JOURNAL

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OF THE

ROYAL ASIATIC SOCIETY

(New Series)

EDITED BY

Dr. V. S. SUKTHANKAR, M.A., Ph.D. (Berlin), A. A. A. FYZEE, M.A. (Cantab.), Bar-at-Law, Prop. N. K. BHAGWAT, M.A.

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Fig. 1.—Portion of the opening leaf of the Bankipur copy. Slightly reduced.

بدى نايدكه درب عماريدان ق شارى بند حبادك درام خسن وى ق خبر مكرحسن نوسنجيد عبران نظر والمنة سه على الانهام والد المختام والعنام والد المبيرة والمتحلم منام شد تويد اب بياون و ترشيخ اي رياضي من متحرع حام المخ كاى عبد الرحمن بن احد المحابى و نف ه الله كلهما إ تا محابى و نف ه الله كلهما إ تا محابى و نف ه الله كلهما إ تا محابى و فل المناد من في من المد و فل المناد من في مي الدارية و فل المناد و المعرب و فل المناد و المعرب و الم

Fig. 2.—Colophon on p. 104 of the Bombay copy. Slightly less than actual size (83:90).

ناه ، ورزخ تها جن جن مها دوات عبد بيده ، مهاى بد ي ، بادب بو فوركا رسالية ، كزراخ اين خبسته دفر ، وذناظم قنم ، باخد د رفى دجهل فكر ، منوبي بلوح اعتبار ف ، درسلا ب بد جا مادكن بحام ، تان جام معام ست وها ، دماد في فرخ من تسويد سنى النقش المنتخب و فسوص المحكم والمنت فيه مظاه الامار وصفات المقدم والمنت فيه مظاه الامار وصفات المقدم المعرف الهدى انتقاق خاطري كا انفيل با بامان الله و مدات في شهرال فال ومدات في شهرال فال ومداس من سنة في المناه الله و المعرف الله في الله

Fig. 3.—Colophon on p. 1102 of the Bombay copy. Slightly less than actual size (73 ± 80).

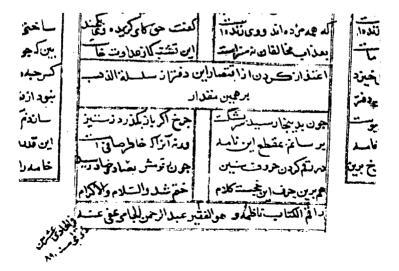


Fig. 4. Petersburg copy. Portion of Plate I in V. Rosen's Catalogue. Reduced (65 : 83).

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GENUINENESS OF JAMI'S AUTOGRAPHS

By W. Ivanow

I

For a long time there was known only one autograph copy of several poetical works by the great Persian poet, Nūru'd-dīn 'Abdu'r-Raḥmān b. Aḥmad Kharjirdī Jāmī (born the 23rd Sha'bān 817 A. H. = the 7th Nov. 1414; died the 18th Muḥarram 898 A. H. = the 9th Nov. 1492). It belonged to the library of the special School of Oriental languages attached to the Foreign Office of Russia, at St. Petersburg. ¹ Later on another, supposed to be an autograph copy, came to light in the Bankipur Public Library, Patna. And just recently another one was acquired in Bombay by the well-known businessman and promoter of Islamic studies, Mr. A. M. Mecklai, who kindly lent the volume to the author of this note for examination. ²

The St. Petersburg copy is a large volume of 714 pages (33 by 24 cm., 31 lines to a page). It contains only the poetical works of Jami, i.e. his mathnawis, and his diwans. The copy was fully

- Now, as I hear, the collection is deposited in the Asiatic Museum of the Russian Academy of Sciences.
- ² The late Prof. E. G. Browne in the third vol. of his Literary History of Persia (Cambridge, 1920, p. 543) refers to a Constantinople printed edition of the first Dīwān (1284/1868) which is said to be based on an autograph copy. Its whereabouts, however, remained unknown to him.

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described by the late Prof. Baron Victor Rosen, who devoted to it 45 pages in his Catalogue, "Collections scientifiques de l'Institut des langues orientales du Ministère des Affaires Étrangères. Part III. Manuscrits Persans" (St. Petersburg. 1886, pp. 215-259). He gives also, on two separate plates, facsimile reproductions of specimens of the handwriting.\(^1\) The latter, except only for three pages, is uniform in the volume. On p. 96, at the end of the second daftar of the poem Silsilatu'dh-dhahab there is a line (see fig. 4) in which Jami calls himself "rāqimu'l-kitāb nāzimu-hu"; this surely cannot mean anything else but that the copy was transcribed by himself.

The second known copy, that of Bankipur, is much smaller. It is a volume of 492 pages, roughly of royal octavo size (25 by 17 cm.), 25 lines to a page. It contains only an early version of his $D\bar{v}w\bar{a}n$, and the first daftar of the Silsilatu'dh-dhahab. The fact that the volume is Jami's autograph is established in the "Catalogue of the Arabic and Persian MSS in the Oriental Public Library at Bankipore" (Calcutta, 1910, pp. 67-71) from the appearance, on the first leaf of the MS, of a note giving the date of the birth of Jami's son, Diyā'u'd-dīn Yūsuf, on the night of the 9th Shawwāl 882 A. H. (Tuesday the 14th January, 1478). At its end Jami calls himself "wa'l-kātib abū-hu al-faqīr.....al-Jāmī". The cataloguer tells us that the handwriting in the note and in the bulk of the book is identical (cf. fig. 1).

The copy recently acquired in Bombay comes from Afghanistan. It bears no seals of its former owners, except for that of one Sayyid Muḥammad Amīn, in 1286/1869, whose note and seals appear on p. 585. Other seals are all obliterated. It is a huge volume of 1144 folio pages, 32 by 22 cm., 27 lines to a page, the poetry being written in four columns. It is a kind of a "de luxe" copy, with blue and gold jadwal lines accurately drawn, and with 28 excellent vignettes (sar-lawh), some of which are still in a good state of preservation. All headings are apparently written by a different hand; if there are several of them on a page, they are alternately written in gold, blue, red, and dark red-brown inks. In fact, it is a

¹ The lower portion of the first plate is reproduced in E. G. Browne's Lit. Hist. of Persia, vol. III, facing page 508. The size is slightly reduced, and therefore the letters appear smaller.

typical specimen of a good MS copy transcribed by a professional copyist in the style of the beginning of the X/XVIth c.

The handwriting seems to be one and the same all through the copy, except for pages 120-122, and 1104-1144, which are by a different scribe, possessing a more elegant hand, resembling that of the headings all through the copy. It may be noted, however, that the paper and the handwriting indicate slight differences. The paper on which the prose works are copied is slightly different from the paper of the poetical portions. It seems as if originally the copy formed two or more separate volumes which later on were combined in binding into one. Slight difference in handwriting of one and the same copyist is quite normal in all MSS. In prose works the handwriting may remain natural, while in poetry the scribe has continually to modify it, adapting it to the length of lines which is uniform for the whole copy, regardless of the fact that some verses are longer, and others shorter.

The volume contains 26 works by Jami, of which the last three are incomplete:

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1. (p. 1) Risāla dar 'arūd.
```

- 2. (p. 13) Risāla'i qāfiya.
- 3. (p. 17) Risāla'i mūsīqī.
- 4. (p. 35) Risāla'i munsha'āt.
- 5. (p. 69) Risāla'i kabīr dar mu'ammā.
- 6. (p. 105) Risāla'i şaghīr dar mu'ammā.
- 7. (p. 121) Risāla'i manzūma dar mu'ammā.
- 8. (p. 125) Silsilatu'dh-dhahab. Daftar I.
 - (p. 201) ,, ,, II.
 - (p. 233) , , III.
- 9. (p. 257) $D\bar{\imath}w\bar{a}ni\ Awwal$. Qasa'id.
 - (p. 293) ,, Other poems.
- 10. (p. 455) *Dīwāni Thānī*.
- 11. (p. 543) Dīwāni Thālith.
- 12. (p. 587) Sharhi Lama'āt.
- 13. (p. 663) Sharhi Qaşida'i Khamriyya.
- 14. (p. 695) Sharhi Rubā'iyyāt.

- 15. (p. 721) Lawā'ih.
- 16. (p. 737) Chihil ḥadīth.
- 17. (p. 741) Sharhi baytayni Mathnawī-yi Mawlawī.
- 18. (p. 745) Sharhi bayti Amīri Khusraw.
- 19. (p. 747) Risāla dar sukhanāni Khwāja Pārsā (a fairly rare work of Jami).
- 20. (p. 753) Āyīna'i Sikandarī.
- 21. (p. 801) Salāmān wa Absāl.
- 22. (p. 823) Tuḥ fatu'l-aḥ rār.
- 23. (p. 859) Subhatu'l-abrār.
- 24. (p. 919) Nafaḥātu'l-uns, about one-third of the work from the beginning, ending in the middle of the biography of Shaykh Aḥmadi Naṣr.
- 25. (p. 1012) Sharh Muntakhab minFuṣūṣi'l-ḥikam, the second half, beginning abruptly.
- 26. (p. 1104) Shawāhidu'n-nubuwwat, abruptly beginning in the middle of the sixth rukn.

All these works are well known, some of them were repeatedly printed or lithographed, and all of them are described in the catalogues of all large Oriental libraries.

With regard to their appearance one may conceive an idea that the prose works, namely 1 to 6, and 12 to 19 formed parts of one volume, the poetical works 8-11 and 20-23 formed parts of another, Nos. 24 and 25 a third, and Nos. 7 and 26 were transcribed by a different copyist, though in the same style as the other works.

A majority of these works have no colophon containing the date and the name of the copyist. We find only these:

On p. 104 the colophon of No. 5 (Risāla'i kabīr dar mu'ammā) runs as follows: "tamām shud taswīdi īn bayād wa tarshīḥi īn riyād bar dasti....'Abdu'r-Raḥmān b. Aḥmad al-Jāmī", and the date is given, without any mention of the day or the month, simply as 856/1452. This is exactly the date of completion of the work, which is also given in other copies. (Cf. fig. 2).

On p. 740 is given the date of completion, but not of transcription, of No. 16,—Chihil hadīth, as 886/1481.

On p. 751, in the colophon to No. 19, again the same formula appears as in the case of No. 5: "tamām shud taswūli īn bayād, etc., bar dasti....'Abdu'r-Raḥmān b. Aḥmad al-Jāmī", etc.;— no date is given.

On p. 857, in the colophon to No. 22, Tuḥfatu'l-aḥrār, it is stated that "itmām wa intizām" of this poem took place "dar silki shuhūri 886/1481".

And ultimately on p. 1102, in the colophon to No. 25, the commentary on selected chapters from the Fuṣūṣw'l-ḥikam, it is said: "faragha min taswīd Sharḥ......Muḥammad b. Ḥasan al-Mu'arcif al-Harawī", in Shawwāl 909/March-April 1504. (Cf. fig. 3).

II

After having some idea about each of these supposed autograph copies of Jami's works, we may critically analyse the indications on which is based the conclusion as to their being copied by Jami himself.

As every one can see from the plates appended herewith, in which specimens of the handwriting of all three MSS are given en regard, there cannot be any doubt as to the handwritings being one and the same in all three copies. We may start again with the St. Petersburg copy.

It must be noted that facsimile reproductions of handwriting made in what is called "line block" usually make it appear thicker than the original. Fifty years ago, in 1886, it was even more difficult to obtain a satisfactorily correct reproduction of the handwriting in this way than it is now. Therefore, in examining the handwriting of the St. Petersburg copy, we must understand that in the original it must be slightly thinner.

If we study plate I in V. Rosen's Catalogue, we can clearly see that the date, 890, 19th Dhī Ḥijja, given in the corner, is nothing but a gloss to the ta'rīkh, implying the date of the completion of the work, given in the text. The words rāqimu'l-kitāb, etc., may, indeed, indicate that the copy was transcribed by Jami, but we

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have no guarantee for this. These words could be easily transcribed from the original by a diligent scribe. We may realise that the volume contains also the *third* $D\bar{\imath}w\bar{a}n$ which was completed not before 896/1491, as is well known. As the handwriting of the volume is quite uniform, it must follow that Jami, being very old, could within the last two years of his life spend all his time in copying such a voluminous book, in a style which is typically that of the professional scribes of his time. Jami was not a poor man, and certainly could make a fresh copy employing a copyist. It seems highly improbable that he really would waste his last days on transcription.

In the Bankipur copy we may be surprised with the date of the birth of Jami's son, Yūsuf, in 882/1478, because, if the date of Jami's own birth which is given by the most reliable biographers is correct, he should be then about 65 years of age. But supposing this is true, we find strange things on the MS itself. As can be seen from the page on which the note appears, it is the end of a work, apparently not of one of Jami's own, without a colophon. Under these concluding lines, directly in the middle of the page, is written the note. And under the latter there is a versified chronogram by a poet, for the same date, in exactly the same handwriting. And this handwriting is the same as that of the Bombay copy, and of the St. Petersburg MS. Again there is nothing improbable in the supposition that the note was transcribed from Jami's original, by some one else.

If we scrutinize the handwriting of the Bombay copy we may see that the handwriting of the whole of the huge volume is the same throughout, though there are slight variations which are quite natural if we realise how long time such transcription takes. If the scribe is Jami himself, and the colophon on p. 104, giving the date 856/1452, is his, we may wonder how he could preserve exactly the same style, paper, ornamentations, number of lines, etc., for forty years, because his third Dāvān, as we have seen, was not completed before 896/1491. And if we carefully compare the handwriting of No. 25, transcribed by Muḥammad b. Ḥasan al-Harawī in 909/1504, we can see that it is exactly the same as in all other parts of the MS (except for No. 7 and 26), and exactly the same as that of the St. Petersburg and of the Bankipur copies.

Thus an important fact comes to light: none of these copies is an autograph. All of them were transcribed by this Muhammad b. Ḥasan al-Harawī, probably a professional scribe (though certainly not quite a first class one), who possibly copied these works from Jami's own drafts, which he carefully followed.

It is interesting to collate the last page of the second Daftar of the Silsilatu'dh-dhahab, reproduced on plate I in V. Rosen's catalogue, with the same place in the Bombay copy,—the number of slight deviations is quite considerable, and some of them violate the metre. This would hardly be possible should these be copied by the author himself. ¹

We may give here a few specimens of such variants, marking the St. Petersburg copy by P and the Bombay copy by B:

A CHRONOLOGICAL LIST OF THE IMAMS AND DA'IS OF THE MUSTA'LIAN ISMAILIS

By ASAF A. A. FYZEE

The recent activity in the field of Ismailitic studies, and particularly the appearance of W. Ivanow's Guide to Ismaili Literature (R. A. S., London, 1933), makes it necessary for us to have a clear idea of the chronology of the Musta'lian ¹ Imāms and Dā'īs. The dates of death of the earlier Imāms are not difficult to find out,—notwithstanding the remarkable diversity of view and uncertainty regarding some of the dates,—but those of the Dā'īs of the Yemenite Da'wat from Saiyid-nā Dhu'aib b. Mūsā downwards are not easily accessible, although the Sulaimānī and Dā'ūdī ² prayer books (Ṣaḥīfatu'ṣ-Ṣalāt) mention them.³

It is not the purpose of this article to establish these dates scientifically. The only object kept in view is to make the traditional dates generally available, with the addition of the corresponding Christian dates.⁴

The first section gives the dates of death of the 21 Imāms; the second section contains the dates of the Yemenite Dā'īs, before the bifurcation into the Sulaimānī and Dā'ūdī sub-sects; the third section contains two sub-sections: (A) Sulaimānī (Yemenite) Dā'īs and (B) Dā'ūdī (Indian) Dā'īs.

It will be observed that in the main the Sulaimānī Da'wat continues to this day the Yemenite tradition, whereas the Dā'ūdī Da'wat is almost entirely Indian. To take but one very apparent difference, the Dā'ūdī Dā'īs generally employ honorific titles after their names, while the Sulaimānīs preserve the ancient simplicity. Thus the present Dā'ūdī Dā'ī is known as His Holiness Sardār

- ¹ As distinguished from the Nizārian branch of Ismailis. They are also referred to as the Western Ismailis.
- 2 $D\bar{a}'\bar{u}d\bar{\imath}$ is to be preferred to $D\bar{a}w\bar{u}d\bar{\imath}.$ Wright, Arab. Gram., 3rd ed., i. 18D.
- ³ In the pages that follow *DS* refers to the Dā'ūdī Ṣaḥīfatu'ṣ-Ṣalāt, Muḥammadī Press, Bombay, 1344 A.H. (in Gujrātī, written in Arabic characters), and *SS* to the Sulaimānī Ṣaḥīfatu'ṣ-Ṣalāt, Muṣṭafā'ī Press, Bombay, no date, *circa* 1340 A.H. (in Urdu).
 - 4 DS, 337-342; SS, 547-552.

Saiyid-nā Țāhir Saifu'd-dīn; while the Sulaimānī Dā'ī is 'Alī b. Muḥsin, the title Saiyid-nā being common to both.'

In this connection it is pertinent to point out that Ivanow's classification of the literature of the Western Ismailis is not quite accurate.2 All the literature produced from 526/1132 till the death of Dā'ūd b. 'Ajab Shāh, 997/1589 belongs to what may be termed the Yemenite Da'wat, and as such is accepted by all the Musta'lian Ismailis, Dā'ūdīs, Sulaimānīs, and all other minor sections. The distinction between the Sulaimanis and the Da'udis arose only after the death of Dā'ūd b. 'Ajab Shāh (26th Dā'ī, died 997 or 999/1589 or 1591). The Da'ūdīs accepted Da'ūd b. Qutb Shāh, and the Sulaimānīs, Sulaimān b. Hasan as his rightful successor. Thereafter the headquarters of the Sulaimānī Da'wat remained in the Yemen, while the Da'ūdī was transplanted to the Indian soil. Therefore the term "Dā'ūdī Literature" cannot be applied to the earlier literature. The literature of early Ismailism and of the Yemenite Da'wat is indicated (roughly speaking) by nos. 1-285 in Ivanow's Guide and is the common heritage of all branches of the Musta'lian Ismailis.

In giving the equivalent Christian dates I have used throughout the tables of Wüstenfeld-Mahler.³ The corresponding dates are therefore according to the usual Islamic calendar. The computation peculiar to the Western Ismailis has not been followed, as it would in each case be necessary to base the calculation according to the astronomical appearance, and not the mere visibility, of the New Moon. It is well-known that the Western Ismailis have a calculation of their own which differs from that of the generality of Muslims. For this reason in every case they are ahead of the usual Muslim calendar by a day or two. To take an example, the 'āshārā' day (10 Muḥarram 1353) this year fell according to the usual calendar on Wednesday, 25 April 1934. But according to the Western Ismailis it fell on Tuesday, the 24th April, as the month commenced a day earlier. Not only do they compute the month

¹ Ivanow has also noticed this, Guide to Ismaili Literature, 10, n. 1. In the Yemen, the $d\bar{a}^i\bar{\imath}$ is called the " $d\bar{a}^i$ i $qab\bar{a}^i$ il $y\bar{a}m$ ". EI, iv. 1154.

² See Table of Contents and p. 29 of his Guide.

³ Wüstenfeld-Mahler, Vergleichungs-Tabellen der mohammedanischen und christlichen Zeitrechnung, 2te auflage, von. Ed. Mahler. Leipzig, 1926.

according to the astronomical New Moon, but they also arrange their year so that the month of Ramadān is always complete, having 30 days. In the case of the general Muslim calendar the visibility of the moon being uncertain Ramadān may or may not have exactly 30 days.

I. THE 21 IMAMS.

- I. Hasan ¹ b. 'Alī. 5 Rab. i. 50/2 Apr. 670. Medina.
- II. Husain b. 'Alī. 10 Muh. 61/10 Oct. 680. Kerbela.
- III. 'Alī Zainu'l-'Ābidīn b. Ḥusain. 18 Muḥ. 94/24 Oct.712. Medina.
- IV. Muḥammad al-Bāqir b. 'Alī. 114/732 (DS); 7 Dh.-Ḥ. 130/7 Aug. 748 (SS). (EI, iii. 670 gives 114, 117 and 118 as probable dates). Medina.
- V. Ja'far aṣ-Ṣādiq b. Muḥammad. 5 Shaw. 148/24 Nov. 765. Medina. (Non-Ismailis give other dates.)
 - VI. Ismā'īl al-Wafī b. Ja'far. Date unknown. Medina.
- VII. Muḥammad ash-Shākir b. Ismā'īl. Date unknown. Ferghāna (DS) or Mişr (SS).
- VIII. 'Abdu'l-lāh *al-mastūr* ar-Radī. No date. Salmīya (DS) or Misr (SS).
- IX. Aḥmad al-mastūr at-Taqī. No date. Salmiya (DS) or Misr (SS).
- X. Husain al-mastūr az-Zakī. No date. Mukarram 'Askar (DS) or Mişr (SS).
- XI. 'Abdu'l-lāh al-Mahdī bi'l-lāh (1st Fat. Cal.). 15 Rab. i. 322/5 Mar. 934. Mahdīya,² Tunis.
- XII. Muḥammad al-Qā'im bi-amri'l-lāh (2nd Fat. Cal.). 13 (DS) or 10 (SS) Shaw. 334/18 or 15 May 946. Mahdiya.
- ¹ It will be observed that the Musta'lian Ismailis begin their series of Imāms with Ḥasan, and not with 'Alī. Cf. Fyzee, Ismaili Law of Wills, 82, n. 2. In both the Ṣaḥīfas, the following three additional dates are given before commencing the series of Imāms. (1) Muḥammad the Prophet, born 12 Rab. i., 'ām al-fīl; died 12 Rab. i. 11-7 June 632 (SS) or 28 Ṣaf. 11-25 May 632 (DS). Medina. (Fr. Buhl in EI, iii. 656 gives another date—Monday 13 Rab. i. 9-8 June 632.)
 - (2) 'Alī b. Abī Ţālib, 21 Ram. 40-28 Jan. 661. Najar.
- (3) Fāṭima bint 'Alī, 10 Jum. i. 11-3 Aug. 632 (DS), 3 Jum. ii. 11-26 Aug. 632 (SS). Medina.
 - ² For Mahdīya, see "Qāḍī an-Nu'mān", JRAS for 1934, 9, n 3.

XIII. Ismā'īl al-Manṣūr bi'l-lūh (3rd Fat. Cal.). 28 or 29 Shaw. 341/18 or 19 March 953. Mahdīya.

XIV. Ma'add al-Mu'izz li-dīni'l-lāh (4th Fat. Cal.). 11 Rab. i. 365/18 Nov. 975. Cairo.

XV. Nizār al-'Azīz bi'l-lāh (5th Fat. Cal.). 12 Ram. 386/28 Sep. 996. Cairo.

XVI. al-Ḥusain al-Ḥākim bi-amri'l-lāh (6th Fat. Cal.). 27 Shaw. 411/13 Feb. 1021. DS says he ascended to Heaven; SS gives the place of death as المارة المارة (1).

XVII. 'Alī az-Zāhir li-i'zāzi dīni'l-lāh (7th Fat. Cal.). 15 Sha'b. 427/13 June 1036. Cairo.

XVIII. Ma'add al-Mustanşir bi'l-lāh (8th Fat. Cal.). 17 or 18 Dh.-Ḥ. 487/28 or 29 Dec. 1094. Cairo.

XIX. Aḥmad al-Musta'lī bi'l-lāh (9th Fat. Cal.). 16 Ṣaf. 495/10 Dec. 1101. Cairo.

XX. al-Manṣūr al-Āmir bi-aḥkāmi'l-lāh (10th Fat. Cal.). 4 Dhū'l-Qa'da 526/16 September 1132 (DS); or 3 Dh.-Q. 536/30 May 1142 (SS). Cairo.

XXI. Abū'l-Qāsim aṭ-Ṭaiyib. The date and place of death are secret. From him commences the period of satr, as opposed to the former period of zuhūr. See Ivanow, Guide to Ism. Lit. 15.

II. THE YEMENITE DA'WAT.² 526/1132 to 999/1591.

- 1. Dhu'aib b. Mūsā. 10 Muḥ. 546/29 Apr. 1151. Ḥauth, Yemen.
- 2. Ibrāhīm b. Ḥusain al-Ḥāmidī. 7 or 16 Sha'b. 557/22 or 31 July 1162. Ḥifl, Ṣan'ā' (SS) or Hamdān, Yemen (DS).
- 3. Ḥātim b. Ibrāhīm al-Ḥāmidī. 16 Muḥ. 596/7 Nov. 1199. Ḥaṭīb, Yemen.
 - ¹ 536 seems to be a misprint. EI, i. 329 has 2 Dh.-Q. 524 (8 Oct. 1130).
- ¹ In DS before beginning the series of $d\bar{a}$ 'is from Saiyid-nā Dhu'aib b. Mūsā, the names of the following $d\bar{a}$ 'is are also given:
 - Saiyidatu-nā al-Hurratu'l-Malika Arwā bint Aḥmad. 22 Sha'bān 532-5 May 1138. Dhī Jabla, Yemen. (For a short account of this remarkable woman see Hamdānī, JRCAS, (1931), XVIII, 505 sqq.).
 - al-Khaṭṭāb b. al-Hasan al-Hamdānī. Şafar 533-Oct. 1138. Juhūr ash-Shām, Yemen.
 - 3. Lamak b. Mālik. 27 Jum. ii. 510-6 Nov. 1116. Harāz.
 - 4. Yahyā b. Mālik. 28 Jum. ii. 520-21 July 1126. Ḥarāz, Yemen.

- 4. 'Alī b. Hātim. 26 Dh.-Q. 605/1 June 1209. Şan'ā', Yemen.
- 'Alī b. Muḥammad b. al-Walīd. 27 Sha'b. 612/21 Dec.
 Harāz, Yemen.
- 6. 'Alī b. Ḥanzala al-Wādi'ī. 12 or 22 Rab. i. 626/8 or 18 Feb. 1229. Hamdān, Yemen.
- 7. Aḥmad b. al-Mubārak. 28 Jum. ii. 627/14 May 1230. Hamdān, Yemen.
- 8. Ḥusain b. 'Alī b. Muḥammad b. al-Walīd. 22 Ṣaf. 667/ 31 Oct. 1268. Ṣan'ā', Yemen.
- 9. 'Alī b. Ḥusain b. 'Alī b. Muḥammad. 13 Dh.-Q. 682/2 Feb. 1284. Ṣan'ā', Yemen.
- 'Alī b. Ḥusain b. 'Alī b. Ḥanzala. 1 Ṣaf. (DS) or 21
 Ṣaf. (SS) 686/18 Mar. or 7 April 1287. Ṣan'ā', Yemen.
- 11. Ibrāhīm b. Ḥusain b. 'Alī b. Muḥammad b. al-Walīd. 10 Shaw. 728/18 Aug. 1328. Ḥifl Af'ida, Yemen.
- Muḥammad b. Ḥātim b. Ḥusain b. 'Alī. 1 Dh.-H. 729/26
 Sep. 1329. Af'ida, Yemen.
- 13. 'Alī b. Ibrāhīm b. al-Ḥusain. 18 Raj. 746/14 Nov. 1345. Ḥiṣn Dhamarmar (DS) or Af'ida, Yemen (SS).
- 14. 'Abdu'l-Muṭṭalib b. Muḥammad b. Ḥātim. 14 or 24 Raj. 755/4 or 14 Aug. 1354. Ḥiṣn Dhamarmar (DS) or Af'ida, Yemen (SS).
- 15. 'Abbās b. Muḥammad b. Ḥātim. 8 Shaw. 779/7 Feb. 1378. Mashāhid (DS) or Af'ida (SS), Yemen.
- 'Abdu'l-lāh b. 'Alī b. Muḥammad. 9 Ram. 809/17 Feb.
 Hiṣn Dhamarmar, Yemen.
- 17. Ḥasan b. 'Abdi'l-lāh. b. 'Alī. 6 Shaw. 821/6 Nov. 1418. In the Aqdām mosque, Ḥiṣn Dhamarmar.
- 18. 'Alī b. 'Abdi'l-lāh. 3 Ṣaf. 832/12 Nov. 1428. Ḥarāz, Yemen.
- Idrīs ('Imādu'd-dīn) b. Ḥasan. 19 Dh.-Q. 872/10 June
 Ḥarāz (DS) or Shabām (SS), Yemen.
- Hasan b. Idrīs b. Hasan. 15 Sha'bān 918/26 Oct. 1512.
 Taiba (SS) or Harāz (DS), Yemen.
- 21. Husain b. Idrīs. 10 Shaw. 933/10 July 1527. Ḥarāz, Yemen.

- 22. 'Alī b. Ḥusain b. Idrīs. 21 Dh.-Q. 933/19 Aug. 1527. Ḥarāz, Yemen.
- 23. Muḥammad b. Ḥasan (SS—Ḥusain) b. Idrīs. 27 Ṣaf. 946/14 July 1539. Zabīd, Yemen.
- 24. Yūsuf b. Sulaimān. 16 Dh.-Ḥij. 974 (or 973—SS)/24 June 1567 (or 4 July 1566). Taiba, Yemen.
- 25. Jalāl b. Ḥasan. 16 Rab. ii. 975 (974—SS)/20 Oct. 1567 (or 31 Oct. 1566). Ahmedabad, Gujrat, India.
- 26. Dā'ūd b. 'Ajab. 27 Rab. ii. 999 (DS) or 997 (SS)/22 Feb. 1591 (or 15 Mar. 1589). Ahmedabad, Gujrat, India.

III.

(A) THE SULAIMANI DA'IS.

(Yemenite.)

- 27. Sulaimān b. Ḥasan. 25 Ram. 1005/12 May 1597. Ahmedabad, Gujrat, India.
- 28. Ja'far b. Sulaimān. 29 Rab. ii. 1050/18 Aug. 1640. Taiba, Yemen.
- 29. 'Alī b. Sulaimān. 18 Sha'b. 1088/16 Oct. 1677. Ahmedabad, Gujrat, India.
- 30. Ibrāhīm b. Muḥammad. 17 Şaf. 1094/15 Feb. 1683. Najrān, Yemen.
- 31. Muḥammad b. Ismā'īl. 26 Rab. i. 1109/12 Oct. 1697. Najrān, Yemen.
- 32. Hibatu'l-lāh b. Ibrāhīm. 25 Ṣaf. 1160/8 Mar. 1747. Salwa, Najrān, Yemen.
- 33. Ismā'īl b. Hibatu'l-lāh. 16 Ṣaf. 1184/11 June 1770. Salwa, Najrān, Yemen.
- 34. Ḥasan b. Hibatu'l-lāh. 12 Jum. i. 1189/11 July 1775. Raḥṣa, Najrān, Yemen.
- 35. 'Abdu'l-'alī b. Ḥasan. 29 Ram. 1195/18 Sep. 1781. Ṭaiba, Yemen.
- 36. 'Abdu'l-läh b. 'Alī. 17 Dh.-Q. 1225/14 Dec. 1810. Ṣawāba, Badr, Yemen.

- 37. Yūsuf b. 'Alī. 9 Rajab. 1234/4 May 1819. Ṣawāba, Badr, Yemen.
- 38. Ḥusain b. Ḥusain, 9 Raj. 1241/17 Feb. 1826. Ṣa'fān, Yemen.
- 39. Ismā'īl b. Muḥammad. 10 Ṣaf. 1256/13 Apr. 1840. Badr, Yemen.
- 40. Ḥasan b. Muḥammad. 12 Rab. i. 1262/10 Mar. 1846. Badr, Yemen.
- 41. Ḥasan b. Ismā îl. 4 Ṣaf. 1289/13 April 1872. Hudaida, Yemen.
- 42. Aḥmad b. Ismā'il. 18 Jum. ii. 1306/19 Feb. 1889. Badr, Yemen.
- 43. 'Abdu'l-lāh b. 'Alī. 30 Raj. 1323/30 Sep. 1905. Jabal hihār, Yemen.
- 44. 'Alī b. Hibatu'l-lāh. 27 Sha'bān 1331/1 August 1913. Badr, Yemen.
 - 45. 'Alī b. Muḥsin. The present dā'ī.

(B) THE DA'UDI DA'IS.

(Indian.)

- 27. Dā'ūd Burhānu'd-dīn b. Quṭb Shāh. 15 Jum. ii. 1021/13 Aug. 1612. Ahmedabad, Gujrat.
- 28. Shaikh Ādam Ṣafīyu'd-dīn b. Ṭaiyib Shāh. 7 Raj. 1030/ 28 May 1621. Ahmedabad.
- 29. 'Abdu'ţ-Ţaiyib Zakīyu'd-dīn b. Quţb Shāh. 2 Rab. i. 1041/ 28 Sep. 1631. Ahmedabad.
- 30. 'Alī Shamsu'd-dīn b. Ḥasan b. Idrīs. 25 Rab. i. 1042/10 Oct. 1632. Yemen.
- 31. Qāsim Zainu'd-dīn b. Pīr Khān. 9 Shaw. 1054/9 Dec. 1644. Ahmedabad.
- 32. Quṭb Khān Quṭbu'd-dīn b. Dā'ūd b. Quṭb Shāh. 27 Jum. ii. 1056/10 Aug. 1646. Ahmedabad.
- 33. Pīr Khān Shujā'u'd-dīn b. Aḥmadjī. 9 Dh.-Q. 1065/10 Sep. 1655. Ahmedabad.

- Ismā'īl Badru'd-dīn b. Mullā Rāj b. Ādam. 23 Jum. ii.
 1085/24 Sep. 1674. Jāmnagar.
- 35. 'Abdu't-Țaiyib Zakīyu'd-dīn b. Ismā'il Badru'd-dīn. 12 Dh.-Q. 1110/12 May 1699. Jāmnagar.
- 36. Mūsā Kalīmu'd-dīn b. 'Abdu't-Ţaiyib Zakīyu'd-dīn. 22 Rab. ii. 1122/20 June 1710. Jāmnagar.
- 37. Nür Muḥammad Nüru'd-din b. Müsä Kalimu'd-din. 4 Raj. 1130/3 June 1718. Mandwi, Cutch.
- 38. Ismā'īl Badru'd-dīn b. Shaikh Ādam Ṣafīyu'd-dīn. 7 Muḥ. 1150/7 May 1737. Jāmnagar.
- 39. Ibrāhīm Wajīhu'd-dīn b. 'Abdi'l-Qādir Ḥakīmu'd-dīn 17 Muḥ. 1168/3 Nov. 1754. Ujjain, Central India.
- 40. Hibatu'l-lāh al-Mu'aiyad fī'd-dīn b. Ibrāhīm Wajīhu'd-dīn. 1 Sha'b. 1193/14 Aug. 1779. Ujjain.
- 41. 'Abdu't-Țaiyib Zakīyu'd-dīn b
. Ismā'īl Badru'd-dīn. 4 Şaf. 1200/7 Dec. 1785. Burhānpūr.
- 42. Yūsuf Najmu'd-dīn b. 'Abdu't-Taiyib Zakīyu'd-dīn. 18 Jum. ii. 1213/27 Nov. 1798. Surat.
- 43. 'Abd 'Alī Saifu'd-dīn b. 'Abdu't-Ţaiyib Zakīyu'd-dīn. 12 Dh.-Q. 1232/23 Sept. 1817. Surat.
- 44. Muḥammad 'Izzu'd-dīn b. Shaikh Jīvanjī. 19 Ram. 1236/20 June 1821. Surat.
- 45. Țaiyib Zainu'd-dîn b. Shaikh Jīvanjī. 15 Dh.-Q. 1252/21 Feb. 1837. Surat.
- 46. Muḥammad Badru'd-dīn b. 'Abd 'Alī Saifu'd-dīn. 29 Jum. ii. 1256/28 Aug. 1840. Surat.
- 47. 'Abdu'l-Qādir Najmu'd-dīn b. Ţaiyib Zainu'd-dīn. 26 Raj. 1302/12 April 1885. Ujjain.
- 48. 'Abdu'l-Ḥusain Ḥusāmu'd-dīn b. Ţaiyib Zainu'd-dīn. 27 Dh.-Ḥij. 1308/3 Aug. 1891. Ahmedabad.
- 49. Muḥanmad Burhānu'd-dīn b. 'Abdu'l-Qādir Najmu'd-dīn. 27 Dh.-Ḥij. 1323/22 Feb. 1906. Surat.
- 50. 'Abdu'l-lāh Badru'd-dīn b. 'Abdu'l-Ḥusain Ḥusāmu'd-dīn. 10 Rab. i. 1333/26 Jan. 1915. Surat.
- 51. Țāhir Saifu'd-dīn b. Muḥammad Burhānu'd-dīn. The present dā'i'l-muḍlaq.

Note on the numerical extent of the Musta'lian Ismailis .- The exact numerical extent of the Musta'lian Ismailis is not known. Their chief strongholds to-day are the Yemen, South Arabia and the Bombay Presidency in India. They are also to be found scattered all over India. East Africa and even in China, and curiously enough a few are to be found also in Spain.1 No figures are available from the Yemen, the population of that province being variously estimated at 1,000,000, 1,800,000 and 5,000,000. See Grohmann in Enc. of Islam, s. v. Yaman, iv. 1155, 1156. It appears however that out of these 60,000 are Jows, a few Parsees and Christians, and the rest are Muslims of different denominations. "The highlands between Sa'da, Yarim and 'Aththara and the whole of the East including al-Jawi are Zaidi; the Tihama, Ta'izzīya and Hadramot, Shāfi'i. The Ismā'ilīva includes among its followers the districts of Najran, Hamdan, Taiba, Harāz, Sa'fān and the neighbourhood of Yarīm. The Ya'qūbī sect has followers in the vicinity of Menākha'' (EI, ibid.). Nothing definite is to be found also in the article on the tribe of "Yām" (EI, iv. 1154). Their fighting forces are variously estimated at 25, 40 and 100 thousand; but no reliance can be placed on these figures. The Ismā'ilis in the Yemen are mostly Sulaimānī and the dā'ī is known as "Dā'ī Qabā'il Yām" (EI, ibid.). A modest estimate would be 25 to 30 thousand.

The figures for India are more definite, and being available from the Census Report, are as follows:

BOHORAS. Census of India, 1931, Vol. I, Pt. ii, Table xvii, page 529. Bohoras in India. Total population—212,752.

Chief provincial figures:

Bombay			• •	 	118,952
Baroda				 	28,355
Western In	idia Sta	ites Ag	ency	 • •	17,005
Rajputana				 	15,302
Central Inc	lia			 	14,715

Variation of Population in Bombay (including Western India States Agency). Vol. I, Pt. i, Table xii, page 464.

1931	1921	1911	
137,957	132,299	126,011	

Increase 1911-31—plus 11,946.

I may add that I was unable to give the 1931 figures in the *Ismaili I aw* of Wills, 3, n. 2, as the figures for 1931 were not available in the middle of 1933, when that book was published.

Bombay, April 1934.

¹ Census of India, 1931, Vol. 1, Pt. i, p. 72, mentions that 200 Bohoras are to be found in Spain.

THE WIDE SOUND OF T AND SI IN KATHIAVAD

By N. B. DIVATIA

In an elaborate article in the last issue of the JBBRAS (Volt IX, New Series, Nos. 1-2) Mr. D. R. Mänkad states that this wide sound of $\overline{\mathbf{q}}$ and $\overline{\mathbf{e}}$ is absent in some parts of Kāṭhiāvād, and stresses its absence at least in Hālār and Soraṭh (section 5 of Mr. Mānkad's article).

Before examining the implications of this guarded statement I should like to note that Mr. Mānkaḍ's main thesis is for the Soraṭhī dialect, discussing as he does the peculiarities found in the spoken language of Kāṭhīs, Āhīrs, Chārans, Mers and other tribes, whereas his section 5 (and partly section 4) mix up some main divisions of Kāṭhiāvāḍ. However, this is comparatively a minor issue.

My main point is that in the statement quoted above Mr. Mānkad has a covert aim at my views embodied in Gujarātī Language and Literature Vol. II, pp. 334-335 on the Kāṭhiāvādī sound (wide sound) in words like घाँडो for घोडो (Gujarāt proper). I should be excused if I quote the necessary portion from my work just now referred to:—

"Distance and detachment are annihilated now with the advent of railways and telegraph and interprovincial intermingling has brought in a new state of things. Kāṭhiāvāḍa is sending out in large numbers students into Gujarāt proper and migrations of the cultured classes are a noteworthy feature. All this intercommunication is a potent unifying factor, as also the silent acceptance of a more or less common literary standard of language, as a result of the first factor. The Suratīs have long given up the \mathbb{R} sound when \mathbb{R} is the recognized śiṣṭa one, in literature and even in everyday speech. Kāṭhiāvāḍīs are also steadily getting over their angularities in linguistic features visibly in written literature imperceptibly, and a little slowly in spoken language. As an

indication of this I may mention a recent incident. The word घोडो was, and even now is, pronounced with a broad ओ in घो, thus : घींडो. I have known this from personal contact with several Kāthiāvādīs of different sub-provinces (They pronounced घोळचं also with a broad ओ e.g. ए ना आब्यो तो घळियो). When I questioned some young Kāthiāvādī friends as to this broad sound in घोडो some said "No, we always pronounce it with the narrow आ-घोडो. Some Kāthīs or Gohilvādīs may be sounding it broad, we Hālārīs don't; while-others, themselves Häläris, admitted that they sounded the broad ओ in घोड़ो. The reason is clear. Peculiarities of this kind are fast disappearing in cultured language, thanks, amongst the forces noted above, to the fact that the education of Kāthiāvād was under the guidance of teachers from Gujarāt proper for a number of years and young men, who were not born when this broad sound was all-prevalent or whose observation is not keen and who live in the new atmosphere of unification, naturally believe that the sound did not and does not exist in their land. Another little fact may be noted; the peculiar Kāthiāvādī accentuation of words-not like the Vedic, nor like the English accent or the Hindi accent, but a sort of cross between accent and emphasis distinguished the people of the peninsula. Where a resident of Gujarāt would say in a colorless way ए ते। यवानुं नथी the Kāthiāvādī said ई तो थांवान नंथी. (I mark the accent-emphasis by a perpendicular stroke).

This accentuation has slowly and steadily been disappearing and the young Kāṭhiāvāḍīs now sojourning in Gujarāt and Bombay talk as if they were never to the manner born."

This will show-

- (a) that in examining the peculiarities of pronunciation and idioms of Kāṭhiāvādī speech I have kept in view the province as a whole, marking off the vogue in subdivisions like Gohīlvād, Hālār and the like;
- (b) that the claim of some Hālārīs to the narrow आ in घोडों is not universally recognized by the Hālārīs themselves;

and

(c) that this fact is due to the unifying process at work during

recent years, and also to want of correct observation on the part of persons like Mr. Mānkaḍ and others. 1

But I would claim that Mr. Mānkad's statement that the wide sound is absent in some parts of Kāṭhiāvād amounts evidently to an admission that this wide sound is present in other parts of Kāṭhiāvād which is all that I contend in speaking of Kāṭhiāvādī peculiarities as a whole.

One point more before I conclude. Mr. Mānkaḍ imagines that the narrow sound in बेसे and कोण is due to the बिसे and कुण forms (see p. 90 in his article). How the mere इ and उ could yield this narrow sound it is difficult to comprehend. Such short cuts do not constitute बीजलाघन as he claims; they are on the contrary cases of कमलाघन. If Mr. Mānkaḍ re-reads my discussion on बीजलाघन and कमलाघन and examines my conclusion at p. 144 in my Gujarātī Language and Literature Vol. I and the discussion preceding and succeeding that page, he would see the correct sense of the two kinds of लाघन and he would see that the wide sound is due to the य and व resulting from the accent on the अ in the अइ and अउ (बइसइ-कडण) whereas the narrow sound results from the accent falling in the इ and उ of अइ-अउ or from the long ई and उ (in अई-अउ); see instances beginning with गधेडो and ending with

¹ Apart from Mr. Mānkaḍ's want of observation his reading of the history of Gujarāti phonetics is erroneous. This is evident from his remarks in his section 3 on the clision of the h sound, especially when he virtually questions the effect of the faulty system of spelling adopted in the Government Vernacular Reading Series. Perhaps he is not to blame, for it was not possible for him to know anything about these series. Let me make myself more clear. The class of persons—educated ones—affected by the innovations of the Reading Series, used till then to see ₹ present in reading and writing, whereas the classes in Kāṭhiāvāḍ noted by Mr. Mānkaḍ are outside the influence of the new system. Any argument, therefore, based on this situation will be faulty. For what is claimed by the advocates of the h sound is that till the innovations stated above came into vogue the class of people who now drop it used actually to pronounce it.

শ্ৰন্থিতান in the table at pp. 138-143 of GLL Vol. I, as also the previous tables. He will see that this process is the real ৰ্যালভাঘৰ process. 1

Bombay,

13th February 1934.

¹ I do not follow Mr. Mānkaḍ in his nomenclature when he speaks of the *short* sound in contrast with the wide sound: he speaks of "both the wide and short sounds." Does he use it as a synonym of the narrow sound? Or, does he distinguish the two? If so, how? To my mind the sounds are either wide or narrow, (not short and long).



Kolhapur Copperplate Grant of Akalavarsadeva. Seal.

KOLHAPUR COPPER-PLATE GRANT OF AKĀLAVARŞADEVA.

By K. G. KUNDANGAR.

No one knows how and when these plates were procured. They were in the keeping of the Superintendent of the Javasingarao Abasaheb Ghatage, Technical School, Kolhapur, for a number of years, and were sent to the Irwin Agricultural Museum, Kolhapur, in the year 1927 by Rao Saheb D. R. Mahadik, the present Superintendent of the School. The plates are three in number and are connected by a ring 3" thick and of a circular diameter of 43". On its back side are incised the letters Bīraya in Kannada characters. On the ring is a square seal of 2_x^3 on which are in bas-relief the images of Śankara, Ganapati, and Sadānana, at the centre, and left and right corners. On the left and right sides of the head of Sankara are the sun and the moon respectively. Below the image are inscribed the letters Śrīmad-Akālavarsa-devaru in Devanágari characters; 'ru' is a Kannada termination. The ring was not cut when the plates were received in the Museum.

The plates are $16\frac{1}{2}'' \times 9\frac{3}{4}'' \times \frac{3}{8}''$ and weigh along with the ring 37 lbs. Letters are inscribed on one side of the first and the third plates, and on both sides of the second. The rims of the plates are raised to protect the inscription. In line 14 the letters " $t_T vyah$ śrī- K_T ṣnarā" are corroded and gone. The text of the inscription is in Devanāgari characters, well-formed and legible throughout. The plates are in a good state of preservation.

The letter 'va' is written for 'ba' throughout as in 'laudha' for 'labdha' l. 2, 'vāndhava' for 'bāndhava' l. 4, 'amvu' for 'ambu' l. 13, 'vimva' for 'bimba' l. 2 and 17, etc. The first letter of a conjunct consonant is generally doubled when preceded or followed by 'ra' (Kannada influence) as in 'vicittrita' l. 2, 'tattra' l. 8, 'Dantidurgga' l. 11, 'garvva' l. 19 etc. And 'ri' is sometimes written for r as 'grihātum' l. 54, 'Coda' is written for 'Cola', throughout. The language is pretty correct, and seems to be an improvement over the Karhad plates published by Dr. Bhāṇḍārkar in Epi. Ind., Vol. IV, Pages 278-290. Almost all the verses in the Karhad

plates appear in this charter; however, the 14th, 21st, 23rd, and 24th are new, and are not found in the Karhad plates. The following are the differences from the Karhad plates:—

Line.	Kolhapur plates.	Karhad plates
35	Deva	$_{ m n}$ rapati
37	vamse	$patn\bar{\imath}$
37	rāstra	rājya
39	Vappukau	\mathbf{V} appugau
40	Asanna	$ar{\mathbf{A}}\mathbf{s}\mathbf{ar{\mathbf{i}}}\mathbf{n}\mathbf{n}\mathbf{a}$
44	utkataih	udbhavaih

The family relation between the Kalacūries and the Rāṣṭra-kūṭas is faintly referred to in this inscription (l. 37).

The inscription records the grant of the village of Rikkați (the present Rukadi near Kolhapur) situated in the district of Alatage 700 in the province of Kuhuṇḍi (l. 60) by Akālavarṣadeva called Vallabha Narendradeva also (l. 51-52) of the Rāṣṭrakūṭa dynasty in the year Śaka 882 (corresponding to the year 960 A. D.) Raudra Samvatsara. The grantee was one Govindabhaṭṭa of Āttreyasagotra, whose family had migrated from Kuregrāma (Koregaon) in the province of Karahāṭaka.

The places mentioned in the plates are identified below.

Alatage is about 17 miles to the north-east of Kolhapur. Rikkați (the modern Rukaḍi) the place granted, is about 5 miles to the south-east of Alatage.

Siregrāma is said in the plates to be to the east of Rikkați. But no place like Siragāva or Siragūru can be traced in the vicinity of the place of the grant. The village Sājaṇi exactly fits in, and is about 3 miles to the east of Rukaḍi. It cannot be said with certainty whether the place is identical with Siregrāma. But considering the position of Māṇagāva which stands for Māligrāma of the plates one is lead to believe that this is the place referred to.

Māligrāma is the modern Māṇagāva to the south-east of Rukaḍi near Sājaṇi.

Kodavali is the present Paṭṭaṇa-Kodoli about three miles to the south of Rukadi.

Yerurage is Herle and is situated at a distance of two miles to the north-west of Rukadi. It was an important place under the rule of the Śilāhāras of Kolhapur.

Mundasage is the present Mudasinge about two miles to the north of Rukadi near Herle.

Cincavata is the present Cincavada to the west of Rukadi.

Choke is the present Cokāka to the north-west of Rukadi.

Some allowance must be made for the rough geographical know-ledge of the people of the 9th century. They were not so very well equipped with the apparatus at the disposal of the present surveyors. Their knowledge, therefore, was bound to be defective. However all these places are within four miles from Rukadi (Rikkati of the plates) near Kolhapur. It can justly be concluded, therefore, that Rikkati of the plates is the present Rukadi near Kolhapur.

TRANSLITERATION.

1st plate; second side.

- Sa=jayati jagad-utsava-praveśa-prathana-paraḥ-kara-pallavo Murāreḥ / lasad-amṛta-payaḥ-kaṇām.
- 2. ka-Lakṣmī-stana-kalaś-ānana-lavdha¹-sam̃niveśaḥ // 1 // Jayati ca Girijā-kapola-vimvād² ==adhigata-pattra-vicittritāmsa-
- 3. bhittiḥ/Ttripura-vijayinaḥ priy-oparodhād=dhṛta-Madanābhaya-dāna-śāsan-eva // 2 // Śrimān=asti nabha-stha-laika-tilakas-ttrai-
- 4. lokya-nettr-otsavo devo Manmatha-vāndhavaḥ ³ kumudinī-nāthaḥ sudhā-dīdhitiḥ / niś-śeṣ-āmara-tarppaṇ-ārppita-tanu-prakṣīnat-ālaṁ-
- 5. Kṛte yasy-āmśaḥ śirasā guṇa-priyatayā nūnam dhṛtaḥ Śambhunā // 3 // Tasmād=vikāsana-paraḥ kumud-āvalīnām doṣ-āndhakāra-dalanaḥ.
- 6. paripūrit-āśaḥ / jyotsnā-pravāha=iva daršita-śuddha-pakṣaḥ prāvarttata kṣiti-tale kṣiti-pāla-varnśaḥ // 4 // abhavad=atula-kāntis=tattra muktā-

¹ Labdha. 2 Bimbāt. 3 Bāndhavaḥ.

- 7. maṇīnām gaṇa=iva Yadu-vaṁśo dugdha-sindhūyamāne / adhigata-hari-nīla-prollasan-nāyaka-śrīr=aśithila-guṇa-saṁgo-bhūsa-
- 8. ņam yo bhuvo=bhūt // 5 // Udvṛtta-daitya-kula-kandala-śānti-hetus=tattr-āvatāram=akarot puruṣah purāṇaḥ / tad=vamśa-jā=
- 9. Jagati tunga-yasah-prabhāvās=tungā=iti kṣiti-bhujāh prathitā=vabhūvuh¹ // 6 // Kṣiti-tala-tilakas=tad=anvaye
- 10. ca kṣata-ripu-danti-ghaţo=janiṣṭa Raṭṭaḥ / tam=anu ca suta-Rāṣṭrakūṭa-nāmnā bhuvi vidito=jani Rāṣṭrakūṭa-vaṁśaḥ // 7 // Tasmād=arāti-
- 11. vanitā-kuca-cāru-hāra-nīhāra-bhānur=udagād=iha Danti durggaḥ/ekam cakāra catur=avdy*-upakaṇṭha-sīma-kṣetram ya c-
- 12. tad—asi-lāngala-bhinna-durggaḥ // 8 // Susnigdhām—ghana—pattra—samcaya-kṛtac-chāyām mano-hāriṇīm ūḍh—odāra—phalām samāśri—
- 13. ta-jana-śrānti-vyapoha-kṣamām̄ / yaś=cālukya-kul-āla-vāla-valayād = uddhṛtya Lakṣmī-latām̄ siktām̄ danti-mad-āmvubhih³=sthira-pa-
- 14. d-āsaktim sva-vamse=karot // 9 // Tasmād-apālayadimām vasudhām pi-(tṛvyaḥ śrī ⁴-Kṛṣṇarāja)-nṛpatiḥ śarad-abhraśubhraiḥ / ya-
- 15. t-kārit-eśvara-gṛhair-vvasumaty -- aneka -- Kailāsa -- śaila-nieit-eva ciraṁ vibhāti // 10 // Govinda-rāja=iti ta-
- 16. sya vabhūva⁵ nāmnā sūnuḥ sa=bhoga-bhara-bhangura-rājya-cintaḥ / ātm-ānuje Nirupame vinivesya samyak-

Second plate first side.

17. sāmrājyam=īśvara-padam śithilīcakāra // 11 // Švetātapattra-ttritay-endu-vimva -līl-oday-ādreḥ kali-vallabhākhyāt / tataḥ kṛt-ārāti ma-

- 1 Babhūvuḥ. 2 Catur=abdhy-upa. 3 Ambubhiḥ.
- 4 This portion is worn out. 5 Babhūva. 6 Bimba.

- 18. debha-bhamgo jāto jagat-tumga-mṛg-ādhirājaḥ // 12 // Tat-sūnur=ānata-nṛpo nṛpatumga-devaḥ so=bhūt-sva-sainya-bhara-bhangurit-āhirājaḥ / yo Mānya-
- 19. kheṭam=amarendra-pur-opahāsi gīrvvāna-garvvam=ivai kharvvayitum vyadhatta // 13 // Tasy=ottarjjita-Gūrjjaro hṛtahaṭal=Lāṭ-odbhaṭa-śrīmado Gauḍānām vi-
- 20. naya-vṛt-ārppaṇa-guruḥ Sāmudra-nidrā-haraḥ / dvārasth-Āmga-Kalimga-Gamga-Magadhair = abhyarccit = ajñaś-ciram sūnuh sūnrta-vāg-bhuvah parivrdhah śrī-Kr-
- 21. ṣṇarājo=bhavat // 14 // Abhūj=jagat-tumga=iti pras¹ ddhas=tad-amgajaḥ strī-nayan-āmṛt=amśuḥ/alavdha¹-rājyaḥ sa=divam vininye divy-āmganā-prārthanay=eva Dhātrā // 15 //
- 22. Tan-nandanaḥ kṣitim=apālayad=Indrarājo=yad-rūpa---sambhava-parābhava-bhīruṇ=eva / mānāt-puraiva Madanena Pinākapāṇi-kop-āgninā ni--
- 23. Ja-tanuḥ kriyate sma bhasma // 16 // Tasmād-amoghavar-ṣo raudra-dhanur-bhamga-janita-vala 2—Mahimā/Rāma=iva rāmaṇīyaka-mahā-nidhir-Daśa-
- 24. rathāj=jātaḥ // 17 // Kṣipram divam pitur=iva praṇayād=gatasya tasy=ānujo manuja-loka-lalāma—bhūtaḥ/Rājyan=dadhe Madana-saukhya-vilāsa-
- 25. kando=Govindarāja=iti viśruta-nāmadheyaḥ // 18 // So=py=aṁganā—nayana-pāśa-niruddha-vuddhir=unmārgga-saṅga-vimukhī-
- 26. kṛta sarvva-satvaḥ/doṣa-prakopa-viṣama-prakṛtiḥślath= āmgaḥ prāpat=kṣayam sahaja-tejasi jāta jādye // 19 // Sāmantair-
- 27. atha Raṭṭa-rājya-mahimā-lamv³-ārtham=abhyarthito=deven=āpi Pinākinā Hari-kul-ollāsaiṣiṇā preritaḥ / adhyāsta prathamo=vive -
- 28. kiṣu Jagattuṁg-ātmajo=mogha-vāk-peyūṣ 4 -āvdhir= Amogha-varṣa-nṛpatiḥ śrī-vīra-siṁhāsanaṁ // 20 // Paṭṭo yasya lalāṭa-dhāmni vika-

¹ Alabdha. 2 Bala. 3 Mahim-ālambārtham. 4 Vāk-pīyūş-ābdhi.

- 29. te sāmanta-mukhyair=mudā vaddho¹=maṇḍalibhis=tadaiva ca bhiyā svasya praṇām-āṁjaliḥ/yasy=oddāma-mad-āndha-sindhura-pati-skandh-ādhiroho-
- 30. dyame līl -āṁco=pi bhay=ākulai=ripu-kulaiḥ śailaḥ sa-mādhyāsitāḥ // 21 // Dharme Manuḥ samara-karmmaṇi Kārttavīryo=vīrye valiḥ.²
- 31. jana-mano-harane Dilīpah / Uccaiś=cirantana-yaśāmsi harann=ap=īttham vṛddheṣu namra-carito vinayena yo=bhūt // 22 // Siddhy-amjanāḥ
- 32. khala-janesu viţesv=iva prāg-dos-āndhakāra-valato³ = ratim=abhyupetāḥ yasy=odaye Hari-kul-āmvara⁴-Śītaraśmeḥ sva-svāmi-
- 33. nām=iva gatā guņinām grhāņi // 23 // Sāmgatyam śri-Sarasvatyoḥ Sāhasāmka-pariksaye naṣṭam cireṇa yam prā-

Second plate, second side.

- 34. pya punah samsthānam=āgatam // 24 // Kim=iva sukṛta-rāśer=vvarnyate tasya cittram yudhi ripubhir=aśeṣair-vvīkṣito=bhajyamānaih
- 35. viyati nikaţa-varttī yasya jātaḥ sahāyaḥ praṇata-Hari-Virinc-ābhyarceitaś-Candra-mauliḥ // 25 // Śrī-Kṛṣṇarājadevas=tasmā-
- 36. t-parameśvarād=ajani sūnuḥ / yaḥ śakti-dharaḥ swāmī ku-māra-bhāve=py=abhūd=bhuvane // 26 // Rāma-bata-Sahasra-bhujo=bhuja-dvayā-
- 37. kalita-samada-Rāmeņa jananī-vamse gurur—api yena Sahasrarjuno—vijitaḥ // 27 // Śrī-Raṭṭa-rāṣṭra-pura-vara—rakṣā-parikhā-
- 38. madena yasy=ājñām / Vipulām vilamghayantaḥ svayam=apatan drohiņo=dhastāt // 28 // Yena Madhu-Kaiṭabhāv=iva punar=unmagnau jan-o-
- 39. pamarddāya / Śrīvallabhena nihatau bhuvi Dantiga-Vappukau duṣṭau // 29 // Rathyāmalla-viṣa drumam=udasya nihitena yo kṛta-sanāthām / Bhūtā-

- 40. rya-puṇya-taruṇā vāṭīm=iva Gaṁga pāṭīnca // 30 // Pari—malit-Āṇṇiga-Pallava-vipattir=āsanna-vismaya-sthānaṁ / visphurati yat-pratā-
- 41. pe=śeṣita-vidveṣi-Gāmgaughe // 31 // Yasya paruṣ-ekṣit-ākhila-dakṣiṇa-dig-durgga-vijayam=ākaraṇya / galitā-gūrjjara-hṛdayāt-Kā-
- 42. lamjara–Cittrakūt;—āśā // 32 // Anamann–āpūrvv–āpara-jalanidhi–Himaśaila–Simhala–dvīpāt / yam janak-ājnā–vaśam —api–
- 43. maṇḍalinaś-caṇḍa-daṇḍa-bhayāt // 33 // Snigdha-syāma 1 -rucā pralamva 2 -bhujayā pīn-āyat-oraskayā mūrtyā kīrtti-lat-āhit-āmṛta-jalai-
- 44. r=vvṛttaiś-ca sattv-otkaṭaiḥ/jnātv=āyaṁ puruṣottamaṁ bharasahaṁ viśvaṁbhar-ābhyuddhṛtau śānte dhāmni layaṁ ga-taḥ praśaminām=ādyaḥ kṛtārthaḥ pi-
- 45. tā // 34 // Vṛtte-nṛtta-sur-āṁganc sarabhasaṁ-divy-arṣi-datt-āśiṣi Śrī-kāntasya nitānta-toṣita-Hare=rājy-ābhiṣek-otsave / yasy-āvaddha ³ -kara-gra-
- 46. h-odyama-bhavat-kamp-ānurāg-odayād=dikkanyāḥ sva-samarppaņo=rttham=abhavam=llagn-ānukulya-priyāḥ // 35 / Luptāḥ ke=pi nij-āspadād=guṇa-
- 47. bhṛtaḥ kecit-pratiṣṭhāpitāḥ ke=py=anyonya-vibhedato= viralitāḥ kecittu saṁśleṣitāḥ / yen=āty-ūrjjita-śavda⁴-tanttra-patinā varṇṇā=i-
- 48. v=occ-āvacām nitā-maṇḍalino=daśām sumahataḥ siddhim padasy=ecchatā // 36 // Kṛtvā dakṣiṇa-dig-jay-odyata-dhiyā Coḍānvay—o-
- 49. nmūlanam tad=bhūmim nija-bhṛtya-bharmma-paritaś-Ceramma- Pāṇḍyādikām / yen=occaiḥ saha Simhalena karadān san-maṇḍal-ā-
- 50. dhīśvarān=nyastaḥ kīrtti-lat-āṁkura-pratikṛti-stambhaś=ca Rāmeśvare // 37 // Sa=ca parama-bhaṭṭāraka-mahā-rāj-ādhi-rāja-param-e-

Third plate, first side.

- 51. śvara / Śrīmad-Amoghavarṣa-pād-ānudhyāta-parama-bhaṭṭāraka-Mahā-rāj-ādhirāja-parameśvara-Śrimad-Akālavarṣa-deva / pṛthvī—
- 52. vallabha-Śrīmad-Vallabha-narendra-devaḥ / kuśalī sarvān = eva yathā samvadhyamānakān¹ rāṣṭra-pati-viṣaya-pati-grama-kūṭa-mahattara-yu-
- 53. ktak-opayuktak-ādhikārikān samādišaty=astu / vaḥ samviditam kṛte=vara-dig-vijayena dakṣiṇ-āśām=api nirjjitya pracaṇḍa-Coḍa-vamśa-
- 54. m=unmūlya Coḍa-Cera-Simhala-bhūmir-vibhajya bhṛtye-bhyo=jīvanam vidhātum maṇḍal-eśvarāṇām sarvvasvāni pari-grihitum Setu-cakr-opānte ya-
- 55. śah parvvatam=iva Kṛṣṇeśvar-āyatanam / Gaṇḍa-Mārttaṇḍ-Ādity-āyatanam / Kāncī-maṇḍale Kāla-priya-dev-āyatanam / vikato=vakr-ādy-āya-
- 56. tanāni ṣpādayitum 2 Melpāṭī-sam-āvasita-śrīmad-vijaya-kaṭakena Saka-nṛpa-kāl-ātīta-samvatsara-śateṣv-aṣṭasu dvy-aṣ̄ti-
- 57. tama-sampravarttamāna-Raudra-samvatsar-āntarggata-Vaišākha-šuddha-pakṣ-ākṣaya-tṛtīyāyām Budhavāre Rohiṇīnakṣatre mātā—pitror=-ātma-
- 58. naś=ca punya-yaśo=bhivṛddhaye Karahāṭa-viṣay-āntar-ggata-Kureggrāma-vinirggat-āttreyasa-gottra-vahu.,..vasa brahmacāri-3
- 59. Rāmadeva-bhaṭṭa-Yautu-bhaṭṭa-Devabhaṭṭa-sutāya ve-da-ved-āṅga-pāragāya Śrīmad-Govinda-bhaṭṭāya Kuhu-
- 60. ndī-viṣay-āntarggataḥ Alatage-sapta-śata-prativaddhaḥ 4 savṛkṣa-mālā-kulasya dhānya-hiraṇy-ādeyaḥ sada-
- 61. nda-doṣa-daś-āparādhaḥ sarvv-otpatti-sahitaḥ pūrvvaprasiddha-catuḥsīmā-paryanto=cchadma-dāya-nyāyena Rikkaṭināmā-

Sambadhyamānakān.

Nispādayitum.

³ Bramhacārine.

⁴ Pratibaddhah.

- 62. grāmaś-c-ācandr-ārkka-namasyo mayā dattaḥ / Yasya pūrvataḥ / Siriggrāma-Māliggrāmau sthitau / tathaiva dakṣiṇa-syān=diśi-
- 63. Koḍavali-Ciñcavāṭau / Pascimataḥ / Yerurage Choke / uttarataḥ Muṇḍasage nāmā-grāmaḥ parvvat-āgrāsvuparivarttaśca / even=ca-
- 64. tura - ta viśuddham Rikkați-grāmam Śrī-Govindabhațtasya kṛṣataḥ karṣayato=bhuñjato=bhojayato=pānakena viddhmā-ghātah kāryah — Ya-
- 65. ś-ca karoti sa=pañcabhir=api mahā-pātakair=upapātak-kaiś-ca saṃyuktaḥ syāt // Uktañ ca // ṣaṣṭiṁ varṣa-sahasrāṇi svargge tiṣṭhati bhūmi—
- 66. daḥ / ācchett -ānumantā-ca tāny=eva narake vaset // Vin-dhy-āṭavīṣu toyāṣu¹ śuṣka-koṭara-vasinaḥ / kṛṣṇ-āhayo= hi jāyante bhūmi-
- 67. dān-āpahāriṇaḥ // Vahubhir=vvasudhā bhuktā pārthivaiḥ Sagar-ādibhiḥ / yasya yasya yadā bhūmis=tasya tasya tadā phalam // Sāmānyo=yam dharmma-setur-
- 68. nṛpāṇām kāle kāle pālanīyo=bhavadbhiḥ /sarvvān=evam bhāvinaḥ pārthiveṣu² bhūyo bhūyo yācate Rāmabhadraḥ // Yosyagmena likhitam=iti //

TRANSLATION.

- 1-2 (V. 1). Triumphant is Murāri's leaf-like (tender) hand, that ushers in the manifestation of the festivity of the world, and which rests on the nipples of the jar-like breasts of Lakṣmī marked with shining particles of milky water.
- 2-3 (V. 2.) And triumphant is the rampart-like broad shoulder of the conqueror of the three cities (Siva), which is adorned by variegated figures impressed upon it by the excellent (disc-like) cheeks of the daughter of the mountain (Pārvatī), which bears, as it were, out of a desire to confer a favour on his beloved, a record of grant promising safety to the God of Love (Madana).

¹ The word ought to be "toyesu".

² The word ought to be "pārthivesu".

- 3-5 (V. 3). There is the glorious God Moon, the sole ornament of the surface of the sky, the delight of the eyes of the three worlds, the friend of the God of Love, the lord of the night lotus, whose rays are full of nectar, whose wanness, caused by his having given up his body for gratification of all the Gods, is his ornament, and a portion of whom is worn on the head by Sambhu verily on account of his (Siva's) love for excellent qualities.
- 5-6 (V. 4). From him sprang forth on earth a race of kings like a stream of moon-light—which enhanced the series of the joys of the people, 1 (as moon-light expands the series of night-lotuses which destroyed the darkness of sin as the other destroys the darkness of night), which fulfilled all desires (as the other fills all the quarters), and which had unblemished adherents (as the other brings on the bright half of the month).²
- 6-8 (V. 5). Therein arose the family of Yadu of matchless brilliance like a collection of pearls of matchless lustre in the ocean of milk—a family which being strong in the possession of merits and having for its illustrious leader the dark complexioned Hari (like a necklace whose beauty is enhanced by the central saphire and which is firmly strung on a thread).³
- 8-9 (V. 6). In that family the primeval person (Viṣṇu) the cause of destruction of multitude of haughty daitya families took his incarnation; and kings of that family, whose fame and valour were pre-eminent, became known in the world as Tungas.
- 9-10 (V. 7). In that race was born Ratta, the ornament of the surface of the earth, who destroyed the arrays of elephants
- 1 Kumuda='night-lotus', also punningly it means people. It is difficult to construe it with kaiti-pāla-vamsah. However, it may be derived as: kutsitā mud yeṣām te meaning 'common people', or kau (pṛthivyām) mud yeṣām te meaning those who delight on the earth, 'human beings.' See Mudrā-Rākṣnsam, act IV-5. 9 "Kaumudi kumud-ānande jagadānanda-hetunā."
- ² The attributes vikāsana-para, kumud-āvali, doṣ-āndhakāra-da-lana, pari-pūrņit-āśā, and Śuddha-pakṣa convey two meanings, one towards the kings and the other towards the moon.
- 3 The attributes—adhigata—hari-nīla-prollasan-nāyakaśrīḥ, and aśi-thila—guna-saṃgah convey two meanings one applicable to the family of Yadu and the other applicable to the necklace of pearls.

of his enemies; and after him the Rāṣṭrakūṭa family became known in the world by the name of his son Rāṣṭrakūṭa.

- 10-14 (V. 8 and 9). In that family was born Dantidurga who was a sun to the fog in the form of the charming necklace on the breasts of the wives of his enemies, and who having broken the uneven ground (or fortresses) by a plough-share in the shape of his sword, made the whole earth a single field bounded by the shores of the four oceans. He plucked out from the surrounding water basin in the shape of the Cālukya family, the creeper in the form of supreme sovereignty, and planted it firmly in his own family sprinkling it with the water of the rut of his elephants so that it became dense and charming by its thick foliage, bearing abundant fruit, and capable of removing the fatigue of men resorting to it.
- 14-15 (V. 10). Thereafter king Kṛṣṇarāja, the paternal uncle, protected the earth. By his construction of temples of Iśvara, white as the clouds in autumn, the earth shines forever as if covered with many Kailāsa mountains.
- 15-17 (V. 11). A son by name Govindarāja was born to him. Devoted to pleasures he gave little attention to his kingdom; and entrusting fully the universal sovereignty to his younger brother Nirupama he relaxed his task as a ruler.
- 17-18 (V. 12). To him who was called Kali-vallabha and who was a sporting eastern mountain on which rose the moon in the shape of the triple umbrella, ¹ was born Jagattunga, the lion, who overpowered the intoxicated elephants in the form of his enemies.
- 18-19 (V. 13). His son who was saluted by kings, and who oppressed the lord of serpents by the weight of his army, was Nrpatungadeva, who in order to humble as it were the pride of Gods founded the city of Mānyakheta, which laughed in contempt at the capital of the Lord of Gods.
- 19-21 (V. 14). His son the truthful Kṛṣṇarāja was Lord of the earth for a long time,—he who terrified the Gurjara, who destroyed the excessive pride of prosperity entertained by the

¹ Svet-ātapatra-tritaya = the triple umbrella, the emblem of a chakra-vartin.

illustrious Lāṭa, who was the preceptor to initiate the Gauḍas into the vow of humility, who deprived the people on the seashore (Sāmudra)¹ of their sleep, and whose command was honoured by the Aṅga, the Kaliṅga, the Gaṅga, and the Magadha kings waiting at his gate.

- 21 (V. 15). He had a son famous by the name Jagattunga, a moon to the eyes of women. Before he could ascend the throne he was taken to heaven by the creator at the request of the heavenly damsels.
- 22–23 (V. 16). His son Indrarāja protected the earth. The God of Love, for fear of indignity likely to be caused (in future) by his beauty, as it were, had his body reduced to ashes even before through pride by means of the fire of the wrath of Pināka-pāṇi, (Śiva).
- 23–24 (V. 17). From him was born Amoghavarşa as Rāma was born of Daśaratha, the store-house of beauty, the greatness of whose power was shown by the breaking of a terrible bow.³
- 24-25 (V. 18). He having immediately, out of love for his father, gone to heaven, his younger brother of the famous name Govinda-rāja, the ornament of the world of men, and the source of the sportive pleasures of love, ruled the earth.
- 25–26 (V. 19). He too with his intelligence caught in the net of the eyes of women, displeased all by taking to a vicious course his limbs becoming enfeebled as his constitution was deranged on account of the aggravation of maladies (like the constituents of the body politic divided by the disaffection produced by his vices), and his innate strength and spirit having cooled down he perished.
- 1 Sāmudra means those born of the ocean, and hence people living on the sea-shore.
 - 2 God Śiva has in his hand a bow by name Pināka.
- 3 Raudra-dhanu means a terrible bow, and also punningly the mighty bow Śāńkara which was broken by Rāma at the Svayańvara of Sitā. the Breaking of a bow by Amoghavarşa refers to his war with the Cera king, who had a bow for his emblem.
- 4 The attributes dosa-prakopa and lejas are to be interpreted in two ways.

- 26-28 (V. 20). Then king Amoghavarsa, the son of Jagattunga, the first among the wise, the ocean of nectar in the form of unfailing words, being entreated by the feudatories to maintain the greatness of the sovereignty of the Rattas, and also sent by God Siva (Pināka-pāṇi), who desired the prosperity of the family of Hari, ascended the glorious throne of a hero.
- 28-30 (V. 21). Round the broad space of whose forehead was tied the royal fillet by the friendly bordering princes in joy at the same time when by the (hostile) members of the circle of states were folded in awe their hands; at the sight of his mounting on the back of impetuous and lordly elephants blind with rut, the hordes of his enemies, being panic-stricken, resorted to the mountains though (once intended) for sport.
- 30-31 (V. 22). A Manu he was in righteousness, a Kārtavīrya ¹ in battle, a Bali ² in valour, a Dilīpa in attracting the hearts of men; though he acquired high and eternal fame his behaviour towards the elderly persons was humble out of modesty.
- 31-33 (V. 23). At the rise of whom, the moon in the sky of the family of Hari, signs of success that had before taken delight in the wicked persons by dint of the obsession of sin went over to the abodes of the meritorious, just as (women) marked by personal accomplishments ³ that had formerly taken a fancy to stay with their paramours through the influence of darkness of night returned to the abodes of their husbands on the advent of the moon.
- 33-34 (V. 24). Obtaining whom, the association of Śrī and Sarasvatī that had long disappeared after the death of Sāhasānka came into existence again.
- 34-35 (V. 25). How can one describe him (adequately) who was the store of merits! O wonder! he was observed in battle
 - 1 Kārtavīrya is the General of the Gods (Senānī).
- 2 Bali could not be overpowered in fight by any God or Gods. Vishnu, therefore, in the garb of a brahmacārin sent him to patal asking of him a gift of land three feet in measurement.
- 3 Siddhyamjanah, dosāndhakāra-valatah, and sva-svāminām admit of two interpretations one applicable to the signs of success and the other to the adulterous women.

by the enemies whom he routed, while by him stood as his helper in the sky the moon-crested (Siva) worshipped by the saluting Hari and Virinci (Bramha).

- 35-36 (V. 26). From this supreme lord was born a son, the prosperous king Kṛṣṇa-rāja, who though young possessed enormous strength and became the lord (as Kārtikeya was born of Siva, wielded a weapon 1—śakti—and was the lord of divine hosts).
- 36-37 (V. 27). By him, that had brought under his sway by his two arms the haughty Rāma, was vanquished Sahasrārjuna, though an elderly person in the family of his mother, whose thousand arms were (before *i.e.* in the Paraśu-Rāma incarnation period) lopped off by Rāma.
- 37-38 (V. 28). His enemies arrogantly tried to transgress his mighty command, which was the great protecting trench to the great city of the kingdom of the prosperous Rattas, and fell down themselves.
- 38-39 (V. 29). By this lord of greatness—Śri-Vallabha² were killed the wicked Dantiga and Vappuka, who seemed to be Madhu and Kaiṭabha risen again on earth to torment men.
- 39-40 (V. 30). Having uprooted the poisonous tree in the form of Rathyāmalla he planted in Gaṅgapāṭi, 3 as in a garden the good tree in the form of Bhūtārya.
- 40-41 (V. 31). It is no wonder that his burning prowess which completely destroyed the multitude of Gangas could parch up the fragrant sprouts in the form of Anniga.
- 41-42 (V. 32). Having received news of the conquest of all the strongholds in the South simply by the angry glance of his eyes the hopes about Kaliñjara and Citrakûţa, vanished from the heart of the Gurjara.
- 1 Kumāra, Šaktirlhara, and Svāmin are the names of God Kārtikeya. These words can also be interpreted so as to be applicable to Kṛṣṇarāja.
- $2-\acute{S}r\ddot{\imath}$ -Vallabha punningly means $K_{I}sna$ who killed Madhu and Kaitabha two demons.
 - 3 Gangapāti is Gangavādi 12000 in Mysore territory.

- 42-43 (V. 33). The tributary princes from the eastern to the western ocean and from the Himālayas to the Island of Simhala bowed to him out of fear of severe punishment, though he himself was obedient to his father's commands.
- 43-44 (V. 34). By his body which had dark glossy colour, long arms, and a broad and massive chest, and by his virtuous deeds which were the nectar water that fed the creeper in the shape of his fame, knowing him to be an excellent man¹ (Viṣṇu), and knowing him to be able to sustain the heavy responsibility of supporting, the earth, ² his father, the best of sages who had attained the object of life, vanished into the tranquil ³ light.
- 45-46 (V. 35). When the festival of the coronation of this favourite of Lakṣmī who had greatly pleased Hari, at which celestial nymphs danced and heavenly rṣis pronounced benedictions, had taken place amidst great joy, damsels in the form of quarters who entertained love for him, who were desirous of surrendering themselves to him, and who trembled nervously when their hand was to be taken by him, welcomed that auspicious occasion.
- 46-48 (V. 36). He a powerful master of the science of politics, desirous of attaining a lofty position deprived some of his subordinate chiefs of their places, and established others who were descrying, separated some from each other by producing disunion and united others, and thus arranged them in a high or low position; just as a proficient master of the science of words (grammar) desirous of building a good composition drops some letters from their position, introduces others in their guna form, separates some on account of their dissimilarity, unites others, and places them in various 4 ways.
- 1 Purusottama literally means an excellent man. It also means Visnu.
- 2 Viscombhar-ābhyuddhtṛtau refers to Viṣṇu also punningly as he lifted the earth in his third incarnation.
 - 3 Sante dhamni means in the tranquil light, i.e., Brahma.
- 4 Luptah, guṇabhṛtah, pratisṭhāpitah, anyonya-vibhedato, viralitāh, samɨleṣitāh, uccāvacām, and siddhim padasy-ccchatā can be interpreted in two ways so as to give meanings applicable to a politician and a grammarian.

- 48-50 (V. 37). Having, with the intention of subduing the Southern region, uprooted the race of Colas, devoted their lands towards the maintenance of his servants, and made the lords of great countries, viz., the Ceramma, the Pāṇḍya, and others along with the mighty Simhala, the tributaries, he erected a high column at Rāmeśvara, which was the image as it were of the sprout of the creeper in the shape of his glory.
- 50-53. And he, the great holy, the great king of kings, the supreme lord, the prosperous Akālavarṣadeva, the lord of the earth, the prosperous Vallabha-narendradeva, who meditated on the feet of the great holy, the prosperous Amoghavarṣadeva, the great king of kings, the supreme lord, being happy, commands all the Governors of districts, heads of sub-divisions, village headmen, leading persons, officers and employees, so far as they may be concerned (with these gifts):
- 53-62. Be it known to you that while my glorious army, that had conquered the western quarters was encamped at Melpāţi, having uprooted the Cola, and having conquered the southern quarters, for the purpose of creating livings (maintenance) out of the countries of Simhala, Cola, and Cera, of taking possession of the whole property of the lords of provinces, and of erecting temples of Krsneśvara, which was like the mountain of his fame, and the temple of Ganda-mārtanda near the (Rāma) bridge 1 circle, and Kāla-priya-deva temple in the province of Kanci which were, expansive and curved, etc., eight hundred and eighty-two years of the Saka king having elapsed on Wednesday the third day of the bright half of Vaisākha of the (cyclic) year Raudra and the constellation being Revati, for the increase of merit and fame of my parents and of myself have I granted by way of concealed gift the village by name Rikkati, whose boundaries are well-known ere now, one of the seven hundred villages situated in the district of Alatage along with the rows of trees in it, along with the assessment in grain and gold,
- * * along with all the produce, to the celibate Govindabhatta, who is conversant in Veda

 $^{^{1}}$ $\it Setu-cakra$ refers to the Bridge built by $\it R\bar{a}ma$ between India and Ceylon.

and Vedāṅga (who has gone to the other side of Veda and Vedāṅga), the son of Devabhaṭṭa, who was the son of Yautubhaṭṭa, who was the son of Rāmadevabhaṭṭa, of Attreyasa-gotra, and an emigrant from Kuregrāma¹ in the country of Karhāṭa. (The grant) is to be respected (i.e. not to be interfered with) as long as the moon and the sun endure.

- 62-65. To the east of this village are Sirigrāma ² and Mūligrāma ³ to the south Kodovali ⁴ and Ciñcavūṭa, ⁵ to the west Yerurage ⁶ and Choke, ⁷ and to the north the village by name Muṇḍasage. ⁸ No one should cause obstruction to Govindabhaṭṭa while he cultivates the village (lands of) Rikkaṭi defined by these four boundaries or causes it to be cultivated, enjoys it or causes it to be enjoyed. And he who causes obstruction will incur all the five great sins and the minor ones. It is said:—
- 65-66. He who grants lands, dwells in heaven for 60,000 years; but he, who takes it away, and he who abets the act, dwells as long in hell.
- 66-67. Those who take away land grants are born as black serpents living in dry hollows (of trees) in the wilderness of the Vindhyas.
- 67. The earth was enjoyed by Sagara and others. To him will go the fruit (of the gift) whosoever masters the earth, at whatever time.
- 67-68. This is a common bridge of merit in the case of kings, (bridge of dānadharma with the help of which they can cross the worldly ocean), and (as such) it should be maintained by you. Thus does Rāmabhadra often and often request all the kings to be.

(I am indebted to Profs. S. S. Sukhthankar and N. G. Shinde for the translation of some of the verses.)

¹ Koregaon. ² Sājaņi. ³ Māṇagaon.

Pattana Kodovali.
 Cincavāda.
 Herle.
 Cokāk.
 Mudasinge.

METEOROLOGY IN THE RG-VEDA

By RAO SAHEB MUKUND V. UNAKAR

(Continued from Vol. 9, page 78.)

CHAPTER VI

AHIS AND VRTRAS-ADVERSE DEMONS

- (1) Vrtra-Encompassing Cloud.—It has been mentioned before that adverse meteorological conditions were metaphorically supposed to have been caused by demons. By far the most important of the individual aerial demons of the Rg-Veda is Vrtra who has sometimes the form of a serpent and whose name literally means encompasser, coverer, engulfer, encloser or a swallower of celestial waters. He is called rain-obstructor, rain-withholder and is said to lie beneath the feet of torrents which he encompasses by his greatness. The darkness is said to compass round him. The poet says "There darkness stood, the vault that stayed the waters' flow; in Vrtra's hollow side the rain cloud lay concealed, but Indra smote the rivers which the obstructor stayed, flood following after flood down steep declivities". The rain-obstructor is said to be in mid-air's lowest deep and from the lofty place above, Indra hurls Vrtra down or, as is said in one stanza, shatters into pieces the broad massive cloud. Nothing availed this Vytra, neither lightning nor thunder nor hailstorm nor mist which he had spread round him in his fight with Indra. It will be seen that Vrtra represents a dark overhanging cloud with which the sky is overcast. It is supposed that rain streams lie concealed above this cloud. Indra by his thunderbolt of lightning slays the demon and rain streams flow over the Earth.
- (2) Śambara—Water-Concealing Cloud.—Another meteorological demon is Śambara. The word literally means water-concealer. He is frequently associated with mountain and represents a water-concealing cloud. Once he is connected with autumn.

Thus Indra discovered Sambara in the fortieth autumn as he dwelt among the mountains; he slew Sambara of the mountains, brought Sambara from the mountain down, smote Sambara from the lofty hill. He appears to represent a water-concealing cloud mountain which may lie against the horizon and obstruct light.

- (3) Arbuda—Water-Bearing Cloud.—This demon is described as a watery monster. Indra draws forth the kine of guileful Arbuda from the mountains' hold, and brings down the dwelling place, the height of lofty Arbuda; once Indra is said to have pierced Arbuda with frost. Literally the word means water-giver or water-cutter.
- (4) Vala—Cloud-Rock or Cloud-Ridge.—The word literally means covering or cave. He is a stable of cows or a guardian of clouds. He keeps the clouds confined in a cave which is said to be rich in cows or clouds. Indra rushing against the mountain broke the never-broken ridge of Vala. Vala stole the cows of the gods and hid them in a cave, that is, kept the light and waters imprisoned in dark clouds.
- (5) $\acute{S}usna$ —Hissing and Scorching Wind.—Etymologically the word means hisser or scorcher. He is interpreted as a personification of excessive heat before the rains. As there is a band of Maruts so there is a brood of Susna. Indra with a roar that fills the woods forces down on the winds' head the stores which Susna kept confined. He is a child of the mist, couched in darkness. Indra crushed with his bolt Susna's quick moving castle of clouds. He is sometimes associated with Kuyava, the harvest spoiler. He would also represent the hissing winds which dry up crops.
- (6) Kuyava—Harvest Spoiler.—Etymologically the word means causing bad corn or harvest. He is a harvest spoiler. He is said to cast foam amid the waters. The rivers delight him by bearing milk upon their waters. The foam and the milk appear to represent the thin layer of ice on the surface. The poet then asks for a share of sunlight which would melt the frost and requests Indra to do no harm to the yet unborn offspring, not to rend the unborn brood or the vessels with the life that is within them,

apparently referring to the standing crops. The demon represents winter frost which spoils the yava (barley) crop and which is so detrimental even now to the wheat crop.

(7) General Remarks.—These are the principal meteorological demons; there are others mentioned occasionally but not included here. The first four represent various kinds of clouds which obstruct the rains or light; the fifth is a scorehing wind while the sixth is a plague of harvest.

From the constant association of the cloud demons to mountains or caves or rocks or ridges, it appears that terrestrial mountains were not altogether absent from the minds of the poets. Even now rainfall in the Punjab hills is greater than rainfall in the Punjab plains due to clouds passing over the plains and rising against the hills. The mountains thus become the robbers of clouds or rainstreams. This phenomenon produces over the plains a thin overhanging film of vaporous cloud and fast-moving cloud rocks, or cloud ridges and cloud forts against the horizon, creating drought and obstructing light. Indra's connection with the release of the terrestrial rivers makes this inference about the association of the cloud mountains with terrestrial mountains in the minds of the poets, when they referred to these adverse demons, quite probable. It may be of interest to mention here that Sambara is still the name of a lake in the Aravalli hills and Arbuda is the Sanskrit name for Mount Abu. These hills also even now induce the monsoon rains towards their neighbourhood at the expense of the distant plains.

CHAPTER VII.

FAMINES.

(1) Description of General Famine Conditions.—Direct reference to famine occurs in about half a dozen places while references to indigence, poverty, destitution, hunger are not infrequent. Usurers are condemned. There are occasions when the distress due to famine seems to be considerable. Then the worshippers go to Indra as the only god who can show them grace, set them free from

misery and famine, deliver them from the dire curse and the darkening sorrow and succour them with his help. It is wished that they may subdue all famine and evil want with store of grain and cattle.

- (2) Prayers for Rain.—Rainfall seems to have been ever present to the minds of the Rg-Vedic poets, and prayers for rain are very frequent. Gods are asked to give the balmy rain and sweet plenteous food and to bedew their pasturage with the milk of heaven. Indeed the greatest achievement of the greatest of the Rg-Vedic gods is rainfall and the greatest evil attributed to the greatest demon is his rain-withholding malignity. That drought conditions prevailed frequently in the Punjab is a proposition which does not admit of doubt.
- (3) The Twelve-Year Famine.—Hymn 98 of Book X of the Rg-Veda in which the gods are constantly requested to send down the celestial waters which stood obstructed in the firmament is said to have been based on a legend relating to a famine which lasted for twelve years. The legend is narrated in a treatise on Vedic deities written about 500 B.c., the date of the Vedic hymn being of course uncertain. Also Hymn 112 of Book IX is said to relate to the different occupations which people pursue in times of drought. Such legends indicate occasional occurrence of prolonged periods of distress due to droughts and famines. (See also Chapter IX.)

CHAPTER VIII.

RTUS-SEASONS.

- (1) Significance of the Word Rtu.—The word used to denote the conception of the order of the world is Rta. It connects itself with the alternation of day and night, the regular passage of the sun through the heavens, or the unswerving motion of the rain in its fall from heaven and of the streams along their courses. Everything in the world which is concerned as showing regularity of action may be said to have Rta for its principle. The Rtus or the seasons were thus conceived of as phenomena which were marked by a distinct regularity of occurrence.
- (2) Number of Seasons in a Year—Three, Four, Five, Six.—In later literature, as well as at places in the Rg-Veda, the seasons

are said to be six in number being conveniently commensurate with twelve months of the year, each season extending over two months. Sometimes the seasons are said to be five, by combining the two whose characteristics might have appeared to be similar, or to be four of ninety days each. Also seasons are said to be three only. Traces of a division of the year into winter and summer do not appear clearly in the Rg-Veda.

- (3) Names and Descriptions of the Seasons.—Rains, Autumn, Winter, Spring, Summer.—The Rainy season is the parent season the most important of the seasons. Hymns to Parianya or the rain-cloud god and the reference to frogs and springing up of vegetation leave no doubt as to the character of the season. It is connected with plenteous food and autumnal fruitage. The use of the word Sarad which means autumn as a designation of the year is common in the Rg-Veda because it denotes harvest, a time of overwhelming importance to an agricultural people. The year is also designated by the word Hima which means winter. Winter is said to rob trees of their foliage and the poet is said to cleave close to the gods as to a cloak in winter. The rainy season, the autumn and the winter are the three seasons which are mentioned frequently and with any characteristic attributes. The word for spring occurs only twice in the collection and the word for summer only once without any distinctive attributes. The hymns in which they occur are also later hymns. The word used in the later literature or the dewy season which is the sixth season of the year between winter and spring does not occur in the Rg-Veda though references to dews are frequent. An apparent conclusion seems to be that winter, rains and autumn are the three seasons which attracted the notice of the Rg-Vedic Indians.
- (4) Meteorological Significance of the Changes in the Number of the Seasons.—The growth of the divisions of the seasons from three to five is suggestive of climatic fluctuations; also certain hymns which ignore winter and insist on rains indicate a different place and time of origin from those which refer to winter conditions. To the west of the Punjab and round the frontier hills winter rains are more important, while in the south-east Punjab the monsoon rains are equally valuable and autumns acquire a distinct characteristic. For other seasons there is no distinctive difference between

the weather of the west and the east Punjab. In the west Punjab the distinctive seasons are winter and summer; in the east Punjab the rainy and autumn seasons are equally important. Thus the change in the number of seasons may be due to the changes in the localities on present climatic basis. This does not however preclude the probability of real climatic changes during Rg-Vedic period.

(5) Meteorological Significance of the Frequent Occurrence of the Phrases "Hundred Winters" and "Hundred Autumns".-These expressions occur frequently in connection with long life and prosperity, both being synonymous with the actual span of life of hundred years. Thus the poets wish that they may live a hundred autumns or hundred winters. It has been held by some that the phrase hundred winters refers to hymns which are earlier in point of time and hundred autumns to hymns of later period and that the prevailing climate of the Punjab was cold at first but changed later to conditions under which autumn was of importance. Most of these references have been collected together and it is found that the phrase hundred autumns occurs some 16 times and hundred winters about 14 times. The former occurs some 8 times in Books I and X, and the latter 7 times in Book VI. Autumns are connected indiscriminately with all gods, while winters are connected 7 times with Agni. There appears to be some slight justification for the association of winters with an earlier period, which supports the inference about climatic changes during Rg-Vedic age deduced in Chapter IX. It is natural that an agricultural community would wish to live to eat the fruits of their agricultural labours, and the phrases probably refer to the winter crops and the rainy season crops, being used in the hymns in accordance with their relative importance in sequence of time and change in locality.

CHAPTER IX.

SOME METEOROLOGICAL FEATURES OF PRESENT CLIMATIC CONDITIONS AND REMARKS ON A POSSIBLE DEDUCTION OF A CHANGE OF CLIMATE FROM THE RG-VEDA.

For a meteorological purpose the region of the seven rivers may be represented by Peshawar, Lahore and Ambala; November to April may be called winter and May to October summer. The outstanding feature of present meteorology of the Punjab regions is the recurrence of winter precipitation as well as monsoon rainfall. Winter precipitation amounts to about 58 per cent, of the total annual rainfall at Peshawar, to about 19 per cent, at Lahore and to about 18 per cent, at Ambala. At Peshawar there are 16 rainy days in winter and 10 rainv days in the monsoon season, the respective days for Lahore and Ambala being 9 and 19 and 12 and 31 respectively. It is clear that winter precipitation is a predominant feature in the west, and monsoon precipitation in the east of the Punjab. The incidence of periodic rainfall from year to year is more irregular during winter than during summer. Average wind velocity is generally low with a tendency to less winds in winter than in the monsoon. There are only 3 days in the year when the velocity of the winds exceeds twice the normal amount at Peshawar, 15 such days at Lahore and 59 at Ambala. There are about 27 thunderstorms in a year at Lahore; they are more frequent in the monsoon than in winter, being about 3 to 5 in the mid-monsoon month and about 1 in the mid-winter month. A thunderstorm gives about an inch of rain on an average. So far as actual temperature effects are concerned there are no very striking differences between the west and the east Punjab. Conditions are favourable for the formation of frost in December and January and more so in the west than in the east of the region. It is curious that no prominence is given in the Rg-Veda to actual dust-storm descriptions which are numerous under present climatic conditions. The existence of immense forests is significant in this connection.

These features of the present climatic conditions can be seen more or less in the Rg-Vedic descriptions of various deities, but their historical sequence described in Chapter III, (5) and (6), and their relative importance in the Rg-Veda suggest climatic changes during the period of its composition. Such changes cannot be explained as will be presently seen, by assuming different localities as the places of composition of various hymns. Nor can, as has already been observed in the last paragraph of Chapter V, (6), the small changes in the surface configurations of rivers, sea and desert explain them. For their explanation, therefore, other sources may now be considered.

Climatic changes during historic times have been thought to

be due to cycles extending over long periods of the order of several centuries, a certain set of climatic features prevailing over a set of years in the neighbourhood of the crest of the periodic curve, and meteorologically opposite features prevailing over another set of years in the neighbourhood of the trough of the periodic curve. The period of composition of the Rg-Vedic hymns also extends over several centuries. If these long-period climatic changes do really exist, the apparent differences in the Rg-Vedic descriptions can be explained on this basis. On the one hand the long-period theory would explain the Rg-Vedic climatic differences, while on the other the Rg-Vedic climatic differences would strengthen the validity of an assumption of long-period climatic cycles in meteorological phenomena. Thus the Rg-Veda and the theory of long-period cycles mutually support each other.

This theory of periodic fluctuations in climate offers an opportunity for building up climatic curves from older traditions and literary records and from migrations of people and the waxing and waning of civilisation which may be supposed to have been due to climatic reasons. In 'Climate through the Ages', 1 Dr. C. E. P. Brooks discusses climatic fluctuations and builds up climatic curves for the last 7,000 years over Europe and Western Asia. He finds that conditions of maximum wetness existed about 5000 B.C. and changed from wet to dry from 5000 B.C. to about 2000 B.C. when maximum dryness prevailed. Another such wave, disregarding the minorfluct nations, followed between this date and 500 A.D., maximum conditions of wetness having occurred about 800 B.C. and of dryness about 2000 B.C. and 500 A.D. During this whole period he regards the geographical factors of climate as remaining practically constant and the probable source of climatic changes is sought for in variations of solar radiation. The curve of wetness in Asia agrees closely with that of Europe and considering that they are based on entirely different and independent data the measure of agreement points to widespread climatic changes. It should be remembered in this connection that, so far as the Punjab is concerned, this agreement might refer principally to winter conditions.

The Rg-Vedic evidence for such climatic fluctuations may now be discussed. The meteorological conditions described in the Rg-Veda point to three distinct periods. The first period is dominated by Varuna when rains were more or less peaceful in their incidence, unassociated with lightning and thunder, and were probably regularly distributed throughout the year. This was also a period of cold weather, generally, when the cult of domestic fire worship existed and the Sun was a beneficent deity. The second period is dominated by the Maruts or the storm gods when winter depressions gave copious rains for prolonged periods. The third and the last period was dominated by Indra who had to fight against all adverse conditions of climate, including droughts, and when monsoon rains, as exemplified in Parjanya, were a feature of the Punjab climatology. It is probably because of his being the last in the sequence that Indra is so often thought of in the Re-Veda. Thus during the Rg-Vedic period, a period of little climatic fluctuations was followed by a period of wetness, and this in its turn was followed by a subsequent period of dryness.

In Brooks's climatic curves the change from wet to dry occurred between 850 B.C. to 500 A.D. and from 5000 B.C. to 2000 B.C. Now there is overwhelming evidence in Sanskrit literature to show that the codification of the Rg-Veda took place long before the commencement of the Christian era; under the circumstances, the composition of the Rg-Veda must have taken place not from 850 B.C. to 500 A.D., but from 5000 B.C. to 2000 B.C., as exemplified in the transition from the Maruts or winter depressional storms to droughts and dryness connoted by Indra, and must have extended to earlier periods, as exemplified in Varuna who was one of the oldest of the Rg-Vedic gods and belonged to the Indo-Iranian period.

As Brooks's climatic curves are derived from independent sets of data and as the climatic sequence in the Rg-Veda supports the realities of the fluctuations exhibited in the curves, the correspondence between the two is noteworthy. Incidentally it may be inferred that the evidence of the climatic changes would place the date of composition of the Rg-Vedic hymns to a period extending from 2000 B.C. to about 5000 B.C. or earlier. It remains to be seen whether indications of the wet period about 800 B.C. and the

dry period about 500 A.D. are found in the later Vedas and in later Sanskrit literature.

The interest of this paper lies in the antiquity of the data, in their interpretation, and in the sifting for meteorological purposes of a large amount of Rg-Vedic literature.

The meteorological deductions refer to the modern Punjab and the North-West Frontier Province and the seat of meteorological activity is said to be the middle regions of the firmament with the earth at the bottom and the heavens at the top. The Rg-Vedic hymns contain meteorological information expressed in metaphorical language.

In conclusion I wish to express my thanks to Mr. D. Sankara Narayanan of the Library Section of the Indian Meteorological Department, Poona, for the assistance he has given me in the verification of the Rg-Vedic stanzas in the Appendix from the original Sanskrit text and in the revision of the first draft of this paper. My thanks are also due to the scholars who have kindly gone over my draft copy and given me their remarks or criticisms.

CHAPTER X.

CONCLUDING REMARKS ON THE PRINCIPAL FEATURES OF RG-VEDIC METEOROLOGY.

- (1) In the Rg-Vcda expression is given to regularity in periodic meteorological phenomena with a reference to comparatively peaceful precipitation in descriptions of Varuna.
- (2) The story of the Maruts or the depressional storms now called western disturbances is written with some minuteness and shows a keen perception of meteorological phenomena. The depressional storms are preceded by a red glow in the sky covered with cloud patches, are accompanied with lightning, thunder, destructive winds and copious rains, and are characterised by a rotatory motion and motion of translation from west to east.
- (3) The first burst of the monsoon (Parjanya) is characteristic, being accompanied by thunder, lightning and some wind, and

followed by the springing up of vegetation which is the food of living beings.

- (4) Droughts with overcast skies appear to have been of frequent occurrence and were brought to an end by Indra through some sort of lightning influence after a strenuous meteorological conflict giving rise to rains and river floods.
- (5) Chronologically the peaceful and regular periodic incidence of meteorological phenomena appear to have been followed by their irregular incidence.
- (6) At first depressional storms mostly of the winter type were all-important. Later, descriptions of struggle against drought and acquisition of rain became prominent.
- (7) Sunshine was desired rather than disliked; it is said to be beneficent and not maleficent.
- (8) Fire is said to be omnipresent and, with the waters, is conceived as one of the principal factor of generation; in the form of lightning it is instrumental in the production of rain. It is the centre of domestic life and recalls the drawing-room fireside of cold countries.
- (9) The force of the monsoonal winds is conspicuous by its absence except in connection with the first burst of the monsoon, indicating the occurrence of rainfall only in connection with thunder-storms and depressional storms.
- (10) The initial red glow of the sky is associated with the subsequent destructive agency of lightning.
- (11) The importance of the regular recurrence of the seasons is indicated by their being personified and honoured as deities.
- (12) The commingling of light and water in the firmament is expressed in various ways and an afternoon rainbow is one of the consequences.
- (13) There is a slight justification for believing that lunar effects on the production of rainfall were occasionally present in the minds of the Rg-Vedic poets.
- (14) The graceful and descriptive lyrics in connection with Dawn are of some importance to atmospheric optics; her connection

with variegated clouds, misty skies, morning dews and watery regions of the firmament is of meteorological interest.

- (15) Twilight or possibly Zodiacal light is connected with fresh and sweet and nourishing morning dews.
- (16) The waters are deified and appear to be of primary importance, explaining the frequent occurrence of prayers for rainfall and the inclusion of much meteorological matter in these religious and sacrificial hymns.
- (17) Rivers were also deified; Sarasvati was a mighty river; they were not easily fordable; they started from the mountains, speeding on to the ocean; rainfall was rare in the desert, and springs in the desert were fully appreciated.
- (18) The Rg-Vedic flora and fauna may indicate climatic conditions. The country was covered with immense forests and forest conflagrations were frequent. Agriculture was known and both the winter and the monsoon crops appear to have been raised. Good pasture lands were desired, and herds of cows and horses had value; the tiger was unknown and the elephant was a strange creature.
- (19) Adverse meteorological factors took the form of overhanging cloud sheets or cloud masses unproductive of rain, or scorching or hissing winds, or harvest spoiling frosts.
- (20) Famines were not infrequent; they caused considerable distress and necessitated storage of grain.
- (21) Descriptions of seasons are not striking; their number is variable, being three, four, five or six; rains, winter and autumn are mentioned frequently, while spring is mentioned only twice and summer only once. An indefinite number for the seasons and a frequent designation of the year by winter have led some to postulate a change in climate during the Rg-Vedic age.
- (22) From the foregoing description it is possible to deduce:
 (1) clouded skies with occasional thunderstorm rains in the monsoon season, (2) fairly frequent droughts, scarcity and occasional famines,
 (3) predominance of winter rains and prevalence during winter of greater amount of rainfall and colder conditions, (4) frequent.

dew with occasional frost, (5) indistinctness of spring and (6) less severe summers, during the Rg-Vedic age. The period of several centuries which is covered by the composition of these hymns is so extensive that any long-period climatic changes would introduce such irregularities in the descriptions. Curves of such climatic changes as given by Brooks in his 'Climate through the Ages' accord with Rg-Vedic descriptions and it has been deduced that the period of composition would extend from about 2000 B.C. to about 5000 B.C. or earlier.

APPENDIX

RG-VEDIC REFERENCES WITH A TABLE OF CONTENTS

The appendix contains a list of Rg-Vedic stanzas which have been utilised in writing the text. The stanzas appropriate to each paragraph are enumerated under the heading which specifies it and these may be considered to be my authority for the views contained in that paragraph.

- 2. In the references, the first figure represents the number of the book or 'Maṇḍala', the second figure represents the number of the hymn or 'Sūkta' and the third figure represents the number of the stanza or 'ŖK'. It should be noted that the eleven Vālakhilya hymns which occur in some editions after hymn number 48 of the eighth book are excluded from the serial numbering adopted here so that hymns numbered 49 to 92 in these references correspond to hymns numbered 60 to 103 of the other edition.
- 3. Meteorological matter is scattered haphazard throughout the Rg-Vedic compilation and the present work consists mainly in selecting suitable Rg-Vedic references, in classifying them under principal meteorological events, and in presenting a connected thesis on Rg-Vedic Meteorology. The difficulty of selection is enhanced by the great variety in the mode of presentation of the same theme by various Rg-Vedic poets and by the metaphorical language of the Rg-Veda. In a preliminary work of this kind these circumstances have led me to give a fairly large number of references even at the risk of redundance. Thus in some places a whole meteorological idea in the text would be expressed by more than one stanza while at other places the idea would be fitly expressed by a portion of the stanza only; occasionally the Rg-Vedic stanza though apparently unintelligible by itself would be found to give the proper meaning if interpreted with reference to the Rg-Vedic context. Generally my interpretations are supported by notes on the stanzas by one or other of the European Vedic scholars.
- 4. In spite of these difficulties it will be found that the meteorological idea contained in a paragraph is supported by the collective evidence of the Rg-Vedic references pertaining to that paragraph; and it is hoped that the paper as a whole will be found to represent correctly the meteorological features of the Punjab area as obtained from the Rg-Vedic references. It is also hoped that Meteorologists will have little difficulty in appreciating the phenomena which are expressed in modern meteorological language and in following my views and conclusions.

CHAPTER I.—PREFACE.

- (1) Interest of the work.
- (2) Sources of information.
- (3) Arrangement adopted.
- (4) Limits of inquiry and lines of further work.

CHAPTER II.-INTRODUCTION.

- (1) Extent of the Rg-Veda.
- (2) Antiquity of the Rg-Veda. (6.21.5) (3.32.13) (5.31.6) (7.29.4) (10.92.10).
- (3) Geographical limits of the Rg-Veda. (See Chapter V 6 infra.)
- (4) General nature of Rg-Vedic Gods.
- (5) Rg-Vedic cosmogony. (8.10.6) (7.6.7) (1.124.5) (8.89.9) (10.158.1) (1.139.11) (10.121.5).
- (6) Rg-Vedic cosmology. (4.56.3) (10.121.1) (10.121.7) (10.123.1) (1.164.35) (1.164.50) (10.90.8).
- (7) Nature of Rg-Vedic data.
- (8) Meteorological metaphors of the Rg-Veda. (8.89.9) (5.31.3) (1.164.41) (1.164.42) (10.73.9) (1.64.5) (5.85.4) (8.7.10) (7.64.1) (3.55.17) (3.55.13) (8.32.25) (1.51.4) (1.11.5) (1.32.11) (1.32.8) (2.17.1) (4.1.15) (8.7.7) (1.131.4) (9.108.65) (2.19.3) (6.17.6) (6.66.1) (1.166.6) (5.62.7) (8.33.11) (4.3.7) (5.54.12) (1.168.8) (1.79.2) (1.37.10) (6.66.10) (1.157.4) (5.77.3) (4.45.3) (3.62.16) (7.64.1) (5.62.4).

CHAPTER III.—PRINCIPAL METEOROLOGICAL DEITIES.

- (1) Varuna-The encompassing sky.
 - A Connection with all-pervading law. (1.25.10) (1.25.11) (7.34.11) (6.70.1) (1.24.10) (1.25.9) (1.25.7) (1.25.8) (7.66.11) (5.66.1).
 - B Connection with waters and water vapour. (1.161.14) (9.73.3) (2.38.8) (9.90.2) (5.85.6) (2.28.4) (1.184.3) (7.64.1) (5.62.4) (5.85.3) (5.85.4) (7.62.5) (3.62.16) (8.25.6) (7.65.4) (8.58.12).
 - Connection with regular and periodic rains. (5.62.3) (7.64.2) (5.63.1) (5.63.2) (5.63.3) (5.63.4) (5.63.5) (5.63.6) (5.63.7).
 - D Chronological position of Varuna. (5.62.4) (1.184.3).
 - E Meteorological interpretation of Varuna.
- (2) Maruts-Depressional storms.
 - A Birth and Precursors. (5.52.16) (2.34.2) (1.168.9) (8.83.1) (8.83.2) (3.26.4) (1.39.6) (8.7.28) (5.58.7) (1.134.4).
 - B Connection with lightning and thunder. (6.66.2) (1.172.1) (8.7.25) (1.168.5) (1.37.2) (1.23.12) (1.168.8).
 - C Connection with winds. (8.7.3) (6.66.10) (1.23.11) (10.78.3) (5.56.3).
 - D Connection with rain. (1.64.11) (1.19.7) (1.87.2) (1.38.9) (5.59.5) (5.54.3) (1.85.5) (5.55.5) (1.37.10) (1.37.11) (8.7.10) (1.168.8) (5.53.6) (6.49.11).

- E Connection with destruction. (8.7.4) (1.39.5) (1.64.7) (1.166.5) (1.39.3) (7.56.9) (5.54.6) (7.57.4) (1.166.6).
- F Revolving motion. (5.58.5) (8.7.35) (5.59.6) (8.20.14) (10.78.4) (5.53.11) (7.56.3).
- G Motion of Translation. (5.52.3) (5.55.1) (2.34.5) (8.20.18) (5.54.10) (6.66.7) (5.59.2) (7.56.2) (5.61.1) (1.167.2) (8.20.1) (8.7.7) (5.53.8).
- H Western origin. (5.53.9) (10.78.6) (8.20.24) (5.52.9) (8.20.25) (8.20.26) (8.83.12) (5.58.8) (5.55.7) (8.7.14) (5.56.4) (8.7.5) (8.7.34).
- I Meteorological interpretation of the Maruts. (5.53.1).

(3) Parjanya-Rain-cloud.

- A Description and Association. (5.83.1) (5.83.5) (1.164.51) (5.53.6) (1.38.9) (7.101.4) (5.83.8) (7.36.3) (5.83.3) (5.83.7) (5.83.10) (7.103.1) (7.103.9) (5.83.9) (5.83.2) (7.101.3) (5.83.10).
- B After effects of Parjanya rain. (5.83.4) (7.103.3) (7.103.7)
- C Connection with gods of European countries.
- D Meteorological interpretation of Parjanya.

(4) Indra-The successful fighter.

- A Necessity of Indra.
- B The great mythical fight with the demons. (1.32.11) (1.32.1) (1.52.8) (6.24.6) (1.80.4) (1.80.5) (1.32.7) (6.25.4) (10.112.8) (2.11.6).
- C The fight against adverse meteorological factors—cloud mountains, cloud rocks, cloud forts. (2.11.9) (1.133.6) (2.11.5) (1.57.6) (6.17.5) (8.53.5) (1.80.8) (3.54.20) (8.1.28) (2.14.6) (5.32.1) (1.57.2) (6.39.2) (8.85.2) (1.51.4) (1.174.2) (1.131.4) (7.19.5) (2.19.6).
- D Release of rain streams. (4.17.2) (4.19.7) (1.61.10) (1.10.7) (6.17.5) (6.43.3) (5.30.4) (8.32.25).
- E Release of light beams. (8.78.4) (2.19.3) (1.52.8) (1.51.4) (6.32.2) (6.17.5) (6.17.6) (4.16.9).
- F Release of river floods. (4.19.8) (10.111.9) (10.111.10) (5.32.2) (3.33.6) (10.89.7) (1.32.12) (2.12.12) (1.32.2) (2.19.3) (1.32.1) (4.17.1) (6.32.5) (8.85.1) (8.85.2) (8.85.18).
- G Help in earthly battles. (3.34.9) (1.130.8) (10.42.4) (6.46.11) (7.30.3).
- H Indra's appearance and power. (10.96.3) (10.96.4) (10.22.5) (3.30.5) (6.24.7) (1.80.15) (2.12.2) (2.17.5) (10.44.8) (2.12.3).

- I Indra the supreme God of Rg-Vedic Indians. (7.32.16) (10.47.8).
- J Meteorological interpretation of Indra.
- (5) Indra-Varuna—change in their relative importance during the Rg-Vedic age.
 - A Historical account.
 - B Account in Rg-Vedic hymns of rivalry and adjustment. (4.42.2) (4.42.4) (4.42.5) (4.42.6) (4.42.7) (10.124.3) (10.124.4) (10.124.5) (7.82.5) (7.82.6) (7.83.9).
 - C Meteorological interpretation of the accounts. (10.75.2) (3.33.6).
- (6) Indra-Maruts—change in their relative importance during the Rg-Vedic age.
 - A Accounts in Rg-Vedic hymns of their friendship and rivalry. (5.42.6) (1.52.15) (5.30.6) (3.32.4) (10.73.1) (1.100.3) (1.101.2) (5.31.10) (8.85.7) (1.170.2) (1.170.5) (1.171.4) (1.171.6) (1.165.6) (1.165.7) (1.165.8) (1.165.9) (1.165.11) (1.166.12).
 - B Meteorological interpretation of the account

CHAPTER IV.—MINOR METEOROLOGICAL DETTIES.

- (1) Savitar-Sūrva—the Sun-God.
 - A General nature: Connection with heat, cold and waters. (7.63.4) (1.86.10) (3.23.4) (10.70.1) (9.107.20) (10.59.5) (10.37.10) (9.4.6) (8.18.9) (6.59.8) (5.44.7) (6.15.5) (7.34.19) (6.16.38) (2.33.6) (8.12.9) (4.53.5) (2.38.2) (1.164.7) (4.38.10) (1.164.47) (3.33.6).
 - B Meteorological remarks.
- (2) Agni-God of Fire and Light.
 - A Sacrificial importance, (7.11.3) (4.8.4) (4.2.3) (8.49.1) (10.2.4) (6.13.1) (2.6.5) (10.88.10) (3.27.9) (10.91.6) (1.70.2).
 - B Triple character. (5.3.1) (5.13.6) (3.26.7) (10.45.1) (10.7.3) (5.3.3) (3.29.11) (1.95.3) (8.43.28) (10.91.5) (10.8.1) (1.39.9) (9.76.3) (9.100.3) (1.116.12) (1.79.2) (2.1.1) (3.1.12) (10.45.3) (10.30.4) (8.44.16) (7.94.1) (6.59.2) (10.32.6) (8.38.2).
 - C Connection with the seasons. (1 95.3) (10.2.1) (10.2.3) (3.20.4) (5.12.3).
 - D Domestic connections, (7.15.2) (6.48.8) (10.91.2) (2.4.3) (5.18.1) (10.127.6) (10.88.6) (10.7.3) (1.75.4) (1.31.1) (1.71.10) (3.1.15) (5.8.2) (10.46.3) (7.9.3).
 - E Meteorological remarks.

- (3) Vāyu-Vāta-the Wind God.
 - A General character. (10.168.3) (10.168.4) (10.168.1) (10.97.13) (7.35.4) (1.135.9) (1.134.3) (4.46.1) (1.122.3) (1.134.4) (2.11.14) (6.49.6) (7.40.6) (5.83.4) (4.17.12).
 - B Allusion to two winds. (10.137.2) (10.136.5) (2.39.5).
 - C Meteorological remarks.
- (4) Rudra-The ruddy roarer of heaven.
 - A General character. (1.114.6) (1.43.5) (1.114.5) (1.114.8) (1.114.10) (1.114.11) (2.33.14) (6.28.7) (1.114.9) (2.33.1) (2.33.12) (2.33.13).
 - B Meteorological remarks.
- (5) Rbhus and the Seasons.
 - A General remarks. (1.15) (6.52.10) (4.51.6) (4.34.2) (1.110.4) (4.36.4) (4.33.7) (1.161.11) (4.34.9) (4.36.3) (1.111.1).
- (6) Miscellaneous deities connected with fire, water and their mingling.
 - A Mātariśvan—Celestial carrier of fire or light. (3.9.5) (1.143.2) (1.141.3).
 - B Trita Aptya—Watery third-fire. (5.9.5) (1.105.9) (8.12.16)
 - C Ahirbudhnya—Dragon of the Deep. (7.34.16) (7.34.17).
 - D Apāmnapāt—Child of the waters. (10.30.4) (2.35.3) (2.35.4) (1.95.4) (1.95.5).
 - E Gandharva-Vena—Rainbow or cloud spirit. (10.123.1) (10.123.2) (10.123.5) (10.123.7) (10.123.8) (8.66.5).
 - F Dadhikra—Divine horse of the morning sun. (4.39.1) (4.39.3) (3.20.1) (7.44.4).

CHAPTER V.-QUASI-METEOROLOGICAL DEITIES.

- (1) Soma—The drink of the gods.
 - Terrestrial Soma, Celestial Soma, Moon-God. (9.109.15) (9.104.5) (9.88.6) (9.103.3) (9.114.2) (9.113.3) (9.110.8) (1.80.2) (9.38.5) (9.3.7) (9.41.3) (9.39.2) (9.74.7) (9.97.17) (9.108.10) (9.27.5) (9.85.9) (10.85.2) (9.79.4) (1.91.22) (9.64.8) (9.69.5) (9.97.9).
- (2) Indra-Soma: Their connection. (9.23.7) (1.80.2) (8.81.5) (3.43.7) (10.119.2) (9.86.22) (6.34.4) (9.37.3) (1.91.21) (9.87.9) (9.108.6).
- (3) Uşas—Dawn. (4.52.2) (5.59.8) (1.124.5) (6.64.4) (10.110.6) (7.75.7) (3.61.5) (4.30.9) (4.30.10) (10.138.5) (2.15.6).
- (4) Aśvins—Twin heralds of Dawn. (7.72.5) (4.43.5) (4.45.2) (1.22.1) (8.22.1) (4.45.4) (1.157.5) (4.45.3) (10.40.6) (8.9.5) (10.39.3) (1.22.3).

- (5) Āpaḥ—Waters. (7.49.2) (10.111.8) (7.47.4) (10.17.10) (1.23.21) (10.137.6) (6.50.7) (1.23.18).
- (6) Rivers: with incidental reference to mountain, sea and desert. (10.75.5) (10.75.6) (10.75.8) (6.61.14) (6.61.8) (6.61.2) (7.95.1) (8.47.11) (8.72.3) (3.33.9) (3.33.1) (3.33.2) (10.75.2) (3.33.6) (3.54.20) (5.61.19) (10.121.4) (10.69.6) (7.34.23) (7.95.2) (1.71.7) (18.16.2) (8.6.4) (1.116.3) (1.116.4) (1.116.5) (7.88.3) (10.47.2) (1.25.7) (8.64.9) (10.63.10) (10.101.2) (5.53.6) (4.17.2) (4.19.7) (4.33.7) (5.83.10) (1.38.7) (10.4.1) (6.34.4) (5.36.1) (10.86.20) (1.35.8).
- (7) Forests—Fields—Animals. (10.146.6) (10.146.5) (6.60.10) (10.142.4) (1.58.5) (4.4.4) (8.60.12) (4.57.7) (4.57.3) (4.57.8) (10.101.3) (10.34.13) (10.26.3) (10.43.7) (1.117.21) (3.52.8) (10.94.13) (8.66.6) (10.169.1) (6.28.7) (1.29.6).

CHAPTER VI.-AHIS AND VRTRAS-ADVERSE DEMONS.

- (1) Vrtra—Encompassing cloud. (6.20.2) (4.19.2) (2.14.2) (1.32.8) (10.113.6) (1.54.10) (1.32.10) (1.32.11) (1.51.4) (1.52.6) (8.3.19) (1.57.6) (1.32.13) (4.19.3).
- (2) Sambara—Water concealing cloud. (2.12.11) (6.26.5) (1.130.7) (2.14.6) (4.30.14) (3.47.4).
- (3) Arbuda—Water bearing cloud. (10.67.12) (8.3.19) (8.32.3) (2.14.4) (8.32.26).
- (4) Vala—Cloud rock or cloud ridge. (10.67.6) (1.11.5) (3.30.10) (2.14.3) (6.39.2).
- (5) Suspa—Hissing and scorehing wind, (8.40.10) (8.40.11) (1.54.5) (4.30.13) (5.32.4) (8.1.28) (2.19.6) (4.16.12).
- (6) Kuyava—Harvest spoiler. (1.104.3) (1.104.4) (1.104.6) (1.104.8).
- (7) General remarks.

CHAPTER VII.-FAMINES.

- (1) Descriptions of general famine conditions. (8.18.11) (3.8.2) (3.53.15) (1.38.6) (3.16.5) (7.1.22) (7.1.19) (1.53.4) (10.33.2) (8.67.10) (8.55.10) (8.55.14) (8.55.15) (10.42.10) (10.43.10) (10.44.10).
- (2) Prayers for rain. (5.63.4) (6.70.5) (6.70.6) (7.64.2) (7.65.4) (7.101.1) (8.7.13) (8.25.6) (9.39.2) (9.49.3) (9.65.24) (9.97.17) (9.106.9) (1.85.11).
- (3) The Twelve-year Famine. (10.98.1) (10.98.4) (10.98.8) (10.98.10) (10.98.12) (9.112.1) (9.112.2) (9.112.3) (9.112.4).

CHAPTER VIII.—RTUS—SEASONS.

(1) Significance of the word Rtu. (10.190.1) (10.190.2) (10.190.3) (7.66.11) (1.105.16) (4.53.7) (1.95.3) (10.85.18) (1.25.8) (1.105.12) (3.20.4).

- (2) Number of seasons in a year.—Three, four, five, six. (1.164.15)
 (8.57.14) (1.23.15) (1.164.11) (1.164.12) (1.164.13) (3.55.18)
 (1.155.6) (1.164.2) (1.164.48) (3.56.3).
- (3) Names and descriptions of the seasons.
 Rains, autumn, winter, spring, summer. (2.13.1) (7.103.9) (7.103.10) (7.37.7) (1.173.3) (10.68.10) (1.34.1) (10.161.4) (10.90.6).
- (4) Meteorological significance of the changes in the number of the seasons.
- (5) Meteorological significance of the frequent occurrence of the phrases "Hundred winters" and "Hundred autumns". (1.64.14) (2.33.2) (5.54.15) (6.48.8) (1.73.9) (2.1.11) (6.4.8) (6.10.7) (6.13.6) (6.17.15) (6.24.10) (9.74.8) (10.161.4) (6.12.6) (7.101.6) (10.161.2) (10.161.3) (10.161.4) (1.89.9) (10.18.4) (2.27.10) (3.36.10) (7.61.2) (7.68.16) (10.85.39) (6.47.17) (1.179.1) (7.37.7) (1.86.6) (6.24.7).
- CHAPTER IX.—Some Meteorological Features of present climatic conditions and remarks on a possible deduction of a change of climate from the Rg-Veda.
- CHAPTER X.—Concluding Remarks on principal features of Rg-Vedic Meteorology.

SOME EARLY RECORDS ON BOMBAY

By D. B. DISKALKAR

The acquisition of Bombay by the English from the Portuguese, based on article eleven of the treaty of marriage dated the 23rd of June 1661, between the King of Great Britain Charles II and the Infanta of Portugal, D. Catherina, sister of the King of Portugal D. Alfonso VI, forms one of the most remarkable episodes in the history of Bombay. The importance of such a magnificent natural harbour as Bombay can best be appreciated by a maritime people like the British and as early as 1625 A.D. the English cast a glance on Bombay which was then in the possession of the Portuguese who had obtained it from the Sultan of Gujarat on the 23rd of December 1534. Accordingly with the Dutch aid they invaded the island on the 13th of October 1626 and pillaged the town and set fire to the Great House and Castle of the Portuguese.1 But suddenly they abandoned the place for fear of being surprised by the Portuguese. In 1640 Bombay is mentioned as the best place on the Western India Coast for a Station of the East India Company. Oliver Cromwell during the protectorate in 1645 attempted to get possession of it. And in 1659, only two years before the abovementioned treaty of marriage was signed, the Surat Council had recommended to the Directors of the East India Company that an application should be made to the King of Portugal to cede them some place on the West Coast, Danda Rajapuri, Bombay or Versova.2

In accordance with the treaty of marriage the English King Charles II despatched in March 1662 a fleet of five men of war, under the command of the Earl of Marlborough. He also appointed Sir Abraham Shipman as Governor of the island and entrusted five hundred troops under his command. The English fleet arrived in Bombay on the 18th of September and demanded the cession of the island and its dependencies. But the Portuguese Governor

¹ Origin of Bombay by Dr. J. G. Da Cunha, JBBRAS, extra number, p. 160.

² Ibid., p. 242

or the Captain of Bassein refused to deliver the island on the ground that he had received no orders from Portugal to that effect. Admiral and the Commander then applied to Sir George Oxenden, the British President at Surat, for permission to land the troops at Surat but the latter declined to do so for fear of giving offence to the Moghal Governor there who, he thought, might seize the Company's investments and expel them from the fort.1 Although the English authorities at Surat knew that the sympathies of the people of Bombay and the adjoining places in the Konkan were towards the English as they were extremely dissatified with Portuguese rule and they had offered help to the English in case they would invade the island,2 they did not think it proper to use force and would offer no help to the English fleet that had come from England. The Earl of Marlborough, accordingly, returned in disgust to England and Sir Abraham Shipman sailed down and landed at the unoccupied island of Angediva, to the south of Goa, where during the following eighteen months three hundred of his men died owing to the deadly effects of climate and the searcity of provisions. Before November 1663 of all the commissioned officers which Sir Abraham brought out from England with him there were not more than three remaining alive '.3

Meanwhile Antonio de Mello de Castro, Viceroy of the King of Portugal over the Portuguese possessions in India, who was loth to part with Bombay, wrote from Goa on the 28th December 1662 representing to Alfonso VI not to part with Bombay, which he declared was the best port of His Majesty's possessions in India, with which even Lisbon could not be compared and on which their prestige and trade in India depended. He also suggested to his King that even if His Majesty had completed the gift of the island, it should be purchased back from the King of England by paving him any amount he demanded.

¹ Ibid., p. 243.

² Indian Factory Records Vol. XI, p. 144, Gary's letter to Home Government; also Oxenden's letter to Lord Arlington of a late date—6 March 1665.

³ See Gary's letter No. 4 published below.

⁴ Ibid., p. 339, and Origin of Bombay, p. 248.

The Portuguese Viceroy, no doubt true to his nation, did not realise that Portugal ceded Bombay at a time when her political existence was at stake and when the peace of Pyrenees had revived the danger of Spanish invasion; she was moreover at war with the Dutch and her devastating war with Spain and the United Netherlands had brought her to the verge of bankruptcy. The Portuguese King, when he agreed to cede Bombay to the British King, had made a secret treaty with him by which the King of Great Britain bound himself to exert his whole strength and power to help the Portuguese King in his hour of emergency.

In reply to the letter the King of Portugal wrote to his Viceroy on the 8th of February 1664 2 'whatever is stipulated in the capitulations and reasons for giving contentment to the King, my brother, admits of no doubt; and I trust you will carry out my instructions without further delay.'

On the receipt of this letter from Portugal Antonio de Mello de Castro, learnt that Sir Abraham Shipman in whose name the cession was to be made had died at Angediva on the 6th of April 1664 and found an excuse for further delay in the affair till he was satisfied that Mr. Humphrey Cooke, whom the deceased Sir Abraham Shipman had duly nominated, was a competent man to take delivery of the island. Accordingly he drew up on the 26th of December 1664 a statement of the case and appointed a Commission to make the delivery of the island. The Commission left Goa on the 17th of January 1665, reached Bombay on the 11th of February and after a new treaty consisting of fourteen articles was signed, though unwillingly, by Humphrey Cooke the island and harbour of Bombay was duly handed over to him on the 18th of February 1665.

Although the island of Bombay was regularly delivered, the question of its boundaries still called for some discussion and at last all the villages of Mazagao, Parella, Varli, Mahim, Siao, Dharavi

¹ Journal of Indian History Vol. I, pt. 3, Sept. 1922., p. 448.

² Dr. Shafaat Ahmed Khan gives the date as Aug. 10, 1663. Ang-Port Negotiations, p. 455.

^a J. I. H. Vol. I, p. 459. ⁴ 1bid., p. 462. ⁵ Origin of Bombay, p. 257.

and Vadala were taken possession of by the English as belonging to the territory of the island of Bombay. The Bombay island thus at last became a possession of the British Crown and was attached to become a part of the Royal Borough of Greenwich and Mr. Humphrey Cooke became in fact the first Governor of Bombay, subject to the British King and independent of the President of Surat of the East India Company.

The Portuguese Viceroy, as was natural, made frequent complaints to his King against the excesses of Humphrey Cooke and curiously enough the British Government also were highly dissatisfied with his measures. He was accordingly removed and Sir Gervase Lucas was appointed to succeed him from the 5th of November 1666 but unfortunately he died shortly afterwards on the 21st of May 1667.

Captain Henry Gary who had long been in the service of the East India Company and was a deputy of Sir George Oxenden, the President of Surat, was now appointed by the King to be the Governor of Bombay from the 25th of May 1667.

But Gary could not long enjoy his post and Bombay was destined to undergo another transfer from the British Crown to the British East India Company. The following were the reasons:—

The Governor of Bombay was in those days placed in a very difficult position. As the island of Bombay was leased to the English against their wishes and interests, the Portuguese officials, whose possessions, included Bassein, Salsette and other places in the neighbourhood of Bombay could never forgive the loss of this important port and were constantly at variance with him and frequently made complaints against the British Governor to the Home Government. Charles II, though determined not to give back Bombay island at any cost, wanted to avoid displeasing the Portuguese as far as possible in minor details and the complaints of the Portuguese officers were referred back to the Bombay Governor. Another difficulty with the Bombay Governor was that being appointed by the British King to govern his own possessions he was not a subordinate of the Eust India Company's President at Surat and consequently the relations between the Bombay and Surat officials were often far from cordial, one of the chief points in dispute being the granting of passes to native ships. The beginnings of this friction could be perceived even in the Governorship of Cooke who in his letter of March 1665 complains of Sir George Oxenden, the President of Surat. 1 A similar misunderstanding sprang up between Sir G. Lucas, the Governor and Sir George Oxenden, the President of Surat, and though a reconciliation had taken place between them for some time, the trouble was brought to a head in the time of Henry Gary. It was now clear to King Charles II and no less evident to the Company that the existence of two independent authorities within the same sphere would endanger ceaseless strife and continual bickering. 2 The offer of the East India Company to take over Bombay thus fell on willing ears and the King decided to approve of the transfer. Accordingly on Wednesday, the 23rd of September 1668, Captain Henry Gary, the officiating Governor of Bombay, handed over the charge of Bombay to the Commissioners appointed by the Council at Surat. Henceforward Sir George Oxenden, President at Surat, became also the Governor of Bombay and the full sovereignty of the island which had been acquired by Charles II from the King of Portugal was transferred to the East India Company.

The foregoing short account of the transfer of Bombay first from the King of Portugal to the King of England and then from the latter to the English East India Company will be helpful for the proper understanding of the seven letters of Henry Gary dated 1662 to 1668, the accounts of Bombay for the period between 22nd May 1667 and 23rd September 1668 transacted by Henry Gary, and the Representation the Governor and Company of Merchants of London trading to the East Indies concerning Bombain made to the Right Hon'ble the Lords of the Committee for Trade and Plantations, which are published below. These MSS, were acquired by the late R. B. D. B. Parasnis and have been preserved in the Historical Museum at Satara. Although a large number of documents relating to the cession of Bombay and to its early history have been so far published, these MSS, have their own interest.

The seven letters of Henry Gary are autograph transcripts or duplicates very closely written and extend to some 13 folios.

They are written in a fantastic style characteristic of Gary which is only intelligible with a considerable difficulty. The letters are in most cases signed by Gary and were evidently sent by him in duplicate by later vessels in case the originals were lost and one of the letters bears the endorsement of the recipient. One of the seven letters was written from Goa, four from Surat and two from Bombay. The name of the person to whom they were addressed is not recorded but it is probable that they were written to Lord Arligton, the Secretary of State in London, to whom a number of Gary's letters written in the same vein are addressed.

In addition to these seven letters a few more letters of Gary have been published in *The English Factories in India* edited by Sir William Foster, and two more in the *Journal of Indian History* edited by Dr. Shafaat Ahmed Khan. A number of other letters of his which are referred to in these published letters require to be traced and published.

From these letters it seems that Henry Gary was a man of unusual energy and great diplomacy, though he appears to have been much misrepresented, not only by the unfriendly Portuguese but by his own people, chiefly by his superior officer Sir George Oxenden, the President of Surat. It was even stated that Gary was not a pure Englishman by extraction. He was born in Venice and was popularly supposed to be of non-English origin. But that he was born of English parents is made clear by himself. In one of the following letters he says, 'Sir Geo Smith in his (i.e. President Oxenden's) esteem is noe better than wee and because hee was not borne in England ordinarily calls him Lapland; this is one and the only reasone hee sayeth that I am not beloved but extreamly hated by all menn here my parents having given me my birth in Venice.'

Gary was not in the good graces of Sir George Oxenden, the British President of Surat, under whom he was working. Each writes spitefully of the other. Oxenden spoke of Gary as being a man of 'unadvised vaine glorious boastings.' Gary in return writes of Oxenden in one of the following letters as follows: 'Doubtlesse so greate an hypocritt lives not uppon the face of the whole earth; nor a more prouder man and so damnable imperious that uppon the receipt of some unpleasing lines from the Company the best

langwage her afoards them is Doggs; to us theyr servants in generall knaves, Rogues and Rascalls.' He was so much displeased with Oxenden's treatment and was so much disappointed that in one letter he wrote thus—'I never expect to have any employmt given me in this comp^s service so long as S^r. Geo Oxenden is theyr Presid^t, hee having noe manner of kindnesse for me but rather to the contrary.' But Gary was in the good graces of the authorities at Home and even of the Queen to whom he makes a frequent reference in his letters. Probably because of this influence in England he was appointed on 25th May 1667 by the King of England to officiate as Governor of Bombay on the sudden death of Sir G. Lucas. When Gary was made Governor of Bombay the enmity between him and Oxenden seems to have been increased and Gary even accuses Oxenden to have barbarously taken money from his wife in his absence.

Gary was a highly educated man. He was proficient in the principal European languages. He was well versed in Portuguese and his chiefest employment at Surat was writing and answering of letters in Portuguese for the President. He seems to have made a deep study of the classical languages and his letters are full of quotations from the classics. A report goes that he had dedicated a treatise in Arabic to the Portuguese Viceroy of Goa. But this seems improbable as the Viceroy was not in good terms with him. Gary's letters are written in a peculiar vein in quaint old-fashioned English and are not easily intelligible.

Dr. Fryer has rightly described Gary as 'a person of a mercurial Brain a better merchant than a soldier.' Gary seems to have sometimes looked for his own interests. One of the following letters shows that he expected some compensation from the Hon. Company for procuring the grant of Bombay to them from the British Crown. In announcing the transfer to the Secretaries of State Lord Arligton and Sir Joseph William he remarked that though the unexpected change had much troubled him he hoped that they would make the Government and the Committee of the East India Company sensible of his fidelity and that he was deserving of remuneration. But there can be no doubt that he had always worked hard for the prosperity of Bombay and his nation. From a MS. published under section B below and which gives the

account of the income and expenditure of the island of Bombay from 22nd May 1667 to 23rd September 1668 it seems that he had begun to fortify Bombay but had to leave the work incomplete as the island was handed over to the East India Company. In a letter dated Bombaim the 11th October 1668 (No. 7) he states 'Had not His Majesty parted with this (i. e. Bombay) island I would have fortified the place in lesse than two yeares very substantially with stone and lime.' His chief ambition, however, was to develop the port of Pen into a great commercial centre forming a connecting link between Northern and the Southern India. With this object he made friends with Abdullakhan, the Moghal Subha at Kalyan-Bhivandi, and with the minister Mirza Karim Beg and the Prince Moazzim, the son of the Emperor Aurangzeb. But because of his loss of the Governorship of Bombay on its transfer from the British Crown to the President of Surat and partly because of the peculiar nature and quarrels with Oxenden he could not achieve anything.

But one is amused to see Gary, with all his solicitude for material gain for himself and his nation, speaking in the following sanctimonious terms in one of his letters about the great fire of London which he attributes to the sinfulness of the people of London.

"The first memorable that I shall ensist upon is the dreadful damage done us by the Easterly winde who will make us alter the Proverb, Omne malum ab Aquilone, and put ab Euro instead of it. The truth of it is I believe no chronicle can paralell so dismall a judgment as that upon the Cittie of London, when for its great and before unheard of sinners and daring, provocations it pleased God to lett out himself upon them who is a consuming fire. I pray God to the consumtion of sins as of houses."

As regards the career of Gary he seems to have been at first a Captain in the British army at Surat but was subsequently made a councillor at Surat in 1662. In the letter No. 1 published below he writes thus of his promotion—'The President (i.e., Oxenden) had admitted me into the Councill and confirmed me Grace Purcer, 1 though it was no other but trash which hee did upon presenting

¹ This is an obscure term. Perhaps it may be compared with "Grass Widow" for which see *Hobson Jobson*.

him with a gold cupp of 60 £ value.' Upon the sudden death of Sir Gervase Lucas Gary was appointed by the British king his Governor over the island of Bombay from 25th May 1667. On 23rd September 1668, however, when the island of Bombay was transferred by the British king to the British East India Company and consequently when the President of Surat became also the Governor of Bombay and had appointed one Captain Young as his Deputy at Bombay, Gary had to revert to his former position of a mere councillor. His later career is not sufficiently known, though we find a few of his letters dated in 1668 and 1670 written by him from Bombaim. The name of Gary is also not found among the English ambassadors who were sent from time to time to Shivaji to negotiate with him probably because he had held and unfriendly attitude towards Shivaji and the Marathas.

B. Accounts of Bombay for the period between 22nd May 1667 to 23rd Sept. 1668 transacted by Henry Gary.

The second MS. on Bombay acquired by R. B. Parasnis consists of 33 folios and is in the hand of Henry Gary and is twice signed by him. It is entitled "Accompt Generall of His sacred Ma'ties receipt and revenue of His Port and Island of Bombaim begunne the 22nd May 1667 continued and transacted by Henry Gary, Esqr., to the 23rd September 1668 the day it was transferred to the Hon'ble Easte India Company" and relates to the account in connection mainly with the Garrison, Fortifications and Defence.

Fo. 1	Bombaim Garrison Annis Dommini 1667-68.	£	8.	d.
	Accompt Generall of His Ma'ties receipt and revenue of His Port and Island of Bombaim begunne the 22nd May 1667 continued and transacted by Henry Gary, Esqr., to the 23rd September 1668 the day it was transferred to the Hono'ble East India			
	Company viz.: Remayned at Sr. Gorvaso Lucas his Decease where			
	w'th I charge myselfe, the following particollars viz: The Pynke Chest-nutt on w'ch			
	Sr. Gervase had expended £ 157:07:03 The Sloope w:ch. I esteeme to		İ	ļ
	be worth £ 67:10:00 The Baloone or Pynace as shee			1
	cost His Ma'ty £ 15:01:01 Houses two valued and delivered			
	up by Mr. Cooke at £ 218:15:00 Jewells being 109 ruff Diamonds			
	ammounting to £ 568:02:08			i
	A Parcell of saile Cloth importing. £ 10:10:00		1	í
	Ready mony the summe of £ 388:11:06]			
	Plate to the ammount of £ 205:06:06			١,
		1631	04	, 0

Fo. 1	Bombaim Garrison Annis Do	mm	ini 1667-	68.	£	8.	d.
	Received for Coconuts as p my receipts given	x	33150 :	1:48			
	receipts appeares Received for the stanck of To- bacco to y'e 8th Octob : as p	X	18920 :	0:19			
	my receipts	X	14662:	1:40			
	the Tavernes as p my receipts Received the Rents of Bombaim	X	3224:	1:40			
	as p my receipts given Received the rents of Mazagaon	X	6776 :	0:54	ļ		•
	as p my receipts appeares Received the rents of Mahim and	X	7701 :	1:25	1		
	its Jurisdiction as p receipts Received the rents of Verulin as	X	8253:	1:36		ļ	
	p receipts	X	210:	0:49			
	acco. etc. but passed no receipt.	X	591 :	1:40	108	2	09
	Received of Mudan Kissengee etc. for Batte; for w'ch gave noe						
	Received rent for the Island of	Х	375 :	1:16			
	Patteccas, but passed noc. rect: Received from Persia on accompt of the 20 bales sent thither by Sr. Gervase Lucas w'ch hee	X	21 :	0:00			
	charged to contingencies Received of Francisco Murzelo, Custumer, formerly of Mahim viz.	X	1548:	2:61			
	In ready mony the summe of In coconuts being included in the	Х	8064:	1:00			
	summe of X 33150: 1:48 In an house at Mahim it being	X	135 :	2:00			
	the Custome house	X	800:	0:00		ļ i	l
		X	9000 :	0:00	1		l
	Deducting X' 135: 2: Larees I am accomptable for Received for severall Penaltys, sentences and confiscations for	X	8864:	1:00			
	w'ch gave noe receipts the summe of Batte or rice in the Huske remay- ning Moras 264:13:19 ad.	X	383 :	2:62			
	ammon'g to		3968 :	0:73			
	Summa W'ch makes sterling money at		108652 :		l		
	22sh. 6d. the summe of Recovered of the Administrator		•••	£	9402	12	08
	estate X 6202 : 1 : 47 amo't to			• • •	536	15	01
						<u> </u>	_

Fo.	2	Bombaim Garrison Annis Dommini 1668.	£	a.	d.
ept.	23	Received since the 23rd Septemb: and makeing up of the last abstract sent by the Constantinople merchant, the following summes upon acc. due to	1	11	10
vov.	14	His Ma'ty viz: Of Vittogee Parvu on acc. of the rents of Mazagao X 60: 1:40			
		Of Tomball Mattare on acc. of the rents of Verulin			
		Of Ramgee Parvu on acc. of the rents of Mahim X 10: 1:50 at 13 x' p. each 22sh. 6d is ster:			
		£ 10:19:10 d X 127: 0:10	10	10	10
		Summe Totall of what Received is £	11581	11	0
		Disbursements generall made on the Island of Bombaim for Acc. of His sacred Ma'ty from the 22nd May 1667 to the 23rd September 1668 the day of the resigning up the Island unto the Commissioners for the Hono'ble Easte India Company and to the 3rd of October the day of the expiring the soldjers last moneth in His Ma'ties service, transacted all by Henry Gary Esq., as followeth viz:			
		Paid to His Ma'ties soldiers both old and new etc. as appeares by the particolars trans-			_
		ported hether the whole amount from folio 23. £ Contingencies its ammount brought hether from folio 25 £	5346 415	07	0
		Stable charges theyr ammount brought bether from folio 26	245	13	0
		Provission of Pouder and Saltpeeter transported hether from folio 27	272	10	1
		Fortifications the amo't of its acc. transported hether from folio 28 £	332	02	0
		Buildings and house reparations theyr amo't bro't hether from folio 29 £	79	12	0
		Saile Cloath expended by the Gunners etc. a parcell ammounting to £	10	10	0
		Summe Tottall of His Ma'ties disbursements on this Island for His acco £ His Ma'ties remaynes up to the Easte India Comp: as Commissioner in all due obedience to His Ma'ties		04	0
		Warrant are as followeth viz: The Chest nutt Pynke for what dis-			
		bursed on her as in fo: 30 X 3377; 1:16 The sloope a substantiall service-			
		able vessell £67:10sh X 780: 0:00 The Baloone or Pynace as shee cost		' 	
		Horses 17 Oxen 2 and a fower wheele Coache as in fo: 31 X 2210: 0:26	1		

Fo. 2	Bombaim Garrison Annis Dommini 1668.	£	8.	d.
	Houses 3 viz. 2 at Bombaim w'th a Palmar to cache and one at Mahim w'ch is the Custome-			
	house there all cost X 3327: 2:18 Carabines 12 bo. of S. Geo. Oxinden			
	formerly and 2 others here cost X 254: 0:30 Batte or rice in the Huske moras			
	264:13:19 adolins X 3968: 0:00 Household stuff severall particol-			
	lars as in folio 32		1	
	importing X 6562: 0:35 Plate wrought as much as impor-			
	ted the summe of X 4241: 1:60 Tymbor 441 pieces as p acc, there-		! !	
	of in folio 33 appeares X 4126 : 1 : 16 In ready money X 18083 : 2 : 42 res and in good debts X 1614 : 0 : 56			
	res			
	W'ch at 13 x' p eache 22s. 6d. ster ammounts to. £ More Dd into theyr Custody what was recovered of the Administrator to Sr. Gervase Lucas estate. X 6202: 1:47		• } •	
	Dd. them in all besides Artyllery,	550	1.,	0.
	ammunition stores etc. to ye amo of			
	Summe expended and delivered up ammounts unto	11581	11	0

H. GARY salvo errore.

[X in these accounts stands for Xeraphim (Arabic Ashrafi), a silver coin current at Goa and roughly equivalent to 1s. 6d. or a rupee. 13X = 22sh. 6d. Similarly Laree was a coin much in use on the Bombay side in those days. Basra Larees are mentioned in a Marathi document of 1-5-1650 of the time of Shivaji and his Governor Abaji Mahadov over Kalyan-Bhivandi. See Selections from the Peshwa Daftar No. 31-24.]

[On the folios from 5 to 23 the details of the amount of £5346-07-03 on account of the salaries of Henry Gary himself, as Governor and of his staff and the soldiers are given. In the first paysheet he gives the account thus—]

Accompt sallary paid to the officers and soldjers etc. of His Ma'ties Garrison of Bombaim commencing the 17th June 1667 as followeth viz.

June 17—To my selfe as Governour: I say paid the severall officers and soljers belonging to my owne Company one moneths pay commencing from the 18th May and ending the 15th June 1667 as followeth viz.

```
To my selfe as Governour from the 21st
May to the 15th June is 25 days 1 at 40s.
p. diem ammounts to ......£ 50-00-00

To the Lieutenent at 4s. p. diem comes to. £ 5-12-10

To the Ensigne at 3s. p. diem .....£ 4-04-00

To two Serjants at 1s. p. diem each ... £ 4-04-00

To three Corporalls at 1s. p. diem each ... £ 4-04-00

To two Drumes at 1s. p. diem each ... £ 2-16-00

To 56 private centinels at 9d. p. diem each ... £ 25-16-00

£ 58-16-00
```

Paid the officers and souldjers belonging to the Company to Capt. Thomas Hardie (unto whom I gave a Commission the 28th May) one moneths pay commencing from the 18th May and ending the 15th June 1667 as followeth viz.

```
To the Capt, 18 days pay at 8s. p. diem
  ammounts to
                                           £ 7-04-00
To the Lieutenent at 4s, p. diem ...
                                       .. £ 5-12-00
To the Ensigne at 3s. p. diem
                                           £ 4-04-00
To two Seriants at 1s. cach
                                           £ 4-04-00
To three Corporalls at 1s. ...
                                           £ 4-04-00
To two Drumes at 1s.
                                           £ 2-16-00
To 51 Private Centinells at 21s, p. mensem
                                           £ 53-11-00
To 1 Private Sentinel for 10 days at 9d. p.
  diem
                                           £ 0.7.06
                                                ---£ 82-02-06
```

Paid to the severall officers following one moneths pay comening the 18th May and ending the 15th June 1667 viz.

```
To John Bird Chirurgeon the summe of ...
                                        £ 5-12-00
To Thomas Farley Chirurgeons mate
                                        £ 3-10-00
To Walter Gollephor Store keeper . .
                                        £ 1-08-00
To Amos Prestoh Gunner . . . . .
                                     .. £ 2-16-00
To William Lacey Gunners mate ...
                                    .. £ 2.02.00
                                    .. £ 2-02-00
To John Goodman Armorer
                                    .. £ 0-10-00
To the Armorers Assistant ...
To John Flower an under surgeons mate . . £ 1-08-00
                                                 £ 19.08.00
```

^{£ 231-06-06}

¹ Gary does not include the last date viz. 15th June, which he does in the following paysheet.

21-13-04

Paid to the severall officers and soldjers belonging to my owne Company one moneths pay commencing from the 15th June and ending the 13th July 1667 viz.

July 13—To my selfe as Governour			£	56-00-00
To the Lieutenent at 4s. p. diem			£	5-12-00
To the Ensigne at 3s. p. dicm			£	4-04-00
To two Serjants at 1s. p. diem each			£	4-04-00
To three Corporalls at 1s. p. diem each			£	4-04-00
To two Drumes at 1s. p. diem each			£	2-16-00
To 58 Private Centinels at 9d. p. diem ea	ch	••	£	60-18-00
			£	137-18-00
[In this way Gary gives the account of the salar to time and the last paysheet written on folions.				

to time and the last paysheet written on folio 22 gives the names and pay of the officers and soldiers as noted above, with the following important additional information and makes the "Summe Totall of salary paid" as . . £ 5346-07-03]

Paid to Narangee Parvu receiver of the Coconuts in Bombaim for three monther service as p his receipt X 25.. £ 2-03-03

On the folios 24 and 25 Gary gives the various details of the contingent expenses which amounts to 4800-0-32 Zerafins which is equal to £415-08-03½ as stated in the second item of expenditure. Similarly in the following folios he gives the details of the other items of expenditure like the stable charges, Provision of powder, Fortifications etc.

(To be continued.)

REVIEWS OF BOOKS

A facsimile of the Manuscript of Al-Kitābu'l-Bāri' fi'l-Lughah. By Abū 'Ali Ismā'il b. al-Qāsim al-Qālī al-Baghdādī. British Museum, 1933. Pp. 16, 148.

Mr. A. S. Fulton, by editing the fragments of al-Qālī's Kitābu'l-Bāri', recently acquired by the British Museum, has shown to the world how Muslim scholars of early days laboured hard to collect the vast treasure of Arabic words. From the facsimile we no doubt see how the Andalusian scribe wrote in his peculiar Maghribi hand, but in this age of hurry and flurry Mr. Fulton would have spared us the trouble of deciphering the contents of the fragments, if he had taken pains to make a fair copy of the manuscript and printed it in the ordinary type. Besides it seems to me that Mr. Fulton has incorrectly indicated the title of the work, which should read as Kitābu'l-Bāri' and not as al-Kitābu'l-Bāri'. The signification of the title in that case would be "The Book of the Accomplished in Lexicography" and not "The Preeminent Book on Lexicography" as the editor has translated it. For, the epithet $b\bar{a}ri$ is applied to a man who excels his fellows in knowledge, learning, beauty, etc., and not to a book, though it may be applied to the beauty of its style. I do not know whence Mr. Fulton got this title, for authoritative works like Ibn Khallikan's Wafayāt (vol. i. 74, Cairo edition, 1310 A.H.) and Yāqūt's Mu'jamul'l-Udabā (vide vol. ii, 352) all give the title as Kitābu'l-Bāri' fi'l-Lughah. At any rate, from the publication of these fragments we get a fair idea of the contents of this work, which at its time was held to be the most comprehensive dictionary in the Arabic language.

Kitābu'l-Bāri' of Abū 'Alī al-Qālī (d. 356 a.H.) is the third of the earliest lexicons in the Arabic language, the first two being the Kitābu'l-'Ain of al-Khalīl (d. 180 a.H.), so called because it begins with words having 'Ain as one of their radicals, and the Jamharah of Ibn Duraid (d. 321 a.D.), who was a teacher of al-Qālī. Kitābu'l-'Ain is nownot extant, but its abridgement (Mukhtaṣaru'l-'Ain) by al-Qālī's student, az-Zubaidī still exists. The Jamharah has recently been published in Hyderabad. Of Kitābu'l-Bāri', only two fragments remain, one in the Bibliothèque Nationale,

Paris, and the other in the British Museum, about which we have just spoken. According to Yāqūt (supra) it consisted of 3,000 leaves, and according to Ibn Khallikān (supra), of 5,000 leaves, and contained 5,683 words more than Kitābu'l-'Ain, besides giving evidential quotations in support of the words, which had been left unexplained by al-Khalīl.

Like the Jamharah of Ibn Duraid, Kitābu'l-Bāri' also followed Kitābu'l-'Ain, in which the words were arranged according to the alphabetical order of the Sanskrt grammarians, beginning with the gutturals and going on to the labials, the three weak letters $w\bar{a}w$, alif, and \bar{a} being classed by themselves at the end of the series. The other two important works on lexicography, that have followed the arrangement of Kūābu'l-'Ain, are the Tahdhīb of al-Azharī (d. 370 A.H.) and the Muhkam of Ibn Sidah (d. 458 A.H.). It is a peculiar arrangement and is based upon what is known in algebra as "permutation and combination" (taglin). A word consisting of three radicals is susceptible of six forms, of which some, if not all, may have a meaning. For instance, a word consisting of the three radicals B, J, and L, will have the following forms: Bajala, Balaja, Jabala, Jalaba, Labaja and Lajaba, all of which are possible (vide, Kitābu'l-Bāri', pp. 129-32), and so on. In this scheme, it becomes very difficult for the reader to find out a particular word.

This was the besetting fault of the early lexicographers, but as they were pioneers in the field of lexicography, this fault is easily forgiven, while we cannot thank them sufficiently for the vast stores of linguistic knowledge, which they have placed before us with all meticulous care and with their usual unbounded liberality. The disappearance of such a work as *Kitābu'l-Bāri'* is a great loss to Arabic literature, and we may only hope that perhaps one day the whole work may be unearthed in some uncatalogued library of North Africa or the Near East.

U.M.D.

THE LIFE OF A MOGUL PRINCESS; Jahānarā Begum, Daughter of Shāh-Jahān. By Andrea Butenschön, with an introduction by Lawrence Binyon. George Routledge, London. 1931. Pp. 13, 221, 26 plates. 10/6.

Madame Butenschön has made an ambitious attempt in this novel at portraying the atmosphere of the Mogul Court in the last

exciting years of the reign of Shah Jahan when Aurangzeb advanced to Delhi with victory after victory. The story is told by Jahānarā Begum herself and is in the form of an irregularly kept diary of the Princess. The Princess is in love with a Rajput prince; but as the daughter of the Emperor she can never marry him. The plot is affecting but often obscure. The author has evidently taken a great deal of trouble in collecting her materials. At the end of the book are given two songs in Rags Darbari and Kalingra scored in European notation; and the Rags themselves are set out in European notation adapted for the piano. There is also a useful glossary of Indian terms and explanations.

The author has however not been entirely successful in capturing the atmosphere of the Mogul Capital in 1650. We object not only to the general style in which the Imperial Princess is made to write and to the sentiments she is made to express, but also to the author tripping in many details. At p. 39, Jahānarā tears her "Sari,": at p. 97 the Princess is of the opinion that amongst Akbar's artists "the Hindus painted best of all, as if they were still sitting in the cave-monastery of Ajanta, using their brushes to conjure up the life of the outside world upon its walls," and so on. whatever Jahānarā may have worn when she felt inclined to tear her "sari" it was certainly not a sari. And Jahānarā could not possibly have even heard of Ajanta. In the "Explanations" an "Orchestra" is said to have "played at certain hours of the day and night" in the Diwan-i-Am. No word could have been more inappropriate and inaccurate than "Orchestra" to describe the Naubat.

The book is well got up and the 26 plates will "convey to the reader some idea of the surroundings and atmosphere in which the Princess moved," as the author intends they should.

On the binding there are two excellent vignettes by Professor G. Morgenstierne.

S.F.B.T.

THE KADAMBA KULA. A history of ancient and medieval Karnatak By G. M. Moraes. B. X. Furtado & Sons, Bombay, 1931. Pp. 504. Rs. 15.

Mr. Moraes is to be congratulated for bringing to light, in a thoroughgoing manner, the history of a little-known dynasty.

In his efforts to trace the vicissitudes of fortune of the Kadamba families he has presented a connected account of the Western Karnataka (which was called Kuntala in ancient Sanskrit literature) from the fourth to the fourteenth century. He has emphasized their work in the field of culture and civilisation as well as their political importance; and he has collected and utilized a good deal of new material which throws light on their activities. He has shown that in addition to fostering commerce, education and literature, they created a new style of architecture—which is the basis of the Hoyasala style—and also a new school of sculpture.

History of the Rashtrakutas. By Bisheshwar Nath Reu. Arch. Dept., Jodhpur. 1933. Pp. 151. Rs. 2.

This is intended to be a comprehensive history of the Rashtrakutas dynasties "upto the third quarter of the 13th century of Vikrama Era"; but its main object is to show that some of the present ruling houses of Rajputana which are known to belong to the Gahadavala clan, are descended from the ancient Rashtrakuta stock. The author seeks to establish, therefore, that a Rashtrakuta branch came down to Gadhipura (Kanauj), and established a kingdom; and that owing to its connection with that city, its members came to be known as 'Gahadavalas.' His argument is presented with crudition, but it fails to carry conviction. But he is to be congratulated for sketching the history of the different Rastrakuta dynasties and of the earlier Gahadavalas. An interesting appendix refutes certain charges commonly made in legend and history against two eminent Gahadavala rulers, Jayachchandra of Kanauj and his grandson Rao Siha.

Indian Women and Art in Life. By K. H. Vakil, B.A., LL.B. Taraporevala Sons & Co., Bombay, 1933. Pp. 35. Rs. 2.

This little book, which seems somewhat excessively priced, comprises an address delivered by the author to the Indian Women's Conference. He believes that women can, if they so determine, "help art and culture to humanise the values of life," and he has much to say against the misdirected zeal of academic enthusiasts who fail to see the intimate relation between life and art.

Tungkhungia Buranji or a History of Assam, 1681-1826. By S. K. Bhuyan, Oxford University Press, 1933. Pp. 32, 262. Rs. 10.

This valuable work, which throws a flood of light on Assamese history, is a curious mosnic of three distinct literary genres. It is in part translation, in part compilation, and in part independent literary effort. Its principal object is to present a history of Assam of the Tungkhungia period 'as told by its own historians.' It consists primarily of an English translation of Shrinath Duara's Buranji (Chronicle) which, however, covers only 70 out of the 145 years of the Tunghungia rule. This, Professor Bhuyan has himself supplemented by an account of the earlier years he has compiled, cutting sentences from old Buraniis and arranging them in their proper sequence, and it forms a proem to Shri Nath Duara's work. And in order to bring the story down to 1826, in which year Assam was taken over by the British, Professor Bhuyan has written a Chronicle of the last years in the style of old Buranjis. book is very daring but it is well accomplished. An excellent introduction, geneological tables, a bibliography and a glossary which compresses a mass of information on the political, social and religious system of the Assamese people, add to the value of the book.

Publications of the Islamic Research Association, Bombay

- (1) DIWÂN OF KHĀKĪ KHORASĀNĪ. Persian text, with an Introduction by W. Ivanow. Pp. 20, 17A. Bombay, 1933.
- (2) Two Early Ismaili Treatises (Haft Bābī Bābā Sayyid-nā and Maṭlūbu'l-Mu'minīn by Tūsī). Persian text, with an Introductory note by W. Ivanow. Pp. 9, 78. Bombay, 1933.
- (3) TRUE MEANING OF RELIGION (Risāla dar Haqiqati Dīn) by Shihābu'd-dīn Shāh al-Ḥusaynī. Persian text, with an English Trans., by W. Ivanow. Pp. 28, TA. Bombay, 1933.

The Islamic Research Association, inaugurated in February 1933, have already printed their first three publications. All

three deal with the religious books of the Ismaili sect, of the branch which is familiar to the inhabitants of Bombay under the name of Khojas. This, as we understand, was due entirely to the fact that these three works were ready for publication, and, when offered to the Association, could go immediately to the press. Other books are in preparation, and it is hoped that they may be published soon. As plainly stated in their prospectus, the Association does not limit its activities to any particular branch of Islamic studies, or to a definite sect. All studies forming a new step in Islamic research are welcome, and each will receive full share of attention.

The first item in the series is a collection of poems of an otherwise entirely unknown Persian poet of the first half of the seventeenth century, who himself belonged to the Ismaili sect. He was a peasant from a village situated not far from the city of Nishapur, where long before him flourished a poet who acquired such enormous fame far away from his mother country, Omar Khayyam. Khākī's poetry in no way resembles the familiar poetical aphorisms of Khayyam. He was probably not well educated, not well trained in the technique of versification, and his poems do not appear as brilliant as those of the great poets of Persia. But the secret of the appeal of his verses is a sincere and deep religious feeling, their unpretentiousness, and the purely human note in them, so rare in the sea of artificial splendour of Persian poetry. Those who are interested merely in the doctrine which he propounded may find it concisely explained in an English introduction, which gives all the details about the original Manuscripts, biography of Khākī, etc.

The next item contains two short prose works on Ismailism. The author of the first one is unknown, but by a lucky chance it is mentioned in the text that it was composed in 1200 A. H. It gives a rather primitive, but very interesting account of the Ismaili dogma, according to the ideas of the Persian Ismailis. The second item is supposed to be a short work of that famous and still enigmatic philosopher and theologian, astronomer and politician of the Persian middle ages, Naṣīru'd-dīn Ṭūsī, whose work on ethics, Akhlāqi Nāṣirī is still popular in India. Most probably, being requested (as he states himself at the beginning of his work)

by some influential person, to whom he could not say "no" so easily, he wrote this short and rather superficial treatise in a hurry, only to show courtesy rather than to benefit the students. It is, however, a valuable document now, some seven hundred years after it was written, and it is good that such an ancient work has been printed.

The third item in the series, which is accompanied by a complete English translation, is a short sermon-like tract by the late Shihābu'd-dīn Shāh, the brother of H. H. the Aga Khan, who died some fifty years ago when the latter was only a child of some five or six years. The work, unfortunately, is not finished, though the portion that is printed was preserved in a unique and autograph copy, is complete in itself. It deals with the moral side of religion in general rather than emphasising purely Ismailitic dogma, and therefore may appeal not only to Ismailis, but also to people generally interested in Islamic idealism. It has a strong Shi'itic flavour, as one may expect, and perhaps equally savours of Sufism. It is a small work which may stimulate thought on some important problems not only of this material world, but also of the ultimate destiny.

The text is based on two MSS. that are available at the B.O.R.I., Poona. The book is a short disquisition on the topics discussed in the first Adhyaya of the Pūrvamīmānsa Sutras of Jaimini. The title 'Tripādanītinayanam' is to be explained by the fact that in this book the author attempts to summarize and supplement the contents of the last three Padas of the first Adhyaya of the Mīmānsa Sutras, which discuss the validity of the Vedic Arthavāda and Nāmadheya as also of the Smṛti literature from the point of view of 'Dharma.' The text contains many mistakes in point of readings—thus making the understanding of the text rather a difficult task—, but the editor cannot be held responsible for them as he bases his text on the obviously incorrect MSS. of Poona.

In this book, the author refers to the views of some older writers in words like 'Vivekastu' (p. 11), 'Candrastu' (p. 12),

^{&#}x27;Tripādanītinayanam' of Sri Murari Misra, edited and published by Harisankar Onkarji Sastri at the Piyūsa Patrikā Kāryūlaya, Nadiad. Pp. 46. Ans. 8.

'Nandanstu' (p. 13), and 'Srikarastu āha' (p. 40). Among these Śrikara is a well-known writer often quoted in legal Digests and commentaries. Nandana is obviously not to be identified with the commentator of that name on the Manu Smṛti, if we assume with the editor that the author of this book is really the great Mīmānsaka, Murāri Miśra. A comparison of this book, however, with Aṅgatvanirukti which too is ascribed to Murāri Miśra, and which is printed in the 3rd volume of the Śābara Bhaṣya published in the Ānandāsrama Series, leaves one in doubt regarding this identification. The style of the book under review is rather poor for the great Mīmansaka.

It is to be noted that the author does not make any Mangala. The introductory verse is obviously written by the scribe, who must have been a follower of Sri Vallabha Ācārya.

V. A. G.

ISMAILI LAW OF WILLS. By ASAF A. A. FYZEE. Humprey Milford, Oxford University Press, 1933. Pp. 12 + 94 Rs. 5. This work of Mr. A. A. A. Fyzee, together with several of his earlier papers, opens quite a new ground in the studies of Islam. Not only was there no reliable information about the Ismaili system of law, but even the existence of an independent school of Ismaili figh was scarcely known outside the circles which were in close contact with Ismailis themselves. The present book contains the text and the translation, with necessary notes and comments, of a short extract from the classical work on the subject, the famous Da'ā'imu'l-Islām by Qādī an-Nu'mān, written about the middle of the tenth century. The extract is very small, and even smaller than it appears, because a substantial part of it consists of the Wasiyyat of Ali, -whether genuine or not we cannot discuss now, which is a purely religious document and has nothing to do with figh. Students of Islamic law would surely not have lost anything if it would have been omitted in this edition and dealt with separately. Let us hope that the author succeeds in editing with the same thoroughness the whole text of the Da'ā'im, or at least all the important portions of it, which should give a clear and complete idea about the outlines of the system of figh as built under the rule of the Fatimids of Egypt, a thousand years ago.

Social and Political Life in Vijayanagara Empire. (a.d. 1346—a.d. 1646). By B. A. Saletore, M.A., Ph.D. London. 2 Vols. B. G. Paul & Co., 12, Francis Joseph Street, Madras. Pp. 53+470; 525. Rs. 15.

The author states that he has endeavoured to describe the activities of the princes and people of Vijayanagara in sphere, related to their political and social well-being. His attempt is the first of its kind in bringing before the reader classical and medieval Hindu theory in harmony with Vijayanagara maxims and practice, and enabling him to estimate for himself the achievements of the rulers of Vijayanagara, who were often declared custodians of the Hindu Dharma; and we congratulate Dr. Saletore on the success achieved by him in his enterprise by his patient work. This thesis, now in the form of these two volumes, was accepted by the London University, for the Degree of Doctor of Philosophy, and is published with a grant from that University.

A very useful bibliography on the subject has been given at the beginning of the book and the Author has tried to make it as complete and up-to-date as possible.

After describting very pathetically the political condition of the Deccan on the eve of the establishment of the Vijayanagara Empire, Dr. Saletore deals with the four controversies, viz., (1) The Date of Establishment of the Empire; (2) the hand of Vidyāraṇya in it, (3) the pure Karṇāṭaka stock from which the first rulers were descended; and (4) the Building of the Capital.

He has weighed the pros and cons of these controversies testing them on the touch-stone of epigraphical and contemporary literary evidences and has arrived at right conclusions.

The subsequent chapters referring to the political and social institutions and their working, the customs and manners of the times form the main part of the two volumes. It is gratifying to note that some topics such as the capitals of the empire, the revenue matters with their sub-heads—taxation, land revenue, rent, customs, administration, and the army are treated at length.

In dealing with the social history in detail Dr. Saletore touches such important subjects as Brahmans and others, women,

habitation, food, dress, mode of living, festivals, games and amusements. It is, therefore, surprising to note that he has said nothing about education, literature, state patronage to men of letters, and religious disputations, &c. Perhaps the author has not exhausted his subject, as he admits in the preface.

A map of the Vijayanagara Empire with the important places marked on it, a plate of Vijayanagara and contemporary coins, and a synopsis of the History of the Vijayanagara kings would have increased the usefulness of the volumes. The following words and phrases in the technical glossary require revision,—droṇāmukha, erugaṇike, gaṇākāra-terige, gandiga, haḍapa, honnu, otti, sese, taļavāra-āya, ubhayapradhāni. These things can easily be remedied in a second edition.

K. G. K.

THE ECONOMIC CONDITION OF INDIA DURING THE SIXTEENTH CENTURY. By H. L. CHABLANI, M.A., Economics Department, Delhi University. Oxford Book & Stationery Company, Kashmere Gate, Delhi. Pp. 113.

It is very difficult to get authentic information on all aspects of India's economic life during the ancient times. For such information regarding the Maurya and Gupta periods, we have to rely on scattered, indirect and inadequate material. For the Mogul period there is reliable and adequate material available and Mr. W. H. Moreland has attempted to use it in his two books; but his approach is rather one-sided, and his presentation of the facts and figures is not entirely historically scientific. In writing the present book Professor Chablani's main object is to stimulate interest in the reconstruction of Indian History and to try to give a correct perspective of those times.

The author has relied upon the information available in the writings of foreign traveller such as Barbosa, Nuniz and others in the Memoirs of Babur and the Chronicle of Mirza Haider. The author has drawn a vivid accurate and comprehensive picture of the economic condition of the whole of India during the 16th century. The whole book is copiously documented and quotations are allowed to speak for themselves.

The book is divided into three parts. The first part contains the introduction and a chapter on population. The second part deals with agricultural and industrial production, trade, water transport, economic security and currency. The third part contains chapters on food, clothing, housing and luxuries. In all matters except that of population the author has drawn conclusions which are supported by the quotations. Speaking of the extent of population of Akbar's empire he observes "This will give us a population of 130 millions for Akbar's empire alone -an estimate that exceeds by three millions Moreland's estimate for the whole of India." He concludes "Our estimate for the whole of India thus reaches a total of 2891 millions." This figure is arrived at by a priori reasoning. It may be safely stated that Mr. Moreland has underestimated while Professor Chablani has overestimated the number. Professor Chablani has committed an error in guessing the rural population for the whole of India from the extent of the urban population.

We find that in the 16th century India was a land of plenty and prosperity. All the departments of her economic activity were very highly developed. There was abundance of agricultural and industrial production. Everybody had two square meals, enough clothing and housing accommodation. India was economically self-sufficient and she exported various kinds of manufactured goods to foreign countries in her own ships and received specie (gold) in return for goods. From the chapter on shipping which is very enlightening we find that her shipping had reached a very high stage of development. We have a detailed account of various crops, vegetables, fruits, flowers and the methods of cultivation.

The standard of life was relatively high. People were physically strong and spirited. Those who are interested in knowing this glorious past should read this book.

BOOKS RECEIVED.

- Origin and Development of Religion in Vedic Literature. By P. S. Deshmukh, M.A., D. Phil. Oxford University Press. Pp. 394. Rs. 15.
- Brhati of Prabhākara Miśra, Tarkapāda. Madras University. Sanskrit Ser. No. 3, pt. I. 1934. Pp. 424. Rs. 5.
- Diwān-i-Zu'l-Fakār. The collected poems of Zu'l-Fakar Shirwānī. Edited with an Introduction by E. Edwards, M.A. British Museum, London. 1934. Pp. 472.
- Some Aspects of the Vāyu Purāṇa. By V. R. RAMACHANDRA DIKSHITAR, M.A. (Bulletin, Dept. of Indian History and Archæology, University of Madras.) 1933. Pp. 52.
- Oriental Studies in Honour of Cursetji Erachji Pavri. Edited by Jal Dastur C. Pavry. Oxford University Press. 1933. Pp. 420. 50/-.
- Indian Psychology: Perception. By Jadunath Sinha. Kegan Paul, London. 1934. Pp. 400. 15/-.
- Tibetica I: Dialects of Tibet; the Tibetan Dialect of Lahul. By GEO. DE ROERICH. Urusvati Himalayan Research Institute. Pp. 109. Rs. 3.

TRANSLITERATION OF THE SANSKRIT AND ALLIED ALPHABETS

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TRANSLITERATION OF ARABIC AND ALLIED ALPHABETS

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