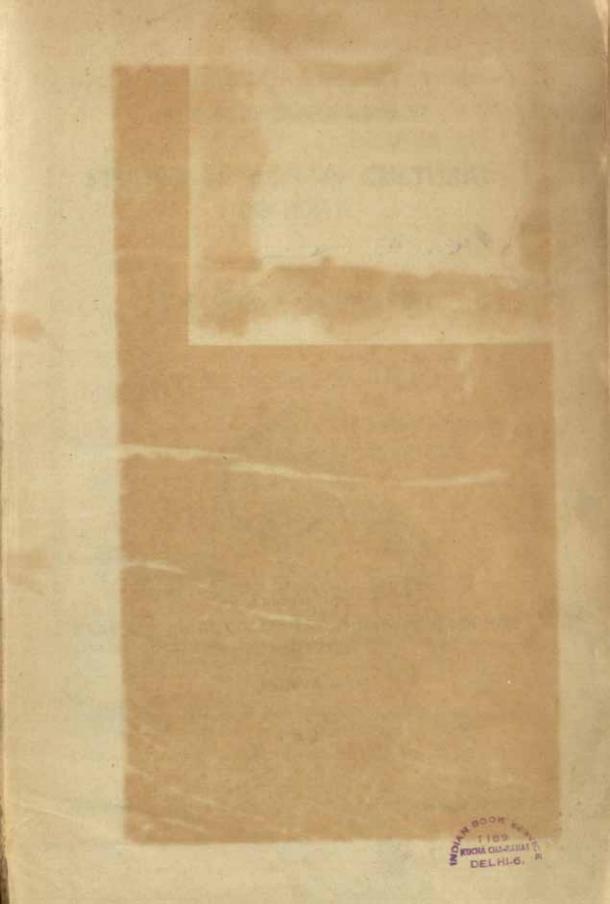
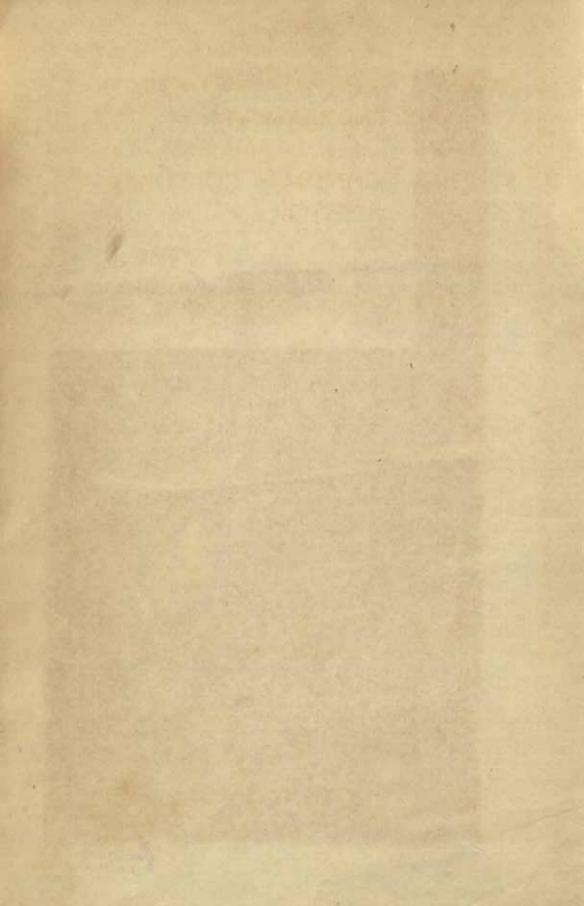
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FOREWORD

We have great pleasure in presenting to the world of scholars this fifth volume of Professor Dr. P. K. Gode's Collected works, the second in the Studies in Indian Cultural History, which is the second to be published by "Prof. P. K. Gode Collected Works Publication Committee." The genesis of the Committee and the necessary information about it and the list of contributors to the Publication Fund have been given in the third volume. Though the proceeds from the third volume were available to the Committee, but for the spontaneous voluntary donations from the following kind friends of Prof. Dr. Gode, the present volume could not have seen the light of the day so soon:—

Prof. K. K. Handiqui of Jorhat (Rs. 500/-) Shamaraj Bhalerao of Hyderabad (Rs. 200/-) The late Prafulla Chandra Bhanj Deb of Baripada

(Rs. 100/-).

On behalf of the Committee we offer our grateful thanks to these friends for their kind help in the cause of scholarship and learning.

The book contains 20 articles and covers 260 pages of the text. One article by Prof. R. T. S. Miller of the Wilson College, Bombay, on "The Nose-ring in the Old Testament" (No. 17) is included in this volume to give completeness to Dr. Gode's series of articles on "The Hindu Nose-ornament" (Nos. 12-16). The articles embrace literary, historical and cultural subjects, and, as usual, present all the data, both Indian and foreign, in every sphere bearing on the topic, in a thorough, precise and comprehensive manner, which characterises all writings of Prof. Gode. Different articles on the same topic have been presented in a serial order so that readers get a complete picture of the particular problem.

In these 19 articles by Prof. Gode are presented nine different series, dealing with fire—arms, mounted bowman, stirrup, sling, Bhavānī sword, Bhagvā Zeṇḍā, bullock—cart, nose—ornament or "nath", and Divālī. The supreme importance of the articles on "Nose-ornament" (Nos. 12-16) which conclusively prove "that the nose—ornament makes its appearance in Indian history and culture about 1000 A. D. but not

earlier", in fixing the chronology of literary works in India will be evident to all students of Indian culture. The history of the Divall festival (Nos. 18-20) has been traced from A. D. 50 down to the present day, on the basis of literary sources - Sanskrit, Prakrit and regional languages-epigraphy, folklore, etc. Those interested in the history of war in India, ancient, medieval, and modern, will find valuable and interesting material in the articles dealing with fire-arms (Nos. 1-3), mounted bowman (No. 4), stirrup (No. 5) and sling (No. 6). There is an informative study of the prehistoric and Vedic ancestors of the Indian bullock-cart (No. 11) followed by a comparison of the carriage manufacture in Vedic India and ancient China (No. 12). Students of Maratha history will find fresh material from Sanskrit sources regarding the Bhavānī sword (No. 7) and the Bhagvā Zeṇḍā (No. 8).

On this happy occasion our special thanks are due to Puratattvacharya Muni Jinavijayaji, Hon. Director of the Rajasthan Research Institute, who set the ball rolling by publishing two volumes of Prof. Gode's Studies in Indian Literary History, and this facilitated the work on further volumes. We are glad to state that the fourth volume is almost ready and will be published soon by Acharya Vishva Bandhu Shastri, Director of the Vishveshvarananda Vedic Research Institute, Hoshiarpur; and that through the kind benefaction of Prof. K. K. Handiqui, former Vice-Chancellor of the Gauhati University, the printing of the sixth volume has already started.

In conclusion, we wish Dr. Gode long life full of vigour and vitality so as to enable him to continue his literary activity in full force, as he has been doing all along.

(No. 12-16) when continued to many "that the meanment makes

J. R. Gharpure

A. D. Pusalker

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I have great pleasure in presenting to the world of scholars this fifth Volume of my Studies, which is Vol. II of my Studies in Indian Cultural History or Vol. V of my collected Studies. The progress of the publication of my Studies will be clear from the following table:—

P. K. Gode Studies	Title Title	Publisher
Vol. I T. M. co	Studies in Indian Literary History - Vol. I (Singhi Jain Series No. 37) 1953, pp. 570.	Bharatiya Vidya Bhavan, Bombay 7
Vol. II	Do - Vol. II (S. J. Series No. 38), 1954, pp. 560.	Do Topojos ovaltar
off (Vol. III) and to a distribution of the control of the contro	Do-Vol. III, 1956, pp. 270.	P. K. Gode Works Publication Committee, Poons 4.
Vol. IV	Studies in Indian Cultural History, Vol. I	V. Vedic Research In- stitute, Hoshiarpur.
Vol. V	Do - Vol. II, 1960, pp. 298	P. K. Gode Works Publication Committee.
Vol. VI	Do - Vol. III (in Press)	Do-m tol will till

A glance at the above table will show how the work of the publication of my Studies started by my revered friend Muni Shri Jinavijayaji (General Editor, Singhi Jain Series) ten years ago has borne abundant fruit owing to the good will and co-operation of brother-scholars and affectionate friends whose benefaction * made it possible for me to bring out part III of my Studies.

Subsequently my affectionate friend Professor Vishva Bandhu Shastri, M. A., M. O. L., the Director of the V. Vedic Research Institute, Hoshiar-

^{*} See list of Contributors to the Prof. P. K. Gode Works Publication Fund printed in Vol. III.

pur (Panjab), whose high regard for learning and the learned is well known all over the world, offered to publish Vol. IV of my Studies and started its printing in the press of his Institute. This Volume of about 500 pp. will be out within a few months. The sale proceeds of Vol. III of my Studies realised in 1956 were not sufficient to finance Vol. V of my Studies immediately. Luckily I secured the following voluntary gifts from my affectionate friends for this Volume which made it possible for me to start the printing of this volume on the Dasara day (3rd October) 1957:-

Rs. 500/- from Prof. K. K. Handiqui, M. A. Jorhat (retired Vicechancellor of Gauhati university)

Rs. 200/- from Raja Shamraj Bhalerao of Hyderabad.

Rs. 100/- from Shri Prafulla Chandra Bhanj Deo, M. P. of Baripada (Orissa)

Rs. 800/-

I cannot adequately thank all these friends for their spontaneous donations and high regard for my humble work in the field of Indology. I have enjoyed the friendship of my learned friend Prof. Handiqui for over thirty five years. This friendship, which has now deepened into affection, enabled me to start the printing of Vol. VI of my Studies on the Dasara day 11th October, 1959, as he made a gift of Rs. 2100/- towards the printing of this Volume. I hope to bring out this Volume after about two years. Raja Shamraj of Hyderabad, whose intimate friendship I have enjoyed since my first meeting with him twenty five years ago, has a soft corner not only for books but also for their authors. In fact he has kept in bound Volumes a majority of my papers in his magnificent library at Hyderabad. His voluntary gift for the present Volume amply speaks for his love for me and my work. The late Shri Prafulla Chandra Bhanj Deo M. P. of Baripada became my intimate friend in 1945 when he was studying at Cambridge under the guidance of my esteemed friend Dr. Bailey. He was a great lover of Sanskrit and was engaged in studying Sanskrit works on Tantra for many years prior to his unfortunate death two years ago. It is an irony of fate that he should pass away within a fortnight of his gift of Rs. 100/- towards the present Volume! I deeply mourn his loss as I found in him not only an ardent devotee of Sanskrit learning but also a loving friend with a sincere soul and a spirit of benefaction, which is most needed at present for the progress of research in this country.

The present Volume of my Studies in Indian Cultural History is being published by the Committee organised by my friends, Dr. A. D. Pusalker and Prof. N. A. Gore for the publication of my collected works. I owe to them a deep debt of gratitude not only for the fund they collected for the publication of Vol. III of my studies but also for the elaborate Indices they have provided to all my Volumes so far published. These Indices have enhanced the reference value of my Volumes. The labour of preparing these Indices is tremendous but it is a labour of love for which I cannot thank these friends adequately. Special thanks are due to Principal J. R. Gharpure, the Chairman of the Committee for his continued blessings for myself and my work and also to Dr. R. N. Dandekar (Treasurer) for his advice and co-operation in the editing and other matters pertaining to my volumes.

When Vol. VI of my Studies will be published after a year or so, a major part of my research output of about 4000 pages will be in a bookform. The publication of the papers not included in these Volumes will require about Rs. 20000/. If Providence comes to my help I may be able to bring out some volumes of these papers. In the meanwhile I have published a complete Bibliography of my 474 papers (1916-1959) in the P. K. Gode Commemoration Volume, edited by Dr. H. L. Hariyappa and Dr. M. M. Patkar and published by Dr. R. N. Sardesai, Proprietor, Oriental Book Agency, Poona. I take this opportunity to thank all these affectionate friends for their labour of love on this Volume. I have also to thank not only all the scholars in India and outside, who have contributed articles to this Volume but others who have helped me in my research work during the last 43 years.

In the correction of the proofs of the present volume I have received considerable help from my friends Shri. S. N. Savadi of the B. O. R. Institute, Dr. A. D. Pusalker and Prof. N. A. Gore. I convey to them my cordial thanks for this selfless friendly help and co-operation. I have to convey my hearty thanks to Shri M. S. Sathe, the Manager of the Prājña Press, Wai; and all the workers of this press for the neat and careful printing of this Volume.

Bhandarkar Oriental
Research Institute, Poona 4,
11th July 1960.

P. K. Gode

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To

MY WIFE

Kamalabai

1. Use of Guns and Gunpowder In India*

From A. D. 1400 Onwards.

Sir P. C. Ray in his History of Hindu Chemistry 1 has collected much valuable information about Gunpowder, Saltpetre and the Mineral Acids. In connection with the belief entertained in some quarters that the ancient Hindus had the knowledge of the art of manufacturing gunpowder he quotes a passage from Śukranīti 2 or the Elements of Polity of Śukrācārya, containing mention of Agni-cūrņa or fire-powder (gunpowder) and to Nālāstra or gun, but concludes by the remarks that "Śukranīti is a patch-work in which portions of Chapter IV were added sometime after the introduction of gunpowder in Indian warfare during the Moslem period." 3

" यन्त्राणि आग्नेयौषधवलेन सीसकांस्यदृषद्रोलप्रक्षेपकाणि लोह्मयानि भाषायां नाल्याब्दामि-धेयानि तेषां सूत्रं सुचकं शास्त्रम् "

This is a description of iron guns. Agneyauşadha = agnicurna = gunpowder (Vide Sabhaparvan, v. 21. Chitrashala Edition of the Mahabharata, Poona, 1929, p. 17).

3. "Dr. R. L. MITRA, judging form the description of guns alone, concludes this portion to be spurious vide Notices of Sanskrit MSS, Vol. V, p. 155. "Vide p. 145 of "Chronology of Modern India (A. D. 1494-1894) by James BURGESS, London, 1913:—

"A. D. 1702-Gunpowder first manufactured at Madras." Obviously this entry refers to the English manufacture of gunpowder at Madras, It would be useful to investigate and record references to the manufacture of gunpowder in India earlier than A. D. 1702 by either Moslems or Hindus between, say, 1400 and 1702 A. D. A Maratha in the employ of Tipu Sultan by name Shivaji Mahadeva has recorded some information about Tipu Sultan's army while at Kalmeri in the province of Kopal near Tungabhadra. According to this information Tipu manufactured guns for his army and ceased purchasing guns imported by the English.

("नन्या बंदुका करावयास कारखाने लाविले आहेत. तेथे नन्या बंदुका तयार करवीत आहे. ईंग्रजांकडील वेगेरे बंदरी बंदुका बेत नाहीं." - Vide ऐतिहासिक टिपणें - No. 22 (Pub. by PARASNIS in इतिहाससंग्रह, Jan. 1911).

The Peshwas purchased pieces of cannon from the English in December 1759. Ramaji Mahadeva was asked to purchase these pieces of cannon from the the English at Bombay weighing more than 20 seers (Pesh. Daftar Selection, No. 45, p. 101):—

^{*} A Volume of Indian and Iranian Studies in honour of Sir Denison Ross ed. by S. M. Katre and P. K. Gode, 1939, pp. 117-124.

Vol. I, Calcutta, 1902, pp. 95-108.

^{2.} Ed. by VIDYASAGARA, pp. 555-57, verses 201-211. Verse 202 mentions agricura or gunpowder. Nālāstra or gun is mentioned in verses 203, 205, 210. Golah (lohamayah) or cannon-ball is mentioned in verses 204, 209, 211. Laghusāla or a gun with a light barrel is mentioned in v. 204. Nīlakaņtha Caturdhara, the commentator of the Mahābhārata (between 1650-1700 A. D.) refers to sāla in the following passage:—

The above conclusion raises the question about the earliest reference to guns and gunpowder as also their use in Indian warfare. About this question Dr. P. C. Ray makes the following remarks:—

"The first record of the use of cannon and gunpowder in Indian warfare is in the Memoirs of Baber. In 1528 he forced the passage of the Ganges near Kanauj with the aid of artillery. 1"

Let us now record some authentic references to the invention and use of gunpowder and guns in the European records. According to Encyclopaedia Britannica 2 " we have authentic information of guns in France in 1338 and in Florence in 1326 and that the Oxford MS De Officiis Regum of 1325 gives an illustration of a gun." This information clearly proves that Baber's use of guns and gunpowder in 1528 in his Indian warfare is about 200 years after their invention in Europe about 1325.

We are concerned in this paper with the earliest reference to the use of guns and gunpowder in the Indian warfare by Moslems or their gnemies.

The Rās Mālā states that Mahomood Begurra, the celebrated Mahommedan king of Gujarat in his fight against the pirates of Bulsar used a force consisting of Musketeers and gunners about A.D. 1482.4 He also cannonaded the city of Champaner according to the Muhammadan account of the fall of Champaner recorded in the Rās Mālā. 5

In Pesh. Daft. No 39, Letter 70 of 6-9-1766 repair to guns and manufacture of ammunition is mentioned.

- Vide article on early Asiatic fire-weapons by Maj. Gen. R. MACLAGAN in the Journ.
 As. Soc. Bengal. Vol. XLV, pp. 80 ff.
 - 2. Fourteenth Edition, 1929, Vol. II, p. 8.
- This book is also known as the Hindoo Annals of the Province of Gujarat by A. D.
 FORBES, founder of the Forbes Goozerathi Sabha, Bombay, (Born July 1821 and died at
 Poons on 31st August 1865).
 - 4. Ibid., p. 288.
- 5. Ibid., p. 288. Vide also p. 65 BRIGGS: Feristha (History of the Rise of the Mahomedan Power in India till A.D. 1612) Calcutta, 1910. Vol. IV. p. 65. BRIGGS remarks about the use of musketeers in the siege of Champaner as follows:—

"This is the first mention of artillery and musketry in the Guzerat history. They were probably introduced by the Arabs and Turks from the Red Sea and Gulf of Persia," p. 69. Use of a shell against Raja Beny Ray's palace in the siege of Champaner is mentioned. BRIGGS' note on the word shell reads:—

[&]quot; तोफाचे करार केले आहेत तरी बीस सेरापासून वर्ते असतील ते घेणें. "

[&]quot;The word is hooks. The use of shells at this early period is remarkable, although it is mentioned that the Moslems employed grenadoes in their ships at the time the Portuguese reached India."

In the history of the Vijayanagar kings we find references to pyrotechny 1 in which gunpowder may possibly have been used.

In the historical poem Kanthiravanarasarājavijayam² composed in A. D. 1648 we have references to guns (pirangi) carried on carts together with thousands of bags of gunpowder taken with the army in the expedition of Ranadullakhan against the king of the Karnatak and his feudatories.

In a work called the Yāvanaparipāṭi-anukrama composed by Dalapatirāya under his patron Mādhavasimha about A.D. 1764 3 we have the draft of a letter to be addressed by the king to the officer in charge of the king's artillery called Analādhyakṣa ordering him to make the artillery ready for action. This draft as given in the Yāvanaparipāṭi-anukrama makes interesting reading and hence may be reproduced from MS No. 409 of 1882-83 in the Govt. MSS Library at the B. O. R. Institute, Poona:—Folio 10—

" अनलाध्यक्षं प्रति यंत्रशाला सजीकरणाय राजः ॥ पत्रं ॥ शौर्यधैर्यनिधेश्वरनीकसत्ता-दिद्दश्चया नियांस्याम इति भवान् स्वनियोगे समबद्दितः ॥ सपताकबद्धिबाणधृतः पदातिनः करमांश्र छंबछटानां लघुनालिकानां शतशतार्द्धनालिकानां च मुधा निसगंशुद्धानां विद्वारवातानां शकटिका गुलिकांगारचूर्णदविकागुल्लास्कंददंडपताकायुगनिसगंशिक्षित्पसारधिसुवृषमकलितानासीरे प्रथमेंद्र-ध्वजगजानुगामितया नियोजयतु ॥ द्वितीयंद्रध्वजकारणसुष्ट्रनालिका इयनालिका गजनालिकाश्च निज-निजोपस्करसज्जाः स्वयमपि कवचिभिः ससबाहतुरगैभेटैः परिवृतो वर्मास्वभृत् स्वाधिकारनियुक्तपरि-जनयुक्तोनुसरतु किं बहुना ससुचितक्षे ॥ "

From the above passage we get some Sanskrit equivalents of terms denoting the artillery and its equipment. Yantraśālā is evidently the place or building where the guns and their accessories were stored.

^{1.} The following reference to the use of fireworks at Vijayanagar is noteworthy: A. D. 1443. 'Abdur Ramaq, the ambassador from the Court of Sultan Shah Rukh who stayed in Vijayanagar from end of April A. D. 1443 till the 5th of December A. D. 1443 during the reign of Devaraya II mentions the use of pyrotechny in the Mahanavami festival (See Elliot. His. of India, IV, pp. 117-118). Perhaps in the pyrotechny referred to above gunpowder may have been used. According to Sir P. C. Ray (His. of Hindu Chemistry Vol. I, p. 100 f. n. 4). "Saltpetre has been in use from time immemorial as the basis of Rocket and other fireworks both in China and India."

² Šiva-caritra-vrita Samgraha (Khanda I—Kānadi Vibhāga) B. I. S. Mandal, Poons, 1938, p. 4. The author of the poem Kanthiravanarasarājavijapam is Govinda Vaidya. He was a resident of Srirangapattan and a court-poet of the Mysore kings. He wrote this poem at the instance of Nanjarājendra, the general of Kanthiravanarasarāya in the Śaka year 1570 (Sarvadhāri Samvatsara) = A.D. 1648. He was a Smārta Brahmin, well versed iu Sanskrit and Kanarese languages. His patron, K. Narasarāja ruled from A.D. 1638-1659.

³ Vide Dr. M. M. PATKAR's article in IHQ, XIV, No. 1, pp. 158-57.

Gulikāngāra Cūrna means gunpowder and reminds us of the term agnicūrna mentioned in the Śukranīti as we have seen above. We further get the terms ustranālikā meaning portable guns carried on camel's back, hayanālikā, those carried on horse-back, and gajanālikā, those carried on the back of elephant.

It appears that the term nālikā had become current since the importation of guns into India as we find the usage of the term in the above passage from a work of the 18th century. I shall now quote a passage from a 17th century poem called Śambhurājacarita composed by Harikavi alias Bhānubhatṭa¹ in a.d. 1685. The poet describes in the following stanzas of the Śambhurājacarita (MS No. 191 of 1875-76) folio 71a the thundering of guns on the battle-field, where Sambhaji, the son of Shivaji the Great, is shown as being surrounded by the army of the enemy:—

" ततः समभवद्वः प्रहतसूरिभेरीभवः सुतालनिभनालिकागढगढारवस्राजितः । विलोलितमहीतलो बहलगर्जिताश्रस्थलो निनाद इव मेघजः कुलिशरावसंराजितः ॥ २८ ॥ "

Folio 72b-

" सशस्त्रवरसंभृतां बहळनाळिकासंकुळां सकंकठभटोद्भरां प्रबळकुंजराश्रेसरां । रणोद्भततुरंगमोद्भमतरंगरंगोत्तरां चक्रषं परवाहिनीं प्रथिवरूथिनीं स्वां ततः ॥ ७१ ॥ "

Folio 92-

" ततो नृपतिसैन्यतो बह्छनाछिकावक्त्रतो महारविद्यारितश्रवणमस्तका निर्ययौ । सुगोछकतिश्रछसुमणिमाछिकेवोद्रता रिपुत्रजपताकिनीं सपदि निर्देहंती हठात् ॥ ९१ ॥ "

Verse 91 quoted above contains a good description of the series of cannon-balls (sugolakatati) issuing from the mouths of cannons (nāli-kāvaktrataḥudgatā) and looking like a row of suns, destroying the army of the enemy.

From the 17th century we shall now go to the 16th century and quote a passage from a Sanskrit poem, called the Rāṣṭrauḍhavaṃśamahā-kāvya² composed by a Dākṣinātya poet of the name Rudrakavi at the court of the Bāgalān king Nārāyaṇa Shah in A.D. 1596. In Chapter XX, v. 52

^{1.} Vide my paper on Hari Kavi, Annals, Vol XVI, pp. 262-291.

^{2.} Gailwad Ori. Series No. V. Baroda, 1917.

we have the following description of red-hot connon-balls issuing from the mouths of guns :--

" शितकारैरपकैरय नाळिकाविनिहतज्बळदायसगोळकैः । मिळितयोरुभयोरय सेनयोः प्रबद्दते समरस्तुमुळस्तयोः ॥ ५२ ॥ "

It appears from the above verse of A.D. 1595 that the iron cannon-ball (āyasagolakaiḥ) with which the gun was charged (nālikāvinihata) contained within it sharp arrows (sitasaraiḥ) and stones or gravel (upalaiḥ). This description finds its analogue in Nīlakaṇṭha Caturdhara's description of guns in the latter part of the 17th century in which he describes guns as machines (yantrāṇi) made of iron (lohamayāni) and capable of throwing away (prakṣepakāṇi) by the force of gunpowder (āgneyauṣadhabalena) balls of lead (sisa), bell-metal (kāṃsya) and stones (drṣadgola).

A further reference to nālikā is found in a work called the Ākāśa-bhairavatantra ¹ which appears to have been composed during the prosperous days of the Vijayanagar Empire, most probably before a.D. 1550. In the 60th chapter of this encyclopaedic work the king is advised to worship 32 weapons on a particular day. Among these weapons nālikā is mentioned as No. 23:—

Folio 189 (of B. O. R. I. MS No. 43 of 1925-26).
"Trayoviṃśam nālikāstram svāstikam tadanantaram"

As Abdul Razzāq, who visited the Vijayanagar Court in A.D. 1443 mentions the use of pyrotechny at the Mahānavamī festival, the use of gunpowder appears to have been current in the Vijayanagar Empire about the middle of the 15th Century and this fact would justify our interpretation that the expression "nālikāstra" in the above passage means a gun and nothing else, especially in view of the reference to musketeers and gunners about A.D. 1482 used by Mahmood Begurra in cannonading the city of Champaner.

In the Deccan also the use of gunpowder appears to have been introduced about 10 years earlier than that made in the siege of Champaner in 1482 A.D. Mahmud Gawan during his second campaign against Belgam in A.D. 1472 made use of mines successfully to make a breach in the walls of

^{1.} In a paper submitted by me to the Karmatak Historical Conference (May 1939) I have proved that the work called the Ākāfabhairavatantra (MS No. 43 of 1925-26 in the Govt. MSS Library at the B. O. R. Institute) has nothing to do with Tantra, but that it is a work dealing with the inner life of the kings of Vijayanagar in elaborate detail and bearing on all its aspects, civil, religious, political and cultural. The original of this copy is in the Tanjore MSS Library.

the fort. The account of this campaign1 given to us by Prof. Sherwani on the authority of Burhanu-i-ma'athir2 and Ferishta3 reads as follows :-" Second campaign; Belgam-1472: The Khwajah informs the King that Parketah of Belgam and the chief of Bankapur want to raise an insurrection and invade Goa and offers to lead the expedition himself, but His Majesty decides to command the expedition in person and orders a vast army to be collected at the capital. Immediately when everything is ready he marches direct to Belgam, a fortress of great strength, surrounded by a deep moat full of water. Besieging the place he orders that the moat should be filled up with rubble and wood in order to facilitate the entry of the royal army when time comes; but the Khwajah's work to that end in the day is frustrated by the Rai's men during the night as they clear the moat of the rubble under cover of darkness. On this the whole strategy is changed and mines are laid under the wall of the fort under cover of a new wall erected parallel to the former and as this laying of mines is entirely a new thing in the Deccan, the Rai is not aware of the significance of the new walls being created. Anyhow three mines, those from the posts of the Khwajah Yusuf 'Adil Khān and Fat-hu'llāh " Imādu'lmulk burstopen the wall and breaches are effected."

As stated in the above account the laying of mines for bursting open the walls of forts was a new thing in the Deccan in a.D. 1472. The use of mines presumes the importation of gunpowder or its manufacture in India, if such manufacture could be proved to have been carried out in the 15th century in Gujarat, Deccan and at the Vijayanagar court.

From A.D. 1472 we now go to A.D. 1406, when guns were available in Bengal according to an account of Mahaun, a Chinaman 4 who visited Bengal at that time and who was attached as an interpreter to the suite

^{1.} Vide pp. 263ff. of the Journal of Indian History, Madras, Vol. XVI. Article by Prof. H. K. SHERWANI on "Mahmud Gawan's Campaigns in the Maharashtra."

Published by the Persian Texts Society, Hyderabad (Deccan). It contains a number
of diplomatic letters to the kings of Gujarat and Jaunpur as well as to the rulers of Turkey,
Persia, Hirāt etc.

Ferishta's History of India was written at Bijapur in the time of Ibrahim Adilshah II (1579-1626).

^{4.} Vide JRAS 1895, Mahaun's Account of the Kingdom of Bengala (Bengal) by Geo. PHILIPS, pp. 528ff. Cheng Ho was ordered to go on the expedition in the 6th month of the year 1405. The party visited Cochin China, Straits and India and gave presents to the princes and chiefs. Mahaun has given us an account of 20 kingdoms visited by the expedition. Mahaun's Travels are just like those of Marco Polo, Friar Oderic and Ibn Battuta. Mahaun's book contains also an account of Calicut, Ormus, Aden, the Maldives and many other places in the Indian Ocean.

of Cheng Ho, sent by the Chinese Emperor, Yung-lo with a party of 30,000 soldiers in a fleet of 62 ships to the various kingdoms of the Western Ocean in order to show that China was rich and strong. Mahaun describes the language of the people as Bengāli and states that Persian also was spoken in Bengal. He states that "not having any tea they offer their guests the betel-nut in its place, "He further records: "The mulberry tree and silk worms are found there. Silk handkerchiefs and caps embroidered with gold, painted ware, basins, cups, steel, Guns, knives and scissors are all to be had there. They manufacture a white paper from the bark of a tree, which is smooth and glossy like a deer's skin."

The reference to "Guns" in the above extract is very important as it proves that guns were to be seen in Bengal about 1406 a.D. when Mahaun visited the country. This reference, therefore, takes the antiquity of Guns in India and consequently of gunpowder upto say 1400 a.D. I shall feel grateful if any scholar publishes references to Guns or gunpowder in Indian literature earlier than a.D. 1400.

I shall now summarize in chronological order the references to guns, gunpowder, mines, etc. recorded by me, in the following lines:—

European References

A.D. 1325 - Picture of a gun in an Oxford MS.

A. D. 1326 - Guns in France and Florence.

Indian References

- A.D. 1406 References to "guns" in Bengal by Mahaun, a Chinese Interpreter.
- A.D. 1443 "Pyrotechny" at Vijayanagar Court mentioned by Abdul Razzaq.
- A.D. 1472 Use of "mines" at the siege of Belgam in the Deccan (for the first time) by Mahmud Gawan.
- A.D. 1482 A force of musketeers and gunners at the siege of the fort of Champaner by Mahmud Begda.
- A.D. 1528 Baber's use of cannon and gunpowder near Kanauj.
- A.D. 1596 Nalikā = Gun, mentioned by Rudrakavi, the Court-poet of Narayan Shah of Baglan.
- A.D. 1648 References to guns carried on carts together with bags of gunpowder by Govinda Vaidya.
- A.D. 1685 Hari Kavi's description of guns (= nālikā) and gunfire in the Śambhurājacarita.

a. D. 1764 — Dalapatirāya's Sanskrit draft of a letter to be addressed by a king to his analādhyakṣa or the officer-in-charge of artillery to keep the yantraśālā ready for action.

I believe the above references would be found sufficiently authentic and instructive as they take the antiquity of the use of guns and gunpowder in India upto, say, 1400 A. D. I shall be happy to know from veteran researchers any references to guns and gunpowder as used in India between A.D. 1300 and 1400.

P. S.—Since this article was sent to the press I have been able to note a few more references to Guns. These are as follows:—

- (1) Three iron Guns bearing inscriptions and recording the names of Fāruqi Kings Mubārik and Adil Shāh. One is dated 1554-5 A.D. while another is dated possibly 1589 A.D. (Vide p. 73 of Inscriptions in C. P. and Berar by Hira Lal, Nagpur, 1916). Item 102—Khandwa Gun Inscriptions—Item 94 on p. 68— Asirgadh Gun Inscriptions (a bronze gun made at Burhanpur in A.D. 1663 and another in A.D. 1664.)
- (2) Barbosa (A.D. 1515) refers to riders of elephants with bows, arrows and handguns (Vide p. 259 of History of Gujarat by Commissa-BIAT, Vol. I, 1938).
- (3) The Campūbhārata of Anantakavi (c. 1500 A.D.) describes gunfire as follows (Stabaka III, v. 54 p. 113 of N. S. Press Edition, Bombay, 1903):—

" काळाम्बुदालिनिळकारक्षणदीसिवत्याँ संबुक्षितारसपदि सध्वनि निःसरिदः । वपाँदमसीसगुलिकानिकरैः कठाँरै-वर्मासियातिमवधीखनकाल योघः ॥ ५४ ॥ "

- (4) Prof. Ramanayya (Vide p. 129 of Vijayanagar: Third Dynasty) states that the Vijayanagar army was weak in artillery, which comprised a corps of musketeers and several cannon. The Mussalmans made use of artillery fully with the help of Turkish gunners trained in European wars.
- (5) Sir E. Denison Ross (Arabic History of Gujarat, 1928) refers to guns (p. 220), shot and ball (p. 453), broken gun-carriage (p. 497), five hundred brass guns in the army of Gujarat (p. 568), 12000 muskets in Gujarat, etc.
- (6) On November 1, 1526 Baber witnessed the casting of a gun by Ustad Ali Kuli (Vide pp. 343-344 of Memoirs of Baber by ERSKINE, London, 1826).

- (7) In the Rabari Songs of Kathiawar recorded by B. L. MANKAD, p. 66 of Bombay Univ. Jour. VII (New Series) Pt. IV, we find a reference to guns in connection with a marriage party:—
- "Drums are beaten and guns are fired as the bride-groom's marriage party starts from the house of the bride."
- (8) Principal Dr. Balkrishna sometime ago published an article on Fire arms in the Mahābhārata in the Rajaram College Magazine called the Rajaramian. Dr. V. S. Sukhthankar has shown to me a reprint of it but I have not examined the views of Dr. Balkrishna stated in this article.
- (9) About Saltpetre, vide pp. 66-67 of The Travels of John Albert de Mandelso from Persia into East Indies (London, 1669). Sir P. C. Ray regards this as the earliest account of Saltpetre on a commercial scale, (vide Hindu Chemistry I, p. 100). Regarding Transport of Saltpetre in India in the Seventeenth Century by Land and Sea, vide Jour. of Beh. and Orissa Res. Society, XXV, Pt. I (March, 1939)—article by J. N. Sarkar, Feb. 6th, 1627—about Rs. 2,500 were exacted from the English factories at Surat as taxes on Saltpetre and Sugar conveyed by a caravan.

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2. The Manufacture and Use of Fire-arms In India between A. D. 1450 and 1850 *

In my paper on the "Use of Guns and Gun-powder in India from A.D. 1400 onwards" contributed to the Sir E. Denison Ross Volume (pages 117-124), I have recorded a few references on this subject, which clarify to some extent the history and chronology of the use of guns and gun-powder in India. I propose in this paper to record some more data bearing on the subject, which, it is hoped, will be useful to scholars who intend to write on the history of fire-arms in India and allied topics.

(1) RAM CHANDRA KAK in his Ancient Monuments of Kashmir (London, 1933) records the political history of Kashmir. In his account of the reign of Zain-ul-Abidin (A. D. 1421-1472) he gives us the following information about fireworks and fire arms:

(a) Page 36—"The King (Zain-ul-Abidin) himself composed two works in Persian, the first being a treatise in the form of questions and answers on the manufacture of Fire-works and the second entitled Shikayat (the Plaint) a poem, etc."

(b) Page 38—" He gave a strong impetus to the Manufacture of paper, shawls, and embroidered tapestry, for which Kashmir has always been famous. He promoted the silk industry by inviting weavers from Khurasan and settling them in the country. It was in his reign, in the year A. D. 1466 that firearms were first introduced in Kashmir."

The above references to fire-works and fire-arms are in harmony with the references to guns and gun-powder in India from A. D. 1400 onwards recorded by me in my paper referred to above.

(2) In the Catalogue of Venetian Coins in the Madras Government Museum (Madras, 1938) Mr. T. G. Aravamuthan has recorded some information about the professions of the Italians in India in the 16th and 17th centuries. In this information I find the following references to Italian Artillery makers:—

Page 22 — "A Milanese gunner who died in Lahore in 1597" left

"all his books to the (Jesuit) fathers (of the mission to
the Mogul Country) including some technical works on
the founding of Cannon and on Siege operations." (See

^{*} Bharatiya Vidya, Vol. IX (Munshi Volume), pp. 201 ff.

page 192 of Maclagan's Jesuits and the Great Mogul, London, 1932).

- Page 26 Among three or four Christians employed at Agra in A.

 D. 1632 there was one Venetian Angelo Gradenigo,
 employed by Jehangir in his court as cook and probably
 as maker of artillery (Mundy, ii, 208, n. 3).
- Page 27 Niccolao Manucci, a Venetian, who reached India in 1656
 A. D., entered services as an artillery-man under Dara Shukoh. He became Captain of Artillery to (Mirza)
 Raja Jaising of Amber, marched to the Dekhan and saw Shivaji in 1665. He died about 1720 (See Intro. p. 67 to Storia do Mogor, Translation by W. Erwine, London, 1907-1908).

Sometime before A. D. 1672, among the thousand brass and iron pieces of great Cannon mounted on the walls and gates of Bijapur, there was one carrying not less than 540 pound weight of gun-powder cast by a native of Rome, who when questioned by one of the king's Commissioners about the money he had disbursed upon this account, threw him into the same hole where he had cast the cannon before. (vide p. 602 of Baldaeus P.—A True and Exact Description of the most celebrated East India Coasts of Malbar and Coromandel — Trans. Vo III — London, 1703).

- Page 29 Petro Paulo, who worked as a Carmelite friar in India, wrote to Manucci in A. D. 1680 that "he knew about a Match lock that could be fired five to seven times after only once loading it, and whenever he chose to do so." (See Manucci, IV, 112-3).
- Page 31 About A. D. 1625 "Handsome musket barrels wrought with gold and set with agates of various colours in which heads are carved were also brought here overland by the Venetians." (Vide p. 26 of Pelsaert's Travels—Trans. by W. A. Moreland).
- (3) Dr. J. B. Chaudhuri records the following verses of a Sanskrit poetess Gauri, which describe a weapon called সুমত্বী (Vide p. 9 of Sanskrit Poetesses Vol. II, Part A, Calcutta, 1939):—
 - (1) " महाचण्डीव संभाति भुशण्डी भवतः करे। प्रतापज्वरसंभातगोळिका जीवहारिणी॥ ४॥"

"(O, King!) the Bhuśandi — the destroyer of beings and filled with cannon balls, that are shining with

brilliant prowess,—is shining in your hand like the great goddess of destruction."

(2) "बन्दिच्णैषरिपूर्णैनजान्त— गौँछिका गरछवनत्रविकाशा ॥ बाहुभीषणभुजङ्गभृतेयं भाति दुष्टभुजगीव भुशण्डी ॥ ५ ॥ "

"With its yawning mouth, poisonous by reason of the cannon balls that are filled with fiery powder this Bhuśandī shines (in the hand of the King) just like a malignant snake (shining in the hand of one (i. e. Śiva) who wears dreadful snakes on his arms."

It appears from the two verses of Gauri quoted above that the weapon "Bhuśaṇḍi" in the hand of the King is either a musket or a small portable piece of Cannon. As Gauri is quoted by Veṇidatta (A. D. 1644) we may conclude that she is earlier than about A. D. 1625. According Dr. Chaudhuri the lower limit of her date is 17th Century A. D. (See p. IX of the Intro.). As Gauri mentions fire-arms we may safely infer that she is later than about 1400 A. D. We may tentatively fix her date between A. D. 1400 and 1600.

(4) Saint Tukārāma of Mahārāṣṭra possibly refers to bullets or Cannon-balls (गोलपा) in the following extract;—

" देव राखे तया मारील कोण तुका म्हणे नारायण । येतां गोळ्या वारी वाण ॥ ४ ॥ "

(Abhanga No. 2927 in तुकाराम-गाथा, Bombay.)

Tukārāma flourished between A. D. 1608 and 1649.

(5) Raghunātha Pandita in his Rājavyavahāra Koša composed by the order of Shivaji the Great about A. D. 1676 refers to the terminology about fire-arms in the Sastravarga (verses 129—131) as follows:-

" यन्त्रव्यूहस्त्वराया स्याद् वाणोऽग्निनिष्ठका भवेत् ॥ १२९ ॥ नाष्ठिकं वरसेदानं नलीयन्त्रं तु वन्दुस्तम् । तोफ नाम भवेदुस्का दारू नामाग्निचूणंकम् ॥ १३० ॥ लघुयन्त्रं जवर्जनं जम्बूरा तु शतिक्षका । दीप्तिनीढं भवेत् काना गोलंदाज् यन्त्रवेधकः ॥ १३१ ॥ " (Vide p. 155 of ज्ञिवचरित्रप्रदीप, Poona, 1925)

In the above extract the terms बराबा, बाण, बरसंदाज, बन्दुख, तोफ, दारू, जबजंग, जम्बूरा, काना, and गोलंदाज are either Persian or Arabic. Their Sanskrit equivalents have been given by Raghunātha Paṇḍita. (6) Bernier in his Travels (A. D. 1656) has recorded many observations about the artillery of Aurangzeb and that of the Mogol army (See Constable's edition of Travels, London, 1891). I note below some points from these remarks:—

Page 217:— Musketeers squat on the ground and rest their muskets on a wooden fork which hangs to them—afraid of an evil spirit causing the bursting of their musket, which may burn their eyes and long beards—Monthly pay of musketeers is Rs. 20, 15 and 10—Artillery men receive great pay. Particularly all the Franguis or Christians, Portuguese, Dutch, Germans, and French; fugitives from Goa, and from the Dutch and English Companies. Formerly when the Mogols were little skilled in the management of artillery, the pay of the Europeans was more liberal and there are still some remaining who receive Rs. 200/—a month: but now the King admits them with difficulty into the service and limits their pay to Rs. 32/—

Two Kinds of Artillery :-- (1) Heavy and light or Artillery of the Stirrup.

Heavy artillery: - 70 pieces of cannon, mostly of brass, 200/200 camels, each carrying a field piece of the size of a double musket attached on the back of the camel.

Page 218: - Artillery of the Stirrup :-

50 or 60 field pieces of brass, each mounted on a well-made and handsomely painted carriage, with a ammunition chests, one behind and another in front, and ornamented with a variety of red streamers. The carriage, with the driver was drawn by 2 fine horses and attended by a third horse, led by an assistant driver as a relay.

The heavy Artillery could not move along difficult passes or cross the bridges of boats thrown over the rivers. The light Artillery is always intended to be near the King's person and on that account takes the name of the Artillery of the Stirrup.—When the king arrives at any place of encampment, the guns ranged already in front of the King's quarters fire a volley by way of signal to the army.

Page 219: Infantry - About 15,000 in the army immediately about the King, including Musketeers, foot Artillery, etc.

Page 352:— The heavy Artillery consists of 70 pieces mostly of brass.

Many of these cannon are so ponderous that 20 yoke of oxen are necessary to draw them along and some, when the road is steep or rugged, require the aid of elephants in addition to the oxen, to push the carriage-wheels with their heads and trunks.

Page 277 .- Description of an elephant fight --

Use of Charkys (or fire-works) to separate fighting elephants—the elephants have a particular dread of fire; they have been used with very little advantage in armies since the use of fire-arms—The boldest elephants come from Ceylon but those only, that are accustomed for years to the discharge of muskets close to their heads and the bursting of Crackers between their legs, are employed in war.

(Charkhi or a wheel on the end of a stick is a common fire-work in Northern India).1

(7) Abul Fazl in his Ain-i-Akbari (C. A. D. 1590) makes the following remarks about Artillery of Emperor Akbar (Vide pp. 91-95 of Gladwin's Trans. Vol. I, Calcutta, 1897):—

"The Artillery—These are the locks and keys of empire; and excepting Room, no Kingdom can compare with this in the number and variety of its ordnance.

Some pieces of cannon are so large as to carry a ball of twelve Maunds; and others require each several elephants and a thousand bullocks for their transportation.

His Majesty gives a great deal of attention to this department, and has appointed to it Daroghahs and Clerks.

He has invented several kinds, some of which are so contrived as to take to pieces for the convenience of carriage, and when the army halts they are nicely put together again. Also seventeen pieces are so united as to be discharged by one match. There are others which can be easily trans-

^{1.} Berniar refers to "Bannes" (Bana or rocket) on p. 48 of the Travels, used for frightening the horses in the battle. He explains "bannes" as a "sort of granade attached to a stick." I shall study in a separate paper the usage of the term Bana (वाण) as applied to a fire-work or fire-arm, say between A. D. 1450 and 1850. It is for linguists to say whether the sense of "fire-work" or "fire-arm" has been grafted on the Sanskrit word 'वाण' which means an arrow-

ported by one elephant and they are called "Gujnal." Others can be carried by a single man and are called Nurnal.

It has been wisely ordered that a sufficient train of artillery be placed in each Subah.

The cannon for battery, and boats and those, which are fit for journies are kept separate. It would be impossible to innumerate them; and skilful artists are continually making new ones especially Gujnals and Nurnals.

In this department Omrahs and Ahdyan receive large salaries.

Rules observed in making fire-arms for his Majesty's use :--

Bundooks (i. e. match-locks) are now made in such a manner that when filled with powder up to the muzzle there is no fear of their bursting. Formerly, they never were of more than four folds of iron: and sometimes only of one, joined together by the two extremities of the breadth, and which were very dangerous. His Majesty after having the iron flattened, has it rolled up like a scroll of paper but slantingly and every fold is passed through the fire. There is also the following method:—Solid pieces of iron are properly tempered and then bored with iron borer and three or four of these are joined together to form a Bundook. The smallest Bundooks that are made are two spans long and the longest near two ells. That of one ell and a quarter is called Demanik and its stock is made differently from the others. Some are made to fire without a match, merely by giving a little motion to the trigger. And they make some balls that will do execution like a sword.

There are a great number of skilful artists in this department, the chief of whom are Ostad Kebeer and Hussain. In preparing the iron for Bundooks half is lost in the fire. When the lengths are made and before they are joined together they are stamped with figures, expressing the quantity of crude iron and the quantity remaining; and in this state it is called Dowl. This is sent for His Majesty's inspection and the weight of the ball being determined, the bore is made accordingly. The Bundook ball is never larger than twenty five Tanks nor less than fifteen; but excepting His Majesty no body is bold enough to fire off one of the largest. When the bore is finished it is again carried to the Harem. From thence it is brought out again, and set in an old stock and filled with powder till within a third of the muzzle. If it stands this proof it is carried again to his Majesty. Then the muzzle is finished, after which it is again put into an old stock as before mentioned, and tried at a mark. If it does not carry true, they heat it and straighten it by means of a wooden rod. Then

in the royal presence it is delivered to the filer, who fashions the outside as he is directed. When this is done, the barrel is again carried to His Majesty, when the wood and form of the stock are determined. In this stage the figures, marking the weight of the crude and of the prepared iron, are effaced, and in their room are engraven the maker's name, the place, the month and the year. Next are made the trigger, the ramrod and primer. After all these are finished, the piece is again ordered to be proved. If it is found to carry true, it is again brought to the Harem along with five balls. In this state it is called Sadeh (or plain). The colour of the barrel and stock is next determined and when the colouring is finished, it is called Rungeen (or coloured). It is now sent again into the Harem with five more balls. His Majesty fires it four times and returns it back again with the fifth ball. When ten of these Rungeen muskets are collected together they are ordered to be inlaid with gold and are afterwards sent to the Harem as before described. And when ten such are completely finished, they are committed to the care of Cheeyleh.

A description of the Barghu:—Formerly it required a great many men, with a number of iron tools to polish the Bundooks; but His Majesty has invented a wheel, which is turned by a single bullock and polishes sixteen muskets in a very short time.

Of the ranks of the Royal Bundooks :-

Bundooks are either made in the royal workshops or are bought or are received in present. His Majesty out of a thousand of those of different kinds selects one hundred and five for his own particular use, which are used in the following manner:—viz. twelve are named after the months and are brought to him alternately, so that each comes in use once a year; thirty others are changed every week; and thirty-two are used alternately every day of a solar month; and the remaining thirty-two are for the Kowtel. His Majesty fires every day, and after he has discharged a piece four times, it is sent out and exchanged for another.

It is also a rule that the clerks of the Chase take an account of all the game that is shot by His Majesty and with what particular piece, from whence it appears that with the musket called Sungram, which is the first in rank of the Khaseh muskets and appropriated for the month of Ferverdin (i. e. March), there have been killed one thousand one hundred game of various kinds.

The pay of the Bundookchyan:-

His Majesty has fixed the pay of the Merdahs after four rates viz., first 300 Dams; Second 280 Dams; third 270 Dams; fourth 260 Dams and

the pay of others at five rates, each of which are divided into highest, middle and lowest.

	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS	
First Rate:	Highest Dams	250
rati uniwottel est	Middle Dams	240
	Lowest Dams	230
Second Rate :-	- Highest	220
	Middle "	210
dela ma un sustan	Lowest	200
Third Rate:	Highest Dams	190
	Middle	180
	Lowest	170
Fourth Rate :-	- Highest	160
	Middle "	150
STATE OF THE PARTY OF	Lowest	140
Fifth Rate:-	Highest	130
	Middle	120
	Lowest	110 "
PERSONAL PROPERTY AND ADDRESS OF THE PERSONAL PR	THE RESIDENCE OF THE PARTY OF T	

These are the remarks of Abul Fazl on Akbar's Artillery. They are very important for the history of the Manufacture of Fire-Arms in India. We notice in these remarks the personal attention of Akbar to every detail of this manufacture because Artillery was regarded by him as "the locks and keys of the Empire" as Abul Fazl puts it. Other details of the Artillery department recorded in these remarks speak for themselves. They may be useful to us for comparison with similar details pertaining to the use of Artillery by the Marathas and the English in 17th and 18th Centuries. Unless we bring together all data pertaining to the use of firearms in India, we can have no true vision of their history in India.

(8) Rāmachandrapant Amātya (A. D. 1650-1733), who had a close knowledge of the Maratha administration under the Maratha Kings, Sri Shivāji Mahārāja and his sons Sambhāji and Rājārām, composed his celebrated Ājñāpatra dealing with Maratha Polity. It is dated £1st November 1716. In this elaborate document we find some references about firearms as used by the Marathas. I note some of these references from its Edition by Prof. V. G. Urdhvareshe, Indore, 1939:—

Page 7:— In the description of Shivāji's हुजरात or standing army reference is made to the following items:-

(1) Employment by Shivāji of trustworthy musketeers (बन्दुकी,) bowmen (तिरंदाज) etc. and their equipment.

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- (2) Equipment of all forts with दास्तीळी, वाण, होके, मोडी, etc.
 - (3) For Cavalry, ताजी, आरबी, इडासी and कडी horses were maintained, 1
 - (4) The लोकञ्चाना or artillery, consisted of the following items:-
 - (i) बन्दुकी = Musketeers
 - (ii) रामचांरया = a kind of gun
 - (iii) दुराच्या = long-range guns
 - (iv) फिडनाक (or फिडनाळा) = a gun mounted on an elephant.
 - (v) सुतरनाङा = A gun mounted on a Camel
 - (vi) गाड्यावरील-भांडीं = Guns on wheeled carriages
 - (vii) करोळ = Mounted musketeers
 - (viii) होके (हुका or हुका) = Vessels filled with gunpowder or bombs, or बाण or सुहंग.
 - Page 17: हुजरात should consist of छड्कर, आडाव, हशम, बंदुकी (musketeers), तिरंदाजी and करोल (mounted musketeers).
 - Page 18: Weapons to be kept ready are:—
 तरवारा, कटारा, जमदाडा, प्रष्टे, भाळे, बाक, बिचवे, सैत्या, टाकण्या,
 तिरकमाना, बंदुकी (muskets). Other equipment consisted of —
 बस्तरे, धुंग्या, टोप, दुपहे, चिळसर्ते, पारवरा, ताज, हुके, दारूगोळी
 (muskets), बाण, etc.
 - Pages 40-48:— Chapter on Forts and their equipment consisting of भांडी, जुंबरे (जंबरे) small Bandooks.

Instructions regarding the care and upkeep of ordnance:-

- (i) दारुवाना should be kept away from residential quarters.
 - (ii) The cellar of the दारूखाना should contain दारूचे बस्ते (big bags of gunpowder) as also मडके (earthen pots) full of it.
- (iii) बाज, होके, etc. should be kept in the Central room of the

निळा = कर्क, बोर = द्योण, कुमैत = क्यामल, अंबरी = मेधवर्णक, अव्लख = कर्बुर, जरदा = पिङ्गल, अबश = व्याप्रवर्ण, करडा = पाटल, रहवाल = सैन्धव, इराखी = यावन, अरब्बी = पारसीक, कच्छी = जवन, मुजिन्नस = विजातीय, जहरी = बास्हीक, ताजी = मद्रज, ठांकण = पर्वतीय, तेजी = सैजस्वी, तुरकी = वस्तान.

^{1.} Cf. राजन्यवहारकोश (शस्त्रवर्ग) - Verses 164-168 mention the following horses:-

^{2.} Briggs in the Feristha (Vol. IV, P. 65, Cal. 1910) explains. " Hooka " as Shell.

- (iv) Every fortnight the Havaldar should take out दारू, बाज होके and heat them in the sun and again keep them in the cellar duly sealed (मुद्रा करून).
- (v) The বাহজানা should be guarded day and night by special guards, who should not allow any one to approach without permission.
- (vi) As forts can be protected only by भांदी and बन्दुका, gunners should be maintained.
 - (vii) Officers on the fort such as तटसरनोवत, बारगीर, सदरसर-नोवत, and हवालदार should practise the use of muskets (बंदुकी) and मांडी (cannons).
 - (viii) भांडी, जंडरे, चरनया, etc. should be kept at strategic points on the fort at different towers (बुरुज).
 - (ix) The gun-carts (भांडियाचे गाडे), चरक (grindstone for sharpening weapons) and भांडी (cannons) should be installed on strong iron bases (मजबूत छोलंडी कट).
- (x) दारूच्या खिल्या (bags of gun-powder), गज (iron rods), भांडे निवावयाच्या कुंच्या (covers for cooling the cannons), गोळे (cannon-balls), कीट (burnt metal) etc., small stones from the river of the size of a betel nut, बाणाच्या प्रकासा (फाळ), जामग्या (wicks for firing off the cannons), उरफा (iron sheet attached to बाण), सामते (instruments for boring holes) for repairing the holes of cannons (काने) etc. — all this equipment should be always ready for use near the cannons (भांडी).
 - (xi) Articles of iron and stone (अहिनी, दगडी जिन्नस) may be kept near the gun-powder.
 - (xii) होके, बाज should also be kept ready at all places, where guards are posted.
- (xiii) During the rainy season all the pieces of cannon with their openings and crevices should be coated with oil and wax. Their angular crevices (कोने) should be filled with wax. All the pieces of cannon should be provided with covers (आयादी) to protect them against damage.

 Other equipment also should be kept well protected against moisture.

- (xiv) Brave and trustworthy artillery men (गोलंदाज) with families (कविलेदार), should be employed in adequate number commensurate with the needs and artillery equipment of each fort. These men should be expert marksmen (नेमला जागा दुरस्त मारणार असे).
 - Page 44 Chapter on Navy (आरमार)

The navy should be provided with brave men, equipped with भांडी, जंबुरे, वंदुका, दारुगोळी, हुके etc.

- Page 46 The enemy should be kept under naval fire (भांडियाचा मार) on all sides (चौगीर्द घेरून).
- Page 47 The enemy should be kept terror-struck by destroying his ships with naval cannonading.

The foregoing notes amply show the use of fire-arms by the Marathas in the 17th century. They also reveal the importance attached to artillery by Shivaji the Great and his ministers in war-fare on land and sea. I do not, however, notice in them any reference to the manufacture of cannons and muskets as I find in the Section on Artillery in the Ain-i-Akbari. I wonder if any of the early Maratha rulers devoted any personal attention to the manufacture of fire-arms as Emperor Akbar did.

(9) In the Hobson-Jobson by Yule and Burnell (London, 1903) we get some information about fire-arms as follows:—

Desc. General de Africa, lib, iii, f. 92.

Page 37:— Article on ARSENAL—the following extract refers to the manufacture of cannon and gun-powder at Fez.

A. D. 1573—"In this city (Fez) there is a very great building which they call Darcana, where the Christian captives used to labour at blacksmith's work and other crafts under the superintendence and orders of renegade headmen.......here they made cannon and powder and wrought swords, cross-bows and arquebusses, — Marmol

Page 854: - Article on FIRINGHEE: -

A. D. 1678—"The Artillery in which the Fringis are listed, formerly for good pay, now very ordinary, having not above 30 or 40 rupees a month."

- Fryer, 195

Pages 127-128: "BUNDOOK". s. H. Bundûk from Ar. Bunduk.

The common H. term for a musket or match-lock. The
history of the word-is very curious, Bunduk, Pl. banddik

was a name applied by the Arabs to filberts (as some allege) because they came from Venice. (Banādik, comp. German Venedig). The name was transferred to the nut-like pellets shot from cross-bows, and thence the cross-bows or arblasts were called 'bunduk' elliptically for Kaus al-b. 'pellet-bow.' From Cross-bows the name was transferred again to fire-arms as in the parallel case of arquebus (Al-Bandukāni, 'the man of the pellet-bow' was one of the names by which the Caliph Hārūn-al-Rashid was known, and Al Zahir Baybars al-Bandukdāri, the fourth Baharite Soldan (A. D. 1260-77) was so entitled, because he had been slave to a Bandukdār, or Master of Artillery (Burton Ar. Nights, xii, 38).

(1845—" Banduquis, or orderlies of the Maharaja carrying long guns in a loose red-cloth cover"-Drew, Gumoo and Kashmir.

Page 935:— TOPE-KHANA. s. The Artillery, the Artillery park, or Ordnance Department, Turco-Pers. Top-khana, "Cannon-house" or 'Cannon-department. The word is the same that appears in reports from Constantinople as the Tophaneh. Unless the traditions of Donna Tofana are historical, we are strongly disposed to suspect that Aqua Tofana may have had its name from this word.

1687—" The Toptchi" —These are Gunners, called so from the word Tope, which in Turkish signifies cannon, and are in number about 1200 distributed in 52 chambers, their quarters are at Tophana or the place of Guns in the suburbs of Constantinople."

- Rycaut's Present State of the Ottoman Empire

1726 - "Isfandar Chan, Chief of the Artillery (called the Daroger of the 'Topscanna')."

- Valentyn, iv, (Surate) 276.

1765—"He and his troops knew that by the treachery of the
Tope Khonnah Droger (Daroga) the cannon were
loaded with powder only."

- Holwell, Hist. Events, etc. i. 96.

10. Capt. Edward Moor in his " Narrative " about the siege of Dharwar (A. D. 1794, London) records some account of the city of Bijapur

(Chap XXIII). In this account he devotes some pages to the description of the great guns at Bijapur (Pages 322-323). Some points from this description may be noted below:—

- (a) -Enormous size of the guns he saw at Bijapur.
- (b) -- Moor measured 3 guns -- Formerly all towers had guns, from which only 12 remained.
- (c) —Measurements of the Malabar gun on the South Eastern side of the fort (See p. 322)— Length from breech to muzzle = 21 feet—5 inches— Diameter at the breech = 4 feet, 5 inches.
- (d) —Short gun near the above monster called Cutcha -Butcha.
- (e) Moolk e' Meidan, largest gun on a tower on the south-western side with an inscription of A. D. 1685 by Alum Geer, commemorating his conquest of Bijapur (see plate opposite p. 322)— Several Inscriptions on it in Arabic, and one Persian Several stone shot lying near the gun also its rammer, which is like a mast.
 - (f) -The gun on Coperes-boorj called Lumcherree or Far-flyer 30 ft. 31 inches x 9 ft.-2 inches at breech.
 - (g) -Measurements of Moolk e' Meidan:-

Diameter at the breech - 4 feet, 10½ inches

muzzle — 4 " 8

of the bore — 2 ,, 4 , length — 14 ,, 1

Circumference in the middle — 13 " 7 "

Moor observes:--

"The first and last of these guns are constructed of bars of iron, hooped round, not upon carriages, but lying upon blocks of wood. The brass gun is fixed on its centre on an immense iron inserted in the ground and grasping its trunnions in the manner of a swivel, breech resting on a block of wood, supported by a thick wall, so that it cannot recoil when fired.

Besides the inscriptions, the brass gun has several ornamental devices upon it, particularly about the muzzle, where, if we recollect right, a lion and a tiger are fighting, and one of their mouths expanded forms the muzzle of the gun, in a manner, to our recollection,

not very clear. About the fort we saw several small guns cast of brass, and curiously inlaid with gold and with tiger mouths, a plan Tippoo has followed in casting some of his field pieces.

We are told, that there never was but one other gun so large as Moolk e' Meidan, which was its sister, Kurk o Bedjlee, Thunder and Lightning and that it was carried to Poona, and perhaps melted down, as we never heard of it there."

Pages 420 — 422 — Note XIII:-

"Several writers mention pieces of ordnance as almost incredibly large, but none that we have read of by any means approach the magnitude of Moolk e' Meidan and the others here described; which we repeat may be depended upon, as their dimensions were carefully taken.

Dow (History of Hindoostan, Vol. II, p. 278) mentions two pieces of ordnance capable of receiving a stone ball of six or seven maunds, or one of iron of thirty maunds. "The size of these guns" he adds in a note, "might be reckoned incredible, did there not remain to this day in India, pieces of as extraordinary a bore: particularly one at Arcot and another at Dacca." Dow is, we think, deficient in not giving the maund by which he estimated the weight of this shot: a maund is a very indefinite term, as it varies in different parts of India, from twenty five pounds, the Madras standard, to seventy four in some parts of Bengal.

Hanway (Travels in Persia, Vol. I, page 452) speaking of a gun in a city of 'Germany, says," It is a brass mortar, and will carry a ball of seven hundred and thirty pounds to the distance of thirty-three thousand paces and throw a bomb of one thousand weight." we do not clearly understand, how it could throw a bomb, by which we imagine a shell is meant, of greater weight than a shot, because the latter must 'necessarily be nearly the same diameter as the Calibre, and solid, which the former is not. Criticism is, however, thrown away upon so extraordinary a relation, which carries impossibility on its face as a very prominent feature: how can any force of powder impel a ball of any dimensions thirty-three thousand paces?, which estimating the pace at two feet and a half, is upward of fifteen miles, or at only two feet, is twelve miles and a half?

Rennell in his Memoir (page 61) gives the mensuration of the gun near Dacca, spoken of by Dow; it is now fallen into river, together with the bank on which it rested. "As it may gratify the curiosity of some of my readers," says the Major, "I have here inserted the dimensions and weight of this gun. I took the measure very carefully throughout, and calcula-

ted each part separately. It was made of hammered iron, it being an immense tube formed of fourteen bars with rings of two or three inches wide driven over them and hammered down into a smooth surface; so that its appearance was equal to that of the best executed piece of brass ordnance although its proportions were faulty.

Whole length	22	feet 10½	inches
Diameter at the breech	3	,, 3	
4 feet from the			
muzzle	2	,, 10	"
" at the muzzle	2	, 21	**
at the bore	1	foot 31	**

The gun contained 234, 413 cubic inches of wrought iron and consequently weighed 64, 814 pounds avoirdupoize; or about the weight of eleven 32 pounders. Weight of an iron shot for the gun 465 pounds.

Allowing for windage, that is the difference of the diameter of a shot and the calibre of the gun, one-twentieth part of the latter, as allowed in the ordnance tables, an iron shot for Major Rennell's gun will be in diameter 1 foot 2 inches 37-100ths, and as the increasing gravity of solid iron globes is as the cube of their diameters, and as a 42 pounder is in diameter 6 inches 68-100ths, the weight of an iron shot for this gun is consequently 417 pounds 3-10ths. The calibre of a 42 pounder is 7 inches 3-100 ths; of a 9 pounder 4 inches 21-100 ths; a 9 pounder shot in diameter is 4 inches; therefore a shot for Cutcha-Butcha, the gun first described in the text, allowing a calibre of 1 foot 9 inches, to require a shot of 1 foot 8 inches diameter, will weigh 1125 pounds. For Lumcheree, allowing 2 feet 35-100-ths of an inch diameter for the shot of its calibre of 1 foot 1 inch it weighs 264 pounds 4-10ths. For the calibre of Moolk e' Meidan 2 feet 4 inches, allow the diameter of the shot to be 1 foot 2 inches 6-100ths, it will weigh 2646 pounds 7-10ths!"1

Page 103:—"On the top of the unfortified hill, one of those unwieldy, enormous pieces of ordnance, called before Malabar Guns, was found: it was ornamented with inscriptions and devices, and upon the whole, the hand-

^{1.} Compare the description of the "Great gun of Agra" by Vincent Smith (Oxford History of India, 1923, p. 600, footnote 2):—

[&]quot;A wonderful piece of ordnance known as "the Great Gun" of Agra was taken (by the British). It was a casting in Brass or similar alloy, 14 feet, 2 inches long, with a calibre or bore 28 inches in diameter. It weighed 96,600 pounds and could fire a shot weighing 1500 pounds. When General Lake tried to remove it to Calcutta it sank in the Jumns. Subsequently, Lord William Bentinck caused it to be blown up and sold as old metal."

somest of this kind of guns that came under the observation of any in our detachment."

Pages 135-136:— "We are still within hearing of the Chittledroog
morning and evening gun, which we learned was fired
from a thirtytwo pounder on the top of the hill. The
custom of firing a morning and evening gun in Tippoo's
garrisons, appears in "Memoirs of the War in Asia, by
an officer of Colonel Baillie's detachment," page 155,
to have commenced in 1793.

The hours of firing are six in the morning and nine in the evening.1

- Page 187:—" Changerry is a hill fort at the very top is a good tower, with a six pounder, the only decent gun in the fort, mounted on it."
- Page 17:—"The principal battery from which the Bhow's (Parashuram Bhau's) guns were fired is of five guns and called the Ram battery,2 from having a favourite gun in it of that name."
 - Page 24:—"A most tremendous fire of guns, mortars, rockets, and musquetry was poured from the fort and batteries."

 (at Dharwar fort).
 - Page 40:—" these guns were originally made of iron bars hooped round, and beaten into shape: they will be spoken of hereafter by the name of Malabar guns, by which names Europeans know them."
 - Page 506:— "Limber— A low two-wheeled carriage on which the trail of a gun is fixed when travelling: it is released in a moment if wanted to fire, which is called unlimbering the gun: the cattle being yoked to the limber, guns are of course dragged breech-first."
 - Page 509:— "Rocket—A missile weapon consisting of an iron tube of about a foot long and an inch in diameter, fixed to a bamboo rod of ten or twelve feet long. The tube being filled with combustible composition is set fire to, and

^{1.} At present in Poons the hour "nine in the evening" is indicated by lowering the voltage of electric lamps. Formerly, in Poons this hour was indicated by the firing of a gun. In the B. I.S. Mandal Quarterly (July-October 1946) p. 225—Mostyn's Diary (for A. D. 1772-1774,), P. 324 is quoted as referring to "Gunfire in the morning" at Poons.

^{2.} Possibly "Rom Battery" = Parashuram Battery named after Parashuram Bhau Patwardhan himself.

being directed by the hand, flies like an arrow to the distance of upwards of a thousand yards. Some of the rockets have a chamber and burst like a shell; others called ground rockets have a serpentine motion and on striking the ground rise again and bound along till their force be spent. The rockets make a great noise and exceedingly annoy the native cavalry in India, who move in great bodies; but are easily avoided, or seldom take effect against our troops, who are formed in lines of great extent and no great depth - This article is taken from Major Dirom's Glossary."

Page 510: - " Tumbril - A carriage for the gun ammunition."

The foregoing notes on the use of the fire-arms by Capt. Edward Moor possess both historical and technical interest for the students of the history of fire-arms in India. Moor had a scientific outlook both in his study of men and manners, as also in his record of this study. His close study of the great guns at Bijapur is very informative and instructive.

(11) In Mr. N. G. Chapekar's book " वेशवाईच्या सावर्डीत " (Poons, 1931) we get the following references to fire-arms:—

A. D. 1758 — (Page 75) " वोकखाना" or Artillery Department of the Peshwa is referred to.

A. D. 1793 — (Page 87) — " तोफखाना."

A.D. 1779 — (Page 91) — Purchase of " 和来" or gunpowder:—

Rs. 2800 -- Gun-powder1 for Tophs or Guns.

Rs. 640 - do - for Banduks

Rs. 78-12-0 - 250 Bags for gun-powder

=Rs. 3518-12-0 - Cost of gun-powder purchased from दुरुभसेट गोविंदजी

Rs. 1600 - 0-0 " तोफीदारू "

Rs. 960 - 0-0 " बंदुकी दारू"

A. D. 1780 - Rs. 276 - 0-0 " वोकीदार "

Rs. 56-4-0 Bags for gun-powder

A. D. 1781 — Rs. 62 - 8-0 Repairs to a gun called 'सरनागीन'; (Page 92) — Special earth (for casting the gun " सरनागीन") brought from Alibag.

^{1.} Burgess (P. 145 of Chrononology of Modern India - A. D. 1494-1894) - "A. D. 1703 Gunpowder first manufactured at Madras."

Rs. 25-0-0 For melting a temple-bell, the metal being used for casting the gun "सरनागीन."

- A. D. 1778 -- " वोफखाना "
- A. D. 1789 -- (Page 151) Rs. 15-8-0 For purchasing a बंदक.
- A. D. 1770 (Page 156) 6 annas for purchasing 28 bullets for banduks.
- A. D. 1828 (Page 255) " बंदुका "
- A. D. 1769 (Page 155) For Banduks on Purandar Fort Rs. 62-8-0.
- A. D. 1790 (Page 92) " दारूचे कारखान्याकडे वासे "

It appears from the above notes that the casting of some guns and repairs to them was done at Poona or in its vicinity by local workmen. Some Banduks were also manufactured by local blacksmiths. On page 274, Rs. 5-1-6 have been debited on account of payment to a blacksmith (धनाजी छोहार सिरदोणकर) for preparing a new Banduk. A "पंचरसी बोक" is also mentioned on this page.

The chronology of the references about the manufacture and use of fire-arms in India recorded above may be tabulated briefly as follows:—

Source	Chrono- logy-A.D.	References
Hobson-	1260-1277	Usages of the word Banduk = crossbow and al-
Jobson Ancient	1421-1472	Bandukāni = Man of the pellet bow.
Monuments of Kashmir by R. Kak	1421-1472	Zain-ul-Abidin rules in Kashmir-His Persian treatise on Fire-works. He gave impetus to paper-manufacture.
7, 211 2411	1466	Fire-arms, first introduced into Kashmir.
Hobson- Jobson	1573	Manufacture at Fez of Cannon and powder by Christian captives.
Ain-i- Akbari	c. 1590	Detailed description of the Artillery Department of Akbar— Artillery, is called " Locks and keys
of Abdul Fazl	Midway do	of Empire"— Number and variety of ordnance unmatched except in Room — Cannon carrying a ball of 12 maunds—cannon requiring many
Miller	and the last	elephants and 1000 bullocks for transportation- Akbar's great personal attention to this Depar-
		tment, with many officers and clerks-Akbar's invention of many kinds of ordnance-Seventeen pieces discharged by one match-Gujnāl, Nurnāl-

Source	Chrono- logy-A.D.	References
700 Emileo	Se product	Special Artillery for each Subhā—Cannon for battery and boats prepared by skilful artists—large salaries to Officers.
And the same	pend value	Rules for special fire-arms for Akbar's use -Bundooks that do not burst even though filled up to the muzzle—Smallest Bundook, two spans long and longest of 2 ells - Bundooks fired without
BUT OF	nessant	a match, merely by the motion of the trigger. Akbar's personal supervision-Chiefs of Artists are Ostad Kebeer and Hussain-Akbar working like an Artillery engineer while in the Harem,
	And the said	supervising every detail of the manufacture of Bundooks - Rungeen or coloured muskets - Ak- bar's invention of a wheel to polish 16 muskets in a short time-Royal Artillery workshops -
A CAN TA		Akbar's daily firing practice-Sangram musket for hunting - four scales of pay for officers of the artillery-Author of some works on firearms.
Catalogue of Vene- tian Coins	1597 c. 1625	Death of a Milanese Gunner at Lahore. Musket barrels wrought in gold etc. brought by Venetians.
by Arava- muthan,	1632	A Venetian " maker of artillery " employed by the Mogol Emperor,
No the burning	1656 c. 1672	Manucci the Venetian "artillery-man" entered service under Dara Shukoh. A great piece of cannon, carrying about 540
	1680	pounds of gun powder, cast by a native of Rome and mounted on the walls of Bijapur. Reference to a match-lock capable of firing
Sanskrit Poetesses.	Before 1600	5/6 times after one loading only. References to विद्वर्ण (gun-powder), गोलिका (bullet) and भुशपदी (musket) by Poetess Gauri.
Saint Tukā- rāma's Works.	1608-1649	Reference to "गोळ्या " (bullets.)

Source	Chrono- logy-A.D.	References
Raghu- nātha Paṇḍita.	c. 1676	Explanations of the terms बाण, वरखंदाज, बन्दुक, दारू, जवजंग, जम्बूरा, काना, and गोलंदाज in the राजन्यवहारकोश (शस्त्रवर्ग).
Bernier's Travels.	1656-1668	Bernier describes Aurangzeb's Artillery - employment of Portuguese, Dutch, Germans, French, etc., on high pay— Two kinds of artillery, heavy and light—The use of the fire work called "Cherkys" to separate fighting elephants—Heavy cannon drawn on carriages—Musketeers and foot artillery—camels, elephants and oxen used for transport of guns—ammunition chests on gun-carriages.
Hobson Jobson. Burgess	1687 1702	Topchi (gunners) and Tophana (तोफखाना) at Constantinople. Gun-powder first manufactured at Madras.
Ajñāpatra of Rāma- candra Amātya.	21st. Nov. 1716	Description of Shivaji's standing Army — Musketeers, bowmen, and their equipment—दारू-गोळी, बाण, होके, भांडीं, etc. रामचांग्या, दुराव्या, फिलनाक, सुतरनाल, गाडवावरील भांडीं, करोल,—Standing army, consisting of लड्कर, इशम, बाडाव, बंदुकी, तिरंदाजी, करोल, Special care of the Artillery on forts—
	Classic State	दारुवाना, दारूचे बस्ते, बाज, होके, to be kept dry in the rainy season — Periodic inspection of ord- nance by Havaldar — High officers on the fort should practise musketry. Ordnance for the Navy— भांडी, जंदुरे, बंदुका, दारू-
200	Grandona	गोळी, हुके, etc. Naval Cannonading against enemy.
Edward Moor's Narrative.	1794	Moor's description and measurements of the Great-guns at Bijapur. Moolk e' Meidan, Lumcherree, Malbar Gun, Kurk o Bedjlee (perhaps melted down) — Dow referring to big guns at Arcot and Dacca.

Source	Chrono- logy-A.D.	References
Services of the services of th	my hills has a second of the s	Hanway's reference to a big gun in a German city, carrying a ball of 730 pounds. Renell's description of the gun near Dacca (fallen into river) as weighing 64, 814 pounds. "Malbar guns" so called by Europeans were made of iron bars hooped round and beaten into shape. Major Dirom's description of a Rocket.
N. G. Chapekar's "पेशवाईचे सावलींत,"	1758-90	Tophkhānā (Artillery) of the Peshwas—Dealers in gun-powder at Poona—Two kinds of gun-powder, one kind for Tophs and the other for Banduks—Casting of a gun called " सरनागीन" by melting a temple-bell—Purchase of Banduks and bullets—Banduks prepared by local black—smiths—" दास्या कारखाना"—Bags
Peshwa Daftar Selection No. 45 p. 101.	December 1759	of gun-powder. Purchase of cannon by the Peshwas from the English — Ramaji Mahadeva purchased pieces of Cannon from the English, each weighing more than 20 sers.
इतिहाससंग्रह by Parasnis (Jan. 1911) ऐतिहासिक टिपणें No. 22.		Tipu Sultan manufactured guns for his army and ceased purchasing guns imported by the English.

I hope the data collected in the present paper as also those in my previous paper will give the readers a fair idea about the use and manufacture of guns and gun-powder in India between about A. D. 1450 and 1850. I propose to deal with the use of gun-powder before A. D. 1400 in and outside India in another paper, as soon as sufficient evidence is gathered for this purpose. During my study of this topic, which is strictly realistic, I have failed to develop the view entertained by some previous writers on this subject that fire-arms were known in ancient India.

3. The History Of Fireworks In India Between A. D. 1400 And 1900*

All important inventions like printing, gunpowder, the mariner's compass, etc., have profoundly affected the course of civilizations of the East and the West. The history of the origins of these inventions and their wide-spread use throughout the world in the subsequent centuries is quite enchanting. Attempts have been made to study this history to the minutest detail on the strength of historical sources, both Eastern and Western. Unfortunately the Eastern sources are not easily available to European writers on this subject. So naturally their accounts of inventions which originated in the East are incomplete and sometimes vague and erroneous. The articles on these inventions in the Encyclopædia Britannica, though very useful to the average reader, are incomplete, as I found when I referred to them during the course of my studies in the history of Indian culture. There is, therefore, ample scope for research pertaining to the history of these inventions on the basis of known and unknown Asiatic sources of history.

During the last 36 years of my close study and research in the field of Indian literary and cultural history, the history of some of the inventions which affected Indian culture excited my curiosity. Among these, the invention of gunpowder loomed large on the horizon of my field of investigation. Accordingly I published two papers, recording the use of gunpowder in India for purposes of warfare. One of these papers deals with the history of the use of guns and gunpowder in India from c. A.D. 1400 onwards while the other deals with the history of the manufacture and use of firearms in India between A.D. 1450 and 1850. Copies of these papers were sent by me to numerous scholars in India and outside.

One of these scholars, viz., the late Prof. Tenney L. Davis, Editor-in-Chief of Chymia, devoted to the history of chemistry and published by the University of Pennsylvania, pressed me to write one more paper on the related subject of the Indian contribution to the history of fireworks. When I received this request from this most versatile American scholar I decided to accept it, especially because I was collecting some material on this topic to complete my inquiry about the use of gunpowder in India,

^{*} Transaction No. 17 published by the Indian Institute of World Culture, Bangalore, pp. 1-26, 1958.

¹ Vide pp. 117-124 of the Sir Denison Boss Commemoration Volume edited by P. K. GODE and S. M. KATRE, 1989, and pp. 208-228 of the K. M. Munshi Diamond Jubilee Volume, Part I (1948), published by the Bharatiya Vidya Bhavan, Bombay.

both for warfare and for entertainment. Unfortunately, Professor Davis is no longer with us to see the completion of the present paper, as he suddenly passed away in January 1950 after posting to me a batch of his papers on the history of Chinese alchemy and a proof of my paper on the history of ambergris in India, which appeared in Vol. II of Chymia, dedicated to his memory. The pleasant memory of my contact of two years with Professor Davis still haunts me as I write this paper.

In the article on "Fireworks" in the Encyclopædia Britannica (14th Edition, 1929, Vol. 9, pp. 281-283), no detailed history of fireworks is recorded. The following points in this article will, however, give us a background for the present study:—

(1) The history of pyrotechny may be said to have begun when a prehistoric fire maker first mixed saltpetre with his charcoal cooking-fire to use as tinder. Other ingredients were added later.

(2) When the principle of the gun was evolved by Berthold Schwartz in the 13th century the pyrotechnic mixture used by him was named "gunpowder."

- (3) With the introduction of artillery the military fire worker came into existence. He provided pyrotechnic engines of war as also spectacular fireworks in celebration of victory or peace. During the 17th century and onwards, most occasions of national rejoicing were celebrated by displays of fireworks, generally provided by military fire workers.
- (4) It was not until the early part of the 18th century that displays of any pyrotechnic merit were produced.
- (5) During the 17th century two schools of pyrotechnic thought developed, viz., (i) the Nuremberg school and (ii) the Italian school.
- (6) The Peace of Aix-la-Chapelle in 1749 was celebrated in London with a display of fireworks.
- (7) De Frezier in his two books published in 1707 and 1747 describes the introduction of colour in fireworks.
- (8) In the first quarter of the 19th century the era of modern pyrotechny began with the introduction of potassium chlorate (discovered in 1788) in the manufacture of fireworks. Two metals, magnesium (c. 1865) and aluminium (in 1894) were introduced and gave to fireworks a brilliancy never before attained.
- (9) The famous displays of fireworks at the Crystal Palace, London, were instituted in 1865.
- (10) The National Peace Display in Hyde Park in 1919 was the greatest display produced up till that time.

- (11) In the literature on fireworks the writings of the following authors are noted:
 - (i) Vannucio Biringoccio (Pirotechnia, Venice, 1540 and 1553)
 - (ii) De Frezier (1707, 1747) (v) Websky (Leipzig, 1878)
 - (iii) Ruggieri (1801, 1821) (vi) Denisse (1878)
 - (iv) Chertier (1843, 1854) (vii) A. St. H. Brock (1922)

These are the only points of historical interest in the article on "Fireworks" in the Encyclopaedia Britannica. The earliest work on fireworks mentioned in the article is Pyrotechnia by Vannucio (1540). I shall record subsequently in this paper some formulæ in Sanskrit for the manufacture of fireworks by a royal author, who flourished in Orissa between A. D. 1497 and 1539. This Indian author was evidently a contemporary of Vannucio, who published his work on fireworks in 1540.

The History of Fireworks by Alan St. H. Brock (London, 1949) is a very important publication on the subject. Its first 10 chapters are of special interest to me as they deal with such topics as the origin of pyrotechny, pyrotechny in the East and in Europe (from early years to the 18th century) and pyrotechny from 1800 to 1948. The following points from this detailed history of fireworks will be found useful for understanding correctly the historical perspective in which my evidence on the history of fireworks in India must stand, in the light of our present knowledge of this subject:—

- (1) The book contains some pictures of displays of fireworks and related exhibits of historical interest. I note below the details of some of these illustrations by dates:—
 - 1570—Display at Nuremberg, the earliest print showing fireworks in action. (Plate I)
 - 1600—Display at Florence in honour of the marriage of Henry IV of France. (Plate I)
 - 1635—A printed book on fireworks by John Bate of London.
 (Plate II)
 - 1650-Display at Nuremberg. (Plate III)
 - 1678- do, in honour of the visit of Leopold, Emperor of Austria. (Plate IV)
 - 1685-Display on the Thames for the Coronation of James II.
 (Plate VIII)
 - 1676—Display at Versailles for 5 days. (Plate V)
 - 1735—Display at Meudon on the 5th birthday of the Dauphin of France. (Plate VI)

1749—Displays at The Hague and at London to celebrate the Peace of Aix-la-Chapelle. (Plate facing p. 52)

1769—Ticket for ball and fireworks in commemoration of "Shakespeare's Jubilee" at Stratford-on-Avon, signed by George Garrick, brother of the famous actor. (Plate VII)

1763-Ticket for display to celebrate the Peace of Paris. (Plate VII)

1688—Display on the Thames to welcome William of Orange to London. (Plate IX)

1688—Display at Amsterdam to mark the Coronation of William in London. (Plate X)

1713-Peace Display on the Thames, (Plate XI)

1810—Display at Paris on the occasion of the marriage of the Emperor Napoleon to Marie Louise. (Plate XII)

1762-Illuminations at Buckingham Palace: Birthday of King George III. (Plate XII)

1751—Fireworks at Versailles: Contemporary water-colour bearing the signature of the pyrotechnist Torré. (Plate facing p.81)

1814—Grand Jubilee Display at the Green Park. (Plate facing p. 96)

1816 Two posters about fireworks by Mr. Brock: This plate contains two pictures, of Queen Victoria's Coronation Display and of fireworks at Vauxhall Gardens. (Plate XIV)

1685 (6th November) - Act of 1685 Prohibiting the Manufacture, Sale and Firing of Fireworks. (Plate facing p. 140)

1855—Fireworks at Versailles celebrating the visit of Queen Victoria to Paris. (Plate XVIII)

1852-Display at Paris. (Plate XVIII)

1869—Display at the Crystal Palace: Visit of the Khedive of Egypt and De Lesseps, Engineer of the Suez Canal. (Plate XIX)

1892—Fire portrait of the Shah of Persia (60 ft. high) fired at the Crystal Palace. (Plate XIX)

1855-Fireworks at Woolwich Marshes celebrating the fall of Sebastopol. (Plate XXIII)

1886—Display at Lisbon celebrating the marriage of the Crown Prince of Portugal. (XXIV)

1892-"Niagara of Fire" from Brooklyn Bridge, New York.
(Plate XXV)

1908-Display celebrating the Tercentenary of the founding of Quebec. (Plate XXV)

1919-Display at Hyde Park. (Plate XXVI)

1947—Display at Cape Town for the Royal Visit. (Plate XXVII)

1946—Rockets over the Thames: National Peace Display. (plate XXVII)

1858-Explosion in Madame Coton's Factory. (Plate XXVIII)

1842--Explosion at D'Ernst's Factory. (Plate XXVIII)

1841-Rocket Practice at Woolwich Marshes: Picture showing Queen Victoria, the Duke of Wellington, etc. (Plate facing p. 224)

1673-Fireworks used for advertising by a quack doctor who died in this advertising stunt. (Plate XXIX)

1751-1772— Diderot's Encyclopaedia: Plate showing Manufacture and Apparatus of Fireworks. (Plate XXX)

The foregoing dated illustrations about fireworks give us in a nutshell the history of fireworks in the West from A. D. 1570 onwards.

- (2) Brock gives us a "Bibliography of Manuscripts and Printed Sources" in Appendix I to his *History of Fireworks* (pp. 267-270). I note below some items from this Bibliography:—
 - (i) Manuscripts by dates:--

A. D. 1432-MS on the "Feuerwerksbuch." (In the University Library, Freiburg)

C. A. D. 1438--Latin MS. (In the Royal Library, Munich)

1785—Artificial Fireworks: 3 Volumes, with illustrations. (In Brock's possession.)

(ii) Printed Sources.—Dates of printed works on Fireworks are as follows:—

1859, 1696 (London), 1816,1529 (Strasbourg), 1817, 1591 (London), 1807, 1909, 1893, 1620 and 1630 (Pont-à-Mousson), 1818, 1825, 1635 (London), 1845, 1891, 1540 (Venice), 1578, 1922, 1884, 1880, 1844, 1912, 1830, 1854, c. 1540 (Venice), 1823 (Philadelphia), 1822, 1825, 1943, 1882, 1876, 1579, 1735, 1864, c. 1620, 1919, 1885, 1741, 1747, 1895, 1915, 1873, 1906, 1765, 1776, 1878, 1845, 1846, 1878, 1588 (London), 1607 (Strasbourg), 1629 (Paris), 1836, c. 1812, 1824, 1852, 1628 (London), 1643 (London), 1648 (Worcester), 1824, 1740, 1745, c. 1870, 1865, 1801, 1821, 1812, 1854, 1729, 1650 (Amsterdam), 1710, 1859, 1612, (Brussels), 1865, 1850, 1930 (New Orleans), 1947 (Brooklyn), 1900 (New York), 1573 (London), 1878, 1698 (Copenhagen), 1896.

Encyclopædias, Periodicals, etc:—
1865, 1753 (Chamber's Encyclopædia); 1943, 1948, 1947, 1824,
1929, 1751-52 (Diderot's Encyclopædia), 1802, 1856, 1921, 1886, 1941.

Brock's Bibliography about fireworks gives us a fair idea how the invention of gunpowder has been exploited in Europe for purposes of warfare and social entertainment. It is worth while preparing a bibliography of manuscripts and printed sources in India pertaining to gunpowder, firearms, fireworks, etc.

The Sanskrit texts on the manufacture of fireworks discovered by me belong to the period, A. D. I497-1539. These texts appear to be the earliest, if not the only texts about the manufacture of specific fireworks, some of which have come down to us. In Brock's Bibliography the earliest MSS about fireworks are dated A. D. 1432, 1438, etc., while the earliest printed books are dated A. D. 1529, 1540, etc.

- (3) Speaking about the origin of pyrotechny Brock observes that the discovery of the possibilities of saltpetre as an aid to combustion, somewhere in Asia, led to the gradual development of pyrotechnic mixtures. The knowledge in course of time spread to Europe, where, early in the 14th century, the monk Berthold Schwartz invented the gun, adapting a pyrotechnic mixture to his purpose. Two hundred years later firearms were introduced into China by the Portuguese. (p. 19)
- (4) The Chinese employed explosive missiles as early as A. D. 1282. "War rockets were used in India in very early times." There is no definite evidence as to when fireworks first began to play their part in Chinese civil life (p. 20). Two works on pyrotechny written during the Ming Dynasty (A. D. 1368-1644) contain a few references to the subject, not of much practical value (p. 23). Chao Hsüchmin's Outlines of Pyrotechnics (c. A. D. 1753) seems to be the only work on civil fireworks to have appeared during the long history of pyrotechny in China. There are two books on Chinese military pyrotechnics written about the beginning of the 17th century.
- (5) In a. D. 1659 a pyrotechnist named Kagia began manufacturing fireworks at Tokyo, in Japan. Since 1868 August 1 has been observed as the date of the great fireworks festival of Tokyo. (p. 26)
- (6) Although primitive firework mixtures must have been known in India and used by the Hindus for many centuries it was not until almost the beginning of the present century that any advance was made. The cracker is used in India in differing forms known as gola, pataka, vengagvedi, koroo, adirvedi etc. "Chinese fire" mixture is used by Hindu pyrotechnists burnt in paper, bamboo containers and earthenware pots. These are known as Tubri. Other fireworks used in India are anar, puljari.

burusu, chandrajota or mahteb. Rockets are known as abusavanani or hawai

Brock's history of fireworks is exhaustive so far as European sources are concerned but it contains no historical information about fireworks in Asiatic countries, including India.

Prof. L. Carrington Goodrich of Columbia University records some information about gunpowder on pp. 152-154 of his Short History of the Chinese People, New York, 1951. The following points from these pages are noteworthy:—

- (1) During the Sung Period (A. D. 960-1279) the application of explosive powder to war was a major development.
- (2) The firecracker (known in the 6th century A.D.) was originally employed for religious ceremonies.
 - (3) Fiery projectiles were used in warfare as early as the 12th century.
- (4) According to Chinese historians the process of making explosive powder was first described fully in a military handbook issued in A. D. 1044. The first trustworthy reference to the use of a mixture of sulphur, sultpetre, paper, charcoal, tung oil, etc., for military purposes dates from the year A. D. 1000.
- (5) Full development of fire weapons is noticeable under the Mongols in the 13th and 14th centuries.
- (6) In a. D. 1126-27 and in 1161-62 the Chinese utilized explosive weapons both on land and water against the invading Jurchen.
- (7) In A. D 1259 and 1272 the Chinese used such weapons as a long bamboo tube from which bullets were ejected by touching off the powder, to halt the advancing Mongols.
- (8) The Mongols were fully equipped with fire-weapons, like a catapult capable of flinging large rocks and a field-piece called Mangonel, constructed by two Moslems.
- (9) Whoever may have invented the cannon and smaller pieces, the Chinese and their immediate neighbours played a significant part in the early stages of their development; the Chinese alone originated the fire-cracker and allied fireworks. 2

In September 1948, I received from my friend Prof. Tenney L. Davis a reprint of an article on "Early Chinese Military Pyrotechnics," written by him in collaboration with Prof. James R. Ware of Harvard

² Vide " Invention and Use of Gunpowder and Firearms in China. " By WANG LING. (Isls, 1947, No. 57, pp. 160-178).

University and published in the Journal of Chemical Education, vol. 24, pp. 522-537, November 1947. This article contains much valuable information about the history of pyrotechnics in China which is not known in India. The following points from this article supply us the Chinese background for the history of fireworks in India:

- (1) According to Goodrich and Feng, guns were in use in China before the visit of Portuguese navigators to Canton in A. D. 1517, in fact, as early as A. D. 1236. Goodrich has published photographs of ancient Chinese iron cannons bearing the dates A. D. 1356, 1357 and 1377. The Peiping Museum contains copper cannons dating from the period of Hungwu (A. D. 1368-1398) and others from the period A. D. 1403-1449. The Chinese had real firearms in the 13th century. In 1132 bamboo tubes were filled with a pyrotechnic composition and used for throwing flame. In A. D. 1259 bullets were loaded into tubes along with the composition and thrown out when it burned. In A. D. 1236, p'ao were cast from gold, silver, iron and bronze.
- . (2) From fireworks, Firearms were undoubtedly derived.
- (3) Among Chinese texts on military subjects the following dealing with military pyrotechnics are noteworthy as they contain many informative and interesting illustrations:—
- (i) Teng Tan Pi Chiu by Wang Ming-hao (end of the 16th century), 23 illustrations.
- (ii) Wu Pei Chih by Mao Yuan-i (about A. D. 1621), 222 single pages of pictures.

The contents of these treatises are examined at length by Davis and Ware with illustrations which supply us a complete picture of the various steps in the evolution of guns from spouting fire weapons. The fire weapons³ described in these treatises are: (i) Arrows carrying an incendiary composition, (ii) Fireballs, (iii) Incendiary stink bombs, (iv) Spouting fire weapons, (v) Rockets, (vi) Exploding weapons; Grenades, bombs and shells; (vii) Artillery and field pieces, and (viii) Guns.

(4) The following chronological table given by Davis and Ware gives at a glance the history of fireworks in China from the 6th century

^{3.} We may compare the Chinese fire weapons with those used in India from 1400 onwards. See my paper in the K. M. Munshi Volume, Part I (1948) on the manufacture of firearms in India. In Akbar's time a body of gunners was kept on some vessels. (See Ain-i-Akbari, FRANCIS GLADWIN'S translation, Vol. I. p. 195 (Calcutts, 1897). Side by side with the bow and arrow, the bundook was also used for hunting. The Ain-i-Akbari refers to Akbar's "killing the lion with a matchlock." (1bid. p. 198)

Chronology A. D.	them the experience on Item amount by the representation
6th century	Bamboos, cracking in a fire, used in Hupeh and Hunan to drive away malignant spirits. Firecrackers not yet known.
603-617	Emperor Yang-ti of the Suy Dynasty introduced fireworks, probably firecrackers.
618-906	T'ang Dynasty. Fang I-chih (c. 1630) believes that re- creational fireworks, fire trees and silver flowers were al- ready known. A certain Yuan Shu-chi, whose history is very much beclouded, mentions crackers, rockets, serpents or squibs, and exhibition pieces.
917	The Sovereign of Wu had a furious fiery oil for use in warfare.
968	Yo I-fang prepared fire arrows for the Sung Emperor.
1126	Fireballs thrown from catapults were used against the Kin in defence of K'ai-feng Fu.
1132	An invention of Ch'ên Kuei, long bamboo tubes filled with a pyrotechnic composition used to rout bandits at Te-an.
Before 1164	Wei Sheng used against the Kin fire stones made from saltpetre, sulphur, and willow charcoal and thrown from catapults.
1221	Kin Tartars attacked a Chinese city with t'ieh-huo-p'ao, gourdshaped explosive bombs of cast iron, about two inches thick.
1232	Kin Tartars defending Lo-yang and K'ai-feng Fu against the Mongols, employed "heaven-quaking thunderers" (explosive bombs) and "flying fire spears" (equipped with fire tubes).
1259	Chinese at Shou-Ch'un employed t'u-huo-Ch'iang, long bamboo tubes which threw smoke and fire and one or more bullets.
1272	Chang Shun had fire spears and fire ballistae on board boats at Siang-yang Fu.
1356 1357 1377	Cast-iron cannons of these dates exist in Chinese museums.
1368-1398 }	Copper cannons of these dates in the museum at Peiping.
1403-1449)	Emperor Yung-lo established a fire-weapon brigade. General Chang Fu, in his assault on Topang, used guns and bombs attached to animals.

I have given above the historical background of the origin and development of fireworks in China and Europe. It now remains for me to record my evidence about the use and manufacture of fireworks in India. I record this evidence below to enable other scholars to supplement it with new material from sources not known to me:—

(1) In the English translation of Gulistan by the Persian poet Sadi (c. A. D 1175-1292) by Francis Gladwin. (Bombay, 1894, p. 133, Chapter VII—Tale XIII ("Effects of Education") we find the following:—

"An Indian was teaching others how to make fireworks, when a wise man said to him: This is not a fit play for you, who inhabit a house made of reeds. Until you are persuaded that the discourse is strictly proper speak not; and whatever you know will not obtain a favourable answer, ask not.'"

When I read this passage I thought that I had found the earliest reference to the manufacture of fireworks by Indians. Before accepting this reference as genuine, however, I wrote on December 5th, 1944, to my learned friend Khan Bahadur Prof. A. K. Shaikh, inquiring if Gladwin's translation of the lines containing the reference to fireworks was correct. In his prompt and scholarly reply to my letter Professor Shaikh wrote to me on December 7th, 1944, as follows:—

"Gladwin's translation of the passage in Gulistan is wrong. The correct translation is 'A Hindū (the word Hindu also means a slave) was learning (i. e., practising) Naptha-throwing' etc. The word used in Gulistan is Naft or Nift which is Arabic, from which are derived Naphtha, Naphthaline, etc. It was an inflammable liquid, with which thin glass bottles or balls were filled and these latter thrown against the enemy as incendiary bombs, somewhat like the modern hand-grenade. When struck against any hard substances in the body of the enemy, the container would break and let loose the contents, which would immediately burst into flames and set fire to combustible articles. It was generally used in warfare in the middle ages.

There are some works written in Persian bearing on the subject. Gunpowder is known in Persian and Urdu as Bārūh which is a Turkish word. Persian words relevant to Fireworks are:— इवाई, महताबी, जनार, बातशबाजी, दारूखाना, Other interesting Turkish words are:— बंदक, बंदकची, तमंचा, तोप, तोपची, दारू (Gunpowder) is also a Persian word."

In view of the above reply, I could not regard Sadi's as the earliest reference to the manufacture of fireworks by Indians.

(2) "Abdur Razzāq, the ambassador from the Court of Sultan Shāh Rukh, who stayed in Vijayanagar from the end of April A. D. 1443 till the 5th of December, A. D. 1443 during the reign of Devarāya II, mentions the use of pyrotechny in the Mahānavamī festival." The words of this Persian Ambassador about pyrotechny are quoted by Dr. B. A. Saletore on p. 374 of his Social and Political Life at Vijayanagar, etc., (Vol. II) as follows:—

"One cannot without entering into great detail mention all the various kinds of pyrotechny and squibs and various other amusements which were exhibited."

It is clear from this reference that various kinds of fireworks, either manufactured at Vijayanagar or imported from outside, were used at Vijayanagar in A. D. 1443 and possibly many years earlier for purposes of entertainment at festivals.

(3) Ram Chandra Kak in his Ancient Monuments of Kashmir (London, 1933) gives the political history of Kashmir. In his account of the reign of Zain-ul-Abidin (A. D. 1421-1472), he refers to his work on fireworks as follows:—

Page 36— The King himself composed two works in Persian the first being a treatise in the form of questions and answers on the manufacture of fireworks and the second entitled Shikayat (The Plaint), a poem, etc.

Page 38— It was in his reign, in the year A. D. 1466 that firearms were first introduced in Kashmir.

It is curious to find that the Chinese text on military pyrotechnies by Wang Ming-hao, noticed by Davis and Ware in their paper referred to above, also belongs to the end of the 16th century. It remains to be investigated whether the Persian treatise on fireworks by the Kashmir Muslim King Zain-ul-Abidin had anything to do with the Chinese texts on military pyrotechny composed before A. D. 1472. I hope that some Persian scholar will throw some light on this point from Persian sources.

(4) Verthema in his Travels (Argonaut Press, London, 1928) writes about Malacca and Sumatra in Chapter XII. He was at Pidar (Pedir) in Sumatra. About the people of this place he observes on page 86 as follows:—

"They are also very great swimmers and excellent masters of the art of making fireworks."

The period of Verthema's Travels was "A. D. 1502-1508." It is, therefore, clear from his reference to fireworks in Sumatra that the art

^{4.} See Elliot's History of India, IV, pp. 117-18.

of making fireworks, which was in a flourishing condition in Vijayanagar in A. D. 1443 and current in Kashmir between A. D. 1421 and 1472, had also penetrated as far south as Sumatra and Malacca by A. D. 1500, if not earlier.

Verthema describes the City of Vijayanagar (Bisinegar), its elephants and elephant-fights (pp. 51-2). In this connection he observes (page 52) as follows:—

"But if at any time they (elephants) are bent on flight it is impossible to restrain them; for this race of people are great masters of the art of making fireworks and these animals have a great dread of fire, and through this means they sometimes take to flight."

The manufacture of fireworks at Vijayanagar and their display observed by Abdur Razzāq in a. D. 1443 had reached perfection by A. D.

1500 as vouched by the above remarks of Verthema.

(5) Barbosa in his Travels⁵ (Vol. I, London, 1918, page 117) describes a Brahmin wedding in Gujarat and the use of rockets on this occasion as follows:—

"During this time they [the bride and the bridegroom] are entertained by the people with dances and songs, firing of bombs and rockets

in plenty, for their pleasure."

It is evident from this reference to the use of fireworks by Barbosa in his Travels (A. D. 1518) that fireworks were manufactured in India on a large scale about A. D. 1500 and were available in plenty in Gujarat for

use at marriages and on other festive occasions.

(6) The testimony of foreign observers as to the use and manufacture of fireworks in India between A.D. 1443 and 1518 recorded so far needs to be corroborated from Indian sources. So far, I have referred to only one treatise on fireworks in Persian, by Zain-ul-Abidin, the Muslim King of Kashmir (A.D. 1421-1472), but no Sanskrit text on the manufacture of fireworks has been discovered by any scholar. In search of such a text I was fortunate in discovering a section on the manufacture of specific fireworks in a Sanskrit work called the Kautukacintāmaņi 6 by Gajapati

कोतुकचिन्तामणि med. Oudh IX, 26. Burnell 696 by Prataparudradeva.

C C II, p. 256--की. चिन्तामणि An. Rgb 1031 (inc-) med. by Prataparudradeva...

^{5.} Published by the Hakluyt Society, London. Second Series, No. XLIV, 1918.

^{6.} Aufrecht records the following MSS of Kautukacintamans:-

C C I, p. 1810 कोतुकचिन्तामणि dh B. 8, 80 by Rudradeva K. 248.

C C III. p. 285--की. चिन्तामणि by Prataparudradeya. Bd. 981.

Prataparudradeva of Orissa (A.D. 1497-1539), the reputed author of some works on dharmasastra like the Sarasvatīvilāsa, etc. Aufrecht mentions this royal author 7 of Orissa and the works attributed to him. None of the MSS of the Kautukacintāmani mentioned by Aufrecht in his Catalogue are available to me except the following, found in the Government MSS Library at the Bhandarkar Oriental Research Institute, Poona:-

- (1) MS No. 1031 of 1884-87. Folios 52-55 of this MS are devoted to विनोदनानि or royal entertainments. In fact, these folios contain formulas for the preparation of different fireworks such as:-
 - (i) कल्पवृक्षवाणः
- (v) युष्पवर्तिः
- (ii) चामरवाणः (vi) छुछुंद्रीरसवाणः
- (iii) चंद्रज्योतिः (iv) चंपाबाणः
- (vii) तीक्ष्णनालः
- (viii) gequion:
- (2) MS No. 981 of 1887-91. This MS is dated A. p. 1778 but it is a copy of an earlier MS dated A. D. 1670. Folios 37-38 of this MS contain the formulas for fireworks (in Sanskrit verses) referred to above.

The text of the Sanskrit verses containing the formulas will be edited by me later by procuring copies of the MSS of the Kaututkacintamani from other libraries. I may, however, note below the materials used in the manufacture of fireworks as found in the Sanskrit verses describing the formulas :-

- (1) 前班本:—Sulphur. (WPC)8
- (2) यवश्चार:—Saltpetre. (WPC)
- (3) अंगार :- Charcoal. (WPC: charcoal of bamboo, pine, willow, birchbark, etc.)
- तीइणस्य छोहस्य चुणं :-- Powder of steel.
- (5) छोड्युणं :--Powder of iron. (WPC : Powder of roasted iron)
- 7. Cata. Catalo. I, p. 348- प्रतापस्द्रदेव गजपति, son of पुरुपोत्तमदेव, grandson of कपिलेश्वरदेव, patron of विश्वनायसेन. Works attributed to him :

India. The main gyrotachase 10gr

-कोतकचिन्तामणि L. 3108, Bik. 646

—निर्णयसंग्रह

—प्रतापमार्तण्ड

लाको बाह्य मा अधिवासिक - सरस्वतीविलास

8. The letters WPC indicate the Wu Pei Chih, the Chinese text on military pyrotechnica by MAO YUAN-I, written about A. D. 1621. I have put the letters WPC against the materials used in Indian pyrotechnics to indicate that these materials were also used in China for the Chips. Tolk was on howesten of Chin E and (L. p. 1132). manufacture of fireworks.

- (6) " वास्रोद्धवं जांगडास्यं द्ववं सरकवष्टविः" Exudation from copper called जांगड, having the lustre or colour of an emerald.
- (7) ansi-Yellow orpiment. (WPC: orpiment).
- (8) वावान्यागैरिकं-गैरिक-Ochre. (Marathi काव, गेरू)
- (9) सादिरं दास-Wood of the Khadira tree.
- (10) নাজক or নাজ--A hollow piece of bamboo.
- (11) वर्तिका-A wick.
- (12) पंचक्षार—Five kinds of salt. Apte's Dictionary mentions आर-त्रितय—three kinds, viz., natron, saltpetre, and borax.
- (13) तीक्ष्णकोह-Steel.
- (14) वेणुनाल-A hollow piece of bamboo.9
- (15) अायुपायाणमंत्र—आयुपायाण=आखुपायाण—Lodestone.
- (16) चिन्नुकात्रय-
- (17) प्रंडवीजमजा or प्रंडमजा—Pulp made of the crushed seeds of the castor-oil plant.
- (18) स्त-Quicksilver or mercury. (WPC)
- (19) अलिए Paste made from food (rice, etc.).
- (20) वंशनाङ—A hollow piece of bamboo.
- (21) नाग—Tin or lead. (WPC: powder of lead)
- (22) अकांगार (अके+अंगार)— Charcoal prepared from the wood of the अके (Madar, रुद्दे) plant.
- (23) गोम्त्र—Cow's urine.
- (24) हिनुसास—हिनुस—Vermillion or cinnabar. (WPC)
 - (25) इत्तिक—This may be इत्तिङ्क or इत्तिङ —Yellow orpiment, (WPC: orpiment)

The foregoing list of ingredients of pyrotechnic mixtures used in India along with other accessories for the manufacture of fireworks c. A. D. 1500 speaks for itself. It is possible to suggest that the Chinese formulas for the manufacture of fireworks were brought to India some time about A. D. 1400 and then modified by the use of Indian substitutes for Chinese ingredients, not all of which may have been then available in India. The main pyrotechnic ingredients, like sulphur, saltpetre, charcoal, powder of iron, etc., had to be retained in the Indian formulas as they were the very basis of pyrotechny; they were available in India from early times.

^{9.} Long bamboo tubes filled with a pyrotechnic composition were used to rout bandits in China. This was an invention of Chen Kuel (A. D. 1132).

(7) Consistent with my discovery of Sanskrit formulas about the manufacture of fireworks current in Orissa about A. D. 1500 and used for royal entertainment, I have found a brief description in Sanskrit of the display of fireworks for royal entertainment in a Sanskrit work, called the Akāšabhairava-Kalpa, represented by a MS in the Tanjore Manuscript Library. I acquired a copy of this voluminous treatise for the B. O. R. Institute and studied it. The results of my study of this treatise have been published by me in a paper 10 in the Karnatak Historical Review (Dharwar, 1939). This treatise contains references to guns and fireworks and is obviously later than c. A. D. 1400. In Paṭala 60 of this treatise aliest (nālikā) or a gun is mentioned among 32 weapons to be worshipped by the King. In Paṭala 62, dealing with several entertainments (vinodas) for the King, I find the following passage describing a display of fireworks:—

"ततः पश्येदारुयन्त्रविद्येपान्स्यन्द् नाहृतीन् । दिवा आन्त्या करुपयतः केनिचचेत्रसा निम्न ॥ उचावचान् वाणवृक्षान् ततः पश्यक्रननेषरः । स्कुलिंगान्चामराकारान् तियंगुद्रिदरतो बहुन् ॥ ततः प्रख्यकालोचत् घनगित्रतनीपणम् । शृण्यादाणनिनदं विनोदाविस्चकम् ॥ एव प्रतिदिनं रामा विनोदान् पंचविक्षतिम् ।", etc.

In this passage the author gives us a description of the several structures used in the pyrotechnic display which the King was to witness each day. The expression " बाजहान " (būṇavṛkṣān) 11 possibly refers to structures on which the bāṇas or rockets were hung and from which they were fired off in the air. Sparks of fire were emitted from these structures and the whole display looked like the hairs of a Chowrie. 12 Some of the sparks issuing from these structures were shot off at a tangent. The entire display came to a close with the sound of a rocket (bāṇa), which was fired off last to indicate the end of the entertainment.

(8) From the references to fireworks in the Sanskrit sources recorded above I now turn to references to fireworks in Marathi literature.

^{10.} The title of this paper is " Akakabhairava Kalpa : An Unknown Source of the History of Vijayanagara, "

II. This is possibly a display of the rocket called the কংশুরুত্বাধ described in the formulas of fireworks given by Gajapati Prataparudradeva of Orissa.

^{12.} Possibly the rocket called the चामरवाण in the formulas of Prataparudradeva was used for this display.

The earliest description of a display of fireworks in a marriage procession so far discovered by me is found in Saint Ekanātha's Marathi poem Rukmiņi-Svayamvara completed in Šaka 1492 = A. D. 1570. The text of this description is found on pages 106-7 of Ekanāthacaritra by Mr. D. B. Sahasrabuddhe (Poona, 1883). In describing the procession of the bridegroom's party on the occasion of the marriage of Rukmiņi with Kṛṣṇa (Chapter 15 of the Rukmiņi-Svayamvara) Ekanātha writes as follows:—

" मरूनि रजतम औषध । करूनि अग्रियंत्र संबद्ध । कृष्णापुढें अतिविनोद । एक प्रबुद्ध दाविती ॥ ११७ ॥ भन्नी लावुनी डायीं टायीं । ममता जाळिती हवई। गगना उसळली पाही । खुबोन ठावीं निमाली ॥ ११८ ॥ मोहयन्त्री समनमाळा । अग्निपुष्पं भासती डोळा | फुळ म्हणती अवला । पाहतां डोळा ते राख ॥ ११९ ॥ बतिलोभाची चिचंदरी। मिं छावनी टाकिकी दूरी। पेटल्या पडती जनावरी | उरी शिरी जाळीत || १२० || देकन उपशम अनळा। बाळीती क्रोधाचा भुइनळा। भड़भड़ा निवृति स्वाळा । तोही तत्काळ निमाला ॥ १२१ ॥ हाती धरूनि क्रव्याळीळा । वाळिती कामाचा हातनळा । धरू नेणती त्या बरका । जिवी जिव्हाळा पोळती ॥ १२२ ॥ " etc.

In Ovis 123 and 126 Ekanātha describes the display of बाज (rocket) and the variety of fireworks called चंद्रज्योती. The names of fireworks found in Ekanātha's description of fireworks are:—

- (1) अधियंत्र A small gun or rocket.
- (2) इवई A firework which rises up in the air with a stream of fire.
- (3) सुमनमाळा A firework producing garlands of fire flowers.
 - (4) चिचंदरी A rocket which goes with a hissing sound (PR)
- (5) भुद्रनळा A firework kept on the ground and emitting a stream of fire sparks.

- (6) হাবৰতা A firework held in the hand and emitting a flow of fiery fire sparks.
- (7) बाज A rocket (PR)
- (8) चंद्रज्योती A firework which emits fire, producing a moonlight effect. (PR)

In the above list of fireworks I have put the letters PR against those which are mentioned by Pratāparudradeva of Orissa in his formulas described in the Kautukacintāmaņi. The names इवर्ड, चित्रंदरी, भुद्दनळा, हात-नळा, बाण and चंद्रज्योती are still current in the Deccan. These fireworks are still used in our marriage processions as they were used in Ekanātha's time in the 16th century.

From the evidence recorded so far about the history of fireworks in India it is clear that by a. D. 1600 the use of fireworks for entertainment purposes had become current in Gujarat, Mahārāṣṭra, Orissa, Vijayanagar, and even Sumatra. The history of fireworks in other parts of India is worth investigating from other regional sources with which I am not familiar.

(9) Another Mahārāṣṭra author, Saint Rāmadāsa (A. D. 1608-1682) refers to guns and fireworks in his varied writings. So far I have traced the following references in the Rāmadāsa Samagra Grantha (Poona, 1906):—

Page 345—नित्यनैमित्तिक विधिसंग्रह सोपान, मानसपूजा, Prakarana 13 —This section deals with the description of a bhajana or devotional singing accompanied with the display of fireworks:—

" दिवटया दिलाल चंद्रजोती ।

वाण, हवया झळकती ।

नळे, चिचंद्रया धावती । चंचळखें ॥ ९ ॥

प्रेड दांड भेदिती वाणे

अभिनव कीर्ती वालाणे । भाट गर्जती ॥ ३० ॥ "

Page 588 — दुइकोड of Rāmāyana in Śloka metre, Prasanga 13 —
A display of fireworks before King Rāma at night:—

lo woll a nestime kne

सरारां फुळे धावती अंतराळीं | कडाडीत घोषे निराळीं निराळीं। भरारां हवाया किती एक वेळां ! बळें पाहती ऊर्ध्वनक्षत्रमाळा ॥ ३३ ॥ वह औषधे दिव्य नानापरीचीं । किती एक तेजाळ तीं कसरीचीं। घडीनें घडी तेजपुंजाळ होती। उजेडेंचि ते लोक लोकां पहाती ॥ ३४ ॥ "

This is a fine description of a display of illuminations and varied fireworks before King Rama. As fireworks were unknown in the time of the Rāmāyana in India and even in China it is an anachronism to insert any description of them in any story based on the Ramayana. Being accustomed to displays of fireworks in his time, Saint Rāmadāsa could not but insert a description of them in his writings.

Page 621—Description of a festival on the completion of a Rama temple at Chaphal (Satara District):-

" दिवरमा हिलाल चंद्रज्योती । ovail Last of agolina ad area soft | was well beg been de reales (1801 बाण हवाया झरकती । गगनामध्ये ॥ १३ ॥ "

Page 623-Advice to King Shivsji on Ksatra-dharma :-

" जैसा भोड्यांचा गडोला । निर्भय भारामध्ये पदिला। वैसा क्षत्री रिचवला । परसैन्यामध्ये ॥ ६ ॥ "

The expression "भांडवांचा गडोडा" refers to the use of cannons (भांडी) in warfare.

The names of fireworks referred to by Saint Rāmadāsa in the above extracts are as follows :---

- (1) इवाया-plural of इवई, mentioned by Ekanātha.
- (2) वाज-mentioned by Prataparudradeva and Ekanatha.
- (3) नके plural of नका, mentioned by Ekanatha.
- (4) चंद्रज्योती-mentioned by Prataparudradeva and Ekanatha.
- (5) नक्षत्रमाळा—compare सुमनमाळा mentioned by Ekanatha.
- (6) चित्रंदवा-plural चित्रंदरी mentioned by Ekanatha and Prataparudradeva.
- (7) फुलबाजा—compare युष्पवर्ति mentioned by Prataparudradeva.

Almost all the fireworks mentioned in Rāmadāsa's works in the 17th century are used today. Rāmadāsa also mentions भांडी (cannons), बंदुका (muskets), and खिले (small cannons or mortars with gunpowder used for producing thundering sounds during pyrotechnic displays).

(10) We have seen above that the term and (bāṇa) in the sense of a firework has been used by Pratāparudradeva of Orissa (c. a. d. 1500), by Ekanātha (a. d. 1570) and by Rāmadāsa (c. a. d. 1650), but we have no means of visualizing this firework. Bernier in his Travels (Constable, London, 1891) in India (a. d. 1656-1668) helps us to understand this contrivance known as bāṇa, which he calls "bannes." The following extract from his Travels describes "bannes" and its use in contemporary warfare:—

Page 48- Speaking of the battle between the Emperor Aurangzeb and his brother Morad-Bakche, Bernier observes:-

"... here and there were placed men who threw bannes, which are a sort of grenade attached to a stick and which were thrown, from various parts of the line among the enemy's cavalry, and which produced the effect of terrifying the horses and sometimes of killing the men."

Page 277—Describing elephant-fights at festivals celebrated at Delhi and Agra, Bernier refers in the following extract to the use of a firework called cherkys, used for separating the fighting elephants:—

".... The animals can be separated only by means of cherkys, or fireworks, which are made to explode between them; for they are naturally timid, and have a particular dread of fire, which is the reason why elephants have been used with so very little advantage in armies since the use of firearms. The boldest come from Ceylon, but none are employed in war which have not been regularly trained, and accustomed for years in the discharge of muskets close to their heads, and the bursting of crackers between their legs."

The firework called cherkys in the above extract is in use today in Northern India. It is called चरकी (carki) in Bengal¹³ and चरकी (carkhi) in the United Provinces¹⁴ as reported to me by my friends Prof. D. C.

14. My friend Dr. V. S. Agrawala has sent to me a list of fireworks manufactured at Lucknow (U. P.), among which I find no less than 9 varieties of carkhi.

7

^{18.} My friend Prof. D. C. Bhattacharya of Chinsura has sent to me a list of Bengali names of fireworks in which carki is found. He derives this name from the Sanskrit cakra.

Bhattacharya and Dr. V. S. Agrawala, to whom I am indebted for the information about fireworks which they have kindly supplied to me. It is worth while recording a complete glossary of the names of fireworks and allied terms now current in different provinces of India and Pakistan.

(11) In the glossary of non-Sanskrit terms called the Rājavyava-hārakośa, composed by Raghunātha Paṇḍita by order of the Maratha King Shivāji the Great about A.D. 1676, he explains the term আল (bāṇa) as জিন্দিলো or a tube filled with gunpowder. It think that "bannes" mentioned by Bernier, who was a contemporary of Raghunātha Paṇḍita, is identical with bāṇa. In the 67th Paṭala of the work Ākāśabhairava Kalpa, a description of the Divali festival is given. In this connection the King is advised to witness a display of fireworks (আলিক্সা) at nightfall along with tributary princes, etc.:—

" सामन्तराजपुत्रादीन् समाह्याथ तैस्सद्द । निशामुखे बाणविद्यां हृद्यामाकोक्य तस्परम् ॥ "

The Sanskrit word Bāṇa means an arrow. Bāṇa in the sense of a rocket appears in Indian sources after c. A. D. 1400. This word appears to be a non-Sanskrit word. It is for linguists to trace its history and etymology in non-Sanskrit sources.

(12) Tavernier (A. D. 1676) in his Travels in India (London, 1889) refers to the use of fireworks in India and Java in the following extracts:—

Page 258—Describing marriage ceremonies in India Tavernier states that nuptials are celebrated with pomp and great expenditure. "He (the bridegroom) borrows moreover for this ceremony from the Governor of the place and from other great nobles as many elephants as he can, together with show horses and they march about thus for a part of the night with fireworks which are thrown in the streets and open spaces."

शक्षवर्गे -- '' यन्त्रव्यूहरूत्वारावास्याद्वाणोऽमिनलिका भवेत् ॥ १२९ ॥
नालीकं वरत्वंदाज नलीयन्त्रं तु वन्दुत्वम् ॥
तोफ नाम भवेदुत्का दारू नामामिचूर्णकम् ॥ १३० ॥
लघुयन्त्रं जवर्जरां जम्बूरा तु शतिमका ॥
दीप्तिनाडं भवेत् काना गोलंदाज् यन्त्रवेधकः ॥ १३१ ॥ ''

^{15.} See Page 12 of Rajavyavaharakosa, Poona, 1880. The pertinent verses containing terminology about the use of gunpowder read as follows:—

Page 360-While speaking about the King of Bantam at the western end of Java Tavernier observes: -

"There were five or six captains sested round the room who were looking at some fireworks which the Chinese had brought such as grenades, fusees, and other things of that kind to run on the water; for the Chinese surpass all the nations of the world in this respect."

(13) The Marathi poet Śrīdhara (died c. A. D. 1730) refers as follows to the firework called "candrajyoti" in his work "Harivijaya," II, 129:—

" चंद्रज्योती चंद्राकार । तेजे अंदर प्रकाशे ॥ "16

(14) In the *Peshwa Bakhar* by K. V. Sohoni, written towards the end of the Peshwa Period (edited by K. N. Sane, Poona, 1925, page 149), an account ¹⁷ of the Divali festival is given as follows:—

Mahādji Scindia (A.D. 1727-1794) informed Peshwa Savai Mādhavrāo (A. D. 1774-1795) as follows :—

"The Divāli festival is celebrated for four days at Koṭā (in Rājasthān), when lacs of lamps are lighted. The Rāja of Koṭā during these four days gives a display of fireworks outside the premises of his capital. It is called "वास्त्री छंडा" or 'Lankā of fireworks.' During this display the image of Rāvaṇa is prepared and kept in the centre of the show. Images of Rākṣāsas, monkeys and a big image of Hanumān are all prepared of gunpowder. The tail of Hanumān is then set on fire, and Hanumān begins to fly in the air setting fire to various houses in this Lankā of fireworks. Such a display is given by the Rāja of Koṭā during the Divāli festival.

The Peshwa ordered Mahādji to give a similar display of fireworks for his entertainment. Mahādji made all preparations within 15 days and the display was carried out on a dark night before the Peshwa and his Sardārs. The display took place at the foot of the Parvati Hill (near Poona) and was witnessed by the Peshwa and his Sardārs from the Parvati temple. It was a grand performance and was witnessed by the people of Poona in large numbers."

It appears from the above extract that displays of fireworks had become popular in Rajputana in the 18th century and that they were also used for royal entertainment on a grand scale.

^{16.} See p. 38 of the Marathi Śabdakośa by Y. R. Date and C. G. Karve.

^{17.} I have referred to this account in my paper on the "History of Divall Festival (Between c. A. D. 50 and 1945) published in the Annals of the B. O. R. Institute, Poons, Vol. XXVI, 1946, pp. 282-288.

(15) Rao Bahadur D. B. Parasnis published an article on "হিবুহ্যানা-লীন্ত হুমনী নাল্যবানী" (English Fireworks in India) in Itihāsa-Saṃgraha,

Vol. I, No. 6, January 1909. Parasnis states :-

From the reign of Asafaddaula (A.D. 1775-1797), the Nawab of Lucknow, we find references to the attempts of the English to please Indian princes by their skill in the art of fireworks. About A.D. 1790, the English gave a remarkable display of fireworks at the court of the Nawab of Lucknow. A description of this display was sent to Nana Farnavis, the Chief Minister of the Peshwa at Poona, by his Vakil at Lucknow. This description is very interesting.

Parasnis has reproduced the entire letter of the Vakil in Marathi giving a detailed description of the displays of fireworks at Lucknow. I

give below a brief summary of this letter :--

An English artist of the name of "Karār," 18 expert in the art of fireworks, came to Calcutta. He gave displays of his skill in fireworks to the English at Calcutta and thus attained prominence. He was also properly rewarded by the English for his skill. The reputation of this artist spread far and wide in India. Two English officers at Lucknow of the names of "Idor" and "Alpu" wrote to the English at Calcutta to send the artist to Lucknow. The artist accordingly came to Lucknow and for six months he was busy preparing different fireworks. When the fireworks were ready "Idor" and "Alpu" arranged for their display with Mirza Amānī Hasanrajākhān and Haidarbeg Khān and Raja Mangatrao on a cloudless evening at their residence at Bibipur.

The English artist "Karār" made his fireworks ready. On a square pillar he placed a statue of fireworks and asked the persons assembled to shoot it with their guns with a view to starting the display of fireworks. Some Englishmen as well as Raja Javānsing and Mirza Amānī tried to shoot at the statue several times but missed their aim. As it was getting late the artist "Karār" with his own hand set fire to one of the fireworks to start the whole display. Immediately other fireworks caught fire and produced a veritable garden with fire flowers of orange, green and other colours. This display was quite spectacular and lasted for a time. Thereafter a column of fire blazed forth from a rocket and went high up in the sky and there split up into countless stars which, while falling down on the earth, were transformed into hooded serpents. Other fireworks blazed forth and went up in the sky and produced hundreds of fish, which fell

^{18.} This artist "Karār" needs to be identified. The names "Karār," "Idor" and "Alpu" are queer transformations of English names.

down on earth like stars. Just at this time began the rainfall-like display of fireworks. From another firework arose a mosque. To heighten the pleasure of this unprecedented sight the spectators heard, high in the air, great noises of the firing of muskets and guns. These noises were so great that they were heard at Lucknow proper, though they were produced at Bibipur. As the display was coming to a close there arose from the blazing fire of a rocket a Sun of fire, which moved up high in the sky and illumined the whole maidān below. A similar display of the moon followed from a rocket. To close this display the artist produced a sun-like fire flower which went on whirling in the sky producing bright letters which could be seen distinctly and read by the spectators.

Thus came to an end this marvellous display of fireworks by the English artist "Karār," who was richly honoured and rewarded by the Nawabs present. All the spectators thanked the English for this excellent entertainment. The people then dispersed and went to their homes.

The display of fireworks about A. D, 1790 given by an English artist Karār before the Nawabs of Lucknow is important for the present history of fireworks of India. So far I have not discovered any evidence about such displays by European artists prior to A. D. 1790, before Indian spectators.

(16) In the Hobson-Jobson by Yule and Burnell (Edition of 1903, London, pp. 208-209) many dated references to the Divāli festival are recorded from A. D. 1613 to 1883. Among these references the following one contains a description of the Divāli illuminations accompanied with fireworks:—

A. D. 1820. The Dewalee, Deepaulle or Time of Lights takes place 20 days after the Dussera and lasts three days; during which there is feasting, illumination and fireworks. (T. Coats in Tr. Lit. Soc. Bo. ii, 211).

(17) The second marriage of Sayaji Rao II of Baroda was celebrated in A. D. 1820 with the use of fireworks costing about Rs. 3,000/-, as vouched by the following document in *Historical Selections* (Baroda Records) edited by C. V. Joshi, (Vol. VII, 1943, p. 925)

Letter No. 33, dated 23rd April 1820—Memo to Haribhakti for Rs. 18500/—. Out of this sum an amount of Rs. 3000/- was to be used for the preparation of fireworks:—

" ३,००० अतसवाजी दारू करावयासी "

(18) Buchanan in his Patna-Gaya Report, published by the Behar Research Society, Patna (Vol. II, pp. 625-626) records the following remarks about the manufacturers of fireworks in Bihar about A. D. 1811:—

"These who make fireworks are not superior to the Atushbaz usual in Bengal. The fireworks are chiefly employed at marriages. At other seasons the same people make gunpowder of which a good deal is used. The nations seem to delight in the noise of firearms and fire powder merely for pastime but many people in this district are constantly provided with arms and ammunition; as a defence against robbers or rather from family habits, considering themselves as born soldiers. They do not, however, parade in arms and few of them now appear in public with even swords."

- (19) Edward Moor in his Narrative (of Operations against Tipu Sultan) London, 1794, gives a description of a rocket on p. 509 from Major Dirom's Glossary.
- (20) In the Ajñapatra of Ramacandra Nilakantha Amatya (edited by Urdhwareshe) there are several references to Bāṇa (rocket). This document is dated A. D. 1716.
- (21) A small booklet called "ব্যুবাজী বহুৰে" or "ব্যুক্তীরা" by Laksmana Pāmjī Khopkar (Bombay, Anglo-Vernacular Press), 1886 records the methods of manufacturing different fireworks for Divali celebrations. The materials mentioned in this booklet are:—
 - (1) सोरा (सुर्याखार)-
 - (2) गंधक-- Sulphur,
 - (3) कोळसा -- Coal of शेर, त्र, लाघाडा, देवदार, एरंड, मिरची, निवहुंग.
 - (4) बीड --
 - (🔰) मनशीळ ---
 - (6) हरताळ ---
 - (7) sigt Camphor,
 - (8) गुळी--
 - (9) सुरमा -- Antimony.

Fireworks for which formulas are given in the booklet are: -

- (1) नळे--(मोतिया, चमेली, शेवंती, आनार, सुरू, बैठकी)
- (2) फुळबाजी
- (3) चन्द्रज्योत (white, red, green)
- (4) सुरसुच्या
- (5) बाण
- (6) बस्या
- (7) आवाजाची दारू
- (8) बंदुकीची दार Hall Manager be emminellenem edt tande sittem

- (9) सफेत तारे
- (10) छाछ वारे
- (11) चिचुंद्रि

Many of the ingredients for the manufacture of fireworks mentioned in the above booklet are also found in the Sanskrit formulas for fireworks (c. A. D. 1500) recorded in the Kautukacintāmaņi by Gajapati Pratāparudradeva of Orissa already referred to by me.

- (22) An article on the manufacture of fireworks for Divali celebrations has been published in the Marathi magazine *Udyama* of Nagpur for October 1936, pp. 666-668 The fireworks mentioned in this article are:—
 - (1) आतपवाजी (white, blue, red, purple, green)
 - (2) टिकस्या
 - (3) फुलझडी
 - (4) फुलबाइया के कि स्थानक राज्य का निर्मा के किया के मा बार्कार
 - (5) सुईनळे
 - (6) चंद्रज्योती
- (23) The modern Marathi poet Keśavasuta refers to fireworks in one of his poems as follows:—

" मोठे बाण ही चंद्रज्योती मधुनी खा फ्लबाज्या नळे "-केक. १४९

(See p. 1808 of Śabdakośa by Date and Karve)

- (24) The following Marathi printed books about fireworks have been kindly brought to my notice by my friend Shri C. G. Karve 19:--
 - (1) 朝知新聞 by Gaņeśa Bābāji Māṭe (Litho Press, 1871).
 - (2) ৰায়ৰনকাৰ by Govinda Moroba Karlekar (Litho Press, 2nd edition, 1889).
 - (3) आधारीहा by Ranganatha Sakharama Late (1894).
 - (4) आतपवाजी by Samkara Yajñeśvara Garge (1927).

Information about fireworks has been given in such Marathi works as " हुबरकलासंग्रह," " उपयुक्तकलासंग्रह," " उपयुक्तकलासंग्रह," किंदियकलाशतक, " etc.

(25) Shri V. K. Bhave in his recent book called "पेश्वेकानी महाराष्ट्र" Poona, pages 362-63, makes some remarks on the आवष्याजी or fireworks in use during the Peshwa Period and in particular during the reign of Peshwa Savai Madhavarão. The names of fireworks given in these remarks are:—

^{19.} I am thankful to Shri Karve for the trouble taken by him in searching for printed.

Marathi writings on fireworks.

(1)	ताबदानी रोपनाई	(8)	बाण 🗇
(2)	बाकाशमंडळ वारोगण	(9)	पाणकोंबडी
(3)	चादरी दारूकाम	(10)	हातनळे
(4)	नारळी झाडें	(11)	कोड्याचे नळे
(5)	प्रभाचमक	(12)	फुछबाज्या
(6)	कैचीची झाउँ	(13)	महताफा
(7)	वादलगर्ज	ot per in a	

In concluding my notes on the history of fireworks in India I have to request other scholars to supplement them with additional evidence from datable sources. In the present paper I have recorded my evidence about the history of fireworks in India and provided it with the background of the history of fireworks in China and Europe as recorded by other scholars. I shall welcome evidence about the use and manufacture of fireworks in India prior to A. D. 1400 from any source, Indian or foreign. I want in particular evidence on the following points connected with this problem:—

- (1) What person or persons brought the knowledge of fireworks to India?
- (2) What is the exact chronology of the transmission of fireworks to India?
- (3) Is there any evidence in Chinese, Persian or Arabic sources about the introduction of fireworks in India?

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Pocos, pages 284.03, under some remarks on the coupers or liveworks in the driving the Period and in particular during the regard.

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4. The Mounted Bowman on Indian Battle-Fields — From the Invasion of Alexander (B. C. 326) to the Battle of Panipat (A. D. 1761)*

- J. Russell Smith in his article 1 on "Grassland and Farmland as Factors in the Cyclical Development of Eurasian History" makes the following remarks about the curious and striking part played by the horse from the steppes in man's affairs in Eurasia:—
- (1) Bishor thinks the Scythians may have been the first effective cavalrymen. Armed with a Compound 2 bow, which seems to have been an invention of the north, a cavalryman could ride circles around a charioteer. Hence the use of chariots in war declined in the near-east after the Assyrians, in the ninth century B.C., adopted cavalry from their enemies the Scythians.
- (2) The chariot was distributed to Ireland and Korea between 2500 and 1000 B.c. After centuries of using the chariot as an instrument of war-fare men began to fight from the back of the horse. But it was more centuries before the stirrup was invented.
- (3) Early uses of the horse sift down to this—meat supply, milk animals, assissant to the herdsman, the pet of princes, for pageantry, religious ceremonies, and war especially war.
- (4) The horseman with a two-piece bow was the greatest "blitz" before gunpowder. This bow seems to have brought cavalry to the fore. The horse-man with a lance was not so potent. This bow brought the horse to his Golden Age in the affairs of men. From the beginnings of

* Bulletin of Deccan College Research Institute, Vol. VIII, Nos. 1-2, pp. 84-46.

 See Smithsonian Report for 1944, Pages 357-384, Publication No. 3792 of Smithsonian Institution, Washington, D. C., 1945.

2. Vide Technical Arts and Sciences of the Ancients by Albert Neuburger (Eng. Trans. by Henry L. Brose, 1980; Methuen and Co. London) pages 218-221 (The Bow, the Crossbow and Ballistic Machines). According to Brose the Compound Bow was made of the two pieces of the same material joined together. The Composite Bow was made of a combination of different materials. The following points from NEUBURGER'S remarks may be noted here:—

(1) The Simple Bow is the oldest. (2) The Wooden Bow was made of the yew tree or taxus. (3) Odysseus carried a Composite Bow made of horn. Long before Homer the Composite Bow was used by the Egyptians (Figure 288). One relic of this Bow dates from the time of Rameses II (13th cent. B. C.) and another from an Egyptian tomb of 7th cent. B. C. The Composite Bow comes from Asia (Fig. 289) and is made of horn, wood and sinews. It can shoot an arrow as far as 1000 yards and can shoot right through a Bison. "This achievement cannot be equalled by the heavy colt revolver used by the American army."

Cavalry with the Scythians about the Ninth Century B.C. to the date of the effective use of gunpowder the Calvalryman of the Eurasian grasslands almost continuously harassed the settled cultures upon the grassland rim and smashed them at will.

- (5) In the 9th century A.D., some one, apparently in France, invented the horse collar and traces. Then horses could pull a load and enter the economic realm.
- (6) The great Wall of China was built to stop he marauding mounted bowmen of the Steppes between the 7th and 3rd centuries B.C. It is a monument to the horse.
- (7) Gun-powder and the railway reduced the grassland man to impotence.

I am concerned in the above remarks with the importance of the mounted bow-man who dominated war-fare for hundreds of years in human affairs on account of his mobility as a fighting unit. Accordingly I propose in this paper to record some references to the mounted bow-man or the use of the bow and arrow made by foreign cavalry in ancient and mediaeval periods of Indian history.

(1) In a treatise on archery called the *Dhanurveda* (MS 4 No. 54 of 1886-92 in the Govt. MSS Library at the B. O. R. Institute, Poona) the author describes the সাইখন: and its uses as follows:—

folio 2— " शाई पुनर्धनुदिंग्यं विष्णोः परममायुधम् । वितस्तिसप्तसंमानं निर्मितं विश्वकर्मणा ॥ न स्वर्गे न च पाताले न भूमौ कस्यवित्करे । तद्वनुवंशमायाति सुक्तवैकं पुरुषोत्तमम् ॥

3. As regards the use of Guns and Gun-powder in India from A. D. 1400 onwards, see my carticle on this subject in the Denison Ross Volume, Pages 117-124.

4. This MS is dated Samvat 1868 = A. D. 1812. Other MSS of Dhamureda are No. 407 of 1887-91 and No. 558 of 1875-76. Some particulars from these MSS may be noted below:—

- (1) No. 407 of 1887-91- lalled " शिवोक्त धनुवेद " in the Colophon.
 - verse 3 at the beginning refers to '' बीरचिन्तामणि "— verse 1 reads :-
 - " ईश्वरोक्तात् धनुर्वेदात् व्यासेनापि सुभाषितात् । पद्मान्याख्याय रचितो ग्रन्थः संक्षेपतो मया ॥ १॥ "
- (2) No. 558 of 1875-76 All the above details are found in this MS but the Colophon reads:
- " एते शिवधनुर्वेदस्य भगवतो व्यासस्य । इति शाङ्ग्रीधरविरचितायो चितामणिर्नाम्ने धनुर्वेदस्य परिच्छेदः ॥ "
- (3) No. 54 of 1886-92— The text of this MS is same as those of the above two MSS but some portions found at the beginnings and ends of the above two MSS are missing in this MS-The colophon reads :— " ইবি ধুর্বিমি: ইবি মুব্বি: "

8

पौरुषेयं तु यच्छाई बहुवन्सरशोभितम् । वितस्तिभः साई पड्भिर्मितं सर्वार्थसाधनम् ॥ प्रायो योज्यं घतुः शाई गजारोहाश्वसादिनाम् । रथिनां च पदातीनां वांशं चापं प्रकीर्तितम् ॥

The concluding verse of the above extract tells us that साईधनुः is to be used by warriors on elephant's back (गजारोहाः) and cavalrymen (अश्वसादिनः). It also tells us that बांस चाप or a bow made of बंस or bamboo is to be used by warriors in the chariot (रियनो) and foot-soldiers (पदावीनो).

Folio 7—The following extract prescribes how the war chariot is to be equipped with four bows (कार्युकाणां चतुष्टपं) and 400 arrows in quivers along with other weapons viz.—

खड्ग, गदा, शक्ति, परिघ, मुद्रर, नाराचान्, परधा, पट्टिश, चर्म, कुंत etc.

"रथे च धारयेद्धद्रं कार्मुकाणां चतुष्टयम् ।

चतुःशतानि बाणानां तृणीरीयं प्रप्रयेत् ॥

खद्धं चर्म गदां शक्ति परिघं मुद्ररं तथा।

नाराचान्परध्रं कृंतं पट्टिशादींब धारयेत् ॥ "

One who has no chariots or elephants should ride his horse 5 with the quiver at his belt and equipped with অহ্য, মন্দ্র and খন্তঃ (bow):—

"न रथा न गजा यस्य सोश्रमेव समारुद्देत् । कटिबर्दैकत्णीरखड्गशक्तिधनुर्युतः ॥ "

Folio 8 — Under युद्धविधि the author informs us that mounted bowmen (साङ्गे धरुभेरा: तुरगास्टा:) become irresistible on the battle-field :—

> " घतुः संगति संग्रुद्धा वाजिनोमुखदुर्व(म)छाः। व्य)कर्ण पति(छि)ता बोधाः संप्रामे जयवादिनः॥ परस्परानुरक्ता ये योदाः शाङ्गैधनुर्धराः। युद्धज्ञास्तुरगारूडास्ते जयंति रणे रिपृत्॥"

Runaways from the battle-field should not be hunted by the powerful warriors for the reason that such men are likely to be infused with courage owing to their desperate condition:—

" भीरः पलायमानोऽपि नान्वेष्टच्यो बलीयसा । कदाचिच्छुरतां याति मरणे कृतनिश्चयः ॥ "

^{5.} Evidently preference was given to chariots and elephants as vehicles in warfare. The combination of the horse and a bowman, inspite of its advantage, was not looked upon with favour by Indians.

The extracts 6 quoted by me fully support the following extract on p. 97 of Prof. V. R. R. Dikshitan's "War in Ancient India" (Macmillan, Bombay, 1944):—

"In Wilson's words, 'the Hindus cultivated archery most assiduously and were very Parthians in the use of the bow on horseback.' One feature of this weapon was that it could be handled by all the four classes of warriors."

Prof. DIKSHITAR quotes Arrian's Indika on the mode of equipping Indian soldiers for war but this quotation refers to foot-soldiers carrying bows and not the use of the bow by the cavalry.

MITRAMIŚRA (c. A. D. 1610-1640) in his encyclopaedic work Viramitrodaya, in several divisions called "Prakāśas," refers to several weapons of war (नानायुष्ठकाण प्रकरण) in the Lakṣaṇaprakāśa (Vol. XX of Chowkhamba Sans. Series, Benares, 1916). In the account of these weapons he devotes pages 273-292 to Dhanurveda or science of archery. The authorities quoted in this account are:— विष्णुपमान्तर, वैदाकतन्त्र, नेपम्बक धनुवेद, राजविजय, वीरिचन्तामणि धनुवेद. Much of the matter of this section is drawn from the वीरिचन्तामणि धनुवेद represented by five MSS in the Govt. MSS Library at the B. O. R. Institute. The reference to the use of the bow on horse-back recorded by MITRAMIŚRA is found in the extract from the वीरिचन्तामणि धनुवेद quoted by me at the beginning of this paper viz.

" शाक्कं पुनर्धनुर्दिन्यं । प्रायो योग्यं घतुःशाक्कं गजारोहाश्वसादिनाम् । रथिनां च पदातीनां वांशं चापं प्रकीर्तितम् ॥ "

(ii) No. 62 of A. 1883-84 — The title on the label is वीरचुडामणि which is perhaps a misreading for वीरचिन्तामणि—
The colophon reads:—

" इति भी वाहुजकुलालंकार भी भदरगहमछात्मज— श्रीविद्यलदासविलासे घनुर्वेदनिर्णवप्रकाशः"

^{6.} I have quoted these extracts from three MSS of the title and in the Govt. MS3 Library at the B. O. R. Institute. The text of this work is also represented by two more MSS in the above library vis.—

⁽i) No. 138 of 1892-95 —बीरचिंतामणि धनुवेंद् — dated Samvat 1785 = A. D. 1679—
copied at '' जलालावाद ''—ends as follows:—
'' इति श्रीद्रोणभाषित वीरचिंतामणि धनवेंद समाप्त: ''

^{7.} I have not seen the authorities on which WILSON'S reference to the Indian use of the bow on horse-back is based.

^{8.} Someśvara (A. D. 1180) in his मान्सोद्धास (Vol. II, G. O. Series, Barods, 1950) pp. 162-169, deals with बन्दिया and its feats but there is no reference in it to the use of the bow on horse-back.

In the section on swords (खड्गप्रशंसा), which follows the Dhanurveda section, MITRAMIŚRA quotes from the औश्रनस धनुवेद (p. 293). This quotation contains the following stanzas:—

" क्षिती रथे वाजिनि कुञ्जरे वा गृहे दुमे नागरके प्रमादे। सर्वत्र सर्वस्य च भागेंवेग्द्र परायणं स्थाद् असिरेव नित्यम्॥ धनुरिह शरपातादेव वे हन्ति शत्रृत् दहति रिप्रसम्हं वाजिवह्नितंवेन। सुभटकरगतस्तु क्षिप्रमम्यासमात्रे शमयति रिप्रसेनां पातयोगेन खहुगः॥"

In the first stanza the all-round use of the Sword is emphasized, while in the second the use of the Sword on the battle-field is indicated. Perhaps the line " बहुदि अववादेव वे इन्ति अवृत् " has a reference to footsoldiers using the bow referred to by Arian in his Indica. The line " दहित विश्वमृद्धं वाजिबद्धिजेवन", which states that the fire of cavalry burns the hostile army by its speed, refers only to the extreme mobility of the horse. If, however, the entire second stanza is taken to be the description of a mounted समय or expert warrior armed with bow and arrows along with sword, we have here an admirable description of a mounted bowman. The subsequent stanzas in the quotation from the जीवनस बनुबेंद establish the superiority of the sword on the battle-field as follows:—

" मतङ्गजस्थो रथवाजिगो वा शरक्षये शस्त्रगणक्षये च । समस्यितो वा विषमस्थितो वा । नरोऽसिना मर्व्यतीह सर्वान् ॥ स्वच्छन्दे चापभङ्गे च विरथस्य विवाजितः । शत्रुमध्यावतीर्णस्य नान्यत् सङ्गात् परायणम् । "

In all disadvantageous situations created by the exhaustion of the supply of arrows and other weapons the warrior, whether mounted on an elephant, a chariot or a horse, can kill all who oppose him, by his sword alone. Even when the bow is broken and the warrior is dislodged from his chariot or horse, the sword alone is the resort of such a warrior surrounded by the army of the enemy.

The treatises on Dhanurveda from which I have noted some references to the mounted bow-man are not very old. It is, therefore, difficult to say whether the Indian cavalry before about 500 B. c. used the bow

from the horse-back. RUSSELL SMITH states that " Scythians may have been the first effective cavalrymen" because they were armed with a compound bow. If this statement is correct are we to presume that the use of the bow from horse-back was adopted by the Aryans in India from the Scythians? "The Assyrians in the ninth century B. C. adopted cavalry from their enemies the Scythians" - states Russell Smith. The Aryans who came to India brought the domesticated horse about 1600 B. C. and these "horsed-warriors defeated the elephant-armies of the natives of India" observes Mr. M. S. RANDHAWA in his recent article on the "Role of Domesticated Animals in Indian History." 9 Mr. RANDHAWA states that according to PEAKE and FLEURE the horse was first tamed in the Steppes of Central Asia and South Russia, which formed an immense grassland, where Erzewalskis horse is still found wild. If the Aryans used "the trained horse and the sword " against the elephant armies of the natives of India we have to inquire at what stage of their history they picked up the use of the bow on horse-back and from whom? Was it from the Scythians prior or posterior to their invasion 10 of India c. 150-140 B. C.?

In the account of the Bow and Arrow given by Mr. G. T. DATE 11 he discusses the following topics:—

- (1) Use of the bow by all warriors of the world in the early stages of civilization.
- (2) All ancient Indian warriors were expert shooters with the bow (e.g. the skill of Śrāvaṇa of the Rāmāyaṇa and Arjuna of the Mahābhārata in archery).
- 9. Vide p. 10 of Science and Culture, Calcutta, July 1946. The chronology of the Horse and Cow Culture of Aryans given by Mr. RANDHAWA is as follows:-
- c. B. C. 1600— The domesticated horse brought to India by the Aryan nomads—No evidence of horse on seals of Mohenjo Daro nor any bones of horse discovered.—The horse was domesticated even before 5000 B. C.—

 The training of the horse for war caused a great crisis in human history.
- 326 B. C. Alexander's invasion of Northern Punjab demonstrated the superiority of the horse over the elephant in warfare.
- lst century A. D. —The horse had established its superiority over the elephant as far east as Mathura as proved by a Kushan sculpture showing a procession of Horses with the elephant humbly following.

13th century A. D.— The horse-period reaches its some in the horse-empire of the Mongols.

14th century onwards — The sailing ship of the Europeans put land transport into the background.

10. Vide p. 277 of SMITH : Early History of India, Oxford, 1914.

^{11.} Vide pp. 11-15 of Art of War in Ancient India, Oxford University Press, London, 1929.

- Eastern Iranians.
- (4) There was no material change in the Vedic bow during the Epic period.
- (5) The Arthaśāstra refers to four kinds of bow, some varieties of arrows, bow-strings etc.
- (6) The Brhat Sarngadhara Paddhati deals with the bow and arrow in detail in its account of weapons.
 - (7) Certain signs of Indo-Sumerian Seals look like arrows.
 - (8) The bas-reliefs of Sanchi illustrate some of the weapons.
 - (9) Statement of the Greek historians that Indians used heavy bows.
- (10) Representations of the bows on coins of Candragupta II and Kumāra Gupta I (shooting with the bow ond arrow).
- (11) Dravidians knew archery from the beginning of their written history.
- (12) The Agnipurana gives an account of archery.

In the discussion of the above topics Mr. Date does not refer to the use of the bow on horse-back. In his account of "War Animals and War Vehicles" Mr. Date refers to the following points which have a bearing on my present inquiry about the use of the bow on horse-back:—

- (1) The Aryan invaders of India brought the Turkoman horse 12 with them to India (see JRAS, 1919, p. 507).
- (2) During the Vedic period the horse was used mainly for riding, though there are some references to riding in battle.
- (3) The Dravidians used the horse for riding.
- (4) In the Mahabharata time the horse was used in the army, although no word equivalent to cavalry could be found. Soldiers on horse-back fought alone and were treated as an inferior fighting force,
- (5) By the time of Alexander's invasion the Indians had a respectable cavalry.
- (6) Poros had 4000 horsemen (see p. 102 of Invasion of Alexander).
- (7) The horse was never regarded in Ancient India as a superior fighting unit, and elephants and chariots occupied a position higher than cavalry.
- 12. Vide Dr. M. B. PITHAWALLA'S remarks on "Role of Animals" in the Early Aryan Home and settlements (Indian Geographical Journal, Karachi, October-December, 1945). The horse was a native of the Syr-Amu Darya doab which was the most likely Home Region of the ancient Aryan Family. Its name has gone into the surnames of the Iranian heroes and Kings, c. g. Kerhasp, Arjasp, Gushlasp etc.

(8) The defects of the chariot were revealed more than once in combats with foreigners.

In his above account of horse as a war-animal I find no reference to the use of the bow on horse-back by Ancient Indians of Alexander's time. In fact Poros was defeated by the mounted bow-men of Alexander at the Battle of Hydaspes. In this connection VINCENT SMITH observes as follows (p. 64 of Oxford History of India, 1923):—

"The elephants on which Poros had relied proved unmanageable in the battle and did more harm to their friends than to their foes. The archers in the chariots were not a match for the mounted bowmen of Alexander; and the slippery state of the ground hindered the Indian infantry from making full use of their formidable bows, which they were accustomed to draw after resting one end upon the earth and pressing it with the left foot." 18

It is clear from the above evidence that the superiority of the mounted bowmen of Alexander over the infantry bow-men of Porus was clearly demonstrated to the Indians at the Battle of Hydaspes in B. c. 326. It is, however, surprising that inspite of this demonstration Indians did not adopt the use of the bow on horse-back in their war-fare in succeeding centuries. Consequently it has become difficult to get any references to mounted archery in Sanskrit texts of the early period. 14

In the Holy Bible (New Testament, Revelation, Chapter 6) I have traced the following references to the mounted bow-man:--

"2. And I saw, and behold a white horse: and he that sat on him had a bow, and a crown was given unto him: and he went forth conquering and to conquer."

Really the mounted bow-man has gone forth through centuries of history "conquering and to conquer!"

^{18.} See p. 82 of Oxford History of India (1923)—Vincent SMITH, speaking of the equipment of the army during the Maurya period observes:— "Each horseman was armed with two lances resembling the Grock Sauma and was protected by a buckler. The principal weapon of the infantry was a straight broad sword suspended by a belt from the shoulder; Javelins and bows and arrows were additional arms. The arrow was discharged with the aid of pressure from the left foot on the extremity of the bow resting on the ground and with such force neither shield nor breast-plate could with-stand it". (See the picture of the of Veddah bow reproduced by SMITH on this page).

^{14.} DB. R. K. MOOKERJEE in his "Candragupta Maurya and His Times (Madras University, 1928) refers to some sculptures representing soldiers as follows:-

P. 276 - Sculptures of soldiers wearing swords, bows and arrows on Sanchi topes (Ist-

At this stage of our inquiry I have to record the following reference to mounted-bowmen in the Adiparvan of the Mahābhārata 15 (B. O. R. Institute, Critical Edition, I, 124, 24):—

" ते स्म ढक्ष्याणि विविधुवणिनांमाङ्कशोभितैः। विविधैर्ङाधवोत्सृष्टैरुद्धन्तो वाजिभिर्वृतम् ॥ २१ ॥ "

I have to request other scholars to point out to me some more references to mounted archery from the Mahābhārata, 16 the Rāmāyaṇa or any other Sanskrit texts of the early period say before A.D. 500. If Droṇācārya and his pupils in archery knew the use of the bow on horseback as early as the Mahābhārata war we have to explain why Porus and his cavalry did not adopt it in practice against the mounted bowmen of Alexander. I strongly hope that our Mahābhārata scholars will explain

-"The bas-reliefs represent nearly all the foot-soldiers as archers, which is in accord with the statement of Megasthenes."

P. 277 —In the foreground of the picture are three warriors armed with Parthian bow and short straight sword of Roman shape;—they also wear cross-straps for carrying their quivers.

DR. MOOKERJEE speaks of Indian soldiers fighting in Europe in the 5th century B. C. "As early as 480 B. C. the army of Xerxes which invaded Greece comprised an Indian contingent clad in cotton garments (probably Sutrakantaka of Kautilya) and armed with cane bows and iron-tipped cane arrows."

15. In the account of the display of skill in archery in the Jatugrahadāhaparva of Ādiparvas the reference to mounted bowmen is traced in verse 24. S. C. MUKHOPADHYAYA in his English Trans. of the MBH. (Calcutta, 1899, pp. 278-279) translates this verse as follows:—

"The princes riding on fleet horses began to pierce the targets, quickly discharging various arrows on which their respective names were beautifully engraved". (In the Chitrashala Edition of Adiparvan, Poons, 1989, we have the reading application of Adiparvan, Poons, 1989, we have the reading application of the bow from the chariots is referred to:—

"कृत्वा धनुषि ते मार्गात्रथचर्यामु चासकृत् । गजपृष्ठेऽश्वपृष्ठे च नियुद्धे च महावलाः ॥ २७ ॥ ग्रहीतस्त्रज्ञचर्माणस्ततो भूयः प्रहारिणः । सरक्मार्गान्यथोदिष्टांश्चेरः सर्वामु भूमिषु ॥ २८ ॥ "

16. J. TALBOYS WHEELER in his History of India (London, 1880), p. 6, refers to "Public Exercises" described in the Mahābhārata as follows:—

"Drops and his son Aswatthama then entered the arena in white garments, and chanted the praises of Indra and the gods. The princes followed with their weapons in their hands and kissed the feet of their preceptor. They began by shooting arrows at a butt, first on foot, and afterwards from horses, elephants and chariots". (Cf. Mbh. I, 124, 27—" कुला धनुषि ते मार्गात्रयन्योमु चासकृत । गजपुष्ठेऽश्रपृष्ठे च नियुद्धे च महावलाः ॥").

this riddle some day. For the present I venture to suggest that the reference to mounted archery appearing in the text of the Mahābhārata has been inserted at a time, when Indians came to know it as a result of their contact with Scythians or Sakas, who invaded India about 150-140 B. c.

Though Indians did not develop the art of using the bow on horse-back, foreigners from Central Asia residing in India practised it long prior to A. D. 500 as will be seen from the following evidence:—

RAMCHANDRA KAK in his Ancient Monuments of Kashmir (London, 1933) describes in detail the excavations at Harwan, a village about 2 miles beyond the Shalimar garden in Kashmir. In these excavations a wonderful pavement of the courtyard round a temple has been discovered. This pavement consisted of large moulded brick tiles, having various shapes and different patterns (Plate XIX). There are several pictures stamped on these tiles, among which I find "archers on horseback 17 chacing deer and shooting arrows at them" as follows:—

Plate XXIII, 8—"On a horse fully accounted, horseman in armour riding at full gallop and drawing his bow. On his right side, attached to the saddle, hangs his quiver. Two ends of drapery flutter at his back." Kharoshthi numerals 1, 4, 10 = 15.

Plate XXVIII, 14 - "A mounted hunter aiming an arrow at a fleeing deer."

Do -, 18 -- "Upper part of an archer wearing conical cap."

Plate XXIX, 20 -- "A huntsman with bow and arrow riding at full gallop." Kharoshti numerals: 1, 4, 20, 20, 20 = 65.

The pictures of the mounted bow-man on three different tiles leave no doubt that at the time the tile-pavement was constructed the use of the bow on horse-back was made by some residents of Kashmir, either native or foreign.

As regards the date of the tiles Mr. KAK observes as follows:
Page 109 -- (1) Each one of these tiles bears a number in Kharoshthi script.

^{17.} These pictures of mounted bowmen hunting deer may be contrasted with Kalidasa's description of King Dusyanta (शाकुन्तल Act. I, 6) hunting a deer seated in a chariot and armed with bow and arrow (कृष्णसारे ददचतुस्त्रिय चाधिरजनामुके । मृगानुसारिणं साक्षाल्यया-मीव पिनाकिनम् ॥ ६॥). The ground was full of hollows, hence the charioteer elackened the speed of the chariot by drawing in the reigns.—The mounted bowman on Harwan tiles chasing deer at full gallop apparently had no difficulties of the type experienced by Dusyanta in his chariot hunting a deer.

(2) The Kharoshthi script ceased to be in vogue in north-western India about 5th century A. D. The tiles are, therefore, much older in date than this time.

Page 110 -(3) The date of the tiles, and of the diaper pebble masonry with which they are associated is "about A. D. 300."

- (4) The above date is further supported by the following data:--
 - (i) The physiognomy and dress of men and women (on the tiles) are wholly unlike that of any races in Kashmir today.
 - (ii) The facial characteristics etc., trousers, and Turkoman caps of the persons represented on the tiles show them to be Central Asian.
 - (iii) Kashmir had connection with Central Asia during the Kushan Period, when the Kushan rule extended from Mathura to Yarkand.
 - (iv) Some pious and prosperous Kushan must have built the Harwan shrine (with its tiled pavement).

"Among the foreign decorative motifs which reveal foreign influence are the figures of mailed horse men with flying scarves tied to their heads, which are strongly reminiscent of the contemporary Sassanian art of Persia."

The above evidence of the sculptures of about A.D. 300 depicting the mounted bowmen leads us to suggest that the reference to the mounted archery in the Adiparvan of the Mahābhārata has been inserted during the rule of the Kushan or Indo-Scythian Dynasty in India (from about A.D. 20 to A.D. 225) or more broadly between c.B.C. 150 and 300 A.D., when the text of the Mahābhārata may have assumed a settled form. I now request our Mahābhārata scholars to see if this suggestion is acceptable to them. 18

So far I have recorded the following evidence about the mounted bownen on the Indian battle-field:—

18. My friend Rao Bahadur K. V. RANGASWAMI AIYANGAR of Madras writes to me in this connection in his letter of 22-7-1946 as follows:—

[&]quot;I have seen in the Madura temple and in one or two other temples figures of horseman armed with javelins and swords, but not bows. There are representations of Satyabhāmā using a bow, when seated on the shoulders of Garutmān. Rāma was seated on Hanumān's shoulders when he fought with Rāvana. — These figures are of the late Vijayanagar period. — I do not remember any instance in our literature of archer cavalry and my impression is the same as that of Russell Smith, with the variation that I regard Persia, not Scythia as the original home of the mounted archer. You have selected an intriguing topic which has escaped (in spite of its importance) the attention of scholars till now."

- (1) Defeat of Porus by the mounted bowmen of Alexander the Great (B. C. 326).
- (2) Reference to the display of mounted-archery in the Mahābhārata (I, 124, 24).
- (3) Reference to the use of Śārnga bow by riders of elephants and horses in the Dhanurveda (B. O. R. I. MS No. 54 of 1886-92— "प्रायो योज्यं धनुः शाङ्गं गजारोहाश्वसादिनाम्"). This treatise also refers to "साङ्गंधनुधंराः तुरगारूडाः योद्धाः " and prescribes the use of the bow on horse-back by one who has neither chariots nor elephants (" न स्था न गजा यस्य सोश्वमेव समारहेत्। कटि-वदैकत्णीरसङ्गाकिधनुर्युतः ").
- (4) Three pictures of mounted bowmen hunting deer on the tile-pavement (at Harwan in Kashmir) of about A. D. 300. According to RAMCHANDRA KAK these bow-men on horseback are not Indian but foreigners from Central Asia.

In Duarte Barbosa's account of Gujarat at the death of Mahmud Begada (A. D. 1515) recorded by M. S. Commissariat in his *History of Gujarat* (Bombay, 1938), Chap. XX, pages 354 ff., we find a detailed description of the *methods of warfare* adopted by the Sultan of Gujarat. The following points in this description are noteworthy:—

- (1) The Gujarat sovereign employed a corps of war-elephants in accordance with Indian traditions; some of these animals were brought from Malbar and Ceylon at a cost of about £ 750 each.
- (2) Three or four men seated in howdahs on each elephant used bows, arrows, hand-guns etc. against the enemy.
- (3) The cavalry was composed of horses, bred in the country. The riders were expert horse-men, seated on high-pommelled saddles each carrying a strong round shield, two swords, a dagger, and a Turkish bow with very good arrows.
- (4) The warriors were mostly Persianized Turks, with whom the Persian game Changan (Polo) was a favourite pastime.

It is clear from the above account of Barbosa that the use of the bow on horse-back was made in the Gujarat army of c. 1515 A. D. by Persianized Turks and not by Indians.

About 150 years later than Barbosa's observation of the use of the Turkish bow on horse-back by the army of the Sultans of Gujarat we have the following observations about the effective use of mounted archery recorded by Bernier in his Travels (A. D. 1656-1668), (Constable, London, 1891):—

Pages 47-48 — Speaking of the army of Dara Shukoh used against Aurangzeb, Bernier observes :--

"The rest of the army consisted principally of Cavalry, armed either with sabers and those kind of half-pikes used by the Ragipous 19 (Rajputs); or with sabres and bows and arrows which latter weapon is generally used by Mogols that is (according to the present acceptation of the term Mogol) foreigners whose complexions are white, and who profess Mahometanism; such as Persians, Turks, Arabs and Uzbeks,"

The superiority of the mounted archery even over musketeers is further vouched by Bernier as follows:—

Page 48 —It cannot be denied that the cavalry of this country manoeuvre with much ease and discharge their arrows with astonishing quickness; a horsman shooting six times before a musketeer can fire twice."

In our story of the mounted bow-man we have started with 326 B. a., when Alexander defeated Poros on the strength of his mounted bowmen, and come to about 1660 A. D., when the Mogol army, consisting of Persians, Turks, Arabs and Uzbeks, was still using the Turkish bow on horse-back with great force and advantage. It is a pity that the Indian soldiers failed to adopt this effective method of warfare, even when they had visible demonstration of its superiority during a period of about 2000 years!

From Bernier's account of the use of Turkish bow by the Mogol army we come to the Battle of Panipat (A.D. 1761) an exhaustive account of which has been recorded by Prof. T. S. Shejwalkar in his brilliant monograph "Panipat: 1761" (published by the Deccan College Research Institute, Poona, 1946). Speaking of the weapons employed by the Marathas and the Afghans at this battle, Prof. Shejwalkar observes:—

Page 89 — "Now a cavalry battle fought with lance and sword on the Maratha side and musketry and archery on the other side (Afghan side) began in good earnest. It is certain that the Afghan cavalry under Ahmad Shah had more musketeers, match-lockmen and archers amongst them than were to be found in the Maratha army. Each Maratha of note had possibly a hand-gun by his side but he had neither love for it, nor expertness at its use. He preferred lance and spear at a short distance to the clumsy 20 bow and arrow or heavy long match-lock of those days."

^{19.} Evidently the Rajputs in the Mogol army did not care to adopt the use of the bow on horse-back, which was a special feature of the Mogol warfare.

^{20.} Contrast this statement with BERNIER'S statement that a horse-man of the Mogol army could shoot his arrows six times before a musketeer could shoot twice. Lence and Spear were good weapons at close range but they were not effective against mounted archery.

Page 93 — "Now the battle entered its most desperate stage. The fight was a close combat with sword, spear, lance, dagger and knife "by Ahmad Sultan's good fortune" an arrow struck Vishwasrao killing him outright."

The effect of the death of Vishwasrao had a disastrous effect as we learn from the subsequent account of this battle. I presume that the arrow that killed Vishwasrao was from the mounted bow-man from the Afghan cavalry.

It will now be seen from what has been said and recorded above that from B. C. 826, when the mounted bowmen of Alexander defeated the Indians under King Poros upto A. D. 1761, when the mounted-bowmen of Ahmad Shah Abdāli routed the Maratha army, the Indian soldiers and their sovereigns did not care to study and practice mounted-archery inspite of its demonstrable superiority even over the crude muskets of Shivaji's time. 21

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^{21.} In the Ajfiāpatra of Rāmacandra Nilakaṇṭha Amātya dated 21st November 1716 he includes archers (বিবৈটো) in the formation of the Hujarāt or standing army of the Maratha king (See p. 17 of সাহায়স, ed by V. G. Urdhvareşe, Indore, 1989 —

[&]quot;आधीं हुजरात सजावी. लष्कर, हशम, आडाव, बदुकी, तिरंदाजी, करोल, असे पंचरूढ जमाव ठेवावें." P. 7 — "लष्कर, हशम, बंदुकी, तिरंदाज, आदिकरून...बारदान ठेऊन etc.)

Here the musketeers (बंदुकी) and archers (तिरंदाज or तिरंदाजी) are mentioned side by side, but the archers mentioned here are foot-soldiers armed with bows and not mounted bowmen. —For the use of archery in England upto the time of Henry VIII of England (A. D. 1491-1547) see article on Archery in the Encylo. Britannica.

5. The History of the Stirrup in Indian and Foreign Horsemanship—Between B. C. 852 and 1948.

The horse has been the friend of man from remote antiquity in peace and war. The Aryans in India have made use of the horse from the time of the Rgveda up to the present day for offence and defence. In the military history of India as also that of the people of the other nations of the world the history of cavalry is associated with deeds of heroism and romance, which fill many pages of the history of the world. The use of the cavalry in India from the Mauryan times upto the present day has been proved by historical records of the different periods of Indian history. The importance of the cavalry ceased, however, in the recent second great world war (1939-1945) owing to the use of armoured cars, aeroplanes and other modern scientific weapons of warfare and finally came the Atom Bomb, with its mysteries and miracles, not to say an undreamt feeling of horror which still pervades the modern civilized world.

Whatever be the future military weapons of the so-called civilized nations of the world, the respect for the horse, which has been the friend of man for more than 4000 years, can never disappear from the human breast. The cultural history of the horse has been as enchanting as its military history. The Central Asia has been the home of horses for thousands of years and some of the races of antiquity like the Sakas or Scythians were expert riders, who made use of the bow and arrow from horse-back and hence were found invincible in land-warfare wherever they went.

The history of Indian horsemanship is quite a fascinating subject for the student of Indian military history. The taming of the horse, its use for riding or carriage purposes, the care of the horse, the selection of horses for carriage and such other matters connected with horse-culture and horse-breeding have been considered at great length in Indian and foreign books on horse-craft. I have read many works on the sangar and allied subjects but have failed to notice in them any reference to the stirrup, with the history of which I propose to deal in the present paper. My evidence though scanty is sufficient to establish the antiquity of the stirrup for more than 2500 years. Its appearance in Indian history appears to be later than about 100 B, C.

^{*} B. I. S. Mandal Quarterly, 1948, pp. 1-14.

There is no word for the stirrup in Sanskrit or Prakrit. Mr. Apte in his English-Sanskrit-Dictionary (2nd Edition, p. 413) mentions " पाद्महर्णी, पाद्मारणी" as equivalents for the stirrup. Evidently these are coined words. In his Sanskrit English Dictionary he does not record these words and their meanings. The words for the stirrup in the different vernaculars of India are being collected by my friend Dr. Siddheswara Verma and they will be recorded by me or Dr. Verma in a subsequent paper on this subject.

The absence of any Sanskrit word for the stirrup may suggest its foreign origin, though we cannot say that the stirrup was quite unknown in India even in pre-Musalman times. Unfortunately I have not found any literary evidence about its use by Indians except the following extract in the section on the game of Polo (त्रगवाद्यालीविनोद) in the encyclopaedic Sanskrit work called the the मानसोहास or अभिक्षिवायैचितामणि composed by

the Calukya King Someśvara about A. D. 1130 :-

While describing the horses to be made ready for the royal Polo, Someśvara refers to "पादाधारै:" or Stirrups of gold, hanging down on both the sides of the horse—

Page 224 —Pair of stirrups is referred to as ' पादाधारयुगं '' in the following verses :--

— " अन्तर्वेहगां समाकृष्य बहिवंछा(ह्नाा)कृताश्रयः । इंडोक (रु) श्रकजङ्घश्र स्थिरहस्तोऽश्रयासनः ॥ १८॥ विस्तृतोरस्थलश्रेव बाह्यकर्णांभदन्तदक् । अङ्गुष्टाभ्रेण सम्पीदय पादाधारयुगं इंडम् ॥ १९॥ "

In the above extracts of c. A. D. 1130 the term " पादाधार " for the stirrup appears to be a coined one like " पाद्याखार " coined by Apte as we have seen above.

The Persian name for Polo is Chaugan or horse-golf. For many centuries it was the game of Kings and Courts over all Mahommedan Asia. (Vide p. 191 of Hobson-Jobson by Yule and Burnell, London, 1903). In the Middle Ages this game came from Persia to Byzantium sometime

before "the beginning of the 8th century." There are constant metaphors about this game in Persian literature. The fullest description of the game as played at Constantinople is given by Johannes Cinnamus (c. A. D. 1190). It remains to be proved if this game called " ज्याबाद्धी विज्ञेद " by Someśvara was introduced into India after the Muslim conquest of Sind in A. D. 712 or earlier. At any rate the use of the Stirrup in the game of Polo as played at the Calukya court about A. D. 1130 is very important as it proves the currency of the stirrup in Indian horsemanship more than 800 years ago.

Another reference to the Stirrup is found in the lexicon राजन्यवद्वारकीय (Poona, 1880) prepared by Raghunātha Paṇḍita by order of Shivaji the Great about A, D. 1676. In the section of this glossary or lexicon, which is called चतुरङ्गवंग dealing with military terms current in the 17th century we find several terms about the cavalry and horsemanship including the accoutrement of the horses, such as the following with their explanations

in Sanskrit:--

पागा = मन्द्रा मिराखोर = अधरक्षकः हरू = पयायी शाहतीर = जांधिक रिकेवदार = तोत्रधरः नालवंद = सरव्रबंधकः बन्तझंलि दवायन = पीवाबन्धः गडखोल = निगाल: भोंबरकडी = निगालबलयम् चमक = शिरोदंशवारणम् पायबंद = पादबन्धः स्त्रमामा = पाशकः दस्कला = चर्मनिगड नाळ = छोहनिगड सरोसर = प्रोधचर्म छगाम = खछीनकम् तकंमान = खलीनरहिम खोगीर = कल्याणम

भीडन = तुरगासनपृष्टम् हणा = तुरगासनञ्ज्वा पेशबंद = पुरोबन्धः जेर्बन्द = तीक्ष्णताहनी शिकार्वद = कक्षिरज्ज्ञः साखता = जधनपत्रकस फंदणा = गुच्छः हरडा = मणिः चंग = किङ्गिणी सहका = चामरम् जलाजल = पुर:किङ्किणिका सर्वेळी = जिरश्रमं ळाळे = ओष्टबन्धनम रिकीब = आरोडिणी रिकीबदाल = (आरोहिक्याः) चर्म दुमची = पुच्छवन्ध तंग = कइयबन्ध तंगकडी = कक्षिवन्धवलयम् पुस्तंग = वरत्रा हवासा = प्रान्थिचर्म

जीन = तुरगासनम् दावण = तुरगासनपक्ष सुस्तफा = दावणाञ्चतन्तवः पालगाँशा = अश्वरुवचम् लगामपटा = अश्वमुलभूषणम् ताजा = अश्वमुलकवचम्

In the above terminology the term रिकीय for the stirrup is explained as आरोडिणी i.e. a contrivance which helps a rider to climb up the horse while the मानसोद्धास calls it पादाधार i.e. foot-support or foot-rest. In fact the stirrup not only helps a rider to climb up the horse but also serves as a foot-rest while riding. The words पादाधार and आरोडिणी are evidently coined words as there was no word in the Sanskrit language for this contrivance when the Indians adopted it from foreigners.

There is an illustrated manuscript of the Bhāgavata-purāna in the Government Manuscripts Library at the B. O. R. Institute, Poona. It contains about 130 coloured illustrations by a Muslim painter. This manuscript was copied at Jodhpur in A. D. 1648. There are pictures in this manuscript representing some battle-scenes with horse-men. These horse-men are shown as using metallic stirrups and armed with weapons like the bow and arrow, swords, lances etc. We may find the pictures of the stirrup in other Indian paintings prior to the 17th century also.

The foregoing evidence proves the use of the stirrup in Indian horsemanship from c. A. D. 1100 upto the present day. As regards its use in India prior to A. D. 1100, I made inquiries with scholars interested in this problem. I record below most gratefully their replies to my letters, which throw a flood of light on the history of the stirrup in India and outside:—

(1) Dr. R. E. Mortimer Wheeler, c. I. E., M. E., Director General of Archaeology in India wrote to me from New Delhi on 7-4-1948:-

"With reference to your letter of the 2nd April: For the stirrup I have no extensive literature here. It occurs quite early, however, in Central Asia and in China, where it is found in the Han and Tang periods. The Sarmatians also used it in the 1st Centuries B. C.—A. D. See for example M. Rastovtzeff, Iranians and Greeks in South Russia, (Oxford, 1922), pp. 121 and 130. I have not yet investigated the earliest occurrence in India but I expect it reached India from the Sarmatians, very likely via the great trade-route to North-West India through the Hindu Kush. It would, however, be a matter of some interest to re-examine early Indian sculptures and paintings with the problem in mind."

(2) Dr. Moti Chandra, M. A., Ph. D., Curator, Art Section of the Prince of Wales Museum, Bombay, in his letter of 30-4-48 sent me the following valuable remarks on the stirrup:—

"As far as my knowledge goes there is no representation of the stirrup in the bas-reliefs of Bharhut and Sanchi.

However, a kind of stirrup made by looping a rope appears on the lowest beam of a torana archway in the railing round a stūpa, which was recovered from Kankālī Ţilā, Mathurā (The Jain Stupa of Mathura, p. 22, by V.A. Smith, Allahabad, 1901). This railing has been assigned on good grounds by Smith to 100 or 50 B.C. The reverse of the torana beam represents a procession about to visit some sacred place. The horseman heading the procession has his feet resting in a looped rope or may be a leather strap (Pl. XV). There is, however, no sign of iron stirrup as we find in Mugal paintings.

The same kind of looped rope or strap, whatever you may choose to call it, appears on a lota in the Indian Museum discovered by Major Hay in 1857 at Kundlah in Kulu (The Industrial Arts of India, p. 154, Pl. 12, by George C. M. Birdwood, London, 1880). The decoration on the lota is made up of a procession scene, in which there are musicians, a chariot, two horsemen and an elephant.

The horsemen have foot-rests exactly of the same shape as described above. The lota has been dated to 200-300 A. D. but on stylistic grounds it could be dated at least two hundred years earlier.

The sculptural evidence, therefore, proves that such kind of foot-rest was known in India in the first century B. C. but before that it was unknown. We can, therefore, put a suggestion that probably it was an innovation introduced by the Śakas in the first century B. C. It is, however, difficult to say when the regular iron-stirrup was introduced in this country, but as it was common in the Mongolian tribes of Central Asia after the sixth century, as the recent Russian excavations have found out, the Indian stirrup also points out to the same source. In this connection I may also point out to you that in Garhwal hills looped ropes are still used as stirrups. There are some technical words about a horse's equipment in the Harşacarita. Dr. V. S. Agrawal has made special study of them. Some of these words have not yet been explained satisfactorily and may be of foreign origin."

(3) Dr. J. M. Unwalla, M. A., Ph. D. Wrote from Bombay on 30-4-48:-

"As regards your inquiry about the Stirrup and its invention, I am unable to say any thing definitely. Sassanian bas-reliefs do not show the stirrups used by horsemen. In modern Persian the Arabic word rikāb is used for it. Again the Arabian Nights describes Sindbad teaching peoples of Further India the use of stirrups. This much for Iran.

In Draxt i Asnrik in Pahlavi published by me with translation and notes in BSOS, II, part IV, 1923, p. 655, we have Pahl. saxtak for "riding equipage," Modern Pers. saxt " the girth or surcingle of a horse together with his armour covered on both sides with felt cloth (Steingass); on p. 657-we have Zen, "Saddle."

I think the best answer to your questions can be got from funeral clay figurines of horsemen discovered in early Chinese graves many of which form also proud exhibits of several European museums.

We have in our University Library, Max Ebert,, Reallexicon der Vorgeschichte, Berlin, 1924-32 - Bd. XII—Article on stirrup by Eckhard Unger runs as follows:—

'The stirrup was not in use in the Near East (Vorder asien), but the idea of a stirrup was not unknown. We have up to date only one example, that of the Assyrian King Salmanasser III, who is shown using a privisory stirrup, while riding along a difficult stony path near the course of the Tigris on the occasion of consecrating in 852 B. C. His own Rock bas-relief. A board 12ft. long and about 1½ foot broad bound with strings, serves him as a support for the feet [s. relic DIJI of the bronze gate of Ingur-Enlil. Comp. E. Eckhard, Assyrische in Babylonische Kunst 1927, p. 30, Illustration 41].

This stirrup is thus the oldest stirrup of antiquity. In Europe, the stirrup appears as late as the early middle Ages."

Dictionairre des Antiquite's classiques might give further information but we have not got it here in Bombay."

(4) Dr. H. Goetz, Ph. D. Curator of the Baroda Museum and Art Gallery wrote to me on 18-5-48 as follows:—

"As far as I remember the stirrups are closely connected with the problem of heavily armed cavalry. A rider in a heavy armour was not so easily able to maintain his seat on horse-back and, when slipping, more helpless because the weight of the armour, would drag him down as soon as he lost his balance. Stirrups thus were a necessity. Now easily armed cavalry was used especially by the Parthians and the Sassanians. Thus the introduction of stirrups in India must coincide with their rule, over North Western India. Also the Chinese had stirrups, if I remember correctly, already in the Han times. Thus they must have known them. However, the Guptas did not know them (at Ajanta all horsemen are without stirrups). Also the Rajputs did not use them, at least not before the 16th Century, when the Muslim armour was introduced. But

I should think that the Muslims had them. On Persian Miniatures of the Ilkhani period, at least, stirrups are the rule."

The foregoing remarks about the history of the stirrup in India, Assyria, Central Asia, Arabia, China, Iran, Europe etc. are very informative and helpful in my present inquiry as they give us a very comprehensive historical perspective to the stirrup as a human invention, its origin and development as vouched by historical evidence, much of which is archaeological and consequently reliable. I note below some more notes on the Stirrup which I have gathered during the course of my investigations in connection with this problem:—

(1) The Stirrup in the Khmer or Indo-Chinese Art - 8th Century A. D.

In the Art journal Silpi of Madras for April 1948 there is an article on the "Art of Greater India, Khmer Sculpture" by Mile. Suzanne Karpeles (pp. 373-382). At present the Annamites owing their culture to China form 72 p. c. of their population in Tonkin, Annam, and Cochin China. The Cambodians of Indian leanings are 12 p. c. only while the Lactions are 6 p. c. of the population. The Khmer art is properly the ancient Cambodian art. The pre-Angkorean period of this art extends upto the 9th Century A. D. Many of the Buddhist images belong to this period. At the end of the article we find a photo of "Horsemen Stone panel" from Annam belonging to the 8th Century A. D. The left foot of each of these horsemen is clearly shown as resting in a stirrup of looped rope hanging from the saddle. We may compare this stirrup to that found on the archway at Mathura, assigned to 100 or 50 B. C. as also that on the lota of about 200 A. D. found at Kundlah in Kulu by Major Hay in 1857.

(2) The Stirrup in Turkistan at Dandan Uliq - 8th Century A. D.

Vincent Smith in his History of Fine Art in India and Ceylon (Oxford, 1930) gives a photograph of a wall-painting showing mounted princes or saints, one of whom is riding a horse while the other is riding a camel. The rider of the horse has his left foot in a stirrup, which looks like a metallic stirrup. According to Smith the remains of the 8th Century at Dandan Uliq in which the above painting was found, show Indian influence. The painters followed Indian models but were also exposed to Persian and Chinese Schools of influence. The rider of the horse is shown as riding a piebald Yarkandi pony. The blending of Indian and Chinese features is noticeable in the face of the horseman (See Plate 116 A facing p. 163). This painting belongs to the 8th Century A. D. as Dandan Uliq was abandoned soon after A. D. 791.

(3) The Stirrup in Persia (Rayy) - A. D. 1191 - Arthur Lane in his Early Islamic Pottery (London, 1947) Plate 55 (c), gives a photograph of the Chicago dish dated A. D. 1191. This dish of 14 inches diameter is now in the Metropolitan Museum, New York. On this dish there is a picture of a rider on horseback with his left foot in the stirrup. The stirrup is clearly marked out in the picture and it looks like a modern metallic stirrup. The dish is a specimen of Persian lustre - painted wares current in Persia in "late 12th - early 18th Century."

(4) The stirrup in Scotland-A. D. 1241-1285.

I have already noted the remark of Eckhard Unger that the stirrup appears in Europe as late as the Early Middle Ages. In this connection I have to note that the seal of Alexander III (A. D. 1241-1285), King of Scotland, shows him riding a horse with his right leg in the stirrup and his uplifted sword in the right hand. This stirrup showed on the seal may be either of looped rope or leather strap (vide p. 573 of Vol. I of Encyclopaedia Britannica, 14th Edition, where the seal is reproduced).

(5) The foreign origin of the stirrup indicated by the evidence recorded in this paper gets further support from the linguistic evidence. My friend Dr. Siddheswar Varma, M. A., D. LITT. has been kind enough to examine this linguistic evidence. He will publish in due course a note on it. In the meanwhile I may record here his tentative conclusion based on the words for the Stirrup found in different languages of the three groups, (1) Indo-Aryan (Gujarātī, Sindhī, Hindī, Nepālī, Bengālī, Marāthī), (2) Iranian (Balochi), (3) Dravidian (Tamil, Telugu, Kannada) and (4) Muṇdā (Goṇḍī). In his letter of 9-5-1948 Dr. Varma observes:— "The above list (of words for the stirrup) is far from encouraging and shows how extensive has been the domination of the Perso-Arabic form reaching even Muṇḍa-Dravidian. "Dr. Varma has promised to tackle the older forms of the above languages with regard to the stirrup and I await with eagerness his detailed researches in this inquiry.

The evidence regarding the history of the stirrup as recorded in this paper may be represented chronologically as follows:—

Chronology Reference

S = stirrup.

B. C. 852

S used by the Assyrian King Salmanasser III (a foot-board bound with strings).

B. C. 1st Century
A. D. 1st Century

S used by Sarmatians.

S in Central Asia and China (Han and Tang periods).

B. C. 100-50	S at Mathura (in the railing round Jain Stupa) — a looped rope or leather strap.
A. D. 200-300	S on a lota from Kundlah in Kulu.
40.00	(now in the Indian Museum)
ed) or it spread and	(a looped rope or a leather strap)
A. D. 500 onwards	Use of iron stirrup by Mongolian tribes of Central Asia.
A. D. 700–800	S in a painting at Dandan Uliq in Turkistan (metallic stirrup?)
A. D. 700-800	S on the stone panel of horsemen at Annam
	(Khmer or Indo-Chinese art) - looped rope.
A. D. 1130	S described as पादाचार of gold (foot-rest) by
Youlles, L'Atual pe le	King Someśvara in his Mānasollāsa (description of Polo or Horse golf).
A. D. 1191	S on a Persian pottery dish (New York Museum)
Lange are along by	(metallic stirrup).
A. D. 1241-1285	S in Scotland (on the seal of Alexander III)
off to solif od; out a	(looped leather strap or rope).
A. D. 1676	S mentioned as " रिकीव " and explained as " आरो-
to montale add to se	हिणी" by Raghunatha Pandita in his राज-
- BI UL-3-	व्यवहारकोश composed by the order of Shivaji
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The above table speaks for itself. The data recorded in it can be easily supplemented by Indian and foreign scholars on the strength of sources available to them, both literary and archaeological. I am particularly interested in the Indian sources. I shall, therefore, feel thankful if some more light is thrown on this problem from Indian sources, especially prior to A. D. 1000.

P. S.—Since this paper was sent to the press. I received some valuable information about the stirrup from friends in Europe. I have great pleasure in adding it to my paper most gratefully:—

- (1) Prof. Dr. Vittore Pisani of the University of Milan (Italy) writes to me on 10-7-1948 as follows:—
- (i) The Romans and the Greeks had neither stirrup nor saddle.
- (ii) The first mention of the stirrup is in a treatise of the Byzantine emperor Maurikios (dead 602 A. D.); in the West in the work Etymologiae of the Spanish bishop Fridor of Sevilla (VII century A. D.)

- (iii) The Romance peoples got the knowledge of the stirrup from the Teutons as seen from its names in Italian.
 - (iv) Whence the Teutons had the stirrup is not quite certain; probably they had it from the Nomads of Asia.
 - (v) The Byzantine people may have received the stirrup from the
- (II) Prof. Dr. Gerhard Lindblom, Director of the Ethnographic Museum, Stockholm (Sweden) writes to me as follows, in his letter of 3-8-1948:--

"The best work on stirrups is R. Zschille und R. Forrer, Die Steigbügel in ihrer Formenentwicklung, Berlin, 1896. It is a large work in folio with good plates and it gives the whole development of the stirrup, at least in Europe. I will also mention Lefebvre des Noettes, L'Attelage le Cheval de Selle a travers les ages, Paris, 1931. I think that you will find a short but good Survey in M. Ebert in Real-Lexicon der Vorgeschichte article "Steigbügel"—The two first-mentioned books are owned by the library of the Royal Armoury here. Dr. H. Seitz of this institution knows a good deal of stirrups himself. He gave me the titles of the two books mentioned above."

(III) Prof. Dr. V. L. Grottanelli, Superintendent of the Museum of Pre-historic Antiquities in Rome (Italy) writes on 11-5-1948:—

" I am truly in admiration at your great activity and at the vastness of the field covered by your investigations and researches. I enclose a few lines on the subject of stirrups:—

Encyclopedia Italiana, Vol. XXXII, Rome, 1936, p. 446, under "Staffa" (by Lt. Col. Carlo de Margherita)

"....The ancients must not have known the use of stirrups, because Xenophon does not mention them in his works, whereas Galenus and Hippocrates speak of the ailments which horsemen suffered of in their legs owing to the habit of leaving them hanging and loose. Stirrups are mentioned for the first time in a treatise by emperor Mauritius who died in 602 (A. D.).

At first stirrups consisted of cords made of rich materials (textiles); later on they were made of metal....In the XI century the use of stirrups was already common among men of arms, though not universal: some horsemen in order to climb on their horse still used a peg inserted in their lances' staff...."

(The work of Xenophon to which the author refers to was written between 364 and 361 B. C. The use of saddles preceded of course, as has

been the case in every part of the world, that of stirrups. The idea of a saddle was probably suggested to the Greeks by the Persian custom of heaping blankets on the horses' backs; a cushion eventually took the place of these blankets, but it is only in comparatively late times that a real saddle was developed. In the Roman cavalry of imperial times, saddles reached a high stage of perfection, but as stated above stirrups do not seem to have appeared before, let us say at the end of the VI century. (Montandon, L'ologenese culturelle, Paris, 1934, p. 205-206, says that the saddle and stirrup appeared both in the IX century, but he is obviously wrong). Oddly enough, I have seen no conclusions drawn, or even hypothesis put forward, as to the origin of stirrups. The Chinese used them in the VII century, and as far as we know not before this time, so that apparently stirrups were known or at least heard of in Byzantium at an earlier time. Persian influence again? As soon as I have time I shall look into the matter. You have chosen here a most appealing subject for research, and no doubt your contribution will be a precious one).

Besides the above information about the history of the stirrup in Europe I have found the following account of the discovery of iron stirrups in a tomb of 5th century A. D. in South Korea:—

In the Quarterly journal Artibus Asiae (Switzerland) Vol. X/3 there is an article on an excavation at Kyongyu, a town in South Korea. This article deals with the excavation of two tombs (c. 5th century A. D.), one of a noble and the other, probably of his wife. Figures 17-19 give us photographs of the Horse-furniture found in one of the two tombs, which is called "Ho-ou" Tomb. The items of this furniture as recorded on pp. 182-183 of the journal under reference are as follows:—

- (1) One pair of gilt bronze saddle bridges
 - (2) Nine small bronze horse-bells
 - (3) One strap pendant
- (4) One pair of iron stirrups
- (5) Several iron bits
 - (6) Three gilt bronze horse masks
 - (7) Many bronze strap ornaments.

These items of horse-furniture of the 5th cent. A.D. show the highly developed condition of horse-furniture about 1500 years ago in the Far East. We must trace the history of Indian horse-furniture with a view to seeing what items of Indian horse-furniture have been borrowed from foreign countries in contact with India in ancient and mediaeval times of Indian history.

6. The History of The Sling (Gophana) in India And Other Countries

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Between C. B. C. 3000 And A. D. 1900

In the article on Sling in the Encyclopaedia Britannica, Vol. 20 (1929), p. 797 we get a history of the Sling but it makes no mention of the history of the Sling in India. I propose in this paper to record some references to the Sling in Indian literary and other sources but before doing so it is advisable to record briefly the history of this implement as given by other scholars. The following points in the above article in the Ency. Britannica are noteworthy:-

- The Sling is probably the earliest device by which force and range were given to the arm of a thrower of missiles.
- 2. Sling stones from the stone age are frequent.
- 3. Two kinds of Sling were used :-
- (i) Sling with a leather socket or strap with two cords attached to it.
- (ii) The staff Sling in which the Sling is attached to a staff held in both hands and used for heavier missiles thrown in siege operations during the middle ages.
- 4. There are many references to Sling and Slingers in the Bible; the left-handed Slingers of Benjamin were famous (Judges xx. 16).
 - 5. The Assyrian monuments show the Sling of the ordinary type.
 - 6. Slingers were used in the ancient Egyptian army but not before the 8th century B. C.
 - 7. The Sling is not mentioned in Homer.
 - Herodotus (vii. 158) speaks of the Slingers in the army offered by Gelon to serve against the Persians. It seems to have been a weapon used by barbarian troops.
 - 9. The Acarnanians were expert Slingers (Thu. c. ii, 81).
- 10. The Achaeans were also expert Slingers. They invented the Sling which discharged a shaft with an iron bolt head (Livy xlii, 65, from bolibius).
- 11. In the Roman army by the time of the Punic wars the Slingers (Funditores) were auxiliaries from Greece, Syria and Africa.

^{*} Journal of S. M. Library Tanjore, Vol. X (No 1), pp. 18-21.,

- 12. The Balearic islanders in the Hannibal's army were always famous as Slingers.
 - 13. In the mediaeval times the Sling was much used in the Frankish army, in defending trenches.
 - 14. The Staff-Sling was used against fortifications in the 14th century for throwing grenades.

The above remarks try to depict the history of the Sling from the stone age onwards and consequently give a good back ground to my present study.

While I was studying this problem my ever-obliging friend Dr. Gerhard Lindblom presented to me the following papers on the Sling published by him as Director of the Ethnographical Museum of Sweden, Stockholm:

- 1. Die Schlender in Afrika and Anderwarts, Stockholm, 1927, by K. G. Lindblom. In this monograph on the Sling the author indicates its distribution and use in Africa (with map of distribution), together with a brief survey of its occurrence in other parts of the world.
- 2. The Sling, especially in Africa (Additional Notes to a previous paper) by K. G. Lindblom, Stockholm, 1940. This paper contains very valuable information abut the Sling and especially its history in the near Orient and southern Europe. The following points in this paper are noteworthy:
- i. In Africa the Sling is used in four different ways:— 1. as a weapon of war, 2. as a hunting implement, 3. for scaring away marauders, particularly birds from the ripening fields, and 4. as a toy for children.
- ii. The Persian King Darius used the Sling as a weapon of war against Alexander. Cyrus reserved the Sling for prisoners and slaves.

 The Persian Slingers used nothing but stones for missiles. In modern Persia and Mesopotamia Slings are used as weapons of war by Arabs and Bedouins.
 - iii. The use of the sling as a weapon by Hittites is authenticated by pictures.
 - iv. The Assyrians and Babylonians used the Sling as a weapon. The Assyrian reliefs show the pictures of Sling.
 - v. Among the ancient Hebrews the Sling was used as weapon for herdsmen, for war and hunting. There were expert Slingers among the tribe of Benjamin (Judges XX. 16).

- vi. According to Pliny the Sling was a Phoenician invention (Hist. Nat. VII, 57). The Phoenicians are described as expert users of the Sling as a weapon.
- vii. Bedouin boys in Arabia use the Sling with great precision.
- viii. According to Varthema the Bedouins of Yemen anciently used the Sling as a weapon.
 - ix. Fig. 1 (on p. 8) is a photo of a Silver vase found at Mycenae depicting the siege of a town, whose defenders include Slingers.
 - x. In Greece and Crete the Sling is a weapon of remote antiquity (Fig 1). The Sling was known even in Mycenean times as proved by the silver vase referred to above.
 - xi. As early as the 5th century B. C., Sling projectiles of metal (bronze and lead) were used in Greece on the battle-field of Marathon. A number of these projectiles have been recovered. The Greek Sling-bullets are of slight volume with excellent ballistic properties surpassing even the bow in this respect.
- xii. In ancient Greece the Sling was largely used by the mountain peoples that supplied the best Slingers.
- xiii. According to Thucydides the Acharnians, the Actolians, the Thessalians, and Achaeans were reputed for outstanding skill in the use of the Sling.
- xiv. Philip V of Macedonia had 300 Achaean Slingers in his service.
 - xv. The Greek cities had mercenary Slingers who by their "fire" prepared for the attack of heavy infantry (the hoplites.). Their action was just like the modern artillery fire before infantry attack.
 - xvi. Fig. 2 on p. 9 is the picture from a fresco in a grave at Corneto in Italy showing the use of the Sling for bird-hunt. It also shows a man on the shore killing a water fowl with a Sling. This and other frescos show that the Etruscans used the Sling as a weapon for fighting and for hunting.
 - xvii. According to Daremburg et Saglio, the Romans employed Slingers (funditores) in the republican era. Hannibal employed Slingers from the Balearic islands. To fight against these Slingers the Romans themselves imported Slingers from Sicily and from these islands as mercenaries. These mercenaries fought against the Gauls. Pompey and Caesar employed Slingers in their African campaigns.

- xviii. Diodorus, Strabo, and Vegetius (in his book on the art of war)
 describe these expert Slingers from the Balearic islands. According to Diodorus these Slingers threw stones, which smashed helmets, armour and shields.
- xix. Kings of Numidia (modern Algeria) had Slingers in their armies. The Roman army in Spain employed Slingers at the seige of Numantia.
- xx. The Carthegenians used the Sling in defending their for
 - xxi. Opinions differ as to whether the Slingers depicted in Beni Hasan were Lybians.
- xxii. The Sling was known to the ancient Egyptians. Fig. 3 on p. 13 is the photo of the remains of two plaited linen-thread Slings found in the tomb of Tut-Amkh-Amen (14th cent. B. C.) in the toy-chest of this King.
 - xxiii. Possibly the Sling came to Africa from the ancient cultures of the Near East and from the early Mediterranean culture in general.
 - xxiv. It is very probable that the Sling spread from Southern Europe over the continent. The Goths did not possess the Sling when in A. D. 533 they invaded Italy. The use of the Sling for protecting growing crops from birds is vouched by a woodcut of A. D. 1502 (edition of Virgil, Georgia, Nuremburg).
 - xxv. In Asia the Sling is used by 1. the mountain-people of Southern Pamir, 2. the Bhils, 3. the Gonds, 4. the Juangs of Orissa, 5. the Tibetans, 6. the peoples culturally related to the Tibetans.
 - xxvi. Sir Aurel Stein discovered a Sling in the ancient Tibetan fort of Miran. It is of goat's hair-cord and felt pouch and belongs to about the 9th cent. A. D.
- xxvii. J. S. Thomson gives an interesting account of the use of the Sling in China in the province of Kwanlung. Stone-throwing contests were held in this province as also in Korea.
- xxviii. In northern Asia the use of the Sling has been noticed and recorded by many writers.
 - xxix. The use of the Sling in Indonesia (Sumatra, Java etc.) has been noticed and recorded by some scholars.
 - xxx. The occurrence of the Sling in the Philippines has also been referred to by some writers.
 - xxxi. The Sling exists (or formerly existed) in many parts of America.

xxxii. Possibly the original home of the Sling may have lain among the early cultures of the Near East and thence it spread over the world.

In the foregoing information about the Sling we find no references to the history of the Sling in India. I record below such references with a view to supplementing the exhaustive study of the Sling made by foreign writers on the subject:—

- 1. At present the Marathi word for the Sling is भोषल (gophana). Let us see if this word is traceable in Sanskrit sources. In verse 5 of chap. 72 of the Bhīṣma parvan of the Mahābhārata we find the word "Bhiṇḍipā-leṣu भिण्डपालेषु." Devabodha, the earliest commentator of the Mahābhārata explains this word to mean "भोषलेषु" (see p. 25 of Devabodha's ज्ञानदीपिका commentary ed. by S. K. Belvalkar, B. O. R. Institute, 1947). One Ms of this commentary gives the variant 'भोषलेषु' for 'भोषलेषु.' We are, therefore, unable to say if Devabodha knew the word भोषण,
- 2. In the Adiparvan of the MBH (B. O. R. Institute) Edition, chap. 218, verse 24 reads as follows:—

" अयःकणपचकारमभुकुण्ड्युचतवाहवः । कृष्णपार्था विघासम्तः कोघसंमूर्विष्ठतीत्रसः ॥ २४ ॥ "

The word আনাহনৰ occurring in the first line of the above verse is recorded by Monier Williams in his English Sanskrit Dictionary, p. 381. He translates it as "a Sling for throwing Stones." Dr. Sukthankar puts a wavy line under the words " আনাহনসূত্ৰ বু". We are, therefore unable to rely upon the word " আনাহন " as authentic in the text of the MBH.

Nilakantha Caturdhara (c. A. D. 1650-1700) comments on the above passage (see p. 357 of the Chitrashala Edition, Poona, 1929-Adiparvan) as follows:-

" तथा चक्राइमसंज्ञं यस्य अभिवलेन महान्तोपि पाषाणा अतिद्रे क्षिप्यन्ते तस्काष्टमयं यन्त्रं भुञ्जण्डी चर्मरज्जुमयं यन्त्रं पाषाणक्षेपणभेव "

According to Nilakantha ৰক্ষাহ্ম was a wooden machine for hurling big stones while মুমুদ্ধী was made of leather and ropes and used also for throwing stones. Does he mean that মুমুদ্ধী was a Sling made of leather and ropes?¹

3. In the Suśruta-Samhitā (Sūtrā-Sthāna, Chap. 18, passage 18-N. S. Press edition, 1931, page 83) we find 14 kinds of bandages for wounds, among which a bandage called "mwm" is mentioned as follows:-

^{1.} I am thankful to Dr. M. M. Patkar of the Deccan College Research Institute for supplying these references to me.

" चित्रकासोष्टांसबस्तिषु गोफणां." This bandage was called " गोफणा" as it was of the shape of गोफणा or Sling and could be tied up properly on the chin, lips and such other protruding parts of the body on which a flat bandage could not be properly tied up. The commentator Dallana (c. A. D. 1100) quotes the following verse from an earlier work to explain the term " गोफणा" in the Suśrutasaṃhitā:—

" पाषाणगुडकोरक्षेपकारिणीं गोफणां विदुः । वदाकृतिं भिषक्कुयांद्रोफणां पञ्चकम्बिभिः ॥ "

गोकणा is capable of throwing stones and a bandage of the shape of गोकणा or Sling should be prepared by the physician etc.

The editor of the Susruta Samhitā Vaidya Jadavaji Trikamji Acharya quotes the following verse of चक्र about गोफणा bandage in footnote 1 on p. 83:-

" गोफणां गोफणाकारां युज्याबासोष्ट्रबस्तिषु । चित्रके चापि पञ्चाङ्गी इनुसन्धी विसंगते ॥ " etc.

It is clear from the above references that the word 'nixm' meaning a Sling was current in the time of the Suśruta Samhitā and that it meant a Sling for throwing stones. Apte in his Sanskrit English Dictionary (1890, p. 468) records the word nixm with the following meanings:—(1) a bandage hollowed out so as to fit the chin or nose, (2) a Sling, but does not record any usages of this word.

4. In the Astāngahrdaya (8th or 9th century A. D.) of Vāgbhata (edited by Harishastri Paradkar, N. S. Press Bombay, 1939) we get references to "गोरफणावन्य" as follows:—

Page 871 --

'' कार्यक्ष गोव्फणाबन्धः कटवामावेइय पहकम्।'' (verse 25) '' चर्मणा गोव्फणाबन्धः कार्यक्षासंगते वर्णे॥'' (verse 23)

The " गोष्फणाबन्ध " mentioned in these verses is identical with the " गोफणाबन्ध " of the Suśrutasamhitā.

5. In the Cikitsästhäna of the Suśruta Samhitā we get the following reference to the गोफणिकावन्य which is identical with the गोफणावन्य referred to in the Sūtrasthāna, chap. 18, passage 18:—

Page 357 -- chap. 2 verse 67 वर्णाविकिस्तित or treatment of wounds.

" प्रवेदय तुत्रसेवन्या सुक्ती सीव्येत्ततः परम् । कार्यो गोफणिकावन्धः कटपामावेदय यन्त्रकम् ॥ ६७ ॥ "

The commentator Dallana observes: — 'गोफिंगका कीपीनं कच्छोटक इत्यर्थः'.

Here Dallana equates नोकिन with कीपीन i. e., a piece of cloth worn over the privities, which is practically the same as कच्छोटक i. e., the end of the lower garment tucked into the waist band or girdle (over the privities) (Marathi कासोटा). Evidently the कीपीन is of the shape of a Sling.

6. In the Brhatkalpasütra (Shri Jain Atmanadasabha, Bhavanagar, p. 1313) we get the word " गोप्फण" in the following extract:--

" कुवणयमादी भेदो, धंसण मणिमादियाणकट्टादी । पहवरादी पीसण गोष्कण- घणुमादि अभिवातो ॥ ४९०५ ॥ "

टीका ... "'गोफणा' चर्मद्वरकमयी प्रसिद्धा तया, धनुःप्रभृतिभिन्नां यन् प्रक्षिपति एषोऽभिष्ठात उच्यते ॥ ४८०५ ॥ "

According to my friend Muni Punyavijayaji, 3 who has kindly supplied to me the above reference the above Sūtrā belongs to the 6th century of the Vikrama era.

7. Chapter XVIII of Book II of the Arthasastra of Kautilya (Vol. I, edited by J. Jolly, Lahore, 1923 pp. 60-61) deals with the duties of the Superintendent of Armoury (आयुधानासम्बद्ध). The following line (p. 61) records some of the weapons:—

" यन्त्रगोऽपणमुष्टिपाषाणरोचनीदयदश्च चायुधानि । "

The translation of this extract given by Dr. Shama Shastri is as follows:— "Yantrapāṣāṇa, Goṣpaṇapāṣāṇa, muṣṭipāṣāṇa, rocanī (millstone) and stones are other " (see p. 112 of Eng. Trans. of Arthaśāstra, Mysore, 1929).

In the footnotes we get the explanation of the first three terms in the above extract as follows:--

- 1. यन्त्रवायाण = Stones that can be thrown by a machine.
- 2. गोल्युज्यायाज = Stones thrown by a rod called गोल्यज.
- 3. मुद्रिपापाण = Stones hurled by hand.

All these explanations are based on the commentary.

Can we identify nisque with nisque? If nisque was a rod for throwing stones against the enemy we can suggest that it may have been a kind of "Staff-Sling" described in the Encylopaedia Britannica. In the Staff-Sling the Sling is attached to a staff held in both hands and used for heavier missiles thrown in siege operations during the middle ages.

^{2.} The Pahlvi word for Sling is Kopin. In Pahlvi Vendidad (Eng. Trans. by B. T. Anklesaria, Bombay, 1949, p. 302) the impliments of a warrior are mentioned viz. Spear, Knife, mace, bow, saddle with quiver, and Sling (Kopin). Can we connect Sans. 3)414 with Pahlvi Kopin?

^{3.} I am grateful to Muni Punyavijayaji for this reference.

I await more light on this point from linguists and Sanskrit scholars in general who may have studied the text of the Arthasastra more closely than myself. The word ' niequ' occurs only once in the text of the Arthaśāstra. The words गोफण, गोफणा, गोफणिका, गोष्फण, गोष्फण, are not mentioned in the Arthasastra.

8. In the Marathi work " Jñāneśvari " composed in A. D. 1290 we get a reference to gophana (Sling) in the following extract:-

त्त वर्ष कित्रको स्⁴ लीलाइसके खेळणे। पुष्पमाला झेळणे। को कार्या है – पार कार्या न करी महणे गोफर्ने । ऐसं होईछ ॥ ८४ ॥ " व्याप्त वा वा वा वा वा वा

(Chap. 13, ovi 84 of Jnaneśvari ed. by S. V. Dandekar, Poona, 1953, The lex con Kelpadrukele (A. D. 1660), Vol. 1. Baroda, oc. (:264.q

A person practising आहसा (non-violence) does not whirl by his hand a lotus flower or garland of flowers with the apprehension that it may injure some one in the manner of a gophana (Sling). 1

9. References to expert slingers used in their armies by Indian kings have not come to my notice. Emperor Akbar, however, employed such slingers as stated in the Ain-i-Akbari (c. A. D. 1590)-(Eng. Trans. by Francis Gladwin, Vol. I, Calcutta, 1897)-Vol. I, Page 178 - what you wolled and ball as 2 20 q till lov seek

"The Pehlwan are wrestlers and boxers of Iran and Turan. There are also expert Slingers of Gujarat and other parts of Hindustan, who are called Mull, numbers of whom are in His Majesty's service. Their monthly pay is from 70 to 450 Dams and every day some of the above combat together and receive various rewards."

10. There is a work called सभाजकार (Sabhā Śrngāra) represented by a rare MS in the Govt. MSS Library at the B. O. R. Institute (No 671 of 1899-1915 . Folios 22) dated Samvat 1781 = A. D. 1725. This work contains list of words useful for a courtier. On folios 12-13 we find a list of the fellowing towns :--

थागरो (Agra), उजेण (Ujjain), उदेपुर, आवेर, आवमेर, अहमदाबाद अवरंगा-बाद, दक्षि, दोलताबाद, द्रीयाधाद, दीव, दसोर, गोधा, गोलकुढं, (Golkonda) लाहोर, लपमीपुर, वहांनपुर, विजापुर, बुदि, राजमहरू, राजनगर, भागनगर, (Hyderabad) प्रभाति (Khambayat), स्रति (Surat), पाटण, पटणु, जेसळसेर, विकानेर, सांगानेर, योधपुर, वालोर, नागोर, मलकापुर, मुरादाबाद, सात्यादाबाद, फत्तीयाबाद, फत्तेपुर,

As Ahmedabad was founded in A. D. 1413 (see p. 235 of Bombay Gazetteer Vol. I, Part I - History of Gujarat, 1896), we may put A. D. 1418 as the

^{1.} I am thankful to my friend Prof. V. G. Maydeo for drawing my attention to this only reference to gophana in the Janesvart. 12

earlier terminus to the date of Sabhā-śṛṅgāra, which mentions Ahmadābad in the list of towns. If the town अवश्याबाद mentioned in this work is identical with any town of this name founded by or named after Emperor Aurangzeb, who came to the throne about A. D. 1659, we can fix the date of the Sabhā-śṛṅgāra between c. A. D. 1659 and 1725.

The Sabhā-śṛṅgāra, the chronology of which has been indicated above, mentions ' নামল' (Sling) twice as under :—

Folio 5 b - Names of weapons (आयुध). Here गोफण is mentioned as an आयुध or weapon along with हयनाळ, हवाई, नाळ, गोळो, etc.

Folio 8 b - Description of battle (युद्धवर्णन). Here also गोकण is mentioned.

11. The lexicon Kalpadrukośa (A. D. 1660), Vol. I. Baroda, contains a reference to गोक्रण in the following line:—

Page 124 -

" मुञ्जण्डीशङ्कमुसलस्तरु गोफण पत्रणः ॥ ३३३ ॥ "

It is worthwhile searching for the word गोफण in the numerous Sanskrit lexicons published or unpublished.

- 12. In the Marathi Śabdakośa by Y. R. Date and C. G. Karve, Poona, 1934, Vol. III, p. 1029 we find the following references to gophana (Sling):-
- (i) Kathākalpataru by Kṛṣṇayājñavalkya (c. A. D. 1548-1613 -see p. 256 of Madhyayugina Caritrakośa by S. Chitrav, Poona, 1937)

" द्वार्ती घेवोनि गोफणा " कथा ६, १२, ५३,

(ii) Harivijaya by Śrīdhara composed in Śaka 1624 = A. D. 1702 (see p. 561 of Mahārāṣṭra Sārasvata by V. L. Bhave, Poona, 1951 and p. 196 of Śrīdhara Caritra by C. N. Joshi, Poona, 1951).

" एकें चिंतामणि गोफणिला । तो येजन अंगणांत पहिला "

We have already noticed the earliest reference to gophana in the Jnaneśvari (A. D. 1290). It is possible to find many more references to gophana in Marathi literature between c. A. D. 1100 and 1900.

Regarding the use of the Sling in China I consulted my friend Prof. Dr. L. Carrington Goodrich of the Columbia University, U. S. A., now in India. He wrote to me from Ceylon on 19th May 1954 as follows:—"C. N. Bishop, The Neolithic Age in Northern China, Antiquity, December 1953, p. 597 writes.—

"Stone and clay balls are numerous. Possibly the smaller ones were missiles for the pellet bow, known in very early China. The larger specimens may have been Sling Stones. The Chinese Sling used as

a weapon of war in recent centuries and still surviving as a child's toy, consists essentially of a cord or thong attached to a short handle."

H. G. Creel The Birth of China, does not mention Slings.

The end result is that we know very little about Slings in early times in China."1

I hope the history of the Sling as recorded by me in this paper would create some interest in the minds of the serious students of Indian cultural history regarding this earliest device of man. In particular I have to request them to record all references to the Sling in India prior to c. A. D. 500.

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About the history of the Sling in China I consulted another friend Dr. T. K. Cheng of the University of Cambridge (England). He also finds it difficult to locate references to the Sling in Chinese sources but has promised to keep my query in mind.

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7. Hari Kavi's Contribution to the Problem of the Bhavani Sword of Shivaji the Great *

In 1924 Mr. S. M. Edwards contributed a note on Shivaji's Sword "Bhavāni" to the Indian Antiquary 1 which he concluded with the following appeal to scholars:-

"The question still remains 'where is now the original Sword Bhavani?' In view of what is written above and of the fact that the Sword now worshipped at Satara is the Sword of Shahu, can any reader suggest a solution of the problem? Could the Sword have been taken to Benares when the Raja retired thither after his deposition? Has it been hidden to reappear at some future date as the symbol of a united Maratha people? Perhaps some one of the leading students of Maratha history may be able to answer the question."

^{*} New Indian Antiquary, Vol. III, pp. 81-100.

I. Vol. LIII, 1924, pp. 18-20-References to the Bhavani Sword recorded by Mr. Edwards are as follows:—

Śivadigvijaya Bakhar (reference translated by Dr. Surendranath Sen on p. 181 of his translation of Sabhāsad Bakhar.

⁽²⁾ Grant Duff's History of the Marathas Vol. I, Oxf. Univ. Press, 1921, p. 230-Grant Duff states that the Bhavân I Sword "is still preserved by the Raja of Satara." On p. 244 (Vol. 1) he mentions that Sambhaji carried the sword during the Maratha attack on Gos in 1683 and that he did great execution with it. On p. 313 (Vol. 1) he states that two swords viz. (1) the Bhavân I Sword and (2) the sword of Afzalkhas of Bijapur had been taken by the Mughals at Raigarh. These were given as presents to Shahu by Aurangzeb when Shahu's nuptials were celebrated by the Emperor. Both these swords as well as the third sword personally presented to Shahu by Aurangzeb were in the possession of the Raja of Satara at the time Grant Duff published his history in 1826.

⁽⁸⁾ Mr. D. B. Parasnis informed Mr. Edwards that the sword preserved at Satara is S'-9" in length in the blade and S" long in the handle and bears a Marathi inscription "Srimant Sarkär Rajmandal Raja Shahu Kadim Acval", which shows that it is the weapon of Shahu. Parasnis further informed Mr. Edwards that there is a belief at Satara that the original Bhavāni Sword was taken by Tarabai, wife of Rajaram to Kolhapur and that in 1875 this sword was presented by the Diwan of Kolhapur to H. M. the late King Edward. It was exhibited in 1878 at the Paris exhibition (vide p. 68 of Handbook of the British Indian Section of this exhibition by Sir George Birdwood). Mr. Edwards made inquiries in England about the above sword the result of which rendered it certain that the Bhavāni was never taken to England.

⁽⁴⁾ Pratap Singh, the Raja of Satara, presented General Lionel Smith with a sword in A. D. 1820 with the approval of the then Governor of Bombay. Mr. Edwards rejects Parasnis' suggestion that this sword may have been the Bhavani sword.

In view of this appeal made 14 years ago by the then editor of the Indian Antiquary and finding that no effort had been made by scholars to examine the whole problem of the genesis and historicity of the Bhavānī sword I was tempted to make some notes about this problem and make my own contribution to it, howsoever slight, though I don't claim to be a leading student of Maratha History. In these notes I have tried to gather what has been said about the Bhavānī sword by some of the previous writers on the subject with a view to indicating the stage at which the problem stands at present. Thinking that these notes may be of use to other workers in this field I am publishing them after waiting for full two years (since this paper was first drafted) with a view to get the benefit of exchange of views with senior workers in the field.

In the Shivaji Souvenir² published on the occasion of the Ter-centenary of the Maratha King, Shivaji the Great, we find photographs of four panels of Shivaji Memorial prepared by the celebrated sculptor, V. P. Karmarkar (facing p. 98 of English Section of the Souvenir). One of these panels contains the picture of Goddess Bhavani with eight arms presenting a sword to Shivaji Maharaj, who is shewn at her feet with face towards the goddess and receiving the sword with both his hands. Mr. H. George Franks interprets this panel by putting the following words on record as coming from the mouth of the Great Shivaji:—

"I received that famous sword very early in my career as a token of a compact with the Chief Gowalkar Sawant. It has been suggested to me on my way to the place where it was being kept that I should take it by force, but remembering what tremendous storms are sometimes raised by unnecessary trifles, I thought it better to leave it to its owner, especially as its possession was not a matter of life and death to me. In the end the wise

^{2.} Edited by G. S. Sardesai contains an English section which includes (1) the Jedhe chronology (2) the Jedhe karena (3) Are the Bhonsales Kshatriyas? (4) Shivaji and the Portuguese (5) Original decuments:—Shahaji's letter to Ali Adil Shah, A Persian Firman, Shivaji's letter to his father, Shivaji to Malaji Ghorpade, Shivaji to his officers, etc. (6) Shivaji's letter to Jayasinha, etc., and a Marathi-Hindi Section including (1) Kavi Bhushan (2) Shivabāwani (3) Maratha Forts (description) (4) Maratha Forts (slphsbetical list) (5) The birth-date of Shivaji (6) Historical documents and letters:—Shivaji's letter to Baji Prabhu, Jijabai's letter, Treaty between Shivaji and Portuguese, etc., (7) Commercial policy of Shivaji, (8) Some old arms and their history (9) Meeting of Shivaji and Chhatrasal (10) Life aketches of Shivaji's contemporaries, etc.—This volume was published on 3rd May, 1927. It contains the following illustrations:—(1) Shivaji on horse-back (2) Aurangseb in old age (3) Ambarkhana at Panhalgad (4) Shri Ramdas (5) Kalyan gate of Sinhagad (6) Swords and arms (7) Chhatrasal (8) Four panels of Shivaji Memorial (9) Shahaji and Shah Jahan (10) Bust of Shivaji (11) Some Marathi letters reproduced.

chief brought the sword to me as a sign of amity even when he knew that its purchase-price was not to be measured in blood. From that day onward the sword, which I reverently named after my tutelary deity Bhavānī salways accompanied me, its resting place when not in use generally being the altar of the goddess, to be received back from her as a visible favour from heaven always on the Dasara day when setting forth on my campaigns, I am told that the sword is now at Satara, but I am afraid that I cannot verify it until I can see it to identify it. The fine Genoa blade 3 feet and 9 inches in length, might, in fact, be my other favourite sword which I called Tulja presented to me by my father."

I am not aware of the authorities on which the above journalistic description is based but it may be taken to be an upto date summary of the history and tradition associated with the swords of Shivaji the Great. I am concerned it this paper with the sword known as the *Bhavānī sword* and hence shall try to put on record references to this sword from contemporary and subsequent records which may reveal the high value attached to it on account of the successive and successful feats of bravery and personal adventure which mark the entire career of this great hero.

In the Maratha Chronicle composed by Malhar Ramrao Chitnis 4 in A.D. 1811 we find the following passage referring to the Bhavani sword:—

^{8.} Mr. Y. B. GUPTE has reproduced an original letter of Shivaji addressed by him to his step-brother Vyankoji which begins with " श्रीमहादेव श्रीतुल्जा भवानी." It appears from line 49 of this letter that Shivaji was conscious of the favour of his deity in all his operations against the Muslims. This line reads as follows:— " दुसरा विचार करावा होता की, श्रीदेवाची व श्रीची कृपा त्यावरी पूर्ण जाली आहे. दुस्ट तुक्काला ते मारितात etc " (Vide इतिहाससंग्रह (October, 1915) Vol. VII, Nos. 1, 2, 8 (ऐ. स्फु. ले. २).

Cf. Jayarāma Kavi (A. D. 1658-58) Radhāmādhavavilāsa Campū (VI Ullāsa) p. 227— '' तुल्लाभवानी श्रीमत्पांड्रंगं च.....नुला ''

^{4.} Life of Shivaji the Great in seven chapters by Malhar Ramrao Chitnis, edited with copious notes, critical and explanatory, by K. N. SANE, 1924 (A. B. Press, Pocns). Some other chronicles pertaining to the Maratha History are:—

⁽¹⁾ হিবস্তব্যাই কৰিব ————— by Krishnaji Anant Sabhasad written in 1694 at Jinji, by order of Rajaram; ed. by K. N. SANE, 3rd ed. 1912. Trans. into English by J. L. MANKAR as Life and Exploits of Shivaji (Bombay, 1st Ed. 1884, 2nd. Ed. 1885)

⁽१) चित्रगुप्तबस्वर composed about 1760.

⁽⁸⁾ शिवदिन्विजय Ed. by. P. R. NANDURBARKAR and L. K. DANDEKAR. (Baroda, 1895).

⁽⁴⁾ The Raigarh Life (Original Marathi text lost). English trans. pub. in G. W. FOR-REST'S Selections, etc., from the letters in the Bombay Secretariat, Maratha Series, Vol. I, (pp. 1-22), 1886.

Page 184 — " महाराजानी सफाई करून ' तुम तों बडे और पठाण, आब हमारी भवानी शिवाजीकी देखों ' म्हणून तरवारीचा वार खांदावर केळा. "

In the above extract which describes the Afzalkhan incident in Shivaji's life we are told that Shivaji retaliated to Afzalkhan's attack by giving a stroke of his sword with the words: "you are a big person besides being a Pathan; just have a taste of this Bhavānī (sword) of Shivaji". The account of this Afzalkhan incident states that Shivaji carried with him the tiger's claws (vāgh nakha) and a bichvā (a small dagger). If these details are true to history it may not be true that Shivaji had with him on this occasion the Bhavānī sword referred to in the Chitnis Bakhar. It may also be difficult to presume the identity of the bichvā with the Bhavānī sword. Leaving it to specialists to settle these questions we may feel satisfied by only noting the reference to the name Bhavānī (sword) in the Chitnis Chronicle of A. D. 1811.

Another chronicle which gives exhaustive information, about the Bhavāni sword is the "Śri Śivadigvijaya" published at Baroda in 1895. Dr. Surendranath Sun in his Śiva Chhatrapati translates the account of the Bhavāni sword appearing on pp. 354 ff. of the above edition of the Śivadigvijaya as follows:—

The Bhavani sword "S. D. [154] the Savants had an excellent dhop tarwar (a long and straight sword) worth two hundred Hons. Shivaji wished that such a famous sword should be with him. But it is not proper to wish for a good thing that belongs to one's Sardars [155] or a neighbour of rank.

**The Mahārājā wished to have the sword but it would bring him disrepute as the precedent showed,—and so the Mahārājā observed that the matter should not be even spoken of;—as in another age such a cause had resulted in the slaughter of many. * * But the sword that had divine properties addressed the Mahārājā in a dream — "If thou goest to fight with me in thy hand even at the head of a small

An English translation of Tarikh-i-Shivaji is published by Sir Jadunath SARKAR in Modern.

Review - March 1907.

^{5.} Vide Siea Chhatrapati, Vol. I, Calcutta 1929 by Dr. Surendranath SEN. Sieadigeijaya is the most voluminous of the three bakhars viz. (1) the Sabhāzad bakhar (2) the Chitris bakhar and (3) the Sieadigeijaya. Its authorship is shrouded in mystery. Its author was a Prabhu Kāyastba according to Dr. SEN, but not Khando Ballāl as the editors suppose. RAJAWADE thinks that the author was some scion of the Baroda branch of the Chitnis family. Its language is at times very modern. RAJAWADE thinks that the bakhar is a revised edition of an old bakhar. Bir Jadunath SARKAR, thinks that it is the revised edition of a new lost bakhar of which Tārikh-i-Shivāji is the Persian rendering. Its date is uncertain. RAJAWADE supports the date 1818 suggested by Mr. Shankar Balakrishna. (pp. 258-259).

force against a mighty army the enemies will be routed and victory shall attend thee. Do not give the sword back, keep it always near thee and duly worship it." That very night the Sāvant heard the following behest in a dream—"Give the sword to the Mahārājā and secure his friendship thereby. Otherwise thou shalt lose thy kingdom. I shall no longer stay with thee and I am going away." The Sāvant assembled his officers and related all about the dream. With the counsel of all, it was decided to secure the friendship of the Mahārājā by presenting the sword. Accordingly the Sāvant came to see the Rājā and presented the sword to him. It was named Tuljā Bhavānī".6

In the picture of Shivaji reproduced by James Douglas 7 we find Shivaji seated on horse-back in full attire holding the reigns of the horse in the left hand and a straight sword blade extending from its handle firmly grasped in the right hand. This sword blade appears to be the earliest pictorial representation of Shivaji's sword. Can it by any stretch of historical imagination be identified with the famous Bhavānī sword the subject of so much description in the Śivadigvijaya quoted (in translation) above?

In the Shivaji Souvenir volume (1927) we find a very exhaustive article on Historical Weapons by Prof. Manikrao of Baroda (pp. 138-153) in which he states that the Bhavānī sword of Shivaji was sent to King Edward by the Maharaja of Kolhapur and that it is preserved at the Buckingham Palace in a golden cupboard. He also expects its return to the Indian soil and exhorts the historical research scholars to collect all possible information about this sword (p. 150). He then gives us a description of this sword in detail such as – two deep lines or grooves on both the sides; golden decoration on the steel parts of the handle; its handle made of steel

^{6.} Sen : Šiea Chhatrapati (Vol. I of Extracts and Documents relating to Maratha History) pp. 151-152.

^{7.} Bombay and Western India by James Douglas, London, 1893. Vol. II, p. 174—Mr. Douglas remarks: "No portrait of him has come down to us in an English work except the one in Orms's history, evidently from an oval on glass by some Delhi painter [Given ante Vol. I. p. 331. The accompanying cut is from De Jan Cigny and X. Baymond's Inde (Firmin Didot fr. 1345).—B] and most probably picked up by Orme or his father (landed an adventurer in Western India. 1706) in their wanderings along the coast of Western India in the early part of the 18th Century. Their proximity to Shivaji's own time, is a partial guarantee of its faithfulness." Douglas gives a bust of Shivaji on p. 331 of Vol. II from Orme.

In the Travels in the Mogul Empire (A.D. 1656-1668) by Bernier reprinted in 1891 (London, Constable & Co.) a bust of Shivaji is reproduced on p. 187 from Valentyn's Beschryving in which is published an engraving of this bust from an Indian drawing. Mr. V. S. Bendre has published in 1933 this bust of Shivaji with the following endorsement:—"Copied from the painting secured by Von Valentyn just after the Surat Sack of 1664 A.D." For other pictures of Shivaji see Pictorial Shivaji published by Y. N. Kelkar, Poona, 193".

and provided with cover; its blade broadened at the joint of the blade and the handle; the end of the handle studded with rubbies and diamonds. This sword, Prof. Manikrao states, was preserved at Kolhapur and was an object of worship but the descendants of Shivaji parted with it out of a sense of loyalty to King Edward (p. 151).

I am unable to verify the statements made by Prof. Manikrao regarding the Bhavāni sword in the above article. If the sword is preserved in the Buckingham Palace its identification may not be a difficult matter. But as matters stand the Bhavāni sword has become the object of much historical speculation and patriotic wonder and the people of Maharashtra will be prepared to pay any price for it provided its existence is traced and its identity proved on historical evidence.

There was once a belief current in Maharashtra that the sword was preserved in the British Museum. The late Mr. V. L. Bhave has tried to dispel this belief by publishing a letter from the authorities of the British Museum stating that no such sword as the Bhavāni sword has been preserved in that Museum. This belief runs counter to the statement of Prof. Manikrao that the Bhavāni sword is preserved at the Buckingham Palace.

Mr. Parasnis ⁸ in his article on the Afzalkhan incident quotes the following passage from Justice M. G. Ranade's Rise of the Maratha Power (pp. 97-99):—

"The Mahomedan historians, whom Grant Duff follows, charge Shivaji with treachery in the first attack he made with the fatal vāgh-nakh (tiger claws) and the Bhavānī sword, etc."

8. Itihāsa Samgraha (Dec. 1914-Jan. 1915) Vol. VI, Nos. 4 to 6 以 表示。这句 —No. 19 (p. 52)—In the description of the combat as given by Parasnis on the authority of a bakhar discovered by him at Satara the only offensive weapons on Shivaji's person when he set out for the combat are (1) vāgh nakh and (2) Bichvā (p. 69). In this article Parasnis has published a photograph of Afzalkhan's tomb at Pratapgad (facing p. 73). There is also an article in this issue of the Itihāsa Samgraha on the family diety of Shivaji containing a photograph of the image of the goddess (facing p. 74) and another photograph of the temple of the goddess (facing p. 76).

James Douglas gives a victure of vägh nakh in Vol. II of his Bombay and Western India (p. 181). His chapters on Shivaji's Forts in this volume (pp. 187-197) will be found interesting. They contain some good illustrations such as (1) Ganga Sägar Tank at Rayagarh (p. 187); (2) Rajarh (p. 66); (3) Pratapgarh and Afsalkhan's tomb (p. 187); (4) Shivaji on horseback (p. 174); (5) Plan and elevation of Shivaji's Cenotaph (p. 180).

Jayarāma Kavi's description of Shivaji's visit to the temple of Bhavāni at Pratapgad and of the image of the goddess will be found in the Parnālaparvatagrahanākhyāna, chapt. IV, verses 21-54. The temple was througed with people gathered for the mahāpūja

" घंटासुद्रंगकाहाळहुंदुभिध्वतिनादितस् । कालोचितमहापूजासंख्यावृत्तजनैकृतम् ॥ २६ ॥ " The above remarks give rise to an impression that the works of the Mahomedan historians contain a reference to the Bhavāni sword. I am unable to verify the above statement at present. In the present paper I am confining myself to the reference to the Bhavānī sword in the Maratha records with a view to pointing out the earliest reference to this sword in the contemporary records.

Prof. R. P. Patwardhan in his article on the Afzalkhan incident are remarks that the chief sources for the Afzalkhan incident are Sivabhārata, Jedhe Śakāvali, Povāḍā, Sabhāsadi bakhar and 91 Kalami Bakhar and then states 10 that no reference to the use of vāgh-nakh occurs in Śivabhārata11, Jedhe Śakāvali12 and 91 Kalami bakhar 13. The Śivabhārata refers to "कुव्यिका" 14 while the 91 Kalami bakhar refers to only bichvā and paṭṭā. The Jedhe Śakāvali does not refer to any weapon at all. Later Prof. Patwardhan describing how Shivaji got ready to meet Afzalkhan states (p. 176) "He held the Bhavāni sword in the right hand and the bichvā in the left and tied the shield to his back" ("उत्तवे हातांव भवानी तरवार व डावे हातांव

^{9.} Śiva-Caritra-Nibandhāvali (pub. by B.I.S. Mandal, Poona, Śaka 1851-A.D. 1929) Chapter VII, pp. 161-179.

^{10.} Ibid, p. 164.

^{11.} Edited by S. M. Divekar (B.L.S. Mandal, Poona, 1927) with numerous illustrations. The text is based on MS No. B. 1409, (Burnell's MSS catalogue), in the Sarasvati Mahal MSS Library of Tanjora. The editor has also availed himself of a palmleaf MS of the Śivabhārata which is a Tamil rendering of the original (vide Upoddhāta, p, 5). The published text of the Śivabhārata contains 2252 Ślokas or verses.

^{12.} An English rendering of this chronology appears in Shivaji Souvesier (1927) pp. 1 to 45—by Sir Jadunath Sarkar. Pages 47-99 contain an English rendering of the Jedhe Karcena by Sir J. Sarkar. The original texts of the Jedhe Śakāvali and the J. Karcena in Marathi were published by Lokamanya B. G. Tillak in Śwa Carita-Pradipa (pp. 14-65) ed. by D. V. APTE and S. M. DIVEKAR (B. I. S. Mandal, Poona, 1925). These texts are based on a MS in the possession of Dayajirao Sarjerao Jedhe Deshmukh of the village Kārī in Bhor Sate. This MS is on Portuguese paper (22 folios). RAJAWADE published fragments of this Śakāvali in his Sources of Maratha History (Khanda XVIII. No. 5).

^{18,} Edited by V. S. VAKASKAR, 1930.

^{14.} Amarakola Kāṇḍa II, verse 89 mentions the word कृपाण = sword ("खद्गे तु निश्चिश्चन्द्र-हासासिरिष्ट्यः । कोश्चयको मण्डलाग्नः करवालः कृपाणवत् ॥ ८९ ॥") (see B.S.S. edition of Amarakola, 1907, p. 202). For the text of this work the editor has used a MS copied in A.D. 1297 (Vide his Sücanā at the commencement). Mr. APTE in his dictionary explains कृपाणकः = a sword while he explains कृपाणिक as a knife or a dagger. The lexicon Abhidhāna Cintāmaņi of Hemacandra records the word : कृपाणिका (३ मर्गकाण्ड)—" श्वरी स्थि कृपाणिका."

In the Parnalaparvatagrahanākhyāna (or the story in verse of the capture of the Panhala fort near Kolhapur) composed by Jayarama Kavi in Śaka 1595 (preface p. 1) = A.D. 1678 the following verse shows that the vāghankha was used by Shivaji's soldiers as a matter of routine:— (chapter III, verse 25 of the Bh. I. S. Mandal Edn., 1923, Poona)

[&]quot; शार्दुलनखबल्लोहनिर्मितैनंखरैर्यतान् "

ৰিম্বা ঘ্ৰজা বাঠীজা তাজ ৰাম্ভী"). I am not aware if Prof. Patwardhan identifies the " ভুদালিকা" referred to in the Śivabhārata with the Bhavāni sword. Possibly the term ভুদালিকা may refer to the bichvā more than to the Bhavāni sword. This reference is, however, inconclusive so far as my present inquiry is concerned because we don't get in the Śivabhārata any mention of the name ম্বানী as applied to Shivaji's sword.

In the Śivakāvya 15 composed by Purusottama in Sanskrit the meeting of Shivaji and Afzalkhan is described at some length. This poem was composed in A.D. 1821 and hence, though its historical value may not be very great it has some merits as a poem. It describes the fatal embrace of Afzalkhan as follows:—

" आर्लिंगनक्षण इमं सृगराडिवेनं धृरवा नृपस्य सिश्चरः प्रविधाय बाह्नोः । तस्यौ नृपोपि बलवान् नस्ततोस्य कुक्षी शक्सा (स्थ्या) विभेद विशिखो ह्यवनौ पपात ॥ ५९॥ " 16

The MS from which the above verse is quoted contains illustrations in colour of the Afzalkhan incident. One of these illustrations represents Shivaji 17 dressed for the combat or rather his meeting with Afzalkhan. He holds on his right hand the vāgh-nakha and a small dagger in the left hand,

^{15.} Published in the Kaeyetihasa Samgraha (1884, 1887, by K. N. SANE and J. B. MODAK). This Kaeya is almost an epic of the Maratha History (from A.D. 1627 to 1818) Purusottama's surname was Bandesti and his family was resident of Pedgaun in Ahmadnagar District. Purusottama was born in A.D. 1766 and died as a sanyasi in AD 1856.

^{16.} I have copied this verse from a MS of the work in the Govt, MSS Library at the B. O. R. Institute, Poons,—No. 81 of 1907-15. Purusottama composed a commentary on his poem in which he explains the above verse as follows:—

[&]quot;आलिंगन इति ॥ सः यवनः मृगराट् सिंहः इभिमव आलिंगनस्य क्षणे समये एनं राजानं पृत्वा नृपस्य शिरः बाह्रोः मध्ये प्रविधाय दृढं घृत्वा तस्थौ ॥ बलवान् नृपोपि अस्य यवनस्य कुष्ठी कुष्ठिप्रदेशौ नलेनेति नखतः सार्वविभक्तिकस्तिसः व्याधनखेनेत्यर्थः शस्त्र्या (क्त्या) च विभेद चिच्छेद हि यस्मात् भेदनात् विगता शिला यस्मात् सविशिलः यवनोपि अवनौ पपात् पतितवान् ॥ ५९ ॥ "

^{17.} Vide folio 45 a of B. O. R. Institute MS No. 81 of 1907-15. The verse describing the person of Shivaji reads as follows:—

[&]quot; नात्युची नातिनीचः कमलदलनिभाक्षीतिपीनोन्नतांसो गौरांगो गूढजनुर्मनसि च जनयन्योषितां कामदेवः । निभांकः सिंहयानोऽकणकरचरणः कंठभूपाषिभूषो मृदंष्न्यानद्वरक्ताजिनविहितपदत्राणकोसौ प्रतस्थे ॥ ५२ ॥ "

This verse of course does not mention the vaghnakh and the dagger shown in the picture (2½ inches x 1½ inch in size) referred to as आ अस्त कार्य अस्त in verse 50 on folio 44 a.

which is obviously the bichvā referred to in the several accounts of this incident and mentioned as স্থা by our poet. The following three verses tell us how Shivaji meditated on his family deity Durgā and obtained her favour before starting on his perilous task:-

" बहं स्वदीयोस्मि सराज्यकोशः काको वकीयान् कृटिको ममायम्। शत्रुर्महान् भीमवकोहमल्पो दुर्गैव देवी शरणं न चान्यः ॥ ४८ ॥ वस्याः प्रसादादहमेवमद्य निहन्मि चिंता न हि काचिदत्र । तद्वाहिनीं स्वं शमयासु चीर वीरेभेटैः पातितवीरसंबैः ॥ ४९ ॥ हस्यं स सेनाधिपर्धि प्रबोध्य हस्तांगुळै व्योधनस्तं निबध्य । वामे करे सुक्षमतरां च शसीं निधाय देवीं प्रणमन् प्रयातः ॥ ५०॥ "

The poet explains the word शसी as follows in his commentary:"शसीं कृरिको स्थान्छसी चासि पुत्री च कृरिका चारि बेनुके त्यमरः ॥"

It appears to me that the " पूर्मचरा शकी" mentioned by Purusottama is same as the कृपाणिका of the Śivābhārata. It is, however, difficult to identify कृपाणिका with the Bhavāni sword.

James Douglas 18 in his chapter on Shivaji in his Bombay and Western India published in 1893 makes a reference to the Bhavāni sword and states in a footnote 19:—"The Genoa blade presented to the Prince of Wales in 1875 during his visit to India by the Raja of Kolhapur" and reproduces a picture of the sword from Grant Duff's History (p. 346). This picture gives us a long blade of sword with a decorated bandle with the scabbard pictured near it. The blade of the sword as represented in this picture is curved at the end but the breadth of the blade is almost uniform and not broadened as in the case of the sword claimed to be Shivaji's sword by Mr. Bomonjee D. Pudumji 20 of Poona, who has publi-

^{18.} Bomboy and Western India, Vol. I, pp. 331-346, deal with Shivaji, his country, his birth, his person and character, his accomplishments, his motto, his good and bad traits, etc. These pages contain the following illustrations:—

⁽I) Picture of Shivaji (bust) from Orms 's Fragments (p. 331).

⁽²⁾ View of Sinhgarh (from a photograph by Dr. T. CROOKE) (p. 839).
(3) Shivaji's sword "Bhavāni" (from Grant DUFF'S history) (p. 846).

^{19.} Ibid, p. 342 — This footnote explains the statement of Prof. Manikrao of Baroda referred to earlier in this paper to the effect that the Maharaja of Kolhapur presented the sword to King Edward. The Prince of Wales referred to by James Douglas is of course identical with King Edward VII. Students interested in the history and identification of the Bhavant sword may hunt up this clue from official sources.

^{20.} Mr. PUDUMJI in his pamphlet (August, 1928) gives us a picture of a sword in his possession which he claims as Shivaji's award. He also observes (p. 2 of pamphlet) "At any rate one thing is certain that the sword called Bhowani has not yet been irrefutably identified. There is a belief in Satara that a sight of the sword causes safe delivery of a woman in labour." He refers to the information published by Mr. P. M. CHANDORKAR in the Journal of the

shed a small pamphlet called "Notes of the subject of Shivaji's sword." This sword is a "tegh" sword with a broad curved blade, slightly concave in the middle and made of flexible steel. It is single-edged and higher up double-edged upto a length of 9 inches from its point. The length of the blade measured along the middle of its curve from the point to the hilt is 2 ft. $4\frac{1}{2}$ inches. The tang of the sword is $2\frac{1}{8}$ inches wide. The blade is broader higher up, the maximum width being nearly 3 inches. The hilt of the sword is beautifully encased with tiny gold flowers 21. On the other side of the blade are marks of the crescent moon 21 (6 small marks of the crescent moon, 4 small

Bharat Itihasa Mandal, Poona, 1918 A. D., to the effect that on either side of the throne of Shivaji at Satara there are two swords. One of them is an ordinary sword. The other is the Bhavanu sword on the right hand side of the throne. There is an engraving on the blade of this sword viz. "सरकार राजा शाहुछत्रपति कार " from which we find that King Shahu appears to have engraved his own name on it. On the blade of the sword in the possession of Mr. Pudumji the words " अवस्ति महाराज शीवाजी " are inlaid in gold in Devanagari characters. Dr. S. K. BELVALKAB thinks that a letter in the word छत्रपति is written in the style in which we find it in MSS 150 or 200 years old (p. 15 of pamphlet).

21. In a letter dated 12th February, 1912, from Mr. D. P. MOOS to Khan Bahadur B. D. PUDUMJI, the writer considers the sword in question to be a genuine old sword of Shivaji. This opinion is based on the following points: - (1) the quality of the steel (2) its "Taga" shape, a characteristic of the Maratha swords (3) its old-type lettering and (4) the "Tahanshah "work of inlaying the letters, the art of which is now extinct. (Mr. Moos represented the firm of "The Indian and Oriental Armour", Medow Street, Port, Bombay). Mr PUDUMJI quotes an extract from the illustrated Hand-book on Indian Arms (by Wilbraham EGERTON now Lord. E.) which refers to a sword presented by the King of Kabul to the Governor-General. This sword once belonged to Tamurlane. Swords are estimated by their aga, watering or temper. PUDUMJI reproduces a coloured view of "Jevaheer Khana" once the residence and strong-hold of Shivaji (Fort Singhur, Dt, Poons) and now in his possession. He also gives an extract from Satara Gazetteer (1884) by Sir James CAMPBELL which reads :- (p. 238)-"the sword of Afzalkhan and Shivaji's favourite sword Bhavant passed to the Moguls on the capture of Shambhaji in 1690. They were restored by Aurangueb to Shahu in 1707 and till 1827 remained a valued trophy in the armoury of Shivaji's decendants. " In the revised edition of his pamphlet, Mr. PUDUMJI (1929) gives a photograph of a brass tray (p. 86) about 2 ft. in diameter with him on which is embossed the calebrated episode in Shivaji's life viz. the release of a beautiful Moghul lady (daughter-in-law of the Subedar of Kalyan) brought as a captive after the sack of Kalyan in 1664 A. D.

22. Mr. PUDUMJI in a revised edition of his pamphlet (21st March, 1929,) on p. 11 draws our attention to the last para 91 of Shivaji's letter to Jaysinha, who invaded the Deccan at the head of the Moghul army. This para reads as follows:—"Tomorrow, the moment the sun shall conceal his face behind the evening cloud, the Crescest moon of my sword shall flash forth. That is all. God be with thee." Mr. PUDUMJI is of opinion that the expression "Crescent moon of my sword" in the above para represents Shivaji's own description of his sword" as to its shape, i.e., it had a curved blade. The letter of Shivaji from which the above para has been quoted is in Persian and has been published by the Nägari Pracharini Sabha of Benares in their Patrika

marks of the full moon possibly and 2 big marks of the crescent moon). Mr. Bomanji Pudumji prints on p. 3 of his pamphlet a copy of a letter dated 24th March, 1925, from the authorities of the British Museum stating that the British Museum does not possess the original "Tigerclaw" or sword of Shivaji. 23

The Sabhāsad Bakhar 25 composed in A. D. 1694 refers in many places to the tutelary deity of Shivaji viz. Śrī Bhavānī 25 but no references to the Bhavānī sword can be found in it. The references to the family deity Bhavānī in this bakhar are generally associated with the major incidents of Shivaji's intrepid career but I have failed to trace in this source any mention of Bhavānī as the name of Shivaji's sword. I await more light on this problem from scholars who have done intensive researach in the history of the period.

⁽Bhāga 8, No. 1—Saṃvat 1975). This has been reprinted in the Shivaji Souvenir (1927)—Marathi Section (pp. 161-170) and English trans. of it in the English Section (pp. 170-178). Though this letter in the form of a poem may have a high poetic value its testimony on the question of the shape of Shivaji's sword has no value, especially as the document bears no date and is also of anonymous authorship. Hari Kavi (A. D 1685) describes the Bhavāni Sword by the terms "বের্ল্লার" অর্ল্লার্ড), অনিত্রা, in his Śambhurāja Carita.

^{23.} This reply was received by Mr. V. L. BHAVE, author of the History of the Marathi-Literature (Mahārāṣṭra Sārnsvat) and is printed in the Journal of the Bharata Itihaza Samshadhak Mandal, Poons, of Śaka 1887 (= A.D. 1915) p. 19. It is signed by C. HERCULES, Record-keeper of the Department of British and Mediaeval Antiquities and Ethnology, British Museum, London, W. C.)

^{24.} Life of Sica Chhatrapati (by Krishnaji Anant Sabhasad) Ed. by K. N. SANE, 1923 (Fourth Edition). Mr. SANE has based his text on five MSS: (1) MS procured from the pujārī at Pratapgad. (2) MS copied in A. D. 1852 and deposited in the Native General Library of Poons, (3) and (4) MSS procured by Krishnajipant Acharya Kalgaunkar of Satara. Mr. SANE has relied on the Pratapgad copy as it is very old and especially on account of its being found at Pratapgad. The date of composition recorded in this MS is Sake 1616 (= A.D. 1694) but the Samvatsara mentioned is "Isvara" which is equivalent to Saka 1619 (= A.D. 1697); (5) MS Procured at Mahad, in which some changes appear to have been made from DUFF'S History.

^{25.} Ibid p. 9 (" श्री भवानी कुल्देवता महाराजांची"); pp. 11 and 28 (" श्री भवानी तुळजापूरची"); p. 87 (" श्री भवानी "), p. 42 (श्री शंभूस व भवानीस नमस्वार केला); p. 46 (श्री शंभूमहादेव, " श्री भवानी"), p. 49 (" श्री भवानी"), p. 53) (" श्रीभवानीनें"), p. 83 (" श्री महादेव व श्री भवानी कुल्स्वामी"), p. 89 (" श्रीभवानी ") (cf. Jedhe Sakacali under Saka 1581) — " कदाश्रित श्री अंबेच्या वरदें अफ्झल्खान मृत्य पावला तरी इशारतीचे आवाज राहावरी होतील" (and under Saka 1600) भवानीवाई लेक संभाजी राजे यासी जाली (at Sringarpur).

The next important contemporary source of information on the problem of the Bhavāni sword is the Śivabhārata 25a composed by Kavīndra Paramānanda by order of Śrī Chhatrapati Shivaji Maharaja. This poet hailed from Nidhinivāsa (= Nevase on the bank of Pravarā river) and was a contemporary of the celebrated Gāgābhaṭṭa who officiated at the coronation of Shivaji in A. D. 1674. He composed the Sivabhārata after Śaka 1583 (= A. D. 1661) and before Śaka 1596 (= A. D. 1674), the year of Shivaji's coronation at Raigad.26 Mr. D. V. Apre27 has already pointed that Shivaji made use of the sword in his fight with Afzalkhan and this sword is none other than the Bhavānī sword referred to by Paramānanda in the Śivabhārata in verses 16 and 22 of Chapter XX. These verses are as follows as translated by me in English:—

"Prostrate him (Afzalkhan) to the ground by the great stroke of your sword (अভি) as that person (demon in the form of yavana) is constantly rising on this earth for the obstruction of dharma" (verse 16).28

25a. Edited by S. M. DIVEKAR, Pub. by the Bharata Itihasa Mandal, Poona, Saka 1849 (= A. D. 1927,) contains a fine frontispiece of a picture of Shivaji in colour from a painting in the Prince of wales Museum, Bombay. It is a fascimile reproduction from the original in which the height of Shivaji's figure is about 34 inches. Other good features of the edition are Upoddhāta pp. 1-28 by S. M. DIVEKAR; (2) a useful bibliography; and (3) a masterly introduction by D. V. APTE (pp. 1 to 200.). The text and the Marathi translation of the 81 chapters of this epic, (" चरितं शिवराजस्य भरतस्येव भारतम्"- Chap. I, 22) of the Life of of Shivaji has been critically edited. This is followed by an exhaustive index of places and persons mantioned in the text. The illustrations besides the frontisplece are (1) a contemporary horoscope of Shivaji by Sivarama Jyotist (page 56); (2) photo of folio 39 of MS recording verses about the birth-date of Shivaji (p. 56); (3) photo of the extract from Jedhe Sakāvali containing the birthdate of Shivaji (p. 56); (4) Bangalore Fort (p. 64); 5 Images of the Goddess Bhavani at Fort Sivaneri (Siwai) and at Fort Prataggad (Bhavani) (p. 65);. (6) Map illustrating the Muslim dominions in Shahaji's time (p. 80); (7) Map of Karnatak in Shahaji's time (p. 80); (8) Map of Southern India in Shahaji's time (p. 80); (9) Map illustrating Shivaji's invasion of Konkon in Saka 1583 (= A.D. 1661) (p. 81); (10) Photos, of the forts, Purandhar, Rajagad and Simahgad (p. 203); (11) Photos of Pratapgad, Panhalgad and of a picture of Afzalkhan (p. 209); (12) Map illustrating Shivaji's invasion of Saka 1589 (= A.D. 1667) after the Afzalkhan incident (p. 248); (13) Map illustrating Shivaji's battle of Umbarkhind (p. 248); (14) Map illustrating Shaista Khana's invasion of Saka 1582 (= A. D. 1660); (15) Map illustrating the siege of Panhalgad Saka 1531 (= A. D. 1680) (p. 249); (16) Pictures of Shah Jahan, Mahmmad Adil Shah, Shaista Khan, Jasayant Sinha, Aurangseb, Fazalkhan, Raja Jayasinha and Dilerkhan (pp. 252-253.)

26. These Chronological limits are given by Mr. DIVEKAR (vide p. 20 of his Upod-

dhata to the Sivabharata). The poem refers to the death of Siddi Johar (A.D, 1661).

Sicabhārata (Prastāvanā, p. 168). In the Index (p. 12 under Bhayāni Tarvār reference is made to verses 22 and 23 of Chap. XX of the text.

^{28.} Page 193 Sivabharata-

[&]quot; उद्भवन्तं निरोधाय धर्मस्येह मुहुर्भृहुः । तमेनमसिपातेन महता भुवि पातय ॥ १६ ॥ "

"It has been ordained by the Creator that he (Afzalkhan) should be killed by this hand of yours and hence, O King, I (goddess Tulajā) have identified myself with your sword (हुनाजी)" — (verse 22) 29

"With these words Śarvāṇī. i. e. the goddess Bhavānī or Tuljā entered his sword (क्याणिम्) and he (Shivāji) though in a waking state regarded it (the whole occurrence) as a dream."— (verse 23). 50

In the above verse we get a genesis of the Bhavanī sword which is perhaps the earliest on record from contemporary sources : Evidently the goddess Bhavani enters the usual sword of Shivaji and makes it unusual. This association of the goddess Bhavanī with Shivaji's sword given in a contemporary record (between 1661 and 1674 A. D.) is extremely valuable as it explains how the term Bhavani tarvar came into being. The verses quoted above do not, however, refer to any sword of Shivaji as Bhavāni tarvār, an expression which became an established usage during the course of centuries that have elapsed since the tragedy of Afzalkhan. The human sword of Shijvāji having once become divine by its association with the goddess Bhavanī and thus having been linked up in popular imagination with all the heroic exploits of Shivaji, whom the people believed to be an incarnation of Siva,-this human sword has now become an object of much wonder and speculation for the historian and the patriot alike. It would be certainly a red-letter day on which its existence and identification are proved beyond challenge by any scholar or institution interested in historical research. Our duty for the time being is to collect all possible information which might help scholars and patriots in keeping the memory of the Bhavani sword fresh in their minds so that this quest of the holy grail may continue unabated by all lovers of the Maratha history in particular and of history in general.

The foregoing discussion and record of references to the Bhavani sword appears to me like Shakespeare's drama Hamlet without the King of Denmark. The account of this sword as recorded in the Ślvadig-

^{29.} Ibid-

[&]quot; विधिना विहितोस्यस्य मृत्युस्वत्याणिनामुना । अतस्तिष्ठामि भृत्वाई कृपाणी भूमणे तव ॥ २२ ॥ "

^{30.} Ibid, p. 194-

[&]quot; व्याहरन्तीति शर्वाणी तत्कृपाणीमवीवशत् । असौ जाम्बद्दस्योऽपि तत्स्वप्रमवमन्यतः ॥ २३ ॥ ।"

vijaya being a late one 81 cannot be taken as historical truth especially in the absence of contemporary evidence to support it in material particulars. The account of the Śivabhārata is quite valuable so far as the genesis of the expression Bhavani tarvar is concerned. The reference to this sword in the Chitnis bakhar of A.D. 1811 is also not very helpful. It is, therefore, necessary to search for more contemporary references to the Bhavani sword like that of the Sivabharata, Such references alone can give that factual touch to the history of this question which is necessary to fill up the historical void that separates us from the time of the author of the Sivabharata. I shall, therefore, conclude this paper by putting on record at least one contemporary reference to the Bhavani sword in which we find a poetic description of the exploits of the Bhavanī sword in the hands of King Sambhāji, to whom this sword must have passed on as a heroic legacy after Shivaji's death in A.D. 1680. This reference is also very important as it is the only one so far discovered in which the name " Bhavani's Sword " is mentioned five years after the death of Shivaji, i.e in A.D. 1685 and in which no less than 3 verses or 12 lines are devoted to the praise of this sword. The bearing of these verses on the history of the Bhavani sword was not quite apparent to me when I noticed them first three years ago in my paper, 32 on " Hari Kavi alias Bhanubhatta, a Court-poet of King Sambhāji and his Works." I was then under the impression that in the documents of the period many authentic references to the Bhavani sword must have been traced and scientifically recorded by the indefatigable researchers 33 in the field. When, however, I began to look for them in the

^{31.} Vide liva Caritra-Pradipa (B. I. S. Mandal, Poons 1925) p. 75 where the date of composition of the Śwadigwijaya is given as Śaka 1740 = A.D. 1818. The extracts from several Bakhara relating to the birth date of Shivaji (pp. 71-78) will be found interesting. These bakhars are (1) Sabhāsad B. (A.D. 1697), (2) Chitragupta B. (about A.D. 1759), (3) 96 Kalami B. (A.D. 1780), (4) Bakhar composed for Savai Madhavarao Peshwa (Rajawade Khanda 4) (A.D. 1783), (5) Chitris B. (A.D. 1810), (6) Choti B. (A.D. 1817), (7) Śwadigwijaya (A.D. 1818), (8) Panta Pratinidhi B. (A.D. 1844), (9) Panditrao B. (A.D. 1848), (10) Shri Shivaji Pratap (A.D. 1829), (11) Shedgaunkar B. (A.D. 1854).

^{32.} This paper was submitted to the Modern History Congress. Poona in June, 1985 and was published in the Annals of the Bhandarkar Institute, Vol. XVI, pp. 262-261. Hari Kavi was a resident of Surat. His family hailed from the Mahārāṣṭra. He composed (1) Sambhurāja-Carita by order of Kṛṣṇapaṇḍita, the guru of Sambhaji, (2) Haihayendra-Carita and its commentary Sambhurāja-Carita by order of Sambhaji and an anthology called the Subhāṣitahārāvali. The Sambhurāja-Carita was completed at Surat on 12th January, 1685. It is a mahākāvya in 12 sargas of which only some fragments are available in the Govt. MSS Library at the B. O. R. Institute, Poona.

^{33.} Rao Bahadur G. S. SARDESAI, the Mahārāṣṭra Historian, has directed my attention in a private communication dated 16th April, 1938 to his views on the problem of Bhavānī Sword as recorded by him on p. 53 of his volume on Shivaji (Marathi Riyasat—2, Šaka Kartā, Shivaji,

published records I was thoroughly disappointed to find a woeful lack of reliable information on the question of the history of the Bhavānī sword based on contemporary and subsequent evidence. Evidently the problem has not been examined by any scholar competent to search for, scrutinize and arrange in a chronological order all the available data bearing on the question. I have gathered in this paper a few facts regarding the Bhavānī sword solely with a view to provide a historical background to Hari Kavi's description of this sword in his Śambhurāja-Carita, composed in a. D. 1685. This description shows that to a resident of Surat like Hari Kavi the glory of the Bhavānī sword had some poetic appeal as will be clear from the following verses:—

Folio 8284 of MS No. 191 of 1875-76 -

"राजन्कि घोषयामस्तव विजयमहो ते वयं मंद वाचो वीरश्रीशोभमानः करतलविलसच्चंद्रहासो³⁵ भवान्यां(न्याः)। चक्रेत्रतप्रमत्तिहरदगलचलद्भूरिभांकारपूर्णं सा वीराशंसिनीम्खिजगति विजयाशंसिनी यखकास्ति ॥ १२६॥ शंभो त्वत्सद्भवल्ली लक्षति समुदिता कालकादंविनीव³⁷ ध्वांतार्ली³⁸ सैन्यपूर्ली वत जगति समातत्य³⁹ झत्कार विद्युत्। अखां सौररपारे⁴⁰ प्रधनवसुमतीं⁴¹ हावयन्ती⁴² समन्तात्

Bombay, 1935):—Shivaji during his Konkan expedition (A. D. 1657-58) came into contact with Lakham Savant of Goa (1651-1675 A. D.) whom he made a vassal. This Savant had in his possession a famous sword manufactured in Europe, which Shivaji acquired by presenting the Savant 300 hons and a dress of honour. This sword was named Bhavani. As its possession brought much success to Shivaji he used to worship it daily. This sword is still at Satara in the temple of the goddess and is included among articles for worship. (Footnote:— King Shahaji (father of Shivaji) sent by sea some valuable articles from Karnatak such as a bedstead, a belt and an armour and a Phiranga talvar according to the statement of the Cchoti Bakhar of the Maratha Empire. It is possible to conclude that the sword included among the above articles is the Bhavāni Sword. The story about the transfer of this sword to London is not true.).

34. Vide Annals, XVI, p. 266, where these verses have been quoted by me.

85. चंद्रहास = a glittering sword (Apto); "खड़े तु निश्चिशचन्द्रहासासिरिष्टयः" Amarakofa (II, 8, 89). Bhānuji Dikṣita explains:— "चन्द्र इव हासः प्रभा अस्य। चन्द्रं हसति वा। द्युतिमत्वात्."

36. বর্বতী = the sword-creeper = sword resembling a creeper possibly by its length and elasticity.

37. कादंबिनी = a long line of clouds.

38. जांत = darkness ; आली = a row or continuous line.

30. समातत्व = having over-spread in an intense manner.

40. The unfathomable waters in the form of weapons (used by the army). SIX = water.

11. प्रधन = Battle and वसुमती = earth; प्रधनवसुमती = the battle-field.

42. प्रावयन्ती = flooding.

प्रौद्धकुण्णेमकुंभोद्ग⁴⁸तमणिकरका⁴⁴ न्य्रक्षिपंती नितांतं ॥ १२७ ॥ स्ते नानापदार्थांस्तव यदसिखता शंभुराजाद्भुतं तत् तापाकं कीर्तिचंद्रं विजयहुतभुजं तारकालीं गुणालीं । झत्कारान्वियुदोघानपि रिषुकमलां भारतीमस्मदीयां नारीणां शात्रवीणां नयनयुगसराबाष्पशैवाळिनीश्च ॥ १२८ ॥ "

In the foregoing three verses Hari Kavi gives us a fine poetic description of the "Bhavāni's Sword" 45 and its doings on the battle-field. This description is inserted in the battle-scene of the Śambhurāja-Carita in which Sambhāji is shown as surrounded by the army of his enemy intending to attack him. With him we find Campā, the terror-struck heroine of the poem on her journey to her husband's home after her marriage 46 with Sambhāji at Surat as also Kṛṣṇapaṇḍita 47 the guru of the Maratha King, who is described as a very important personage throughout the poem and at whose instance, Hari Kavi informs us, he wrote the Śambhurāja-Carita. This description of the Bhavāni's sword has an earlier parallel in the description of the sword of Shabāji 48 by Jayarāma

^{43.} इमकुंस = the foreheads of elephants which were full grown (प्रीट). The elephants had their temples shattered to pieces (क्षणा).

^{44.} मणिक्रकान् = Hall stones in the form of pearls in the temples of elephants (the temples of elephants are supposed to contain pearls). Verses 126 and 127 contain a metaphor of a violent storm attended with lightning and dark clouds and followed by a heavy rain shower with hail stones.

^{45.} The MS has the reading " चन्द्रहासो भवान्यां " The correct reading ought to be चंद्र-हासो भवान्याः = Bhaeāni's sword.

^{46.} The Sambhurāja-Carita (A. D. 1685) gives a detailed description of Sambhāji's marriage with Campā. In this connection compare a picture of a marriage scene in colours painted on folio 61 of Skandha IX of the Bhāgavatapurāna (B C. R. Institute MS No. 61 of 1907-1915). This MS was prepared in A. D. 1648 at Udayapura. The picture in question shows the bride and bridegroom in matrimonial attire scated facing each other with two priests shown scated near the bride and the bridegroom with the nuptial fire between the priests. Another picture on the same folio shows the bride and bridegroom scated on a chariot possibly on a journey to the bridegroom's home. The chariot is dragged by two white horses.

⁴⁷ I shall prove in a separate paper the identity of this Kṛṣṇapaṇḍita with Kavi Kalasha or Kabji, the celebrated minister of king Sambhāji.

^{48.} Vide p. 236 of Rādhāmādhacacilāsa champū by Jayarāma Pindye, edited by V. K. RAJAWADE (Šaka 1844 = 1922 A.D.) Poona. This poem is a Life of Shahāji, the father of Shivāji and grandfather of Sambhāji. The description of a sword or उन्नवर्णन occurs in the 8th Ullāsa (verses 227-285) as follows:—

[&]quot; पुनरपरस्मिन् दिवसे यथापूर्वमुपविद्यति सति राजनि शस्त्रमार्जकतैलघावितां रत्नावितमृष्टि-मंजुलां पार्श्ववर्तिभृत्यपाणिग्रहीतां कृपाणिकामवलोकितुं विकोशां कुर्वाणे सति स कविवर्णयामास ।

Kavi, who composed his Rādhāmādhavavilāsa Champā or a Life of Shahāji between Śaka 1575 (= A.D. 1653) and Śaka 1580 (A.D. 1658). Evidently Jayarāma Kavi was a senior contemporary of Hari Kavi (A.D. 1685) and his description of Shahāji's sword is not merely poetic but factual as well. It is described as "राजस्वितपृष्टिमंजुलं" or "lovely on account of its having a handle bedecked with jewels." It is compared to a cloud (इपाणजल्द) and is called कृष्णा or of darkish lustre due to its being rubbed clean by the application of some polishing oil (श्रामाजिक्देशियां). Will it be possible to prove on documentary evidence that this very sword of Shahāji actually seen and described by Jayarāma Kavi before A.D. 1658 was transferred to Shivāji sometime thereafter and was actually in his possession at Pratapgad at the time of the Afzalkhān incident of A.D.

ययामित मया विभो तव कृपाणिकायाः स्तुति विधाय विनिगच्छते सद्सि सत्कवीनां पुरः । परिक्षणविचक्षणाक्षितित्रलेकसंरक्षण—– क्षणं ललितलक्षणश्रवणमत्र संदीयतां ॥ २२७ ॥ राजा सादरं तच्छ्रतवान् । यथा ।

> नृप तव कृपाणिकेयं दृढतरकरपीडनेन संभ्रांता । अपद्वतकोशा भृत्यैर्निपतित परिवृत्य वैरिणां कंठे ॥ २२८ ॥ नृप तव कृपाणिकायाः प्रायः सारा×नी छाया । अनया निकृत्य शत्रूननुकृतिति सापि तत्र पत्रस्थान् ॥ २२९ ॥

हस्तोदितो विचित्रः शाहमहीपाल लङ्गमेपस्ते । वर्षति यत्र हि धारां कुरुते तत्रैव जीवजीवनामावं ॥ २३० ॥ आश्चर्यं तव शाहिक्षतीश दृष्टं कृपाणजलदस्य । वृष्टिं विनैव कुरुते यस्तृणसृष्टिं प्रतीपरदनेषु ॥ २३१ ॥ अवलोक्तितं श्रुतं वा कैरिंप चलनं जलस्य जलपुरतः । तृप तव कृपाणनीराद् गच्छति नीरं परस्य वदनस्यं ॥ २३२ ॥ कृष्णा कापि कृपाणी राजन्नाजी विलक्षला जयति । हरति पररक्तवस्तं स्वीयेनाच्छाच कालेन ॥ २३३ ॥ श्रीमान् महाप्रयागः पुष्करकलिता कलिंद्रजा यस्मिन् । भूमृन्मोलिषु ललिता स्ते चित्रं सरस्वतीं गंगां ॥ २३४ ॥ अलमलमधुना शाहिक्षतीश दृष्टं कृपाणनृतिर्मियः ।

तृणमप्यरिदंतघृतं विलोक्य निलयान्निःसरित ॥ २३५ ॥ एवमादीन्यन्येषामपि महाकवीनां खड्गवर्णनान्याकर्ण्यं किमपि विविदिषुरिवान्यत्राकृष्टदृष्टिरमवत् । etc."

^{49.} According to RAJAWADE : vide p. 4 of his Intro. to Radhamadhavavilasa.

1659? If this sword of Shahāji is proved to be identical with the sword of his son Shivāji with which the goddess Bhavānī identified herself at the time of the Afzalkhan incident as stated by Kavīndra Paramānanda between A. D. 1661-1674 it would be easy for us to imagine that this same sword passed on to Sambhāji⁵⁰ after his father's death in A. D. 1680 and was later described by Hari Kavi in A. D. 1685. Even if this identity of the two swords remains doubtful it would be worth-while representing the results of our discussion about the contemporary references to the swords of Shahājī, Shivājī and Sambhājī in a tabular form as follows:—

Serial No.	Owner	Source of Description	Date of Description	Description
national states	Shahāji	Jayarāma Kavi in VIII Ullāsa of Rādhāmādhava- vilāsa Campū.	Between 1653- 1658 A. D.	" रस्नखचितमुष्टि- मंजुङों " and " इच्चा "
2	Shivaji	Kavindra Para- mānanda in Sivabhārata, XX, 16, 22, 23.	Bet. A. D. 1661- 1674	कृपाणी or असि
3	Sambhāji	Hair Kavi in Śam- bhurāja – Carita	12th January 1685	चंद्रहासोभवान्याः - बसिलता or सङ्ग- वल्ली

The foregoing table shows three different swords associated with the grandfather, the father and the son in one and the same line of kings and described by three different poets, all of whom were contemporaries of their patrons. The difference of about 30 years between the first contemporary reference to a sword and the last reference and the chronological sequence of references tend to suggest a hypothesis for further verification that the objects referred to by three contemporary poets are not several but identical.

The foregoing discussion about the Bhavani sword associated with the hair-raising exploits of Shri Shivaji Maharaja raises the question of

^{50.} Cf. Bar. M. K. SETT'S remarks in his article on "Sri Vatsyayana" in the Jubilee Volume (1938) of the Anthropological Society, Bombay, p. 197—"A young man is asked to go out into the world and carve a career for himself. The carving was done by his trusty sword, often the parting gift of his family."

the existence or otherwise of any earlier historical parallel to the story of the Bhavānī sword as now finds currency in the Mahārāṣṭra and the veracity of which has to a certain extent been confirmed by Hari Kavi's description of the Bhavāni's sword (भवान्याः चंद्रहासः) in the hands of King Sambhāji. Luckily for us such a historical parallel 51 is found in the divine sword given by a strange woman to Kumāra Kampaṇa, the eldest son of King Bukka of Vijayanagara and which had been the heir-loom in the royal Pāṇḍyan family.

The account of this Pandyan sword has been fortunately preserved for us in a magnificent poem⁵² composed by Kumara Kampana's talented queen Gangadevi and hence possesses much historical value. Kumara Kampana also called Kamparaya was the son of Bukka I (A. D. 1376death, V. SMITH Oxf. His. 1923, p. 802) by his wife Depayi. When the prince Kampana grew to manhood his father advised him on the duties of royal princes and asked him to proceed against the king of the Turushkas with his headquarters at Madura. Kampana accordingly undertook this expedition and pitched his camp in the town of Marakata.53 A goddess appeared before him and after describing to him the disastrous consequences of the Mussalman invasions of the South and the sad plight of the southern country and its temples exhorted him to extirpate the invaders and restore the country to its ancient glory, presenting him at the same time with a divine sword. Kamparaya then proceeded against Madura and in a battle, killed the Sultan ruling at the place. He then made grants to several temples.54

The closeness of the above historical parallel to the story of the Bhavāni sword is remarkable. Though the Pāndyan sword mentioned by Gangādevī as presented to her husband Kamparāya is removed historically by about 350 years the points of similarity of the circumstances connected with each sword may now be tabulated as follows:—

^{51.} I am thankful to my friend Dr. B. A. SALETORE, for pointing out to me this para-

^{52.} Vide Sources of Vijayanagar History by S. K. AIYANGAR, Madras, 1919, pp. 23-24 where Dr. AIYANGAR has given us a brief analysis of each of the eight cantos of Gangadevi's historical poem called कम्परायचित्रम् from a MS in the Govt. Ori. MSS Library, Madras. Vide printed edition of this poem also called मधुराविजयम् by Pt. Shrinivas SHASTRI of Travancors, Archaeological Department (Trivandrum).

^{58.} Kamparāya Caritam, Canto V.

^{54.} Ibid., VIII.

The Bhavani Sword The Pandyan Sword (1) This sword is also given by (1) This sword is given by a godthe goddess Bhavani to the dess to the hero. hero. (2) The hero here is Shivaji, son (2) The hero here is Kumāra Kamof Shahāji. pana or Kamparaya, son of Bukka I. (3) This sword is also supposed (8) This sword is given to the to be given on the eve of hero on the eve of the perfor-Shivaji's meeting with and mance of a heroic deed viz. destruction of Afzalkhan. the destruction of the Sultan of Madura by Kamparāya. (4) The object of Shivaji's ex-(4) The object of the exploit of the ploit was also to deliver the hero was to deliver the Hindus Hindus of the Maharashtra from the tyranny of the Mufrom the Moghul and Muhammadans, not to say their hammadan tyranny indicareligious oppression and deseted by the breaking of Hincration of Hindu temples. du idols and destruction of Hindu temples. (5) Kamparaya, the hero kills the (5) Shivaji kills Afzalkhan and Sultan of Madura and becomes effectively checks the Muhammadan tyranny. victorious. (6) Shivaji also made some grants

to some men of his court

according to the Sivadigvi-

jaya,55

(6) Kamparāya makes grants to

quest of Madura.

several temples after the con-

^{55.} Ed. by P. R. NANDURBARKAR and L. K. DANDEKAR, Barods, 1895, p. 171-"Pantajipant was the recipient of the istam of the village Hivaresi. He was also given the robes of honour. Visvāsrao Nānāji and others who had served (at the time of the Afzalkhān incident) were also the recipients of some issams, etc. A new tower was built at the place where Afzalkhan was killed, etc. "

I believe the above parallelism between the incidents associated with the Pāṇḍyan sword and those connected with the Bhavānī sword will be found sufficiently interesting by the students of the Maratha history.

In concluding my survey of the problem of the Bhavānī sword I have to point out that so far no contemporary reference to this sword has yet been traced by scholars working in the field of the Maratha history. In view of this fact vouched by close students of the Maratha history Hari Kavi's reference to the Bhavāni sword in a. D. 1685 must be treated as "practically contemporary" 56 and hence should retain its evidential value in any discussion about the genesis and historicity of the Bhavānī sword. In view of the decaying condition of the MS in which Hari Kavi's verses about the Bhavānī sword are found I have thought it advisable to publish along with this paper photograph of the folio of the MS on which these verses are recorded as also that of the last folio on which the date of composition of the Sambhurāja-Carita is found. 57

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^{56.} This paper was read before the Bharat Itihāsa Sams. Mandal, Poons in June 1938. Mr. V. S. BENDRE who was then in London, had sent a note on the subject of this paper for the annual gathering of the Mandal where this paper was read. On reading this note I wrote to Mr BENDRE pointing out that there is no contemporary evidence regarding the Bhavāni sword except the three verses of Hari Kavi. Subsequently Mr. BENDRE sent me a copy of his paper on the Bhavāni sword which he had contributed to a London Journal and in which he has admitted the force of my evidence as will be seen from the following extract:—"Where is the Bhavāni sword of the great Mahratta hero Shivāji? Much has been told in the later chronicles about this sword which was a gift to him by his goddess Shri Bhavāni. These narratives are not, however, quite unanimous in their description. The only practically contemporary reference is that by Hari Kavi in his Sambhurāja Carita (1685 A.D.)—Folio 82 verses 125-8 of this work—photo-copy supplied by my friend Mr. P. K. GODE."

^{57.} Plates I and II containing the two photographs under reference are not reproduced here.

8. Parijata-dhvaja of the Maratha King Sambhaji *

Studies in Indian Colleged Han

(mentioned by his Court-poet Hari Kavi in A.D. 1685)

An exhaustive study of Indian banners from the earliest times up to the present day based on contemporary sources is yet a desideratum in spite of the references to banners recorded in literary and other sources. In the present paper I propose to record two verses containing a reference to the banner of the Marāṭhās in the 17th century. These verses read as follows:—

Folio 74 of the Sambhurājacarita¹ — Battle scene

" करस्फुरद्नगँछप्रवरचंद्रहासप्रमा —

विभासितदिगाछिभिः सुभटकोटिभिः प्रोद्भटः ।

स भूपतिशिक्षामणिद्युतिमरीचिमालाचितः

सुगुप्तिमकरोदृगुरोस्तद्रनु पारिजातध्वजः ॥ ६१ ॥ "

Indian Historical Quarterly, Vol. XVI, pp. 40-47.

1. Vide my paper in the Annals (B.O.B. Institute) Vol. XVI (1985), pp. 262-291. The only MS of the Sambhurājacarita so far known is No. 191 of 1875-76 in the Govt. MSS Library, at the B.O.B. Institute, Poona.

In the Sivabharata (composed between A.D. 1661 and 1674) of Kavindra Paramananda there are references to banners which may be noted here:—

Chapter XXIV, 56 - " अप्रतः अचलन्तीनां पताकानां समंततः कान्तिभिः सक्छं व्योम तदा कीर्मीरतां द्वी ॥ ५६ ॥ ' Chapter XXIV, 63 - " श्रिष्यद्भिः श्रितिमपि बद्धमृष्टिभावा -बोन्मुक्ताः कचन पताकिभिः पताकाः ॥ ६३ ॥ " III, 13 — " स्वै: स्वै: सैन्यै: परिवृता: पुर: प्रोच्छायितध्वजै: " Chapter VI, 16 - " केतनोन्नमनं चोच्चैश्रारुचामरवीजनम् " Chapter XI, 13 - " तरलाभिः पताकाभिस्तदितः परितर्जयन् " Chapter XII, 9 - " कम्पयन्त इवाकाशं पताकापटमण्डले: " Chapter XII, 79 - " सपताको ध्वजश्चापि "; 85 - " पताकिनीपाल " Chapter 117 - " न पताका न च ध्वजः " XIV, 5 - " पताकोर्मिविराजितम् "; 35 - " पताकिनी " Chapter XXII, 60 — " पताकाभिध्वंजैरिप "; XXIII, 62 — " पताकिनीम् " Ohapter XXIV, 24 } "प्वाकिनीस्"; XXVIII, 13 — " ध्वजिनी तास्रवन्त्राणास्" In the above stanza the word जुरो: refers to Kavi Kalaśa,² the minister of Sambhāji. The word चेह्नास possibly refers to the Bhavānī sword³ in the hand of Sambhāji and the expression पारिजायस्त्र appears to refer to the Bhagavā Zendā, the banner of the Marāṭhās. The verse describes Sambhāji as surrounded by the army of the enemy. Kavi Kalaśa, the guru⁴ of Sambhāji is represented here as accompanying his royal disciple. Sambhāji, therefore, tried to protect his guru as also the royal banner called here पारिजायस्त्र by the poet. In this battle scene Sambhāji's wife Campā,⁵ the heroine of the Śambhurājacarita is also shown by the poet to be by his side in the royal chariot on their return from Surat, where the marriage⁶ of the heroine took place. The poet refersagain to the पारिजायस्त्र in the following verse on folio 79 of the Śambhurājacarita:—

" अये किमिति दीपिते मम कृपाणकालानले भटा नतु पतंगतां समधिगंतुमागम्यते । भवत्सुद्यते इसिर्मम गवेषयाम्यद्भुतं प्रचंडतरकार्मुकं तमिह पारिजातध्वजम् ॥ १०८ ॥ "

As the expression पारिजातच्या represents in the foregoing verses the banner of the Marāṭhās 7 in the 17th century we have to determine

2. Kavi Kalasa is called Kṛṣṇa Paṇḍita by Hari Kavi in versee 124 and 125 on folio 82 of the Sambhurājacarita ("यस्यास्ते गुरुरेक एव सुनिधि: कृष्णो गुणीयांबुधि:"-v. 125 and "श्रीकृष्णा-पंडितात्कक्षिभुवनविषये कोविदक्छेशहर्ता" —v. 124).

8. Verses 126, 127, and 128 on folio 82 of the Sambhürajacarita MS describe the Bhavant sword in the hands of king Sambhāji ("वीरश्रीशोभमानः करतल्विलसच्चंद्रहासो भवान्यां (न्याः) "
—v.126).

- 4. Cf. folio 74 " समेत्य सचिवैः समं तदनुमानसं भूपति र्दभार गुरुनोदितो निजवरूथिनीसज्जने "
- 5. Cf. folio 78 " चचाल चललोचनां समुप्येदय चंपां रथे "
- 6. History knows no wife of Sambhāji of the name Campā. Sir Jadunath Sarkar writes to me under date 21st May, 1936.— "I am inclined to think that Campā was the mother of that Madan Singh, an illegitimate son of Shambhūji, who was kept a prisoner in Aurangzeb's camp along with Shahu after the fall of Raigad in 1689."
- 7. Vide p. 161 of Śaka-Kartā Shieāji by Rao Bahadur G. S. Sardesai, 1925. Dealing with Symbols of Royalty Rao Bahadur Sardesai observes:— "Shivāji made current certain special symbols of Royalty connected with the royal throne (Simhāsana). Certain royal symbols like Jaripatkā, Dankā etc. were used in ancient times. These were renewed by Shivāji at the time of his coronation after giving them proper authority of the Sāstras. The Bhagavā Zendā was formerly used by many warriors. The Marāthā Eardars used this flag generally while proceeding to battle. Jaripatkā was a dignified transformation of this flag. It was Shivāji who first made it a symbol of royalty, though it was later adopted at several places in the Marāthā Empire. The Jaripatkā was not meant to be used at all times in warfare but it was displayed

its exact significance and ascertain if it is identical (or otherwise) with the orange-coloured Bhagava Zenda of the Marathas so popular in the Mahārāstra.

In the absence of contemporary descriptions of the Maratha banners recorded in monographs we have to make the best of the expression used by Hari Kavi viz. पारिजातध्वज,

The Parijata flower proper is white but its stalk is of orange colour, How can we prove, therefore, that the expression पारिजावस्त्रज means the Bhagava Zenda, the orange-coloured banner of the Marathas? I shall, however, record the evidence collected by me in favour of the identity of the Pārijāta dhvaja with the Bhagavā Zendā. This evidence is as follows:-

- (1) Hari Kavi was a Deccani Brahmin resident of Surat as he himself states in his works, fragments of which have been preserved in the Govt. MSS Library at the B.O.R. Institute. He composed the Sambhurājacarita by order9 of Sambhāji's minister Kavi Kalaśa, whom he calls Krsna Pandita. He also composed his Haihayendracarita and its commentary Sambhuvilāsikā by order10 of Sambhāji himself as stated by him in this work. It is, therefore, reasonable to infer that he knew Sambhāji's banner very closely and consequently his description of it as Pārijāta dhvaja is based on a direct knowledge of the banner.
- (2) Hari Kavi was a resident of Surat in Gujarat, where the orange -coloured stems of the white Parijata flowers are crushed for dying pieces

विख्यातस्य निदेशतः वरिमदं काव्यं व्यधादद्भुतम् ॥ १७२ ॥ "

10. Vide verse 10 of Haihayendracarita and commentary (MS No. 829 of 1875-76):-" तस्याज्ञयैव विव्धान्प्रति नेजभाय-

the party of the land of the land.

प्रोद्बोधनाय हरिणा किल तन्यतेऽस्य।"

on special occasions during processions. The Bhagava Zenda was used before Shivaji's time by his father Shahaji. The foregoing genesis of our flags as it has come down to us appears to be acceptable. " (This is the substance of Rao Bahadur Sardesai's remarks in Marathi about Royal Symbols).

^{8.} Vide p. 280 of Shivaji and his Times by Sir Jadunath Sarkar, 1919-Description of a street procession at Raigarh : " (Shivaji) rode through the streets of the capital in full military procession......with two royal banners Jaripatka and Bhagava Zenda borne aloft on two elephants walking in the van. "

James Douglas on p. 178 of vol. I (1893) of Bombay and Western India writes: - " Shivāji's standard Bhagava Zanda was swallow-tailed and of a deep orange-colour but on a big day like this the Jaripatka or golden streamer the national ensign of the Marathas no doubt waved from the great arch which still crowns the highest plateau of Raygarh. "

^{9.} Vide verse 172 on folio 233 (20) of Sambhurajacarita:-

[&]quot; यः श्री शंभमहीपतेरपि गुरोस्तस्यैव कृष्णाख्यया

of cloth. The method of preparing red or orange colour from the stems of the Pārijāta flower appears to have been current from ancient times. Pārijāta trees grow wild in large numbers on the Deogarh hill situated in Deogarh Baris between Dohad and Godhra in Gujarat. In view of this it would be reasonable to conclude that Hari Kavi meant by his expression "Pārijāta dhvaja" the orange-coloured banner of the Marāṭhās known to us as the Bhagavā Zenda.

(3) In this connection it is interesting to note the association of the Pārijāta flower with red colour as recorded in literature as early as the 5th century A. D. In a Jain work, called the Rājapraśniyasūtra, 12 which is the 2nd Upānga of the Švetāmbara Jain canon, Sūtra 15 mentions "पालियाय कुसुमे" (पारिवातकुसुम) among the standards of comparison for red-coloured objects, the other standards being (1) उरअविषय (blood of a ram), (2) समर्थाय (blood of a hare), (3) नरविषय (human blood), (4) वराहविषय (blood of a boar), (5) माहिषदिधर (blood of a buffalo), (6) बालेन्द्रगोप (young Indragopa insects), (7) बालिद्रवाकर (early morning Sun), (8) संख्यावराग (red glow of evening clouds), (9) गुज्ञाचराग (red colour of the half of the Guñjā seed), (10) जपाकुसुम (the red Japā flower), (11) किञ्चकुसुम (the red Kiṃśuka flower) etc.

In view of the references recorded above and in view of the influence of the classical Sanskrit literature on Hari Kavi's writings, the association of the Bhagavā Zendā or the banner of the Marāṭhās with the Pārijāta tree (with all its legendary associations) appears to me to be the happiest one devised by our poet to signify in one and the same expression not

^{11.} I am thankful to Mr. S. P. Shukla, a Vaidya in Poona, for supplying me the following references from botanical works regarding the Pārijāta:—(i) " पारिजात N. C. Cleineas, L. Nyctanthus arbortristis Linn—Native women and children collect them and separating the orange-coloured tubes from the white petals, dry them in the sun and preserve them for dying their clothes a beautiful buff or orange-colour "—(Page 190 of The Materia Medica of the Hindus by Uday Chandra Dutt).

⁽ii) "The flower stalks yield a fine, but fleating buff or grange-colour. To extract the dyes the dry flowers are beiled in water, one pound of flowers requiring ten gallons of water, which are evaporated till one gallon is left; the cloth is then dipped into the liquor and hung out to dye. Five yards of muslin can thus be dyed with one pound of flowers. Silk also takes the colour fairly well. "—(Page 247 of the Botanical Volume, Bombay Gasetteer).

^{12.} Ed. by Prof. N. V. Vaidya, of the Fergusson College, Poona, 1988, p. 64,—I am thankful to Prof. Vaidya for having directed my attention to this passage.

only the orange colour¹³ of the banner but its desire-yielding virtues as the Pārijāta tree is called Kalpavrkṣa.¹⁴

The references to the Marāṭhā banner viz. the Bhagavā Zeṇḍā in contemporary sources 15 will throw more light on the subject of this paper viz. the Pārijāta-dhvaja mentioned by Hari Kavi in A. D. 1685. I have not been able to trace any such references though in later sources we find some references of the Jari-paṭkā. I shall, therefore, record these references in this paper with a request to the scholars of the Marāṭhā history to publish contemporary references to the Bhagavā Zeṇḍā and the Jari-paṭkā:—

(1) A. D 1776 — In a letter 16 dated Saka 1698 (Pausa Suddha) from Raghunathrao Peshwa to Narasingrao Govind the Jari-patka is referred to twice. Here the Peshwa assures the addressee that the Jari-patka would be presented to him when he has proved his competence

for receiving it.

(2) A. D. 1782 — In Yadi No. 13 (p. 79 of Treaties, Agreements and Sanads¹⁷ 1914) there is reference to Jari-patkā lost on the battle-field.

13. The Pārijāta colour is said to be a substitute for Saffron Colour. Sir George Watt (on p. 480 of his Commercial Pyoducts of India, London, 1908) gives substitutes for Saffron:
"Indian Chief Substitutes are: Carthonas and Nyctanthus" (Pārijāta)."

14. Kālidāsa refers to it in the Raghuvamia (कल्पद्रमाणामिन पारिदात: — VI,6). It was one of the five trees of Paradise (said to have been produced at the churning of the ocean and come into the possession of Indra from whom it was wrested by Krans and planted in the

garden of his beloved Satyabhāmā.

16. The Bombay Gasetteer (vol. XVIII, pt. ii, pp. 228-9) records the tradition about the Bhagavā Zendā current in the Mahārāṣṭra:—"He (Shivāji) chose the celebrated Rāmdās Svāmi as his spiritual guide and aspired to a high character for sanctity. He is even said to have offered all his territories to Rāmdās Svāmi. The Svāmi had no need of lands but asked

Shivaji to use the colour of his clothes in the Bhagava Zenda or Saffron Banner."

16. Vide p. 66 of Tritiya - Sammelan-Vitta (1916), B. I. S. Mandal, Poona — Papers of the Bondhle family, ed. by B. V. Bhat — '' अंगरेजास विलायतचा हुकुम आला म्हणजे मसलत सुरु होईल तुम्ही जरिपटक्या विषई अर्ज सांगीन पाठविलात त्यास पंढरपुरपायेतो मुलकाचा बंदोबस्त करोन चाकरी बजाऊन दाखविण फितुरीयाचा फीज तुम्हावर आह्यास ताराज करणे म्हणजे तुम्हास जरिपटका सरकारात्न बहालच केला जाईल'', Of. Surendranath Sen: Administrative System of the Marathas (1925), p. 689— (Reward for military Services):—''Aftagir was conferred by Shivāji on his generals and officers of lesser rank as early as the seventeenth century. Similary the honour of carrying Jari Patākā, the golden standard conferred on distinguished Maratha generals, was also quite in accord with the Mughal custom."

17. Published by Vad and Parasnis. - page 79.

" हत्ती जरीपटके हुजूरचे नेले आहेत ते हुजूर पाठवाने कलम ? लढाईत गेले त्याचा ठिकाण नाही।"

This document is dated ' इसके समानीन मया व अलफ ' (= 4.D. 1782).

A clause in this agreement provides for the restoration of this Jari-patka but the opposite party is unable to restore it as it was lost on the battle-field and could not be traced.

- (3) c. A.D. 1770 In the Keladinrpavijaya 18 of Lingana Kavi the following flags are mentioned:—
 - (i) Yellow flag Symbol of the Patshahas of Bhaganagar.
- (ii) Do Nizam Patshah.
 - (iii) Red flag -- Barid Patshah (of Bedar).
 - (iv) " उपरण्याचे निज्ञाण "- Hasan Gangū Bommanna Patshah.
- (4) A. D. 1673 Jayarāma Kavi in the Parnālaparvatagrahaṇā-khyāna¹⁹ or the story of the capture of the Panhāļā fort near Kolhapur describes Shivāji's visit to the temple of the goddess Bhavānī on the Pratapgad (Ch. IV, 24). This temple was adorned with flags (पवाकाशिः अवस्ता). This poem describes the visit²o of Shivāji to Rāmdās Svāmi but it does not refer to the current tradition about the Bhagavā Zenḍā viz. that Rāmdās Svāmi asked Shivāji to use the colour of his clothes for his banner.

Kavindra Paramānanda who composed his Śivabhārata by order of Shivāji between A.D. 1661 and 1674 informs us that at the age of 12 Shivāji was despatched by his father Shahāji to take charge of the province of Poona (X, 23—पुण्यदेशाध्यस्य ज्ञाह: ज्ञियमयोजयन्). At this time

^{18.} Šivacaritra-vrttasamgraha, P. B. Desai, B.I.S. Mandal, Poona, 1988 (Kānadī Vibhāga, Khanda I).

^{19.} Ed. by S. M. Divekar with Marathi Translation, B.I.S. Mandal, Poons, 1923, p. 28.
20. Ibid., ch. IV, vv. 16-20:—

[&]quot;ततः पौलस्यनगरे परमानन्दनन्दितः।
रसेस्तु पञ्चदशिमः कवीन्द्रैवीधितीर्द्वैजः॥ १६॥
गीयमानं यशः स्वीयं श्रुत्वा श्रुत्वा श्रनः शनैः।
नरयानादवातीर्थं चतुःशालं मनोरमम्॥ १७॥
मन्दिराम्यं समासाद्य एक एवाव्रगोऽभवत्।
गोस्वामिचरणद्वंद्वं नन्दयामास मन्दिरे॥ १८॥
गोस्वामी च ततस्तस्य हस्तं विन्यस्य मस्तके।
पूर्णसाम्राज्यदात्रीभिराशीर्भिः पर्यतोषयत्॥ १९॥
यथोचितानि वस्त्राणि स्लानि विविधान्यपि।
विन्यस्यामे स नृपतिर्नमस्कृत्य पुनः पुनः॥ २०॥
प्रययो सैनिकः सार्षं पौरानानन्दयञ्चनैः।"

[&]quot;Gosvāmi " in the above verses refers to Svāmi Rāmdās.

he was provided with all the paraphernalia91 of his office including tall flags (धवजे: उच्चे:), but we have no means of visualising the colour of these flags. 21. Śivabhārata, ch. X, 25-27 : —

" ततः कतिपयैरेव गजवाजिपदातिभिः। मीलैरामैरमात्येश्च ख्यातैरध्यापकैरपि ॥ २५ ॥ बिरुदेश ध्वजैरुबैः कोषेणापि च भूयसा । तथा परिजनैरन्यरनन्यसमकर्मभिः ॥ २६ ॥ समवेतमम् शाहभूपतिदशोभने दिने । प्राहिणोत्पुण्यदेशाय पुण्यकारिणमात्मजम् ॥ २७ ॥ "

Since this article was sent to the press Mr. S. N. Joshi of the Bhārata I. S. Mandal, Poons, has published a note on the Management of Rayagadh fort in later Peshwa times (pp. 155-200 of B.I.S.M. Quarterly, XX, No. 8-January 1940). In this paper Mr. Joshi gives details of the dead-stock on the fort at the beginning of A.D. 1773 and the expenditure incurred on the upkeep of the guns, the royal throne, the outposts, piquets, guards, buildings, office establishment, patroling, national flag, holiday functions, worship of the deities, the contigents of soldiers etc. during the period 1778-1815 A.D.

The entry about the national flag (nifana) is found on p. 189 in a list of A.D. 1813. It shows the expenditure on " Jot " cloth and " Kao geru " and oil for painting the flag. In the Śwakawya composed in A.D. 1821 by Purusottama the Bhagawa Zenda is called "Gairikakta pata" or cloth besmeared with red-chalk (Gairika) colour. This Gairika is identical with " Kae geru " colour mentioned above. Purusottama (born A.D. 1756 and died 1856) describes the meeting of Rāmadāsa and Shivaji and Rāmadāsa's giving the Bhagavā Zendā or " gairikākta pata " to Shivaji :-

" गैरिकाक्तपटाछनं स्वजं दत्तं प्रगृह्य सः । यं यं देशं ययौ राजा स स देशो वशोऽभवत ॥ २३ ॥ "

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(The Siva-khoya is published by K. N. Sane and J. B. Modak in Kavyetihasasamgraha - 1884-87. A MS of this kavya is in the Bhandarkar Oriental Research Institute - No. 81 of 1907-1915). NAME THAT I WE BOUNT THOSE OWN RESERVED PROFITER OF THE

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Between A. D. 1685 and 1818

9. The Bhagva Zenda Of The Marathas'

In my paper 1 on the " Parijātā-dhvaja of the Marātha King Sambhāji" I recorded the following references to the Maratha banner:-11 69 11 383

UEL TI

- (1) A. D. 1685 Hari Kavi Courtpoet of King Sambhaji, the son of Shivaji the Great, refers to Sambhaji's banner as " पारिजात-खन" in two verses of his Sambhurāja-Carita.
- (2) A. D. 1776 Reference to "जरि-पटका" in a letter dated Saka 1698. The Jaripatka was conferred as a mark of honour on the Maratha generals.
- (3) A. D. 1782 Reference to चरि-पटका lost on the battle field. A clause providing for the restoration of Jaripațkā found in an agreement between two parties.
- (4) c. A. D. 1770 References in Keladinrpavijaya of Lingana Kavi to the yellow flags of the Patshahas of Bhaganagar and Nizam Shah and red flag of Barid Patshah (of Bedar).

I tried to prove that the पारिवातस्वज mentioned by Hari Kavi was identical with Bhagava Zenda or the orange-coloured flag of the Marathas as it is known to-day. This suggestion was accepted by many scholars but in the absence of any other early reference to the Maratha banner indicative of its colour I could not effectively clarify the doubts of certain friends as regards the colour of the Maratha banner as used by Sambhaji.

there Hage,

I propose to record, therefore, some further evidence regarding the Bhagva Zenda of the Marāthās, which clarifies the meaning of the term " पारिकात-खज" used by Hari Kavi in A. D. This evidence is as 1685. follows:-

A. D. 1739 - In the accounts of Shahu Chhatrapati, Son of Sambhāji published in the Peshwa Daftar Selec-

^{*} Journal of S. M. Library (Tanjore), Vol. III, pp. 1-8

^{1.} Vide Indian Historical Quarterly, XVI (1940), pp. 40-47.

Sardesai, we find some accounts pertaining to the Campaign of Bassein of A. D. 1739. ² In these accounts the entry for 22nd May 1739 mentions the expense for hoisting the flag of victory after the conquest of Bassein. This expense includes the following items:—

Rs. 27-6-9- Materials for worship etc., 2-5-0-cloth for preparing the flag (Zendā) and dying it by the use of gerā and oil as specified below:—

2-0-0 ger \bar{u} = weight 5 sers. 0-5-0 oil = weight 1 ser. 2-5-0

It appears from the above entries that 10 pieces of Khādi cloth were purchased and dyed in the colour prepared by mixing gerā and oil so that the colour may be fast and deep. As new (Sans. new) means red chalk

or othre the colour produced by its mixture with oil is the celebrated Bhagava colour, which is used by the Sanyasis for their clothes. Evidently the association of this colour with Sanyasis later gave currency to the story about the presentation of Bhagavā Zendā by Saint Rāmdās to Shivaji the Great. Whatever be the truth of this story the fact remains that the Maratha flag described as " पारिजात ध्वज " in A. D. 1685 is identical with the ' भगवा संदा' hoisted up as a flag of victory after the memorable Bassein Campaign of A. D. 1739. It is also identical with the "गैरिकाक qz" supposed to have been given to Shivāji the Great as described later in A. D. 1821 by Purusottama Kavi in his Sivakāvya in the following verse: -

' गैरिकाक्तपटाच्छन्नं घ्वजं दत्तं प्रगृह्य सः । यं यं देशं ययौ राजा स स देशो वशोऽभवत् ॥' ॥ 28 ॥

In a list 8 of A.D. 1818 we find

22-5-1939- "वसई फते जालियावरी निशाण चडले त्यास खर्च रू ॥
२७। ♥ ॥ छ २५ र ॥ पुजेस सामान वैगेरे
२। ८ छ १७ गो झंडा करावयासी खाद्या १०
खाद्या रंगाई बद्ध खर्च
२ गेरू वजन पके ४४।
।÷ तेल वजन पके ४४।
३। ÷॥ "

Peshwa Daftar Selection No. 30 — Miscellaneous Papers of Shahu and his First Two Peshwas 1983, p. 357.

^{3.} Vide p. 189 of B. I. S. M. Quarterly, Poons, XX (1940) No. 3, Mr. S. N. Joshi's note on the management of the Rayagad fort.

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A. Vale p. 131 d. R. C. M. Control Down T.S. (1910) No. 5, No. 5, N. Soddiy nelvons

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the method of preparing Bhagavā Zeṇḍā repeated, as in this list the articles used for such preparation are (i) "jot" cloth, (2) "Kāw geru" and (3) oil. It is clear, therefore, that the method of preparing the national flag in the 17th

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and 18th century remained unaltered and continued even in the 19th century. In view of this continuity it may be reasonable to identify the परिजातच्या of Sambhāji with the समवा झंडा of Shahu hoisted at Bassein in A. D. 1739.

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10. The Indian Bullock-Cart : its Pre-Historic and Vedic Ancestors *

Mr. W. L. Murrell, Superintending Engineer, Bihar, in his paper on " Roads in India and Australia-Our difficulties and some suggestions," presented before the last Roads Congress Session makes the following remarks 1 about the Indian Bullock-Cart :-

" Even greater than the difficulty of funds is the intolerable dictatorship of the steel tyre of the Indian Bullock-Cart. This survivor of the Dark Ages in India is chiefly responsible for the complete stagnation of the development of our road technique and it is the steel tyre 2 that (if allowed to persist) will throttle the development of Agriculture, education and whatever goes to make a nation great." Leaving engineers to settle the question of betterment of Indian roads by means of their road technique and the replacement of steel tyres by pneumatic rubber tyres, I shall record here some information about the bullock-cart in India and its antiquity in the light of literary and archaeological evidence.

According to the Encyclopaedia Brittanica 8 which has some remarks about the Primitive Vehicle " the earliest type of vehicle was the sledge, having no wheels and mounted on runners. From the sledge was evolved the rude cart with wheels made of wooden discs used for agricultural and other purposes for many centuries with few modifications. Such carts are still to be seen in Spain. Portugal and Mexico drawn by a pair of yoked oxen." We are further told that the requirements of war 4 and hunting had a marked effect on the general design of the vehicle. About 1500 B. C. we find the Egyptian⁵ two-wheeled chariot in a high state of perfec-

^{*} The Poona Orientalist Vol. V. Nos. 2-3 pp. 144-151.

^{1.} Vide p. VI of New Review (Calcutta) August 1940 where these remarks are quoted.

^{2.} I have not examined the possibility of Ancient Carts or Charlots, possessing steel tyres which now characterize the bullock-carts. If the existence of these tyres is proved by archaeological and literary evidence Mr. Murrell's criticism about them would be justified. It appears to me that the ancient chariot in India, Egypt etc. was entirely at the mercy of bad roads and hence the Vedic poet invoked the aid of the Gods Indra and Vanaspati in the Rgueda, III, 58 (18-20). We must first prove that the steel tyre of the Indian bullock-cart of the present day is really a survivor of the so-called " Dark Ages in India " referred to by Mr. Murrell.

^{8.} Fourteenth Edition (Vol. IV) 1929, Page 928-article on Carriage. See also article on Cart (p. 935).

^{4.} Compare the Epic war-chariot to which I have referred at the end of this paper.

^{5.} Vide Egyptian Wall Paintings of the Tombs and Palaces of the XVIII and XIX Dynastics (1600-1200 B. C.) by Ambrose Lansing, The Metropolitan Museum of Art,-New york, (Continued on next page)

tion while the chariots of Assyrians, Greeks and Romans were the first carriages known to us.

In the above remarks about the earliest type of vehicle no reference is found to the evolution of the Indian bullock-cart from remote antiquity. Whether the theory of the evolution of the rude cart with wheels of wooden discs from the sledge is applicable to the Indian bullock-cart or not, is also a matter for investigation by experts in the field of ancient Indian history and civilization. In view, however, of the present popular interest in bullocks and their breeding for the betterment of Indian Agriculture it is our duty to collect all possible information about the different types of bulls 1 known to ancient India from literary and archaeological sources. We must also reconstruct from fragmentary data the history of the Indian bullock-cart which had so much to do with Indian Agriculture from the remotest antiquity.

Page 15—The Tomb of Ken-Amün (No. 98) about 1480 B.C.—Nos. 47, 48—New year's Gifts scene "The Chariot is interesting for its inscription "The Chariot of his mojesty, "The Syrian by name". Its wood was brought from To-nuter in the country of Naharla. "The Chariot was a novelty in Egypt and the Egyptians still made it of wood imported from Asia. A bow, a mace, and a poniard, a coat of scale armor, and elaborately decorated quivers were included among the gifts."

The Tomb of User-Het (No. 56) - about 1480 B.C.

61. Hunting from a Chariot. Egypt had not known horses or Chariots until the invasions of Hykees and their early use by Egyptians was naturally in war. Here, however, User-Het has gone out hunting in his Chariot and is creating havoc among the desert animals. The scene is unfinished, as may be seen not only by the omission of details but also by the blank columns where the inscription should be,

The Tomb of Huy (No. 40-about 1855 B. C.-No. 103-" Furniture, shields and a Chariot."

1. Vide p. 28 of Mchenjo-daro and the Indus Civilization by Sir John Marshall, Vol. I, London, 1931—" From the abundant remains of the humped Indian bulls met with in avery stratum of the site (most of them, be it said, of young animals) it is evident that the Indus valley must have been specially rich in this fine breed of cattle, which was closely allied to, if not identical with the magnificent white and grey breed still common in Sind, Northern Gujarat and Rajputana, but wholly different from the small humped cattle of Central India and the Dekkan. To what a pitch these magnificent creatures had been bred at this remote period may be gauged from the life-like engravings of them on seals 329-40 one of which is reproduced on the front cover of this volume. — Besides the great humped cattle there was also a smaller short-horned and humpless species which is not infrequently represented among the terra-cotas of this period, both in the Indus valley and Balucistan but of which no actual bones or horns have yet been identified."

In foot note 1, Marshall states that the humped bull must have been common at this time in Balucistan and appears to have been known in West Persia and Mesopotamia (Cf. Ch. XVIII, p. 347) but whether the breed in these countries was the same as in Sind it is not possible to determine. He rejects Colonel Sewell's suggestion that these humped cattle were posterior to the sheep and buffalo as the seals and other objects depicting these animals are found indiscriminately at all levels.

As the Mohenjo-daro Civilization is pre-historic and as it is the oldest known civilization of all civilizations that were nurtured by the Indian peninsula, its evidence regarding the bullock-cart must be treated with some deference in all investigation about the antiquity of the Indian bullock-cart. Fortunately for us the clay-models of toys discovered at Mohenjo-daro include clay-models of carts also along with those of other toys in which birds etc. are represented. The remarks 1 of Sir John Marshall regarding these clay-models of toys and in particular about the toy-carts are as follows: - " Birds might be mounted on wheels and oxen might be yoked to toy-carts (Plate CLIII, No. 24). These little toy-carts are particularly interesting as being amongst the earliest representations of wheeled vehicles known to us, approximately contemporary, that is to say, with the Chariot2 depicted on a stone slab at Ur (about 3200 B. C. according to Mr. Wooley) and the model of a wagon from Anau (See infra Chap. XXVII, pp. 554-5)."

" The toy-carts from Mohenjo-daro are all of terra-cota and for the most part of the type shown by Mr. Mackay on Plate CLIV where they are compared with the modern farm-carts of Sind. There is a specimen however, from Harappa made of copper which seems as if it might rather have resembled the present-day ekka. No doubt many other children's toys were made of less durable materials than terra-cota, and have peri-

shed in the course of ages."

The Copper-cart referred to Marshall in the above remarks is described 3 as follows :-

" Among other objects found a peculiar interest attaches to a very fragmentary two-wheeled miniature copper-cart (Plate XXIII d). The axle, wheels, and the animal 4 which were originally attached to it are mis-

1. Vide p. 39 of Mohenjo-daro etc., Vol. I, 1981.

^{2.} Cf. a sculptured relief of an Assyrian War-Chariot of about 650 B. C. in the Louvre (p. 56 of Oxford History of the World by Davies, 1987). This Charlot has two wheels (with axle and spokes) and an open box in which we find four men, one of which is the driver holding the reins of the horse yoked to the Chariot. By the side of the driver we find a man shooting an arrow from the bow in his hand. The remaining two men are shown with shields of a circular type in their hands. On p. 160 we find a photo of an Etruscan Chariot which is bronze-work (in the Metropolitan Museum, New York). This Chariot also has two wheels with axle and spokes, and a long pole with yoke, the two ends of which are curved downwards to fit the necks of animals to be yoked to it. The Chariot is occupied by two persons. On page 184 a picture of a Roman Charlot race from a Roman Mosaic in Britain is given. Here we find four two-wheeled Chariots in motion, each drawn by two horses. These races were very popular in ancient Rome.

^{8.} Vide p. 105 of the Report of the Arch. Survey of India for 1926-27 - Exploration at Harappa.

^{4.} Was this animal a bullock or a horse?

sing. The cart is open, front and back, provided with shafts and relieved on the gabled roof and sidewalls with lozenge and cross-shaped patterns. The driver is seated in front on a raised seat."

The foregoing description about the two-wheeled carts represented by a clay-model and a miniature copper-model found at Mohenjo-daro and Harappā respectively eatablish beyond challenge the existence of two-wheeled vehicles in these two regions in pre-historic times. Whether these two-wheeled vehicles were evolved from sledges in earlier on Indian soil as suggested by the writer in the Encyclopaedia Britannica with respect to European civilization we cannot say at present.

Let us now record some evidence regarding the two-wheeled vehicle from some literary sources connected with the Aryan Civilization. In the Rgveda, the earliest record of the Aryan race, there are numerous references to bulls, cows, buffaloes as also to cars and chariots. The best reference for our present purpose is furnished by Sūkta 58 of the Third Mandala of the Rgveda. This Sūkta or hymn contains practically a terminology for the different parts of the Chariot and its equipment as follows:—

- (1) The Chariot is called स्यम्दन.
- (2) It was made of the timber of the खदिर tree and the दिश्यपा tree.
- (3) It was a means of travel and hence is called याम.
- (4) It was drawn by two bulls (বাৰী) which are also called by the word অনত্ত্ব.

Vide Index to the Translation of the Rgveda by Griffith, Vol. I. 1896, pp. 10, 13, 109, 261, 275, 144, 281, 287, 375, 612, 644 and Vol. II, (1897) pp. 228, 303, 851, 860, 168.

See also Mr. G. T. Date's Art of War in Ancient India (1929) Chapter V on War Animals and War Vehicles, (pp. 43-51), Mr. Date describes the Charlot of Vedic Aryans with following particulars:—

(1) Two wheels, (2) a rim (pavi), (3) a felly (pradhi), spokes (arā), nave (nābhi). The rim and felly constituted the nemi. The hole in the nave was called Kha into which the end of the axle was put. Solid wheels were sometimes used. The axle (aksa) was made of arāta wood and the body of the Chariot (Kola) was placed above it. There were seats for warriors (vandhura or garta.) Ordinarily there was a pole, one end of which passed through the yoke, the other being attached to the axle. The pole and yoke were tied together. The yoke was placed on the necks of horses. Raimi or Raimā means reins and Kāia denotes a whip. Two horses were commonly used. Sometimes three or more were also employed. A poor man had to be content with one horse which then ran between two poles. The pole was a hundred and eighty eight anguls long, the axle a hundred and four and the yoke, eighty six. Besides horses, asses (gardabha) and mules (aivatari) were also used to draw the Chariot. (See Vedic Index by Keith and Macdonell, pp. 201 ff.).

Mr. Date states further that the Epic Chariot did not materially differ form the Vedic Car. He then describes the Epic Chariot on p. 47.

(Mr. Date does not refer to the Syandana or Charlot drawn by bulls described in Sukta 53 of Mandala III of Rgveda. Perhaps the Horse Charlot was used as a war-vehicle while the bullock Charlot was meant for ordinary travel.)

- (5) Its axle is called war. and as posterous and as appropriate contains
- (6) Its pole was called squ.
 - (7) Its yoke is termed you.
 - (৪) Its fellies are denoted by the word স্থি.
 - (9) Its yoke-pins are called पात्रहपे which Sayana explains as " पत्तनशील कीलके" because they were liable to slip out.

The Vedic poet, the author of this hymn, invokes god Indra and Vanaspati or the "sovereign of the wood" to keep the Chariot and its parts in good trim so that the traveller may reach his home safely without any mishap on the way. 1

The detailed information about the Chariot recorded above is found in verses or Rks² 17, 18, 19 and 20 of Hymn 53 of Mandala III of the Rgveda and it gives us a vivid idea of the two-wheeled vehicle current in the Vedic age. References to the Chariot in later ³ Sanskrit literature

" सोऽधस्तात् शकटस्य पामानं कथमाणम् etc. "

^{1.} The safety of travellers in the Vedic Chariot was of course greater than that now furnished by our motor lorries and seroplanes and still the men of the Vedic age invoked the gods for their safety in travel. The prayer of modern travellers, if at all they think of safety, is that the driver is not in a drunken state or the pilot has the necessary license for his ability to pilot his passenger-plane safely.

I reproduce below the translation of these Rks as given by Griffith (p. 875 of Vol. I):—
 17. Strong be the pair of Oxers, firm the axles, let not the pole slip nor the yoke be broken.
 May Indra keep the yoke-pins from decaying; attend us thou, whose fellies are un-injured.

^{18.} O Indra, give our bodies strength, strength to the bulls who draw the wains.

Strength to our seed and progeny that they may live, for thou art he who giveth strength.

^{19.} Enclose thee in the heart of Khayar timber, in the Car wrought of Sisapa put firmness.

Show thyself strong, O Axle, fixed and strengthened, throw us not from the Car whereon we travel.

^{20.} Let not this Sovran of the wood leave us forlorn or injure us.

Safe may we be until we reach our homes, and rest us and unyoke."

We can imagine from the above description of a Chariot in motion the mental condition of persons travelling in it. The experience of these Vedic users of this bullock-chariot without springs or spring-cushions must have been practically the same as we get while travelling in a bullock-cart to villages not so much on P. W. D. roads as on Local Board roads. We now invoke the aid of the Engineers at *Indraprastha* (Delhi) to provide a pattern of the bullock-chariot which would ensure ease and comfort to the Indian villager.

^{3.} The Chandogya Upanisad which was composed before Buddha and Panini (Winternitz: History of Indian Literature I, p. 236) refers to NAZ or Car:--

⁽p. 184 of Anandashram Series No. 14 of 1890) সা. ব.— IV. 1. 8. The Makabhasya of Patanjali contains numerous references to হাক্ত (হাক্ত, হাক্তেনার্থ, হাক্তি, হাক্তিন্ , হাক্তিন্ত , হাক্তিন্ , হাক্

are too numerous to be recorded in this paper, which is confined to the Indian bullock-cart in its earliest form. In the Buddhist literature as also in the early Jain literature there are plenty of references to the vehicles which are worth studying with a view to see what types of vehicles and their equipment were in vogue in the post-Vedic period upto the beginning of the Christian era.

Mr. G. T. Date 1 refers to the oldest Indian war-car as represented in the paintings of a Sumerian King 2 who reigned in 1495 B. C. He observes that this chariot 3 closely resembles the two-wheeled car found in the Sanchi bas-reliefs drawn by two horses. On the railing of the Barhut 4 Stupa also we find a four-horse Chariot. These are representations of cars drawn by horses and not by bullocks and hence do not enable us to visualise clearly the pattern of the ancient bullock-cart as such which may have been current in those days and used for agricultural purposes. 5

The use of charlots in the Mahabharata was very common. These charlots consisted of two wheels only (" द्वाविश्वनी द्वे रथस्मपि चक्रे" — Vanaparvan). Vide page 510 to 524 of महा-भारताचा उपसंहार by C. V. Vaidys, Poons, 1922, on p. 518. Mr. Vaidya gives description of Rathae (रथन्णेन) some points from which I note below :--

(1) The Epic Charlot was drawn by four horses.

(2) The Chariot as well as the horses were well decorated,

(3) The Chariot had a top (resembling a temple dome) which held a fluttering flag bearing characteristic colour and symbol of each warrior.

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This is a typical war Charlot and it presents a vivid contrast to the Vedic bullock-drawn cart or Chariot referred to in Egecda, I, 53 (18-20).

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- 4. The Barhut Car has four horses yoked in one line. Mr. Date states that "Charlots are engraved on the terra-cota plaque from Bhita and the Copper lota from Katu (Indo-Ary. p. 889). Like the Sanchi Car they are open on all sides, "
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11. Carriage-Manufacture in the Vedic Period And in Ancient China in 1121 B. C.*

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- (1) Ratha meant in the Rgveda and later a 'chariot' as opposed to anas (cart) though the distinction is not absolute. Of differences in the structure of the two we have no information, except that the Kha (nave hole) in the wheel of the chariot was greater than in that of the cart.
 - (2) As a rule the chariot had two wheels (cakra).
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 - (6) The end of th axle was inserted into kha.
- (7) The term and may denote the extremity of the axle that was inserted in the nave or the lynch-pin used to keep that extremity in the wheel.
- (8) Sometimes a solid wheel was used.
- (9) The axle (akṣa) was in some cases made of (araṭu) wood, and round its ends the wheel revolved.
- (10) The axle was attached to the body of the chariot (kośa,), which was also called Vandhura meaning the "seat" of the chariot.
- (11) The chariot of the Asvins is called "tri-vandhura" and "tri-cakra" i. e. a chariot with three seats and three wheels. Zimmer, however, considers such a chariot as purely mythical.
- (12) Garta denoted the seat of the warrior.
- (13) The pole of the chariot (işā, prauga) was at right angles to the axle. Normally there was one pole on either side of which the horses were harnessed.
- (14) A yoke (yuga) was laid across the necks of the horses. The pole was passed through the hole in the yoke (kha or tardman) and the yoke and the pole were tied together.
- (15) The horses were tied by the neck (grivā) where the yoke was placed and also at the shoulder, presumably by traces fastened to a bar of wood at right angles to the pole, or fastened to the ends of the pole,

^{*} Annals (B. O. R. Institute); Vol. XXVII, pp. 288-802.

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are too numerous to be recorded in this paper, which is confined to the Indian bullock-cart in its earliest form. In the Buddhist literature as also in the early Jain literature there are plenty of references to the vehicles which are worth studying with a view to see what types of vehicles and their equipment were in vogue in the post-Vedic period upto the beginning of the Christian era.

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if that is to be regarded as of triangular shape, wide at the foot and coming to a point at the tip.

- (16) The words raśmi and raśanā seem to denote "traces." They may also denote the "reins" which were fastened to the bit (perhaps śiprā) in the horse's mouth.
- (17) The driver controlled the horses by reins and urged them on with a whip (kaśa).

(18) The girths of the horse were called kaksya.

- (19) Normally two horses were yoked to the chariot but three or four were also frequently used for this purpose. It is not certain whether the extra horse was attached in front or at the side. Perhaps both modes were in use. Even five steeds were employed.
- (20) Horses were normally used for chariots. Sometimes asses (gardabha) or mules (aśvatari) were also used.
- (21) The ox was employed for drawing carts and in fact derived its name "anadvāha" from this use. Sometimes a poor man had to be content with a single steed which then ran between too shafts.
- (22) In the chariot the driver stood on the right while the warrior was on the left, as indicated by his name Savyeştha or Savyeştha (The Greek notices speak of two warriors and a charioteer). He could also sit when he wanted for the chariot had seats and an archer would naturally prefer to sit while shooting his arrows.
- (23) The dimensions of the chariot are given in the Sulba Sutra of Apastamba at 188 angulis (finger-breadths) for the pole, 104 for the axle and 86 for the yoke.
- (24) The material used in the construction of the chariot was wood, except for the rim of the wheel.
- (25) Many other parts of the chariot are mentioned such as Anka, Nyanka, Uddhi, Pakṣas Patalya, Bhūrij, Rathopastha, Rathavāhana but their names are often obscure in meaning.
- (26) The Vedic Index further records the following terminology connected with Ratha (chariot):-

Rathakāra - Chariot-maker. In the Atharva-veda the Rathakāra already forms a caste,

Ratha-grsta - Skilled charioteer.

Ratha-cakra - Chariot wheel.

The chariot used at a bridal procession was made of Salmali wood (Rv. X, 85, 20). In Rv. III. 53 the chariot (syandana) is said to be made of the timber of Khadira tree and the Simiapa tree (vide my paper on "The Indian Bullock-cart: Its Vedic and Pre-historic Ancestors" in the Poona Orientalist, Vol. V, pp. 144-151).

Ratha-carsana - perhaps means ' pathway of the chariot. '

Ratha-jūti-"driving swiftly in a chariot" or a proper name.

Ratha-nabhi - nave of the chariot wheel.

Ratha-mukha - fore-part of a chariot.

Ratha-vāhana - A movable stand to hold a chariot. The Greeks had such stand on which the chariot rested when out of use.

Ratha-śirsa - The head of the chariot.

Ratha-sanga - Hostile encounter of chariots.

Rathakşa - Axle of the chariot.

Rathahnya - A day's journey by chariot.

Rathin and Rathi - One who goes in a chariot (both the driver and warrior).

Rathitara - " good charioteer ", name of a teacher.

Rathestha - Car-fighter.

Rathopastha - the bottom of the chariot on which the driver and the fighter stand.

The foregoing information about the chariot of the Vedic Aryans shows clearly the wide-spread use of the chariot during the Vedic period, for which the lower limit according to Macdonell is 500 B.C. and the upper limit is "not much earlier than 1200 B.C." The references to chariot-terminology collected in the Vedic Index are very interesting as they show the art of chariot-manufacture in a sufficiently developed condition. One, however, fails to notice in these references any detailed description of the chariot-manufacture as we find in Kautilya's chapter on "The Superintendent of Chariots" (chapter XXXIII of Book II, pp. 155-156 of Eng. Trans. of Arthaśāstra, 1929). In this chapter Kautilya observes:—

"The functions of the Superintendent of horses will explain those of the Superintendent of chariots. The Superintendent of chariots shall attend to the construction of chariots. The best chariot shall measure 10 puruṣas 1 (= 96 aṅgulas) in height and 12 puruṣas in width. After this model, 7 more chariots with width decreasing by one puruṣa successively down to a chariot of 6 puruṣas in width shall be constructed. He shall also construct chariots of gods (deva-ratha) festal chariots (puṣy-aratha), battle-chariots (Saṅgrāmika), travelling chariots (pāriyā-nika), chariots used in assailing an enemy's strongholds (parapurābhiyā-nika) and training chariots.

^{1.} Meyer interprets that a chariot shall have space for 10 to 12 men.

^{2.} Chariots used for festive occasions, such as coronation etc. Commentary.

He shall also examine the efficiency in the training of troops in shooting arrows, in hurling clubs and cudgels, in wearing mail armour, in equipment, in charioteering, in fighting, seated on a chariot and in controlling chariot horses.

He shall also attend to the accounts of provision and wages paid to those, who are either permanently or temporarily employed (to prepare chariots and other things). Also he shall take steps to maintain the employed contented and happy by adequate reward (yogyarakṣānusthānam)¹ and ascertain the distance of roads."

In the foregoing lines we get some idea about the construction of chariots of different types for different purposes, the war-chariots being of course the main object of the care and supervision of a state officer "the superintendent of chariots." Though Kautilya lays down the measurements of different chariots he does not describe the details of the construction of the different parts of the chariots. One wonders if there existed any treatise on chariot—manufacture prior to Kautilya or posterior to him. Had such a treatise been available we would have known more details about chariot-manufacture in ancient India than what we can gather by collecting together stray references to chariots of the Vedic and the post-Vedic period of Indian history. In the absence of such a special treatise, Kautilya's remarks quoted above have a special historical significance for the history of chariot-manufacture in Ancient India.

Let us now see the progress of chariot-manufacture made in outside countries synchronously with the Vedic period. In this connection I shall record in this paper some evidence of a Chinese text of B. C. 1121, which describes in detail the manufacture of carriages as current in China at this time and even before this date. This text is no other than "The Ceremonial Usages 2 of the Chinese, B. C. 1121," as prescribed in the "Institutes of the Chow Dynasty Strung as Pearls" or Chow Le

Some take this to mean "to keep the employed at a safe distance form the intrigues of enemies" — Commentary.

^{2.} Translated from the original Chinese, with Notes, by William Raymond Gingell, Interpreter to Her Majesty's Consulate, Foo Chow Foo, London, 1852. Lin Kow Hwale, the teacher of the Translator has added a Preface to the Translation, from which I note some particulars:—(1) England had commercial intercourse with China from the beginning of the Ming dynasty (1643). In 1842 a British Consul was established at the Five Ports. Englishmen were allowed to employ Chinese teachers. Gingell went to China from India in a troopship in 1842 and while at Nanking studied Chinese poetry, writings and literature. The Preface was written in 1849.—The Preface by the compiler, Hoo Peih Seang printed in this translation is dated 1797. This Preface states that the Chow & classic originated in 1108 B. C.

Kwan Choo" (being an abridgement of the Chow Le classic by Hoo Peih Seang, designated Mung Chew). Gingell states that his translation affords "some insight into the forms and usages of the Chinese, who are to the present day but little changed from what they were nearly 3000 years ago. Few would give them credit for so much civilization at this remote period." In view of these remarks about the antiquity of the Chinese classic I was tempted to go through Mr. Gingell's translation, keeping constantly in my mind the state of Indian civilization about 1000 B. C. as disclosed by the Vedic and early post-Vedic literature. Among other things the remarks in this Translation about chariot - manufacture or rather carriage - manufacture in China 3000 years ago interested me very much in view of my interest in the history of Indian carriage - manufacture form the Vedic times onwards. I shall, therefore, record below the information about the Chinese chariots and other vehicles as disclosed by Mr. Gingell's Translation. Pages 18-26 are devoted to carriages and banners which "required due distinction" like the "palace dresses and other majestic pomps" of the King.

Page 18 — "The Kin Keu had charge of the orders of government as regards the State Carriage."

- (1) Yu loo was a "gem-ornamented chariot" used on the occasion of offering sacrifice.
- (2) Kin loo carriage was employed on great occasions.
- (3) Seang loo chariot was used when going to audiences.
- (4) Kih loo carriage bound with leather was used on military occasions.
- (5) Muh loo chariot was employed on hunting expeditions. These were five equipages of the King.
- (1) Chung tee chariot was used by the queen when she accompanied the King to sacrifice.
- (2) -- Yeu tee carriage was used by the queen when she visited the King.
- (3) -- Gan Keu equipage was made use of when the queen visited the King in court.
- Page 19 (4) Tee Keu chariot was used by the queen when she went to pluck the mulberry.
 - (5) -- Neen Keu carriage was employed by the queen when she moved within the precincts of the palace.

These were the five equipages of the queen.

— Officers beneath the King made use of —

- (1) Hea Cheun -- a carriage with various colours and carved.
- Nobles used (2) Hea man a carriage painted with various colours but not engraved or carved.
 - High officers used (3) Meh Keu carriages varnished black and not painted.
 - Sze made use of (4) Tseen Keu a carriage with no colour excepting the original colour of the wood.
 - People made use of (5) Yuh Keu a carriage with a box behind for stowing baggage etc.

Thus each carriage had its distinctive uses high or low. Teen loo officer was "inspector of chariots." The Keu poh looked after attendant coaches attached to the war chariots of different varieties. The Jung Yew looked after military weapons and attendants attached to the war-chariots.—The text then mentions several officials with several duties connected with King's chariots.

Page 20 — The most honourable of all was Tae Yue "chief charioteer" who was attached to Yu loo chariot which was accompanied by a special tune when moving slowly, and by a different tune, when moving rapidly; bells on the trappings of horses and on the carriage keeping due unison and time to the tune played.

The foregoing information about the different types of chariots and their distinctive uses shows the highly developed condition of the chariot-manufacture. The following extract is, however, highly informative. It takes a general survey of the principles of carriage-building as it was carried on 3000 years ago:—

"We now come to notice the manufacture of the carriages. The book Kaou Kung Ke states that the yew yu she (Imperial Title of Shun-2254 B. C.) esteemed pottery.

The Hea how she (Imperial title of Ta Yu-2204 B. C.) delighted in handi-craft and building; and the men of the Yin dynasty (1872 B. C.) esteemed house hold furniture. The men of the chow dynasty (1121 B. C.) paid particular regard to carriages. Hence there was a multiplicity of workmen employed in their manufacture. Carriages were in abundance. Taking a general survey of the principles of Carriage—building, it was desirable that the parts of the wheel should be solid, firmly joined, and well fitted, and that the wheel should be exactly rounded, so that it should be light and firm upon the ground: were it otherwise than solid and well joined, it would not be durable; and were it not accurately rounded it would not

revolve quickly. If the wheels were too high, persons would find difficulty in getting into the carriage; and if on the other hand they were too low, the vehicle would weigh and press down upon the horse when ascending a slope. To this end, the wheels of the war-chariot (Jung Keu) were six covids six inches in height; the "hunting carriage" (Teen Keu), six covids three inches and the wheels of the carriage in common use were six covids six inches. Those wheels which were six covids six inches in height had the nave or perforation for the axle three covids three inches high and the flat bottom of the body of the carriage with its two Leang puh (=two pieces of wood on either side, which supported the body of the carriage and under which the axle lay) placed on the top thereof, formed altogether a height of four covids 1 from the ground. The men were in stature eight covids 2 and the steps for getting up and down required to be in due proportion. The Lun jin made the wheels, and the To hue prepared the three materials (for the wheel), a proper season being fixed for the preparation of each. The nave (Kuh) was required to revolve quickly, the spokes to be straight and firm and the outer band of the wheel well braced and durable. On looking at the wheel a little distance off, it was desirable that it should revolve gracefully and smoothly; and when looking at it close, that it should be accurately rounded, and rest lightly on the ground: nothing else was required but that it should be circular. The spokes, viewed from a short distance should appear small and fine; and on looking closer, the ends should exactly fit the outer band of the wheel: nothing else was required but that they should be all set in evenly, and be firm and straight. On looking at the nave at a short distance, the projecting part of it should appear convex, and on close examination its lining, or casing of leather should be evenly and firmaly bound on, without loose edges: nothing else was required but that it should be suitable for speed. On looking at the convex side of the spokes (Kang), it was desirable that the ends which entered the outer band of the wheel should be correctly adjusted; and on examining the ends which entered the nave, that they should be well and regularly set: then, although the wheel might be broken, they would not be distorted (or out of place). The rule followed in cutting the nave was to mark off exactly the ying and yang (male and female) principles of wood. If the nave of the wheel were too small and long, it caused the spokes to be much crowded; and if too large and short,

^{1.} A Covid is supposed to have been somewhat smaller than the one now in use.

^{2.} A Covid is 10 Chinese inches; and 2 covids 6 inches = 1 yard English; so that the stature of the men was upward of 9 feet.

it was unsteady and dangerous. The nave was required to be straight in appearance, and the building evenly put on. When glue was made use of it was required thick; and when sinews were applied, they were twisted many times. When the wheel was required for travelling over marshy places, it was essential that it (the rim of the wheel) should be thin and sharp; and when for hill travelling, flat. The compass was used to determine its true circle, and the square to ascertain distortion. The wheel was suspended or balanced to determine the straightness of the spokes; and it was placed in water to observe if it became equally immersed; and millet-grain was used to measure the holes for the spokes, in order that they should be all of one size; the two wheels were weighed by the balance to ascertain that they were equal.

Hence, to use the compass, apply the square, mark the gravity of water, suspend measure and weigh was denominated Kwo Kung, "excellent work,"

The Keu jin made the carriage commonly in use among the people. The handle of the axe used was three covids long and the nave of the wheel was half of the length of this, or one-sixth. The spokes were one Ko "axe-handle", and a half in length or four covids five inches.

These were the established rules for the large carriage or cart. When this vehicle was required for travelling over marshy ground, the nave was made short, and when over hilly ground, long. For travelling over marshy places, the outer circumference of the wheel was required to be made of wood bent outward on itself (the timber being cut in half); and for hilly ground it was bent laterally or sideways. The wheel was three Ko or nine covids in height, the carriage-box behind eight covids, and the yuen, or shafts were thrice as long as the wheels were high, or twenty-seven covids. This differed from the pole of the small military carriage, as the latter was only fourteen covids four inches long. The space between the poles, or the shafts, was six covids and the yoke was six covids long. This differed from the yoke of the small carriage, which was six covids six inches.

Now the large-carriage shafts were called yuen and the small-carriage pole chow: the yoke of the one (gih), differed from the yoke of the other (Hang); for in the large carriage 2 two shafts were used with one ox between them; hence the gih was shorter, and the space between the

^{1.} That one part was not heavier than another.

^{2.} The large carriage was drawn by one ox, the small carriage by two or more horses with a pole between them.

shafts was necessarily more narrow. The small carriage (see cut) had one pole with a pair of horses on each side of the pole; hence the yoke was required to be long, and the space where they were harnessed broader. Thus the yoke of the large-carriage and the yoke of the small one, although of similar use were essentially different.

The Keu jin made the boby of the carriage and the length of the yoke, or bar, were all six covids six inches. The three were alike; hence arose the saying " of three proportions."

These were the established rules for the small carriages (hunting

Now as regards the fashion of the vehicles. The body of the Tseen Keu " plain carriages " sloped inwards from the bottom to the top: the body of the Ship Keu " ornamented carriage, " sloped outwards from the bottom to top : all that was required to be circular was made so by means of the compass: all that was desired to be square was ruled by the square; all that was required upright was tested by the plummet-line; and the yokes were of equal weight, as determined by their gravity in water. The straight portions were like growing sprouts, and the portions joined seemed part nutran and set of anticular latter out helderens and parcel of the whole.

The chow jin made the poles; the chow served the purpose of the yuen, or shafts; and to this was hooked the Hang of the small carriage to which the horse was fastened: this was fourteen covids four inches in length. There were three modes of making it; and the axle-tree or piece of cross wood on which the wheels were set (chuh) had also three distinct principles on which it was made. The pole for the large horse Kwo ma was four covids seven inches deep in the curve; that for the Teen ma four covids; that for the Noo ma three covids three inches. Thus the pole was curved, but it was desirable that the bend should not be abrupt (like a out heat handle recepbled the Eco constellation bent bow).

Now as regards the shafts of the large carriage. If these were too low, it would have been a difficult matter for the ox to ascend a slope; and if the animal were urged on, it would cause the carriage to upset backwards readily : this would happen from no other cause than that of the shafts being straight without any bend. Hence although the shafts of the large carriage might be exactly of a proper height on level ground, yet on ascending a slope, if they did not press down upon the ox they would lift the animal up: this would arise from no other cause than that of the shafts being straight and without curve. On coming to a declevity, if the shafts were not lifted up from off the beast, the breaching would inevitably

strike against the hind quarters of the ox, from no other reason than that the shafts were straight and without curve. Thus the shafts of the large carriage must also have a curve in them as being highly necessary. The pole of the small carriage required to be firm and tough: were the curve of the pole too deep, it would readily break; and if too shallow, it would press too much upon the horses. If the pole was adapted to the horse's backs. the motion of the carriage was equalized, and the vehicle lasted for a long time. When all these points were attended to, the case of the occupant is secured. The pole was required to be curved without angles (uneven points) and the grain of the wood to be continuous and unbroken. In front was the horse, which had to be considered and behind sat the man, who likewise claimed consideration. After a whole day's travel the attendant would then be untired; the horse, although he had passed over a thousand le, would not be jaded; and the clothes of the charioteer would not be rubbed or worn, even after a whole year : this from all being well adapted. On requiring the horse to put forth his strength in ascending a hill, the pole would be an assistance to him when his strength became exhausted.

The bottom-board of the carriage was square and in this respect resembled the earth (alluding to the four cardinal points). The covering or umbrella above was circular, and resembled the heavens. The spokes of the wheel were thirty, corresponding with the days of the month, and the ribs of the covering were twenty-eight in number, agreeing with the twenty-eight constellations. The Lung Ke had nine pendant streamers and resembled the Ta ho constellation; the Neaou yu bird ensign had seven pendant streamers, and resembled the Tun ho constellation; the Heung Ke had six pendant streamers, and resembled the Fa constellation, Kwei shay, tortoise and snake flag, had four pendant streamers and resembled the ying ship constellation, and the Koo sing, or curved banner, with its bent handle, resembled the Koo constellation."

The foregoing long extract amply shows the advanced stage of carriage—manufacture in China in B. C. 1121. The mechanics of carriage—building, so graphically described in the above extract has, I believe, no parallel in Sanskrit literature of the Vedic and post-Vedic period though the Arthasastra makes some approach to this question by enumerating different kinds of chariots and their measurements. In the absence of any such description about the Vedic chariots we cannot understand the mechanics of the vehicles. If the date 1121 B. C. for the Chinese classic from which we have taken the above extract is correct, we have to observe that the Chinese development of the art and mechanics of carriage—

manufacture had no contact with the development of the Vedic chariot. Scholars tell us that "the earliest story of Sino - Indian contact 1 is connected with Emperor Hiao - Wu (140-80 B. C.) of the early Han Dynasty" and the " starting point of Sino - Indian intercourse is generally put at A. D. 64."2

In his recent book on "War in Ancient India" Prof. V. R. R. Dikshitar has recorded some valuable information 3 about chariots, from which I note below a few points:-

- (1) The chariot was an indispensable instrument of war in the days of the Vedas.
 - (2) Originally the warrior was his own charioteer.
- (3) For the first time the Aitareya Brahmana mentions a charioteer as distinct from the warrior.
- (4) The Taittiriya Brahmana mentions chariot makers or rathakaras.
- (5) The Mahabharata mentions official charioteers similar to the custom depicted in Assyria on the marbles from Nineveh.
- (6) In the 4th century B.C. two warriors are seen in each chariot besides the charioteer (This is testified by Megasthenes).
- (7) The Rāmāyana (yuddha. 106, 16-20) lays down tests for ideal charioteer. and saladay wish as abroom peoples or anotherent
- (8) The Markandeya Purana refers to a warrior versed in eight modes of fighting from a car.
- (9) The Arthasastra refers to Rathadhyakşa or superintendent of chariots. Six varieties of chariots are mentioned. The chariots were twowheeled, four - wheeled 4 and eight - wheeled. The officer in charge of the chariots was to maintain accounts relating to the construction of chariots and other matters.
- (10) Megasthenes refers to Indian chariots drawn by oxen on the march.
- (11) There were chariots drawn by asses, bulls, mules besides those A Do 1978-77 ander the orders of the Manutt drawn by horses.
 - 1. Vide p. 4 of Indian Literature in China by P. K. Mukherji, Calcutta, 1931.

2. 1bld, p. 5.

8. War in Ancient India (Macmillan & Co., 1944) pp. 157-166.

^{4.} Vide Travels of Fa-heien (399-414 A. D.) Trans. by H. A. Giles, Cambridge, 1928, p. 47-Fa-hsien describes a ceremonial car, four-wheeled and of five stories, over 20 feet in height, with silk banners etc., used for the annual procession of images in Magadha (Pāṭaliputra).

- (12) Chariots of different types and materials are mentioned.
- (13) Śukra mentions a chariot of iron. The Harivamśa mentions the iron car of Dānava Talā having 8 wheels, axles and poles. It was 2 miles in length and drawn by 1000 mules.
- (14) From the time of the Epics to the epoch of the Puranas the art of fighting from chariots had developed a high degree of perfection.
 - (15) Each chariot was marked by its ensign and banner.
- (16) Besides flags, umbrellas (chattra, ātapatra) and fans were a part of the paraphernalia of the war-chariot.
- (17) The use of war-chariots declined gradually. In Bana's description of Harsa's army (7th century A. D.) no chariots are mentioned. No chariots are mentioned in the Kuram Pallava grant of 650 A. D. which mentions elephants, horses and footmen.
- (18) In the history of the Cola kings of South India mention is only made of the three divisions of the army but the chariots are not mentioned. This omission indicates that they must have become obsolete by that time.

In the account of chariots given by Prof. Dikshitar no reference is made by him to the Chinese chariots. If chariots had become obsolete about the 7th century A. D. as a regular part of the army we should expect their descriptions in subsequent records as only vehicles for civil use of the King. In fact in Someśvara's Mānasollāsa (Vol. II, G. O. S.) composed about A. D. 1130 we find such a chariot mentioned:—
Page 140—" अवैक्ष्यां में स्थापन क्ष्यां का सुनक्षक स्थानिकत:

सत्तकारणके में व्येखित्रिति परिशोभितः ॥ ५५ ॥ नानावर्णपताकाभिभीजितः सुरदाक्षकः । उत्तमः स्वन्दनो याने नृपाणामिव निर्मितः ॥ ॥ "

This is a description of the King's vehicle with two wheels and drawn by two or four horses. This chariot was not a war-chariot but a sort of carriage for ceremonial and other uses.

In the राजव्यवद्वारकोश composed by Raghunātha Pant Hanmante about A. D. 1676-77 under the orders of the Maratha King Shivaji the Great there is a section called चतुरह्नको (Vide p. 155 of शिवचरित्रप्रदीप, ed. by D. V. Apte and S. M. Divekar, Poona, 1925). In this section, while about

^{1.} The Manasollasa (G. O. S. Baroda, 1989) Vol. II, p. 189, refers to king's vehicles (यान) vin. (1) दोला, (2) सुखासन, (3) हस्ती, (4) करिणी, (5) अश्वतरी, (6) ह्य, (7) रथ, (8) नी:, (9) प्रवक.

5 verses deal with terms pertaining to elephants and about 33 verses are devoted to the horse-terminology. Only the following three lines are devoted to the स्थलाङ:-

"रथशाला तु वाहिलीमहाल इति कीर्तितः। वहिली स्याध्यवहणं वहिल्वानस्तुसारियः॥ गाडा शकट इत्युक्तः प्रतोदष् दुमणी भवेत्।"

Here the स्थ or chariot is included in the चतुरह्नवर्ग merely as a matter of courtesy. It had ceased its function as a fighting unit of the ancient Indian army but was maintained more for pomp than for use as an organized force as we find it in Kauţilya's time.

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12. The Antiquity of the Hindoo Nose-Ornament called "Nath"*

Some time ago the Health Officer 1 of the Poona City Municipality suggested in a communication to the press that Hindoo women should cease to wear the nose-ornament called " nath" because this custom tends to keep the nose unclean and the ornament becomes a nuisance to the health of the wearer. Some controversy raged in the press as a result of the above suggestion. I had then a mind to examine the whole custom historically without suggesting in the least that Hindu women should discard their nose-ornament of whatever shape or value, because such a suggestion may lead to reaction and we may find a revival of the custom in places where it has ceased to keep its hold either on the grounds of economy or owing to educated indifference to excess of ornament. I could not carry out my intention to record the historical references to the nose ornament because of the scattered nature of such references and the difficulty of getting exact chronology for them. As, however, a beginning has got to be made in the interest of our sisters, I shall record in this paper the references gathered by me regarding the nose-ornament without prejudice to the desirability of the continuance or otherwise of the custom now in vogue.

The Indian nose - ornament appears to have attracted the attention of foreigners in the 17th and 18th century. Lt. Edward Moor on the Bombay Establishment of the East India Company, who wrote his Narrative 2 of the British co-operation with Parashuram Bhan Patwardhan

^{*} Annals (B. O. R. Institute), Vol. XIX, pp. 312-334.

The late Khan Bahadur Dr. Kershaw Dinshaw Khambata, M. B. E., L. M. & S., L. R.
 P. S., who was Health Officer to the Poons-city Municipality for many years. Unfortunately he is now no more as he died on 19-6-1936.

^{2.} Narrative of the Operations of Captain: Little's Detachment and of the Maratha Army commanded by Purseram Bhow, during the late confederacy in India against Nawab Tipoo Sultan Bahadur, By Edward Moor, Lieutenant on the Bombay Establishment, Lendon, 1794. Pp. XV + 526. The following particulars about Edward Moor are noted on p. 298 of Dictionary of Indian Biography by C. E. Buckland, London, 1906;—"Moor Edward—(1771-1848) Major: born 1771. Went out to India in 1782. Reached Madras 1783. Served with the Maratha Army against Tipoo, 1790-91 at Dharwar, Doridrug, Gadjnur: Wrote 1794 an account of the operations: officiated as Q. M. G.: Garrison Store-keeper i. c. Commissary General, at Bombay, 1799-1805: retired in 1805: compiled the military orders and regulations: Member of the Asiatic Society of Bengal 1796: F. R. S, 1806: F. S. A. 1818: original Member of the Royal Asiatic Society, which he helped to found: member of other learned Societies: Published his Hindu Pantheon 1810: Wrote Hindu Infanticide 1811; Oriental Fragments 1834; and on India in Cyclopaedia: died Feb. 26, 1848"—The Centenary Review of the Asi. Soc. of Bengal (1784-1883) Calcutta 1885, p. 162, records E. Moor's paper contributed to As. Res. VII, 883 on the Chinchvad Samsthāna near Poons.

against Tipoo Sultan between A. D. 1790 and 1792 and who was a minute observer of men and things not to say an accurate and erudite scholar, makes the following observations on nath in his chapter on Historical and Descriptive Particulars of Canara and the Canarese (Chap. XXI) pp. 288-289:—

"In common with most other sects of Hindoos, the women wear an ornamental ring or jewel in their nose, called in Hindvi nutt. A great deal of money is sometimes expended, and a great deal of taste sometimes displayed, in the execution and design of this favourite appendage, which whatever mere Europeans may think, must be allowed a very becoming, and almost irresistible addition to the nose of a pretty face. This ornament is sometimes, but here not very frequently, affixed to the septum of the nose, but it then assumes a different name and form, and we think, loses all its effect, there not being an equal opportunity of displaying either taste or judgment, as in the circular trinket, suspended in the usual style.

Tavernier 1 says, (Persian Travels, p. 86) the Arabian women bore the septum only for the admission of the ring. "The Arabian women only bore the separation between the two nostrils, where they wear hollow rings, as well to spare cost as for lightness; for some are so big that you may almost thrust your fist through them. Beyond all this, the more to beautify themselves, they make a round ring around their eyes with a certain sort of blacking; and as well men as women, in the desert, put the same near their eyes to preserve them, as they say from the heat of the Sun."

Hanway (Travels in Persia, Vol. I, p. 230) speaks irreverently of the nutt, as it is worn by the Persian ladies, but he was too little of an Asiatic to feel its fascinating effects; and from the unpleasant circumstances attending his journeyings in Persia, it would not be surprising if he were so displeased with everything in that quarter, as to speak irreverently of the ladies also."

The foregoing references from the Travels of Tavernier and Hanway prove that the custom of boring the septum of the nose and introducing a ring into it is of Arabic origin. In the same way the custom of boring one of the nostrils and introducing the nuth into it appears to have been current in Persia as observed by Hanway. From the evidence to be

Tavernier began his numerous journeys in the East in 1632-3. Soon afterwards (1642-8) he returned east-wards and reached India by way of Ispahan (Vide p. 62 of Cambridge History of India, Vol. V. British India (1497-1858) Cambridge, 1929].

recorded in this paper it will be apparent that the existence of the nuth in India and references to it in literature and representation of it in painting and sculpture are associated with the post-Muslim period of Indian history and consequently the conclusion becomes irresistible that the nuth or nose-ring has been imported into India from a foreign source. 1

In a work published in London in A. D. 1832 on the Customs of the Moosulmans of India2 we find the following references to the nose-ring:-

Page 210— While dealing with the Mohurrum Fuqueers "the author states that one of the 47 Fuqueers called "Khogeer Shah" (king saddle) goes along repeating a verse somewhat to this effect:—

"In every lane, in every street,

The heaps of sweetmeats rise;

Nose-jewelled * damsels, not less sweet,

View them with longing eyes"

(* the original expression is "nuth-(or Boolag-)lady")

Page 275 - The Mahomedans perform certain vows and "in the same manner in the name of renowned individuals they put on their children nuthnees etc."

Page xxi of Appendix — "Ornaments worn on the nose. The nose has its share in the decoration of the Hindoostanee ladies and bears several

^{1.} It is a curious coincidence that just when this paper was being drafted Dr. A. S. Altekar's article on " Dress and Ornaments of Hindu Women" (Journal of the Benares Hindu University, Vol. II, 1938, pp. 899-122) should reach my hands and corroborate my view about the foreign origin of the nese-ring worn by Hindu women. I shall indicate some of Dr. Altekar's statements on the subjects :- (1) The nose-ring is a sign of Saubhagya or married bliss, yet in the Natyafastra (28rd chapter) it is not included in the exhaustive listof ornaments of women. (2) Sanskrit poets and dramatists show no acquaintance with the ornament. (8) There is no word in Sanskrit language to denote the ornament. (4) The words natha, nathia, nathni nattha, nathdhag found in Indian vernaculars are derived from the Prakrit word nattha, meaning the nose-string used for controlling an animal. (5) The nosering is not found in the Sculptures at Udayagiri, Bhuvanesvara in Orissa, Bodhagaya, Patna in Bihar, Bharhut and Sanchi in Central India, at Mathura in U. P., at Taxila in the Punjab, at Ajanta, Elora, Badami in the Decean and the Amraoti in the Madras Presidency, though these sculptures show a rich variety of women's ornaments. (6) It is clear that the nose-ring was unknown throughout the whole of India during the entire Hindu Period. (7) Hindu sculptures of Puri and Rajputana of the post-Muslim period begin to show the nose-ring for the first time. (8) The nose-ring seems to have been clearly borrowed from the Mahomedans. "It is a mystery how this ornament of foreign origin should have come to be regarded as the most important insignia of Saubhagya," (pp. 420-428 of the J. B. H. Univ. Vol. II).

^{2.} Quncon-e-Islam or the custom of the Moosulmans of India by Jaffur Shurreef and G. A. Herklots, London, 1832. The copy available to me for reference has the autograph of "F. Edward Hall."

ornaments. Nath-an ornament passed through the left nostril, consists of a piece of gold wire as thick as a small knitting needle, with the usual hook and eye, and furnished at the centre or nearly so, with several garnets, pearls etc. perhaps to the number of seven or more separated by a thin plate of gold, having generally serrated or scolloped edges, and being fixed transversely upon the wire which passes through their centres as well as through the garnets, pearls, etc. The common diameter of the circle of a nath is from one inch and a half to two and a half. On the coast of Coromandel a somewhat similar ornament is worn in each year by men of respectability (called Pogool)" Boolaq - a nassal trinket flat in form etc "

The frontispiece of the above book is a plate showing " An Indian Woman decked out in her jewels" which include among others the Nuth and Boolaq. This plate is dated September 1832.

The above references give us a clear idea about the type of nose-ring

or nath worn by Muslim women about a hundred years ago.

In a work on music called the Samgraha-cudamani by 1 Govindacarya composed before A. D. 1750 or so we find in the list of ragas the names "Nasāmaņi" and "Nasikābhūṣaṇi" in the following line: - 2

मात्र संभावताल " नासिकाभुषणीं मेलाजासामणिरजायत " के स्वामीताल स्वामी

The term Nasamani means a nose-jewel and hence the term has been applied to a musical raga by a metaphorical employ of the word.

In the poem called the Parnalaparvata-grahanakhyana 3 or the capture of the Panhala fort near Kolhapur by Shivaji's men there is a des-

द्रि गुकास्यसंसक्तपकदाहिम्बीजताम् ॥ ३७ ॥ "

The date of composition of this poem is A. D 1673 according the to Editor. The Rajavyavaharakola composed by Raghunatha Pandita for the Maratha King Shivaji the Great has the following verse about the 34:-

(कार्यस्थानवर्गे verse 13)— " नासामणिर्नथोमुक्ताफलंमोर्तीफुलीतितु ।

नासापुष्य, बाहुमणिर्वाजूबंधामिधायकः ॥ १३॥ "

I am thankful to Mr. Y. R. Date, Editor Maharashtra Sabdakofa for drawing my attention to this verse.

In a work called Hamsavelasa by Sri Ham-amitthu (G. O. S. Baroda, 1988) bern in Sameat 1794 (= A. D. 1788) there is a section called " alamkaranopacara (pp. 225-27) in which we find a reference to the nose-ornament as follows :-

(continued on the next page)

^{1.} Adyar Edition, 1938-Vide Intro p. xxxiii-the date of composition is recorded as "not later than the latter part of the 18th century."

^{2.} Ibid, p. 148.

^{8.} Edited by. S. M. Divekar. Vide chapter IV, verse 37 which reads as follows :-

[&]quot; नासामुक्ताफलं यस्या दंतोष्ठद्यतिपाटलम् ।

cription of the image of the goddess Bhavānī at Pratapgad in which the goddess is shown as wearing a nose-pearl or nāsā-muktāphala. It will thus be seen that in Shivāji's time the nose-pearl, which evidently presumes a nose-ring, has entered the sacred precincts of the Hindu goddess Bhavānī, the tutelary deity of Shivāji in spite of the foreign origin of the ornament.

In a Kangra miniature 1 (depicting the adoration of Siva as 'Destroyer' by Kṛṣṇa, Brahma and other Hindu Gods and ṛṣis) available in the Indian Museum, Calcutta, the goddess Pārvatī is shown seated holding Kārtikeya. In this picture by a Rajput artist we find a nose-ring with three or four pearls in the nose of Pārvatī.

In an illustrated Ms of the Bhāgavata Purāṇa 2 from Jodhpur dated A. D. 1648 we find pictures of ladies wearing the nose-ring with three pearls. Edward Terry,3 the chaplain of Sir Thomas Roe who visited India between A. D. 1616-19 gives a very accurate description of male and female costume of the period. He describes the ear and nose-ornaments of Muhammdedan women as follows:-"Round about their ears are holes made for pendants and every woman hath one of her nostrils pierced, that there, when as shee please shee may weare a ring." In the early Deccani paintings described by Dr. Motichandra the women wear silver rosettes on one side of the hair, ear-rings, necklaces, nose-rings (nath) armlets, bangles, and anklets.4

From the 17th century we may now go to the 16th century and record a few references to the nath. In a Ms5 of the commentary of the Kirātār-juniya by Ekanāthabhaṭṭa copied in Samvat 1639 i.e. A. D. 1583 we find

^{&#}x27; ललन्मीक्तिक्युगलोइहसिताभिः अद्देशस्तिभिः नासाभूषाभिः नासिकाः परिष्कृत्य," The women-disciples of the gars are required to present themselves before him in their best attire and ornaments. On p. 274 we find a description of the sportive behaviour of these ladies, one of which is said to be putting her ornaments wrongly on the different parts of her body ("केशपाशे क्रियम क्रयम क्रियम क्रयम क्रियम क्रयम क्रियम क

^{1.} Vide Ganefa by Alice Getty, Oxford, 1936, Plate 9b and Page 34.

^{2.} Vide M. R. Mujumdar's article on this MS in the Navacetana (in Gujarati) June 1988, Calcutta. Some of the illustrations are reproduced in this article. Vide also his Jaina Citra-kalpadruma, Baroda, 1935, Plate C, which contains a picture of Santidaes and Kapurtai is shown with a math in her nose. The date of this picture is Samvat 1685 — A. D. 1629. Vide p. 215 of the volume.

³ Early Travels in India by Edward Terry, pp. 808-209 as quoted by Mr. Motichandra (Vide Bombay Univ. Journal, Vol. VII, Part 1, p. 118).

^{4.} Ibid, p. 114-Dr. Motichandra's article on " Three Deccani Paintings on canvas" in the Prince of Wales Museum, Bombay.

^{5.} MS No. 179 of 1879 80 in the Govt. Nas. Library at the B. O. R. Institute. Poons. The date of copy is recorded as Sameat 1639 and Saka 1505 = A. D. 1583.

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the picture of the goddess Sarasvati in colours wearing a nose-ring with two or three pearls. In South India in the Travancore State some mural paintings1 belonging roughly to the 16th century were discovered some years ago. They have been reproduced by the Archaeological Dept. of the Travancore State in their report for 1934-35. In Plate 2 we find two figures of women wearing naths. In Plates 1 and 3 also we notice in each two figures of women wearing nath. These mural paintings were discovered on the walls of an old palace in the Travancore State.

Evidence of the existence of nath in South India in the 14th century is found in the mural paintings2 on the walls of the Tiruvambadi shrine in the Śrī Padmanābhasvāmi temple, Trivandrum belonging to the 14th century and depicting a music party of women etc. Many of these women wear nose-rings (with three pearls) in their left nostrils as is clear from Plate 4 of the Travancore Archaeological Report for 1986-37.

Dr. Altekar observes that there is no word in the Sanskrit language to denote the nose-ornament. This remark is true enough but we find that the deficiency was made good by later Sanskrit writers by adopting the phrases like "nāsāmauktika" "nāsāgramuktāphala, "nāsāmani" as will be seen from the collection of verses dealing with "Nāsābhūṣaṇa" in the Subhāṣitaratnabhāndāgāra.3 One of these verses is identical with verse No.

Vide Travancore Archaeological Report for 1984-35, pp. 5, 6.

^{2.} Vide Report of Travancore Archaeo. Dept. for 1936 37, dated 15th February 1938, page 1. Vide Plate 1 facing page 6 depicting the "relics of mural painting at Tiruvampadi Shrine, Trivandrum . Page 6-These mural painting are considered to belong to the reign of the Travancore King Aditya Varma Sarvanganatha (14th century A. D.) who was a great patron of art and letters. The Sanskrit inscription engraved in the shrine records that King Sarvanganātha constructed at the town of Syanandura (Trivandrum) the shrine of Krana, the gofala, a mandapa and a dipikagrha in the Saka year 1296 corresponding to A. D. 1374-75. These newly discovered relics comprise mostly figures of women in different kinds of drapery and wearing many varieties of jewelry among which the nath is prominent. In Plate 4, I find about 9 women shown wearing nose-rings with pearls.

^{2.} Edited by K. P. Parab, N. S. Press, Bombay, 886, pp. 485-86.

[&]quot; (नासाभूषणम्)

⁽¹⁾ नासामौक्तिकमवले किमधरविम्बेन विद्रमं कुरुषे। दृष्ट्या गुझाबीजं शिव शिव भूयस्तदेव हसितेन ॥ १२५॥

⁽²⁾ श्रेष्मागारे वसतिर्वातास्मानं तदत्र मायात । आन्दोलनच्छल।टिह निवास्यन्तीव मौक्तिकानि विटान् ॥ १२६ ॥

^(3) सुधामयोऽपि क्षयरोगशानयै नासायमुक्ताफलकच्छलेन । अनङ्गसंजीवनदृष्टिशक्तिमुंग्वामृतं ते पित्रतीव चन्द्रः ॥ १२७॥ (continued on the next page)

3305 quoted in the Śārṅgadharapaddhati¹ composed by Śārṅgadhara son of Dāmodara, grandson of Rāghava and great-grandson of Hammīra Bhūpati

- (4) आकाशात्पतितं पुनर्जलनिष्यौ मध्ये चिरं संस्थितं पश्चाद्दुःसहदेहरत्त्रजनित्ह्हेशान्वितं मौक्तिकम् । बाले बालकुरङ्गलोचनयुगे घोरं तपः संचर-बासाभूषणतामुपैति सस्व ते विभवाधरापेक्षया ॥ १२८॥
- (6) अस्याः कार्मानवासरम्यभवनं वक्त्रं विलोक्यादरा-चिश्चित्येव सुधाकरं प्रिथतमं भूमीगतं शोभनम् । नासामाक्तिककैतवेन रुचिरा तारापि सा रोहिणी मन्ये तदिरहासहिष्णहृदया तत्संनिधि सेवेतः॥ १२९॥ "
- 1. From the six verses quoted above I have been able to identify No. 3— " सुधामयोऽपि... चल:" It is identical with stanza No. 3805 in Śārngadharapaddhati (Peterson's Edition. 1888, Vol. I-Text) There it is mentioned as " वैद्यनाथस्य," This stanza is, therefore, earlier than the date of the author of the Śārngadharapaddhatti.

In Vallabhadeva's Subha-ifavals (15th century according to Keith HSL, 222) we find the

following reference to नासामी।क्तकः --

Stanza 2187 (Peterson's Ed. 1886) -

" आदी मञ्जन वीरहारतिलकं नेत्राञ्जनं कुण्डले नासामीकिककेशपाशरचना सत्कञ्चकं नृपुरी । सीगन्ध्यं करकङ्कणं चरणयो रागो रणन्मेखला। ताम्बूलं करदर्पणं चतुरता शृङ्कारकाः योडश ॥ "

Stanza I605 -

" अस्याः कुशेशयदशः शशिशुभ्रशुभ्रं नासामगीतं नवमै।क्तिकमाचकास्ति । "

Stanza 1504 -

" मुकाफर्ड शशिसमस्य मुखस्य तस्या हेमोर्मिकान्तगतमञ्जति नासिकान्ते । "

-- " पं० जोनकस्य "

Stansa 1506 -

" आश्यानतामुपगतोस्य इचा चकास्ति नासाममीक्तिकमिषादमृतस्य बिन्दुः ॥ "

— " श्री वकस्य "

Stansa 27 -

" नासाये नवमाक्तिकम् "

The above references have been pointed out by Mr. N. N. Das Gupta in his article on "Nose-Ornaments in India" (Calcutta Review. May 1987, pp. 142-144). In this article Mr. Das Gupta refutes the view of Mr. N. B. Divatia (JASB, 1938, New Series, XIX, pp. 67-70) that "we find no mention of the nose-ring in Sauskrit literature, lexicons, included".

of Śākambhari country. 1 Śārngadhara introduces the stanza with the endorsement "Vaidyanāthasya" which indicates that the stanza is a work of Vaidyanātha, a poet of an earlier date. The question now arises what is the date of this Vaidyanātha? Though I cannot answer this question conclusively I can at least push back the lower limit for Vaidyanātha's date from a. D. 1563 to about 1258 a. D. because this very stanza is found quoted in the Sūktimuktāvali of Bhagadatta Jalhana and there also it is stated to be the work of Vaidyanātha (Vaidyanāthasya). 3 Jalhana, son of Lakṣmīdeva was like his father minister of Kṛṣṇa who ascended the throne in a. D. 1247 and to whom the composition of the Sūktimuktāvali, also called Subhāṣitamuktāvali is ascribed. 4 According to Mr. E. Krishnamacharya, the Editor of the Sūktimuktāvali, the work was composed by a physician of the name Bhānu in 1258 a. D. or Śaka 1179 5 for his patron

3. Ibid P. 268-

" सुवामयोऽपि क्षयरोगशान्यै नासाग्रमुक्ताफलकच्छलेन । अनङ्गतंत्रीवनदृष्टशक्ति मुलामृतं ते पिवतीव चन्द्रः ॥ ७॥ " — वैद्यनायस्य

Other verses ascribed to Vaidyanātha Paudita are: — Page 111 — Under बुक्षा-योक्ति - च म्पकः

"कुन्दे कुण्डय कीतुकं त्यज वर्चि न्यब्रोधरोपग्रहे मा यत्ने करवीररोहणविधौ कार्थीसमपर्योचिते । भातः काननपाल चंपकतदः कुत्राप्यसौ मृग्यतां यस्यामोदवशात् स्मरप्रियतमा माद्यन्ति चैत्रश्रियः ॥ २८॥ "

-- वैद्यनायपण्डितस्य

Page 103 — Under सर: पद्धतिः

" सौवर्णः कमलाकरदशशिशिलास्सोपानंबदक्रमाः वारि श्वीरसहोदरं तटतहश्रेणीसुखाः श्वोणयः । सर्व ते द्वीवरं सरोवरपरं निन्दाः कुतोऽयं विधिः करम्राहमयात्रयान्ति विमुखाः पान्या निदावेऽध्यमी ॥ ६॥ " —— वैद्यनायपण्डितस्य ।

4 Keith: His. of San. Literature, p. 222.

Vide p. 886 of Krishnamachariar's H. C. S. Literature, Vide also p. 222 of Keith: His.
of Sanskrit Literature 1928. This anthology is arranged in 168 sections and contains 4689
stanzas including some by the auti or himself.

^{2.} Ed by E. Krishnamscharya, G. O. Series, No. LXXXII, 1988.

^{5.} Vide p. 12 of Intro. to the Süktimuktävali (G. O. S. Barola, 1938). The following verses appearing at the end of this anthology (p. 463) give us the date of the work and some information about the author and his environment:—

(continued on the next page)

Jalha or Jalhana, whose genealogy and family history are recorded in the first 41 verses of the Süktimuktāvali. 1

"शकेऽङ्काद्रीश्वरपरिमिते वत्सरे पिङ्गलाख्ये ।
वैत्रे मासे प्रतिपदि तिथी वासर सप्तसतेः ।
पृथ्वी शासत्यतृलमहसा यादवे कृष्णराजे
जहस्यार्थे व्यरचि भिषजा मानुना सेयमिष्ठा ॥ १ ॥
शश्वत्कृष्णमहीपसंपदुदधेर्बृद्धौ निशाकारकः
का [व्या] म्भोजविकासतिरमिकरणश्चाणक्यचातुर्यवान् ।
स्फूर्जचर्करहस्यकर्वशमतिः साक्षाकृतालंकृति—
प्राग्मारो भिषजां वरो विजयते श्रीमास्कराख्यः सुचीः ॥ २ ॥
हरीशयोख्यस्त्रिश्वर्यद्धतीनामिदं शतम् ।
श्रीमता मगदत्तेन जहल्लोन व्यरच्यत ॥
श्रीकण्ठीरवराजस्य धर्मवित्तम्ममित्त्रणः ।
स्फिमुक्तावली सेयं कुर्यात्कल्याणसंततिम् ॥ "

The particulars regarding the date of the work as furnished by verse No. 1 above are Saka 1179, of the name Pingala, month of Caitra, Pratipada tithi, Saptasapti vasara (i. e. Ravi vasara). These details give us the exact date of the work viz. Sunday, 18th March 1257 (Vide Indian Ephemeris, Vol. IV, p. 116). King Krana referred to in verse 2 is identical with Kranadeva of Devagiri. Mr. K. A. Padhye (Life of Hemādri in Marathi, 1931, page 119) states that Kranadeva was contemporary of Cakradhara, the founder of the Mahānubhāva Sect. Mr. Padhye quotes an extract from the Mahānubhāva literature in which a meeting of Kranadeva and his brother Mahādevarao with Cakradhara svāmi took place in Saka 1178 (= A. D. 1256) at Lonār (Dist. Buldhana in Berar), Mr. Padhye records the following inscriptions of Kranadeva's time:—

(1) A. D. 1249 - Minister Mallifeti gives a grant to Brahmins on 26-6-1249 (Copperplate) in Canarese (language).

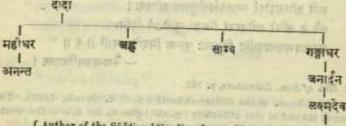
(2) A. D. 1249 - Mallifeti gives a grant on 22-7-1249 (Copper-plate)

(8) A. D. 1250 - Stone inscription at Kolhapur.

(4) A. D. 1253 - Copper-plate grant in Sanskrit by Caundaraja, sen of minister Bicanna.

(5) A. D. 1253 — Copper-plate grant of some lands by Mallifett.
 (6) A. D. 1259 — Copper-plate grant in Canarese language.

Jalhana is stated to have been an officer in charge of the Elephants (Karivāhinīpati
or Karivīndanātha) of Kṛṇṇadeva's army. Jalhana's genealogy (verse bif) is given as
follows:—



(Author of the Suktimuktavali and an officer in charge of Elephants of Eranadeva, A. D. 1247-1260)

It is clear from the above identification in the Sūktimuktāvali of Vaidyanāha's stanza referred to above that the nose-ornament or nāsū-gra-muktāphala was an established feature in A. D. 1257, the date of this anthology. This conclusion is further supported by three more verses 1 in this very anthology referring to the nose-ornament, one of which is ascribed to Kṣemendra but the authorship is not supported by all Mss, while another is ascribed to Bhānupaṇḍita, who is identical with Vaidyabhānu, 2 the real author of the Sūktīmuktāvali. All these four references clearly prove that the nose-ornament consisting of possibly a ring with a pearl (nāsāgramauktīka) had become an established feature of the decorations of Hindu women about 1250 A. D. as it is referred to in the Sūktīmuktāvali composed in A. D. 1257 as we have seen above.

The foregoing references to the nose-ornament get independent corroboration from the Mahānubhāva literature. Lilācaritra, one of the oldest works of the sect of the Mahānubhāvas which deals with the incidents of the life of Cakradhara the founder of this sect mentions the nose-ornament in the following extract 3 which specifies the dress and ornaments of the goddess Mhāļsā (= Mahālasā):—

1. Page 179 (of the Süktimuktavali) : -

" पुण्डरीकमिवाभाति नासावंशगमौक्तिकम्।

कुचिंहासनस्थस्य स्मरभूपस्य सुभुवः ॥ १४ ॥ "

- क्षेमेन्द्रस्य (ग. पुस्तके अवं ।निदशः)

Page 180—
" ललाटे लोलाक्यास्तिलकमिषधारी विधुरयं
स्वमापूर्णं वाञ्छज्ञघरसुधया देवहितकृत् ।
अतो नासाग्रेऽसी तदुपहतये मौक्तिकमिषात्
स्फूटं दैत्यामात्योऽधरशशमृतोरन्तरगतः ॥ १६ ॥ "

Page 181—
"तस्या बदनचन्द्रस्य कान्तिरन्यैव जायते।
कलक्कपुलनां घत्ते यत नासाममौक्तिकम् ॥ २७ ॥ "

– भानुपण्डितस्य

Ibid, Intro., p. 61. Verses mentioned as of "Vaidyabhānupandita" are found on pp. 206, 877, 113, 840, 183, 229, 71, 5, 158, 805, 843, 85, 247, 5, 462, 158, 448, 876, 278, 232, 403, 183, 455, 399, 68, 213, 5, 206, 219, 107, 226, 468, 85, 5, 178.

3. This reference to nose-ornament has been pointed out by my friend Mr. H. N. Nene of Nagpur, the editor of many old Mahānubhāva texts (Vide B. I. S. Mandal Quarterly, Poons, October 1938, p. 55). I translate Mr. Nene's remarks regarding the nose-ornament: — "The names of the different ornaments and the pearl on the nose of the goddes a should be noted for consideration. We must decide on thorough investigation if women of the time of the Yadava Kings of Devagiri used to wear staffs or only one pearl." About the Mahānubhāvas and their literature vide pp. 247-8 of Farquhar's Outline of the Religious Literature of India, Oxford, 1920 and pp. 725-779 of the History of Marathi Literature by L. R. Pangarkar, Poons, 1935.

"कांकणें: कळाविया सोनयांची तानवढें भंवरिया भांगुः टीळा नाकीं मोतीं " (Lilā 172 of Lilācaritra)

The expression "नाजी मोर्शि" meaning a pearl on the nose corresponds exactly to the Sanskrit phrase "नासात्रप्रकास्त्र " and as both these expressions belong to the 13th century it would be reasonable to conclude that the nose-ornament had not only captured the noses of Indian women of the 13th century but that it had entered the sacred precincts of the goddess Mhālsā as well, thus suggesting a greater autiquity for it than is proved by five different 13th century references recorded above.

Earlier testimony regarding the existence in India of the nose-ornament is recorded by Mr. N. N. Dasgupta ¹ from a work of the 11th century called the Śāradātilaka of Laksmana Deśika as follows:—

"As to Sanskrit literature, the Śāradātilaka composed by Laksmana Deśika in course of delineating an Andhra woman represents her, we are told (Pravāsī, 1341 B. S. Kārttika, pp. 109-110) as one with whose breathings oscillates the pendant pearl of her nose-ring (nās-āngurī). Mr. Das Gupta further observes: — In Prof. Winternitz's History of Indian Literature, Vol. I (Cal. Univ. 1927, p. 604) it (i. e. Śāradātilaka) is placed in the 11th century, and if so, it alone is enough to invalidate the theory that nose-ornament was imported in or about the 16th century."

I have not examined the passage in the Śāradātilaka which refers to the nose-ornament according to the writer of an article in the Pravāsī referred to by Mr. Das Gupta as this article is not available to me but

^{1.} My friend Prof. N. B. Roy of Mymensing has kindly drawn my attention to Mr. Das Gupta's article on "Nose-Ornaments in India" - Calcutta Review, May 1937, pp. 142-144. I have to thank Prof. Roy for this reference. The following points from Mr. Das Gupta's article may be noted here: - (1) Refutation of Mr. N. B. Divatia's view that the note-ornament is a Muslim importation. (2) Refutation of the article in Pravast (Vol. XXVII, Pt. I, pp. 563, 716-18) in which an attempt is made on pictorial evidence (not anterior to the 16th century) to prove that the nose-organism is a non-Hindu institution. (3) Reference to noseornament by the author of the Saradatilaka of the 11th century refutes the theory that the ornament was imported by the Muhammedans in or about the 16th century. (4) Reference to nose pearl in Vaidyanatha's verse " Sudhamayopi etc. " (v. 3305) found in the Saragadharapaddhati of A. D. 1363. (5) Reference to nose-pearl in Vallabhadeva's Subhasitavali which belongs to " in or before 1159 A. D." according to Dr. De and the "fifteenth century" according to Peterson and Keith. (6) Baka's verse quoted by Vallabhadeva referring to nose-pearl must have been an interpolation as Baka flourished 1417 A. D. (7) No. 27 of Vallabhadeva's Subha stauals containing a reference to nose-pearl is found in the Kranakarnamyta of Bilvamangala assigned to 9th century A, D. (IHQ, VII, 1981, pp. 384-42). (8) References to noseornament in Brahmavaivariapurana and the suggestion wrongly made that the latest recension of this purama took place in the 16th century (Bharatacaria (1937 B. S. p. 85). Conclusion :- " nose-ornament was known in the Hindu period of Indian history."

in view of the evidence recorded in this paper the antiquity of the noseornament is pushed back on authentic grounds upto A. D. 1200 or so and there is every possibility of its existence in India about 1000 A. D. if not earlier. 1

Mr. Das Gupta states that verse No. 27 of Vallabhadeva's Subhāṣi-tāvali which contains a reference to nose-ornament (" नायामे नवमीकिं ") is found in the Kṛṣṇa-karṇāmṛta of Bilvamaṅgala alias Līlāśuka who is assigned to the 9th century A. D. Even if Bilvamaṅgala belonged to a period one or two or three centuries later, Mr. Das Gupta observes, the evidence of the above verse and also of those noted by him places it above all doubt that the nose-ornament was known in the Hindu period of Indian history.

The Hindu period of Indian history normally ends with the end of the 10th century when the first raid into Indian territory was made by Sabuktigin. If Bilvamangala belongs to the 9th century the reference to the nose-ornament in the Kṛṣṇakarṇāmṛṭa of Bilvamangala as pointed out by Mr. Das Gupta surely supports his statement that this ornament was known in the Hindu period and consequently the theory of Muslim importation gets weakened. Let us, however, examine the genuineness of the verse of Bilvamangala on which Mr. Das Gupta takes his stand and which reads as follows:—

" कस्त्रीतिलकं छलाटफलके वक्षःस्थले कौस्तुमं नामाग्रे नवमौक्तिकं करतले वेणुं करे कङ्कणम् । सर्वाङ्गे हरिचन्द्रनं सुविमल कण्ठे च मुक्तावलीं विम्नत्स्वीपरिवेष्टितो विजयते गोपालच्डामणः ॥ "

This verse is No. 27 in Vallabhadeva's Subhāṣitāvali edited by Peterson, Dr. S. K. De has recently published a critical edition of the

^{1.} Vincent Smith (Oxford History of India, 1928, p. 190) observes that the Hindu States enjoyed exemption from foreign invasion until almost the end of the 10th century. They were not seriously affected by the Arab conquest of Sind at the beginning of the 8th century or by the later Muslim occupation of Kabul. The first raid into Indian territory was made by Sabuktigin, the Amir of Ghami in A. D. 986-7 (A. H. 376). I have at present no references with me to the nose-ornament in India earlier than 1000 A. D.; neither have I any references to it from Persian or Arabic sources earlier than 1000 A. D. which may throw more light on the question of the genesis of the nose-ornament. It is for Arabic and Persian scholars to prove the antiquity of the nose-ornament prior to A. D. 1000 on the strength of references to it in Arabic or Persian literature of the early period (prior to the Arab conquest of Sind at the beginning of the 8th century). If the Arabic origin of the nose-ornament is proved it may enable us to postulate in a stronger manner the theory of foreign importation that now holds the field owing to the absence of references to the nose-ornament in the Hindu literature, architecture, painting etc. prior to the end of the 10th century.

Kṛṣṇakarṇāmṛta. 1 In the constituted text of the poem, (Bengal recension) the above verse is not found. It appears, however, in the additional verses given in the 2nd and 3rd Āśvāsas of Pāpayallaya Sūri's text of the Kṛṣṇakarṇāmṛta (South Indian Version). This version also contains an additional reference to nose-pearl (p. 317) in the following verse:—

" मौळी मायूरवर्डं सृगमद्तिलकं चारुलालाटपट्टे कर्णेट्टन्द्रे च वालीदलमतिसदुलं मौक्तिकं नासिकायाम् । हारोमस्दारमाला परिमलभरिते कौस्तुभस्योपकण्ठे पाणौ वेणुश्च यस्य वजयुवतियुतः पातु पीन्ताम्बरो नः ॥ ९३ ॥ "

The Bengal tradition originating from the time of Caitanya (1486-1533 a. D.) knows nothing about the two Āśvāsas of Pāpayallaya Sūri's text in which the above quoted two verses are found. Pāpayallaya Sūri who refers to Mallinātha (14th century) may have lived considerably after that date. Caitanya who brought the Kṛṣṇakarṇāmṛta from Southern and Western India brought back to Bengal the tradition only of one Sataka of the text and hence Dr. De raises "legitimate doubt regarding the genuineness of the 2nd and 3rd Satakas of the poem included in Pāpayallaya Sūri's southern version of the text." 2

In view of the doubtful character about the chronology of the two verses quoted above it is difficult for us to regard them as conclusive proof of the existence of the nose-ornament in the Hindu period of Indian history. I hope, therefore, that Mr. Das Gupta will give us an incontrovertible proof in support of his contention that the "nose-ornament was known in India in the Hindu period of Indian history." Though personally, I have an open mind on the question of the Muslim importation of the nose-ornament the uniform absence of authentic references to noseornament in literature prior to the end of the 10th century as also the non-representation of this ornament in early sculpture and painting contrasted with the numerous references to it after 1000 a. D. as proved by the present paper has a cumulative force for compelling us to nod our head with the advocates of the theory of foreign importation of the noseornament, leaving aside the questions of the exact time when it was imported into India and the exact source from which the importation has taken place.

Dacca University Oriental Publications Series No. 5 — Kranakarnameta with commentaries of Gopalabhatta, Caitanyadasa, and Kranadasa Kaviraja, 1988, p. 319.

^{2.} Kranakarnameta, Intro., p. xiii.

I have recorded above the reference to the nose-ornament (referred to by Mr. N. N. Das Gupta in his article in the Calcutta Review May 1937) in the Śāradātilaka of the 11th century. As, however, I have not been able to identify this reference I have to record here another reference to the nose-pearl found by me in a work of the 11th century. This work is no other than the Vikramānkadevacarita 1 or the life of king Vikramāditya, Tribhuvanamalla of Kalyāṇa, composed by Vidyāpati Bilhaṇa in the "Eighth decade of the eleventh century" according to Dr. Bühler. This poem gives us a fine description of the Svayamvara of the Šīlāhāra princess Candralekhā or Candaladevī at Karahāṭa or Karhāḍa. Bilhaṇa gives us a minute inventory of the charms of the princess in chapter VIII of the poem. The following verse contains a reference to the nose-pearl nāsāvamša-muktāphala:—

" नासावंशविनिर्मुक्तमुक्ताफलसनाभिना । भाति भालतलस्थेन बालचन्दनबिन्दुना ॥ ७९ ॥ "

The expression " नासावंशविनिमुक्तमुक्ताफड " reminds us of the following verses in Jalhana's Süktimuktāvalī of A. D. 1257 quoted by me already:—
" पुण्डरीकमिवाभाति नासावंशगमीकिकम्।"

It is, therefore, clear that about 1080 A. D. when Bilhana composed his poem the nose-pearl had taken possession of Hindu ladies and was sitting tight on the rings in their noses as we must presume a nose-ring for a nose-pearl to wear on.

A further interesting reference to the nose-ornament or "Nāsā-vibhūṣa" is found in a work ascribed to Śamkarācārya and included in the Works of Śamkarācārya. The verse in which this reference occurs forms part of the Tripurasundarīmānasapūjāstotra and reads as follows:—

Ed. by G. Bühler Bombay, 1875.

^{2.} Ibid. Intro. p. 20 - Bilhana mentions two Kings of Kashmir, Ananta and Kalaśa. "Ananta's succession to the throne falls in the beginning of the year 1028 A. D. and his death in 1080. Kalaśa's rule lasted from A. D. 1080 to 1088 while his coronation and the nominal beginning of his reign fall in 1062. "As Bilhana mentions Ananta as "āsīt" Bühler concludes that he was dead when the poem was composed.

Vikramāditya VI, the Cālukya King of Kalyāna ruled from A. D. 1076-1127. The date of the Vikramānkadeva-Carita appears to fall before A. D. 1088 because the work pases in silence the great expedition of the King to the South which then took place. Bilhana also mentions Harsadeva of Kashmir as prince and not King. We know also from Kalhana (VII, 986-8) that Bilhana lived to hear of Harsadeva's accession (Keith: His. of San. Lit., p. 158).

Ed. by Sri Vani Vilasa Press, Srirangam, Vol. I of the Memorial Edition of the works
of Śri Samkarācārya, p. 197. I am thankul to Dr. S. K. Belvalkar for drawing my attention to
this verse containing a reference to nose-ornament.

" मध्यस्थारुणरत्नकान्तिरुचिरां मुक्तामुगोद्धासितां दैवाद्धागंवजीवमध्यगरवेर्छदमीमधः कुर्वतीम् । उत्सिकाधरविम्बकान्तिविसरैभौमीभवन्मौक्तिकां महत्तामुररीकुरुव्व गिरिजे नासाविभूषामिमाम् ॥ १५ ॥"

The nose-ornament offered to the goddess in this verse appears to be an elaborate one. It consists of a red jewel in the centre surrounded by pearls. Dr. Belvalkar includes the Tripurasundaristotra among 210 stotras, the authorship of which is ascribed to Samkarācārya. It hink the elaborate character of the nose-ornament referred to in the verse quoted above argues in favour of a late date for the above stotra and fully supports Dr. Belvalkar's remarks quoted above. If, however, any scholar can prove beyond challenge that the stotra in question is a genuine work of Samkarācārya we shall have to believe in the view of Mr. N. N. Das Gupta that the nose-ornament was current in the Hindu period of Indian history; but for the present the theory of foreign importation of this ornament appears to hold the field as I have observed already, whatever be the source from which it was imported into India and later spread throughout the length and breadth of the Indian peninsula.

^{1.} The masa-cibhusa is described as beautiful on account of the red lustre of the jewel in the centre (प्रश्राद्वा क्वित्रा किवा) and resplendent with the light of pearls (मुक्तामुगो-द्वा क्षिणे) which surrounded the jewel in the centre. I am unable to say exactly what is meant by the word मुग in 'मुक्तामुग' as मुग does not appear to be a Sanskrit word. In the Canarese language a nose-ornament is called 'मगुन्दु ' where मुग means 'nose' but it is difficult to connect मुग with मुग in 'मुक्तामुग ,' Perbaps मुग may mean a stud or a grain (Marathi मुग or Sanskrit मुद्र) but this interpretation of the word needs some authority in its support. Whatever be the interpretation of the word मुग, the verse clearly states that the nose-ornament offered to the goddess consisted of a jewel and some pearls. In the early references to the nose-ornament recorded in this paper we have only a pearl but no jewel or ratna

^{2.} Basu Mallik Lectures, Part I. Poons, 1929, p. 223.

^{3.} It would be a useful study to collect and record with illustrations the different varieties of the nose-ornament now current in India and compare them with the nose-ornaments current in outside countries. Though such a study would be highly beneficial to the cultural history of Hindu India it would involve considerable expense and trouble in procuring reliable information to the next page.)

The Amarakośa of Amarasimha, one of the earliest Sanskrit lexicons composed before 8th century a. D. gives us a list of ornaments in the manusyavarga. This list includes such ornaments as mukuţa kiriţa, cūdāmani, tarala, patrapāśyā, karnika, kunḍala, lambana, Uraḥsūtrikā hāra etc., but this list makes no mention of any nose-ornament. This omission is quite significant and we may be justified in presuming that the nose-ornament was not current in the time of Amarasimha.

Before concluding this paper I shall show in a tabular statement the antiquity of the nose-ornament from A. D. 1000 onwards as proved in the foregoing paragraphs:—

No.	Date of Reference	Source of Reference	Manner of Reference
1	about	Bilhaṇa	" नासावंशविनिर्मुक्तमुक्ताफकं,"
2	A. D. 1080 Eleventh	Lakşmana Desika	"Nās-āṅguri"
3	century A. D. 1257	Jalhana or Bhanu-	" नासार्वज्ञगमौक्तिक " or नासाममौक्तिक"
4	about A. D. 1250	Lilācaritra	''नाकीं मोतीं " 4 4 का
5	A. D. 1363	Śārngadharapaddhati	" नासाधमुक्ताकल "
6	15th Century	Vallabhadeva	" नासाधे नवमोक्तिकं"
7	15th Century	Pāpayallaya Sūri's text of Kṛṣṇakarṇā-	" मौक्तिकं नासिकायाम् "
8	14th Century	mṛta Mural Paintings at Tiruvāmbadi shrine, Trivandrum	Picture of a music party of women, wearing nose-rings with pearls

tion with pertinent illustrations. I shall, however, record here some information sent to me from Assam by my friend Dr. B. Kakati of Gauhati. The nose-ornaments, worn at present by Assamese women are (1) Nak phul (nose-flower), (2) Nak Canda (nose-moon) and Nalak or Nalakh (nose-lotus). All of these ornaments are made of gold. Nak phul is made of fine gold wire, twisted and interwoven and looks like a small lotus bud. With the hook it is fastened into the hole of the nose bored through. Nak Canda is made of fine gold wires and similarly put on. Nalak has a ring and a pendant and is put on like a stath. As Assamese literature does not go beyond the 15th century no literary references are available—so states Dr. Kakati in his letter of \$1st October 1933. It is curious that no pearl is found on these Assamese

nose-ornaments.

	Charles of the little beautiful to the last of the last	A STATE OF THE PARTY OF THE PAR	
9	16th Century	Mural Paintings in the Old Palace in the	Figures of women wear- ing nath are represen-
10	A. D. 1588	Travancore State B, O. R. Institute Ms	Picture of goddess Sara-
11	À. D. 1611	Bhāgavatapurāņa Ms at Jodhpur	ring with pearls. Pictures of ladies wearing nose-rings with 3
12	A.D. 1616-19	Edward Terry's Travels in India	pearls each Terry refers to nostrils pierced and nose-rings
13	A. D. 1673	Jayarāma Kavi	worn by ladies "नासामुक्ताफल" worn by
14	c. A. D. 1750	Samgraha-cūḍāmaṇi	the goddess Bhavanī on the Pratāpagad fort Musical rāgas called as " नासिकाभूषणी" and
15	c. A. D. 1750	Haṃsavilāsa of Haṃsamiṭṭhū	" नासामणि " " नासाभूषा " with भौक्तिक – युगळ and अरुणरत्न
16	A, D, 1642	min Carlotte	Cf. नासाभूषा with अङ्ग्यस्न and मुक्तामुग mentioned in the Tripurasundari- Stotra
17	- Contract	Tavernier	Arabian women bore the septum of the nose for admitting the ring
18	A. D. 1794 A. D. 1882	Edward Moor	"nutt" worn by Cana- rese ladies
100	D. C. Cincol	Qanoon-e-Islam	Nath, Boolag, Nuthnee "nose-jewelled" dam sels, (with illustra- tions)

P. S.— Since this article was composed the following additional information about the nose-ornament has been received:—

(1) Dr. B. Kakati writes under date 14-12-1938— "Regarding your query about Assamese nose-ornaments as represented in painting and sculpture, a competent Assamese scholar informs me that there is no nose-ornament traceable in existing painting and sculpture. I informed you already there is no reference to it in existing literature which dates from the 16th century. This would perhaps lend weight to your theory that nose-ornaments were introduced by the Moslems. Assam was never a Moslem province."

(2) Mr. G. N. Shrigondekar of the Bhandarkar Institute has kindly drawn my attention to the following verse quoted anonymously by the late-Mr. Visnushastri Chiplunkar in his Nibandhamālā (Vide p. 51 of the collection of the Subhāṣitas in the Nibandhamālā, published by Chitrashala Press, Poona, 1926).

" इन्दीवराक्ष्याः स्फुटविद्युमीष्टयाः सङ्केतसुद्दिश्य वने चरन्याः । चौराः समस्ताभरणानि इत्वा नासामणि नापहरन्ति चित्रस् ॥ १५७ ॥ "

The above verse occurs in the Subhāṣitaratna-bhāṇḍāgāra (N. S. Press, 1886) p. 314, verse 84, but here also the name of the author is not recorded.

(3) I am thankful to Rao Bahadur K. V. Rangaswami Aiyangar, M. A. for the following remarks dated 22-12-1938 on the nose-ornaments in South India:— "Three nose-ornaments are in use in South India. One is a screw inserted on the side of the nostril in a hole bored for the purpose. Its name is Mookku-Kutty, i. e. nose-peg. Ladies wear it on both sides of the nose and usually there is a precious stone embedded in the centre of the screw. It is obligatory for married women and virgins to wear at least one of these. Bulak and Nattu are two ornaments, not now in fashion. As their names denote, they were borrowed from North India.

Very curiously in lithic figures in temples these ornaments are not traceable, probably because of the difficulty of representing them in stone. But I have noticed the screw, in mural paintings in Travancore. I am disposed to regard its wearing as a fairly old custom."

(4) Anantabhaṭṭa, author of Campūbhārata is reported to have "lived about 1500 A. D." His sister's son was Somanātha, the author of Vyāsayogicaritacampū. Somanātha was contemporary of king Acyutadevarāya of Vijayanagar and must have lived about 1535 A. D. (Vide p. 285 of M. Krishnamachariar's History of Classical Sans. Lit. 1938 and B. Venkobarao's Edition of the Vyāsayogicaritacampū (Bangalore) Introduction, pp. iv-ix.) Acyutadevarāya ruled from A. D. 1486-1542.

Anantabhatta in verse 89 of 2nd Stabaka of his Campübharata (Page 80 of N. S. Press, Edition, 1903) puts a nose-ornament on the nose of Draupadī and describes its beauty as follows:—

" अधिनासिकाशिखरमाकलितं नवमौक्तिकं नरपतेर्दुहितुः । श्रुश्चमे मुलाम्बुरुहमध्यचरस्मितहंसिकाजनितमण्डमिव ॥ ८९ ॥ "

The pearl on the tip of Draupadi's nose looked as if it were an egg laid in the lotus of her face by the female swan viz. the smile on her face.

Anantabhatta hardly dreamt of the anachronism involved in the reference!

(5) Prof. R. D. Laddu of the S. P. College, Poona, has kindly drawn my attention to the following reference to nose-ornament (नक्स्टी) occurring on p. 191 of *Phola-Mārūrā Dūhā* edited by Ram Singh and others and published by the Nagari Pracharini Sabha, Benares, 1935:—

Dūhā Nos. 571, 572 read as follows-

" सुंदरी चोरे संग्रही, सब छीया सिणगार ।" नक-फुडी छीघी नहीं, कहि सखि कवण विचार ॥ ५७१ ॥"

Compare the above Dūhā with the anonymous verse quoted above which reads:—

" इन्द्रीवराक्ष्याः स्फुटविद्युमीष्टयाः सङ्केतमुद्दिश्य वने चरन्त्याः । चौराः समस्ताभरणानि हत्वा नासामणि नापहरन्ति चित्रम् ॥ "] "अहर-रंग रत्तव हुवइ, मुख काजळ मसि-ब्रन्न । जाँण्यय गुंजाहळ अछइ, तेण न बृक्य मन्न ॥ ५७२ ॥ "

According to the Editors the D. M. Dūhā was composed between Samvat 1000 and 1618. i. e. between A. D. 944 and 1562. It may be earlier than Samvat 1450 i. e. A. D. 1394 (Vide Prastāvanā of the work, p. 10). The upper limit of A. D. 944 fixed by the Editors is the date of the hero of the poem viz. Dholā. There is no evidence to prove that the work is contemporary. This reference to nose-ornament can be easily assigned to the period, 1000 A. D. to 1394 and hence it does not go against the theory of the foreign importation of the nose-ornament after the advent of the Muhammedans.

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tion, pp. iv-In.) Accurate agreement to m. A. T. vi agr, more

13. Two Religious Poems (in Marathi and Sanskrit) on the Hindu Nose-ornaments*

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In my studies 1 of the Nose-ornament of the Hindus so far published I have tried to establish the following points:—

- (1) The nose-ornament called nath could not be traced in any historical source earlier than A. D. 1000.
- (2) This nose-ornament is possibly a foreign importation into Indian culture but its foreign source or genesis has not to my knowledge been brought to light on documentary evidence by any scholar.
- (3) This nose-ornament, though foreign to Indian culture, has now become sacrosanct to such an extent that it forms part of the costume of gods and goddesses in Hindu pantheon.

In view of these conclusions already suggested by me I was in search of some texts dealing with the Nose-ornament but having a religious import. It has already been proved that the use of the nose-ornament by our women-folk has been getting more and more popular during the last 1000 years though latterly owing to modern education its use has slackened a little in certain provinces. I have found two poems in which the nose-ornament is the central theme though it is used for religious instruction in a poetic way. One of these poems is a song in Marathi by a Deccani saint of the early 17th century while the other poem consists of 25 Sanskrit stanzas on the nose-ornament of a goddess by a possibly South Indian writer, who was obviously a devotee of this goddess. I am unable to fix the chronology of this Sanskrit poem, though its author gives some particulars about himself and his ancestors. These poems show in an admirable manner the importance that came to be attached to this late importation into Indian-female costume and the perfect innocence of the writers regarding its foreign origin.

The Marathi poem on the nose-ornament is a pada or song by Keśavasvāmī who was living in Śaka 1550 = A. D. 1628 according to Mr.

Indian Historical Quarterly Vol. XXVII. pp. 506-511.

^{1.} These studies are:— (1) Antiquity of the Hindu Nose-ornament called Nath, Annals (B. O. R. Institute) XIX, pp., 318-334 and (2) References to Nose-ornament in some works ascribed to Samkarācārya etc.— B. I. S. Mandal Quarterly, Poons, 1940, Vol. XXI, pp. 1-9.

Vaman Daji Oka 1, who has edited Keśavasvāmī's Padas numbering no less than 473. Mr. Oka records the following pada on page 266 of his edition of Keśavasvāmī's songs:—

" माझें नाकीचें बरवें मोती वो ! ।

वरी फांक्ती निर्मेळ ज्योती वो ! ॥ भ्रुवपद ॥

ग्रुद्ध सुवणं गुंफुनी सिळ्छा ।

ग्रुद्धीं मुखाचा दावीत सोहळा ॥ माझें० ॥ १ ॥

परम सुंदर कें अतिहाळाचें ॥ माझें० ॥ २ ॥

योध माणीक लावरी शोभतें ।

उंची पावुनी खाळतें लोंबतें ॥ माझें० ॥ ३ ॥

गुरुवळणयामाजी छेणें वो ॥ माझें० ॥ ४ ॥

प्राप्ती उदयीं केशव छेतसे ॥ माझें० ॥ ४ ॥

प्राप्ती उदयीं केशव छेतसे ॥ माझें० ॥ ५ ॥

वरी सदगुर चुंवन देतसे ॥ माझें० ॥ ५ ॥ "

In this pada the poet has used the metaphor of the nose-ornament for bringing home to the readers the beauties of spiritual instruction and understanding acquired by a devotee through sincere devotion to his preceptor. Here the nose-ornament consists of a pearl (moti) and a ruby (mānik) set in pure gold. It is described as one of the chief ornaments of a lady. The close spiritual intimacy between a devotee and his guru is here depicted as that existing between a husband and his beloved wife. The poet has sustained the metaphor of the nose-ornament throughout the song. As a lady adorned with fine ornaments appearing before her loving husband is sure to receive his kiss, even so a loving devotee who has been adorned with spiritual understanding through his guru becomes capable of receiving spiritual favours from this guru, given but the complete self-abandonment of the devotee towards his guru. This appears to be the substance of the above song.

Whether other Indian vernacular literature contains any poem on the nose-ornament I cannot say, but I record below a Sanskrit poem which is entirely devoted to the nose-pearl or nasamauktika of the goddess Goda

^{1.} Vide pp. 143-290 of Karyasamgraha 13. A collection of Marathi Padas by various Marathi Poets, Part I by V. D. Oka. N. S. Press, Bombay, 1892. Mr. Oka states that Keśava was a Saint who hailed from Bhāgānagar (= Hyderabad, Deccan). His guru's name was Kāśirāja Svāmā. He is the author of Ekāda'i Caritra in Ovl metre and several other padas and abhangas. He was living in Śaka 1550. It is not known when he died. His Samādhi is at Gulburga. The Marathi poet Moropant refers to him in his work Sammanimālā.

Towards the end of the poem the poet gives us some information about himself. He calls himself "श्रीबेह्नदेश कवि", son of "श्रीरामानुजदेशिक" and grandson of "श्रेपादिविह्नमणि". The title of the poem is "नासामीकिक पंचविंगति." In the Colophon the name of the author is given as "श्रीबेह्नद-निवासदास," son of "रामानुजगुरुवर" and grandson of "श्रेपाचळाचार्य," an ornament of the "आंत्रेय गोत्र." These particulars may enable us to identify this author but this work must be left to the students of South Indian history.

The following text of the poem is based on the only manuscript available in the Govt. Oriental Manuscript Library, Madras. This Ms is R. No. 3872.

"। नासामौक्तिकपञ्चार्वेशतिः॥

पद्माह्नादकरस्य पावनकरामशीदिकासीन्मुखे नित्यं षट्पदगीतचारुविभवे लक्ष्मीनिवासस्थले। गोदाया बदनाम्बुजे निवसतो हंसस्य छीछां श्रयन नासामीकिकमातनीतु भवतां नानाविषां सम्पद्म् ॥ १ ॥ बन्याजादमृतप्रदे सुमनसां सन्मण्डलीसेविते पङ्केस्ट्पटली रुचीविधुवनी चण्डी हसन्मण्डले । गोदावक्वनिशाकरेऽनुकरुते यद्दोहिणीविश्रमं नासामीकिकमातनीत भवतां नानाविधां सम्पदम् ॥ २॥ मुकान्लुसललन्तिकासरलसरस्वातीपथे अलता-इयाजाश्रालिपरीवृते रद्पटीसमध्ये मियत्तारके ! गोदावक्त्रनभस्थले कलयत शंको शशाङ्कस्य य-सासामौक्तिकमातनीतु भवतां नानाविधां सम्पद्म् ॥ ३॥ चक्षनीं कसरो रहे परिकसद्भुशेवके रिक्वणो दिव्या दन्तविसाङ्करे सृदुद्दसद्याजीचलद्वीचिके। इंसाधिष्टितसम्बिधी विससरी जातं सुखास्ये हदे नासामौक्तिकमातनोतु भवतां नानाविधां सम्पद्म् ॥ ४॥ सीमन्ताह्मयकान्तिप्रनिपतत्क्ल्योपमाया भवे-हेड्या रत्नळळन्तिकामुखसरस्संप्रयन्ती रुचा। तस्याः फेनविवानमिस्यनुदिनं सन्वर्कितं योक्तिकैः नांसामीक्तिकमातनीतु भवतां नानाविधां सम्पद्म् ॥ ५ ॥ मन्धानाचलमाकलस्य तिलकं रज्वा कटाक्षास्यया नाथे मन्दहसामृतार्थमधुना बद्धाद्रं मध्नित ।

मातुर्वकत्रपयोनिधौ वितनुते यद्बुद्बुदस्याकृतिं नासामौक्तिकमातनोतु भवतां नानाविधां सम्पद्म् ॥ ६ ॥ कान्त्या वक्त्रनिशाकरेण विजितः पूर्णेन्दुरेत्य स्वयं लजासंकुचितात्मको वितनुते सेन्यां (वां) द्दामन्वहम् । इत्थं सञ्जनयन्मतिं हृदि सतां देन्या रमाधीकितु-नांसामौक्तिकमातनोतु भवतां नानाविधां सम्पदम् ॥ ७ ॥

्रगोदायास्तिलकारुयपत्रविततेश्रृयुग्मशाखाजुषो भ्रान्त्या ... किसलयाद्वनत्रालवालान्तरे । नासावीरुध भादधत्सुमनमद्गुच्छेन सञ्जायतां नासामौक्तिकमातनोतु भवतां नानाविधां सम्पद्म् ॥ ८ ॥

> देश्यास्सुन्दरमन्द्रहासपयसि अकल्पवलीवृते रहेन्द्राननपूर्णचन्द्रविमलालोकाहिवृद्धिं गते । श्वेतद्वीपिथयं मुखाभिधपयः पायोनिधावाद्धन् नासामौक्तिकमातनोतु भवतां नानाविधां सम्पदम् ॥ ९॥

गोदाया मुखपङ्कजातनिळयाजाता निजा भामिनी वाणी नित्यमितीव खिल्लमनसा संप्रेक्षिता वेधसा । शंसन्ती तदुदीरितं वसति किं हंसीति शङ्कां स्वन् नासामोक्तिकमातनोतु भवतां नानाविधां सम्पद्म् ॥ १०॥

कान्त्याऽमोदवचोमरन्दमहसा देव्या मुखाम्भोहहा पायोजं विजितं सितं प्रतिदिनं प्राप्तं पुनस्तानगुणान् । तेनासिक्तमुपैति निश्चलतरामित्यादयको धियं नासामाक्तिकमातनोतु भवतां नानाविधां सम्पदम् ॥ ११॥

स्वीयाभाभरको सुदीपरिमिलद् क्लाम्बु नाताम्बरात् सीमन्ताभिषयं ध्यया सद्द कचध्वान्तं पराकुवैतः । भासस्वादसृतोद्धेरुद्यतश्चन्द्रस्य शोभां भजन् नासामौक्तिकमातनोतु भवतां नानाविषां सम्पद्स् ॥ १२॥

नासावंशस्त्रोदरान्तरभवे मुक्ताफलानां गणे यत्पूर्वं... सुविभवं वभूव तरसा नीरन्ध्रतानिगंतम् । तद्दक्त्राब्जमलंकरोति सवतं देव्या इति व्याइतं नासामौक्तिकमातनोतु भवतां नानाविधां सम्पदम् ॥ १३॥

] जातश्राहललाटचन्द्रशकले नासाप्रणाल्यन्तरा सन्दं सन्दमयो गलजवसुषाबिन्दुर्निरुद्धोऽभवत् । देव्या बोष्ठतटादितीव मतिमत्संदोहसंदेहदं नासामौक्तिकमातनोतु भवतां नानाविधां सम्पद्म् ॥ १४॥

मातुमेन्द्रसच्छटाच्छळळसत्पाशान्दितस्य स्मरो नासारन्ध्रनिरूडमृतिरस्जच्छ्वासानिले सौरमम्। तल्लोभेन मनोसृगः किल हरेरायात इत्यृहितं नासामीकिकमातनीतु भवतां नानाविधां संपदम् ॥ १५॥ /नासाक्न्द्छतानुषो नु कवरी कालिन्दि कृष्णस्य किं कस्त्रीतिलकच्छलस्य सुदशां श्लीमोरकरं सुच्यतः। तन्मार्गे गलितः कराद्ध इति प्राज्ञेजनज्ञांपितं नासामीकिकमातनीतु भवतां नानाविधां सम्पद्म ॥ १६ ॥ गोदाया मुखपङ्के निवसति श्रीरंहनाथेऽन्यहं साकाङ्क्षं तिलक्दउलेन पदयोस्सेवां विभोराचरन्। शेषः कृण्डलितः किमित्यवधृतं धीमत्समहैद्युमं नासामीकिकमावनीतु भवतां नानाविधां सम्पदम् ॥ १७ ॥ कृष्णोऽस्यास्तिलकच्छलो मुखगृहे नासास्यनिश्रेणिका-मारुद्धाञ्च ललन्तिकामिष्कसद्यन्त्रस्थमसाति यत् । पाणेस्तच वनीतमेव गाछितं भावीति संभावितं नासामीक्तिकमातनोतु भवतां नानाविधां सम्पद्म् ॥ १८ ॥ गोदाया बदनं विधुं क्वलयामोदन्य सन्तानकं मस्वा लोकतिरस्ततापतिवहं श्रीविष्ण्विचोद्भवम् । अंकं तस्य समागतो नु बुध इत्यापाद(य)छेपनं नासामीकि हमातनीतु भवतां नानाविधां सम्पद्म् ॥ १९॥ रक्नेद्रस्य मनो चु मूर्तिमद्तिप्रेमाञ्चितं दृत्यतो निगंस्य प्रभुणेव वक्रनिकटं संपाप्य संप्रेयितम्। अवबद्वाचिमिहास्त इत्यनुकुछं क्लुप्तं कलावित्कुछै-नांसामीकिकमातनोतु भवतां नानाविधां सम्पदम् ॥ २० ॥ देव्याइशारद्चन्द्रमण्डळळसङ्योत्स्रावितानोपमा या वक्त्राम्बुरुहेऽन्वहं स्मितसुधा स्रोतस्विनी इड्यते । तस्यास्सञ्जनकः क्षमासृदिद्मित्यूदावहं धीमतां नासामीकिकमातनोतु भवतां नानाविधां सम्पदम् ॥ २१ ॥ इन्दुमन्दहसं विशंक्य विमलं ज्योत्मावितानं निजं देव्या वक्त्रसरोरुहा हुतमिति प्राप्तस्तद्नवेषितुम् । आस्ते तक्किटे किलेति कविभिनिवंगनाहाणितं नासामौक्तिकमातनोतु भवतां नानाविधां सम्पद्म् ॥ २२ ॥ सूर्यालोकविकस्वरं सुरभिलं शीवांश्रवेजोऽसहं देव्यास्तामरसं विचिन्स्य वदनं वीक्षामरन्दोत्करम्।

वाणी यन्मिष्वोऽत्र विष्ठति सदेस्याछोचितं पण्डितैनांसामौक्तिकमातनोतु भवतां नानाविधां सम्पद्म् ॥ २३ ॥
देव्या श्वाससमीरणोदि ... छुभाऽमोदाश्चया पद्धगः
कश्चिरकुण्डिलनइशशाङ्कसरुचि ... निश्चलम् ।
एवं सा चिरभावितं सुमितिभिर्विद्वद्विरुग्धस्प्रभं
नासामौक्तिकमातनोतु भवतां नानाविधां सम्पद्म् ॥ २४ ॥
गोदावक्त्रपयःपयोनिधितटे नस्वा [नासा १] भिधाञ्चक्तिका
कान्त्या सा सुभगैरतीव कवरीकादम्बनी पूजिते ।
सुक्तारत्नमस्त किं न्वित सुद्धः प्रेक्षाबदुर्थक्षितं
नासामौक्तिकमातनोतु भवतां नानाविधां सम्पद्म् ॥ २५ ॥
श्रीरामानुजदेशिकस्य तनयः श्रोपाद्विद्वद्वन्मणेः
पौन्नो यामकृतेद्व भक्तिनस्तः श्रीवेद्वदेशः कविः ।
नासामौक्तिकपञ्चविद्यविद्यमां नित्यञ्जपन् मानवो
गोदापादसरोजयुग्मविष्यां भक्ति भजेत्यावनीम् ॥
इति श्रीमदात्रेयगोत्रभूषायमाणशेषाचलाचार्य-पौन्नेण

श्रीरामानुजगुरुवरस्तुना श्रीवेङ्कटनिवासदासेन विरचिता

श्रीगोदानासामौक्तिकपञ्जविंशतिः सम्पूर्णा ।

गोदागुणरतकोदो नासामौक्तिकविषयं श्लोकद्रयम्।

नासामणीरोहिणीं ते यतो वदनवन्द्रमाः । भजत्यतो वृषक्षैव जहाति शठितित्सुते ॥ सुखकान्तितरिक्षण्या वहन्त्या जीवनं सम । शक्के नासावटीसकं सैकतं नासिकामणिम् ॥

॥ गुभमस्तु ॥

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14. References to Nose-ornament in some works ascribed to Samkaracarya and their effect on the Authorship and Chronology of these Works*

The Theosophical Publishing House, Adyar, published in 1937 an edition of the Saundaryalahari 1 of Śrī-Śamkara-Bhagavatpāda. The Editors describe this work as a Poem, (i) "displaying the finest touches of poetical fancy, (ii) a Stotra, Hymn in praise of the Goddess Tripura Sundarī, (iii) a series of Mantras, mystic formulæ, to be used by the Upāsaka along with the corresponding Yantras, Diagrams, wherein the DevI is to be conceived as abiding, and (iv) an exposition of the Āgamas and Tantras bearing on the worship of the Supreme Being in its aspect of the Śakti, Creative Energy, known as the Śrī-vidyā, embodying the underlying principles of Vaidika Dharma and as such having the sanction of the Vedas." 2 Further about the authorship and date of the work the Editors make the following remarks:—

(1) "Śrī-Śamkara-Bhagavatpāda is accredited as the author of the Saundaryalahari 3 by Laksmīdhara, Bhāskararāya, Kaivalyāśrama, Kāme-śvarasūri, Acyutānanda and a host of other commentators 4 of the work."

* B. I. S. Mandal Quarterly Vol. XXI, ph. 1-9.

Edited with English Trans. Commentary, Diagrams and an Appendix on Prayoga by
 S. S. Šāstri and T. R. Šrinivāsa Ayyangar.

2. Intro. p. V.

3. Ibid p. ix—" Vallabhadeva, who is assigned to the fifteenth Century A. D. in his Subhasitävali quotes the 27th Stanza of this work ascribing its authorship to Śrī Śankara-Bhagavatpāda."

4. Vide Aufrecht: Cata. Catalogorum, Part I. p. 48- Commentaries on आनंदलहरी or

सीन्दर्यलहरी addressed to Sakti by Samkarācarya :-

(1) विद्वन्मनोरमा, (2) विष्णुपक्षो, (3) by अप्ययदीक्षित, (4) by कविराज, (5) मञ्जुमाषिणी by कुष्णाचार्य, (6) by केशवमह, (7) सौभाग्यविधिती by कैवल्याश्रम, (8) तत्त्व-दीपिका by गङ्गहिर, (9) by गङ्गाघर, (10) by गोपीराम, (11) आनन्दलहरीतरी by गौरी-कान्त सार्वभौम, (12) by जगदीश, (13) by जगन्नाथ पञ्चानन, (14) by नरसिंह, (15) भावायदीपिका by ब्रह्मानंद, (16) by मल्लमह, (17) by महादेव विद्यावागीश, (18) by माधव वैद्य, (19) by रामनंद्र, (20) by राममह, (21) by रामानंदतीर्थ, (22) by लक्ष्मीधर देशिक, (23) by विश्लेमर, (24) by श्लीकान्तमह, Part II p. 9--(25) by

- (2) "The author of the gloss Sudhāvidyotini ascribes it to his own father Pravarasena, the son of Dramida, a king of the Dramida Country, and says that on the strength of the information directly obtained from his father he wrote the said gloss."
- (3) "There are others who say that Siva himself is the author of the Stotra.
- (4) And yet others who maintain that it had its origin in the teeth of Lalita, the Prime Sakti,"
- (5) "There is yet another tradition about the prime source of this work. The story goes that Samkara Bhagavatpāda, who is considered to be Iśvara incarnate, paid a visit to Kailāsa clad in the robes of a mendicant and took the Mantra-Sāstra placed by the Devī on the throne of Iśvara. While he was about to leave Kailāsa along with the spoil, Nandi-keśvara, who was on duty hard by, snatched the book from his hands. After grappling with him for a while the Acārya succeeded in retaining a portion of the book which contained the first 41 stanzas of the Saundaryalahari to which were added 59 more stanzas composed later on by him to complete the work." The view of the Editors about the authorship of the work is clear in the following remarks 2:—

"All these traditions apart any unsophisticated student of the Śrīvidyā after a thorough and close study of the literature bearing on it is bound to arrive at the conclusion that this work of Śamkara gives a faithful rendering of the views of his Parama Guru Śrī Gaudapādācārya in the first 41 stanzas of this work for the delectation of the more advanced student, rounded off with a highly poetic adoration of the Devī in the

[[] Concluded from last page]

शंकराचार्य, (26) विस्तार चन्द्रिका by गोविंद, (27) by श्रीरङ्गदास, Part III p. 11—(28) पदार्थचन्द्रिका, (29) रहस्यप्रकाश by जगदीश तर्कालकार (vide No. 12 above), (30) by पद्मनाभ दत्त (31) मुधाविद्योतिनी by प्रवरतेन (?), (32) तत्त्ववीधिनी by महादेव, son of यादव (vide no. 17 above), (33) by मुकुटराय, son of रामकवि, (34) by रामशङ्कर शर्मन्, (35) मनोरमा by सहजानंदनाथ (See No. 1 above) and (36) हरिमक्तिसुधोदय by हरिनारायण.

The chronology of all these Commentators is worth investigation in view of the importance of the text they have commented upon.

^{1.} Ibld, p. K.

^{2.} Ibid, p. X, footnote-last nine lines.

latter portion." The Editors have greater belief in "the genuineness of Samkara-Bhagavatpada's authorship of this Stotra," "than of several other Stotras ascribed to him."

About the date of the author of the Saundaryalahari the Editors observe 2:-

"Śamkara-bhagavatpāda to whom almost universally this work is attributed must have flourished in the eighth Century A. D., an inference which is supported by the view of European scholars that Śrī Samkarācārya, the author of the Śārīraka-mīmāmsābhāṣya flourished between A. D. 788 and 820." "We are, therefore, of opinion that this Stotra is the genuine work of Śrī-Śamkara Bhagavatpāda, who lived in the eighth Century A. D." With the firm belief of the Editors in the authorship of the Saundaryalaharī, which they regard as the genuine work of the celebrated Śamkarācārya, the pupil of Gaudapādācārya, let us see if there exists in this poem itself any evidence which goes against this belief. 3 Verse 61 of this poem reads as follows:—

भसौ नःसावंशस्तुहिनगिरिवंशध्वजपिट स्वदीयो नेदीयः फळतु फळमस्माकमुचितम् । वहस्रन्तर्भुकाः शिक्षिरतरनिश्वासघिटताः समुद्धा यस्तासां विहरपि च मुक्तामणिघरः ॥ ६१ ॥ "

The Editors translate this verse as follows: -

"O Flag of the Staff (dynasty) of the snow-clapped Mountain may this the bamboo of thy nose, immediately bear us the cherished fruit.

^{1.} Ibid, p. xi.

^{2.} Ibid, p. xii.

^{3.} J. N. Farquhar (p. 286 of Outline of Religious Literature of India, 1920) makes the following remarks about the Saundaryalahari:—

[&]quot;The Saundaryalahari is a famous ode to the goddess in a hundred stanzas, of which Stanzas, 1-41 are frequently published as a separate ode under the name Anandalahari. The whole is usually ascribed to Samkarācārya but serious scholars regard the ascription a mistake. Laksmidhara who belongs to the end of the 13th Century has a valuable Commentary on it. As he unhesitatingly accepts the authorship of Samkara there must be a tradition of some age to that effect behind him. The work thus goes back to a fairly early date but it is not yet possible to be more definite."

The date "end of the 18th Century" for Lakemidhara given by Farquhar is wrong as Lakemidhara was contemporary of Krenadevaraya of Vijayanagar (A. D. 1509-1530) and was the greatest San krit post in the literary circle of this king (Vide p. 283 of Vijayanagar Sixth-Centenary Commemoration Volume, Dharwar, 1936.)

Bearing in its (hollow) interior pearls, kept in their places by thy very cool breath, it wears a pearl outside also, there being an abundance of them (pearls) therein." 1

The Editors tell 2 us: "Here is reference to the South Indian custom of boring a hole through the left side of the nose of women so as to attach an ornament with a pearl pendant."

The foregoing remarks of the Editors leave no doubt that they treat this verse, containing a reference to nose-ornament, as a genuine part of the Saundaryalahari which they say is a work of Śrī Śaṃkarācārya. I have now to invite their attention to my paper 3 on the Hindoo Nose-Ornament 4 in which I have brought forward sufficient evidence to prove that the nose-ornament makes its appearance in Indian history and culture about 1000 A. D. but not earlier. If the above reference to nose-ornament in the Saundaryalahari is a genuine one it will prove the existence of nose-ornament in India in the 8th Century A. D., if not earlier — a conclusion which is not warranted by my evidence regarding the nose-ornament explained by me in detail in my paper under reference. On the contrary I am inclined to hold the views that —

"रत्नहारप्रवालां अनुपुग्पकटाङ्गदम् । मुक्ताप्रलम्बस्वाणि मालावलयमेखलाः ॥ ५७ ॥ कटकान्यूरुवालानि केयूराः कर्णमुद्दिकाः । कर्णपुरान् शिखायन्थानमस्तकाभरणानि च ॥ ५८ ॥ कण्ठिकावत्सदामानि रसनाः पाद्वेष्टकाः ॥ आलुण्ठयाकुञ्च्य सर्वाणि चिक्षपुर्विदिशो दिशः ॥ ५९ ॥ "

This is a description of ladies of the antahpura mourning the loss of the prince Varanga and throwing away all their ornaments. I be list of woman's ornaments recorded here is quite elaborate and if it includes earrings (老句祖文本):) the omission of 和祖祖和帝 of later times in this list is worth noting. According to Dr. Upadhye "Janairphanandi belonged possibly to [Continued on next page]

^{1.} For the double meaning of the word Vaméa and its application in the present stanza see the remarks of the E litors on p. 192. "The fact that the Devi's nose wears as an ornament a pearl outside, is taken advantage of by the poet, who represents it as one of the pearls in the bollow of the bamboo-like nose cast by the exhaling breath of the Devi and forming an index as at were to the pearls inside."

^{2.} Ibid, p. 193.

^{3.} Vide Annals of the Bhandarkar Institute, Vol. XIX pp, 313-332 "Antiquity of the Hindu Nose-Ornament called Nath."

^{4.} I may point out the significant absence of nose-ornament in the following extract from a Jain Sanskrit work of "A. D. 7th Century": — Verses 57 to 59 of Chapter XV of Varanga Carita of Jațăsimhanandi (ed. by Dr. A. N. Upadhye, 1938, p. 133) read as follows:—

- (1) the verse in the Saundaryalahari referring to nose-ornament is not a genuine part of the poem.
- or (2) if the Editors regard it as a genuine part of the poem the entire poem is not the work of Srī Samkarācārya and further,
- (3) it is a work composed sometime after 1000 A. D. by some author who may have borne the name Samkara.

I would, therefore, request the Editors to examine their evidence about the authorship of the poem and the genuineness of the verse in the light of the view urged by me above to the effect that the work, Saundaryalahari is not the work of the great Indian philosopher of the 9th Century but a late production of some learned pandit with deep devotion to the Devi, the subject of the poem.

The reference to nose-ornament in the Saundaryalahari quoted above is analogous to the following late references 1 to it in other Sanskrit works:—

(1) About A. D. 1080 -- Bilhana in his Vikramānkadeva-Carita refers to নালাবল and মুকামত.

Verse 79—" नासावंदाविनिर्मुक्तमुक्ताफलसनाभिना

भाति भाकतछस्येन बालचन्द्रनबिन्दुना"

(2) A. D. 1257--Jalhana in his anthology Süktimuktavali.

I have also pointed out that another work commonly ascribed to ŚriŚaṃkarācārya contains a reference 2 to the nose-ornament in verse 45:—
" महत्तामुरश कृत्व गिरिजे नासाविभूषामिमाम्"

This work also is not regarded by scholars as a genuine work of the great philosopher and there is no reason why the Saundaryalahari also should not be treated likewise 3 in view of its reference to nose-or-

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Karnāṭak." In the Pūrvapīthikā of the Dafakumāra-Carita (IV Ucchvāsa-p. 28 of P. V.

Kulkarni's Edn., Bombay, 1919) we have a list of woman's ornaments as follows:—

" माण नृपुर मेलला कङ्कण कटक ताटङ्कहार क्षीम कञ्जलं वनितायोग्य मण्डनजातं "
The Pürvaplihikā is regarded by Dr. A. B. Keith as "no part of Dandin's work" (Sans.
Lit. p. 298)

1. Vide p. 329 of Annals, XIX, Part IV (1939).

2. Annals XIX, p. 380 — Reference from त्रिपुरमुन्द्रीमानसपूजास्तोत्र

3. Dr. Belvalkar enumerates over 210 Stotras which he considers as "not genuine works of Sri Samkarācārya." This number includes Stotras addressed to the consort of Siva under names (1) Devi (2) Tripura Sundari or Sundari (8) Bhavāni (4) Lalitā (5) Ambā or Ambikā (6) Bālā, (7) Kāli, or Kālikā (8) Gauri or Gīrijā (9) Syāmā or Syāmalā and (10) [Continued on next page]

nament. These two references to nose-ornament in two different works ascribed to Samkarācārya should lead us to a regular search for references to nose-ornament in other works included in the Vani Vilas Edition of the Works of Samkarācārya. Though I cannot undertake this inquiry at present I may record below some other references to nose-ornament in the works commonly ascribed to Samkarācārya:—

In the Mantramatrka-puspamala-Stava i the following verse 6 contains a reference to नासामोक्तिक:—

" इंसेरप्यतिलोभनीयगमने हारावलीमुज्ज्वलां हिन्दोलबुतिहीरप्रिततरे हेमाङ्गदे कड्णे । मञ्जीरी मणिकुण्डले मुक्टमप्यर्धेन्दुच्दामणि नानामीक्तिकमङ्गुलीयकटकी काबीमपि स्वीक्ट ॥ ६ ॥ "

In the Devi-Catuh-Śaṣṭyupacārapūjā-Stotra² the nose-ornament is referred to as "नासापुटे मोक्तिकम्" as will be seen from the following verse 20:—

"धिम्मिले तव देवि हेमकुसुमान्याधाय फालस्थले सुक्ताराजिविसाजमानतिलकं नासापुरे मौक्तिकम् । मातमौक्तिकजालिकां च कुचयोः सर्वाङ्गुलीपूर्मिकाः कटयां काञ्चनकिङ्किणोर्विनिद्धे स्तावतंसं श्रृतौ ॥ २०॥ "

In the Yamunāṣṭaka³ there is a reference to मौक्तिक as नासिकमूचण of goddess Yamunā in verse 7:—

" करिवरमौक्तिकनासिकभूषणवातचमत्कृतचन्चलके मुखकमलामलसौरभचन्चलमत्तमधुब्रतलोचनिके । माणगणकुण्डललोलपरिस्फुरदाक्लगण्डयुगामलके जय यमुने जय भीतिनिवारिण संकटनाज्ञिनि पावस मास् ॥ "

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Sivā, Pārvati, Mātangi, Sahajā, Jvālāmukhi. Rājarājeivari. (Vide p. 228 of Basu Mallik Lectures Part I, 1929). About the work Ānandalahari Dr. Belvalkar regards "it as probably the genuine work of Samkarācārya" but he specifies this work as "Consisting of 20 Stanzas in Sikharini metre and honoured by over 30 Commentaries, one attributed to Samkara himself" ("as printed in the Vani Vilas Edition Vol. 17. pp. 159-164 and to be distinguished from the Saundaryalahari in 100 Stanzas. The authenticity of the work is not, however, absolutely certain.")

^{1.} Vani Vilas Edition, Srirangam, Vol. 17, 2'0.

^{2.} Vani Vilas Edn. Vol. 17, p. 223,

^{3. -} Do. -- Vol. 18, p. 99.

In the Bhramarāmbāṣṭakam 1 we find a reference to मुक्तामणी on the tip of the nose of the goddess in verse 1:-

वाह्यस्यार्णस्याव्यास्यस्यास्यस्य वाह्यस्य वाह्

If the verses containing a reference to nose-ornament quoted above form part of genuine works of Samkara it would appear that the great Indian philosopher was a great devotee of not only the goddess but of her nose-ornament as well. It appears to me that all these works containing the references to nose-ornament are not the works of Samkara and that they were composed after A. D. 1000. The following table will sum up the six references to nose-ornament in works ascribed to Samkara and included in the Vani Vilas Edition of his works:—

No.	Work	Vani Vilas Edition	Manner of Reference
1	सौंद्यंब्ह्सी	Vol. XVII, p. 140	' नामावंश" and "मुक्तामणि"
2	त्रिपुरसुंदरीमानसपू नास्तोत्र	Vol. I, p. 197	"मीक्तिकां", "नामाविभूषाम्"
3	सन्त्रमातृकापुष्पमालास्तव	Vol. XVII, p. 250	" नासामीक्तिकम् "
4	देवीचतुःषष्ट्युपचार	Vol. XVII, p. 223	ं नामापुरे मौक्तिकम् "
5	यमुनाष्टकम् ा वार्षा	Vol XVIII, p. 99	' ग्रीकिक नासिक सूचण ''
6	धमराम्बाष्टकम्	Vol. XVIII, p. 119	'' नासिकाग्राविख पन्मुक्तामणी "

Evidently all the works mentioned in the above table were composed after the nose-ornament had taken possession of the Hindu society and culture, not to say religion in view of the fact that in all the six cases recorded above the poet has described the nose-ornament in the nose of the goddess.

^{1.} Vani vilas Edu. Vol. 18. p. 119.

In 1939 I published a paper on the "Antiquity of Hindu Nose-Ornaments" (Annals of B. O. R. Institute, Vol. XIX, pp. 313-334) in which I tried to establish that this ornament is a foreign importation into India and that it was imported into India some time about A. D. 1000. Subsequently I noted some references to "nose jewels" in the Bible and requested my friend Prof. R. T. S. Miller of Bombay to examine them closely. In 1942 Prof. Miller published the result of his examination of these and other references to nose-rings (Hebrew, nezem) in a paper on the "Nose-Ring in the Old Testament" (New Indian Antiquary, May 1942, pp. 25-30). Of the eleven passages examined by Prof. Miller, four use the word undoubtedly in the sense of "Nose-ring." These passages are:

- (1) Genesis xxiv. 47; (3) Isaiah iii. 21;
- (2) Proverbs xi. 22:
- (4) Ezekiel xvi. 12.

According to Prof. Miller these passages "do not all show a very favourable attitude to such ornaments" and indicate that it was a "foreign importation" among the Hebrews, who might have inherited this custom from the ancestors they had in common with other Semitic people."

Prof. Miller further observes that the "Bedawin have kept the custom of using nose-rings to the present day." In support of this statement he quotes Burton's Pilgrimage to Mecca, p. 376, where it is stated: The ornaments (of the Bedawin) are bracelets, collars, ear-and nose-rings of gold, silver or silver-gilt."

The Bedouins are a very ancient tribe. They are referred to as Aamu in one of the inscriptions in a tomb of Beni-Hasan (near Harmopolis) belonging to about 1900 B. C. A tomb of the Fifth Dynasty (c. 2560-2420 B. C.) furnishes evidence about the earliest contact between Egypt and Syria-Palestine. About 1950 B. C. an official of the name Sinuhe (from Egypt) fled to Southern Palestine and there settled among the Bedawins, who were called "plunderers" or "sand-dwellers" by the Egyptians, 1 I cannot say anything about the source of the nose-rings current in Palestine at the time when the section of Genesis containing a reference to nose-rings was compiled (about 850 B. C. as stated by Prof.

Journal of Kalinga Historical Research Society, March 1947, Vol. I, pp. 281-283.

^{1.} Vide chapter 9 on "Egypt and Israel" in Legacy of Egypt by S. R. K. Glanville Oxford, 1943, p. 219.

Miller). Whether the ancient Bedawins (Aamu) or the ancient Egyptians had among them the custom of wearing nose-rings prior to say about 850 B. C., is a problem on which we should expect some light from the Egyptologists. I want, however, to put on record the following evidence about the use of nose-ornaments by ladies in Egypt between A. D. 1833–1835 as recorded by Edward William Lane in his Account of the Manners and Customs of the Modern Egyptians, edited by Alexander Gardner London, 1895. Chapter XXI of this book deals with "Egyptian Female Ornaments" (pp. 561-572) some of which are described in detail. I note below the names of these ornaments as given by Lane:

I. ORNAMENTS USED BY LADIES OF MIDDLE ORDERS:

(1) Diamond Kurs; (2) Gold Kurs: (3) Kussah; (4) Enebeh; (5) Shawāteh; (6) Reesheh; (7) Hitāl: (8) Kamarah; (9) Sākiveh; (10) Ood es-saleeb; (11) Misht; (12) Halak (ear-rings) of many kinds; (13) Ekd (necklace) of many kinds; (14) Khatims (finger-rings, debbh is a finger-ring without a stone); (15) Asāwir (Bracelets); (16) Ornaments of the hair, safa, bark etc; (17) Khulkhul (Anklets); (18) Hegāb (amulet). II. Ornaments used by Ladies of Lower Orders:

(1) Halak (ear-rings); (2) Khivām or Khuzām (nose-ring); (3) Ekd (necklace); (4) Tok (a ring for the neck); (5) Finger-rings; (6) Asāwir (bracelets); (7) Hair ornaments, Okoos etc.; (8) Khulkhul (anklets).

About the nose-rings Lane observes (Page 571) 1:

"The Khizām" or nose-ring commonly called "Khuzām" is worn by a few of the women of the lower orders in Cairo and by many of those in the country towns and villages both of Upper and Lower Egypt. It is most commonly made of brass, is from an inch to a half in diameter; and has usually three or more coloured glass beads generally red and blue, attached to it. It is almost always passed through the right ala of the nose, and hangs partly before mouth, so that the wearer is obliged to hold it up with one hand when she puts anything into her mouth. It is sometimes of gold. This ornament is as ancient as the time of the patriarch Abraham" and is mentioned by Isaiah (iii. 21) and by Ezekiel (XIV. I2). To those who are unaccustomed to the sight of it, the nose-ring is certainly the reverse of an ornament."

The above extract about the nose-ring as a female ornament current in Egypt more than 100 years ago may be taken to be accurate as

* See Genesis, XXIV, 47. where in our common version "ear-ring" is improperly put for "nose-ring."

^{1.} On this page there is a wood-cut picture of the face of a woman wearing the siesering and on either side of the face are pictures of nose-rings with beads.

Lane's book was characterized in his days as "the most remarkable description of a people ever written." In the Biographical Sketch (pp. vii-ix) to this book the editor states that this book "remains to this day the standard authority on its subject."

In Lane's remark about the Egyptian nose-ring the following points are noteworthy:-

- (1) Use of the nose-ring among the ladies of the lower orders in Egypt.
- (2) Currency of the nose-ring among some of the ladies of lower orders of Cairo and among many ladies in the country towns and villages of Upper and Lower Egypt.

Egypt must have had some previous history. If this supposition is correct we are curious to know this history as vouched by ancient 2 and mediaeval Egyptian records. Egypt seems to have been in contact with India long prior to A. D. 400. C. H. Roberts in his chapter on the Greek Papyri in the Legacy of Egypt (edited by Glanville, Oxford, 1943), p. 270, states that it is to a single papyrus of A. D. 359 that we owe the knowledge that the government was taking steps at that time to revive the trade between Egypt and India. In view of this early contact between Egypt and India it would have been easy for the nose-ring to migrate to India long before A. D. 1000, when it first appears in Indian literature. We must, therefore, investigate the exact source of the Indian nose-ornament and try to determine whether it was introduced into India by the Egyptians or by the Bedawins of Palestine, who have kept the custom of using nose-ring upto the present day as stated by Prof. Miller.

2. Vide p. 421 of Cambridge Ancient History, Vol. II (1925). In the remarks on Egyptian costume we find the women using brooch, sandals of wood and leather, ear-ring, neck-lace, ear-stude, armlets or bangle- (used by men and women). There is no reference to any ness ornament in this description of Ancient Egyptian costume say before B. C. 1000. Ear-rings were probably introduced from Asia after the middle of XVIIIth Dynasty.

" minerality =1

^{1.} I note some points from this sketch: Edward William Lane, born at Hereford on 17th September, 1801—went to Egypt in 1825 to improve his health—studied Arabic language as also the people of Egypt—adopted native costume and was generally taken for a Turk—engaged two Professors to instruct him in Arabic and in Muslim religion and law—adopted Arabian life and manners—gained entire confidence of the Arabs—Lane wanted to make the Egyptians known to the world—returned to England in 1828 with his Description of Egypt complete—returned to Egypt in 1833 for revising his book, which was ultimately i-sued in 1836 in 2 Vols., illustrated with wood-cuts drawn by the author—great success of the book—two years later Lane brought out his translation of Arabian Nights and subsequently some other works—Lane died at Worthing, Sussex, on 10 th August, 1876 in his 75th year—his grand-nephew S Lane Poole completed the publication of Lane's Lexicon (1876–1890), a work of highest authority—Lane was made a D. Litt. of Leyden University and was a Civil List Pensioner of the British Government.

16. The Hindu Nose-ornament - Its Past and Present*

The Leading Committee of Schools

Every one knows Spenser's dictum " Decoration precedes dress ", as applied to mankind in general. Though love of ornaments is natural in man, its excess is sometimes attributed to Oriental people. Though our Aryan ancestors may not have been excessively fond of ornaments in remote antiquity, they may have developed this love when they settled in India and came into contact with other races and cultures. We find accordingly quite a big list of male and female ornaments mentioned by Bharata in his Natva-Sastra. In this list the Nose-ornament is conspicuously absent.

At present the nose-ornament of varied types and designs is current in all parts of India from the Himalayas to Cape Camorin among Hindu as well as non-Hindu ladies. I am, however, concerned here only with the history of the Hindu nose-ornament. In the present state of this problem, I am inclined to hold the view that the Hindu ladies, who had practically an ornament for every part of their bodies before 1000 A. D., picked up the nose-ornament from savage tribes among whom it appears to have been current, if we are to judge their past by their present customs. The anthropologists have already recorded evidence which shows that all savage tribes in Asia, Oceania, Australia, Africa and America have had the custom of boring not only the septum of the nose and putting pendants or rings through the hole, but of boring the sides of the nostrils and inserting nose-pins into them. In view of this evidence, it is reasonable to suppose that the Hindu ladies must have adopted the custom in imitation of the savages about 1000 A. D. Sea-faring nations into contact with wild tribes of the different parts of the world referred to above, may have introduced it into India.

Recently I discovered some references to nose-jewels in the English translation of the Old Testament of the Bible. I have asked a Biblical scholar to examine these and other references to the nose-ornament in the Bible and report if these references are genuine. In case their genuineness is supported by Hebrew, Greek and Latin translations of the Bible, we may be able to take the history of the nose-ornament backwards from 1000 A. D. to about 200 B. c. But even then the question will remain: "What is the genesis of nose-ornament and its history prior to 800 B. c. ?" * Rainadipa, Rajapur, 1941, pp. 22-24.

This question must be answered by students of proto-Indian history and anthropology. I can only say that the custom of boring the nose or any other part of the body is a savage one and needs to be abandoned by Hindu ladies. At any rate the Nath (न्य), with all its jewels and rubies, should be discarded by our women-folk, though it is wrongly regarded as a sign of married bliss. Its wearing is not supported by any text on Hindu Dharma-Sāstra from the earliest to the last. But custom lends enchantment to the face, and our orthodox sisters are not inclined to leave the Nath to the savage tribes; on the contrary, they make their husbands pay a heavy cost for this ornament which has got the halo of antiquity at least of the last 1000 years. Though our educated sisters are not much fond of this ornament, I find at least some of them wearing this ornament on some occasions in families where orthodoxy has not yet completely disappeared.

At present, the type of the nose-ornament differs with different provinces of India. But even in the 16th century, the Ain-i-Akbari mentions four varieties of nose- ornament viz. the Besar, Nath, Phul etc. This evidence shows the gradual evolution of the types of the nose-ornament on Indian soil in civilized society. Some time ago an article appeared in the Illustrated Weekly Times with photographs of ladies of the Chamba State wearing very complicated nose-ornaments with gold plates and chains hanging from the noses. One shudders to see this harness of the female nose, which hinders the beauty of the nose instead of enhancing it. But "Frailty, thy name is woman" says Shakespeare, and women are slaves of ornaments in a much greater degree than men. "Kanaka" and "Kāntā" are inseparably connected from remote antiquity and let us hope that education may be able to separate them at least so far as the nose-ornament is concerned.

The history of the nose-ornament so far revealed shows, in an admirable manner, how Hindu culture has acquired foreign elements through centuries and digested them thoroughly. Recently I have sent for publication the texts of two religious poems, one in Marathi and the other in Sanskrit, based on nose-ornament as their central theme. I have published another paper on references found in Stotras, the authorship of which is ascribed to Śri Śańkarācārya, but which appear to me to be late works, with which this great Indian philosopher had nothing to do. In fact, I can say that any work containing references to the nose-ornament is later than 1000 a. D., as no literature—Jain, Buddhist or Brahmanical—prior

to 1000 A. D. contains any reference to nose-ornament. In the same manner, no sculpture or painting earlier than 1000 A. D. contains any representation of the nose-ornament at least in India.

The future of the nose-ornament is, of course, quite uncertain, and one cannot say whether the mass-mind of India can discard it at once like many other customs, which were once current, but became obsolete in course of centuries. Cleopatra's nose made history in classical times, and people wished it was a little bit shorter; but that was not to be. In the same manner, one cannot feel sure whether our women folk would discard their nose-ornament finally and change the course of Indian cultural history as a result of the labours of historians, which only excite the interest of the people for a short time and then get buried in the penderous volumes on our book-shelves, as there is no law to control our present literature in so far as it affects our culture, and no dictator to weed out foreign elements from it, healthy or otherwise.

person to study all the references to the newscring in the Birties and to preperson artical note on them for painteness in the new Indian Adaptation
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17. The Nose-Ring in the Old Testament*

By R. T. S. Miliar, Bombay.

[In 1939 I published a paper on the "Antiquity of the Hindu Noseornament" in the Annals of the Bhandarkar Institute (Vol. XIX, pp. 313-334) in which I tried to prove that this ornament is a foreign importation into Indian culture. I further traced the history of this ornament in Indian sources from A. D. 1000 onwards but was unable to trace any references to it in Indian sources prior to A. D. 1000. In view of these findings I was curious to investigate the history of this ornament prior to A.D. 1000 in any source other than Indian and accordingly carried on a cursory perusal of the Bible. To my great surprise I found in the Bible some references to the nose-jewels. In this connection I had a discussion with my friend Prof. D. D. Kosambi, who advised me to consult some scholar, competent to study all the references to the nose-ring in the Bible and to prepare a critical note on them for publication in the New Indian Antiquary. As a result of Prof. Kosambi's inquiry through Prof. John MacLean of the Wilson College, Bombay, I was fortunately introduced to Prof. k. T. S. MILLAR of the same College who kindly agreed to my request and prepared the following interesting note on the "Nose-ring in the Old Testament". I take this opportunity of thanking all these friends for their willing cooperation in pursuing my inquiry about the antiquity of the Nose-ornament prior to A. D. 1000. Prof. MILLAR thinks that the custom of wearing the nose-ring might have come to the Hebrews from the ancestors they had in common with other Semitic peoples - P. K. Gode.]

The following does not attempt to be more than a note on the use of the Hebrew word nezem in the Old Testament or Hebrew Bible. The s gnificance of this is that it indicates that nose-rings were in use among the people of the Hebrews several centuries before Christ.

The word nezem means an ornament in the shape of a ring, and this seems always to have been made of gold. The dictionary gives two meanings: "nose-ring" and "ear-ring", because in some places where it is used it is obviously attached to the nose, and in others it is certainly an ornament for the ears.

There are eleven passages in the Old Testament where the word is used :-

^{*} New Indian Antiquary, May 1942, pp. 25-30.

Genesis 24, verses 22, 30, 47.

Genesis 35, verse 4.

Exodus 32, verses 2, 3.

Exodus 35, verse 22.

Judges 8, verses 24, 25, 26.

Isaiah 3, verse 21.

Ezekiel 16, verse 12.

Hosea 2, Verse 13.

Job 42, verse 11.

Proverbs 11, verse 22.

Proverbs 25, verse 12.

In two of the above passages there is a direct reference to ears. The first is Genesis 35, 4. The Hebrew is as follows:

weeth hannezamin 's sher be' ozněhem ;

which is translated in the Authorised Version of the Bible as

The Revised Version translates:

"the rings which were in their ears;"
and Professor MOFFATT, in A New Translation of the Bible, as
"their amulets of ear-rings."

The other is Exodus 32, 2, 3,

"wayyōmer 'a lēhem ' aharōn pārēqū nizmē hazzāhābh 'asher te' oznē neshēkhem benēkhem übhenothekhem "

" And Aaron said unto them

"Break off the golden earrings, which are in the ears of your wives, of your sons, and of your daughters." (A. V.)
".... Break off the golden rings" (R. V.)

MOFFATT also translates earrings.

As the word nezem (plural nezamim) in these passages undoubtedly means an earring, the earlier translators seem to have attempted to read this meaning into the word in all cases where that was at all possible. The Septuagint (the Greek version of the Old Testament) translates in all cases by enotion, an earring. The Vulgate follows suit with incures, but finds difficulty in two passages, where it uses other words. These will be dealt with later. The Authorised Version (English, 1611) followed the Vulgate, translating by earring except in these two cases. The Revised Version (English, 1881) alters to nose-ring in a number of passages, and seems to give the correct rendering in most cases. This, with MOFFATT's

Translation, may be treated as the last word on the subject as far as translation is concerned.

Besides the passage dealt with above, there are several of the passages in question where there seems to be little doubt that earrings are referred to. These are:-

Judges 8, 24

uthenu-lī Ish nezem shelālo ki-nizme zāhābh lāhem kī yishme'elīm hem "give me every man the earrings of his prey (for they had golden earrings, because they were Ishmaelites)" (A. V.)

The R. V. and MOFFATT also translate earrings.

Job 42, 11

"wayittenû lö îsh nezem zāhābh eḥādh"

" every man gave him an earring of gold " (A. V.)

"every man gave him a ring of gold" (R. V.)

" a gold ring" (MOFFATT)

The chief reason for the assumption that earring is the correct translation in these passages is that the rings seem to be for wearing by men, and all the evidence shows that nose-rings were only worn by women.

Three of the passages just dealt with (Genesis 35, 4, Exodus, 32, 2, 3, and Judges 8, 24) have an interest of their own as indicating that the rings described were associated with heathen practices or heathen peoples. In the first passage Jacob's household is purified by putting away strange gods and divesting themselves of their earrings. In the second passage earrings are melted down to make the golden calf which the Israelites worshipped sinfully in the wilderness. In the third passage, earrings are taken from the defeated Ishmaelites. It was considered natural that they should have golden earrings, because they traded for gold and silver, which they brought from Egypt and Arabia. Pliny (Natural History xi, 50) refers to the wearing of earrings by men of the East. There is said to be no such custom among the Bedawin (the descendants of the Ishmaelites) to day. The earrings seem to have been regarded as amulets. (See MOFFATT's translation and PEAKE's Commentary on the Bible.)

There are three passages where the meaning of the word might be either "earring" or "nosering" These are :-

Exodus 35, 22

"wayyābho'û hā'anāshīm al-hannāshīm köl nedhībh lēbh hēbhī'û hāḥ wānezem weṭabba' ath wekhūmāz kolkelī zāhābh "And they came, both men and women, as many as were willing hearted, and brought bracelets, and earrings, and rings, and tablets,

all jewels of gold" (A. V.)

".....brooches and earrings and signet-rings and armlets, all jewels of gold" (R. V., which in the margin gives the alternative reading nose-rings for earrings).

MOFFATT translates earrings.

In this passage there is another word hah, here translated bracelets or brooches, which means usually a hook or ring put into the nose of animals such as the camel, and which may here mean nose-rings. It does not seem to be used for a human ornament elsewhere.

Proverbs 25, 12

"nezem zāhābh yaḥali-khāthem mokhiah hākhām al-ōzen of beats shoma'ath " and you or the pand you line as it but an adding

"As an earring of gold, and an ornament of fine gold, so is a wise reprover upon an obedient ear." (A. V.)

The Revised Version is the same, but gives the marginal alternative nose-ring.

"A golden earring, a necklace of rare gold, an apt word is like that." (MOFFATT)

Here the context seems to provide a case for taking the meaning as earring, though nose-ring, as in the last passage, has the support of the Revised version margin. Leanty and comamonic that love been given her.

Hosea 2, 13

" üphaqadhti 'aleha eth-yeme habb'alim 'asher taqtir lahem watta-'adh nizmāh wehelyāthāh"

"And I will visit upon her the days of Baalim, wherein she burned incense to them, and she decked herself with her earrings and her jewels " (A. V.)

The Revised Version again has nose-rings as an alternative reading in the margin.

"..... decking herself with rings and jewels" (MOFFATT)

In this last passage there is again a reference to heathen practices, popular religious ideas required certain ornaments for holy days (compare the Koran, Sura 20 verse 61: on the day of ornament (i. e. the feast day be your meeting). There does not seem to be any evidence that noserings were regarded as amulets, but they may have been worn with other ornaments on holy days. Froverbe 11. 22

There remain four passages where the word nezem undoubtedly means nose-ring. In each of these the word is used along with the Hebrew word 'aph, which means nose. They are:

Genesis 24, 47, Proverbs 11, 22, Isaiah 3, 21, Ezekiel 16, 12, Genesis 24, 47.

"wa'asim hannezem al-'appāh"

"I put the ear-ring upon her face" (A. V.)

"...... the ring on her nose" (R. V. and MOFFATT).

"suspendi inaures ad ornamendam faciem eius" (Vulgate)

"kai perietheka aute ta enotia" (Septuagint)

Here the Septuagint, the Vulgate and the Authorised Version all continue to translate earring. They get out of the difficulty created by the presence of the word 'aph, by translating it face, which is possible in some contexts. But it is unlikely here, and in any case could hardly stand for ear.

Bzekiel 16,-12: to taxmento no beauties to parties as an " wā'ettēn nezem al-appēkh wa'aghllīm al-oznāyikh "

"I put a jewel on the forehead, and earrings in thine ears " (A.V.) which also has nose as a marginal alternative for forehead).

"I put a ring upon thy nose, and earrings in thine ears" (R. V.) MOFFATT is similar.

"ed dedi inaurem super os tuum " (Vulgate)

The prophet is here describing the beauty that God has bestowed on Jerusalem, who is depicted as a false woman who has made evil use of the beauty and ornaments that have been given her. There is no doubt at all that a nose-ring is the ornament referred to. Another word 'aghilim is used for earrings.

Isaiah 3, 21

" hattabba'oth wenizme ha'aph "

(The word preceding this is hallehashim which means charms or amulets and is translated by the Authorised Version as earrings).

"The rings, and nose jewels" (A. V. and R. V.)

" signet-rings and nose-rings (MOFFATT)

"et annulos et gemmas in fronte pendentes" (Vulgate)

Here the Vulgate departs from its use of the word incures, and translates by the nondescript word gemmas. It uses incures to translate hallehashim in the preceding verse. This is part of a catalogue of the ornaments worn by the proud women of Jerusalem, who Isaiah says will be made desolate for their pride and luxury.

Proverbs 11, 22

"nezem zāhābh be'aph hazīr ishshāh yāphā weşārath ṭā'ām "

"As a jewel of gold in a swine's snout, so is a fair woman which is without discretion." (A. V. and R. V.)

The Revised Version gives ring in the margin as an alternative for jewel.

"a golden ring in the snout of a sow......" (MOFFATT)

"circulus aureus in naribus suis" (Vulgate)

"enotion en rini huos" (Septuagint)

Here the word is used humourously in a simile, but it must mean a nose-ring such as ladies wear, as it is in a nose, albeit a pig's nose. MOFFATT makes this clear by translating by the word sow. The Vulgate uses yet another word circulus, but the Septuagint sticks to enotion.

The passage in Genesis 84 tells us something more about the ring in

question. In verse 22 it is described as-

"nezem zāhābh beqa' mishqālo" "a golden earring of half-a-shekel weight" (A. V.) "a golden ring" (R. V.) "a golden nose-ring weighing a quarter of an ounce" (MOFFATT). This ring was taken by Abraham's servant Eliezer to put on the nose of Rebecca, who was to become the wife of Isaac, Abraham's son.

The passages in which the word nezem undoubtedly means nose-ring do not all show a very favourable attitude to such ornament. This, and the places at which we find the word used, seem to indicate that the nosering was a foreign importation, or at any rate regarded as such from the fact that it was used by the heathen tribes with whom the Israelites were surrounded. Isaiah regards the use of nose rings and other ornaments as symbolic of the pride of the women of Jerusalem, who are to be punished for that very fault and all their finery taken away. This prophecy was probably written about 735 B.c. and Isaiah was protesting against the state of affairs and in particular the luxury of Jerusalem at the beginning of the reign of Ahaz king of Judah. The prophecy of Ezekiel is later, probably at the time of the exile about 596 B.c. Here the nose-rings, with the crown and the earrings, are symbolical of the blessings which God has showered on Jerusalem. But Jerusalem has abused these bounties (verses 15 to 19) and they have been a snare to her; and as a punishment she will be carried away captive into Assyria.

The section of Genesis from which the first passage (Genesis 22) comes belongs to the so-called Jahwehistic narrative, the date of whose compilation must have been about 850 B.C. The reference to nose-rings must belong to this original writing of the story, or an even earlier tradi-

tion and not to the later period when the different parts of which the Pentateuch is made up were put together. It is thus earlier than the other passages just referred to and it is obvious that the giving of the nose-ring as a token is accepted as the natural thing. The story purports to belong to pre-Israelitish times, when the patriarchs were settling in Canaan and had not yet abandoned their nomadic existence. Their way of life may be said therefore to have been akin to that of the Bedawin, with whom they recognised their kinship in the story of the half-brothers Isaac and Ishmael. It is not surprising, therefore, to find that the Bedawin have kept the custom of using nose-rings to the present day. "The ornaments (of the Bedawin) are bracelets, collars, ear and nose-rings of gold, silver or silver-gilt." (Burton, Pilgrimage to Mecca, page 376). The supposition is that as the Israelites became a settled people and their nobility grew more luxurious, the wearing of jewels was more and more confined to the rich, and was frowned upon by the stricter sort of religious people.

It does not look as if the origin of the wearing of the nose-ring is to be found among the Hebrews, but the custom might well have come to them from the ancestors they had in common with other Semitic peoples.

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18. Studies in the History of Hindu Festivals — Some Notes on the History of Divall Festival*

(BETWEEN C. A. D. 50 AND 1945)

All festivals have a unifying influence in social and national life. Students of the cultural history of a nation must understand the genesis and development of these festivals and record their history with as much precision and detail as possible. The oldest living civilizations on this globe have contributed not a little to the growth of these festivals, which are a regular feature of national life. To whatever class of people these festivals may belong they have a peculiar human appeal. In India with its numerous religious beliefs we have quite a bewildering variety of religious and semi-religious festivals but unfortunately much of the writing 1 devoted to these festivals is of a descriptive type, in which no attempt is made to fathom the depths of available historical sources with a view to reconstructing any reliable history worth the name.

In 1916 one author who calls himself " Rgvedī " published a book called History of Aryan Festivals 2 (आयांच्या सणाचा इतिहास) in Marathi. This

* Annals (B. O. R. Institute) Vol. XXVI, pp. 219-262.

1. The provincial Gazetteers of India contain much useful information about many of these festivals but it is of a descriptive type. The history of each festival ought to be studied in the form of monographs as a preliminary to an encylopaedic history of Indian Festivals. At present our knowledge of the history of festivals is rather nebulous. We cannot say when a particular festival originated and how it developed through centuries of our cultural history. Mere descriptions of the present - day festivals, howsoever enchanting, do not prove their antiquity as these descriptions are a mixture of legends and hear - say evidence with many regional variations, from which it is difficult to comprehend the origin and development of these festivals.

2. This book was published in Bombay. The Preface of the author is dated 3rd April 1916 This book appears to have enjoyed a wide popularity as will be seen from the opisions printed at the end of the volume. The author deals with such topics as - (1) Rise of Indian Astronomy, (2) Seasons, (3) Months, (4) Adhikamasa (intercalary month), (5) Seven days of the week, (6) Samuatsara-phala, (7) different Sakas, (8) Seasonal Festivals and Historical Festivals (pp. 16-17), (9) Samvalsara-Pratipada, (10) Ramanavami. (11) Dolotsava, (12) Gauri-Utsava, (13) Akşayya-Trtlyö, (14) Parafuröma-Jayanti, (15) Nrsimha-Jayanti, (16) Gangotsava or Datahara (17) Vata-Sāvitri, (18) Mahā Ekādati (19) History of Caturmasa, (20) Nagapaticami, (21) Mangala-Gauri, (22) Śravani, (23) Povati Paurnimă, (24) Nărali-Paurnimă, (25) Šri Krsna-Janmästami, (26) Pithori-Amāvāsyā, (27) Poļā or Vrsabhotsava, (28) Haritālikā, (29) Gaņeša-Caturthi, (30) Rei-Paticami, (31) Jyestha-Gauri, (32) Vamana-dvadati, (33) Ananta-Caturdati. (34) Mahalaya-Pakşa, (35) Navarātra-Mahotsava, (38) Vijayā-dafamī, (37) Rāmalilā, (38) Dīpāvali-Mahotsava (घनत्रयोदशी or घनतेरस, नरकचतुर्दशी, लक्ष्मीपूजन), (89) Balipratipada. (40) Yama-dvitiyā, (41) Tulašī-vieāha, (42) Dhātrīpūjana. (43) Vaikuntha-Caturdašī, (44) Tripuri-Paurpimā, (45) Campā-sasthi, (46) Datta-Jayanti, (47) Makara-Sahkramapa, (48) Vasanta-Paticami, (49) Ratha-Saptami, (50) Mahäiivarätra, (51) Phälguna-Utsava or Holi.

is perhaps the only book in Marathi which devotes no less than about 370 pages to the study of Hindu festivals but even here one fails to find any history as such of each festival which has governed the life of our ancestors for hundreds of years. This attempt is, however, praise-worthy as it is perhaps the only conscious effort to meet a long-felt want about the history of our festivals. In dealing with each festival the author records valuable information about its currency in different regions of India, the ritual connected with it and the present manner of its celebration. The remarks of the author on the historical background of each festival are suggestive but not comprehensive for want of fully documented study about its origin and development. The author tells us in his Preface that his book is not written for the learned reader. All the same we must thank him for this pioneer 1 attempt, which is sufficiently conscientious and learned within the limitations under which he had to work and thus provide a readable account of Hindu or Aryan festivals as they are observed in India in the different months of one Hindu year.

According to Rgvedi the Hindu foestivals can be roughly classified 2 as follows:—

^{1.} I must not fail to mention here a still earlier book on Hindu festivals. This is called "Hindu Holidays" by Balaji Sitaram Kothare, printed at the Times Press, Bombay, 1904, pages 100. The author contributed his articles on this subject to the Times of India in the years 1900 and 1901 and these have been presented in a book-form with the above title. About festivals the author rightly observes :- "The life of a nation is best depicted by the description given of its festivals, and the Hindus, being a civilized nation from remote antiquity have had their own holidays both to create and express joy. Hero-worship, religious devotion, social enjoyments, and the observance of particular rites and ceremonies with definite object in view such as preservation of women from widowhood, freedom from the guilt of committing beinous crimes, the preservation of children from death in infancy, the acquisition of wealth, the restoration of lost power, fortune or kingdom, the remembrance, worship or feeding of the departed spirits of ancestors have their characteristic holidays."- The book deals briefly with the account of the following Holidays: - (1) Gudi Pades, Ramanacame, (2) Hanuman Jayanti, (3) Vala Pornima, (4) Ashadi Ekadashi, (5) Nag Panchami, (6) Cocoanut Day, (7) Janma and Golvul Ashlami, (8) Pithori Amavasia, (9) Ganesh Chaturthi, (10) Gauri, (11) Vaman Dwadashi, (12) Anant Chaturdashi, (18) Hindu anniversary Days, (14) Navaratra Festival, (15) Dasara, (16) Kojagari Pornima, (17) Dewali, (18) Four Hindu Holidays, (19) Datta Jayanti, (20) Makara Sankrant, (21) Mahashivaratra, (22) Holi Festival.

^{2.} This classification is good enough so far as it goes. It is only after a thorough historical study of each festival is recorded that an accurate classification can be given. As regards the ritual and belief connected with some of the Hindu festivals see Keys of Power by J. Abbott (Methuen & Co., London, 1932). I note some points from this book about the Divāli:— Divāli, 204-205; maidens wave arti at D., 63, 183, impression of hand made on cattle at D. 132; Oil applied to the body at D., 159; Lights waved before cattle at D. 184; Foot-prints drawn at D. 146; Worship of implements at D. 280; Manavadi days during D. 252; Use of red water at D. 282; Seed. drill dressed in garments of a woman at D. 357; Worship of Laksmi on the threshing at D. 369; Pole of the threshing-floor cut at D. 370; Grinding forbidden at D. 480,-It would be useful to study the history and chronology of these practices from datable sources, Sanskrit and non-Sanskrit.

- (1) Festivals originating from Rtus or Seasons:-संबत्सर प्रतिपदा, अक्षय्यतृतीया, चातुर्मास श्रावणी, नारळी पौर्णिमा, विजयादशमी, दीपावली, धात्रीपूजन, मकरसंकांत, वसंतपंचमी, होळी व शिमगा.
 - (2) Historical (Aitihāsika) Festivals:-श्रीरामनवमी, परशुरामजयंती, दशहरा, कृष्णजन्माष्ट्रभी, वामनद्वादशी ?
 - (3) Śaiva Festivals :-त्रिपुरी पौर्णिमा, महाशिवरात्र,
 - (4) Vaisnava Festivals :-नृसिंह जयन्ती, महाएकादशी, अनंतचतुर्दशी, वैकुंठ चतुर्दशी, दोलोत्सव,
 - (5) Kautumbika Festivals: -वटसावित्री, मंगळागौरी, पिठोरी बमावास्या, इरिताळिका, ऋषिपंचमी.
 - (6) Sākta Festivals :-गौरी-उत्सव, ज्येष्टागौरी, ललितापंचमी, सरस्वती, देवी नवरात्र, चंपापष्टी (?)
 - (7) Saura Festivals :- रथसम्मी.
 - (8) Ganapatya Festivals :-- गणेशचत्थीं.

For studying the regional variations in the celebration of different Hindu festivals one must get first-hand information about these festivals from the residents of the different regions, where these festivals are observed. In the absence of this information we can get some information about them in the Provincial Gazetteers, 1 some of which were written in a scholarly manner and hence may serve as a useful starting point for a historical study of the different festivals as they show the currency or otherwise of these festivals in different regions, where some of the old traditions have been preserved. We must, however, go from

The Encyclopaedia of Religion and Ethics contains some references to Dieall (see IV. 607 a; Ahir, I, 232b, 283 a: Bhil, II, 555b; Davars, V Sa; Dravidian, V, Sa, 14a, 19ab; Pavras V. 19b, Sacrifice, V. 14a,) - The description of Dravidian Divali (V. 19ab) has the following features:-

(1) Lights are used probably as a means of expelling evil spirits.

(2) Sacrifice of goats and fowls before stones, painted red after bringing them from a neighbouring river-bed.

(3) Dancing and feasting attended with lighted torches-

(4) Cattle are decorated with colour and garlands and a figure of the cattle-god Ba-

lindra is made and kept in the cow-shed. (5) Procession of the fiercest bull and the swiftest heifer through the village— Any lad who can snatch a garland from the bull or heifer is considered a fit match for the best girl in the neighbourhood.

The Bombay Gazetteer contains the following references to Divali holidays: — Vol. IX. pt. i, 23, note 5, 54, 82, 119, 151, 170, 173, 175, 178, 203, 305, 306, 316, 336; Festival days among Bhils, id, pp. 305-306; Fire-Worship on-id 357; Days for settling accounts by traders id, 82; Period best suited to subject svil spirits, IX. pt. 11, 145; Hindu New year considered an evil spirit time, id. 148; Buddhist Holidays XIV, 145; among Patane Prabhus, XVIII, pt. i. 251-258; among Kunbis, id, 294-295.

the present to the past and thus try to study when and how the details of these festivals have originated and thus enriched the social, religious and cultural life of India.

In his article ¹ on Divali-Folklore Mr. B. A. Gupte observes:—
"Holidays in all countries have their folklore, and the Divali of India is no exception. The greater the number of folk-tales, the higher the stage of development in the society, and the greater the interest we find attached to the evolution of the festivities." Mr. Gupte then records half a dozen different folk notions, of which No. V is as follows:—

"The fifth idea has a historical basis. It is that King Vikramaditya of Ujjain, a scion of the Gupta race was crowned on this day, the 16th of Asvin and counted his era accordingly. This is thus a New year's day." From the multiplicity of accounts of the origin of Divali Mr. Gupte discloses the following points: - (1) the change of the season, (2) the death of the rice-crop harvest, (3) the time of manuring the soil for the second crop, (4) the Sun reaching Libra, the Seventh sign of the Zodiac, (5) the coronation of Rama, and (6) the selection of this coronation day for the conventional coronation and eramaking day of Vikramāditya, the last of the Guptas. In the Plate of Divali Drawings (drawn by women from the 8th day of the 2nd half of Asvin to Divali) accompanying Mr. Gupte's article we find the following symbols: - (1) Temple ascribed to Laksmi Nārāyana, (2) the Sun, (3) the Moon, (4) hanging lamps, (5) Śańkha Shell, (6) the mace, (7) the lotus, (8) the wheel, (9) the Svastika, (10) the Seşa or thousand-hooded cobra, (11) the cow's foot-prints, (12) sparrows, (13) the mango, (14) the bel (wood-apple) tree and (15) the foot-prints of Laksmi. According to Mr. Gupte "the presence of sparrows at harvest time, the position of the threshing floor usually near a shady tree, and the incoming realization of the sale-proceeds (wealth) as expressed by the foot-prints are significant. This is perhaps the most primitive origin of the festival."

In the Hobson-Jobson (by Yule and Burnell, London, 1903, pp. 208-209) we get some foreign notices of Divali from A. D. 1618 onwards. I reproduce here these notices with the remarks of the editors:—

Dewally, S. H. diwali, from Skt, dipa-alikā, 'a row of lamps' i. e. an illumination. An autumnal feast attributed to the celebration of various divinities, as of Lakshmi and of Bhavāni, and also in honour of Krishna's slaying of the demon Naraka, and the release of 16000 maidens, his prisoners. It is held on the last two days of the dark half of the month of

¹ Indian Antiquary, Vol. XXXII, pp. 287-289 (May 1908).

Asvin or Asan and on the new moon and four following days of Karttika i. e usually some time in October. But there are variations of Calendar in different parts of India and feasts will not always coincide e.g. at the three Presidency towns nor will any curt expression define the dates. In Bengal, the name Diwall is not used, it is Kall Pūjā, the feast of that grim goddess, a midnight festival on the most moonless nights of the month, celebrated by illuminations and fireworks. on land and river, by feasting, carousing, gambling and sacrificing of goats, sheep and buffaloes.

A. D. 1613 - " Divaly "

- Godinho de Eredia, f. 88 v.

A. D. 1623 — "October the four and twentieth was the Dawali or the feast of the Indian Gentiles"

-P. Della Valle, Hak Soc. ii, 206.

- A. D. 1651 "In the month of October eight days after the full moon there is a feast held in honour of Vistnou which is called Dipāwali A. Rogerius, De Open-Deure.
- A. D. 1671 "In October they begin their year with great feasting, Jollity, sending presents to all they have any busyness with, which time is called Dually" —Hedges Diary, Hak. Soc. ii, cccxiv.
- A. D. 1678 "The first New Moon in October is the Banyan's Fryer, 110.
- A. D. 1690 " their Grand Festival Season called Dually Ovington, 401,
- A. D. 1820 "The Dewalee, Deepaullee or Time of Lights takes place 20 days after the Dussera and lasts three days; during which there is feasting, illumination, and fireworks"

 —T. Coats in Tr. Lit. Soc. Bo., ii, 211.
- A. D. 1843 Nov. 5 The Diwali happening to fall on this day, the whole river was bright with lamps...... Ever and anon some votary would offer up his prayers to Lakshmi the Fortuna and launch a tiny raft bearing a cluster of lamps into water,—then watch it with fixed and anxious gaze.

If it floats on till the far distance hides it thrice happy he......but if, caught in some wild eddy of the stream it disappears at once, so will the

bark of his fortunes be engulphed in the whirl pool of adversity."

— Dry Leaves from Young Egypt, 84.

A. D. 1888 — "The Diwali is celebrated with splendid effect at Benares.......At the approach of nights small earthen lamps, fed with oil, are prepared by millions, and placed quite close together so as to mark

out every line of mansion, palace, temple, minaret and dome in streaks of fire" — Monier Williams, Religious Thought and Life in India, 432.

E. W. Hopkins in his article on Hindu Festivals and Fasts in the Encyclopaedia of Religion and Ethics 1912 (Vol. V, pp. 867-871) classifies Hindu festivals as follows:—

(i) Ancient Festivals:-

(1) Moon-festival (seasonal).

- (2) 'Four-month celebration' (seasonal).
- (3) Ceremony of First-fruits.
- (4) Soma-sacrifice.
- (5) Consecration Ceremony.
 - (6) Horse-sacrifice.
 - (7) Solstice-feast.
- (8) Twelve nights' Celebration.
 - (9) Sacrifices at tirthas by pilgrims.
- (ii) Modern Festivals: -- These festivals are new in effect, though old in general character.
- (1) Lamp Festival (Divali)— The rites in honour of one god have passed over to another without materially altering the celebration and sometimes even to-day the same celebration is held in honour of different gods. Thus the very pleasing lamp-festival in which, in autumn, lamps are lighted in every direction, floating lamps are set off down rivers etc., is celebrated by some as a festival in honour of Visnu's wife, and by others in honour of Durga, the wife of Siva Modern festivals have thrown off Brahmanism as far as possible, and are more clearly celebrations of the seasons, devoid of priestly ritual and self-sufficient.
- (2) Spring Festival of Northen India (Holi) Between the old and new there must have been a large number of special festivities now lost sight of, or only faintly reflected in intermediate literature not to speak of many special festivities in honour of gods and goddesses described in the mediaeval Puranic and Tantric literature. Some of the modern festivals are both Sectarian and Seasonal In the devil-frightening festival viz. the "lamp-festival" (Divali) the original intent of the celebration is merged in the worship of some modern deity.

(3) Makarasankrānti and others -

That there were many festivals not included under the screen of religious rites in ancient times may be taken for granted and this is supported by external evidence. — Many of the Hindu festivals have a counterpart in those of other races.

It is clear from the above grouping of Hindu festivals that the Divali or 'lamp-festival' is a modern festival according to Hopkins, 1 who however, does not say when it originated and developed its numerous features as we see them to-day.

In the above volume of the Encyclopaedia of Religion and Ethics there is an article by Margaret Stevenson on Jain Festivals and Fasts (pp. 875-879). In this article she describes the Diwali of the Jains as follows :--

"Next to Pajjusana the greatest of all the Jain sacred seasons is Diwālī. If the former owes its importance to the emphasis which the Jains lay on the sin of killing, Diwali derives its position from the importance of wealth to a mercantile community, the Jains. The Jains assign a special reason for their participation in what is really a Hindu festival in honour of Laksmi, the goddess of wealth. They say it originated when Mahavira passed to mokea and the eighteen confederate Kings and others who were present at his passing instituted an illumination saying: Since the light of intelligence is gone, let us make an illumination of material matter (see Kalpa Sūtra, Sacred Books of the East, xxii 266).

The festival continues for four days, the last days of Asvina which close the Hindu year and the first of Karttika-falling usually within the months of October or November. Among the Svetambara Jains the first day (Dhanteras) of the festival is devoted to polishing jewellery and ornaments in honour of Laksmi on the second day (Kalichaudasa) the women try to propitiate evil spirits by giving them some of the sweet-

- 1. Hepkins records the following Literature pertaining to Hindu Festivals and Fasts:-
 - (1) H. H. Wilson: Select Works, ii. London, 1892, Ch. iv. " Religious Festivals of the Hindus. "
 - (2) Natesa Sastri: Hindu Feasts, Fasts and Ceremonies, Madras, 1908.
 - (3) W. J. Wilkins: Modern Hinduism, Calcutta, 1900.
 - (4) Monier Williams : Hinduism, London, 1877.
 - (5) F. K. Ginzel: Handbuch der mathematischen und technischen Chronologie, Leipnig, 1906, ff. i, 310-402,
 - (6) E. W. Hopkins: Religions of India, Boston, 1895 (previous literature cited on pp. 448 and 592).
- (7) J. C. Oman: Brahmans, Theists and Muslems of India, London, 1907, (esp. p. 241 ff., The Holi Festival.
- (8) A. Hillebrandt: Die Sonnwendfeste in Alt-Indien in Roman Forschungen, V. (1883) 299-340 and Vedische Opfer und Zauber. Strassburg, 1897 (= GIAP, iii, 2.)
 - (9) B. Lindner: Das ind. Ernteopfer, in Festgruss an Bohllingk, Stuttgart, 1888, pp. 79-81.

(10) J. Jolly : Recht und Sitte, Strassburg, 1896 (= GIAP ii, 8).

meats they prepare and cook on this day. These they place in a circle at cross-roads (q. v,) in order to protect their children from evil influences during the year. The third (Amasa) is the great day of the feast. It was on this day that Mahavira went to Moksa and Gautama Indrabhati attained to Kaivalya. This is the day on which Jains worship their account-books and decorate and illuminate their houses. In the morning Jains of all three sects go to their monasteries and convents and do reverence to the chief monk or nun present, who preaches to them on the life of Mahavira and sings appropriate songs. The more devout lay people stay and do posaha, but the generality go home and make up their accounts for the year. In the evening they summon a Brahman to direct the Śarada Pūja or worship of the account-books, for Brahmans are still the domestic chaplains of the Jains. The Jain having arranged his accountbook on a stool, the Brahman enters and paints a chandalo (auspicious mark) on the Jain's fore-head, his pen and one page of the account-book. He then writes the word Sri (i. e. Laksmi) on the account-book, either five, seven or nine times in such a way as to form a pyramid. A rupee (the oldest possible) is now placed on the book; this rupee for the time being, is considered to be Laksmi herself and the placing of it is called Laksmi-pūjā. All the year the owner will carefully guard this particular coin as it is considered luck-bringing, and will use it again next Diwall, so that in some Jain families the coin used is of great rarity and antiquity. Besides the coin, the leaf of a creeper is also placed on the account-book and the Jain waves a little lamp filled with burning camphor before the book, on which he has placed rice, pan, betel-nut, turmeric and various kinds of fruit. The ceremony ends by sprinkling the books with red powder after which the Brahman and the Jain feast on sweetmeats. The account-book is left open for several hours and before closing it they say: Laksa lābha, Laksa lābha, i.e. a hundred thousand profits.

The fourth and the last day of Diwall, New-year's Day, is the first day of the month of Kārttika and of the commercial year; and the Jains then go and greet all their friends much as we might on our New year's Day and send cards to those who are absent."

If the Jaina Diwāli originated with the death of Lord Mahāvīra for which B. C. 528-7 is one of the traditionary dates 1 we can definitely say that it is about 2400 years old. Can we establish the antiquity of the Hindu Divāli for such a period and also prove the exact starting point of

Vide p. 46 of Early History of India by Vincent Smith, Oxford, 1914, and p. 616 of Madhyayugina-Carifra-Kola by S. Chitrava Shastri, Poons, 1937. (Annals B. O. R. I).

its history? It is exactly for answering this question on the strength of documentary evidence that I have undertaken the present study. I shall, therefore, try to establish the antiquity of the *Hindu Divālī* as far back as documentary evidence can take it leaving it to other investigators to improve upon my labours and give us a conclusive history and chronology of this most popular Hindu festival.

In view of the close parallelism between the Hindu Divali and the

Jain Divali we are tempted to ask the following questions:-

(1) Which is the older of the two Divalis-Jain or Hindu?

(2) Is it possible to suppose that the older of these two Divalis has influenced the younger one?

These questions cannot be answered satisfactorily unless we have reconstructed the history of both these Divālis. I shall, therefore, record in this paper some data which would reveal to a certain extent the historical background of these Divālis but before I do so I shall record a detailed description of the Hindu or Brahmanical Dīvāli as given by Margaret Stevenson in her book Rites of the Twice-Born (Religious Quest of India Series), London, 1920, pp. 335-340. This description reads as follows:—

The great Feast of Lamps (Dipāvali, Dipāli or Divāli occupies the last three days of the Indian year (the 18th, 14th and 15th of the dark half of the month of Aśvina) which are sacred to Lakṣmī, the goddess of wealth.

The first of these three days (the Day of wealth-worship, Guj. Dhana-terasa) is extremely auspicious. Indeed so invariably auspicious it is, that no astrologer need be consulted about a child being put to school for the first time that day, a move being undertaken, newly married brides being sent to their husband's homes, or gold being given out to a gold-smith to fashion into jewellery.

As a rule, before this day there is bustle and stir, excursions and alarums in every Twice-born home, for the houses have to be white-washed throughout and decorated, the compound cleaned and the square before the door replastered and marked with a Svastika in chalk and coloured powder, and all the metal vessels, polished till they shine like gold, have to be arranged in glittering rows round the rooms in the ladies' part of the house; all the ornaments, gold and silver, have similarly to be cleaned and, if necessary sent to the goldsmith's for repair; and all the bills called in and paid. Every old-fashioned house-hold has its own tailor, washerman and goldsmith, whose dues are paid once a year now at Divāli;

for not one single debt may be left outstanding. This is the time too when new vessels and new cloth are first taken into use. Old-fashioned people, who do not trust in such new-fangled things as banks, take out their hoardings on this day, wash them in milk and worship them. A fine old chief in one part of India regularly worships a thousand gold mohurs on this day. He puts them all into a huge copper-dish, pours water over them and offers them the full sixteen-fold worship, giving alms to Brahmans at the close. All three days the children let off crackers, and help to illuminate their homes by putting lights on the gates. But on this first day the boys tie white strings and clips to the end of sticks to make buzzers (Guj. Bhambudā).

These they whirl over their heads, so that their buzzing may frighten the cows. Any dust these animals kick up on this day is considered specially sacred, so the boys go and stand in the perfect dust-storm caused by the stampeding cows running away from the buzzers, and so acquire virtue without a trace of boredom!

The women with their spring cleaning finished, cook specially nice food and wear their best clothes. The houses not only of the Twice-born but of all the *Hindus* and also of *Jainas* and *Pārsis*, are illuminated, and there is universal rejoicing in the fact that all debts are paid, the harvest garnered and the rainy season over, so that every one seems happy, and the entire holiday is a festival of light-heartedness. Far different will be the following night!

The morning after the Day of Wealth-worship is still a time of gladness and rejoicing (Rūpa Caturdasi, The Day of Beauty). Men and women get up early take extra pains over their toilet, and wear their finest clothes. Every one is dressed before six, and they all have great fun calling on different friends, break-fasting with them and eating special dainties.

But the Witches Night (Kāla Rātri) that follows is a parlous time, the most hag-haunted season of the whole year, for then all the evil ghosts of the wicked or of those who have died violent deaths, and the terrifying spectres of women who have died in child-birth, come out and walk the streets. But besides these black malignant spirits ordinary ghosts, demons, ghosts, wraiths and witches are also abroad. All through the year rash fools who wished to meet ghosts could find them after night fall when they haunt cemeteries and burning-grounds, or in the particular trees where they dwell, but on this 14th night of the dark of the moon of Aśvina they are not confined within their usual limits, but move freely, wherever they please.

So all wise people bide at home if they possibly can, especially if, like women or children, they are also very timid.

Hanuman, the special guardian against ghosts, has, you may be sure, more than the usual number of worshippers this night, who pour oil and red lead over him and offer him coco-nuts. In return his devotees take some of the oil that drips from his right foot, burn it with soot, and mark their eyes with it, for this not only ensures their being under the special protection of the god for the year, but also improves their sight for the same period.

Other people quiet the ghosts by making circles where four roads meet and put cakes of grain and pulse fried together in oil within the circle, and Indians of other than the Twice-born castes would worship certain mother goddesses within these circles.

Venturesome men who know the right mantras for laying ghosts sometimes try and get control over spirits on this night and go alone to the burning grounds. There they make a circle, either with cold iron or with water and sit carefully within its bounds keeping some pulse of a special kind (Phaseolus radiatus) near them.

All sorts of ghosts, ghouls, demons, fiends, and witches attack the man. If they come too near, he throws the pulse at them, and this frightens them off; and as long as he keeps a brave heart and repeats the right mantras 108 times without stumbling, all goes well, and he is their absolute master for the ensuing year; but if he steps outside the circle before the day dawns, or if for one moment during the terrible ordeal his heart fails him and he blenches, or if he stumbles as he repeats a mantra, he is in the fiends' power for ever.

Other Indians, such as Kolis, Bhils, and the low-castes go down on this night to the desolate places where corpses are burnt and making similar circles, burn within them as sacrifices to terrible mother goddesses, such as Mahākālī or Bhairavī, or Meladī, offerings of evil forbidden food, spirits and meat and give them a Sārī of ceremony and bangles to wear.

If inspite of all her fears, a woman has to go outside her house on this terrifying night, she walks very carefully, for there are circles drawn in every street and if she so much as put her foot inside one, an evil spirit will take possession of her. If, by some mischance, this terrible catastrophe does happen to her, she knows it, and so do her friends, by her constant shaking. Sometimes the woman herself says who the ghost is, how it came, and how to get rid of it.

The last day of the three is the greatest of all the Divāli days. In the morning children get up early, bathe as soon as they 'are dressed, and let off crackers to their heart's content. The children have had a fine time all three days, for their elders believe that, if the children are indulged and kept happy in every possible way, the year will bring good fortune to both parents and children, you may be sure, make the most of so congenial a creed!

On this last day they take a cake of cow-dung, thrust in it a piece of sugar-cane for a holder and arrange on the cow-dung a tiny earthen lamp, in which a wick floating on sweet oil is kept burning. Carrying this light (Guj. Meriyum) the children go round from house to house begging oil for their lamp, that their dead ancestors may get light.

Their elders spend the morning in meeting and entertaining their friends and preparing for what is the main ceremony of the three days, holiday, the Worship of the Account-books, by putting bigger lamps than ever in the windows of their houses, for this night the illuminations must be "gorgeous and grand." All the old accounts must be closed and the new ones opened, in preparation for the worship.

The astrologer fixed the exact moment for this all important rite to be performed.

The new account book is opened and on its third leaf a Brāhman writes the word \acute{Srl} (i. e. Lakşml, the goddess of wealth) over and over again in such a way as to form a pyramid of the syllable \acute{Srl} .

In the centre of this pyramid a betel-leaf is placed, and on it a current rupee, the newer the better.

The five-fold worship is offered by the presiding Brāhman to the account-book still open at this page, concluding with *ārati*, and at the end the food offered is distributed to visitors and alms are given to the Brāhman, who in turn blesses his host, saying; May you be happy all the year."

Then as an omen, the rupee from the account-book is tossed up, and if it falls with a clear ringing sound, it is a lucky presage for the new year.

Afterwards every one gathers round to eat sugar and grain, sends trays of it to friends and lets off crackers.

The account-book is kept open all night with a lamp burning beside it, and early in the morning the Brāhman returns. His host says to him three times: "Lakṣa Lābha" (a hundred thousand profits) and the

Brahman replies: May you have a hundred and twenty-five thousand profits" and shuts the account-book.

All night long every one in the house has kept awake and with the dawning of the new year they sally forth to wish their friends all happiness."

My object in reproducing the above description of the Divāli in extenso is two-fold: Firstly it will enable my readers to compare it with the descriptions of the Divāli, as current in the other regions of India and greater India, which may not have come under the direct observation of Mrs. Stevenson; Secondly it will enable research scholars to see if any of the features of the Divāli celebration mentioned in this description have any early history for them and whether such history can be proved on documentary evidence of Sanskrit and non-Sanskrit sources. In studies pertaining to the culture of any nation the details of any feature of this culture are most important and need to be recorded with meticulous care so that they may give us as comprehensive a picture of this culture as possible on the strength of present observation and past history, backed up by historical sources pertaining to different regions and periods. Every modern feature may not have any long history for it but it is possible to trace the history of some essential features of a festival to ancient times.

We have recorded the descriptions of the Hindu and the Jain Divall so far. Now let us record a description of the Divati as observed in Greater India by people with Buddhist persuasion. In this connection some interesting information is found in the account of Siamese Festivals and Fasts by G. E. Gerini (Vide pp. 885-890 of Ency. of Reli. and Ethics, Vol. V) who informs us that Siamese festivals are traceable, as a rule, to either Brahmanism or Buddhism. These two creeds were introduced into Siam at a very early date and consequently Brahmanic and Buddhist rites were introduced into most of the national festivals and ceremonies. Speaking of the festivals observed in Siam in the month of Karttika Mr. Gerini notes (1) the Feasts of lamps which is a counterpart of Hindu Divali or Dipavali and (2) the Karttikeya Festival, which is a state ceremony recently abolished, in honour of Karttikeya (or Skanda, the Hindu Mars, son of Siva) and which is attended with the floating of lamps, and bon-fires. The Siamese Divali is described by Mr. Gerini as follows:—

"No. 20. Feast of lamps (Karttika, 12th month) - This embraces two distinct festivals (1) the hoisting of lamps on poles on new-moon day and the lighting of them at night, till the second day of the waning, when they are lowered; (2) the floating of lamps in the streams at night on the Isth, 15th and 16th days of the moon, with the eventual addition of fireworks. This second form of illumination seems however, to be connected more especially with the festival hereafter explained (No. 21). On the other hand the aerial lanterns hoisted on poles, as aforesaid, are kept burning to scare away goblins as in time of epidemics (cf. e. g. the rakṣā-pradīpas, and, it is believed, also to retain the water from draining off the paddy fields, for the ears of rice would not attain maturity if the yearly inundation were to abate so early. Hence the festival is a very popular one like its counterpart the Diwālī or Dipāwalī in India. They closely correspond although the ākāšapradīpas (lamps raised on poles in the air) are in India lighted in honour of Lakṣmī. We have here to do essentially with a festival in honour of Viṣnu and his consort, for it is known that on the 11th day of the new moon of Kārttika the god awakes from his four months sleep, and that his victory over king Bali (Vāmana avatāra) took place at this season."

Mr. Gerini does not record any history of the Siamese festivals, hence it is difficult to say at what time the Dīvāli festival originated in Siam and continued to be observed somewhat on the lines of the Hindu Divāli. If the Siamese Divāli is a counterpart of the Hindu Divāli, its history is dependent on the history of the Hindu or Brahmanical Divālī, which we want to reconstruct in this paper.

Resuming now our reconstruction of the history of the Hindu Divāli, I have to record here an interesting account of the Divālī Festival as recorded in a Maratha chronicle 1 which states:—

"Mahadji Scindia (A.D. 1727-1794) informed Peshwa Savai Mādhavarao (A.D. 1774-1795) as follows:-

"The Divall festival is celebrated for 4 days at Koṭā, when lacs of lamps are lighted. The Raja of Koṭā during these 4 days gives a display of fire-works outside the premises of his capital. It is called "दाइनी इंका" or "Lankā of fire-works." During this display the image of Rāvaṇa is prepared and kept in the centre of the show. Images of Rākṣasas, monkeys and a big image of Hanīlmān are all prepared of gunpowder. The tale of Hanīlmān is then set fire to, and Hanūmān begins to fly in the air, setting

^{1.} पेशन्यांची बजर by Krishnaji Vinayak Sohoni, ed. by K. N. Sane, A. B. Press, Poona, 1925, Page 149 (I have rendered the pertinent extract into English from the Marathi original). The author of this Bakhar was possibly born during the reign of Peshwa Savai Madhava Rao (Vide p. 266 of मध्ययुगीन चरित्रहोश by S. Chitrava, Poona, 1937).

^{2.} Modern Kotah State in Rajputāna.

^{3.} Vide my paper on Guns and Gun-powder in India-A. D. 1400 onwards in Sir Denison-Ross Volume, ed. by P. K. Gode and S. M. Katre, pp. 117-124.

fire to various houses in this Lankā of fireworks. Such a display is given by the Raja of Kota during the Divali Festival."

The Peshwa ordered Mahādji to give a similar display of fire-works for his entertainment. Mahādji made all preparations within 15 days and the display was carried out on a dark night before the Peshwa and his Sardars. The display took place at the foot of the Parvati hill and was witnessed by the Peshwa and his Sardars from the Parvati temple. It was a grand performance and was witnessed by the people of Poona in large numbers."

The use of fire-works in the celebration of the *Divāli*, which is so common in India now, must have come into existence after about 1400 Å. D., when gun-powder came to be used in Indian war-fare. It is necessary to record the history of the use of fire-works in Divāli celebrations prior to the Peshwa period.

In the references to Divali in the Hobson-Jobson the earliest notice of the Divali by a foreign observer is dated A. D. 1613. Let us now go backwards from this date. In the Ain-i-Akbari 1 (about A. D. 1590) there is an account of Festivals in which we find the Divali described as follows:—

"Month of Kārtika — The second, ninth, eleventh and twelfth are also festivals. The thirteenth is the Dipālī or row of lamps (Hind. Diwālī). A difference occurs in the calculation of its date. According to the Śuklapakṣa computation it is as above stated but by the Kṛṣṇa-pakṣa (Hind. Aghan-Nov. - Dec.) and they, therefore, hold this festival on the 15th of Kṛṣṇa-pakṣa of Kārttika. Lamps are lit as on the (Muhammadan) festival of Shāb-i-barāt. It begins on the 29th and this night is considered auspicious for dicing and many strange traditions are told regarding it. It is the greatest of the festivals re, the Vaisya caste."

Emperor Akbar "participated in the celebration of Dipāvali or Divāli, the festival of lamps" (Ain, I, 216).

From the 16th century we may now go to the 15th century and see how the Hindu Divali was celebrated within the jurisdiction of the Vija-yanagar empire. In this connection Dr. B. A. Saletore has collected and recorded the following information about Pestivals, Games and amusements in his volumes on Social and Political Life in Vijayanagar Empire (1934). In Vol. II (p. 387) he observes as follows:—

^{1.} Ed. by Jarrett, Vol. 11, 1894, Page 820.

^{2. &}quot;It is auspicious for all undertakings connected with commerce. "

^{8.} Vide p. 319 of Ind Histo. Quarterly. XIII (June, 1987).

"Another celebration which evoked admiration from foreign travellers was the Dipāvali festival held in the month of Kārttika. This commemorates the victory which Viṣṇu scored against the Asuras and Narakāsuras and since as they say it was won in the evening there is universal illumination of houses and temples in the land. 1

Conti thus describes the Dipāvali festival:— "On another of these festivals they fix up within their temples, and on the outside of the roofs an innumerable number of lamps of oil of Susimanni which are kept burning day and night." 2

People gave contributions to the temples also for the celebration of these festivals. In about A. D. 1443 Govanna and Ballana sons of Śrīranga Deva of Aranipura in Kaḍalūr made a grant for the caitra festival of lights in the temple of Channakeśvara according to former custom. 3 An inscription dated Śaka 1443 (A. D. 1521-22) informs us that Sadāśiva Nāyaka provided ghee for lamps during the festival of Tirukkāratigai to the temple of Bṛhadambā at Devikkapuran for the merit of the chief (svāmī) Tirumalai Nāyaka. 4 In Śaka 1444 (1522-23) the daughter of Kannadiya Chief Devappuḍaiyar Marudarśar-Padaiviḍū gave a gift of ghee for the same festival to the same temple." 5

The inscriptional evidence about donations given by certain individuals for the expense of festival of lights or mere lights 6 in temples of specific gods and goddesses does not appear to refer to Divāli festival as such. 7 Conti's description of Divāli at Vijayanagar is, however, sufficient for our purpose.

2. Major India, p. 28; Sewell, For. Emp. p. 86.

8. E. C. V. p. 1. Hn. 82, p. 25.

4. 361 of 1912; Rangachari, Top. List I. N. A. 162, p., 49.

5. 362 of 1912; Rangachari, ibid. N. A. 163, p. 50. Read Pietro della Valle's description.

7. My friend M. M. Principal V. V. Mirashi writes to me on 23-7-1945 :-

"As for Dieāli The one description that I can just now recall occurs in an inscription found in Chhattiegarh. It is not dated but another inscription of the same reign is dated V. S. \ 1570 (= A. D. 1614). The inscription is not published but I have read the verse as follows:—

" यस्सम्बक् प्रतिकार्त्वकम्प्रतिदिनं स्नात्वा द्दात्यादरा —

द्रोदानंञ्च ततः शृणोति महितं पुण्यं पुराणादिकम् । दीपानामपि लक्षमक्षयफलप्राप्त्ये प्रयच्छयसौ दुर्गाया निकटे महानयमतः श्री वाहरकमापतिः ॥ "

I am thankful to Prin. Mirashi for this valuable inscriptional reference.

Śri Kantaliyar, I A, XX, p. 430; Suryanarayan Rao, The City, p. 11. For an account
of the Dipāvali Festival. Wilson, IA, XXVI, p. 308; Gupte, IA, XXXII, pp. 237-289.

^{6.} On p. 115 of his Puranic Records (Dacca, 1940) Dr. Hazra observes:—"The inscriptional evidences show that the gifts of lamps to shrines became popular in Southern India about the end of the 9th century A. D. [Ep. Ind. III, 1894-95, pp. 281, 284; V. 42-44 and 104-106; VII (1902-03) 138 ff. and 138 ff. and so on. JASB, LXXII (1908) 120 7.

Students of the history of Indian art may be in a position to point out the representations of the *Divāli* festival in sculpture or painting. I may, however, record here one such representation of the *Jain Divāli*. It is found in the *Miniature Paintings* 1 of the *Jaina Kalpasūtra* executed in the Early Western Indian style, published by Norman Brown (Washington, 1934), p. 40, *Plate 25*. Brown describes this painting as follows:—

"Fig. 54 (Heeramaneek Galleries, Newyork-MS of Kalpasütra and Kālakācāryakathā with 87 miniatures, not dated—Probably 16th Century)—The Festival of Lights. KS, 128 (Jacobi: Jaina Sūtras, S. B. E., Vol. 22, Oxford, 1884, p. 266), On the night when Mahāvīra died the 18 confederated kings instituted an illumination on the Poṣadha which was a fast day. They said "Since the light of holy knowledge is gone, let us make a material illumination.— Under a canopy are three males, probably typifying the 18 kings, holding torches. The scene bears the legend रावाडी (festival of lights) and Jacobi (J tr. 266n) says that the Jainas celebrate the nirvāṇa of Mahāvīra with a festival of lights on the New-Moon of the month of Kārttika."

Some description of the Divāli as celebrated in the Deccan at Kolhapur in the 11th century is found in the story of King of Kollāpura recorded by Merutunga in his Prabandha-Cintāmaņi (Trans. by C.H. Tawney, R.A.S.B., Calcutta, 1901) p. 111. The author belonged to Vardhamānapura (Vadhvān) in Gujarat and composed this book of Narratives in Samvat 1861 (= A.D. 1805). I note the following points from Merutunga's story referred to above:—

- (1) Some bards were celebrating the glory of King Siddharāja of Gujarat (A.D. 1093-1143) at the court of the Kollāpur King, who doubted this glory and required some proofs for Siddharāja's skill in magic mentioned by the bards.
- (2) The above doubt of the Kollāpur King was reported to Siddharāja, who found an officer of his court ready to go to Kollāpur to prove Siddharāja's skill in magic. Siddharāja gave 3 lacs of rupees to this officer, who went to Kollāpur and stayed there for some days.

I had inquired of Dr. H. Gostz, Curator, Baroda Museum, if he could point out to me any paintings representing Divali illuminations. In reply Dr. Gostz informs me in his letter of 19-12-45:—

[&]quot;As to Divali illustrations, I can only say that there are many Mughal miniatures in the Baroda Museum showing illuminations by many small oil lamps, such as it is the practice at Divali but I am not sure whether this is the only festival where this is done."

I take this opportunity of requesting other scholars to publish any information about the representations of Divali either in painting or sculpture that may come to their notice.

(3) "When the night of the Diwall festival was near and the wives of the King of that city came to his palace in order to worship the goddess1 Mahalaksmi, that officer, having assumed the disguise of a magician, adorned with all those paraphernalia, and being accompanied by a certain Barbara who had carefully practised fiying in the air, suddenly appeared on the pedestal of the goddess. He offered an oblation of gold, jewels and camphor to the goddess and distributed to the King's wives betel similarly adorned and left-there a magic garment marked with the name of King Siddha, pretending that it was a religious gift, and mounting on the back of Barbara flew up into the air and so returned as he came. When the night came to an end the King was informed by his wives of this act of the hostile monarch and being bewildered with fear he sent back that present to King Siddha by the hands of his ministers. Then that officer quickly hurried through the business of buying and selling his wares, and so on, and sent a message to his king by a swift runner, that he was not to grant an audience to those ministers until his arrival. After that he arrived there in a few days. The king, having been informed of the real state of the case took such steps to win over those ministers as occasion demanded."

Whatever be the truth of the above story it gives us a historical illustration of the association of magical performances with the Divāli niqht, so graphically described by Mrs. Stevenson in the extract already reproduced by me. The Śilāhara kings were ruling at Kolhapur at the time of king Siddharāja of Gujarat (A. D. 1093-1143). The goddess Mahāla-kṣmī was their tutelary deity and they called themselves " जीमहास्ट्रमीदेवी-स्टब्स्यस्माद्" in their inscriptions. The Sarasvatīpurāṇa mentions that Siddharāja installed the images af Mahālakṣmī on the bank of the Sahasralinga lake constructed by him as I have shown in my paper on Mahālakṣmī (B. I. S. Mandal Quarterly, 1942).

From Merutunga's reference to Divali at Kolhapur in his work of A. D. 1805 we go to the Marathi work Jnaneśvari completed in A. D. 1890 by the great Saint of Maharastra, Sri Jnaneśvara. In this work Divali is referred to as follows (see Jnaneśvari ed. by B. A. Bhide, Bombay, 1928):—

Pages 108-107- " मी अविवेकाची काजळी | फेडूनि विवेकदीप उजळी | तै योगियां पाहे दिवाळी | निरंतर || ५४ || "

Vide my paper on the Iconography of Mahalaksmi of Kolhapur (B. L.S.) Mandal Quarterly, Poons, Vol. XXIII, 1942, pp. 17-25.

Page 583— " सूर्ये अधिष्ठिली प्राची । जगा राणीव दे प्रकाशाची | असे कार्या कार्या कार्य वर्षा वर्षा वर्षा तेशी वाचा श्रोतयां ज्ञानाची | दिवाळी करी || १२ || "

Though used in metaphors by Śri Jñāneśvara the above usages of the word दिवाळी vividly bring to our mind the illuminations of the Divali

festival as current in the Maharastra in the 13th century.

To supplement the above reference to Divāli by Jñāneśvara we have a very elaborate description of the celebration of the Divali festival in the Mahānubhāva text in Marathi (composed about A. D. 1250) called Lila-Caritra (ed. by H. N. Nene) Nagpur, Part III Pūrvārdha, Khanda 2, 1937) pp. 116 ff. As the passage is too long for reproduction I note some points from it below :--

(1) This is a description of Divali not in an aristocratic circle, but by Cakradhara, 1 the founder of the Mahānubhāva sect and his Gosāvi

pupils.

(2) This Divali was observed at हिवरकी (जालना).

(3) महादाई, the woman — disciple of Cakradhara, managed all the

work connected with this Divall.

(4) On the evening of the earlier day she stored sufficient water for bath of the entire party of the Gosāvis, who bathed next morning, getting up at dawn for this purpose. Plenty of oil was used for rubbing the bodies before this bath by the Gosavis and other devotees of Cakradhara.

(5) After bath महादाई waved lights in a tray in front of these Gosavis and others (वोबाळणी जाली) who then took betel, and pan (तांबोळ). Dinner was given to the party by महादाई, who was helped by another lady उमाई

in this work.

(6) भाऊवीज was observed on the following day when महादाई acted as sister to all the Gosavis. She prepared nice dishes for their dinner such as मोदक, आइत, लाह, सेव etc.

The Bhau-blja day observed by the Gosavis is observed even to-day. It falls on Karttika Śuddha 2 (dvitiya) i.e. on the day following the Divall. This festival is concerned with sisters who feast their brothers on athis day. It is called Yamadvittyā in Sanskrit and Hemādri (A. D. 1260), the contemporary of Cakradhara describes it in detail in his compendium

¹ Vide pp. 850-854 of मध्ययुगीन चरित्रकोश by S. Chitrav, Poona, 1987. The dates for Cakradhara as given here are " A. D. 1194-1273. " Cakradhara founded the Mahanubhava Sect in Saka 1190 (= 1268 A. D.) at Paithan, after having embraced Sanyasa.

called the Caturvarga-Cintāmaņi. This description is contained in an extract from the Bhavişyottara Purāṇa quoted by Hemādrī. The practices prescribed in the extract are current at present in Mahārāṣṭra.

In a Kannada Inscription of A. D. 1119 (11th May) of the reign of Calukya Tribhuvanamalla there is a reference to Dipāvali day. (One) Kāvarāja made a gift of one gadyāna out of the two gadyānas which the Mahājanas used to pay him, as a present on every Dipāvali day for the service of Nilesvaradeva."

I have already recorded references to Divāli from two Marathi sources viz. the Ināneśvarī (A.D. 1290) and the Lilācaritra (c. A. D. 1250). I shall record another reference to Divāli in an astronomical work called the Jyotişaratnamālā 3 by Śrīpatī, which was composed about Śaka 961

"कार्त्तिके ग्रुक्लपक्षस्य द्वितीयायां युघिष्ठिर । यमो यमुनया पूर्व भोजितः स्वग्रहे सदा ॥ द्वितीयायां महोत्सर्गे नारकीयाश्च तर्पिताः । पापेभ्योऽपि विमुक्तास्ते मुक्ताः सर्व्यनिवन्धनात् ॥ भ्रंशिताश्चातिसंतुष्टाः स्थिताः सर्वे यहच्छया । तेषां महोत्सवो वृत्तः यमराष्ट्रमुखावहः ॥ अतो यमद्वितीया सा प्रोक्ता लोके युधिष्ठिर । अस्यां निजग्रहे पार्थं न भोक्तव्यमतो बुधैः ॥ स्नेहेन भगिनी हस्तान्नोक्तव्यं पुष्टिवर्द्धनम् । दानानि च प्रदेयानि भगिनीभ्यो विधानतः ॥ स्वर्णांश्वंकारवस्त्राणि पूजासत्कारभोजनैः ।"

In Revedi's book on Aryan Festivals already referred to by me the यमद्वितीया or भाऊवीच is described on pp. 297-298. He merely states that the story of यम and his sister यमुना is mentioned in the Puranas but does not give any exact reference to it.

 Vide Kannada Inscriptions from the Madras Presidency (South Indian Inscriptions Texts, Vol. IX, Part I) ed. by Shamshastri and Lakshminarayana Rao, 1989, Page 195--Inscription No. 198.

See also Epi. Ind. VIII, p. 387-Yewur inscription of A. D. 1179 of the time of Sankamadeva. The date recorded gives (1) Vikaria year, (2) New Moon day of Aivayuja, (3) Somavara, and (4) महापूर्व -allusion is apparently to दीपाविल according to Dr. Fleet (Vide p. 257, Kadambakula by Prof. Moraes— दीपाविल extended from अश्विन कृष्ण १४ to कार्तिक ग्र. १.)

8. Vide भारत इतिहास संशोधक मंडळ यन्थमाळा (No. 8.)—द्वितीय संमेळनवृत्त (शक१८३६-1914, Poons)— श्रीपतीकृत मराठी ज्योतिधरत्नमाळा (शक ९६१ सुमार) p. 95.

^{1.} Ed. in Bib. Indica, Calcutta, 1878—See Vrata Khanda Chap. VI, pp. 384-386.— The extract about यमद्वितीया अत from the Bhavisyottara reads as follows: —

(A. D. 1039) according to its editor the Mahārāṣṭra historian, Viśvanātha Kāshinātha Rajawade, who thinks that both the Sanskrit text and its Marathi commentary are the work of Śrīpatī himself. The word दिवाळी occurs in the Marathi commentary on a Sanskrit stanza as will be seen from the following stanza:—

Page 95-- " माघे पंचद्शि कृष्णा नमस्ये च त्रयोदशी ।
तृतीया माधवे शुक्छा नवम्युर्जे युगादयः ॥ १३ ॥ "

The commentary on this stanza reads as follows:-

" माघमासिची अमावास्या शिरात्रि भादपदमासचा कृष्णपक्षि त्रयोदश्च अर्द्धपिश्च वैशापमासि शुक्ला तृतीया : अक्षतृतीया : कार्तिक शुक्ल नवमी दिवाळि वितल्या : या तिथि ४ युगादि म्हणिजे ॥ "

At present the Divali day is the 1st day of Karttika Sukla paksa, while according to Śrīpatī (about A. D. 1030) it appears to have been celebrated before "कार्तिक भुक्छ नवमी." I request the students of Indian Astronomy to throw some light on this question from the texts on Indian Astronomy.

In the Marathi poem by the Mahānubhāva poet Narendra-Kavi, called the रुक्सिणी-स्वयंवर 1 composed in Śaka 1218 (A. D. 1292) we find the following references to the Divali:—

Page 90 - Description of Dvārakā

" की आनंद-दिवाळियेचें तेज: । की आकाशीं जोतिचें जौळ हों काज। कीं गगनासि वाइळें भोज: यादव-प्रतापाचें " ७१२

Page 94 -- Description of Vasanta (spring-time)
" कीं ते संभोग-सुखाची दिवाळी :

विरहिणी घेंढेवाळिया होति काजळी जित-इंद्रियें हारबीति तिये वेळीं : जूं वैराम्याचें " ७३८

Prof. Kolate has explained the metaphor in this stanza pertaining to the Divāli referred to by the poet in his notes at the end of the volume. He explains the word ঘটবাজী as কাজীৰ or মহাজ on page 141 while on page 230 ঘটবাজী is explained as lamps lighted during the Divāli festival on the top of a big heap of grass. 2

^{1.} Critically edited by Prof. V. B. Kolate, King Edward College, Amraotl, (সহল মুখ্যাহান, Malkapur, Berar) 1940.

^{2. 1}bid, p. 280—'' चंडेवाळी = दिवाळीच्या दिवसांत गवताचा एक उंच भारा बांधतात आणि स्यावर दिवे लावतात.''

While explaining the above reference to दिवाळी Prof. Kolate has drawn our attention to the following reference to दिवाळी in the Juane-śvari:—

Chap. VI (Ovi 889 - p. 135 of Bhide's edition)
''वैसें होय तिये मेळीं | मग सामरस्याचिया राउळीं |
महासुखाची दिवाळी | जगेसि दिसे || ३८९ || "

We have already pointed out two references to द्वाळी in Jnaneśvari, to which the above one may now be added.

Before I proceed to note the references to Divāli in sources earlier than those referred to above I shall record its fairly detailed description in Sanskrit given in an encyclopaedic work called the आकार्य करण which appears to be a reflection of the social and religious practices of the Vijayanagar Empire (between say A. D. 1450 and 1550). This is a description of a royal Divāli and hence stands in contrast with the Divāli celebrated by Cakradhara and his Gosāvīs. This description reads as follows in the B. O. R. Institute MS No. 43 of 1925-26 of आकार्य स्ववस्थ :-

Page 217- 67th Patala describing नरकचतुर्वशी.

"श्री शिवः — अथान्यदाश्चिने मासि कर्तव्यं कर्म राजिभः ।

वश्यामि सर्वपापवनमलक्ष्मीविनिवारकम् ॥ १ ॥

रूपसौभाग्यसन्तानसंपत्सारस्वतप्रदम् ।

साम्राज्यदं विजयदं विशेषण महीभुजाम् ॥ २ ॥

सर्वशान्त्रक्षयकरं गंगास्तानफलप्रदम् ।

अश्विने मासि कृष्णायां चतुर्दश्यान्तृपोत्तमः ॥ ३ ॥

नाक्षे मुहुर्त उत्थाय कृतज्ञीचिकयः छचिः ।

प्रश्लाव्य पादावाचम्य दन्तधावनपूर्वकम् ॥ ४ ॥

पुरोहितान्पुरस्कृत्य सभायांन् द्विजपुंगवान् ।

कांश्चिदाद्वय संपृत्य तान् गंधकुसुमादिभिः ॥ ५ ॥

दस्वा तद्द्विजवर्षेभ्यः तांबृलानि फलानि च ।

तैराशीरक्षतान् दत्तानादायांजलिना नृषः ॥ ६ ॥

P. 372 — " एवंविधान् नृपो राष्ट्रे देवान् संस्थापयेत् सदा । प्रतिसंवत्सरे तेषां उत्सवान् सम्यगाचरेत् ॥ २०२॥ "

ध्रवा शिरसि चाम्यंगनिमित्तं तैलमुत्तमम्। द्रवा तद्द्विजमुख्यम्यो नत्वा कृत्वा प्रदक्षिणम् ॥ ७ ॥ पुनः प्रस्थाप्य तान् विप्रान् तत्परं पृथिवीपृतिः । हेमपीठे समासीनः प्राङ्मुखः प्रयतः श्रुचिः ॥ ८॥ नदस्सु पंचवाद्येषु बाह्यकक्षान्तरे ततः। कणत्कंकणया वध्वा दरवलगदुरोजया ॥ ९ ॥ बभ्यकः स्नापितो महैः कैश्चित्कोच्लेन वारिणा। ध्रत्वा धौतांबरं दिन्यं स्वर्णतन्बन्निताञ्चलम् ॥ १०॥ इत्येवं मङ्गलं स्नानं कृत्वा प्रागृद्धाइवेः । पश्चात् सुर्योदयाद्वस्त्रं पुण्डं चत्वा महीपतिः ॥ ११ ॥ कम तत्कालकर्तव्यं नित्यं निर्वर्ध तत्परम् । स्वेष्टदेवं समस्यर्थं गंधपुष्पैर्यथाविधि ॥ १२ ॥ अलक्ष्मीपरिहारार्थं दस्वा दीपत्रयं तृपः। सदक्षिणं द्विजाविभ्यस्तेन नीराजितः पुनः ॥ १३ ॥ सखबस्सिशिरस्राणः सबीभरणभूषितः । आस्थानक्टमासाद्य सर्वतस्समलंकृतम् ॥ १४ ॥ सपुत्रपीत्रस्सामात्यः सभृत्यपरिचारकः। सिंहासने समासीनः खेतछत्रेण चारुणा ॥ १५॥ वध्विध्यमानाभ्यां चामराभ्यां विराजितः । नास्थानवर्तिनां राज्ञां मिन्त्रणां च पुरोधसाम् ॥ १६ ॥ सामन्तराजपुत्राणां विबुधानां विनोदिनाम् । कवीनां गायकानां च योगिनां च नियोगिनान् ॥ १७॥ नटानां नतंकानां च गणकानां हिमाद्रिजे । तथैव गणिकानां च वत्तदुद्योगवर्त्तिनाम् ॥ १८॥ शिर:कम्पेन केषांचित् केषांचिद्वलोकनैः। मन्द्रस्मितेन केपांचित् केपांचित् वाग्विलासतः ॥ १९॥ आलोकशब्दैः केषांचित् वेत्रपाणिसमीरितैः । संभावयन् यथायोग्यमात्मदर्शनमद्भिते ॥ २० ॥ सुद्दंमात्रमासीनस्तस्मिन् सिंहासने नृपः। तत्परं तैस्सभास्तारैरपिंतान्यंवराणि वे ॥ २१ ॥ ्र गम्धकुंकुमकस्तूरीतांबुङानि यथोचितम्। दापियत्वासनात् तस्माद्वरुद्धासयोः करौ ॥ २२ ॥ अवलंदय प्रविद्यान्तःपुरं स्नीरत्नसंकुलम् । पुत्रपौत्रैः परिवृतः सुक्तवाबमसृतोपमम् ॥ २३ ॥

ततः स्वीकृत्य तांब्छं अवरोधजनैस्सह । नीत्वा सरसस्रहापैः तद्दः शेषमद्रिजे ॥ २४॥ ततः सेवार्थमागस्य बाह्यकक्षान्तरस्थितान् । सामन्तराजपुत्रादीन् समाहबाथ तैस्सइ ॥ २५॥ निशासुखे बाणविद्यां 1 हृचानाछोक्य तत्परम्। विशालां प्राप्य नृपतिनांटयश लां च तैस्सह ॥ २६ ॥ नाटयं नटीभिरारटघं नानाभिनयमंज्ञलम् । वीणामुरजनिस्साणमुख्यवाद्यानेनादितम् ॥ २७ ॥ दृष्ट्वा प्रस्थाप्य तान् सर्वान् प्रविद्यान्तःपुरन्तृपः। पुत्रपौत्राम्बित: श्रीमान् भुक्त्वा मधुरपूर्वकम् ॥ २८ ॥ इंसत्कीविरचितशब्यायां शयितस्सलम् । क्वंन् सरसङ्खापान् महिष्या सह पार्थिवः ॥ २९ ॥ तद्पितानि तांबुलीद्लान्याकंचितानि वै। आद्दानस्तयासाकमानन्दानुभवी भवेत ॥ ३० ॥ इत्येवं देवि, नरकचत्रदंश्यां नृपोत्तमै:। कर्तव्यं कमें कथितं भया संग्रहतस्तव ॥ ३१॥

इत्याकाशभैरवास्ये महाशैवतन्त्रे साम्राज्यपीठिकायां नरकचतुर्देशी-कर्तव्यमहोत्सवस्वरूपकथनं नाम सप्तपष्टितमः पटलः । "

Page 22 - 68th Patala describing दीपावली-उत्सव.

" श्री शिवः — त्रय तत्कार्तिके मासि दीपावल्यां मही मुजा। यत्कतंब्यं पृथुश्रोणि वक्ष्यामि तव सांप्रतम् ॥ १ ॥ कार्तिकस्य सिते पक्षे या तिथिः प्रतिपत् स्मृता। दीपावलीति विज्ञेया सा सर्वा ग्रुभदायिनी ॥ २ ॥ तस्यां तिथी नृषः प्रातहत्थाय शयनात्त्रिये। कृतशौचिक्रयस्सम्यक् कृत्वा वै दन्तधावनम् ॥ ३ ॥

^{1.} খাগবিধা means here display of Fireyworks. Abdur Rasak who stayed in Vijayanagar from April 1448 to 5th December 1443 mentions the use of pyrotechny or fire-works at the महानवमी festival (See Elliot: History of India, IV. pp. 117-118). The present reference to খাগবিধা at Divaki festival is important as it is one of the earliest references in Sanskrit sources referring to the use of fire-works at Hindu festivals. In the আক্রমানবিক্স there is a reference to gun on folio 189 as follows:—

[&]quot; त्रयोविंशं नालिकालं". Here नालिका means a gues. (See also my paper on Gues and Gue-powder in India in Sir E. Denison Ross Volume, pp. 117-124).

निस्यकमं विनिर्वर्श्य तत्काळोचितमद्विजे । उपास्य भारकरं राजा तत्तरसंगव आगते॥ ४॥ पुरोहितं पुरस्कृत्य तदाशीभिविविधितः। स्वेष्टदेवं हृदि ध्यायन् पीठे रत्नमये शुभे ॥ ५॥ स्वासीनः प्राङ्मुखो देवि वाषयोषपुरस्सरम् । अभ्यक्तो गन्धतेलेन स्नापितः कोण्णवारिणा ॥ ६ ॥ धौतांबरधरः कालदेशे ध्लोध्वंपुण्ड्कम् । निर्वर्त्यं नित्यकर्मांथ तत् कालोचितमद्भिजे ॥ ७॥ स्वेष्टदेवं समाराध्य गम्धपुष्पाक्षतादिभिः। अलक्ष्मीपरिद्वारार्थं लक्ष्म्याश्च स्थैर्थसिख्ये ॥ ८॥ छक्ष्मीनारायणधीत्ये दत्वा दीपत्रयं नृपः । सद्क्षिणाद्विजातिम्यस्तेन नीराजितः पुनः ॥ ९ ॥ सपुत्रपौत्रस्सामात्यः सर्वाभरणभूषितः । बास्थानशालामासाय राज्ञामास्थानवर्तिनाम् ॥ १०॥ सर्वेषां दर्शनं दत्वा यथोचितमगात्मजे । गन्धकस्त्रिकादीनि दस्वा भूमिपुरंदरः ॥ ११ ॥ महुर्तमात्रमासीनो भूपतिः कनकासने तत्परं तान्नुपवरान् प्रस्थाप्यान्तःपुरं नृपः ॥ १२ ॥ प्रविदय देवि साम्राज्यलक्ष्मीं संपूज्य सादरम् । कान्ताजनेन कपुरदीपैनीराजितोऽद्विजे ॥ १३ ॥ भुक्तवा मुहुतं सुप्वाऽथ सायंकाले समागते। मह्युदादिकं रप्ट्वा तत्परं तु निशामुखे ॥ १४ ॥ नगरे देवतागारेव्वालयेषु सभासु च। चरवरेषु तु रम्येषु गोपुराष्ट्राळकेषु च ॥ १५ ॥ हम्येष चातिरम्येष सीधेव्यत्युव्यतेषु च। विशालासु वरारोहे चन्द्रशालासु सर्वतः ॥ १६ ॥ भूपालास्थानकृरेषु कक्ष्यासु विविधासु च । नाट्यशालासु रम्यासु वीयीषु च विशेषतः ॥ १७ ॥ विम्यस्य विविधान् दीपान् किंकरांस्तु कृतश्रमान् । गन्धताम्बूछवसाधैबंहुमान्य महीपतिः॥ १८॥ तस्सवं दीपनिवहं श्रिये जातेति मन्त्रतः । महालक्ष्मये नरपतिः समर्प्यं तदनन्तरम् ॥ १९॥

सिंहासने स्वकीयानि भूषणानि निधाय च। जलपूर्णं स्वर्णकुंभं पल्लवाधैरलंकृतम् ॥ २०॥ तण्डुलोपरि विन्यस्य तत्रावाद्य वर्ष्टि प्रभुम् । वस्यमाणप्रकारेण ध्यायेद्राजा महाबार्छ ॥ २१ ॥ ध्यायेद्वलिं महाकायं सर्वामरणभूषितम् । नपसाहत देवेन्द्र वैभवं विष्णुवहामम् ॥ २२ ॥ खड्गचमंधरं स्वर्णकान्तिकान्तासमन्वितम् । ग्रुकाचमात्यसिहतं दैत्यदानवसेवितम् ॥ २३ ॥ एवं ध्यात्वाचेयेत्सम्यक् नाममन्त्रेण तं बळिम् । नतः पुष्पांजार्ले दद्यात् वह्यमाणैस्तु नामभिः ॥ २४॥ बळीन्द्रः प्रस्हादपौत्रो विरोचनसुतस्ततः। महेन्द्रमर्दनो दानवाधीशो विष्णभक्तकः ॥ २५॥ विभवपद इत्येतैर्दरवा पुष्पांजिल ततः । प्रार्थयेत्स्वाभिछिषतं मन्त्रेणानेन पााथवः ॥ २६ ॥ यथा त्वं सर्वेलोकानामधिपोस्य सुरेश्वर । तथा मे कुरु सौभाग्यं यावदाभूतसंटळवम् ॥ २७ ॥ इति संप्राध्ये विषेभ्यो द्वाद्वित्तानुसारतः। सुवर्णं रजतं मुक्तामणींश्च विविधानिप ॥ २८॥ मित्राप्तवन्ध्मुख्येम्यो द्याद्यंसमन्वितः। कप्रकारुंस्थाकलेस्सार्थं तांबुलानि विशेषतः ॥ २९ ॥ एवं कृत्वा नरपतिर्दीपावल्युत्सवं प्रिये । सर्वदानेश्च यस्पुण्यं यस्पुण्यमखिळाध्वरैः ॥ ३०॥ तत्पुण्यं समवामोति नात्र कार्या विचारणा । एवं ते देवि कथितो दीपावल्योत्सवो महान् ॥ ३१॥ बायुरारोग्यविजयसंपत्सारस्वतप्रदः।

इत्याकाशभैरवास्ये महाशैवतस्त्रे साम्राज्यलक्ष्मीपीठिकायां दीपावल्युत्सवस्वरूपकथनं नाममष्टपष्टितमः पटलः॥ "

The two chapters reproduced above contain quite a colourful picture of the royal Divāli celebrated on two days viz. (1) आधिन कृष्ण चतुर्दशी and (2) कार्विक ग्रुक्ट प्रतिपद. This is Divāli as observed in the South of India between say A. D. 1400 and 1600. I now continue my story of Divāli and come to the extreme North of India and record a short description of Divāli

given by a Muslim writer Abdul Rahaman in an Apabhramsa poem called the संदेशरासक 1 in which we find a description of the month of Karttika and the Dipavali night (जोड्क्सिंड) as follows:—

> " दिंतिय णिसि दीवालिय दीवय णवसिरेहसरिस करि लीअय । मंडिय भुवण तरुण जोड्क्सिहिं महिलिय दिंति सलाइय आक्सिहिं॥ १७६॥"

Mr. Bhayani observes on p. 90 of his critical Introduction :-

"On the Dipavali night mansions were decorated with lights resembling the crescent moon. Ladies applied collyrium to their eyes (176)."

The commentary called दिप्पनक on the above passage reads as follows:
बय कार्तिकवर्णनम्— "नार्यः दीपान् नवशिशरेखासदशान् करे गृहीस्वा निशि ददन्ति ।

वज्जोतिष्कैः दीपैः भुवनानि मण्डिवानि । अन्यच नार्थ्यः तेषां दीपानां कज्जळं शळाकया

कृत्वा नेत्रेषु ददन्ति ॥ १७६ ॥ "

Illumination of houses on the Divāli night by Hindu ladies is aptly described by this Muslim writer who belonged to Multān (मुख्याण) in the Punjab. He was well versed in Sanskrit, Prakrit and Apabhramśa. He must have mastered these languages at some seat of Hindu Culture (perhaps it was Multan).

From the above description of Divali in the Punjab of c. A. D. 1150 we now go to Alberuni's description of Divali of c. A. D. 1030. In Alberuni's remarks 3 " on the Festivals and Festive days" of the Hindus he describes the Divali festival as follows:—

"Ist Kārtika or new moon's day, when the sun marches in Libra is called Divāli. Then people bathe, dress festively, make presents to each other of betel leaves and areca nuts; they ride to the temples to give alms and play merrily with each other till noon. In the night they light a great number of lamps in every place so that the air is perfectly clear. The cause of this festival is that Laksmi the wife of Vāsudeva once a year on

^{1.} Ed. by Jinavijayaji and Bhayani, Bhāratiya Vidyābhavau. Bombay, 1945, page 71. In the Preface (p. 12) Muni Jinavijayaji infers that संदेशसम्बद्धः " must have been composed during the reign of Siddharāja or Kumārapāla i. e. in the latter half of the 12th century or at the latest the first half of the 12th century of the Vikrama era. "

See p. 753 of World Pictorial Gasetteer by Hammerton — Multan stands on the river Chanab. It is about 190 miles S. W. of Lahore. Principal buildings are two Mahomedan Shrines and the remains of an old Hindu temple. A great trading centre (shawls and carpets.)

^{3.} Videp. 182 of Vol. II of Albertani's India, ed. by E. C. Sachau, London, -Chap. LXXVI.

this day liberates Bali, the son of Virocana, who is a prisoner in the seventh earth. Therefore, the festival is called Balirājya i. e. the principality of Bali. The Hindus maintain that this time was a time for luck in Kṛta-yuga and they are happy because the feast day in question resembles that time in the Kṛtayuga."

In our search for the lights of the *Divali* we have traversed a period of about 950 years and moved from the south of India to its extreme north. We stand on the threshold of antiquity at about 1000 A. D. 1 and try to see if we can cross this threshold and notice any lights of the *Divali* in the inner apartments of the Indian history.

About 90 years before Alberuni's description of the Hindu Divāli in North India we find a brilliant poetic description of Divāli in the Yaśastilaka campū of Somadevasūri composed in Śaka 881 (A. D. 959). About this description my friend Dr. V. Raghavan makes the following remarks in his Gleanings from Somadevasūri's Yaśastilaka-campū" (p. 379 of Journal of Ganganath Jha Research Institute, May 1944 - Vol. I, part 3):-

"Pp. 597-99 (Kāvyamālā 70. Bombay, 1901) — The Mahānavamī festival is followed by the Dipotsava. Houses are white-washed and decorated with white festoons; music, merry-making and gambling go on; the tops of houses are bright with rows of lights. This festival is in the Śarat season."

The text of the Divali description reads as follows :-
" — इति विजयजैत्रायुधमागधावबोधितलङ्मीं महानवमीं 2 निर्वर्त्य ।

तथा —

हंसावली द्विगुणकेतुसितांशुकश्रीः पद्मावतंसरमणीरमणीयसारः । प्रासादसारितसुधायुतिदिसदिको दीपोरसवस्तव तनोतु सुदं महीश ॥ ४६२ ॥

In a Chinese poem on the Lantern Festival (of the first full moon) by Au-yang Hein
 D. 1007-1072) we get a parallel of our Divāli (Vide p. 394 of Tien Heia Monthly. (November, 1939). I quote a stanza from this poem :-

[&]quot;Last year at the Lantern Festival
The flower-market lights were bright as day,
When the moon mounted to the tops of the willows,
Two lovers kept their tryst after the yellow dusk."

^{2.} The महानवमी festival was celebrated on a huge scale during the time of the Vijayanagar Empire. It is called नवरात्र at present. It begins on आश्विन शुक्त प्रतिपत् and ends on आश्विन शुक्त ९, followed by शुक्त १० which is विजयादशमी (दसरा), which is again followed by the Dividi on कार्तिक शुक्त प्रतिपत् (See p. 267-284) of आर्योच्या सणाचा इतिहास by Revedi.

यूतोन्मादितकामिनीजिवधतप्राणेशचादृस्कटः कीडाद्वारविलासिनीजनभवद्भूषाविकल्पोद्घटः । आतोद्यध्वनिमङ्गलारवभरन्याजृम्भिताशामुखः प्रीति पूर्णं मनोरथस्य भवतः पुष्यात्प्रदीपोत्सवः ॥ ४६३ ॥

> आभास्यखवैशिखराप्रविटङ्गपालि-दीपावली चुतिभृतपुरसौधवन्धाः । प्रसङ्गसंगतमहौषधिदीप्तदेहा-स्त्वां सेवितुं कुळनगा इव दत्तयात्राः ॥ ४६४ ॥

इति स्नास्कस्चितावसरां दीपोत्सविश्यं चानुभूय । etc. "

From the above description of Divali by a Southern writer of c. A. D. 950 we go to a Kashmirian text "not later than 6th or 7th century A. D." viz. the नीलमतपुराण 1 in which I find the following description of Divali:—

Page 42 (Lahore Edition, 1924)-

"तथा पक्षे व्यतीते तु कर्तव्या सुखसुप्तिका ॥ ५०५ ॥
पञ्चद्रश्यां यथा विप्र तथा मे गदतः शृणु ।
तस्यां दिवा न भोक्तव्यं वाळातुरजनं विना ॥ ५०६ ॥
स्यें त्वस्तमनुप्राप्ते पुजयित्वा करीषिणीम् ।
दीपबृक्षास्ततो देयाः देवतायतनेषु च ॥ ५०७ ॥
चतुष्पथस्मज्ञानेषु नदीपर्वतवेदमसु ।
बक्षमुलेषु गोष्ठेषु चत्वरेष्वापणेषु च ॥ ५०८ ॥
वक्षेश्वैवापणाः सर्वे कर्तव्याश्रोपज्ञोभिताः ।
दीपमाळापरिक्षिप्ते प्रदेशे तदनन्तरम् ॥ ५०९ ॥
स्वलंकृतेश्व मोक्तव्यं द्विजेन्द्र नववाससा ।
सुद्दद्वित्रांद्वणैः सार्थं वंधुभिश्वानुयायिभिः ॥ ५१० ॥
ततः प्राप्ते द्वितोवेद्वि स्वनुलिक्षैः स्वलंकृतैः ।
कीदितव्यं तथा चृतैः श्रोतव्यं गीतवादितम् ॥ ५११ ॥
विशेषवच भोक्तव्येः प्वोक्तैस्तेजनैस्तदः ।
तिशेषवच भोक्तव्येः प्वोक्तैस्तेजनैस्तदः ।

^{1.} Ed. by Ramial and Zaddoo, Lahore, 1924—p. 7 of Introduction.—See also Winternitz:

History of Indian Literature (Calcutta, 1927) Vol. I. p. 583—Kalhana (about 1145 A. D.)

drew on this Purāna. He regarded it as a venerable Purāna "It must be several centuries
carlier than Kalhana's work" (司司司管理).

तस्यां रात्रौ तु कर्तव्यं शस्यास्थानं सुक्षोभितः ।
गन्धेवंस्वेस्तथा धूपैः रत्नेश्चेवाभिलंकृतम् ॥ ५१३ ॥
दीपमालापरिक्षिप्तं तथा धूपेन धूपितम् ।
दियताभिश्च सहितैः तैनेया सा निक्षा भवेत् ॥ ५१४ ॥
पूज्या नृतनवासोभिः सुद्वत्संवंधिवांधवाः ।
वाह्यणा भृत्यवर्गाश्च चन्द्रदेव यथाविधि ॥ ५१५ ॥

इति नी॰ कार्तिकामायां दीपमाळावणैनम् । "

The above passage corresponds to verses 398 to 407 in the Critical Edition of the Nilamata by K. S. J. M. de Vreese published by E. J. Brill, Leiden, 1936 (pp. 36-37).

From the description of Dipamālā in the Nilamata Purāṇa of Kashmir composed in the "6th or 7th century A. D." we turn to the play Nāgānanda 1 of Śrī Harṣa, who is supposed to be identical with Harṣavardhana of Kahauj, the reputed author of two other plays viz. Ratnāvalī and Priyadaršikā, who ruled between A. D. 608 and 648. In Act IV of Nāgānanda I find a reference 2 to Divālī in the following extract:—

" प्रतिहार — अहमिप महाराजविश्वावसुना समादिष्टः । यथा सुनन्द गच्छ मित्रा-वसुं बृहि । अस्मिन् दीपप्रतिपदुत्सवे मलयवत्था जामानुश्चैतदुस्सवा-नुरूपं यिकिचित् प्रदीयते । तदागत्य निरूप्यताम् इति । तद्रच्छतु राजपुत्रीसकाशमार्थः । अहमिप युवराजिमत्रावसोरानयनाय गच्छामि।" (इति निष्कान्तौ)

In their notes 3 on the expression "दीपप्रतिपद्भावे " the editors observe: "This seems to be a festival held on the first day of the bright fortnight of Kartika 4 and celebrated with illuminations, our Divali." I think the cumulative effect of the history of Divali reconstructed by me so far will warrant the above identification of दीपप्रतिपद्भाव with our Divali festival.

^{1.} Ed. by G. B. Brahme and S. M. Paranipe.

^{2.} Ibid. pp. 61-62.

^{3.} Ibid. Notes, p. 51.

^{4.} Mr. R. N. Mehta in his Pre-Buddhist India (Bombay, 1939, pp. 354-355) deals with sports and festivals. In this connection he refers to (1) कार्तिक festival on the night of the Moon (कार्तिकी पूर्णिमा), (2) आश्विन — night of Full Moon (चातुमांसिनी कोमुदी). There is no reference in Mehta's description of these festivals to any display of lamps. (See J. I., pp. 499-500-G. 148; II, p. 372, V, pp. 212-214; and J. VI, pp. 221-222, G. 947, 949, 953 (उत्तमी उस्तवे).

All modern annotators and editors 1 of the Nagananda equate "दीवप्रसिवदुत्सव" with Divali festival but the commentary 2 of Sivarama explains the expression with the remarks : प्रतिपद्त्सचे स्थालीपाकास्त्रे. I cannot say if the Divālī was known as स्याङीपाकदरसय in ancient or mediaeval India. In this connection I note here some points about the origin of the Divall festival recorded by "Rgvedi" in his book on Aryan Festivals 3 already referred to by me. These points are briefly as follows :-

(1) The present दीपाविक महोत्सव is a unification and transformation

of three पाकयज्ञ v. z. (i) पावण, (ii) आश्युजी and (iii) आश्रयण.

(2) पार्वण appears to have been observed on आधिन वदा ३० in ancient times as a पाक्यज्ञ in honour of the ancestors.

(8) आस्युजी was observed in ancient times on the आधिन पौर्णिमा. It pertained to agriculture, the presiding deity of which was सीचा.

(4) आप्रयण (नवासेष्टि) was observed on मार्गशीय पौर्णिमा, It indicated the

closing of the संवस्तर.

(5) In course of time कार्विक was fixed upon as the first month of the विक्रम संवत् during the reign of विक्रमादित्य, the founder of this era. The custom of celebrating the Divali in this month in association with the other festivities of the New year's beginning must have given the Divali its present form.

The above hypothesis about the origin and development of the modern Divali festival needs to be substantiated by evidence. Its author has not recorded any convincing evidence in its support to compel our

acceptance of it.

Our story of Divali as revealed by datable literary evidence has so far come to c. A. D. 600. If the दीपप्रतिपदुक्षच mentioned in the Nagananda definitely means the Divali 4 we can easily take its antiquity at least upto A. D. 500, as national festivals have always a long tradition behind them.

^{1.} Krishnashastri Chiplunkar in his Marathi translation of Nagananda (Bombay, 1865) p. 105, translates the expression "दीपप्रतिपदुत्सवे" as "दिवाळीचे सणाचे दिवशी" — Principal R. D. Karmarkar in his Edition of Nagananda (Poons, 1919), p. 50 of Notes. observes :- "In the introductory scene from the conversation of the क्रानुकी and प्रतीहार we learn that red garments have to be presented for ten days after marriage according to the custom of the time to the bride and the bride groom and also that विश्वावस wants to make a suitable present to the newly wedded pair at the approaching Dipagal festival. "

^{2.} Ed by Ganapati Sastri, Trivandrum S. Series, 1917, page 187,

आर्यांच्या सणांचा इतिहास, Bombsy, 1916, pages 290-298.

^{4.} My friend Mr. M. Govind Pai of Manjeshvar (South Kanara) states in a private communication that प्रतिपत् in "दीपप्रतिपदुत्सवे " clearly refers to कार्तिक शुक्र प्रतिपत् because (continued on the next page)

To go backwards from A. D. 500 is now a difficult task and I earnestly invite brother-scholars to point out from early sources any references to or descriptions of the *Divālī* which can establish the antiquity of this national festival at least for 2000 years, if not more.

Hemacandra in his Deśināmamālā¹ (III, 43) mentions a Deśi word " जनसरती" (= यक्षरात्रि) and equates it with दीवाकी or दीपाहिका. If this explanation is correct we can easily take back the antiquity of Divālī to the time² of Vātsyāyana's Kāmasūtra, which mentions यक्षरात्रि in its list of festivals, as pointed out by Mr. T. N. Ray in his delightful article on "The Indoor and out-door Games of Ancient India" (Vide p. 244 of Proceedings of the Indian History Congress, Calcutta, 1939). Mr. Ray states that the festivals यक्षरात्रि, कीमुदीजागर and सुवसन्त्रक are termed माहिमनी or having got a noble purpose and are universal and the rest are देव्य or provincial. About यक्षरात्रि Mr. Ray 3 observes:—

"Yakṣarātri is performed during the night of the New Moon Night of Kārttika. [Some are of opinion that यक्ष्मांत्र is the Full Moon Night of Kārttika. But I don't think that they are correct. Vide the commentary by Ramacandra Sāstri on Kandarpacūḍāmaṇi (I, 4, 42)]. This night is also called सुन्तांत्र, 4 People generally gamble during this night. This is the night when the Divālī festival is celebrated nowadays almost every where in India. In Bengal and in some parts of India goddess Kālī is

(continued from the previous page)

of the reference to दारत्सम्य in the following lines which are introduced by the poet in the same context:— नायक — मित्रावसो पदय पदय दारत्समय — पाण्डुमि: पयोदपटलै: प्रावृत्ता: प्रालेयाचलदिाखरिश्रयमुद्रहन्ति एते मल्याचलसानव: "[These peaks of the मलय mountain, spread over by the veils of clouds, white on account of autumn, possess the beauty of the peaks of the Himbleys (प्रालेयाचल)].

1. Ed. by Ramānujasvāmi in B. S. Series (B. O. R. Institute, Poons, 1988), p. 148. Example:— " मणिवलपहि कुणन्ती जेवाछेअम्मि जक्तरात्तं व ।

जण्णोहणाण वि तुमं णि सि जच्छंदेण कि डरसि ॥ ३५ ॥ "

- 2. About 100 A. D. Keith assigns the Kāmasūtra to C. 500 A. D. Mr. Ray accepts the date "beginning of the Christian era" for the work.
- 3. Mr. Ray states in foot-note 16 of his article:—I have dealt with festivals in my Presidential address on the occasion of Dipāli Utsab (1846 B. S.) at Dinajpur, which is going to be published very soon, "I have not seen this address.
- The commentator Yafodhara in his Jayamangalā commen. on the Kāmasūtra observes
 p. 55 of Kāmasūtra, ed. by Kedārnāth, N. S. Press, Bombay, 1900):—
 - " यक्षरात्रिरिति । सुखरात्रिः । यक्षाणां तत्र सिन्नधानात् । तत्र प्रायशो लोकस्य वृतक्रीडा । एता माहिमान्यः क्रीडाः । देश्या आह— सहकारभक्षिका " etc.

worshipped during the night. The New Moon and Full Moon Nights are specially fixed for the worship of Kāli and Lakṣmi, the goddess of wealth. The Divāli festival is performed in honour of this goddess in most parts of India. The day following this night is called an which is the first day of the Indian calendar of the Vikrama era. Yakṣarātri is the last night of the year. It is said that Bali, the king of the nether world ascended the throne on this day."

Hemacandra's equation: " जलरत्ती (यक्षरात्रि) = दीवाळी or दीपाळिका" is a good starting point to hunt up the history of the Divali in sources on either side of the Christian era, especially because the Kāmasūtra mentions the यक्षरात्रि among three major festivals (माहिमन्य: explained by Yaśodhara as " महिमा महत्त्वं विद्वयते यासाम् "). If more evidence can be gathered about the यक्षरात्रि festival, we shall be in a position to clarify the problem of the origin of Divali.

At the beginning of his article on Games referred to above Mr. Ray observes:—

"It is not possible to give a chronological account of these games. There are certain games still prevalent in India, which can be traced as far back as the Buddhist, Epic, and even the Vedic period. So we shall arrange the games according to their nature and shall try to give their history as far as practicable."

I am firmly convinced that without a chronological account of our festivals we cannot understand their history. In the present paper I have planted some mile-stones of the chronology of Divali from about A. D. 100 to A. D. 1945 as will be seen from the following tabular statement:—

Chronology	Reference D = Divali	'l'ima indicated
Between A. D. 50 and 400	कामसूत्र mentions यक्षरात्रि as an impor- tant festival-According to Hemacandra जक्तरत्ती (यक्षरात्रि) is equal to दीवाळी or दीपाळिका — यशोधर (on कामसूत्र) explains यक्षरात्रि as सुखरात्रि, attended with यज्ञड and ख्वकीडा. He calls it a माहिमनी festi- val as opposed to देइय. Both these terms	पक्षरात्रि, कीसुदीजागर, सुवसन्तक etc. Is any chronological order

Chronology	Reference D = Divâli	Time indicated
A. D. 606-648	Śri Harsa of Kanauj refers to दीपप्रति- पदुस्सव in his play नागानन्द which is	प्रतिपत् ां शरस्समय.
	equal to modern D as it has a reference to अरुसमय mentioned in the same con-	and amounts are fine
	text—The custom of presenting gar- ments to the bride and bride-groom at	equipment biogram
	this festival referred to in नागानन्द has its parallel in the modern custom of hono- uring the son-in-law with feast and	Loons along the
	presents on the first D after marriage.	avest singer on
Between A. D. 500 and 800	नीलमतपुराण composed in Kashmir describes in detail the दीपमाला festival	पञ्चद्शी " कार्तिक अमायां
And San San	with the following features:—(1) All-	दीपमाला वर्णनम्"
phone mall	round illuminations, (2) hoisting up of festoons, (3) Feasting with Brahmins, relatives and dependents, (4) Gambling,	according to colo- phon.
ME DISCOURS AND	Music, (5) Passing the night in the company of ladies, (6) Wearing of rich	SALTER BUILDING
South Samuel	apparel and jewels, (7) Presenting new garments to friends, relatives, Brahmins	Solitanians, es asl
DYAN I YANG	and the servants.	feetivals wassemen
A. D. 959	सोमदेवस्रि in his यशस्तिङकचंपू compo-	Performed after the
	sed during the reign of the राष्ट्रक्ट King इत्या (III) of मान्यखेट (Mālkhed) describes	महानवमी festival (महानवमीं निर्वर्त्य).
	दीपोत्सव with the following features:— (1) Houses, white-washed and decora-	Castonical
All months are not	ted with white festoons, (2) Merry-	Hotwood A. D. III.
as also vised to	making in the company of ladies, (3) Music, (4) Gambling, (5) Tops of hou-	igal Crist Coards
remail and the	ses bright with rows of lights, (6) Indi- cated by स्नास्क (" स्नास्कस्चितावसरां दीपोत्सवश्रियं.")	mg we were to
A. D. 1000	The astronomer श्रीपति refers to दिवाळी	Prior to कार्तिक
A. D. 1030	in his Marathi commentary on his own ज्योतिषरस्त्रमाळा.	युक्तवमी.

Chronology	Reference D = Divali	Time indicated
A. D. 1030	Alberuni in his " Enquiry into India"	" 1st Kartika of
21 2000	(Tahkik-i-Hind) gives a detailed	New Moon's day
	description of D with the following	when the Sun
	features :- (1) name "Dibāli", (2) Fes-	marches in Libra."
	tive dress, (3) Making presents of betel	rigi
	leaves and areca nuts, (4) Merry-mak-	020L X A 00
	ing, (5) visiting temples and giving	-4
	alms, (6) All-round display of lamps	The state of the s
	at night, (7) cause of D given as the	
	liberation of Bali on this day by Lak-	mD
	smi, wife of Vasudeva, (8) a time for	
	luck - Alberant entered India in the	WHEN I WAR
	train of Mahmud of Gaznī.	(2)
A.D. 1088-1172	हेमचन्द्र of Gujarat refers in his देशी-	1672
	नाममाला to " जक्खरत्ती" (यक्षरात्रि) and	(9)
	equates it with दीवाली or दीपालिका.	dell led
Before A. D.	त्रिकाण्डशेष of पुरुषोत्तमदेव mentions यक्ष-	21
1159	रात्रि = दीपाछी (1. 1. 108) (see यक्षरात्रि in	
10.	St. Petersburgh Sans. Worterbuch)	
A.D. 1100-1200	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	शरत Season—
	Punjab in his Apabhramsa work संदेश	कार्तिक वणन.
	ससक describes the Dipavali night	TATO CONTRACTOR
	(जोइक्सिह) with the following features:-	連信
	(1) Illumination of mansions by ladies	1300
	all-round.	TX.
	(2) Ladies applying the collyrium	MILE
	of these lamps to their eyes.	Same and the
	(3) Resemblance of the Divali lamps	ON THE OWNER WHEN
TANGET	to the crescent moon.	THE RESIDENCE OF
	A Kannada inscription of the Madras	New Moon day of
A. D. 1119	Presidency of the reign of Calukya	अश्युज, सोमवार called
	Presidency of the refers to a gift of	The state of the s
	Tribhuvanamalla refers to a gift of	Fleet regards as दीपा
	one gadyāṇa for the service of नीलेश्वर देव	विक (which extended
	by one Kāvarāja on a महापर्व, New	from आश्विन कृष्ण १४
	Moon day of अश्रयुज, सोमवार.	to कार्तिक ग्रुष्ठ १).

Chronology	Reference All D = Divāli C	Time indicated
A. D. 1290 A Wall a small and	The Mahārāṣṭra Saint ज्ञानेश्वर refers to दिवाळी in his ज्ञानेश्वरी in three differ- ent metaphors—The illuminations of the Divälī are compared to the light of spiritual knowledge.	I 1080 (I I don't don't least tive
o. A. D. 1250	In the Marathi Mahānubhāva text ভীজাৰ্থিয় a long description is given about the celebration of <i>Divali</i> by ৰক্ষয়, the founder of this sect and his Gosāvī pupils. Features of this descri- ption are:—	cpul unio u 36 uniii ilary
	(1) Plenty of water stored and used for the Divālī bath, taken by the Gosāvis.	S WITHOUT G
	(2) Use of oil for rubbing the bodies before this bath.	MAINTENANT AND
	(3) Waving of lights (নীবান্তগী) before the Gosāvīs by the woman-disciple of বক্তথ্য,	May Said
2007	(4) Preparation of choice dishes for dinner such as मोदक, छाहू, सेव etc. on the भाउवीज (यमहितीया) day following the Divali day.	DONE TO LEAVE TO A STATE OF THE
	This was a Saint's Divali without any merry-making of the aristocratic variety. It was quite modest and simple.	Constant facility
A. D. 1260	हेमादि in his चतुर्वर्गचिन्तामणि (वतसण्ड)	कार्तिक गुक्र द्वितीया.
in who need will so you for a will do day of	describes the यमद्वितीया (or भाउवीज) festival. In this connection he quotes a passage from भविष्योत्तर containing the story of यम and his sister यमुना, who	totl A 1119 A Free
VI ME SEED	feasted him at her house. Since that time this festival was observed by brothers and sisters.	

Chronology	Reference D = Divali	Time indicated	
A. D. 1305	मेरुतुङ्ग of Gujarat in his प्रवन्धचिन्तामणि	Divall night	
A. D. 1000	narrates the story of Kolhapur king,		
- 197 30	who was contemporary of king Siddna-		
- FMM A	rāja of Gujarat (A. D. 1093-1143). In		
	this connection he refers to the Divait		
	festival at Kolhapur with the following		
MA IT	features:		
	(1) Worship of the महालक्ष्मी goddess		
	of Kolhapur by the king's wives on the	1	
	Divali night.		
	(2) Oblation of gold jewels and cam-	Granica	
	phor offered to महाख्यमी on the Divali	2	
	night by an officer of Siddharāja.	A COLUMN	
	(3) Gift of a magic garment to महालक्ष्मी	orang .	
	by the above officer.	100	
	by the above officer.	attli	
A. D. 1420	Nicoloi Conti, the Italian traveller	acina.	
	who visited Vijayanagar about A. D. 1420 or 1421 has described the festivals	100 H	
	that were celebrated at Vijayanagar	10321	
	such as वर्षप्रतिपदा, महानवमी, दीपावली and	Hard	
	होळी (Vide p. 252 of विजयनगर स्मारक प्रथ,	155	
	grat (Vide p. 252 of land and concerns)	HORE .	
	B. I. S. Mandal, Poona, 1936-37, arti- cle on विजयनगर जाणि परकीय प्रवासी by R.	110.10	
	cle on langarite allow depth said to		
	M. Athavale). He describes the Divali	Name of the last o	
	lamps kept burning day and night	La Par	
	within temples and on their roofs.	अश्विन कृष्ण चतुर्देश	
Between A. D.	The बाकासमेखकल्प, an encyclopaedic	t-0	
1450 and 1600	work dealing with social religious and		
	political life, possibly of Vijayanagar		
	Empire, describes in two chapters how	1 200	
	a king should observe the Divall on		
	नरकचतुर्वशी and कार्तिक शुक्छ प्रतिपत्. The	S (26)	
	features of the नरकचतुर्वी महोत्सव are :-	270 4	
	(1) This festival brings victory, pro-	H-HV	
	geny, happiness, prosperity etc. to kings.	THE REAL PROPERTY.	

Chronology	T	Reference de la Descripción de la Divalia de la Companya de la Com	T	ime indicated
the negate	It is	called साम्राज्यद (giver of Soverei-	1	2081.G
	gnty		STREET	
S. KILL	(2	2) Early morning bath, (3) Worship	who	
Trees, h	01 P	urohitas and other eminent Brah-	alder.	
	min		with the	
The same of	1	4) At the bath the king's wife		
	snou	ld anoint him with oil and mallas		
	(wr	estlers) should bathe him with		
	Wari	n water. This is called मङ्गलस्नान.	SECTION .	
	(6) King should worship his special	Elife	
	deity	and light three lamps before it.	10	
	(6	i) Then he should go to the आस्थानकृट		
	(855	sembly hall) duly attired with		
	swor	d, helmet, ornaments etc. and sit		
1	on th	he royal throne (सिंहासन) with all		
	his !	servants and officers in attend-		
	ance.	He should receive here the		A. D. 1420
	mem	bers of the assembly consisting of		
	tribu	tary princes, learned Brahmins.		
	poets	, singers, actors, dancers, astrolog.		
	ers,	and courtezans. This reception		
	shou	ld be according to the status of		
	each	class of the assembly. The King		
	shoul	d then distribute presents in the	Halis.	
	form	of garments. The distribution of	-242	
	tāmbi	ala etc. should bring the function		
	toac	lose.	Har.	
ASTRI MEST AND	(7)	The King should then go to the		Between A. Il.
un applite and	बन्तःपु	and there in the company of beau-	NO ZA	0001 hmg 05%1
TENIR ME CO.	tiful	ladies, his sons and grand-sons		
1	etc. f	inish his dinner.		
	(8)	In the evening he should witness,	12a	
i	n the	company of tributary princes etc.	397	
	disp	play of amagai (fire-works) foll.		
	owed	by a dramatic performance in the		
	213-781	ner accompanied with singing etc.		

Chronology	Reference D = Divali	Time indicated
SHEET THE	(9) He should then retire to the	
Very Toulins	अन्त:पुर, take his meals with the mem-	
-STE WEST	bers of the house-hold and later pass	The state of the s
TO BUILDING LAND	the night in the company of his chief	4 IS 1610
at the same	queen (महिषी).	and
	The features of the दीपावली proper	
A least a minimum by	on the following day (कार्तिक शुक्छ प्रतिपत्)	0.003
	are :- A lo atth air gamanoles are	1939
S. S. C. NY	(1) Bath etc. as on the previous day.	Did.
- Alakater	(2) Worship of भास्कर (Sun).	
The same of	(3) Offering three lamps to छड्मी-	Mary and the same of the same
Carlle Occup	नारायण for averting अलक्षी and establi-	ANT WALLE
THE REAL PROPERTY.	shing लक्सी on a secure basis (स्थैयंति दये).	AN ATRI LOD
	(4) Holding a gathering in the आस्था-	THE REAL PROPERTY.
	नक्ट as on the previous day.	(9) Table
	(5) Retiring to stratge and there	(4)
	worshipping साम्राज्यलक्ष्मी.	1000
	(6) After-noon rest, followed by	
	entertainments like महायुद्ध.	The state of the s
	(7) Illuminations all-round in the	
	capital in temples, assembly-halls, terr-	to the foreign
	aces streets and squares, theatres etc.	qualities you handoon
	(8) Honouring the royal servants	distribution of the
	with tambala and garments after their	only sheet also to
-one blacked	labours (कृतश्रमान्) for the success of the	december of the second
ent paper for	Divali celebrations.	The second section will be a second section of the section of the second section of the
	(9) Dedication of the entire illumi-	Lyab toward sidt
	nations (दीपनिवह) to महालक्ष्मी.	
Car Sugar	(10) Worship of बली, son of विरोचन	mathe dan Hessauch Back
STATE AND ADDRESS.	and grandson of प्रस्ताद.	An experience on the group of
ha (an da	(11) Distribution of gifts of gold etc.	the relative forthe ander
: 100	The state of the s	
	ous heart. (susceeding the recommittees)	

Chronology	Reference D = Divali	Time indicated
A. D. 1590	Thus terminates the दीपावळी-दरसव contributing to long life, health, vic- tory, prosperity and knowledge.	her
A. D. 1990	Ain-i-Akbari of Abul Fazl describes Divāli. Features:— (1) Greatest festival of the Vaisya caste, (2) Illuminations-diff-	Karttika कृष्णपक्ष १५ and गुक्रपक्ष १३.
	erence in calculating the date of D.—celebrated on কাৰ্নিক মুকত ইই and কুলো ইং, (3) Lamps are lit as on the Muslim festival Shab-i-barāt, (4) Dicing and other strange traditions.	out l
A.D. 1613,1623 1651, 1671, 1673, 1690, 1820, 1843, 1883.	European references to Divāli recorded in Hobson-Jobson. Features:-(1) Feasting, (2) Festival in honour of fam, (3) Sending presents to all concerned, (4) Bania's Divālī, (5) Grand festival	
	season, (6) Fireworks (1820), (7) Worship of डइमी, (8) Floating of lamps in river, (9) Splendid Divālī at Benares (1888).	

In the foregoing study of the history of the Divālī festival I have confined my evidence as far as possible to non-Purāṇic sources, as the chronology of the Purāṇic sources is not definite. I hope now that many of my friends who have made a close study of the Purāṇic sources will throw more light on this festival of lights by linking up the Purāṇic sources with the chronology of this festival as recorded in the present paper for a period of about 2000 years from the beginning of the Christian era up to the present day. 1

^{1.} Since this paper was drafted I have sent for publication in the Journal of the Dr. Ganga-natha Jha Research Institute, Allahabad, a paper on "The Sukhasuptika of the Nilamata Pura-na (between A. D. 500 and 800) and the Aditya Purana quoted by Hemādri (c. A. D. 1250) and its relation to the modern divali festival"—I have further received the following replies to my inquiries about Divali, which would be useful for further investigation in this field:—

My present study of the history of the Divall has been prepared in space-time context. The time-context has been made sufficiently clear in the table given above. As regards the space-context I may observe that the sources used in the present study pertain to the celebration of the Divali from Kashmir to Madras at such places as Multan, Kashmir, Kanauj, Delhi, Agra, Gujarāt, Chhattisgarh (C. P.), Mahārāstra, Poona, Mālkhed (in Nizam's Dominions), Vijayanagar. etc. This space-context shows the national character of the Divali from very early times. Yośodhara, therefore, is right in putting the Yakşarātri (or Divāli) in the category of Māhimanī (national) festivals mentioned by Kāmasūtra as distinguished from the desya (provincial or regional) festivals.

(continued from the previous page)

(I) Mm. Prof. P. V. Kane writes on 22-1-1946 :-

"The 4th volume of my work (History of Dharmasastra) will deal with festivals and vratas. Therefore, so far I have written nothing about the Divali festival. From my notes I find that Hemadri quotes स्कृत्पुराण and मनिक्युपराण for lighting lamps in Dicali; similarly the मदनपारिजात quotes बृद्धमन्, the दिवोदासीय quotes ब्राह्मपुराण, The निर्णयसिन्धु also quotes these and the कुरपरलाकर (pp. 886-895 and p. 413) has something to say about आश्विनरात्रिमहोत्सव and यमदितीया. "

(II) Dr. A. P. Karmarkar who is now working on Purante Culture at the Bharatiya Vidya Bhavan, Bombay, has kindly sent me the following references to Dipacali from the Puranas, on 1-2-1946 :-

(1) पद्मपुराण (उत्तरखंड, chap. 122); (2) वामनपुराण (chapter 92-verses 58 ff. -Note also the दशावतारं in the ब्रह्माण्डपुराण); (8) स्कृत्दपुराण (वैष्णव खण्ड-कार्तिकमासमाहारम्य,

chapters 9 ff.).

(III) Dr. A. N. Upadhye (Kolhapur) writes about Jain Divali on 26-1-1946 :- " The Dieall is the most important festivity with the Jainas. Lord Mahavira attained Moksa on the कार्त्तिक वद्य अमा (in the South अश्विन वद्य अमा). The Jainas practically all over India celebrate the Nevana of Mahavira by illuminating lights on the night of the New Moon in the month of Karttika; the कल्पसूत्र remarks : "Since the light of intelligence is gone, let us make an illumination of material matter " (see S. B. E. Vol. 22, pp. 264-266). The era of महावीर निर्वाण begins from कार्तिक गुरू ?. The remark of the कल्पसूत्र is the starting point for our study. "

I am thankful to all the above friends for their helpful and prompt replies to my queries about Dieall.

19. Studies in the History of Indian Festivals The Sukhasuptika of the Adityapurana and the Nilamatapurana (A.D. 500-800) and its Relation to the Modern Divali Festival*

In my paper on the History of the Divāli Festival (c.A.D. 100-1945)¹
I have pointed out the following facts:—

- (1) यक्षरात्रि mentioned by the Kāmasūtra as an important festival is identical with its dest name जनसर्जी mentioned by हेमचन्द्र in his Destinamanālā and explained as दीवाळी or दीपाळिका.
- (2) Another lexicographer Purusottamadeva in his lexicon স্থিকাত্তবীৰ also equates ৰশ্ববাসি with বীবাজি (see St. Petersburgh Worter-buch under ৰশ্ববাসি). This author is earlier than A.D. 1159.
- (3) यशोधर in his commentary Jayamangalā on the Kāmasūtra explains यक्षरात्रि as सुलरात्रि । यक्षरात्रि । सुलरात्रिः । यक्षाणां तत्र सक्षिधानात् । तत्र प्रायशो छोकस्य चूतकीडा । 2

Mr. Apte in his Sanskrit-English Dictionary explains सुखरात्रि as the "night of new moon (when lamps are lighted in honour of Lakङ्mi)," but does not record any usages of this term.

If the above explanations are correct we can form the following equation of all these terms:

यक्षरात्रि = मुखरात्रि (according to यक्षोधर)
associated with स्तत्रीडा and यक्षड.

^{*} Journal of Ganganatha Jha Research Institute, Vol. III, Part 2 (1946), pp. 205-216.

^{1.} According to Krishnamachariar (P. 890 of Classical Sanskrit Literature, 1987)
Yasodhara's "gloss is later than Kokkoka (19th cent. A. D.) and cannot be earlier than the
18th century A. D. "Kokkoka is the author of the रितिरहस्य (Ibid, p. 892).

^{2.} Mr. B. M. Khuperkar in his Marathi Translation of कामसूत्र and its Commentary by यशोधर, Bombay. 1988, p. 83. translates this passage as follows:— "कार्तिक अमावास्येच्या रात्रीला यक्षरात्र म्हणतात, त्या रात्री यक्षांचे सांनिध्य असते. या रात्रीमध्ये बहुतेक लोक झूतकीडा करितात."

- = जक्तरची according to हेमचन्द्र (A. D. 1088-1172) is equal to दीवाळी or दीपाळिका.
- =दीपाछी (according to त्रिकाण्डदोप—Before A. D. 1159).
- = सुखरात्रि the night of new moon when lamps are lighted in honour of उद्भी (Apte's Dictionary).

We can visualize the दीपावडी in the above equation but the term सुखरात्रि (given as an equivalent of यक्षरात्रि by यशोधर with two features viz. (1) सुतकीडा or gambling and (2) यक्ष-संनिधान or association with यक्षड) remains vague. Let us, therefore, see if we can find out any descriptions of this सुखरात्रि. In this connection I have to point out that Hemādri¹ records the description of a त्रत called सुखसुतिका or सुखसुतित्रत (आदित्यपुराणोक्त), which in my opinion is identical with सुखरात्रि mentioned by यशोधर in his commentary on the Kāmasūtra. This description reads as follows:—

Pages 348-349 — " सनत्कुमार उवाच । 2

समावास्यान्तु देवाइच कार्तिके मासि केशव ।

समयं प्राप्य सुप्तास्तु सुला क्षीरोदसानुषु ॥ १ ॥

स्क्षमीदेंस्यभयान्मुका सुखं सुप्ता भुजोदरे ।

चतुर्भुजस्य इस्तान्ते ब्रह्मा सुप्तस्त पङ्कते ॥ २ ॥

सतोऽथं विधिवत्कार्या मनुष्येः सुलसुप्तिका ।

दिवा तत्र न भोक्तब्यमृते बालातुरान् जनान् ॥ ३ ॥

 Vide pp. 848-849 of Caturvargacintămani by Hemādri, Vol. II (Vratakhanda, Part II) Bib. Indica, Calcutta, 1879.

2. The Kashmirian नीलमतपुराण which is supposed to be "not later than 6th or 7th century A. D." by its Editors Ramlal and Zadoo (Vide P. 7 of Intro. to नीलमत, Lahore, 1924) contains दीपमालावर्णन on कार्त्तिकामावास्या or सुखसुतिका, which reads as follows:—
Page 42 (Verses 505-515)—

"तथा पक्षे व्यतीते तु कर्तंव्या मुखमुप्तिका ॥ ५०५ ॥

पञ्चद्दश्यां यथा विप्र तथा मे गदतः शृणु ।

तस्यां दिवा न मोक्तव्यं बालातुरवनं विना ॥ ५०६ ॥

सूर्ये त्वस्तनुपाप्ते पूजयित्वा करीपिणीम् ।

दीपवृक्षास्ततो देयाः देवतायतनेपु च ॥ ५०७ ॥

चतुष्यश्वस्मशानेषु नदीपर्वतवेश्ममु ।

वृक्षमृत्वेषु गोष्ठेषु चत्वरेष्वापणेषु च ॥ ५०८ ॥

प्रदोषसमये लक्ष्मीं प्रायत्वा ततः क्रमात् ।

वीपवृक्षाश्च दावच्या शक्त्या देवगृहेषु च ॥ ४॥

चतुष्पये इमशानेषु नदीपर्व्वतवेइमसु ।

वृक्षम्लेषु गोष्ठेषु चत्वरेषु गुहासु च ॥ ५॥

वक्षैः पुष्पः शोभितव्याः क्रयविक्रयभूमयः ।
दीपमालापरिक्षिप्ते प्रदेशे तद्नन्तरम् ॥ ६॥

बाह्मणान्भोजयित्वादौ विभव्य च बुभुक्षितान् ।

बल्केल्तेन भोक्तव्यं नववस्त्रोपशोभिना ॥ ७॥

स्निग्धैम्मुंग्धैर्विद्ग्धैश्च बान्धवैक्षिमृतैः सह ।

शङ्करस्तु पुरा खूतं ससक्तं सुमनोहरम् ॥ ८॥

कार्त्तिके ग्रुक्षपक्षे तु प्रथमेऽहनि सत्यवत् ।

जितश्च शङ्करस्तत्र जयं लेभे च पार्व्वती ॥ ९॥

अतोऽर्थं शङ्करा दुःस्ता उमा नित्यं सुस्त्रोपिता ।

तस्माद् युतं प्रवर्त्तव्यं प्रभाते तत्र मानवैः ॥ १०॥

वस्त्रेश्चेवापणाः सर्वे कर्तःयाश्चोपशोमिताः ।
दीपमाला परिश्चिप्ते प्रदेशे तदनन्तरम् ॥ ५०९ ॥
स्वलंकृतैश्च भोक्तःयं द्विजेन्द्र नववाससा ।
सुद्धिक्र्वांद्वणैः सार्धं बन्धुभिश्चानुयायिभिः ॥ ५१० ॥
ततः प्राप्ते द्वितीयेऽद्वि स्वनुलिप्तैः स्वलंकृतैः ।
कीडितःयं तथा द्यृतैः श्रोतःयं गीतवादितम् ॥ ५११ ॥
विशेषवच भोक्तःयैः पूर्वोक्तेस्तैः जनैस्सह ।
तिस्मन् द्यृते जयो यस्य तस्य संवत्सरः ग्रुभः ॥ ५१२ ॥
तस्यां रात्रौ तु कर्त्तःयं शय्यास्थानं मुशोभितम् ।
गन्धैर्वक्षेस्तथा धूपैः रत्नैश्चैवाभिलंकृतम् ॥ ५१३ ॥
दीपमालापरिक्षात्रं तथा धूपैन धूपितम् ।
दियताभिश्च सहितैः तैनैया सा निशा भवेत् ॥ ५१४ ॥
पूज्या नृतनवासोभिः सुद्धत्वंवन्धवाधवाः ।
बाद्धणामृत्यवर्गाश्च चन्द्रदेव यथाविधि ॥ ५१५ ॥
इति नी० कार्तिकामायां दीपमालावर्णनम् "

The above passage corresponds to verses 398 to 407 in the Critical Edition of Nilamaia (pp. 36-87) by K. S. J. M. de Vreese, Leiden), E. J. Brill, 1936.

विस्मन् भवेज्जयो यस्य तस्य संवत्सरं शुभम् ।

पराजये विरुद्धन्तु लब्धनाशस्ततो भवेत् ॥ ११ ॥

श्रोतब्यं गीतवाद्यादि स्वनुलिप्तैः स्वलङ्कृतैः ।

विशेषवच भोक्तव्यं प्रशस्तैर्वान्धवैस्सद्द ॥ १२ ॥

तस्यो निशायां कर्त्तव्यं शस्यास्थानं सुशोभनम् ।

गन्धपुष्पैस्तया वश्वैः स्तैम्भील्यैरलंकृतम् ॥ १३ ॥

दीपमालापरिक्षिप्तं तथा धूपेन धृपितम् ।

दियताभिश्र सद्दितैर्नेया सा च भवेज्ञिशा ॥ १४ ॥

नवैर्वेश्वैश्र संपूज्य द्विजसम्बन्धिवानधवान् ।

इत्यादित्यपुराणोक्तं सुखसुप्तिवतम्।"

The foregoing description of मुख्युधि or मुख्युधिका quoted as an extract from the Aditya-Purāna by Hemādri (c. A. D. 1260) is practically identical with the दीपमाङावर्णन (or मुख्युधिकावर्णन) found in the Kashmirian Nilamatapurāna which is considered "not later than 6th or 7th century A.D." "The historian Kalhana (about 1148 A.D.) drew on the Nilamata in his Rājataranginī for the ancient history of Kashmir and he regarded it as a venerable Purāna. It must therefore, be several centuries earlier than Kalhana's work "— says Dr. Winternitz. 2

Hemādri states the source of his extract on सुखबुहिन्नत viz. आदित्यपुराण but no such statement has been made by the author of the नीळमतपुराण. Presuming that the आदित्यपुराण is earlier than the नीळमतपुराण it is possible to suppose that the नीळमत has borrowed the extract from the आदित्यपुराण which is mentioned by Alberuni (c. A. D. 1030) in his list of Purāṇas.8 Even if this supposition is not accepted we are justified in inferring that the सुखसुहिकान्त and the practice of observing it on the New Moon day of the month of Kārtika (कार्तिक-अमाबास्या) was current say between A. D. 500 and 800.

^{1.} This identity is not merely in respect of the contents of the extracts from the आदित्यपुराण and नीलमतपुराण but there is verbal parallelism with slight variations as will be seen from a comparison of the two extracts quoted one below the other.

^{2.} Vide p. 583 of History of Indian Literature, Vol. I, Calcutta, 1927, Kalhana calls the work नीलमत (राजतरिङ्गणी I, 14; 16) or नीलपुराण (1. c. L, 178). The Pandits of Kashmir usually call is नीलमतपुराण.

^{3.} Vide p. 90 of Puranic Records by Dr. Hazra, Dacea, 1940.

The features of this सुलसुन्निकानत as revealed by the extract quoted by Hemādri and that from the नीडमनपुराण are as follows:—

- (1) This vrata is to be observed on कार्तिक अमावास्या.
- (2) लक्ष्मी or करीपिणी (the goddess of wealth) is to be worshipped after sun-set (प्रदोषसमये, सूर्येत अस्तमनुप्राप्ते).
- (3) All persons, except children and sick persons, should observe fast by daytime.
- (4) After ভহ্মীপুলন lamps should be lighted all round in temples, cross-roads, cemeteries, on mountains, rivers and on houses, at the foot of trees, in cow-sheds, in caves etc.
 - (5) Market-places should be adorned with festoons and flowers.
- (6) At a place illuminated with rows of lamps, food should be distributed to the hungry and Brahmins should be entertained with a dinner, along with all classes of one's relatives and dependents. On this occasion one should wear ornaments and new garments.
 - (7) On the 1st day of कार्तिक-शुक्टपश्च God संकर was defeated by पार्वती in a dice-play (च्त), hence he was in a sorry mood on this day while पार्वती or उमा his consort was in a pleased mood. All people, therefore, indulge in युत्त early in the morning on this day. Those who win in this च्त will have a prosperous year, while those who lose will suffer much loss. One should hear music of all sorts and dine with all one's relatives.
 - (8) On that night a fine bed should be prepared, decorated with different cloths, jewels and garlands and perfumed with scents and flowers. One should pass this night on this bed in the company of one's wives with rows of lamps on all sides and with incense burning.
 - (9) On this night all one's friends, relatives and kinsmen as also Brahmins and servants should be honoured with the gifts of new garments.

The time-table of the सुखसुष्तिका celebration as found in the passage from आदित्यपुराण quoted by Hemādri (A.D. 1260) may be represented as follows in relation to the time-table of modern Divālī:—

^{1.} The नीलमतपुराण does not refer to this date. It merely states " द्वितीयेऽहि," The story of शंकर playing ज्त with पार्वती on कार्तिक गुक्र प्रतिपत् is also not mentioned by the नीलमत-पुराण.

Month		Pakṣa Day		Particulars of Observances	
1945 (Deccan)	आधिन Do. Do. कार्तिक Do.	कृष्ण Do. Do. गुरू	१३ १४ १५ झमावास्या १	धनत्रयोदशी— First day of modern Divali नरकचतुर्दशी— Second day of modern Divali लक्ष्मीपूजन— Third day of modern Divali बिल्प्रतिपदा — Fourth day of Divali यमद्वितीया or माळबीज Fifth day of Divali	
Between A. D. 500 and 1000 A.D. (North India) आदित्यपुराण and नीलमनपुराण	Do.	Constitution of the	१५ अमावास्या १ (प्रथमे अहनि of कार्तिक ग्रुक्लपक्ष)	लङ्मीपूजन-Observance of सुलसुप्तिकानत - Illuminations all round-Feasting at night but fast by day-Gifts of new garments to all. यूत of शंकर and पार्वती — Men should play यूत on this day — Feasting with relatives, music, etc.	

It will be seen from the above table that the सुखसुसिका of the कादित्यपुराण and the नोडमलपुराण which was celebrated on कार्तिक अमावास्या more than a thousand years ago in North India is now celebrated on काविन अमावास्या in the Deccan. The features of the सुखसुसिका are practically identical with those of the modern Divali celebrations on आधिन अमावास्या including the इस्मीपूजन. We can, therefore, equate सुखसुसिका with दीवाडी or दीपाडिका. The problem of the genesis and development of Divali is a very complicated one but the following equation of different terms for Divali may be helpful towards its clarification:—

यक्षरात्रि =	सुसरात्रि =	सुखसुप्तिका	जक्खरत्ती (यक्षरात्रि)	= दीपाली
Between c. A. D. 100 and 400	THE STATE OF THE S	Between A. D. 500 and 800	A.D. 1088 1172	Between 1100 and 1159
(कामसूत्र)	यशोधर on कामसूत्र	नीलमतपुराण and आदित्यपुराण	हेमचन्द्र in देशीनाम- माला	विकाण्डक्षेष of पुरुषोत्तमदेव

Now as regards the apparent shifting of the date of छड्मीपूजन day from कार्तिक अमाबास्या in the time of the Ādityapurāṇa and the Nilamata-purāṇa to कार्यन अमाबास्या now current in the Deccan, I have to point out that this shifting is only apparent and not real. In this connection Mr. S. B. Dikshit 1 states that the system of computation of months is प्रिमान्त to the north of Narmadā river, while it is अमान्त to the south of Narmadā. In accordance with this explanation we get the following equation of the two days pertaining to पुल्युश्चिका or Divālī.

अमान्त	पौर्णिमान्त
To the South of Narmadā	To the North of Narmada
आश्वन - कृष्ण १५ (अमावास्या)	= कार्तिक - कृष्ण १५ (अमावास्या)
कार्तिक - शुक्छ १ (प्रतिपत्)	= कार्तिक-शुक्छ १

It will thus be seen that the dates for celebrating the सुलसुसिका more than a thousand years ago correspond exactly to the इदमीपूजन day and the बिड्यालिपदा day of our modern Divali. Secondly all the features of the सुलसु-सिका in respect of joyous ritual and merry-making closely agree with the current features of Divali celebrations on आधिन अमावास्या and कार्तिक शुक्छ प्रतिपन् or बिड्यालिपदा. We may, therefore, conclude that this सुलसुसिका of the

Vide pp. 392-398 of History of Indian Astronomy (in Marathi) by S. B. Dikshit, Poona, 1896. I am thankful to Prof. N. A. Gore of the S. P. College, Poona, for drawing my attention to these pages.

बादित्यपुराण is identical with सुन्तरात्र (with सूत etc.) equated by यशोधर with यक्षरात्र of the Kāmasūtra (c. A. D. 100—300).

The Adityapurāna or at any rate the passage in it about सुखसुविका appears to have been composed in North India where the पौर्शिमान्त computation of months was current. The Nilamata Purāna was definitely compiled in Kashmir and consequently the पौर्शिमान्त computation followed in it can be easily understood.

We now require more descriptive particulars of यक्षरात्रि as such from early sources preferably before A. D. 500. In a late lexicon of A. D. 1660 viz., the Kalpadrukośa of Keśava (G. O. series, Baroda, Vol. I. p. 411) I find the following line containing the word यक्षतिइ which is identical with यक्षरात्रि:—

" सिनीवास्यय दीपाछी यक्षनिइ बलिपवे च "

Mr. Apte in his Sanskrit-English Dictionary gives the following explanations of some of the above terms :-

विनीवाडी — The day preceding that of the new moon, or that day, on which the moon rises with a scarcely visible crescent.

दीपाली —Particularly the festival called Divali held on the night of the new moon in आधिन,

यक्षरात्रि —the festival called दीपाछी (q. v.) (यक्षनिड्=यक्षरात्रि).

Perhaps बिळपर्व=बिळप्रतिपदा=कार्तिक शुक्त प्रतिपन्.

If the line from the Kalpadrukośa indicates several days of the modern Divali Festival we can allocate these terms to their respective days as follows:—

सिनीवाली =आश्विन कृष्ण १४ or नरकचतुर्देशी

दीपाली same } = आखिन कृष्ण १५ (अमावास्या) (उद्मीप्जन day)

विलयवं =कार्तिक शुक्ल १ or बिलप्रतिपदा

It remains to be seen if there are any sculptures or paintings, early or late, which may be looked upon as representing any aspects of the Divali festival. The study of the representations of Puranic episodes in sculpture or painting would prove a very useful and fruitful occupation to any devoted student of Hindu religion and culture. In the extract from the Adityapurana about Sukhasuptika quoted by Hemadri reference is

made to the story of the dice-play of God Śańkara and his consort Pārvatī on Kārtika Śukla I and the defeat of Śańkara by his better-half in this dice-play. While this paper was being read out to my friend Mr. R. S. Panchamukhi, Director of the Kannada Research Institute, Dharwar, he observed that this story is represented in the sculptures at Ellora. I requested Mr. Panchamukhi to send me some detailed information about these sculptures and like a true devotee of Sarasvatī Mr. Panchamukhi promptly supplied to me the following information in his letter dated 16th January 1946:—

"While reading your illuminating paper on the history of the Dipāvali festival, I observed that the play of Siva and Pārvatī with dice is depicted in stone. I have attached extracts from my inspection notes for your information. The play is depicted in the sculptures of the Ellora Caves excavated by Rāṣṭrakūṭa Kṛṣṇa I (A.D. 757-772)."

Extracts from the Inspection Notes :-

"Ellora Caves —There are in all 34 caves excavated on the sides of a hill about a mile from the village Verula or Ellora. Of these the first 12 are Buddhist, 13-29 Śaiva (Hindu) and 30-34 Jain.

Cave No. 14 —... The left side wall has the following sculptures:—
(5) Siva and Pārvatī playing with dice, Gaṇapati is standing close by and other attendants with cauris in their hands standing at the back.

Nandi below is being teased by the Ganas.

Cave No. 15—Scene of Śiva and Pārvatī playing with dice as in the Kailāśa temple, below the bull at the foot being teased by the Ganas. The Gandharvas with garlands in their hands are shown in the air (Ākāśa).

Cave No. 16 - (Kailāśa temple)

Four-handed Śiva with four-handed Pārvatī seated below the tree on the mountain playing at dice. On the rectangular plate spread out in front are placed at the four corners, groups of

^{1.} I take this opportunity of recording my most grateful thanks to Mr. Panchamukhi for this information as also for his scholarly interest in the history of the Divall. He has promised to prepare a short article on the Ellora sculptures representing the Sahkara-Pārvatl dice-play (dyūta) and send it to me for publication. I have also requested him to prepare similar papers on many other representations of Purāpic stories which he may have noticed in sculptures or paintings. These papers are bound to give a sound historical perspective to these stories.

five Pagadis. Siva has in his right hand some Kaudis in the act of being thrown on the ground. This exactly corresponds to the play of pagadis in the Divali festival.

Sankara and Pārvatī playing with dice. Sankara showing by his fore-finger that Pārvatī should play one more game, while Pārvatī expressing by the palm of her hand that she had played off and finished the game and would not play any further. Sankara is holding her hand at the fist to induce her to play and is shown with dice in the other hand. Sankara has four hands, while Pārvatī has only two.

Cave No. 21 - (Rāmeśvara).

Siva and Pārvatī playing at dice, Śiva suggesting as before, by the fore-finger that she should play another game; Pārvatī suggesting by her right hand that she had won the play and finished the game. Śiva, however, drags her by the skirts of her garment and begins to play with dice by another hand. One of the female attendants is waving a fan and another holds the braid of hair of Pārvatī."

The above notes on the Ellora sculptures of the 8th century A. D. pertaining to the Śańkara-Pārvatī dice-play are sufficiently illuminating. The relation of this dice-play to the dice-play of men and women on the Divālī day on Kārtika Śukla 1 as mentioned in the Ādityapurāṇa extract quoted by Hemādri (c. A. D. 1260) 1 needs to be further investigated from sources earlier than A. D. 700, both literary and sculptural. It remains to be seen if the association of Sukharātri (= Yakṣarātri = Divālī) with dyūta or dice-play pointed out by Yośodhara has a definite origin in the dice-play of Śańkara and Pārvatī on Kārtika Śukla Pratipadā as mentioned

^{1.} Compare extract from Adityapurāņa quoted by Hemādri:—
" शक्करस्तु पुरा द्यूतं ससर्वे सुमनोहरम् ॥ ८ ॥
कार्तिके शुक्लपक्षे तु प्रथमेऽहनि सत्यवत् ।
जितश्च शक्करस्तत्र जयं लेभे च पार्वती ॥ ९ ॥
अतोऽथै शक्करो दुःसी उमा नित्यं सुस्रोपिता।"

Judging by Mr. Panchamukhi's notes the artist of the Ellora Kailāśa temple sculptures has put in stone the spirit of elation of Pārvasī and the crest-fallen bewilderment of Śańkara in a marvellously delightful manner.

in the Adityapurāna. Is it possible to suppose that the Ellora sculptures representing this dice-play have any connection with the dice-play on the Divālī day? We have already seen that Somadeva Sūri who gives us a description of the Divālī festival in A. D. 959 lived in the reign of Rāṣṭra-kūṭa king Kṛṣṇa III about 200 years later than Rāṣṭrakūṭa king Kṛṣṇa I (A. D. 757-772) who excavated the Ellora caves, in which we find the sculptures about Śaṅkara-Pārvatī-dyūta or dice-play so vividly depicted. I hope that the students of the history of Indian art would throw some search-light on this question and clarify some of the issues in this paper.

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20. Studies in the History of Indian Festivals-The Divali Festival*

Some Puranic Texts on the Observance of the Divali Festival as quoted by Hemadri in his Caturvarga-Cintamani (c. A. D. 1260)

In my recent paper 1 on " The Sukhasuptikā of the Adityapurāna and the Nilamatapurāna (A. D. 500-800) and its Relation to the Modern Divali Festival " I recorded the following equation :-

यक्षरात्रि } = { सुखरात्रि (according to यक्षोधर) associated with of कामसूत्र } = { सुखरात्रि (according to यक्षोधर) associated with

- = जन्तरत्ती which according to Hemacandra (A, D. 1088-1172) is equal to दीवाली or दीपालिका.
- = दीपाड़ी { according to त्रिकाण्डकोप } Before A. D. 1159 }
- = सुखरात्रि 2 the night of the New Moon when lamps are lighted in honour of डइमी (Apte's Dictionary).
- = दीपालिका (according to त्रिकाण्डकोप—Between A. D. 1100 and 1159).
- = सुखसुप्तिका of the नीडमतपुराण (Between A. D. 500 and 800) and the आदित्यपुराण (quoted by Hemādri-c. A. D. 1260).

I have now to record the following extract from Hemādri's चतुर्वने-चिन्तामणि (कालनिर्णयखण्ड, Calcutta, Bib. Indica, 1889) in support of the above equation :-

^{*} Bharatiya Vidya (March 1947), pp. 58-78.

^{1.} Vide pp. 205-216 of the Journal of the Jha Institute, Allahabad, Vol. III. Part 2 (February 1946).

^{2.} Vide folio 68 of MS No. 844 of 1875-76 of कालनिर्णयसिदांत with टीका by रघुराम, who observes :--

[&]quot; तदुक्तं स्मृत्यंतरे । अमावास्यां यदा रात्री दिवा भोगे चतुर्दशी । पूजनीया तदा लक्ष्मीर्विज्ञेया मुखसित्रका ॥ इति "

Pages 914-915 -

" ब्रह्माण्डपराणे--

तुलायां तिलतेलेन सायं संध्यासमागमे । आकाशदीपं 1 यो द्वान्मासमेकं निरन्तरम्। सभीकाय श्रीपतये स श्रिया न विसुक्यते ॥ दामोदराय नमसि तुलायां छोख्या सह । कार कार्य प्रमाण प्रद्वीपं ते प्रयच्छामि नभोडनन्ताय वेधसे Ilb र अध्यक्ष कार्यक एक को the Municipal of A. D. 550-850) and the Respirators of an Englishment.

"legist " I recorded the follow अमावास्यां तुलादित्ये ² लङ्मीर्निद्रां विसुञ्चति । सुखरात्रि ³ स्वरूपा सा प्रदीपोज्ज्वलनाय वै ॥ कुसुम्मकुसुमैर्गन्येदींपैगोरोचनाफछैः। वसुवंधनववध्य पृच्छेत्कृशक्या गिरा । प्जयेच 4 सदा छक्ष्मीमछक्ष्मीं मछनाशिनीम्। क्षये पञ्चपताकानां ध्वजमेकं गृहे न्यसेत्।

musiks the night of the New Mr. 1. Vide folio 141 of MS No. 325 of 1880-81 (B. O. R. Institute) of कालनिर्णय of आदित्य-भट्टोपाध्याय कविवछभ — This author refers to आकारादीप as follows:-

" तैलेनाश्युजं मासं दीपमाकाशवर्त्तिनं । विकास कार्या दोलास्यं हरये दत्वा महतीश्रम (श्रिय) मझ्तुते ॥"

He further refers to लक्मीपूजन on आश्विन अमावास्या together with अभ्यंगस्तान, नीरांजन, etc. He quotes from वाराहपुराण (" कार्चिके भीमवारेण" etc.), from पुष्करपुराण ("स्वातिस्थित रवाविंदु: " etc.) and from ब्रह्मपुराण (" ऊज्वें गुक्कदितीयाया: ") in his treatment of दीपावली.

2. The expression " अमावास्यां तुलादित्य " may be compared with the statement of Alberuni (A. D. 1080) in his description of Divall (Vide p. 182 of Vol. II of Alberuni's India. ed. by E. C. Sachau, London). Alberuni says

"1st Kartika or nesp moon's day when the Sun marches in Libra is called Dieali "

3. Yasodhara explains the यक्षरात्रि as " मुखरात्रि: । यक्षाणां तत्र सन्निधानात् । तत्र प्रायशो लोकस्य चृतकीडा । "

4. In the celebration of modern Divall the लक्सीयूजन takes place on आश्विन कृष्ण अमावास्या (= कार्तिक कृष्ण अमावास्या in North India).

वाराहे।

जमावास्यां तुलादित्ये लक्ष्मीर्निद्रां विमुञ्चति । तिसमन् शक्ले तदा विष्णस्तुलायामथ वृश्चिके ॥ लक्ष्मीप्रबोध: 1 दीया (पा) लिका इति यस्य लोके प्रसिद्धि: । कौ सुदी वक्षरात्रिश्च कौसमी फालानी तथा। वासन्तिरिति विज्ञेया देशस्य महिमाश्रये 2 ॥ आश्विने पौर्णमास्याञ्च निशादेः कीडनं स्मृतम् । की सदी सा समाख्याता कार्यां छोकविभूतये ॥ काचिके सितपक्षादी तिथी तु कसमांशकै:। यक्षाची यक्षरात्रिः स्यात् कार्या चेष्टसुखाय सा ॥

L. According to Hemadri लक्ष्मीप्रवोध = दीपालिका = सखरात्रि

The time of लक्सीप्रबोध (or दीपालिका) is uniformly indicated by the ब्रह्माण्डपुराण, वाराहपुराण and ज्योति:शास्त्र by one and the same line "अमाबास्यां तुलादित्ये लक्ष्मीर्निंद्रां विमुखति" in which the words " अमावास्यां तुलादित्ये " mean "On the New Moon Day when the Sun (आदित्य) is in the Libra (तुला) Sign of the Zodiac. " Alberuni seems as it were to translate this line when he states : "1st Kartika or New Moon's Day when the Sun marches in Libra is called Divali. "

According to Dr. Hazra (p. 28 of Puranic Records, Dacca. 1940) " Indians were not familiar with Rāšis earlier than the 2nd Century A. D. " If this statement is correct all the texts about Divali (quoted by Hemadri) containing a reference to del util are later than the 2nd Century A. D. Hazra states (p. 104) that "Hemādri has verses 82-83 and 85-88 from Chap. 99. verses 1-52 (of दाराहपुराण) and verses 31-40 from Chap. 112" (of the same), which is " not later than 1100" (p. 105). Chapters 1-80 and 98 of the वाराहपुराण now extant are the oldest, being assigned to c. A. D. 800 by Dr. Hazra.

2. The Kamasutra mentions three festivals viz. (1) यक्षरात्रि, (2) कीमुदीजागर and (8) सुव-सन्तक. These are called " माहिमान्य: क्रीहा: " by Yafodhara. According to वाराहपुराण quoted by Hemādri the important festivals or rather the national festivals (देशस्य महिमाश्रये) are:— (1) कीमुदी, (2) यक्षरात्रि, (8) कीमुमी, (4) फाल्गुनी, (5) वासन्ति or वासन्तिक, According to Yafodhara यश्चरात्रि = सुलरात्रि; कौमुदी जागर takes place on आश्विन full-moon day (आश्वयुज्यां हि पौर्णमास्यां); and सुवसन्तक = मदनोत्सव (तत्र तृत्यगीतवाद्यप्रायाः की हाः)

Virabhadra in his metrical commentary on the Kamasufra explains the three festivals of

Kāmasūtra as follows:-

" कुर्यांच्च यक्षरात्रिं सुखरात्रिः सा च कथ्यते लोके । ऐक्यं कोजागस्या कीमुद्यास्तत्र निर्दिष्टम् ॥ सुवसन्तकोऽत्र शास्त्रे भवति वस्त्तस्य वासरः प्रथमः।"

(Vide p. 56 of Kāmasūfra ed. by Kedarnath, N. S. Press, Bombay, 1900)

माधशुक्छचतुर्थ्यान्तु वरमाराध्य च श्रियः ।
पन्चम्यां कुन्दकुसुमैः पूजा सा कौसुमी स्मृता ॥
फाल्गुने पौणंमास्यान्तु यदा वासविद्यासकः ।
जैया सा फाल्गुनी छोके कार्या छोकसमृद्धये ॥
चैत्राष्ट्रम्यामशोकैस्तु श्रयोदद्द्यां स्मराचनम् ।
तच कार्य्यमशोकार्यं जेया वासन्तिकेति सा ॥

षय ज्योतिःशास्त्रे।

अमावास्यां तुलादित्ये लक्ष्मीनिंद्रां विसुन्चित । तस्मिन् शुक्ले यदा विष्णु स्तुलायामधिगच्छति । उत्तिष्टत्यप्रतो विष्णुः पश्चात् कृष्णचतुर्देशीम् ।

वय भविष्यत्पुराणे।

स्नानं दानं शतगुणं कार्तिके या तिथिभैवेत् !

प्रतिपद् ब्रह्मणश्चापि गुडमिश्रैः सदीपकैः ।

वासोभिरहतैश्वाद्यगंब्छेत्तद् ब्रह्मणः पदम् ॥

पुष्पैगंब्धैनंवैवंश्वेरात्मानं पूजयेद्युधः ।

तस्यां प्रतिपदायाञ्च स गब्छेद् ब्रह्मणः पदम् ॥ 1

इति " "काळनिर्णये विष्णुशयनादिकाळनिर्णयो नाम सम्रदशोऽध्यायः ॥ "

- (1) पद्मपुराणे "कार्तिके मास्यमावास्या तस्यां दीयप्रदीपनं । शालायां ब्रह्मणः कुर्यात् स गच्छेत्परमं पदं ॥ प्रतिपदि ब्रह्मण्यश्च गुडमिश्रेः सदीपकैः । वासोभिरहतेः पूज्या गच्छेद्दै ब्रह्मणः पुरं ॥ स्नानं दानं शतगुणं कार्तिकायां तथा नृप । बिल्सस्येषु शुभदा पांशुनाशुभनाशिनी ॥ "
- (ii) वामनपुराणे -- extract about वीरप्रतिपदा उत्सव described by त्रिविकम to बलि.
- (iii) भविष्योत्तरात् Dialogue between श्रीकृष्ण and युधिष्ठिर नरकचतुर्दशीस्तान on "कार्तिके-कृष्णपक्षे तु चतुर्दश्यां दिनोदये" नरक दीप, दीपक to be kept all round, in mansions, temples, palaces etc. यूत, पान etc. of men and women पार्वणश्राद, विप्रभोजन तृत्य, वादन etc.— Royal procession to inspect the illuminations पादाभ्यङ्गपदायिनी वेदया going from house to house in the morning सुवासिनीदान by the king presents to all men by the King— मार्गपाली Ceremony बिल्पूना and दीपोत्सव.

^{1.} Hemādri in जतावण्ड (of चतुर्वर्गाचिन्तामणि) Chap. 21 quotes (after सुखसुप्तिजत description) extracts (pp. 350-359) about कौमुदी महोत्सव as specified below:—

The contents of the above extracts given by Hemādri (c. A. D. 1260) from ब्रह्माण्डपुराण, वाराहपुराण, ज्योति:शास्त्र and भविष्यस्पुराण may be tabulated as follows:—

Source	Festival	Features	Time
ब्रह्माण्डपुराण	कक्मीनिद्राविमो-	आकाशदीप of तिलतेल in the even-	" तुङायां "
	चन called	ing in honour of god दामोदर-	or
	" लक्षीप्रबोध "	छक्मीनिद्राविमोचन=सुखरात्रि-प्रदीपो-	''भमावास्यां तुलादित्ये'
Months all o	or दीपालिका	उउवलन — लक्मीपूजन — अलक्मीमल-	Soluzia, Santa
	by Hemādri	नाशनं—Honouring newly-mar-	Charles - Chill
	- 3000	ried women (नववधूः).	in the beam Name
वासाह (पुराण)	Do	छक्मीनिद्राविमोचन — Description	"अमावास्यां तुळादिस्ये
	SAUDINGS &	of five national festivals:-	st entit miles
	migros (2)	(1) कौ मुदी — " निशादेः क्रीडनं "	"आश्विन पौर्णमास्यां"
	D an ansu-	(2) यक्षरात्रि— " कुसुमां शुकैः यक्षाची	"कार्तिक सितपक्ष
	DATE OF BUILDING	इष्टसुसाय कार्या "	नादौ तिथौ "
	of the section in	(3) कौसुमी " श्रियाः वरमाराध्य	" माधगुक्लचतुच्यां
	-	साधशुक्लचतुच्यां कुन्दकुसुमैः	पञ्चम्यां "
	STATE AND THE	पश्चम्यां पूजा"	
15 231	1 instruction	(4) फाल्गुनी" वासविलासकः"	" फाल्गुने पौर्णमास्यां '
	Tan mines	-"लोकसमृद्धये कार्या"	THE PROPERTY OF
		(5) वासन्ति or वासन्तिका-"अशोकै:	" चैत्राष्टम्यां"
or from the state of	AT I WHIST IS	अशोकार्थं स्मराचंनं कार्यम्"	"त्रयोदस्यां"
	7		PERMITE HEALTH TE
ज्योति:शास्त	Do	लक्ष्मीनिदाविमोचनविष्णुप्रबोध (शुक्के तुलायों)-on page 810 we read :-	"अमावास्या तुकादित्य
		मिधुनस्ते सहस्रांशी स्वपयेन्मधुसूदनं ।	
	1	तुलायां च महाराज पुनस्त्यापयेत्तया ॥	
How is the second	-	स्त्रान, दान, with "गुडमिश्रे: सदीपकै:"	(1 _ 00 _ 0 _ 11
भविष्यत्पुराण	ब्रह्मणः प्रतिपद्	खान, दान, WIED "गुडामश्रः सदापकः अहतैः वासोभिः—"पुष्पैः गन्धैः नवैः	कारिक प्रावपद्
	he make	वस्तः वालामः - दुःषः गन्यः गयः	
	The second	der altalia fandaa.	

Among the details recorded in the above table I am specially interested in the following:—

- (1) लक्ष्मीपूजन etc. on the लक्ष्मीप्रकोध night viz. the अमावास्या when the Sun is in तुला (Libra) Sign of the Zodiac (according to ब्रह्माण्डपुराण).
 - (2) यक्षाचा etc. on यक्षरात्रि on कार्तिक सितपक्ष (ग्रुक्छ) बादौ तिथी i.e. प्रतिपद् 1 (according to वाराहपुराण).

Hemacandra equates जक्खरित or यक्षरात्रि with दीवाळि or दीपाळिका but does not specify its time. Hemādri equates ळ्झ्मीप्रबोध on कमावास्या (of आधिन) with दीपाळिका and quotes the वाराइपुराण, which refers to the celebration of यक्षरात्रि (attended with the worship of यक्षर) on कार्तिक ग्रुक्छ प्रतिपद्. At present आधिन अमावास्या and कार्तिक ग्रुक्छ प्रतिपद्, which follows it, are both included in the term Divāli.

In Chapter 13 of the Kālanirnaya Khanda (pp. 614-617 of Bib. Indica Edn., 1885) Hemādri quotes some texts describing "पुण्यप्रतिष्त" from (1) पश्चप्राण, (2) मिवच्यपुराण, (3) वासाहपुराण, (4) देवीपुराण, (5) ब्रह्मपुराण and (6) वामनपुराण. As these texts have a direct bearing on the history of the Divālī Festival associated with the प्रतिपत् of कार्तिकश्चरूकपञ्च I reproduce them below to enable scholars to study them in their historical and cultural perspective:—

^{1.} Bhattoji Diksita (c. A. D. 1560—1620) in his कालनिर्णयसंक्षेप (MS No. 844 of 1891—95 in Govt. MSS Library, B. O. R. Institute, folio 28) prescribes धनदपूजा (यक्षराट्यूजा) on a प्रतिपत्:—

[&]quot; तिथिविशेषे देवताविशेषपूजा स्मर्थते । प्रतिपद्धनदस्योक्ता द्वितीया तु श्रियः स्मृता। तृतीया तु भवान्याः स्याञ्चतुर्थी तत्सुतस्य ॥ etc. "

In the कालनिर्णयदीपिकाविवरण (MS No. 99 of 1871—72) by नृसिंह the above stansa is introduced as follows on folio 119 :—

[&]quot; तथा च पितामहः। प्रतिपद्धनदस्योक्ताः "तसुतस्य च "

Before this stanza another verse associating औद or धनद with प्रतिपत् is given as follows :--

[&]quot; श्रीद श्रीगिरिजागणेशभुजगस्त्रंदाक्षंदुर्गाः क्रमाद् — अंबावामुक्तिमुन्यजस्मरशिवांभोजासनाश्चेश्वराः एते स्युः प्रतिपन्मुखासु तिथिष्विति। श्रीदो घनदः । अंबा मातरः अजो विष्णुः अंभोजासनो ब्रह्मा । "

"अथ प्रतिपत्क्रमेण पुण्यतिथयः। तत्र तावत् पुण्या प्रतिपत्।1

पद्मपुराणे ।

चैत्रे मासि महाबाही पुण्या प्रतिपदा पुरा ।
तस्यां यस्तपनं दृष्ट्वा स्नानं कुर्यावरोत्तमः ॥
न तस्य दुरितं किंचिकाधयो न्याधयो नृप ।
भवन्ति कुरुशादूंल तस्यां स्नानं समाचरेत् ॥
दिव्यनीराजनं तद्धि सर्वरोगविनाशकम् ।
गो-महिष्यादि यिकिन्चित्तस्य भूषयेन्नृपः ॥
चृणवस्वादिभिः सर्वस्तोरणाधस्ततो नयेत् ।
ब्राह्मणानां तथा भोज्यं कुर्याकुरुकुलोद्वह ॥
तिस्र पृताः पुरा प्रोक्तास्तिथयः कुरुनन्दन ।
कार्तिकाश्वयुक्ते मासि चैत्रे वापि तथा नृप ॥

भविष्यत्पुराणे ।

तिथीनां प्रवरा यस्माद्बह्मणा समुदाहता ।
प्रतिपादिता यदा पूर्वे प्रतिपत् तेन उच्यते ॥
तिस्रो ह्मेताः पुरा प्रोक्तास्त्रिययः कुरुनन्दन ।
कार्त्तिके वाश्विने मासि चैत्रे मासि च भारत ॥
स्नानं दानं शतगुणं कार्तिके या तिथिभवेत् ।
क्षिप्रिमिष्ट्वा च हुत्वा च प्रतिपद्यपि भारत ॥
हिवपा सर्वधान्यानि प्राप्तुयादमितं धनम् ।

वाराहे।

कार्तिके सितपक्षादी तियी तु कुसुमां छुकै: ॥

^{1.} Divākara Kāla in his कालनिर्णयचन्द्रिका (MS No. 343 of 1891—95—B. O. R. Inatitute, Folios 56—59) describes the ceremonies and ritual about दीपोत्सव starting with आश्वन कृष्णद्वादशी and ending with यमद्वितीया. He quotes numerous texts on this topic such as "तिथितत्त्वे ज्योतिर्निबन्धे नारदोक्तः", "निर्णयामृते स्कादोक्तः", "हेमाद्री निर्णयामृते मविष्योक्तः", स्कान्दात्, दिवोदासः, चंद्रप्रकाशे, मविष्योक्तः, बाह्मोक्तः, संग्रह-पाद्मयोक्तः, विष्णोक्तः, वैद्यकं राजनिषंद्रकः, मदनरत्ने पाद्मोक्तः, संग्रहात्, गौतमस्मृतौ, मद्दोष्वीये, काशीखंडे, पाद्मोक्तः, व्यासस्मृतौ, यद्धमन्तः, लिंगे, हेमाद्रौ स्कांदोक्तः, दिवोदासीयोक्तः, दिवोदासीये गार्थः, कालाद्शै, ज्योतिःशास्त्रोक्तः, निर्णयसिधः (A. D. 1612). माधवीये, वृद्धवसिष्ठ, मविष्ये, मात्स्योक्तः, मैथिलीय—दानवल्याम्, दिवोदासम्बाशे स्कांदमविष्ययोक्तः, ब्रह्माण्डपुराणोक्तेः.

यात्राची 1 यत्र रात्री स्यारकायी चेष्टसुखाय सा । वासोभिरहतैः पूज्य गच्छेद्वै ब्रह्मणः पदम् ॥ 2

बह्मपुराणे ।

कार्त्तिके शुक्लपक्षे तु विधानं दितयं दि तत्। नारीनीराजनं प्रातः सायं मङ्गलमालिका ॥ अथ चेत् प्रतिपत् स्वल्पा नारीनीराजनं भवेत्। दितीयायां तदा कुर्यात् सायं मङ्गलमालिका ॥

भविष्यत्पुराणे ।

अम्येख यदि वा प्रातः प्रतिपद् घटिकाद्वयम् । तस्यां नीराजनं कार्यं सायं मङ्गलमालिका ॥

तथा च देवीपुराणे।

प्रातवां यदि लम्येत प्रतिपद् घटिका शुभा । द्वितीयायां तदा कुर्यात् सायं मङ्गलमालिका ॥ काश्विनाम्ते यदा दर्शे नारीनीराजनं भवेत् । नारीणां तत्र वैधव्यं देशे दुर्भिक्षमेव च । कार्तिके शुक्लपक्षादावमावास्या घटीद्वयम् । देशभङ्गभयात्रेव कुर्यात् मङ्गलमालिका ॥

बह्मपुराणे ।

कार्त्तिके शुक्लपक्षे तु प्रथमेऽ(ह)नि सत्यवान् । जितश्च शङ्करस्तत्र जयं छेमे च पार्वती ॥ ततोऽहं शङ्करो दुःखी गौरीनित्यसुखोषिता । तस्माद्यूतं प्रकर्तव्यं प्रभाते तत्र मानवैः ॥ तस्मिन्यूते जयो यस्य तस्य संवत्सरः शुभः । पराजयो विरुद्ध लामनाशकरो भवेत् ॥ श्रोतक्यं गीतवाद्यादि स्वानुलिङ्गैः स्वलक्कृतैः । विशेषतश्च भोक्तव्यं प्रशस्तैबान्धवैः सह ॥

^{1. &#}x27;' বারার্বা '' is possibly a misreading for বস্তার্বা found in the following lines quoted by Hemadri from the বাধার্থ্যাগ (description of বস্তার্থ) —

[&]quot; कार्त्तिके सितपक्षादी तिथी तु कुसुमांग्रकैः । यक्षाची यक्षरात्रिः स्यात् कार्या चेष्टसुखाय सा ॥ "

^{2.} This line "वासोभिः " अहाणः पदम्" is also found in the extract from भविष्यस्पुराण (कालनिर्णय खण्ड) quoted by Hemādri.

अन्योक्षां स्थाप

तस्यां निशायां कत्तंव्यं शय्यास्थानं सुशोभनस् ।
गन्धेः पुष्पेस्तथा वस्त्रीतिंव्यरत्नेरळ्क्कृतम् ॥
दीपमाळापरिक्षिप्तं तथा धूपेन धूपितम् ।
दियताभिश्च सिहतैर्नेया सा च भवेत्रिशा ।
नवैर्वस्त्रैश्च संपूज्या द्विन-सम्बन्धि-बान्धवाः ॥ 1

पद्मपुराणे ।

प्रतिपदि च ब्रह्माणं गुडिमिश्रैः प्रदीपकैः । बासोभिरहतैः पूज्य गन्छेद्वै ब्रह्मणः पदं ॥ गन्धैः पुष्पैयंवैवंश्वेस्तत्स्थानं भूषयेक्षरः । तस्यां प्रतिपदायां तु स गन्छेद्ब्रह्मणः पदम् ॥ महापुण्या तिथिरियं बिंहराज्यप्रवर्तिनी । ब्रह्मणो हि प्रिया निस्यं बालेयी परिकीर्तिता ॥

1. The extract (कार्तिके.....बान्धवाः) is identical with verses 9-15 of the description of सुलसुप्तिका (आदित्यपुराणोक्त) quoted by Hemādri in the जतलण्ड (Pages 848-349). Preceding the description of सुलसुप्तिका the description of कामधेन जत from विह्नपुराण is given (Pages 844-848) by Hemādri, in which I find the following verses:—

"पापिनः पितरो ये च छप्तपिण्डोदकिकयाः । चतुर्दश्याममावस्यां पिण्डदस्याप्नुवन्ति ते ॥ तत्र श्रीः पूजनीया तु मनुष्याणां प्रयन्ततः । बन्धुभिः सिहतैः पल्या नृत्यगीतप्रजागरैः ॥ यदि हुषं प्रयातीह तस्य संवत्तरं जयं । छूते तु क्रीडिते हानौ हानिः स्यादिजये श्रुवं ॥ सुखप्रीतिसुलाभः स्यादत्तरं मनुजस्य तु । गौर्या जिता पुरा शम्भुनंभो सूतिर्वसर्जितः ॥ तेनासौ शङ्करो दुःखी सर्वदोमा सुखान्विता । श्रिया सार्द्वं जगद्योनिः शेते विषणु सुखान्विता ॥ तस्या गत्री जनानां तु अतोऽर्थ सुखसुप्तिका ।"

It will be seen from this extract that the story of शंकरपावती यूत here mentioned as taken from विद्युराण is also found in the ब्रह्मपुराण and आदित्यपुराण extracts quoted by Hemadri.

ब्राह्मणान्यूजयेचीऽस्यां मानं च विशेषतः । स याति परमं स्थानं विष्णोरमिततेजसः ॥

वामनपुराणे । बार्छं प्रति त्रिविक्रम उवाच ।

वीरप्रतिपदा नाम तव भावी महोत्सवः ।

तत्र त्वां नरशार्दूछ ततो हृष्टा स्वल्रङ्कृताः ॥

पुष्पभूपप्रदानेन अर्चविष्यन्ति तस्वतः ।

तत्रोत्सवो मुख्यतमो भविष्यति दिवानिशम् ॥ "

इति पुण्यप्रतिपत् ॥

The contents of the above extracts will be clear from the following table:—

Source	Festival	Features	Time
पश्चपुराण :		स्नान, दिन्यनीराजन, गोमहिष्यादिसूषण, बाह्मणभोजन — Three old and important तिथिब are	police) upilit
	and pa	(2) नाधिन प्रतिपद् (3) नार्तिक प्रतिपद्	or the
भविष्यस्पुराण	कार्तिक प्रतिपत्	Definition of प्रतिपत् :— " "प्रतिपादिता यदा पूर्वे प्रतिपत्तेन उच्यते"— Three great तिथित:—	कार्तिक प्रतिपत्
		(1) कार्तिक प्रतिपत् (2) नाश्विन प्रतिपत् (3) चैत्र प्रतिपत्	in the
		— Features of कार्तिक प्रतिपत् are: — स्नान, दान, अग्निहवि:,-A man gets "सर्वधान्यानि" and "अमितं घनं"	12 (A - 12)
		by observing the above features.	
वाराहपुराण	कार्तिक प्रतिपत्	"कुसुमां गुकै: रात्री यात्राची (यक्षाची)- पूजा with new garments (अहतै: वासोभि:)	" कार्विके सितपक्षादें तियौ "

	=ार्वेड प्रतिपन	(1) नारीनीराजन in the morning	कार्तिक ग्रुक्ल प्रतिपत्
ब्रह्मपुराण	काविक आवन्य	and (2) मङ्गलमालिका in the	and द्वितीया
	THE REAL PROPERTY.	evening. If the प्रातिपत् is स्वल्पा	
	11 1131 1150	these features are shifted to	
	The state of the s	TO THE RESERVE OF THE PROPERTY OF THE PARTY	
	The second	हितीया.	Do
भविष्यत्पुराण	Do	नीराजन to be observed in the	DIDEY
	A COLUMN TO SERVICE SE	घटिकाइय of प्रतिपत् at sunrise and	
	THE PARTY OF	मङ्गलमालिका to be observed in	
	Higher 1700	the evening.	
20	Do	If प्रतिपत् is only for one घटिका	Do
देवीपुराण	Do a	in the morning, मङ्गलमालिका	THE RESERVE TO SERVE
	ballers pater	should be observed on the	
	W. Bish	evening of द्वितीया If नीराजन	ow mady client
	armat sdf	is observed in the दश i. e.	
	cade limey	अमावास्या at the close of आधिन,	and the same of the same
	dr more	it results in widowhood to lad-	AND ADDRESS
	MINOROGE TO STATE	ies and famine in the country-	The same of the same of
	The second level	At the commencement of कार्तिक	STREET, STREET
templics as	distinguished in	शुक्लपक्ष there is अमावास्या for 2	by the beat on yel
·nime nath	William College	शुक्लपक्ष thore मह्गल- घटिकाड (घटीह्रयस्), Hence मङ्गल-	on the state of the
	SCHOOL PROVI	मालिका should not be observed	Dergmo die ille al
	YAL OUR KIE	during this time (of अमावास्या)	the distinct the
	A STATE OF	as such observance is ruinous	A PARTIE NAME
STORY OF	Semilar III	to the country.	
		चूत of शहर and पार्वती (in which	Do
ब्रह्मपुराण	Do	स्त of शहर बाव पायवा (In miss)	
	The same of the same of	शक्स was conquered by पावंती	
	Name of the last	took place on this day—all	esser activities
	THE PERSON NAMED IN	men should play ag on this	Division value
	SERVICE TIME	day गीतवाद्य etc बन्धुभोजन-	Both H. It show
	DICE FOOST	Passing the night in the com	A STATE BUREAU
Landing Man	- pdr.lows	pany of दिवताs-दीपमाला- Offer	OMBIN SINGLY
	Consuled like	ing new garments to Brahmins	Marine County (2)
		relatives etc.	of special and
	De la constitución de la constit	Offering of गुड, दीप, and nev	Do
पद्मपुराण	Do	earments (जहते: वासाम:)
bina men in	The Manual Name	to God Brahmā and worshi	

print myg ski	Learn and a second	pping him with गन्ध, पुष्प etc.— This प्रतिपदा is loved by Brahmā. It is बिल्याज्यप्रवर्तिनी and is hence called "बालेगी."— One worshipping Brahmins on	
वासनपुराण	Do	this day attains विष्णुस्थान. The great festival of बीरप्रतिपदा with पुष्प, धूप, दान etc. takes place (on this प्रतिपद्) day and night.	Do

The features of the Divali festival as set forth in the Puranic extracts quoted by Hemādri (c. A. D. 1260) amply show that this national festival possessed long prior to A. D. 1200 many of its varied cultural details which we now notice in the celebration of the festival year after year. As the Puranas are a mixture of texts of varied chronology it is convenient to make use of them through quotations from them taken in datable sources, which are helpful to the historical reconstruction of ancient Indian life and culture.

The evidence about the history of the Divali festival so far collected by me tends to suggest that the प्रशासि mentioned by the Kāmasūtra contains the oldest nucleus of our modern Divali festival. Unfortunately we have no details about its celebration about 2000 years ago. My study has so far disclosed the following facts about it:—

(1) According to Yasodhara the यक्षरात्रि is attended with वक्षड and दावकीदा,

(2) According to the वाराहपुराण extract quoted by Hemadri the यक्षरात्रि was celebrated on कार्तिक ग्रुक्ट प्रतिपत् with worship of यक्षड (यक्षाचा).

In the present ceremonial of the Divali festival I have not noticed any worship of the THE referred to in the THE GIVE extract quoted by Hemādri. It appears, however, that as late as about 1800 A.D. the worship of THE, the king of the THE, was known as a feature of the Divali ritual to some celebrated writers on Dharmasastra as will be seen from the evidence traced by me:—

(1) Kṛṣṇabhaṭṭa Ārḍe¹ (c. 1800 A. D.) in his commentary on the Nirṇayasindhu (A. D. 1612) of Kamalakarabhaṭṭa prescribes 委司代明 after

Vide my paper on "Some Authors of the Arde Family" (Between A. D. 1600 and 1825) in the Journal of the Bombay University, Vol. XII, Pt. II, September 1943, pp. 63-69.

छड्मीपूजा on the evening of सुखरात्रि (p. 714 of the Chowkhamba Edition of the Nirnayasindhu, Benares, 1930):—

Text of Nirnayasindhu:—" अत्र विशेषो हेमाद्री भविष्ये— " दिवा तत्र न भोकत्यमृते बाळातुराजनात् । प्रदोषसमये लक्ष्मी पूजयित्वा ततः क्रमात् ॥"

Kṛṣṇabhaṭṭa comments :-

"प्रदोषित । प्रदोषे ' छझ्मैय नमः ' इति नाममन्त्रेण छक्मीं संपूज्य दीपदानं कार्यमि-स्ययं: । ततः कमादिति पदात् छक्ष्मीपूजानन्तरं प्रार्थना कार्याः—

"नमस्ते सर्व देवानां वरदाऽसि हरिप्रिया । या गतिस्त्वत्प्रसङ्गानां सा मे भूयास्वदर्चनात्" इति ।

कुवेरपूजापि कार्या-

" सुखराज्याः प्रदोषे तु कुवेरं पूजयन्ति वै ।" इति

वाक्यात् । तत्र मन्त्रः-

" धनदाय नमस्तुम्यं निधिपग्राधिपाय च । भवन्तु स्वत्मसादान्मे धनधान्यार्थसम्पदः ॥ " इति । केचित्तु धनदपुतां त्रयोदशी प्रदोषे कुर्वन्ति, तक्षिमूलस् । "

It will be seen from the above extract that Kṛṣṇabhaṭṭa adds कुवरपूजा to the ritual about Divāli mentioned in the Nirnayasindhu, which does not refer to कुवरपूजा in its account of the Divāli. Unfortunately Kṛṣṇabhaṭṭa does not mention the names of texts from which he quotes in support of his view that कुवरपूजा should be performed after क्वमीपूजा on the सुवराजिश्रदोष.

(2) Kāśīnātha Upādhyāya (alias Bābā Pādhye—A. D. 1790-1806) also adds कुवरपूजा to लक्ष्मीपूजा on the ग्रुष्ठ प्रतिपत् of कार्तिक as follows (Vide folio 36 of Dharmasindhu printed in the Jaganmitra Press, Ratnagiri, by Janardan Hari Athlye):—

" अथ कार्तिकशुक्लप्रतिपरकृत्यं अत्र लक्ष्मीपृजा कुबेरपृजा चोक्ता etc.)

Kāśīnātha does not quote any texts in support of the कुवरपूजा prescribed by

It is clear from the reference to क्यापूजा on the Divall days made by two authors, who lived about A. D. 1800, that according to them the

1. Of. the following statement about the association of कुबेर with त्रयोदशी:—
" त्रयोदशीं धनाध्यक्षः कुबेरः पिवते कलाम्"

Vide fol. 47 of MS No 326 of 1880-81 (B. O. R. Institute) of कालनिर्णय of माधवाचार्य (c. 1850 A. D.).

क्यरपुत्रा was a necessary ritual of the Divall festival as important as the लक्ष्मीपूजा. I am of opinion that this क्षेरपूजा is identical with यक्षाचा on कार्तिक शुक्छ प्रतिपत् mentioned in the वाराहपुराण extract quoted by Hemādri (c. A. D. 1260). We must now try to hunt up more textual evidence in support of the क्वेरपुत्रा or धनदपुत्रा on the Divall days, which is possibly a relic of the यक्षरात्रि, The present Divali ritual is preponderently Vaisnavite. With the growth of Vaisnavism लक्ष्मीपूजा (or worship of लक्ष्मी or goddess of wealth on the Divali days) threw into back-ground the क्षेत्रपूजा (or यक्षराटपूजा or यक्षाची) or worship of Kubera, the god of riches, associated with यक्षरात्रि, If this hypothesis about the genesis and development of the Divali festival is correct we can easily explain how the term यक्षरात्रि fell into disuse and was replaced by the term दीपालिका with its elaborate Vaisnavite observances such as लक्ष्मीपूजा, बलिपूजा, गोकीडन, गोवर्धनपूजा etc. In this connection I may point out that Gopālabhatta (A. D. 1530), one of the six Vrndāvana Gosvāmins codified the ritual and practices of Caitanyaism in his elaborate and erudite Haribhaktivilāsa (20 chapters). In this exhaustive metrical compendium of Vaispava Acara and Anusthana, of which a brief survey has been given by S. K. De in his Vaisnava Faith and Movement in Bengal (Calcutta, 1942), chapter XVI (pp. 381-383) is entirely devoted to the vows and observances to be observed by a Vaisnava in the month or Karttika. "One of the special observances is the placing of lights (दीपदान) inside and outside the temple, in its pinnacle (शिखरदीप), the lights being fed with ghee, sesamum oil, or camphor. Light may also be placed on streets, cross-ways, in water, in the houses of Brahmans, under trees, in cow-pens, and on difficult roads through forest and wilderness. Of great efficacy is the posting of lamp on an elevated pole in the air (आकाश्चीप 1), and the nocturnal illumination with rows of light on the dark new-moon evening after due worship of छड्मी. The vows of Karttika are to be taken from the eleventh fast-day of the bright fort-night of Asvina. Certain articles of food are to be avoided in this month, of which a list

^{1.} See the Regulations for the Illuminations in the Ain-i Akbari (A. D. 1590) p . 42-48 of Vol. 1 of Gladwin's Translation, Calcutta, 1891— "In order to render the royal Camp conspicuous to those who come from far, His Majesty has caused to be erected in the front of the Dowlet Khanah, a pole up wards of forty yards high, which is supported by Sixteen ropes and from the top of the pole is suspended a large lantern which they call Akassaceah" (আন্তাম্বিয়া or আন্তাম্বিয়া)— Verily there was Dieāli in Akbar's palace or camp every day! Was the আন্তাম্বিয়া adopted by Akbar from India or was it a Moghul contrivance? — The Ain-i-Akbari refers to the use of "Camphor Candles three yards long and some larger." Every thing was grand with the Moghuls.

is given (including honey, fish and flesh); one should not use oil or unguent, sleep on others' bed, take others' food, or associate with others' women. The special worship of Radha and Damodars in the month consists of the usual ceremonies, but a Brahman and his wife should be made to represent the deities, and worshipped with garment, ornament and feeding. On this occasion the eight stanzas on Damodara (दानोदराष्ट्रक) from the Padmapurana are to be recited. Other pious rites and acts are ; bath in the spring or well called Radha-kunda on the eighth day of the dark fort-night (Krsnāstami); offer of light to Yama placed outside one's house on the thirteenth night (कृष्णत्रयोदशी); worship of Dharmaraja or Yama the next day (कृष्णचतुर्देशी); nocturnal illumination (दीपालि) mentioned above on the new moon night (अमावास्या) and fasting; worship of the Govardhana hill1, represented by an artificial hillock of cow-dung, on the first-day of the bright fort-night (शुक्रप्रतिपद), accompanied by worship of cows (गोपूजा), and by their sport (गोक्रीडा); worship of the mythical King Bali and his wife Vindhyavali, represented in a picture, the same evening; worship of Yama, bath in the Yamuna and taking of meals, served by one's affectionate sister the next day (यमद्वितीया or आतृद्वितीया), a well-known observance in Bengal; worship of cows on the eighth day of the bright fort-night called गोपाष्टमी, and so forth, "

The foregoing injunctions of Gopālabhaṭṭa about the observance of Divālī are helpful to us for a regional study of the history of this festival. They show in detail how this Divālī festival was observed by the Vaiṣṇavas of Bengal about A. D. 1500, if not earlier.

I now close this paper with the following table showing the chronology of the data about the history of the Divālī gathered in this paper in continuation of the data recorded by me in my two papers on the subject, one in the Annals and the other in the Journal of Jha Institute:—

Chronology A. D.	Source	Particulars
c. 1260		

^{1.} Vide pp. 472—478 of Vaisnava Faith etc. — The मुक्ताचरित्र of Raghunātha-dāsa tells a fanciful tale of Satyabhāmā and Kṛṣṇa. Satyabhāmā enquires if pearls grow on trees and Kṛṣṇa gives an account of his having grown pearl-creepers which bore pearl fruits at Vṛṇdāvana during the दीपालिका festival on the गीत्रधन hill.

STOREST OF STREET	कालनिर्णयसण्ड) लक्ष्मीप्रवोध =दीपालिका	छक्ष्मीप्जन), वाराहपुराण (यक्षरात्रि on कार्तिक धुक्छ प्रतिपत्), ज्योति: शास्त्र (छक्ष्मीनिद्राविमोचन on अमावास्यां तुछादिरये), भविष्यत् पुराण (स्नानदान, etc. on कार्तिक प्रतिपत्), पद्मपुराण (पुण्या प्रतिपत् of कार्तिक प्रतिपत् अमेविष्यत्पुराण (कार्तिक प्रतिपत्), वाराह (कार्तिक प्रतिपत् with यक्षाचां), ब्रह्मपुराण (का. प्रतिपत् with नीराजन and मङ्गळमाळिका), भविष्यत्पुराण (का. प्रतिपत् with नीराजन and मङ्गळमाळिका), व्वीपुराण (का. प्रतिपत् with नीराजन and मङ्गळमाळिका), ब्रह्मपुराण (कार्तिक प्रतिपत् with चृत etc.—story of शंकर -पार्वतो—द्युत), पद्मपुराण (बिरप्रतिपदा), वामनपुराण (वीरप्रतिपदा),
7	आदित्यभट्ट कवि-	लक्ष्मीपूजन on आश्विन अमावास्या with अम्यंगस्तान,
Between 1200 and 1325	वस्थ in his काल-	
1200 and 10	निर्णय	पुराण etc.)
The state of	कालनिर्णय of	" त्रयोदशीं धनाध्यक्षः कुबेरः पिबते कलाम् "
c. 1350	माधवाचायं	THE RESERVE THE PROPERTY OF THE PARTY OF THE
1652-53	कालनिर्णय सिद्धान्त	लक्ष्मीपूजन on अमावास्या called सुखरात्रिका
2002 00	with टीका	2.5.00 APPER BUILD PROPERTY NO.
Street Street	by रघुराम कालनिर्णयदीपिका-	धनद or श्रीद (i. e. यक्षराज or क्षेर) associated
c. 1409	विवरण by नृसिंह	with प्रतिपत्
c. 1560	कंदपंच्डामणि of	यक्षरात्रि (of कामसूत्र)=सुखरात्रि
	बीरमद (बबेल king of Rewa)	Design to the second se
SULANDON	भहोजि दीक्षित in	" प्रतिपद्धनदस्योका"
1560-1620	his कालनिर्णय-	THE RESIDENCE OF THE PROPERTY OF THE PARTY O
And the second	संक्षेप	stand with sades of the standard of the
1612	कमलाकरभट्ट in } his निर्णयसिन्धु	Quotes numerous texts about दीपावली and allied व्रवड
The state of the s	कालनिर्णयचन्द्रिका)	Quotes numerous texts about दीपोत्सव star-
boitta and bie	of दिवाकर काछ)	ting on आश्वनकृष्णद्वादशी and ending on यमदितीया
c. 1800	कृष्णभट्ट बारडे in	Prescribes कुवेरपूजा or धनदपूजा after छक्ष्मीपूजन
0. 1000	his commentary on निर्णयसिन्ध	on जाधिन जमावास्या and quotes some early text in support of it.
PART CHEST SE	A CHARLES AND A SECOND	Merely prescribes कुवेरपूजा after सहमीपूजा on
1760-1806	his धर्मसम्ब	कार्तिक ग्रुक्ड प्रतिपत् but does not quote autho-
CONTRACTOR OF THE PARTY OF	गाव बभासन्त्र	rity for it.

Since this paper was drafted I have recieved some interesting information about the *Divāli* from friends who had read my paper on this subject published in the *Annals* of the B. O. R. Institute. I note this information below with my best thanks to these friends:—

(1) Shri S. R. Tikekar, Author and Journalist, Bombay, writes on 6-8-1946 as follows:-

Yakshini is the deity with a big temple even to-day in Almora.

Yaksha is said to be the name of a tribe of people from whom, it is said, Kashmir gets its name.

Ashoka seems to have employed Yakshas for building his Chaityas."

(2) Rao Bahadur K. V. Rangaswami Aiyangar writes from Madras on 9-8-1946 as follows:-

"I received the reprint of your fine paper on Dipāvali five days ago, and now write to thank you warmly for it. Till I read it I had no idea of the Jain version of the festival.

The Vrataratnākara, printed by the Laksmī Venkateśvara Press at Kalyan in Śaka 1848 (1926), fol. 278-279 and the Nirnaya-Sindhu, N. S. Press, 1926, pp. 146-47 deal with Dipāvali under the head of Narakacaturdaśi.

In South India, particularly in the district of Tanjore, in the heart of the Tamil Country the Dipāvali customs are as follows:—

Dipāvali comes by solar reckoning in the month of Tulām i.e. when the Sun is in Tulārāśi i.e. approximately between the middle of October and the middle of November on the Caturdaśi of Kṛṣṇapakṣa in the early hour of the morning before day-break. During the current year Dipāvali comes on the "night" (taking the Indian day as running from sunrise to sunrise) of Tuesday, ££nd October 1946. That day Trayodaśi ends at 52. 75 nādigas after sunrise, i. e. about 3 A. M. of Wednesday, the £ŝrd October under European reckoning. The asterism Uttarāṣādhā ends a little before midnight and at the time of Dipāvalī the asterism is Hasta. The bath (abhyañjana) has to be taken before day-break, in the last yāma or better in the last muhūrta of the night. Wednesday, 23rd October is noted in the almanac as the day for the Dīpāvalī festivities, and for Yama-tarpaṇam Thursday, 25th is New Moon, amāvāsyā, the day for Śrāddha. No abhyañjana, is permitted on a Śrāddha-dina, and ordinarily no food or drink, in

the Brāhma-muhūrta prior to amāvāsyā. But sometimes Naraka-Caturdašī ends at day-break and amāvāsyā begins immediately or soon after. The partaking of sweets, after abhyañjana is permissible before day-break as Dipāvalī Snānam, though ordinarily both will be barred on other occasions. The next Dipāvalī illustrates the different principles for observing the ritual which the āgamas, purāṇas and later smṛtis have discussed and which are summarised by Viśvanātha and Kamalākara. The treatment in Kamalākara's work is more full than in Viśvanātha's work, which is also later in date. Both were written at Kāśī.

According to Kamalākara the festival period is four days the trayodasi (of the dark fortnight), when a yama-dipa-dāna has to be made (p. 146), the naraka-caturdasī, the next day, when at night, before dawn the auspicious bath (mangala-snānam with oil, i. e. abhyanjanam) has to be done before day-break (p. 148). The bath must be done, when it is caturdasī, but the Lakṣmī-pūjā and the nirānjanam (waving of lamps) must be done in pradoṣasamaya, preferably at midnight on trayodasī. The conjunction of the asterism svātī with caturdasī is deemed the best time, but as this may not always occur, the asterism is less important than the tithi. On the New Moon Day the ordinary Śrāddha of the month should be done, but an exception is made in allowing that Śrāddha day certain articles of food which are interdicted in Śrāddhas, but are indicated for auspicious occasions. Thus in South India on this day pappaḍams can be fried and served even to those who have to do the Śrāddhas, while it cannot be done on other new moon days.

At midnight of New Moon, the expulsion of A-Lakşmi is done ceremoniously by the women of the city, with the noise made by Sūrpa-dindima, i. e. winnowing fans used as drums. On the Pratipat or the first day of the bright fortnight following Dipāvali, a pūjā must be done to Bali, the emperor who was put down by Viṣṇu, and another to the mountain Govardhana, pictures of both being drawn on the floor and worshipped with flowers, fruit, invocation and nirañjanam.

With this ends the three days Dipāvall festivity. Games with cows and gambling are also prescribed on the Pratipat. In other works gambling is advised on Dipāvali night, as it is a time, when the goddess of wealth (Lakṣmī) is propitious.

The Dipāvali morning (before dawn) should be celebrated with fire-works, as they are intended to show the way to the manes (ulkahastā narāḥ Kuryuḥ pitrṇām mārga-darśanam—p. 148).

In South India on Dipāvali morning, the wife anoints the husband, and this is done specially by the newly wedded. For this purpose the son-in-law (and his parents) must come to the bride's house for the first Dipavali after marriage, when they are feasted. Rich cloths and ornaments are presented by the parents of the bride to the son-in-law, while the parents of the son-in-law bring or send through him a rich sarree and a jewel to the bride. In Mysore the Pratipad day is specially indicated for honouring the son-in-law and is more important for the purpose than Dipāvali.

Even a cruel mother-in-law must make her daughter-in-law take an oil bath on Dipāvali day. A person who avoids baths must bathe at least once a year on Dipāvalī. Such ideas are humorously woven into vernacular proverbs in Tamil, Telugu etc.

After day-break following Dipāvali baths, every one goes round to the houses of his friends to ask if they have had "Gangāsnānam." The visitor is given tāmbūla, fruits and sweets. The abhyanjana is a combination of both good luck and Ganga-snana ("taile Laksmir jale Ganga dipāvalyāścaturdaśim", p. 146, and the comment is added "prāya" iti sesah).

The salient features of the accounts in the two nibandhas are:-

- (1) mangala-snana with oil of everyone in the house before day-break.
- (2) Fire-works.
- (3) Insignia of Lakṣmi to be displayed e.g. betel-chewing before the bath by the married ladies and virgins.
 - (4) Distribution and consumption of sweets.
- (5) A propitiation of Yama, the god of Death, the day prior to Dipāvali the expulsion of A-Laksmi from the house by the ladies after mid-night on New moon day and Margapali (govardhana-paja) on the day after the New moon.

In South India all piljas are now omitted as well as yamatarpanam. Lakşmi-pūjā is not done but auspicious songs are sung by ladies, when the married women are made, after chewing betel, to sit over a plank and get annointed before a bath, in which the words "Laksmi-Kalyanam" occur. The Crackers, which are used in China and Indo-China to scare away demons and e. g. Rahû during an eclipse, are now used as tokens of rejoicing, while the Smrti seems to take them (e. g. rockets) as marga-darsi to the manes. The ceremony is in honour of Bali.

Honour is shown to the Daitya at the instance of Visnu. In South India the tradition is that the Asura Naraka who had oppressed the good,

was destroyed by Sri Kṛṣṇa, and the god ordered the day of the removal of the Asura to be celebrated in honour of the demon (!) not in memory of the relief given to people by the destruction of the demon. The Tamil Lexicon published by the Madras University Vol. IV, p. 1942, states that Dipavali or Naraka-Caturdaśi was a festival started by Srī Kṛṣṇa at the request of the demon Naraka, when he was destroyed. The story of the destruction of the demon, at the request of Indra, for the recovery of the ear-rings, of which the demon had dispossessed Diti is told in the Mahabhārata (Sabhā Parvan, Chap. 55). There is no mention in the Epic of any request of the kind made to SriKrsna and granted by him. The story is also told by the Bhagavata, X, 59, and by the Harivamsa, 2, 63-64. In none of these is there any mention of this story of the celebration being ordered by Śrī Kṛṣṇa in response to a request for commemoration made by the demon he had slain. In the legend of the slaying of Gayasura the demon of Gaya, there is such a legend of commemoration of the asura by his body becoming the homa-pitha. I suspect that some such transformation has been made in this legend. But why should the celebration take place on Aświna-Krana-Caturdaśt? The "dark fourteenth" (Krana-Caturdaśt) is first changed to Kṛṣṇa Caturdaśt, a day commemorating an exploit of the Hero-god. Like the Christian All Souls' day Naraka-Caturda'si was apparently a night in which all spirits in Hell (Naraka) were freed by certain pûjûs done by their descendants on earth. This is shown by Naraka -Caturdast coming midway between a trayodast in which the god of Death and controller of Hell is propitiated (yama-tarpanam) and the New Moon in which tarpana is done for the good of the manes (pitr-tarpanam). When ancestral spirits are freed and pleased they grant boons and welfare and the central day is devoted to the celebration of the consequential prosperity (Laksmi-puja). The name Naraka is confused with that of the demon destroyed by Krsna and the legend that is current in south India, without any epic or Puranic support is the result. It is an illustration of the way in which legends grow.

In recounting the exploits of the demon Naraka, Harivamsa II, 63,7. occurs the cryptic verse:—

" Tvaştrur-duhitaram Bhaumah Kaserum-agamat-tadā=Gajarupeṇa jagrāka rucirāngim Caturdasim."

"The expression Caturdasim" as applied to Kaseru is interpreted by Nilakantha as fourteen years old ("Caturdasim" Sarvadā Caturthyā dasayā yuktam, sa ca garbha Kaumārapauganda-Sandhiyauvanam itidasa-bhya urdhvam pancadasabhyo arvāk Caturdasavārsikim ityarthah).

I wonder if the Naraka-Caturdast arose from this phrase.

The verse embodies, I think, a confused memory of a mixture of some old Vedic legends. Trastr is the son of Viśvakarma, identified sometimes with him and with the sun. Trastr's daughter Kaseru is after her abduction and appropriation as his queen by the Asura Naraka, properly Naraka-Caturdaśi. The festival occurs in the month of Aśvina and the Aśvins are the sons of a daughter of Trastr. Their mother's name is given usually as Śaranyu, who was married to Vivasvān. But he had many other daughters also. One of these may be regarded as Kaseru identified by confusion with the number of the Aśvins, and then Aśvina-Caturdaśi and Naraka-Caturdaśi will be equated!

The Jain legend making the festival commemorate the parinirvana of Mahāvīra has internal inconsistancies. What is the connection of prosperity in the world (Lakṣmī Pujā with the death of a sage who renounced riches? Why should death be celebrated with lamps, and nīrānjana to the origin of the pūjā to the goddess of prosperity, who being invoked to grant a lakh replies (in the mouth of the presiding purchita) that a lakh and a quarter profit (savāi lakṣa lābha) is granted? I fear that most Jain legends are deliberate distortions of older Hindu legends.

In the paper there seems to be some confusion between Dipāvali and Kṛttikādipa on the bright fifteenth (Paurnimā) of the Solar month of Kṛttikā, which is celebrated with the lighting of lamps on a large scale in every house, with public illuminations and a bon-fire in the temples, before the God, symbolizing the destruction of some demon of darkness. In Aruṇācala (Tiruvanamali in South India) on the hill, above the temple of Aruṇagirinātha (Śiva) a huge beacon is lit on the bright fourteenth (Caturdaśi) fed by tons of ghee, and it is visible far out on the sea. The accounts in the nibandhas of the two Caturdaśis are given continuously as the treatment is by tithi or māsa indifferently.

In the northern Tamil areas, the Kartigai festival (as the latter is called) is more important than the Dipāvali. In it the new bride is invited to her husband's home, for the first time, accompanied by presents, and she has to light the lamp of the house and start its illumination. Silver standard lamps are presented for this purpose by the parents of the bride. There is, however, no bath and no merit attaching to it and no Lakşmi -pūjā, though worshippers of Siva are making it a Saiva version of Dīpāvali and celebrate it as a festival in honour of Gauri, the mother of Kārtikeya.

In Tanjore District and the Districts south of it the Kārtigai festival is less important than the Dipāvali. A feature of the Kārtigai festival is the making and consumption of the balls of fried rice mixed with molasses. Large balls are sent with the new bride to her future home on the day.

Throughout the month of Kartika lamps are placed in front of houses, in niches provided for them on either side of the doorpost every night. I hope this somewhat desultory account will be of some little interest to you. It reflects the interest your paper has had for me."

In recording above the learned note of Rao Bahadur Rangaswami Aiyangar I have to express my deep gratitude to him for the painstaking manner in which he had expressed his scholarly reaction to my paper on the history of our national Divali festival. The mixture of several traditions and legends which have sweetened the celebration of this festival needs to be analysed carefully with a view to studying the genesis and development of every one of its numerous features which we see today. For a further study of this festival and in particular for a study of its regional variations I earnestly invite the cooperation of scholars and laymen in different provinces of India and greater India. Rao Bahadur Aiyangar has given us a fair idea of this festival as it is celebrated in South India, I shall feel thankful if other scholars publish their views with documentary evidence not only about the history of the different features of the Divali but also put on record description of all beliefs and ritual current in different parts of India with regard to this festival. If any notes on this subject are sent to me I shall incorporate them in my further studies with acknowledgement. In all studies pertaining to the history of Indian culture the correlation of historical evidence with the present-day beliefs and practices is absolutely essential but the success of this correlation is entirely dependent upon the willing cooperation of critical scholars, who alone can understand any problem in its historical and regional perspectives and bring forth pertinent facts, which are likely to throw some new light on the age-old problems of Indian cultural history.

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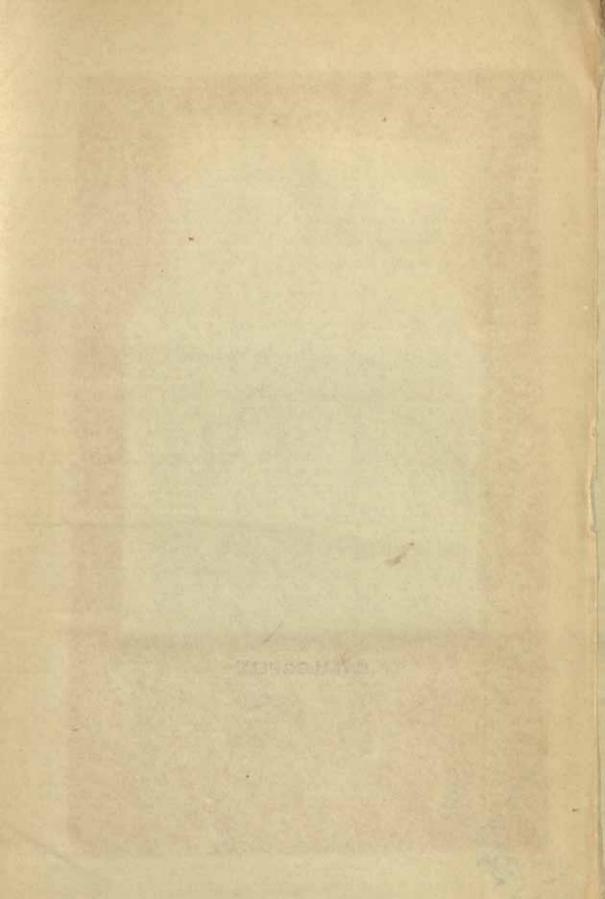
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