهر شانت نهاد
و شانی چمن بر پاستاد
نخست پیش شاه پستاد



چرخ کبک باد آورد کجور
نشته کرد او ده نهار پستاد
وزر اسرافات پستاد

57

72

NIZĀMI, KHUSRAW AND SHIRĪN

Illustrated by Rīzā 'Abbāsī

Khusraw in battle makes his elephant trample on the body of the fallen enemy.

SOUTH KENSINGTON, LIBRARY OF THE VICTORIA AND ALBERT MUSEUM, VOL. 88.

DATED 1091 A. H. (1680 A. D.).

Photo of the Museum

55

ملک در جنبش آمد بر سر پل
بروز پل پای خوشتر

سوی برام شد چو شند چون



شکست اما در چشم

بیای پل بردان پل
بغض فال چو گوشت مرز

همیشه

85

73

NIZĀMI, KHUSRAW AND SHĪRĪN

Illustrated by Rīzā 'Abbāsī

Shīrīn giving Farhād a cup of water to drink.

SOUTH KENSINGTON, LIBRARY OF THE VICTORIA AND ALBERT MUSEUM, FOL. 134.

DATED 1091 A.H. (1680 A.D.).

Photo of the Museum

13

شکر لب شیرینی دست می داد

دلمان پس شیرین گفت فرهاد

همیشه داشت با شاعر شیر

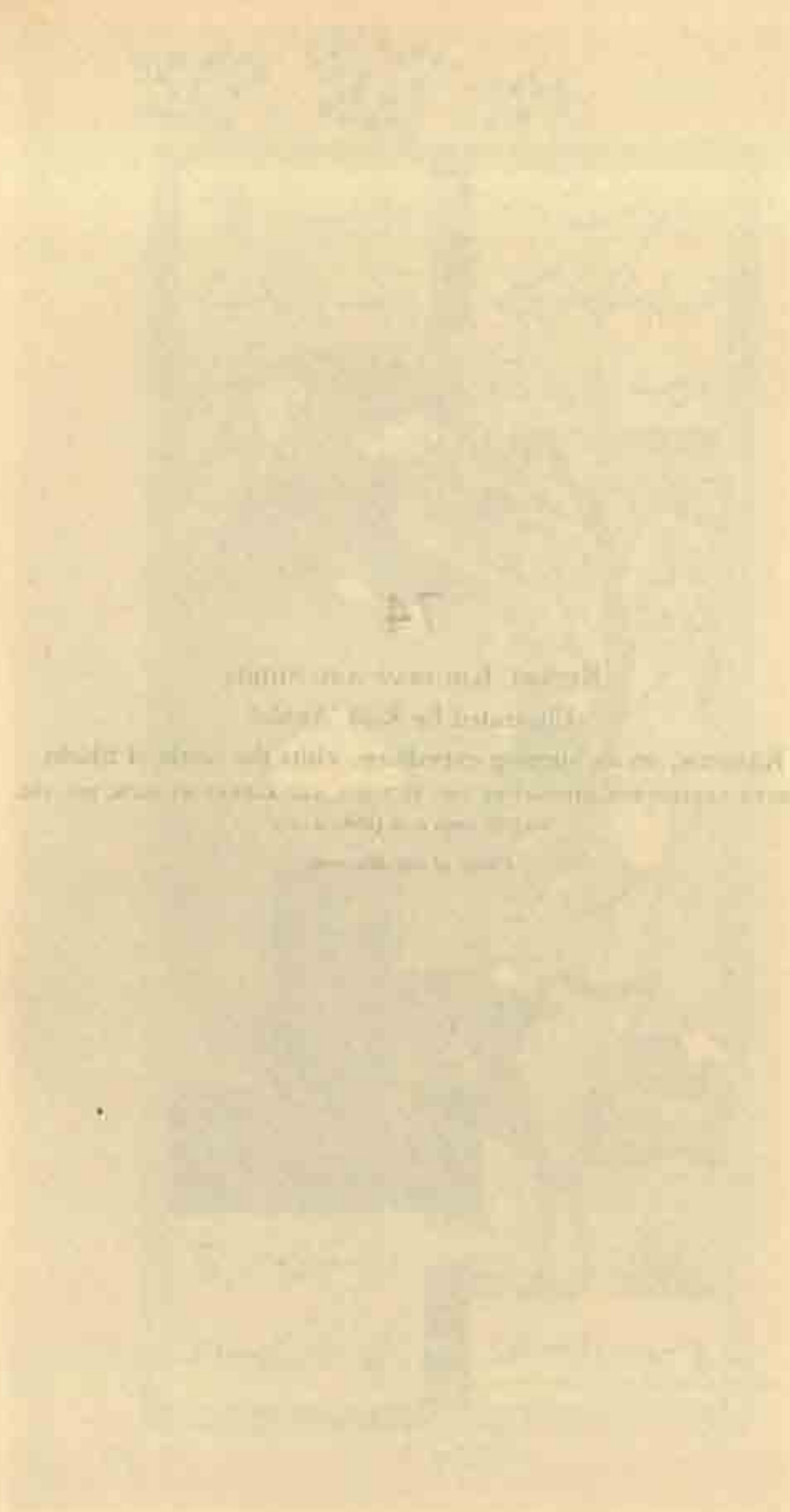


پس شیرین را دین بر باد می کرد

شیرینی شکوهم چون شکر چو در

پس شیرین گفت شیرین چو در

محمّد علی



NIZĀMĪ, KHUSRAW AND SHĪRĪN

Illustrated by Rīzā 'Abbāsī

Khusrāw, on an hunting expedition, visits the castle of Shīrīn.

SOUTH KENSINGTON, LIBRARY OF THE VICTORIA AND ALBERT MUSEUM, FOL. 166.

DATED 1091 A. H. (1680 A. D.).

Photo of the Museum

بسوی بویافته آید خزان
کشاوار کوشکی مرکش بعسل
ساز صمد و اندام و آید خوش

ز میس سید شد را چون بخت
نیم شبه ز راه کردشین بخت



عرق افشان خسرو کرد پیرانه

چمن کج و از دول آن سپه و بی

چرخش و دید با دست بکشی

85

THEORY OF THE EARTH

OF THE EARTH

The theory of the earth is a branch of geology which deals with the origin and development of the earth and its various parts. It is a science which seeks to explain the causes of the various geological phenomena which we observe in nature. The theory of the earth is a branch of geology which deals with the origin and development of the earth and its various parts. It is a science which seeks to explain the causes of the various geological phenomena which we observe in nature.

THEORY OF THE EARTH

OF THE EARTH

PORTRAIT OF RIZA 'ABBASI

BY MU'IN MUŞAWWIR

See *The Journal of Indian Art* XVII, No. 135, July 1916, p. 69.

The inscription is as follows: "The portrait of my late master, who has gone to his rest, on whom God has had mercy, Rīzā 'Abbāsī the painter, known by the name of Rīzā 'Abbāsī Ash'ar (?); it was painted in the month of Shawwāl 1044 (March 1635). In the month of Dhū'l-Qa'da of the same year (April) he passed from his transitory life to the life eternal; and this portrait was finished 40 years later on the 14th of the month of Ramadān of the year 1084 (24 December, 1673), in accordance with the wish of my son, Muḥammad Naṣīrā. Mu'īn Muṣawwir (may his sins be forgiven!)."

Photo Artists Illustrators, London



THE END OF THE

THE END OF THE

THE END OF THE

THE END OF THE

THE END OF THE

THE END OF THE

THE END OF THE

THE END OF THE

THE END OF THE

THE END OF THE

THE END OF THE

20

MUHAMMAD RIZĀ NAW'Ī, SŪZ U GUDĀZ

This poem tells the story of a Hindu girl who insisted on burning herself on the pyre of her betrothed, who had been accidentally killed just before their marriage was to have taken place.

A. *Left*: PRINCE DĀNIVĀL, SON OF THE EMPEROR AKBAR, TRYING TO DISSUADE THE HINDU GIRL FROM HER INTENTION OF SELF-IMMOLATION (FOL. 15).

B. *Right*: THE HINDU GIRL THROWING HERSELF INTO THE BLAZING PYRE OF HER DEAD BETROTHED (FOL. 17).

PARIS. BIBLIOTHÈQUE NATIONALE. SUPPL. PERSAN 1572.
ABOUT THE MIDDLE OF THE XVII CENTURY.

Photo Lemire, Paris

77

I am, Sir, your obedient servant,
and the most humble of your servants,
J. H. P. [Signature]

FATH 'ALĪ KHĀN KĀSHĪ

the court poet of Fath 'Alī Shāh, King of Persia (1797—1834), Shāhinshāh-nāma

Fath 'Alī Shāh on his throne receiving revenue.

LONDON, INDIA OFFICE LIBRARY, ETHÉ 901, VOL. 32.

Photo R. B. Fleming, London

سوی سبکگو به پادشاه دست	نکته را با و رنگ در پیش	نحوه بسته به پادشاه پادشاهی	نحوه به پادشاه پادشاهی
نزد روبرو و آن به پادشاه	همراه آورده اند و پیش	همان نامه که از رخ نگار	سما را در کجای می کشاد



کر افایه بر وزیر رطانی رسید	از نحوه وزیر به پادشاه رسید	و که به پادشاه از کلاه به پادشاه کرد	پادشاه که آن شاه ادای کرد
مکتب از افغان با کمالی کلاه	رو به بر کشیده و آن پادشاه	برخ آفتاب و بیابان چو در	بر آن صرع و این بر سر آمد

87

78

PRINCE 'IMĀD AD-DAWLĀ

by Mīrzā Abū'l-Hasan Ghaffārī Qāshānī.

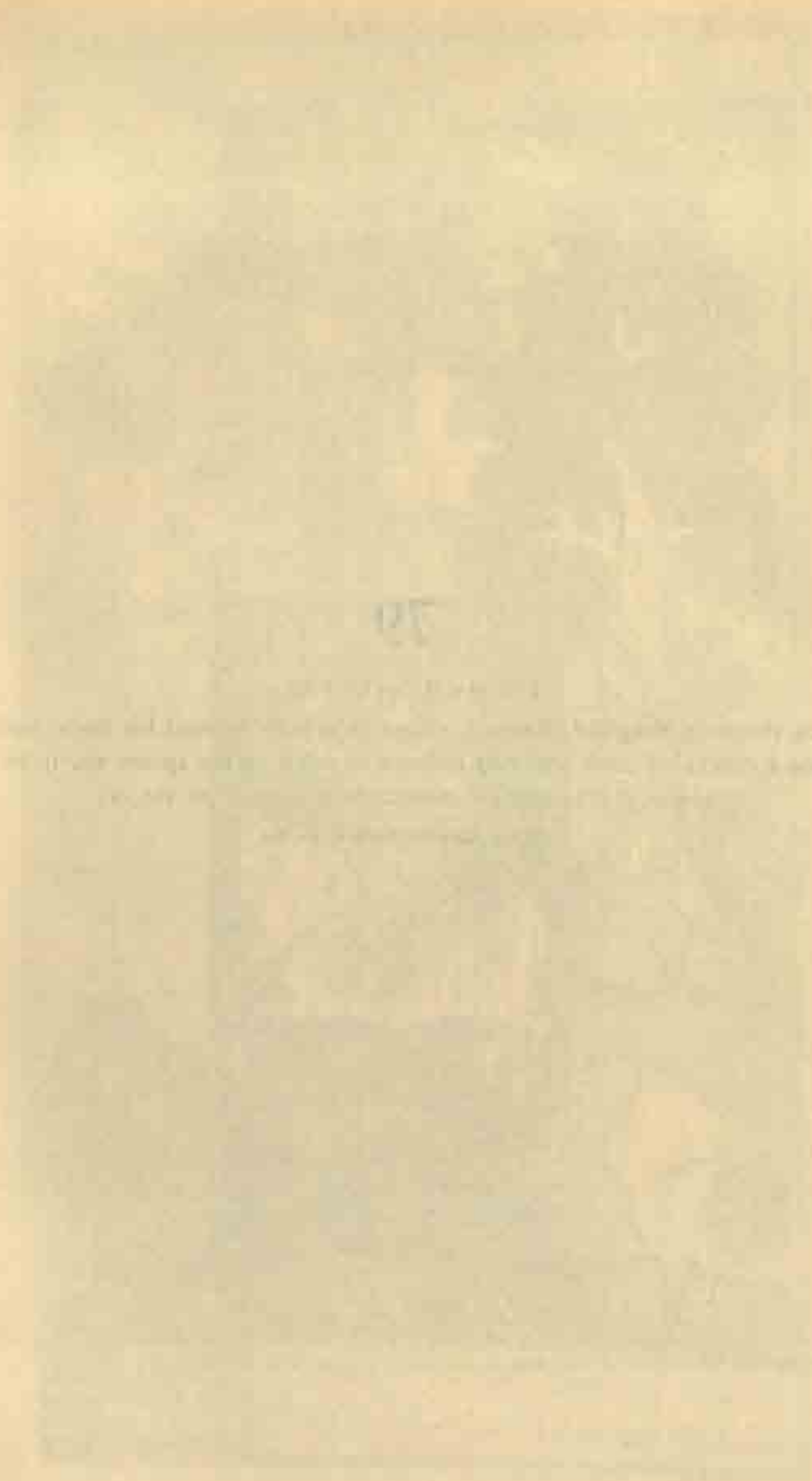
LONDON, BRITISH MUSEUM. DEPARTMENT OF MANUSCRIPTS, ALBUM OR. 4938, P. 7.

ABOUT THE MIDDLE OF THE XIX CENTURY.

Photo Artists Illustrators, London

85





FIRDAWSI, SHĀH-NĀMA

Rustam shooting Shaghād, through whose treachery he and his horse had fallen into a concealed ditch and had become impaled on the spears set up in it.

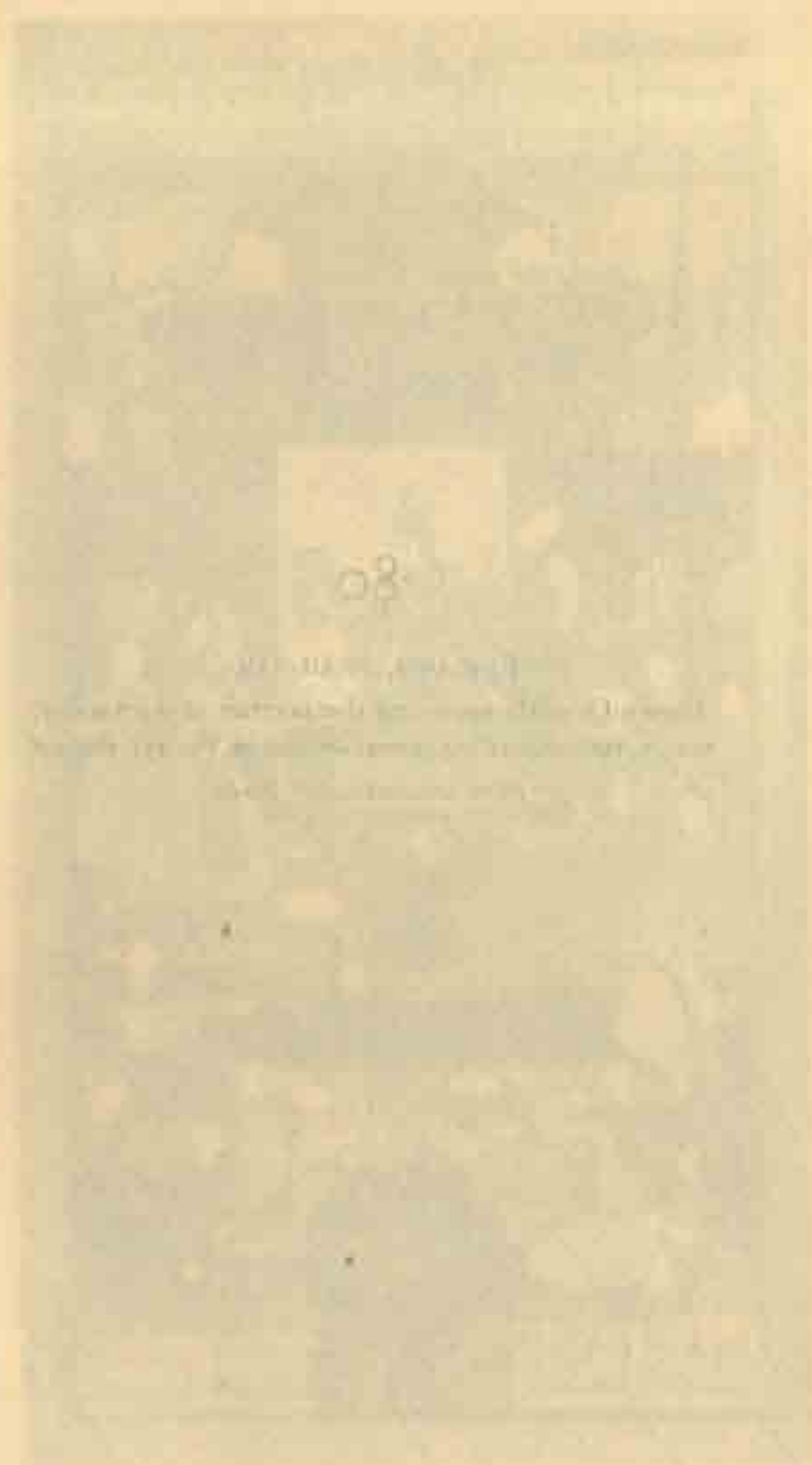
BERLIN, PREUSSISCHE STAATSBIBLIOTHEK. OR. FOL. 172, FOL. 423.

Photo Staatsbibliothek, Berlin



دوست برادر گزین
اینگاهم زینست
نقشه و رسد فراموش
شوقم و دگر گزین

پس گفت بنو که به کوه
مردم را سازد و کوه
ایران و کوه گزین
فرزانه و کوه گزین
پس گفت بنو که به کوه
مردم را سازد و کوه
ایران و کوه گزین
فرزانه و کوه گزین



FIRDAWSI, SHĀH-NĀMA

Queen Qaydāfa receiving the portrait of Alexander.

BERLIN, PREUSSISCHE STAATSBIBLIOTHEK. OR. FOL. 172, FOL. 448.

Photo Staatsbibliothek, Berlin



18.

FIRDAWSI, SHĀH-NĀMA

Alexander is entreated to give help against the savage hosts of Gog and Magog.

BERLIN, PREUSSISCHE STAATSBIBLIOTHEK. OR. VOL. 172, FOL. 456B.

Photo: Staatsbibliothek, Berlin



Handwritten text, likely bleed-through from the reverse side of the page. The text is mostly illegible due to fading and the quality of the scan.

WĀQI'ĀT-I-BĀBURĪ

translated from Turki into Persian by 'Abd ar-Rahīm.

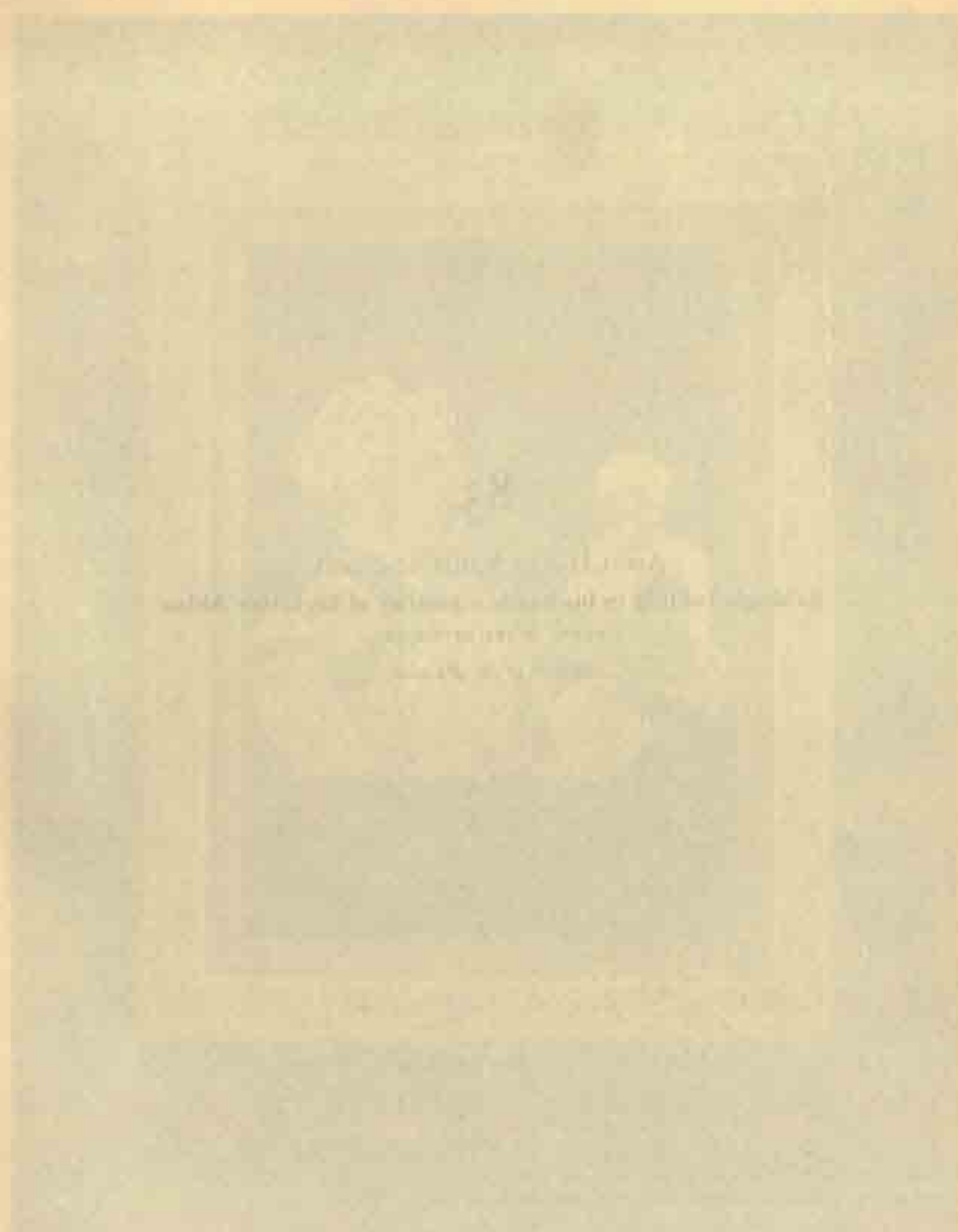
Bābur laying out a garden in a village near Kābul. "There is a pleasant halting place outside it, under great planes, green, shady and beautiful. A one-mill-stream, having trees on both banks, flows constantly through the middle of the garden; formerly its course was zig-zag and irregular; I had it made straight and orderly; so the place became very beautiful."

The Bābur-nāma, translated by S. A. BEVERIDGE, p. 216.

LONDON, BRITISH MUSEUM. DEPARTMENT OF MANUSCRIPTS, OR. 3714, FOL. 180B.

Photo Artists Illustrators, London





ABU'L-HASAN NĀDIR AZ-ZAMĀN

Jahāngīr holding in his hands a portrait of his father Akbar.

PARIS, MUSÉE DU LOUVRE.

Photo of the Museum



48

AMIR KHUSRAW DIHLAWI, KHAMSA

The poet presenting his work to his patron, 'Alā ad-Dīn Muḥammad Shāh Khaljī,
Sultan of Dihlī (1296—1316 A. D.).

As this picture, which occurs at the end of a poem, was painted three centuries
later, the representation is, of course, purely imaginary.

BERLIN, PREUSSISCHE STAATSBIBLIOTHEK: OR. FOL. 1278, FOL. 43.

COPIED BEFORE 1617 A. D.

Photo Staatsbibliothek, Berlin



28

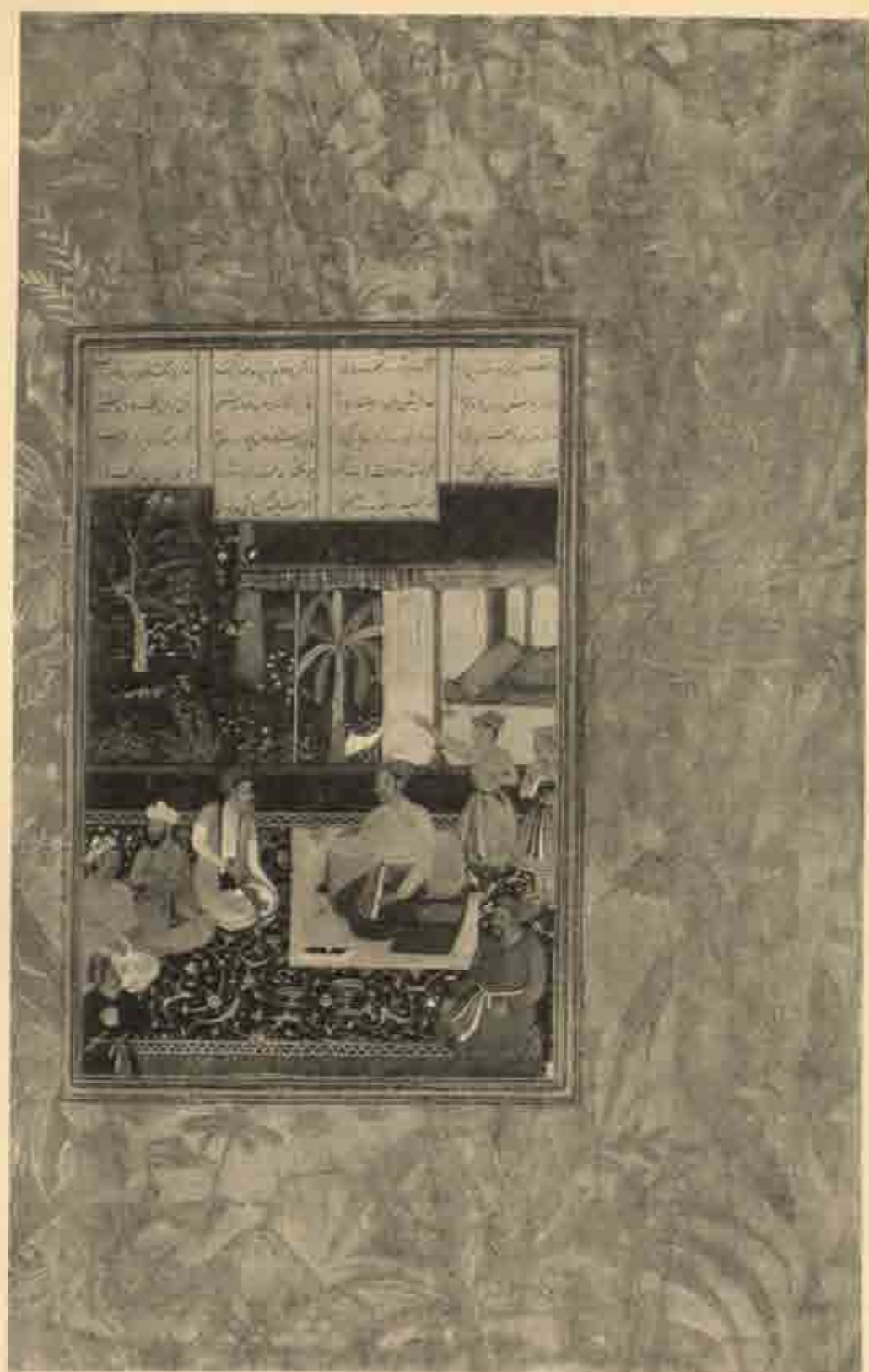
AMIR KHUSRAW DIHLAWI, KHAMSA

The same subject as on Plate 84, somewhat differently treated. This picture, like that on fol. 43, occurs at the end of a poem.

BERLIN, PREUSSISCHE STAATSBIBLIOTHEK. OR. FOL. 1278, FOL. 95B.

COPIED BEFORE 1617 A.D.

Photo Staatsbibliothek, Berlin



AMĪR KHUSRAW DIHLAWĪ, KHAMSA

An artificer, named Hasan, imprisoned for defrauding his sovereign,
is rescued from the dungeon by his wife.

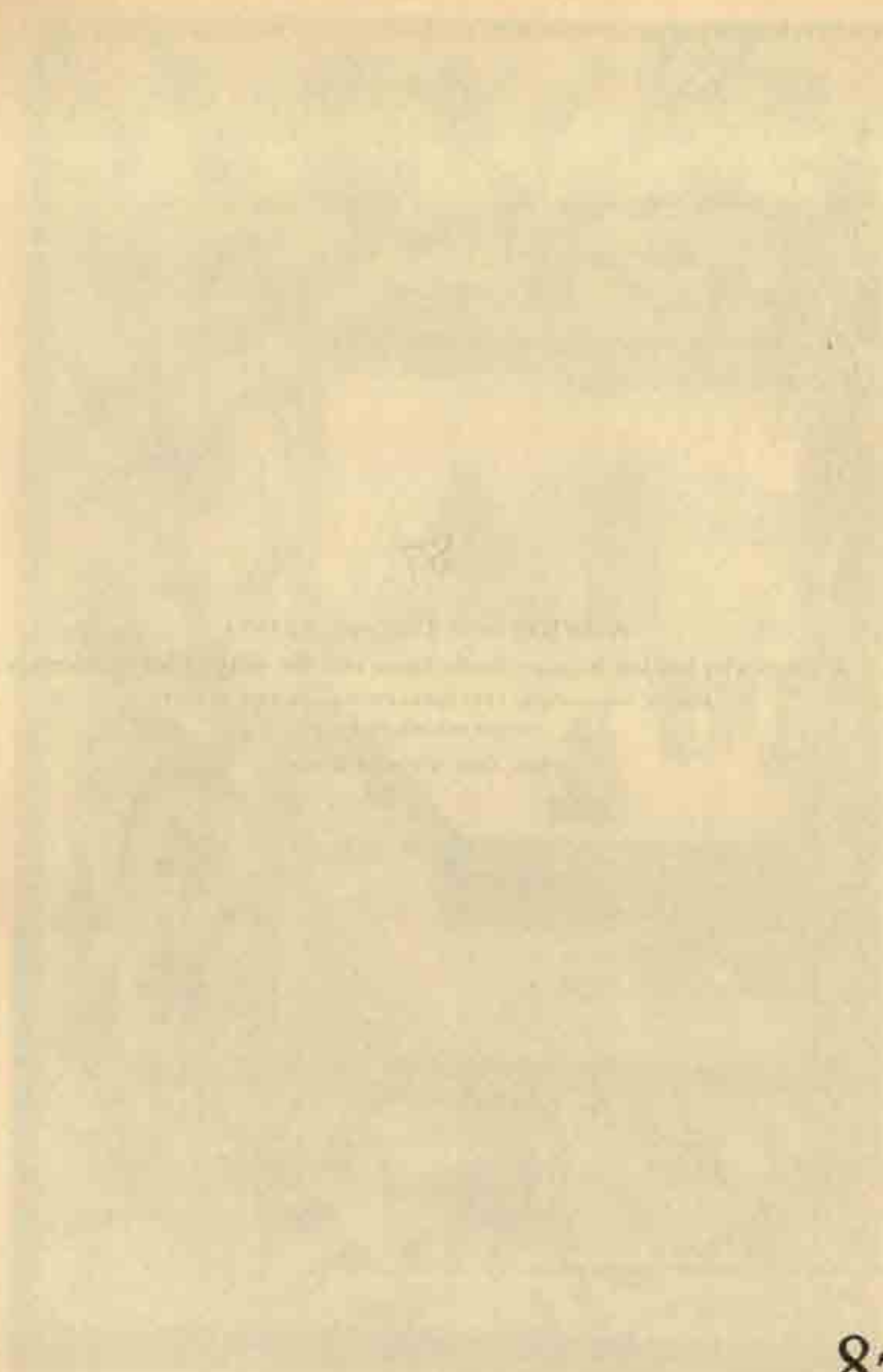
Painted by Hāshim, one of the court-painters in the reign of Jahāngīr.

BERLIN, PREUSSISCHE STAATSBIBLIOTHEK. OR. FOL. 1278, FOL. 147 B.

COPIED BEFORE 1617 A.D.

Photo Staatsbibliothek, Berlin





AMIR KHUSRAW DIHLAWI, KHAMSA

A youth who has lost his way in the forest tells the story of his wanderings.

BERLIN, PREUSSISCHE STAATSBIBLIOTHEK. OR. 1278, VOL. 157.

COPIED BEFORE 1617 A.D.

Photo Staatsbibliothek, Berlin



THE UNIVERSITY OF CHICAGO

LIBRARY OF THE UNIVERSITY OF CHICAGO

540 EAST 57TH STREET

CHICAGO, ILL. 60637

TEL. 773-936-5000

WWW.CHICAGO.EDU

PORTRAIT OF BĀQIR KHĀN (OB. 1637)

a Persian of noble birth, who took service in India under the emperors
Jahāngīr and Shāh Jahān.

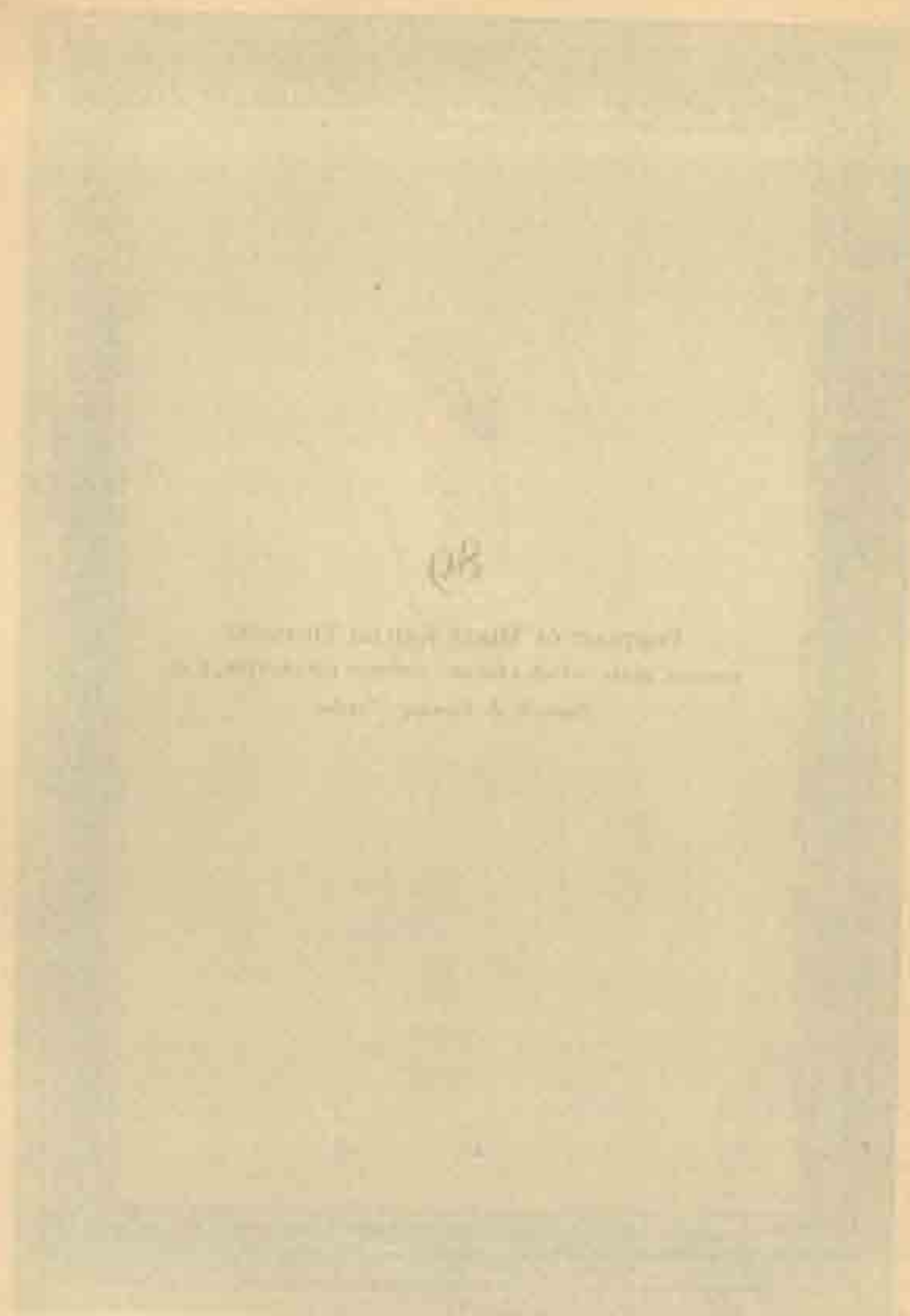
Painted by Bōlchand, in the reign of Shāh Jahān.

LONDON, INDIA OFFICE LIBRARY. JOHNSON COLLECTION, XXV, 9.

Photo R. B. Fleming, London



شاهزاده باقرخان مرحوم عمال بولجند
به فرمان امیرخان



89

PORTRAIT OF MIRZĀ KAHĀSĪ TIRANDĀZ

LONDON, INDIA OFFICE LIBRARY. JOHNSON COLLECTION, 1, 15.

Photo R. B. Fleming, London

e8





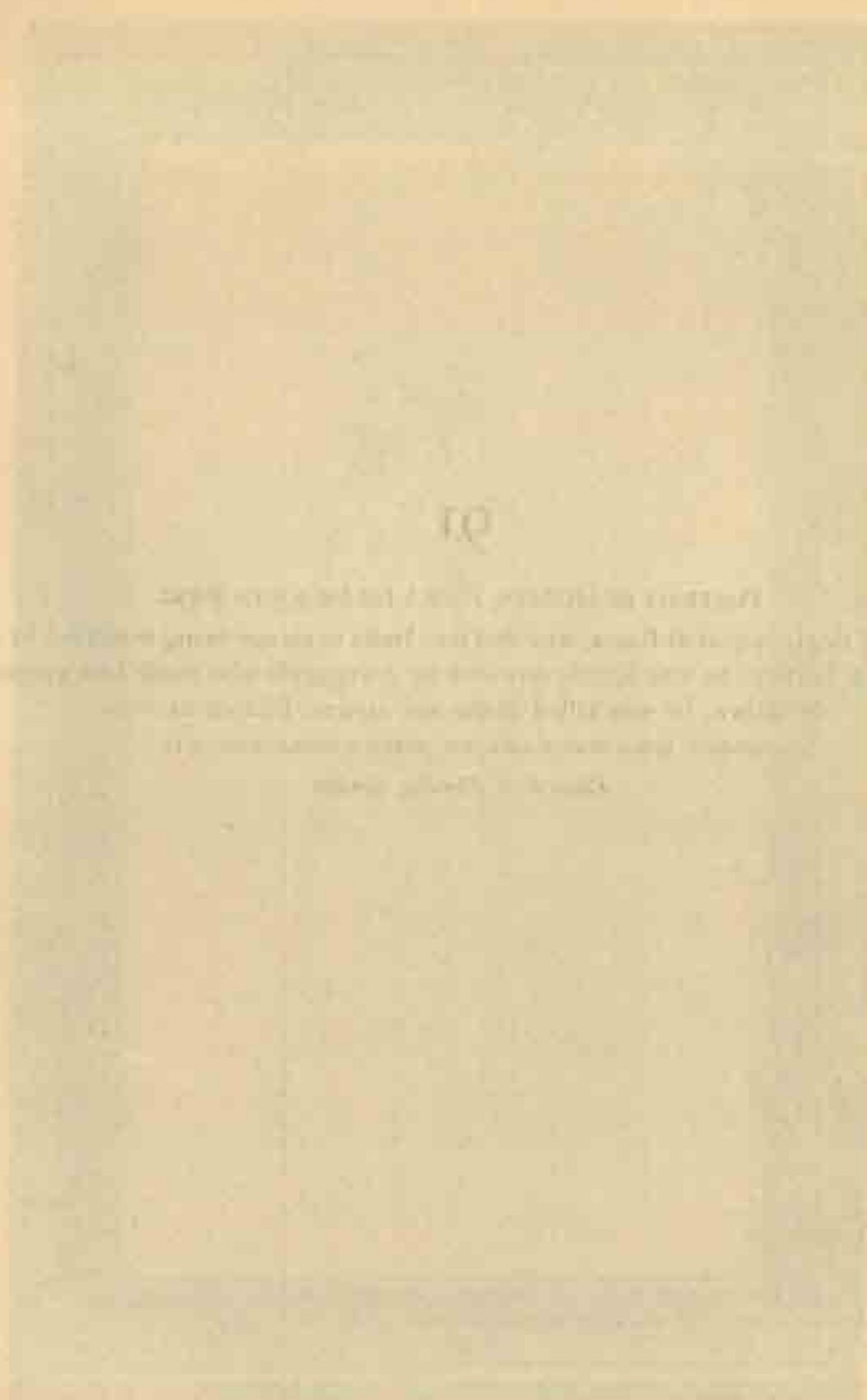
PORTRAIT OF NAWĀB ASAD KHĀN (OB. 1716)

a favourite noble of Shāh Jahān, and later chief minister of Awrangzīb.

LONDON, INDIA OFFICE LIBRARY. JOHNSON COLLECTION, I, 13.

Photo R. B. Fleming, London





PORTRAIT OF HUSAYN PĀSHĀ ISLĀM KHĀN RŪMĪ

formerly Beglarbeg of al-Basra, who fled into India to escape being beheaded by the Sultan of Turkey; he was kindly received by Awrangzib who made him governor of Mālwa; he was killed in the war against Bijāpur in 1676.

LONDON, INDIA OFFICE LIBRARY. JOHNSON COLLECTION; 1, 11.

Photo R. B. Fleming, London



50

THE PRINCE INTRODUCING HIS FAIRY BRIDE TO HIS FATHER.
LONDON, INDIA OFFICE LIBRARY. JOHNSON COLLECTION, XXXVIII, FOL. III.

Photo R. B. Fleming, London



The number of the manuscript
 is 1000 and the date of the copy is 1000
 and the name of the copyist is 1000
 and the name of the owner is 1000
 and the name of the library is 1000

ALBUM OF SULTAN MURĀD III

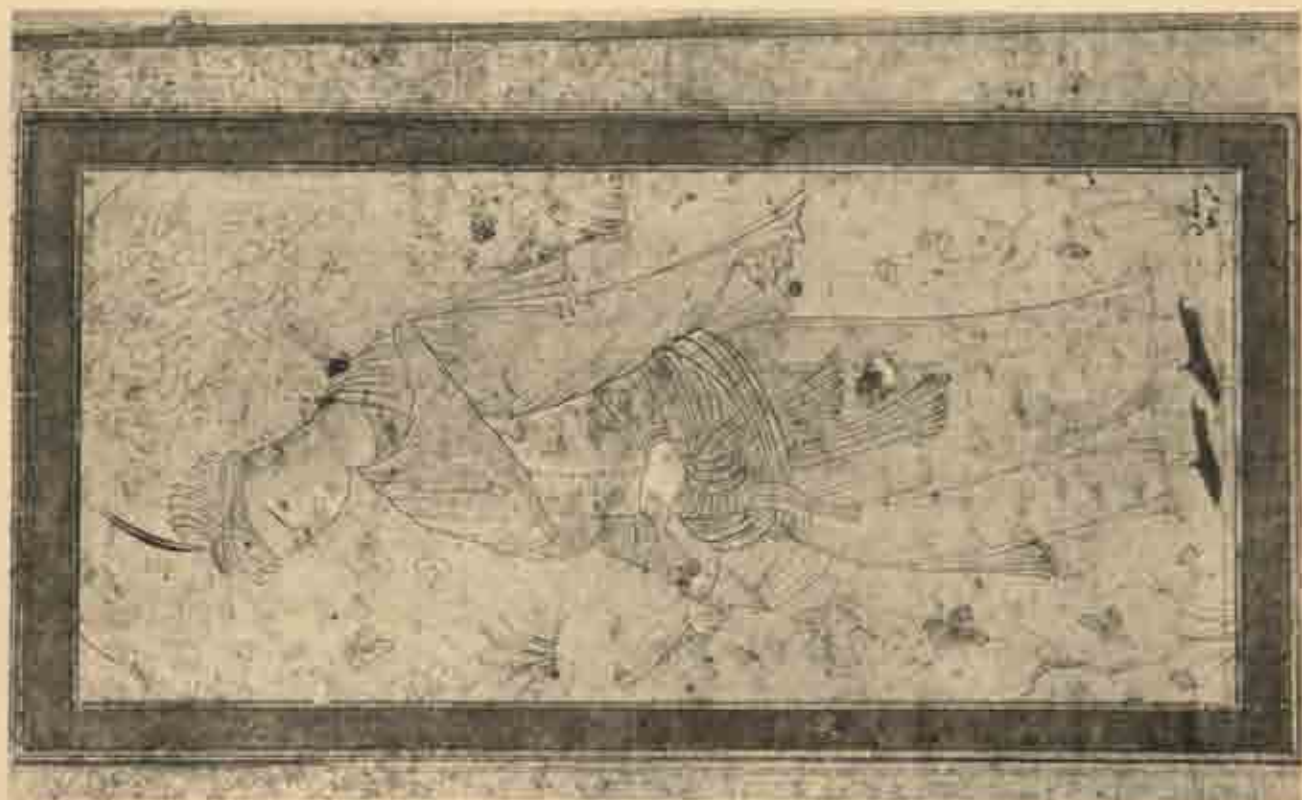
Two drawings by Walī Jān (see p. 95).

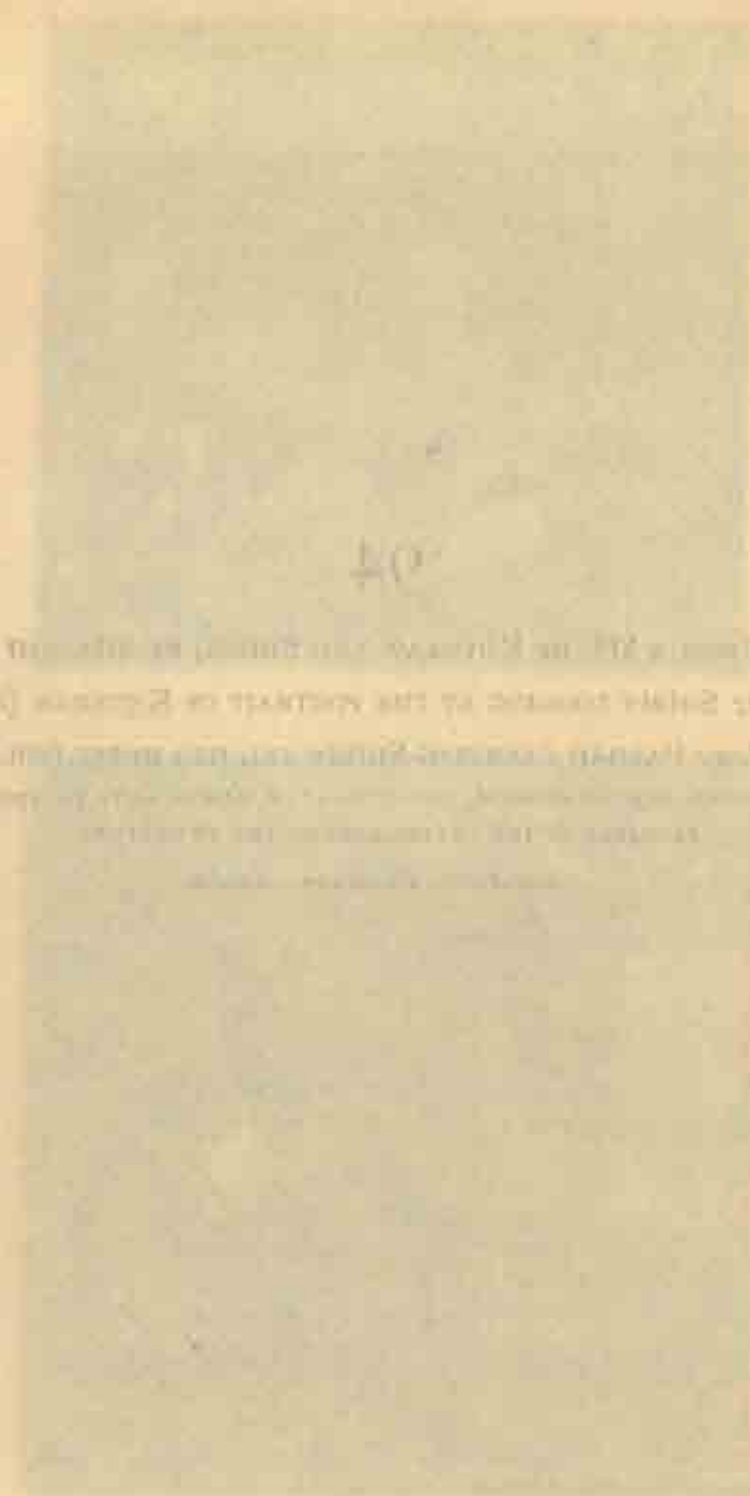
A. *Left*: A CUP-BEARER (FOL. 43).

B. *Right*: AN ARCHER (FOL. 47).

VIENNA, NATIONAL LIBRARY. MIXT. 313.

Photo National Library, Vienna





FROM A MS. OF KHUSRAW AND SHIRIN, BY SHAYKHI

A. *Above*: SHIRIN LOOKING AT THE PORTRAIT OF KHUSRAW (FOL. 17).

B. *Below*: FARHAD CARRYING SHIRIN AND HER HORSE (FOL. 62).

LONDON, BRITISH MUSEUM, DEPARTMENT OF MANUSCRIPTS, OR. 2708.

PROBABLY OF THE LATTER PART OF THE XV CENTURY.

Photo Artists Illustrators, London



MADHĪ

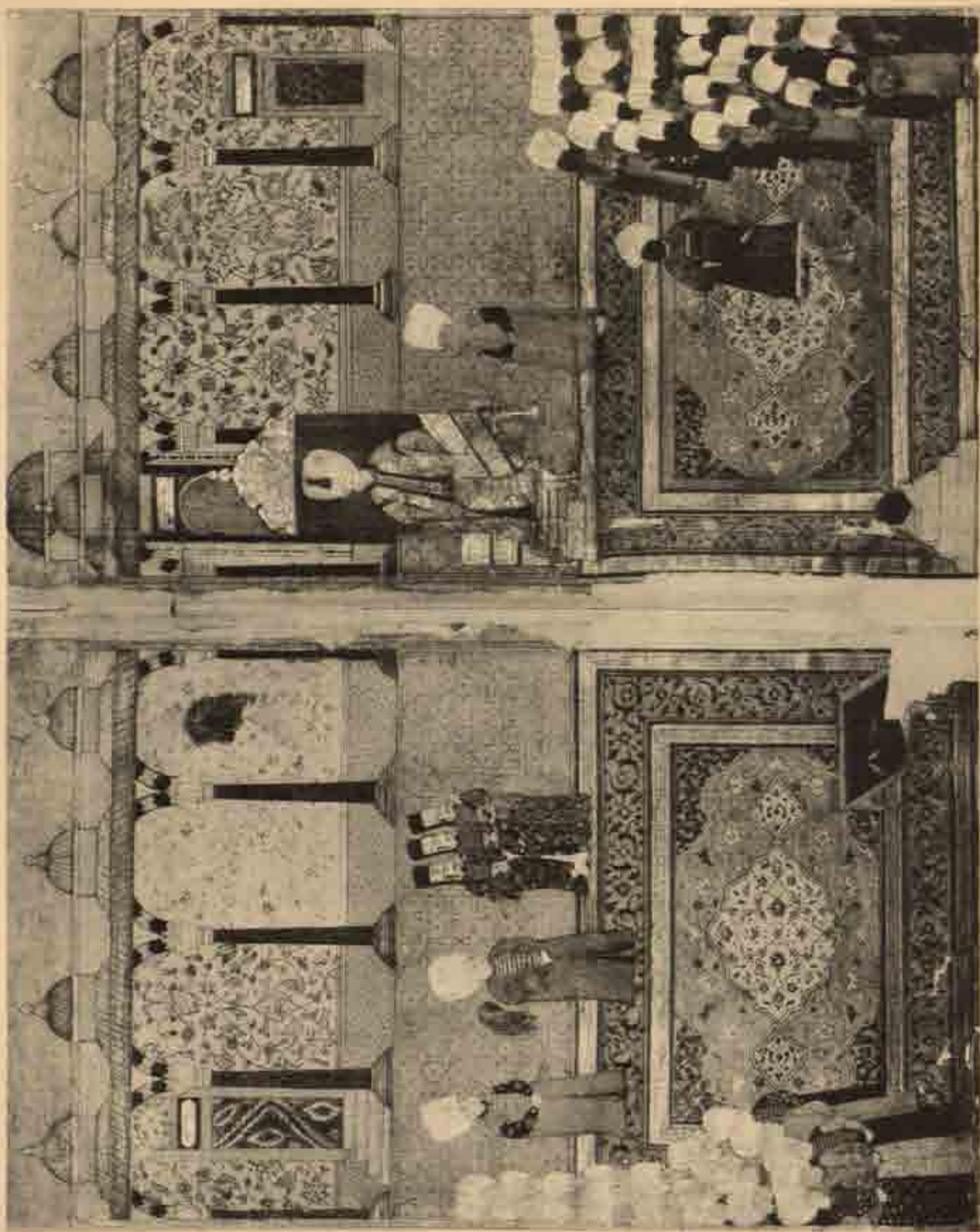
Turkish translation of Firdawsī's Shāh-nāma

(see J. C. TORNBURG, *Codices arabici, persici et turcici Bibliothecae Regiae Universitatis Upsalensis*, Upsala 1849, No. CXLVIII).

'Osmān II (1618—1622) and his court.

UPSALA, UNIVERSITY LIBRARY. CHLS. I, VOL. I.

Photo University Library, Upsala



de

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO
LIBRARY
540 EAST 57TH STREET
CHICAGO, ILL. 60637
U.S.A.

TULO'I PĀSHĀ-NĀMA

Ken'ān Pāshā marching through the province of Rumili in March 1627, in order to put down the brigands that infested it, and being welcomed by the inhabitants.

LONDON, BRITISH MUSEUM. DEPARTMENT OF MANUSCRIPTS. SLOANE 3584, FOL. 20.

ABOUT 1630 A. D.

Photo Artists Illustrators, London

وای فلک شنیک جانم که اگر برابر
 بر نغمه آید و بیهوده در حال را ببرد
 حق بحال آنی خسته شود و در راه
 بود بر نغمه آید و بیهوده در حال را ببرد



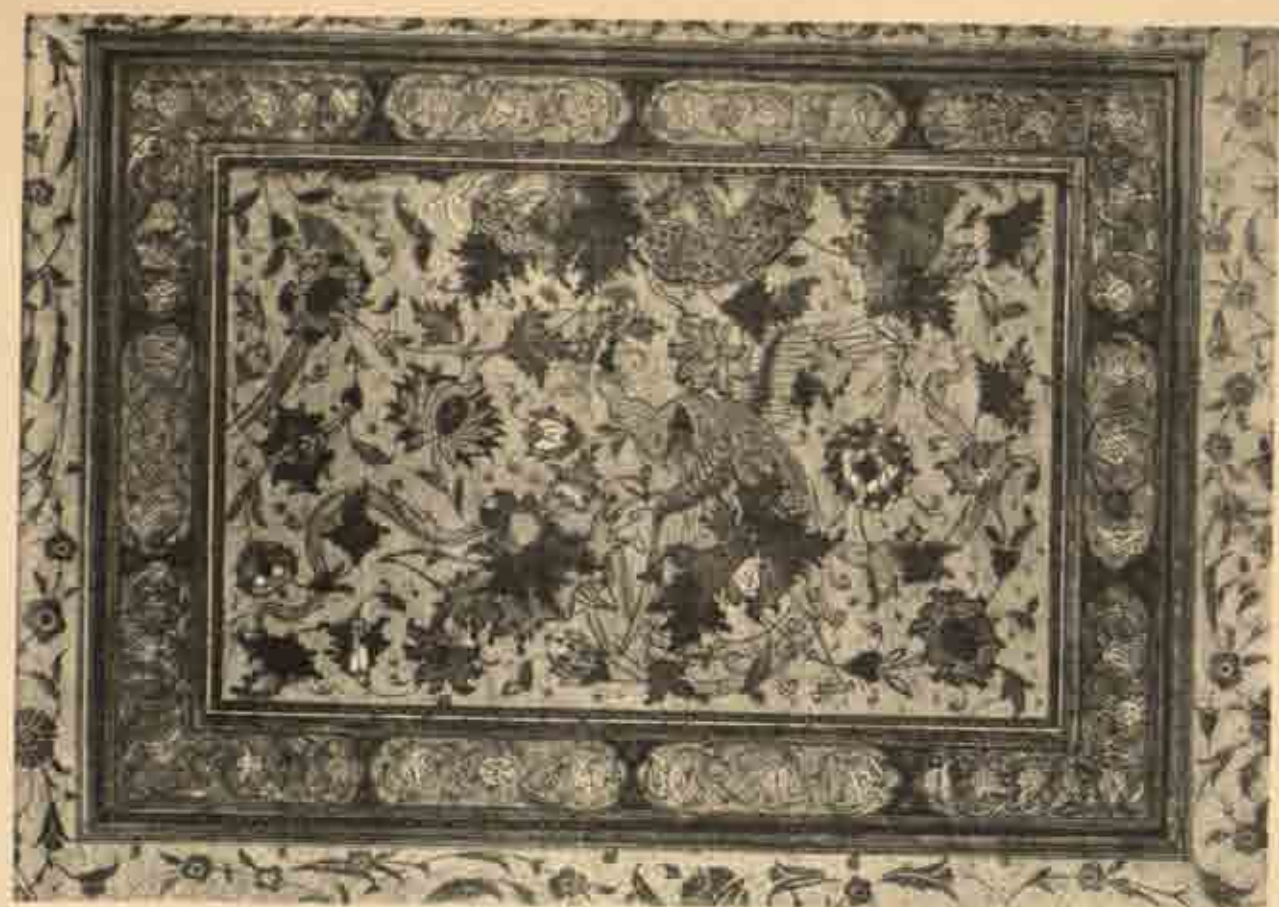
ALBUM OF SULTAN MURÂD III

Two ornamental pages, with conventionalised flowers and birds.

A. *Left*: FOL. 8B. B. *Right*: FOL. 9.

VIENNA, NATIONAL LIBRARY. MIXT. 313.

Photo Jaffé, Vienna.

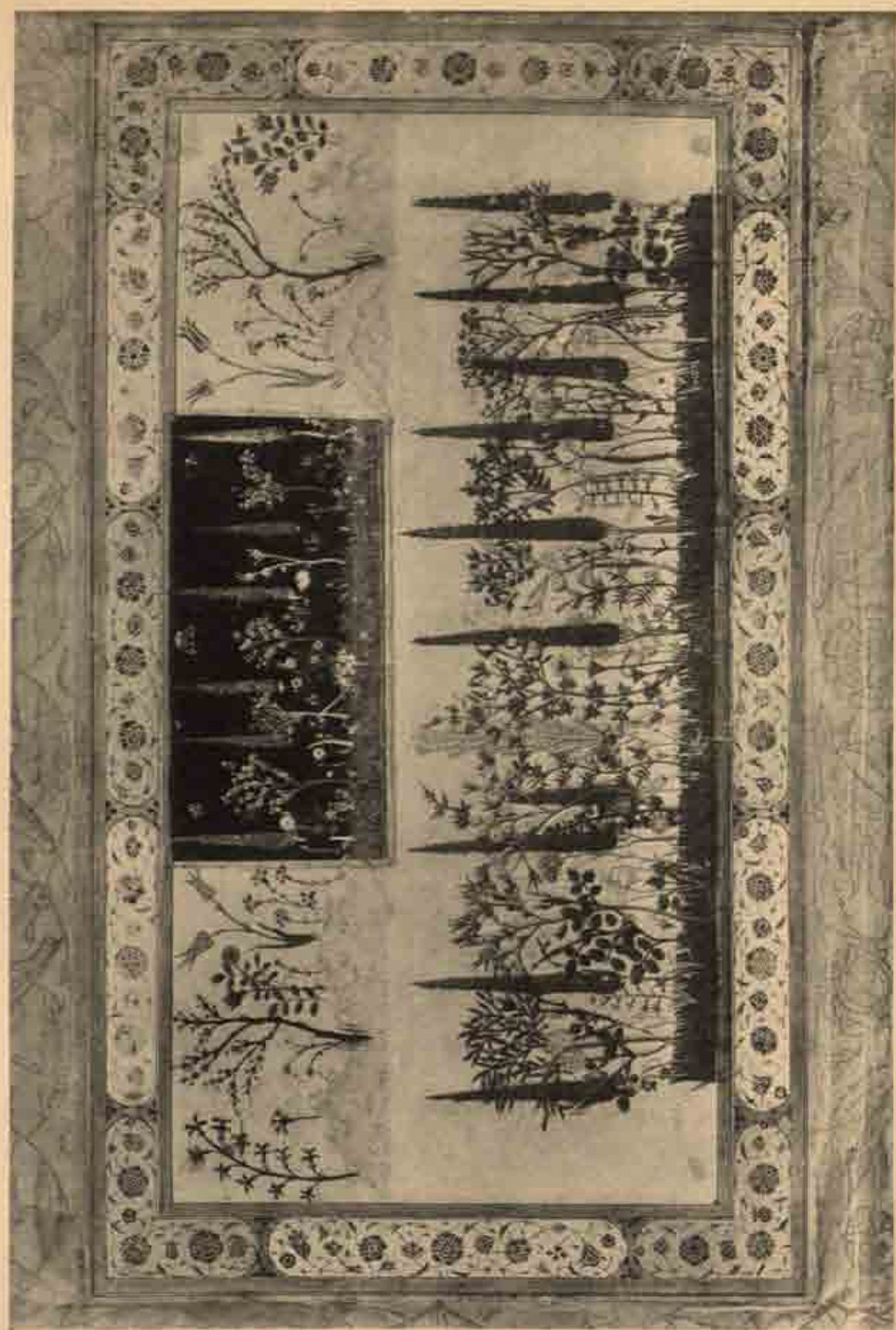


ALBUM OF SULTAN MURĀD III

Garden scenes, made of perforated paper cut out and pasted on a paper background. The upper, smaller picture represents a cypress garden by moonlight; the lower picture, a similar garden in the full blaze of the sun, with a great variety of flowers, rose, hyacinth, narcissus, iris, pomegranate, hybiscus, jasmine, orange blossom etc. J. VON KARABACEK (*Zur orientalischen Altertumskunde* IV, pp. 47-48) conjectures that it is the work of an artist named Fakhrī, about the year 1572.

VIENNA, NATIONAL LIBRARY, MIXT. 313, FOL. 12B.

Photo Jaffé, Vienna



99

FRONT COVER OF A BINDING IN BLACK LEATHER

with traces of gold-pressed marginal lines. The corners and medallions are filled in with elaborate filigree work of gilt leather, superimposed upon a ground of rose and azure blue. Size 40,2 x 25 cm.

VIENNA, AUSTRIAN MUSEUM FOR ART AND INDUSTRY. INV. NO. 16 649 (3601).

Photo Frankenstein, Vienna.



100

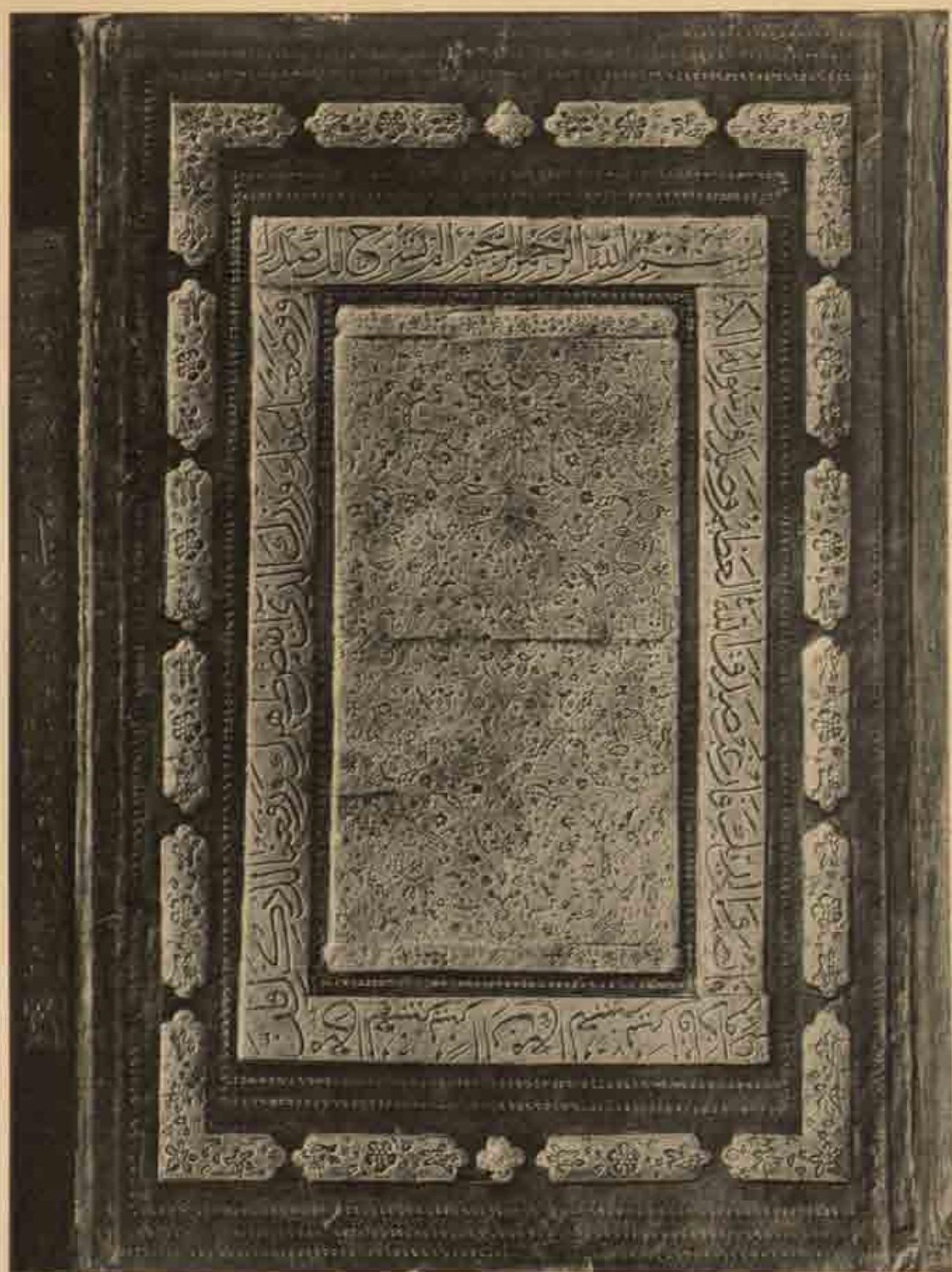
100

COVER OF A QUR'ĀN

Brown leather with gold-pressing. The centre panels are filled in with a delicate floral trellis pattern. Along the outer border, in a bold Nasta'liq character, is Sūra XCIV of the Qur'ān. Size 49 × 32 cm.

VIENNA, COLLECTION OF DR. FIGDOR. INV. 644.

Photo Frankenstein, Vienna



101

IOI

THE INNER COVER OF PLATE 100

covered with a delicate lattice work made of thin leather superimposed upon a ground variously coloured, blue and red and gold.

VIENNA, COLLECTION OF DR. FIGDOR. INV. 644.

Photo Frankenstein, Vienna



THE END

THE END OF THE WORLD IS NOT THE END OF THE WORLD
BUT THE END OF THE WORLD AS WE KNOW IT.

THE END OF THE WORLD IS NOT THE END OF THE WORLD
BUT THE END OF THE WORLD AS WE KNOW IT.
THE END OF THE WORLD IS NOT THE END OF THE WORLD
BUT THE END OF THE WORLD AS WE KNOW IT.
THE END OF THE WORLD IS NOT THE END OF THE WORLD
BUT THE END OF THE WORLD AS WE KNOW IT.

102

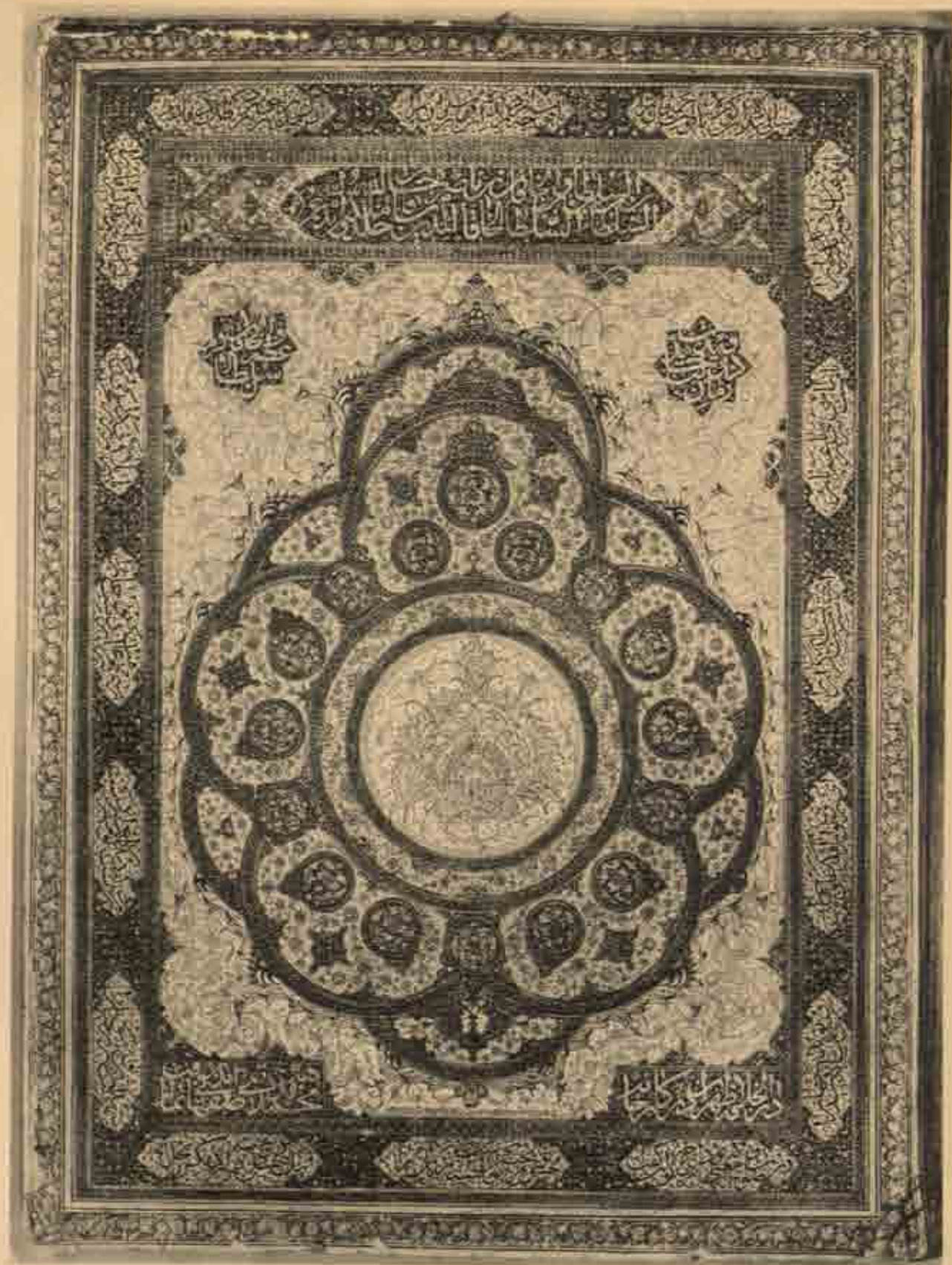
LACQUER BINDING

made by Hāji Muḥammad Taqī of Isfahān, for Nāṣir ad-Dīn Shāh of Persia
(1848—1896)

The colour of the background is yellow, which blends harmoniously with the gold work that covers it. Red, blue and yellow are used for the circles that form part of the central design, and black is also skilfully used for contrast. The bolder inscriptions are in gold on a black background, while those in the oblong panels in the borders are written in black letters on a gold background. Size 33 × 45 cm.

VIENNA, AUSTRIAN MUSEUM FOR ART AND INDUSTRY. INV. NO. 77 (1143).

Photo Frankenstein, Vienna.



101

103

LACQUER BINDING

also by Hājī Muhammed Taqī, Size 29,2 × 44 cm. See p. 100.

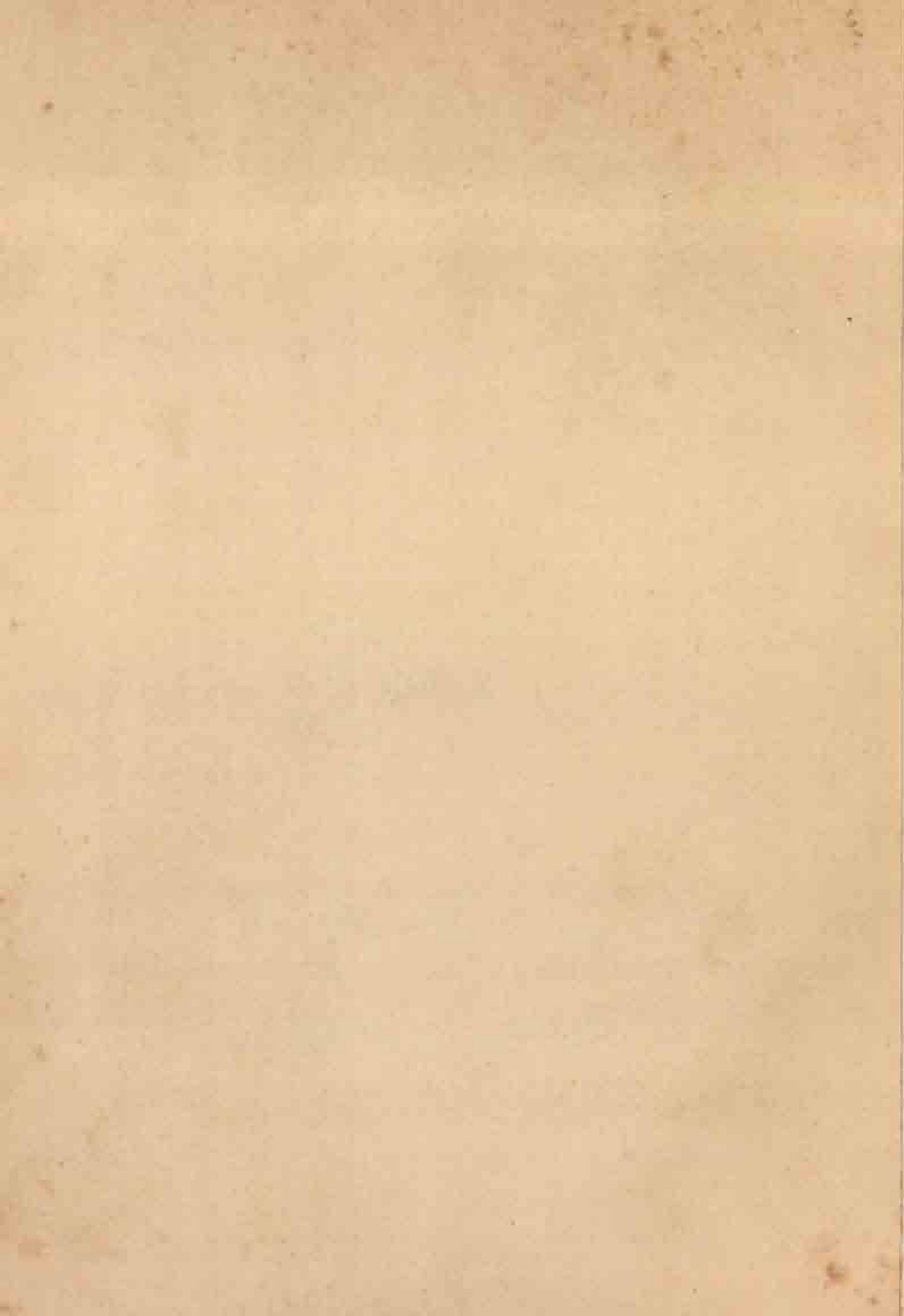
VIENNA, AUSTRIAN MUSEUM FOR ART AND INDUSTRY, INV. NO. 1142 (66)

1270 A. H. (1854 A. D.).

Photo Frankenstein, Vienna

103





101

104

THE INSIDE OF A LACQUER BINDING.

by Hāji Muḥammad Taqī. A yellow iris, within a border of flowers.

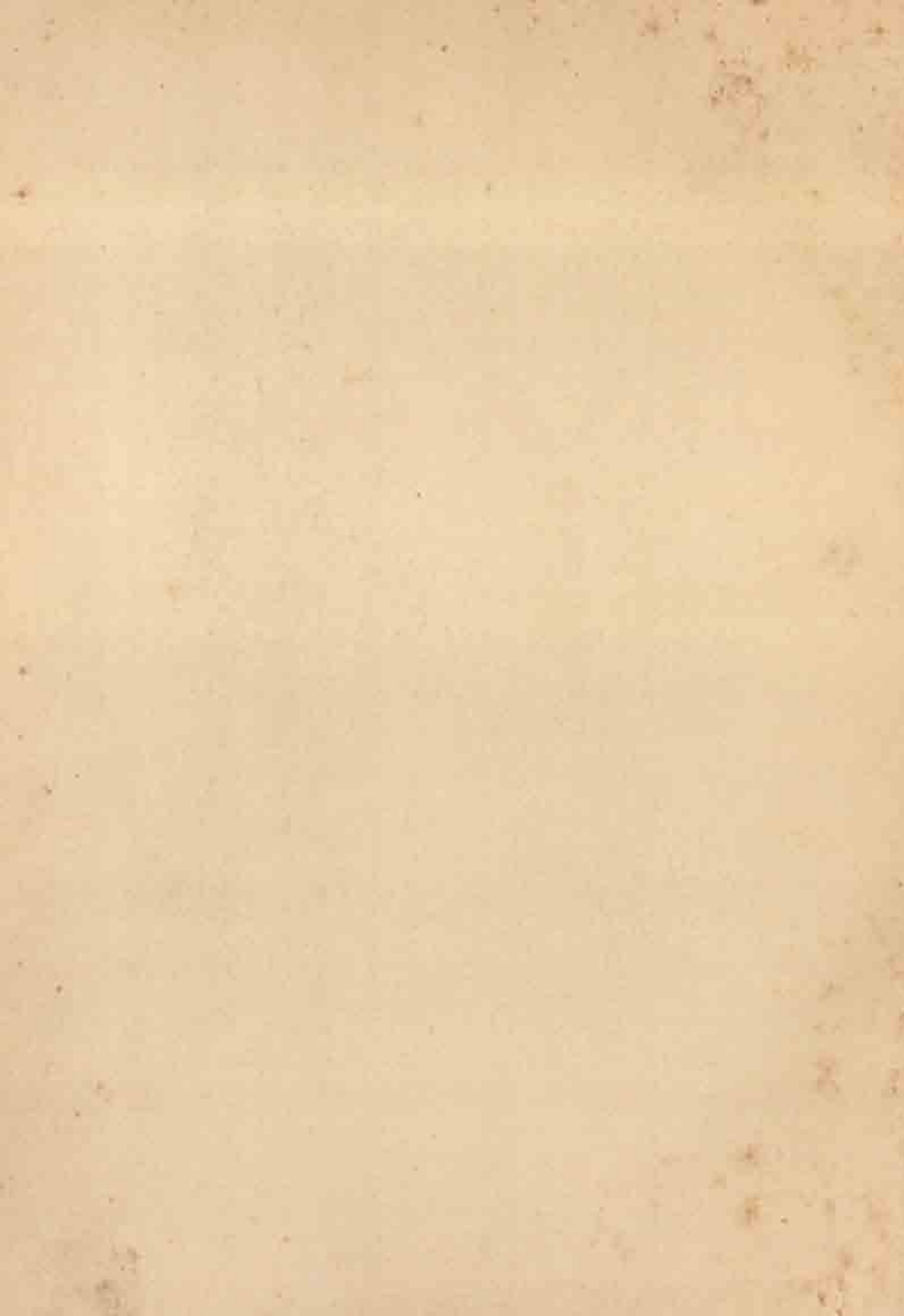
Size 14 × 23,8 cm.

VIENNA, AUSTRIAN MUSEUM FOR ART AND INDUSTRY. INV. NO. 7227.

Photo Frankenstein, Vienna

101





OF THIS EDITION OF THE ISLAMIC BOOK 373 NUMBERED COPIES WERE PRINTED.
THE TEXT WAS PRINTED BY AUGUST PRIES IN LEIPZIG. THE BLACK AND WHITE
COLLOTYPE PLATES WERE EXECUTED BY F. BRUCKMANN A. G. IN MUNICH, THE
COLOURED COLLOTYPE PLATES BY MAX JAFFÉ IN VIENNA. THE BINDING WAS
CARRIED OUT BY HÜBEL & DENCK IN LEIPZIG

THIS COPY IS NUMBER

Col-
N 26/6/75

NC

Central Archaeological Library,
NEW DELHI 20866

Call No. 750.901/Arn/Gro

Author Arnold, T. W. Li
Grohmann, A.

Title The Islamic Book

Borrower No.	Date of Issue	Date of Return
C B Torkh	6/5/78	12/6/78
Z A Deger	13-11-78	15-11-78
S. Lvesma	6/2/81	11/2/81

"A book that is shut is but a block"

CENTRAL ARCHAEOLOGICAL LIBRARY
GOVT OF INDIA
Department of Archaeology
NEW DELHI

Please help us to keep the book
clean and moving.