


PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.

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JANUARY TO DECEMBER,  
1902.



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PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.  
FOR JANUARY, 1902.

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The Monthly General Meeting of the Society was held on Wednesday, the 8th January 1902, at 9 P.M.

H. H. Sir John Woodburn, M.A., K.C.S.I., President, in the chair.

The following members were present :—

The Hon'ble Mr. C.W. Bolton, C.S.I., Major W. J. Buchanan, I.M.S., Dr. A. Caddy, Mr. B. Chaudhuri, Kumar Satindra Deb Rai Mahasai, Mr. W. K. Dods, Mr. W. A. Lee, Mr. J. Macfarlane, Kumar Ramessur Maliah. Mr. J. D. Nimmo, Mr. F. E. Pargiter, Captain L. Rogers, I.M.S., Mr. M. J. Seth, Mahāmahopādhyāya Haraprasād Shāstri, Mr. E. Thornton, Mr. J. Wyness.

*Visitors* :—Mr. A. Crowley, Kumar Kshitindra Deb Rai Mahasai, Kumar Maumdra Deb Rai Mahasai.

The minutes of the last meeting were read and confirmed.

Twenty-eight presentations were announced.

Mr. J. R. Drummond, I.C.S., and Babu Parmeshwara Lall were balloted for and elected Ordinary Members.

Mr. Vincent A. Smith expressed a wish to withdraw from the Society.

The General Secretary reported the death of Nawāb Ashanulla Khan Bahadur, of Dacca, an Ordinary Member of the Society.

The President announced that he had received four essays in competition for the Elliott Prize for Scientific Research for the year 1901.

The question of disposing of the Society's premises, of which intimation had already been given by circular to all resident Members in accordance with Rule 64A, was brought up for discussion.

The Meeting considered the Report of the Sub-Committee and decided that the matter be referred back to the Sub-Committee with the request to frame an estimate of the probable cost of acquiring a new site and erecting a new building with and without accommodation for a Secretary in a suitable neighbourhood, and also to take such steps as might seem sufficient to ascertain definitely what sum is likely to be received by the sale of the present house and site.

Proposed by the Hon'ble Mr. C. W. Bolton, C.S.I., and seconded by Captain L. Rogers, I.M.S., and carried.

The following papers were read :—

1. *On Trilokanātha in the Kayḍā Valley.*—By J. Ph. VOGEL, LL.D.

(ABSTRACT.)

The writer himself gives the substance of his paper in the following terms :—

“The substance of the present paper may be briefly stated thus : That in the Candrabhāgā Valley and also in the southern side of the mid-Himalayan Range on the Upper Biās, Trilokanātha is the name by which the Bodhisattva Avolokiteṣvara is indicated, while along the lower course of the Biās river the same name is assigned to Īiva represented either as a linga or as a five-faced statue which in its attributes shows a marked resemblance to some of Avalokita's images.”

*Remarks* :—Avalokita's attributes resemble those of Viṣṇu of the Hindu Pantheon, the preserver of the Universe, one who is all good. In Patan, Nepal, he is often the same as the Sun God without the horses and the chariot. At Vaidyanātha an image of this deity is worshipped as Sūryanārāyaṇa.

2. *On the Secret Words of the Īlūās.*—By THE REV. T. G. BAILEY, M.A.

(ABSTRACT.)

This is a very interesting paper on the tribe of hereditary thieves and cattle poisoners of the Punjab. They poison cattle because they eat the carcass. Each company of Īlūās has one cattle-poisoner, who charges six or eight annas for poisoning a suitable animal. They kill cows and buffalos with balls of poison,—white, black, and green,—but horses do not

take poisoned food, so they kill horses with poisoned sharp-pointed instruments.

The Çālūās never reveal the secret of their language and their words. They have no grammar like the Sāsīs. They form their secret words by the insertion of *ma* into Panjabi words, just as *skul* is changed into *skumal*.

3. *On the Organization of Caste by Ballala Sen.*—By MAHĀMAHO-PĀDHYĀYA HARAPRASĀD SHĀSTRĪ, M.A.

It will be remembered that at the last general meeting I read two papers, one on the Authenticity of Vallālacarita and the other on the existence of the Ancient Magi in India, even up to the present day. The materials for the latter paper were drawn from the newly-discovered MSS. of Vallālacarita by Ananda Bhaṭṭa. In the present paper I purpose to give a brief outline of the re-organization of the Caste System by Vallāla 800 years ago. But before commencing the paper I cannot help bringing to your notice a striking confirmation of my theory about the Magi from a more ancient and a more authentic source. My friend and pupil, Babu Guṅgāmohan Laskara, M.A., a post-graduate scholar, is engaged in deciphering an ancient MS. brought by me from Nepal and exhibited at this meeting about two years ago. The MS., I believe, was copied about 550 A.D. It is written in the same characters as the Horinzi palm-leaves in Japan. In the ninth leaf of the MS., on the reverse side, there is a verse in the future tense—a prophetic utterance no doubt — **ब्राह्मणानि मनावाश्च समानं जायते कश्चि**. In the Kaliyuga Brāhmaṇas and Magas will be regarded as equals. So even in that ancient time, when Nasirvan was making war on the Rājās of Gujerat or even some centuries before it, good people in India were labouring under the apprehension that Brāhmaṇas and the Magi will, at some future time, occupy the same position.

Now to my present paper. I consider those chapters of the Carita as most authentic which are connected with the name of Çarāṇa Datta, a contemporary poet of Vallāla, and I will see what Çarāṇa has to say about the re-organization of the caste system by Vallāla.

Vallāla in these chapters is said to have performed a great sacrifice, invited all the four castes with the innumerable mixed castes, and fed them and honoured them all according to their deserts. The Sonāra banias, however, who prided themselves as Vaiçyas, had no separate accommodation provided for them. They complained and they were told to go with the clean Çūdras. They resented it and left the place. Their overbearing conduct was reported to the king and he declared that they should be degraded and any Brāhmaṇa teaching them or officiating in their religious ceremonies should be excommunicated

This order of degradation was communicated to all the officers of the State and proclaimed by beat of drums throughout Vallāla's vast empire. The Brāhmaṇas complained that the banias have a fair colour and that they are very handsome. They should not be allowed to wear the holy thread, because in that case, Brāhmaṇas by mistake may make obeisance to them, and so Vallāla ordered that their holy thread should be snatched away. Most of the banias fled from Vallāla's dominions, and those who remained had to submit to his terms, *i.e.*, had to give up the holy thread. But the rich, influential, and haughty bania cannot be expected to tamely brook all this ZULUM on them. They retaliated in a manner worthy of banias. The slave-traders were Brāhmaṇas and the bania used to grant them accommodation. They now stopped slave trade in Vallāla's kingdom. People in great distress implored the king to do something to alleviate their sufferings, and he proclaimed that the Kaivarttas should henceforth be regarded as clean Çūdras and that their services should be accepted. Thousands and thousands of Kaivarttas accepted domestic service, and their leader, Maheça, who was a "Mahattara" (a nobleman) already, was made a Mahāmāṇḍalika, a provincial governor, and sent to Dakṣiṇaghāta with all his warlike followers. So Vallāla degraded the banias and raised the Kaivarttas. The garland-makers, the potters, and the blacksmiths then implored the king to raise their position in the caste hierarchy and the Rājā proclaimed that they should be regarded as clean Çūdras. He made Dhāra, his servant, a Mahattara (a nobleman) and his barber a Thākura.

This is a short summary of the three most important and three most authentic chapters of the Carita connected with the name of Çaraṇa Datta. Now I will try to interpret them. The charges against the Sonār banias were (1) That they left Vallāla's feast because they thought they were slighted and treated as Çūdras; (2) they ridiculed the Brāhmaṇas, called them names, and openly charged them with being the descendants of female slaves; (3) their leader, to whom they were greatly attached, sided with the Pālas, the Buddhist kings of Magadha, with whom Vallāla was often at war; and (4) that this leader gave his daughter in marriage to the Buddhist Pāla king of Magadha and therefore he had great influence in his own caste.

These charges have been formulated in Çaraṇa's chapters. But in another chapter, namely in chapter II, for which Ananda Bhaṭṭā himself is responsible, there are two more charges very distinct. One is that Ballabha, the headman of the banias, refused to advance Vallāla money to prosecute a war against Magadha, though on a former occasion he advanced a crore of rupees. The other is that the banias slighted the Brāhmaṇas and slighted Vallāla too. Their conduct was haughty and overbearing.



These are the charges on which Vallāla degraded a whole caste and excommunicated them from the community of four castes and they are of a grave nature. The charges show that the banias were Buddhists. It is the Sets and Banias who figure prominently in the Buddhist records. They took to Buddhism in numbers. And in Bengal, where Hinduism, or, to say more strictly Brahmanism had to be re-introduced under the Brāhmanas and their faithful adherents, the Kāyasthas, the Buddhists, formed the upper lay community, and they always looked with a jealous eye on the preponderance of a rival faith, of the priesthood of that faith, and of its lay followers.

Vallāla, as represented by Ananda Bhaṭṭa, early sympathized with the Buddhists, I mean Tāntrika Buddhists of a later date. Following the obscene rites of these degraded Buddhists, he used the girl of an actress, a *natī*, and a *caṇḍalī* of twelve years of age. But a monk from Vadarikā Ćrama converted him into Ćaivism and he became an out-and-out Brahminist and, I believe, a persecutor of his former faith, as all apostates are. When Vallāla was a sympathiser of Buddhism, Ballabha advanced him money for his warfare. But with the change of his religion the attitude of Ballabha, his financier, changed. He joined the Pālas of Magadha, gave his daughter in marriage to a Pāla king, and incurred the displeasure of Vallāla. The sacrifice turned the public sympathy in favour of the Rājā and he was not slow in taking advantage of the public feeling. Alone he could not degrade them, he must have Brāhmanas with him, and on this occasion he found the Brāhmanas fully prepared to co-operate with him, because the banias slighted them, abused them, and wanted to be their rivals.

That at Vallāla's time the caste system in Bengal required re-organization is plain from history. I have elsewhere shown that in Hiounth Sang's time Buddhism was the dominant religion in Bengal, though the heretics were not unknown. Our own tradition shows the Adiĉūra about Hiounth Sang's time saw that the few Brahmins, in Bengal knew nothing of Hinduism. They were perhaps traders as they were in Buddhist countries. He brought Brāhmanas and Kāyasthas to Bengal. They increased and multiplied for centuries and included old Brahminists and some converts, for in a mixed community such conversions are frequent and the Hindu society looked tolerably big. The Brāhmanas and Kāyasthas formed the backbone of the society, as the monks and their followers formed the backbone of the Buddhist community. But there was a vast population on whom faith sat rather loose. The Brāhmanas could not go beyond the Ćudras. The aborigines were outside their operation, but the Buddhist had no such scruples. They took in their fold all who came, so a re-organization was necessary in

Vallāla's time. He degraded the Banias and raised the Kaivarttas. The castes below Çūdras were called Autyajas. If they offered a glass of water to a good Brāhmaṇa he is bound to reject it. They were semi-Buddhists. The Buddhist monks, however, claimed them as theirs, as they do everywhere. The Brāhmaṇas claimed as theirs. But these Kaivarttas were very influential. I read a paper some time ago, in which I tried to show that about fifty years before Vallāla, about the year 1080 A.D. they drove away the Pāla kings from North Bengal and set up Bhima Divoka as their king. They killed a Pāla king, and imprisoned another. But at last Ramapāla defeated them, and broke their power. They were smarting under this discomfiture when Vallāla from Western Bengal invaded North Bengal and conquered it from the Pālas. East Bengal too fell into his hands with its capital Ramapāla. From the terms in which Vallāla speaks of these Kaivarttas he seems to have derived much benefit, from them. He was anxious that they should get some recognized position in Hindu society. They helped him in finding out his son Lakṣmana, when that Prince fled away before the anger of a stepmother, and he told them "Gacchadhvam Vyavahāryyātām" that is be a clean caste among the Hindus and at the same time he changed their occupation. They were fishermen and boatswains, but he made them agriculturists also. Their anxiety to serve the Brahmanas and others has already been adverted to.

By inducing them to accept domestic service, and by inducing their leaders to accept high State appointments in a quarter away from the centre of their influence, Vallāla freed North Bengal from the turbulence of these restless people. Daṣṣinaghātā of Vallāla is the same as Maṇḍalaghātā of the present day, where Kaivarttas form the bulk of the population and the majority of the upper classes. The name seems to have changed from Daṣṣinaghātā to Maṇḍalaghātā, because the Kaivartta chief, Maheça was created a Mahāmāṇḍalika, the great Maṇḍala.

The other castes made clean by Vallāla, as mentioned by Çaraṇa were Mālākāra, Kumbhakāra and Karmāra. These are never regarded as Antyajas, so their incorporation means a re-conversion into Brahmanism. Vallāla gave high offices of State even to low-caste men. He made a Kaivartta a Mahāmāṇḍalika. A Napita a Mahattara, or noble man.

So far the information is received from Vallāla's contemporary, Çaraṇa. At the end of the book, however, Ananda Bhaṭṭa on his own authority gives a few verses of what is termed the Appendix to the Vallālacarita. These, when translated, run thus :—

"From Brāhmaṇa in Kṣatriya girls were born Chetri, who are also called Rājaputra. The Sonār banias have become Vrātya or degraded for loss of the holy thread. Gopā (cowherd), māli (makers of

flower garlands), Tāmboli (betel-sellers), Kaṃsāras (workers in bell-metal), Tānti (weavers), Čāṅkhika (workers in conch-shell) Kulāla (potters), Karmakāras (blacksmiths), Nāpita (barbers), are Navasāy-akas (nine arrows). Tailika (the oilman), Gandhika (spice and incense vendor), and Vaidyas are clean Čūdras. Of all the Sat-Čūdras, the Kāyastha is declared to be the best."

This is addressed by Ananda Bhaṭṭa to the Rājā of Navadvīpa to whom he dedicates Vallācarita. So this relates to the state of things as existed in 1510, and it is not very different from the state of things to-day.

There is, however, another chapter on the caste system in the work given on the authority of Vyāsapurāna by Siṃhagiri, who converted Vallāla to Čaivism. But I reserve the examination of that chapter for my next paper.

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The following additions have been made to the Library from 6th December, 1900 to 31st December, 1901.

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**PROCEEDINGS**  
OF THE  
**ASIATIC SOCIETY OF BENGAL.**

FOR FEBRUARY, 1902,

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The Annual Meeting of the Society was held on Wednesday, the 5th February, 1902, at 9 P.M.

H. H. SIE JOHN WOODBURN, M.A., K.C.S.I., President, in the chair.

The following members were present :—

Major A Alcock, I.M.S., Mr. J. Bathgate, The Hon. Mr. C. W. Bolton, C.S.I., Rai Chunilal Bose Bahadur, The Hon. Mr. J. A. Bourdillon, C.S.I., Major W. J. Buchanan, I.M.S., Mr. W. B. Criper, Kumar Satindradeb Rai Mahasai, Mr. F. Finn, The Revd. E. Francotte, S.J., Major C. R. M. Green, I.M.S., Mr. D. Hooper, Mr. W. A. Lee, Mr. J. Macfarlane, Mr. W. C. Macpherson, Kumar Ramessur Maliah, Mr. H. H. Mann, Captain A. F. McArdle, I.M.S., Mr. W. H. Miles, Mr. J. D. Nimmo, Mr. F. E. Pargiter, Mr. H. H. Risley, C.I.E., Captain L. Rogers, I.M.S., Rai Ram Brahma Sanyal Bahadur, Babu Jageschandra Sastri, Mr. M. J. Seth, Mahamahopadhyaya Haraprasad Shastri, Babu Chandra Narayan Singh, Babu Lakshmi Narayan Singh, Maharaja Prodyat Coomar Tagore, Mr. J. Wyness.

*Visitors* :—Mr. E. H. S. Clarke, Kumar Kshitindradeb Rai Mahasai, Kumar Manindradeb Rai Mahasai, Babu Jaladhi Chandra Mukerjee, Babu R. M. Vasu.

According to the Rules of the Society, the President ordered the voting papers to be distributed for the election of Officers and Members of Council for 1902 and appointed Major A. Alcock and Mr. J. D. Nimmo to be scrutineers.

The President then called upon the Secretary to read the Annual Report.

## ANNUAL REPORT FOR 1901.

The Council of the Society have the honour to submit the following Report on the state of the Society's affairs during the year ending 31st December, 1901.

### Member List.

Our number of Ordinary Members is 328, which is higher than in any year since 1885.

Forty-eight Ordinary Members have been elected and we have lost 31, namely, 7 by withdrawal, 7 by death, 6 by removal under Rule 9, 6 by removal under Rule 38, and 5 by removal under Rule 40. The total number of Members at the close of 1901 was 328, against 311 for the preceding year; of these 123 were Residents, 133 Non-Residents, 13 Foreign, 22 Life, 36 Absent from India, and 1 Special Non-Subscribing Member, as will be seen from the following table, which also shows the fluctuations in the numbers of Ordinary Members during the past six years:—

YEAR.	PAYING.				NON-PAYING.				GRAND TOTAL.
	Resident.	Non-Resident.	Foreign.	Total.	Life.	Absent.	Special Non-Subscribing.	Total.	
1896 ... ..	105	119	11	235	23	35	1	59	294
1897 ... ..	106	115	9	230	22	35	1	58	288
1898 ... ..	122	108	11	241	23	35	1	59	300
1899 ... ..	120	119	13	252	21	27	1	49	301
1900 ... ..	116	124	18	258	22	30	1	53	311
1901 ... ..	123	133	13	269	22	36	1	59	328

We have to deplore the death of the following Ordinary Members: Nawab Ashan-ullah Khan Bahadur, The Most Revd. Dr. Paul Goethals, S.J., Surgeon-General R. Harvey, C.B., Dr. A. von Krafft, Babu Shamlal Mullick, Mr. L. de Nicéville, and Mr. G. F. Reader.

Our number of Honorary Members is complete. During the year, on the recommendation of the Council, Professor J. W. Judd, C.B., LL.D., F.R.S., was elected as an Honorary Member in the place of Professor The Right Hon'ble F. Max Müller, deceased.

The lists of Special Honorary Centenary Members, Corresponding Members, and Associate Members continue unaltered from last year, the numbers standing at 4, 1, and 12 respectively.

No Members compounded for their subscription during the year.

#### Indian Museum.

There was only one change amongst the Trustees, caused by the death of The Most Revd. Dr. Paul Goethals, S.J., Archbishop of Calcutta, and Mr. W. K. Dods has been appointed to fill the vacant place. The other Trustees who represent the Society are Mr. A. Pedler, F.R.S., Dr. Mahendralal Sircar, C.I.E., Mr. G. W. Kuchler, M.A., and Mr. T. H. Holland, F.G.S.

#### Finance.

The Accounts of the Society are shown in Statement No. 1, in the Appendix, under the usual heads.

Statement No. 8 contains the Balance Sheet of the Society and of the different funds administered through it.

The Budget Estimate for 1901 was taken at the following figures: Receipts Rs. 17,430, Expenditure Rs. 23,326-4 (Ordinary Rs. 16,126-4, Extraordinary Rs. 7,200).

Taking into account only the ordinary items of receipts and expenditure for the year 1901, the actual results have been: Receipts Rs. 17,602-4-6, Expenditure Rs. 11,397-12-5.

The receipts thus show an increase of Rs. 172-4-6, while the expenditure shows a saving of Rs. 4,728-7-7 on the Budget Estimate.

There is an increase in Receipts under the heads of "Subscriptions," "Sale of Publications," and "Government Allowances." Subscriptions were estimated at Rs. 7,000, while the actuals were Rs. 7,995-14, the excess being due to a large number of members being elected during the last year. Owing to heavy purchases of the Society's publications by Messrs. Thacker, Spink and Co., "Sale of Publications" has exceeded by Rs. 279-3-3. A further grant of Rs. 1,000 by the Government of India towards carrying on the work of the International Catalogue of Scientific Literature having been received, there is thus an increase of Rs. 1,000 under the head "Government Allowances."

The difference between the estimated and actual receipts under the head "Interest on Investments" is due to the interest for the second half of 1901 being credited by the Bank of Bengal on 2nd January 1902 instead of 31st December 1901. The heading "Miscellaneous" shows a very slight decrease.

On the Expenditure side, the items of "Salaries," "Pension," "Freight," "Meetings," "Contingencies," and "Printing Circulars, &c.,"

show an increase. Owing to payment of salaries for December last during that month, there is an increase of Rs. 156-8-9 under this head. For the same reason, there is an increase of Rs. 4 under "Pension." The estimate for "Freight" has been exceeded by Rs. 13-8-5. This is due to supplying other Societies with back volumes of the Society's publications in exchange. The amounts allowed for under the heads "Meetings," "Contingencies," and "Printing Circulars, &c.," have been slightly exceeded.

There were three extraordinary items of expenditure during 1901 under the heads of "Furniture," "Royal Society's Catalogue," and "Insurance" not provided for in the Budget. Rupees 112-10 was paid for supplying entire new punkha frills. The expenditure on the Royal Society's Catalogue has been Rs 450-9-9. Rupees 312-8 was paid to Messrs. Duncan Brothers and Co., being fire insurance premium from 19th April 1901 to 19th April 1902.

The Budget Estimate of probable Ordinary Receipts and Expenditure for 1902 has been fixed as follows: Receipts Rs. 18,375; Expenditure Rs. 16,911-4.

On the Receipt side the estimated incomes under the heads "Subscriptions" and "Sale of Publications" is based upon the average of the actual amount received in the past three years. "Interest on Investments" has been increased by Rs. 170 on account of the interest on temporary investments. "Rent of Rooms" has been increased by Rs. 175 owing to the Photographic Society of India being charged an increased rent of Rs. 25 per month from May 1902.

On the Expenditure side, the item of "Meetings" has been slightly increased. The increase of Rs. 500 for books is required to adjust Messrs. Luzac and Co.'s account and to enable the Society to purchase some new books for the Library. Rupees 1,211-6-5 of last year's grant remain unexpended. As there has been no petty repairs last year, a sum of Rs. 100 has been allotted for the purpose.

The item "Proceedings" is based upon the actuals of the past three years, and as the addition to the Society's Library is published yearly a sum of Rs. 600 will be sufficient. Rupees 5 has been allotted for registration fee for 1902.

There is a new item of Rs. 625 under the head "Insurance." Rupees 312-8 was spent last year, but on renewal of the policy the insurance premium will be doubled.

There will, moreover, be an extraordinary item of expenditure under "Library Catalogue." An additional sum of Rs. 100 has been paid to Mr. H. B. Perie, the compiler, on account, leaving a balance of Rs. 1,100 for the budget of 1902.

## BUDGET ESTIMATE FOR 1902.

	Receipt.								
	1901.			1901.			1902.		
	Estimate.			Actuals.			Estimate.		
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Subscriptions ...	7,000	0	0	7,995	14	0	7,500	0	0
Sale of Publications ...	600	0	0	879	3	3	700	0	0
Interest on Investments	5,530	0	0	3,445	12	0	5,700	0	0
Rent of Rooms ...	1,200	0	0	1,200	0	0	1,375	0	0
Government Allowances	3,000	0	0	4,000	0	0	3,000	0	0
Miscellaneous ...	100	0	0	81	7	3	100	0	0
<b>Total ...</b>	<b>17,430</b>	<b>0</b>	<b>0</b>	<b>17,602</b>	<b>4</b>	<b>6</b>	<b>18,375</b>	<b>0</b>	<b>0</b>

	Expenditure.								
	Rs. As. P.			Rs. As. P.			Rs. As. P.		
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Salaries ...	3,800	0	0	3,956	8	9	3,800	0	0
Commission ...	425	0	0	424	3	2	425	0	0
Pension ...	52	0	0	56	0	0	52	0	0
Stationery ...	120	0	0	117	1	0	120	0	0
Lighting ...	60	0	0	42	8	0	60	0	0
Municipal Taxes ...	884	4	0	884	4	0	884	4	0
Postage ...	550	0	0	542	2	6	550	0	0
Freight ...	60	0	0	73	8	5	60	0	0
Meetings ...	60	0	0	85	9	0	80	0	0
Contingencies ...	300	0	0	307	7	0	300	0	0
Books ...	1,500	0	0	288	9	7	2,000	0	0
Binding ...	750	0	0	688	13	0	750	0	0
Journal, Part I	2,100	0	0	958	0	0	2,100	0	0
Ditto, „ II	2,100	0	0	896	10	0	2,100	0	0
Ditto, „ III	2,000	0	0	1,273	15	0	2,000	0	0
Proceedings ...	1,000	0	0	480	8	0	600	0	0
Printing Circulars, &c....	200	0	0	207	1	0	200	0	0
Registration Fee ...	15	0	0	15	0	0	5	0	0
Auditor's Fee ...	100	0	0	100	0	0	100	0	0
Petty Repairs ...	50	0	0	.....			100	0	0
Insurance ...	.....			.....			625	0	0
<b>Total ...</b>	<b>16,126</b>	<b>4</b>	<b>0</b>	<b>11,397</b>	<b>12</b>	<b>5</b>	<b>16,911</b>	<b>4</b>	<b>0</b>

**Extraordinary Expenditure.**

	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Library Catalogue ...	1,200	0	0	100	0	0	1,100	0	0
Repairs ... ..	6,000	0	0	5,050	1	3	.....		
Royal Society's Catalogue	.....			450	9	9	.....		
Furniture ... ..	.....			112	10	0	.....		
Insurance ... ..	.....			312	8	0	.....		
<b>Total ...</b>	<b>7,200</b>	<b>0</b>	<b>0</b>	<b>6,025</b>	<b>13</b>	<b>0</b>	<b>1,100</b>	<b>0</b>	<b>0</b>

**Agencies.**

Our London Agency is still in the hands of Messrs. Luzac and Co., from whom we have not yet received a final account. The value of the publications sent to them during the year amounts to £35-14, representing 313 pieces of the *Journal* and *Proceedings* and Rs. 179-14, representing 365 components of the "Bibliotheca Indica." From them we have received books and papers of the value of £38-6-9.

Our Continental Agent is Mr. Otto Harrassowitz, to whom we have sent publications valued at £13-8-6 and Rs. 184-8, of which £16-10-10 and Rs. 179-10-8 worth have been sold for us. Other books were sent for sale, amounting to Rs. 50. From them we have received books and papers of the value of £34-3-8.

**Library.**

The total number of volumes or parts of volumes added to the Library during the year was 2,461, of which 575 were purchased and 1,886 presented or received in exchange for the Society's publications.

A new edition of the Society's Library Catalogue is still under preparation. On detailed inspection of the manuscript by the Sub-Committee, the compiler was asked to revise the manuscript, and for the extra work involved his honorarium was increased by Rs. 300, making a total of Rs. 1,300.

**International Catalogue of Scientific Literature.**

During the year 1901, the work of the Catalogue, the preparation of Index-slips or cards, as required by the International Catalogue Committee, was begun. These were submitted for correction to the members in charge of the various sections, and four batches of card-slips, 479 in number, were despatched to the Director of the International Catalogue. Up to the end of last year no information as to the probable date of publication of the Catalogue had been received, and the Director has been written to on the subject. A report on the working of the Bureau from

its inauguration in June 1899 to June 1901 was submitted to the Government of India, Home Department, and a further grant of Rs. 1,000 has been placed at the disposal of the Society towards carrying on the work

#### **Insurance of the Society's Building and its Contents.**

On the recommendation of the Repairs Sub-Committee, the Council requested Messrs. Duncan Brothers and Co., Agents of the Lancashire Insurance Company, to issue a cover for Rs. 2,50,000, being the total amount of insurance over the Society's building and its contents at a premium of 2 annas per cent. per annum. Messrs. Duncan Brothers and Co. issued the Policy, but the Calcutta Fire Insurance Agents Association rated the Society's premises at 4 annas per cent. per annum instead of 2 annas per cent. Messrs. Duncan Brothers and Co. agreed to continue the Policy issued at 2 annas per cent. till expiry date, but on renewal of the Policy to charge 4 annas per cent. per annum. As the increased fire insurance premium is due to the Photographic Laboratory, the Council have asked the Photographic Society of India to pay an additional rent of Rs. 25 per month from May 1902.

#### **Barclay Memorial Medal.**

In 1895, the Surgeon-General of the Indian Medical Service offered the Barclay Memorial Medal to the Asiatic Society of Bengal together with the Rs. 500 odd belonging to the fund. The Council of the Society accepted the offer and rules were framed to regulate the award which were published in the Society's Proceedings for August 1897. During 1901, the Council of the Society awarded the first Barclay Memorial Medal to Mr. E. Ernest Green, Government Entomologist, Ceylon, in recognition of his contributions to Economic Entomology during the past year.

#### **Max Müller Memorial Fund.**

At the instance of the Executive Committee of the Max Müller Memorial Fund, a Sub-Committee was appointed by Council. The Sub-Committee appealed for subscriptions to all the members of the Society in India and Burma and to other supporters interested in India and Indian studies. Rupees 165 has been received and the list is still open for subscription. Dr. Bloch, Secretary to the Indian Sub-Committee of the Max Müller Memorial Fund, is prepared to receive further subscriptions.

#### **Proposed Re-organization of the Society.**

There were several meetings of the Committee in connection with the proposed alterations in the status of the Society, and after due deli-

beration the Committee recommended to the Council that the final consideration of the question be postponed, pending a further report from the Committee.

#### **Proposed sale of the Society's Premises.**

On receipt of an enquiry from the Honorary Secretary of the United Service Club, whether the Society would entertain any proposal on the part of the Club to purchase the Society's premises and on what terms, the Council referred the matter to a Sub-Committee, consisting of Major A. Alcock, Mr. S. C. Hill, Mr. W. K. Dods, Mr. J. Bathgate, and Mr. J. D. Nimmo. The Sub-Committee, after obtaining legal assurance of the Society's right to sell its premises, drew up a report with the recommendation that the proposals set forth therein be submitted to the Members of the Society. The Council approved of the report and ordered it to be printed and circulated in accordance with Rule 64A. The question was brought up at the Monthly General Meeting in January, and the Meeting decided that the matter be referred back to the Sub-Committee with the request to frame an estimate of the probable cost of acquiring a new site and erecting a new building with and without accommodation for a Secretary in a suitable neighbourhood, and also to take such steps as might seem sufficient to ascertain definitely what sum is likely to be received by the sale of the present house and site.

#### **Exchange of Publications.**

During the past year, the Council accepted six applications for exchange of publications with other Societies, *viz.* : (1) from the Treasury Department, Bureau of Statistics, Washington, the Society's *Journal, Parts II and III*, and *Proceedings* being exchanged for their publications; (2) from the École Française d'Extrême Orient, Saigon, the Society's *Journal, Parts I-III*, and *Proceedings* for its Bulletin; (3) from the University of Aberdeen, the Society's *Journal, Parts I-III*, and *Proceedings* being exchanged for their Studies; (4) from the Società Romana di Antropologia, the Society's *Journal, Part III*, and *Proceedings* being exchanged for its Atti; (5) from the Korea Branch of the Royal Asiatic Society, the Society's *Journal, Parts I and III*, and *Proceedings* for their Transactions; (6) from the Museo de Historia Natural de Valparaiso, the Society's *Journal, Part II*, and *Proceedings* being exchanged for their publications.

#### **Secretaries and Treasurer.**

Dr. T. Bloch carried on the duties of Philological Secretary and Editor of the *Journal, Part I*, throughout the year, except for four months,



when he was absent on deputation, during which period Mahāmāhopādhyāya Haraprasād Shāstri took charge of the office.

Mr. L. de Nicéville continued Natural History Secretary and Editor of the *Journal, Part II*, till his death in November, when Mr. Frank Finn kindly consented to undertake the work.

Mr. F. E. Pargiter carried on the duties of the Anthropological Secretary and Editor of the *Journal, Part III*, throughout the year.

Mr. T. H. Holland resigned the office of General Secretary and Editor of the *Proceedings* in March, and Major A. Alcock, F.R.S., was appointed. Major Alcock resigned the office in December, and Mr. J. Macfarlane, Librarian of the Imperial Library, agreed to carry on the duties.

Mr. W. K. Dods continued Treasurer throughout the year, except for a month, when he was absent from Calcutta and Mr. C. Michie kindly agreed to carry on the work.

Mahāmāhopādhyāya Haraprasād Shāstri was in charge of the *Bibliotheca Indica* and the search of Sanskrit manuscripts and carried on the duties of Joint-Philological Secretary throughout the year.

Mr. J. H. Elliott continued Assistant Secretary and Librarian throughout the year.

#### Publications.

There were published during the year nine numbers of the *Proceedings* (Nos. 11 and 12 of 1900 and 1-9 of 1901), containing 116 pages of letter-press; four numbers of the *Journal, Part I* (No. 2 of 1900, Nos. 1 and 2 of 1901, and Extra No. 2 of 1901) containing 261 pages of letter-press and two plates; two numbers of the *Journal, Part II* (No. 4 of 1900 and No. 1 of 1901), containing 206 pages of letter-press and a plate of 1900; two numbers of the *Journal, Part III* (one number of 1900 and No. 1 of 1901), containing 185 pages of letter-press and 21 plates. There was also published Part III of Catalogue of the Society's Sanskrit books and manuscripts.

#### Journal, Part I.

In the Philological Section of the Society's *Journal* four numbers have been published, covering altogether 258 pages of letter-press. One of these numbers belongs to Vol. LXIX of 1900, two to Vol. LXX of 1901, and one is an extra number for 1901 giving a sketch of the Ladākhī Grammar. Materials for another number are ready, and it has been proposed to issue another extra number containing appendix to Dr. Hoernle's Report on Central Asian Antiquities.

The last Annual Report contains a synopsis of No. 2 of 1900 from the pen of Dr. Bloch. In the rest of the numbers there is very little of

history or antiquities. They are more linguistic and numismatic than in previous years, but they fully sustain the reputation of the *Journal* of the Asiatic Society of Bengal. Two linguistic papers by the Revd. Mr. T. Grahame Bailey, B.D., M.A., Wazirabad, are very important from many points of view. There are criminal tribes in the Panjab who have peculiar dialects of their own unknown to the peaceful inhabitants. This facilitates the commission of crime and helps the criminals to escape detection. Efforts were often made to enter into the mystery of their dialect, but in vain. Revd. Mr. Bailey has, however, succeeded, at last, in gaining clues to the decipherment of two of these dialects. The Sāsīs are thieves and the Çülūs are cattle-poisoners. Ordinarily they speak the Panjabi dialect, but they use their peculiar dialect only at the time of the commission of crimes. The Çülūs change Panjabi words by the introduction of the syllable *ma* in the middle of the word, just as *skul-skumāl*, but the Sāsī change them in a variety of ways, all of which are equally well known to the initiated.

But the most important linguistic paper of the year is a sketch of the Ladākhi Grammar compiled by A. H. Francke. It is a complete grammar of the Ladākhi dialect of the Tibetan language, and a knowledge of the grammar of the classical Tibetan is essential in understanding the dialectic variety of Ladākhi. The verbal system of Ladākhi shows an advance on the classical system. The classical verb is more a verbal noun, for the verbal strength of a sentence lies less in the verb itself than in the subject of the sentence, whether that be used in the nominative or instrumental. The utterance of the verb in the Ladākhi dialect rests on this: It can no longer be constructed alternately with the nominative and the instrumental, but that each separate verb takes one or the other case alone. The Ladākhi verb shows three distinct stems: (1) The present stem; (2) the perfect stem; and (3) the imperative stem. The future is often formed by adding *in* to the verbs, e.g., *cha-in*, shall go.

Mr. Francke has rendered another important service by publishing three original documents in the Ladākhi dialect giving the history of the country from the earliest time up to the settlement of the country under the Rājās of Kāçmir. They were compiled and translated by the late lamented Karl Marx, a Moravian missionary at Leh, in Ladākhi. Mr. Francke, by publishing the Grammar and the three Histories with translations, has brought the Ladākhi dialect within the reach of scholars in Europe.

Two papers on numismatics by W. Theobald, M.N.S.L., one on Kārsāpana Coinage and the other on the Copper Coins of Ancient India, traverse the entire numismatic work done on these two classes of

coins. The writer examines all the devices found on these and attempts to give them their proper attribution. Errors had accumulated as regards the identification of these various devices for more than eighty years. The errors were made by distinguished men engaged in the pioneer work of finding, classifying, figuring and so on. A vast number of coins have now been collected in different museums and private coin-cabinets and it is now time that a systematic survey should be made of the vast accumulation of materials. Mr. Theobald took upon himself this arduous work and the Indian numismatists will remain ever indebted to him for the thorough manner in which he has performed it. He has rejected many symbols as wrong identifications; he has improved upon many attributions; he has given a better classification; and has placed great importance on the geographical distribution of coins; as, for example, a symbol identified with the deer has been proved to stand for a buffalo. A tree on a coin from Shaharanpore was regarded as pipal, but in that part of the country pipal trees are a rarity, and so it should be Himalayan cedar—so fine, so striking, and so magnificent a tree. From the indices appended to his papers it will be seen how fertile the Indians were in their inventions about these devices. They have pressed Trees, flowers, fruits, animals, birds, shell-fish, in fact, everything under the sky, into their service, and it is no wonder that eminent men were mistaken as to their identification. The future numismatist will find this work much easier. Thanks to Mr. Theobald.

The Sunga or Mitra dynasty succeeded the Mauryas in the Empire of Northern India about the year 180 B.C. The Sunga coins are very rare. Colonel C. E. Shepherd had found two coins of this dynasty. But they belong to two kings of the dynasty not known before, named Dhrūva Mitra and Rudra Gupta. This is a real gain to our knowledge of the Sunga dynasty the kings of which played an important part in North India at a time when the Greeks were establishing themselves in the Panjab.

In a previous paper Mr. Hoey identified Sewan, a station in the Saran district, with the famous Kuçinārā, the place of Buddha's death. In a supplement to that note of his published during the year under review, the writer contends that the Titāria Stūpa between the Daha and Sondi Rivers is no other than the Stupa mentioned by Hwen Thsang as built for the purpose of commemorating the bird which plunged into the water and flying up shook its wings to extinguish a forest fire. This bird-stupa stood near the vihāra, in which was the figure representing the Nirvana with the adjacent stūpa and a pillar bearing a note to the fact. So he thinks that the great Nirvana Stūpa should be somewhere near the Titāria Stūpa. He thinks he has also found the stūpa commemorating the pious deeds of Drona mentioned in Buddhist

books, who interposed to prevent the resort to arms and divided the relics of Buddha to the seven claimants.

Babu Nandalāl Dey visited the Kālaha hill in the Hazaribagh district on the 21st April 1890. With the sole exception of the image of Kuleçvari he found the images at the place to be all Buddhistic, and so he suspects that the place is the Makulaparabata of the Burmese Buddhist annals. The place has subsequently been visited by Dr. Stein and he confirms the statements of the Babu.

In the district of Jessore there is a place named Çaila kûpā, where there is an old mosque which Maulvi Abdul Wali, the Sub-Registar of the place, has identified with a masjid erected by the great Musalman Sultan of Bengal, Alauddin Husain Shah, at the request of Huzrat Maulana Muḥamad 'Arab, a holy man who flourished at his time. The work was commenced by Huṣain Shah's son, Nasir Shah,—who subsequently became King of Bengal.

Mr. E. D. Maclagan, C.S., of Multan, has succeeded in identifying many of the places mentioned in the account of Multan Sarkar in the third book of the *Ain-i-Akbari*. He has also succeeded in proving that the rivers Indus and Chenab did not then flow in their present channels.

Mahāmāhopādhyāya Haraprasād Shāstri read three papers on the history of the re-organization of the Caste System in Bengal under the greatest of its Hindu kings, namely, Vallāla Sena. His authorities are two copies of *Vallāla-carita*, copied in 1707 and 1791. He has proved that the work contains a genuine history of the administration of Vallāla Sena and he has discovered that the Acaryyas of Bengal, the astrologers, diviners, and pacifiers of planetary deities, though they pass at present as Brahmanas, are none else than the Magi, or the descendants of the Median and Persian priesthood.

From *Vallāla-carita* Mahāmāhopādhyāya Haraprasād Shāstri has shown that the present low position of the wealthy and influential caste of Sonar banias in Bengal is owing to the fact that they were Buddhists, they ridiculed the Brahmanas, they joined the Buddhist Pāla kings against Vallāla and they were connected with the Pālas by marriage also. Mahāmāhopādhyāya Haraprasād Shāstri has shown from the same authentic source that the Kaivarthus, so influential in the district of Rajshahi, were once the lords of North Bengal, that they headed a successful rebellion against the Palas, that when worsted they joined Vallāla, who raised their status in the Hindu society and gave them the governorship of South Bengal, where in the sub-divisions of Ulubaria, Tamluk, and Kontai they are still very influential.

Mahāmāhopādhyāya Haraprasād Shāstri's papers have appeared in the Proceedings.

## Journal, Part II.

Although only two numbers of Part II of the Society's *Journal* have appeared during the past year, and of these one belonged to the year previous, yet several interesting papers have been published.

Major L. Rogers, I.M.S., contributes a most valuable account of the relationship of the water-supply, water-logging, and distribution of *Anopheles* mosquitoes, respectively, to the prevalence of malaria north of Calcutta. He concludes that a good water-supply is an important prophylactic measure in the lessening of the prevalence of malaria, and that the question whether the *Anopheles* mosquitoes play a part by taking the malarial parasites back to the tanks from their human hosts or not must be left to be determined by future experiments.

Dr. P. C. Roy has a paper dealing with two points in Chemistry, entitled, respectively, Further Researches on Mercurous Nitrite and its Derivatives, and On Mercurous Iodide and a new Method of its Preparation.

There are three botanical papers: A description of a new Himalayan genus of *Orobanchaceæ*, by Mr. J. S. Gamble and Major Prain, I.M.S., the eighteenth instalment of the latter gentleman's *Noviciæ Indicæ*, dealing with the Asiatic species of *Dalbergia*; and the twelfth of Sir George King's Materials for a Flora of the Malayan Peninsula. For the purpose of studying the Asiatic *Dalbergias* Major Prain has consulted specimens from no less than fifteen herbaria, besides that of Calcutta, in the hope of publishing a monograph of the genus; but this proving impracticable under present circumstances, the seventy-four known Asiatic species have been enrolled in a hand-list with bibliography and record of distribution. In the case of the less familiar species the field numbers of the specimens are quoted in order that the list may be of use to workers in herbaria which Major Prain has been unable to visit, should these contain duplicates bearing these numbers.

In Sir George King's paper will be found descriptions of all the species of the Myrtle order to be found in a truly indigenous condition in the Malay Peninsula, Straits Settlements, and Andaman and Nicobar Islands. Although this order of plants is best represented in South America and Australia, the above mentioned portion of the Oriental region yields no less than a hundred and twenty-two species, belonging to eleven genera. The common Myrtle is the only European form. The most important genus here dealt with is *Eugenia*, of which no less than ninety-six species are described, more than half of these being new to science. New species of the genera *Barringtonia*, *Tristania*, *Pseudo-Eugenia*, and *Planchonia* are also dealt with in this valuable contribution to Oriental botany.

The contributions of zoological writers do not bulk very largely in our publications for the past year, owing largely to the fact that our leading contributor, Major A. Alcock, I.M.S., F.R.S., has been occupied on other publications, which under the circumstances may well claim notice here. One is the first instalment of a Catalogue of the Decapod Crustacea in the collection of the Indian Museum, published by the Trustees. This part contains the Introduction, and an account of the curious group Dromides or Dromiacea, crabs which are remarkable for their narrow form, long antennae, and the position of the last pair of legs on the back; these curiously-placed legs being often used to carry a sponge or shell used as a protection. These crabs, as a matter of fact, find their nearest allies in the lobsters.

Full descriptions of the Indian genera and species are given, together with lists of the specimens in the Museum collection, and the locality and depth at which these were obtained, generally by the Marine Survey ship *Investigator*.

The Introduction will be of especial value to students of the Crustacea everywhere, inasmuch as it contains a full account of the structure of the group Decapoda (comprising the crabs, lobsters, and shrimps), illustrated by reference to the Andaman Lobster (*Nephrops andamanicus*). This species has been chosen instead of the usual type, the European crayfish (*Astacus fluviatilis*), since it belongs to our local fauna in the East. Subsequently the *Brachyura* or crabs are compared with this general type. A particularly interesting section is that which deals with the general bionomy, or habits of life, of crabs as a whole. They are, says the author, "the most highly organised and most intelligent of the crustacean class. The Cyclometopes and Catometopes are particularly alert and active, and among several of the gregarious species of amphibious Catometopes life appears to be almost as complex as it is among many insects."

The second and larger work is a complete Descriptive Catalogue of the Indian Deep-sea Crustacea in the Indian Museum, being a revised account of the deep-sea species collected by the *Investigator* and also published by the Trustees. This is by no means a reprint of earlier published reports, for in addition to tables and descriptions of species, it contains tables and definitions of all the groups under which these are arranged, from subgenera up to suborders; and it also embodies a large amount of material which the author has prepared to serve as the basis for the more comprehensive work on the Indian Crustacea above commented on. Accounts of many of the species dealt with herein have been published in our *Journal* by Major Alcock and Captain A. R. S. Anderson, I.M.S., and by the late Professor Wood-Mason. This large

memoir, like the work last mentioned, is fully illustrated, the illustrations in the present book being peculiarly fine. It is gratifying to note that their excellence has been much commented on in England, more especially as the drawings are the work of a native artist trained to the work by Major Alcock himself.

To the general student of animal life and the intellectual public as a whole the third of Major Alcock's productions during the past year will be the most interesting. This is "Zoological Gleanings from the Royal Indian Marine Survey Ship *Investigator*," originally published among Scientific Memoirs by Medical Officers of the Army in India. Herein are collected a number of most valuable and interesting observations hitherto scattered among reports and papers where they are not always easily accessible and are liable to be overlooked. These observations deal with such fascinating subjects as commensalism (the association of two very different animal forms for their mutual benefit), sexual characters, pairing and parental care, protective and warning devices and colouration, courtship, and habits of breeding and feeding. And these relate not only to crustaceans and fishes, but to other marine animals, such as echinoderms, while there are also some excellent observations on birds and reptiles. Taken altogether, this paper is a remarkable contribution to the natural history of many groups of animals, and shows the author equally at home in field observation as in systematic work, which is more than can be said, unfortunately, for many zoologists in these days of wild speculation and quibblings about nomenclature.

In his department of butterflies, our late and deeply-to-be-regretted member, Mr. L. de Nicéville, was also always conspicuous as a worker equally competent in field or cabinet study, and in his last year's paper a "Note on the Butterflies comprised in the subgenus *Tronga* of the genus *Euploea*," he shows his usual perspicacity in attempting to reduce to order the limbo of synonyms in which workers have plunged these unfortunate insects, with which he was so well acquainted in life.

Mammals and birds are the chief forms of animal life dealt with in two interesting papers by Captain A. H. McMahon, C.I.E., which embody notes on the fauna of the little-known regions of Dir, Swat, and Chitral. Of special interest are the author's observation of the occurrence of monkeys in this region and his account of the Chitrali method of catching goshawks.

Lastly, some zoological contributions to the Proceedings of the Society naturally come in for mention here. There have been some interesting exhibits, Major Alcock having shown some fine examples of the Museum modeller's work in snakes and deep-sea fish, and Mr. Finn a living guinea-fowl provided with a neck-tassel of feathers, a curious

abnormality in so little variable a bird ; while in the Proceedings was published a most useful paper by Miss Evans, dealing with the feeding habits and reproduction of the common grey mosquito of Calcutta. In this communication it is shown that the insect may live in its adult stage for as long as five weeks, and that it exhibits a marked preference for the blood of the house-sparrow as food, as well as for our own. Altogether the scientific section of the Society's work may be said during the last year to have fully maintained its interest.

### Journal, Part III.

This part of the *Journal* for 1900 contained a long paper by Lt.-Col. Waddell on the Tribes of the Brahmaputra Valley, and could not be issued during that year because of the difficulty and delay attending the revision of the proofs by the author, who was then in China. The article was at length passed through the press and the *Journal* for 1900 was published during the early part of 1901. The tribes in that Valley represent radical elements from all the three great ethnological sub-regions, Indo-Chinese, Indo-Malayan and Indian; and the author describes their peculiar characteristics, dealing with each tribe in detail, and gives a large quantity of anthropometric data which he collected himself.

Papers, which had been read before the Society during 1900, were then brought into the *Journal* for 1901 and were issued at the beginning of the year. They describe some castes and legends in Berar, stone implements in the Santal Parganas (where they are known as lightning-stones), and some riddles from Behar. The second Number contains an article, in which Mr. Holland describes the Coorgs and Yeruvās in the Madras Presidency and gives valuable information and measurements collected by himself; and another paper setting out an Accumulation Droll and Rhyme in Bengal. Mr. Holland's conclusion is that the Coorgs, when judged according to ethnological characteristics, take a very high position among the races of South India.

### Coins.

Fifty-seven coins were presented to the Society by the Governments of Bombay, Madras and N.-W. Provinces during the year under review. Of these 3 are gold, 7 copper, 41 silver and 6 lead coins. The latter bear the die of the Andhra Dynasty who ruled Eastern and Southern India from the beginning of first century B.C. to the end of the second century A.D. Of the gold coins one belonged to the reign of Jagadeka-Malla of the later Calūkyā Dynasty of Kalyāna in the Marhaṭṭa country, found in Bijāpur District, within his kingdom. The second gold coin



comes from beyond India. It belongs to the *Khalipas* of *Baghdād*. The third belongs to the *Toghlaq* Dynasty of *Delhi*. Most of the silver coins belong either to the *Moghuls* or to the independent *Muhammadian* Dynasties who preceded the *Moghuls*. One of them, however, is of peculiar interest. It belongs to *Asala Pala*, a Hindu king of *Kabul*, who must have flourished before the *Ghaznavites* established their rule in that country. The copper coins are not of much importance. Three of the copper coins are dated. They all, however, belong to a very late date.

### Bibliotheca Indica.

Twenty-four Fasciculi have been published during the year at a cost of Rs. 10,099-11-2. Of this sum the printing charges amounted to Rs. 5,926-14 and the editing charges Rs. 4,172-13-2. The average cost of publishing each fasciculus being Rs. 420. Of these 24 fasciculi, 22 fasciculi belong to the *Sanskrit*, two to the *Arabic-Persian* series and none to *Tibetan*. No work has come to a close during the year. These 24 fasciculi belong to 14 different works. The following is a description of the three new works taken in hand, all being in the *Sanskrit* series.

1. *Advaita Cintā-kaustubha* by *Mahādevānanda Yati*, a work belonging to the non-dual school of *Vedānta* philosophy. It was composed in the 18th century and it embodies the latest development of the non-dual theory. It is being edited by *Babu Girindranath Dutta, B.A.*, Superintendent, *Hatwa Raj*. The work is accompanied with a commentary,—an old and authentic one which has the rare merit of really elucidating the text.

2. *Varṣa-kriyākaumudī*—by *Govindānanda Kavikaṅkanācāryya*, under the editorship of a young paṇḍit of *Bhāṭpārā*, named *Kamal Kṛṣṇa Smṛtibhūṣaṇa*. The importance and usefulness of the works on *Hindu Law and Ritual*, which preceded *Raghunandana's* codification in the 16th century, in the eye of scholars and anthropologists can scarcely be overrated. The Society was anxious for a long time to collect MSS. of such works and they have succeeded in this to a great extent. They have discovered several old codes. Of these *Govindānanda's* code, complete in four parts, is often quoted by *Raghunandana* and his school. It gives a complete review of all the *Rituals* to be observed during the course of a year. The Council of the Society therefore, proposed to publish it. It was also proposed to infuse new blood in the editorial staff of the *Bibliotheca Indica* series, and a young Paṇḍita from *Bhāṭpara* has been chosen.

3. For the same reason another young Paṇḍit, Paṇḍit *Vinoda*

Vihāri Kāvya-tīrtha, a young man serving under Mahāmāhopādhyāya Harapasād Shāstri, as a travelling Paṇḍit and a collector of MSS., has been chosen to edit the Nityācārapaddhati by Vidyākara Vajapeyi, an ancient Smṛti compiler of the highest authority in Orissa. Sanskrit works of that country were unknown to the scholars of Europe and it was the zeal of this young Paṇḍit, which brought them to light, and the most important of them was Nityācāra. Therefore the discoverer was entrusted with the work of editing it.

#### Search for Manuscripts.

During the year under review was published the quinquennial report of the operation of the search for Sanskrit and other MSS. in Bengal. From 1891 the work has been done by Mahāmāhopādhyāya Harapasād Shāstri, M.A., Principal, Sanskrit College, Calcutta. During the five years covered by the Report Mahāmāhopādhyāya paid two visits to Nepal and two to Benares, and his agents were active in Orissa, Mithita, East Bengal, and West Behar. Some of the discoveries of these years will leave their stamp on the history of India. Dhanurveda was known only by name. Four distinct works were discovered during these years, giving some idea of the military tactics in ancient India. Many new works were discovered on Medicine and Veterinary Science. A portion of the Kāçyapa Saṃhitā was brought to light. In Astrology the translation of a Greek work into Sanskrit by a Greek *savant* was discovered. Several historical works of great importance were made known to the public.

The Report has been very favourably received in Europe and Mahāmāhopādhyāya Harapasād Shāstri has received many appreciative letters from eminent Orientalists there. The President has requested the Government of India to send copies of the Report to the Darbar of Nepal, where Mahāmāhopādhyāya Harapasād Shāstri made some of his most important discoveries. The discovery of MSS. of Purāṇas and Tantras written in ancient Gupta character has thrown back the date of the composition of these two classes of works by several centuries. Tantras were generally considered to have been as old as the twelfth century, but Mahāmāhopādhyāya Harapasād Shāstri has discovered a Tantra work dated 908 A.D. and two more MSS. of tantrika works which go back to the sixth century. A MS. of Skanda Purāna belongs to the seventh century, so these two classes of works may now be pronounced to have been as old as the second or third century A.D., if they did not belong to earlier centuries.

The Report having been read and some copies having been distributed, the President invited the meeting to consider it at their leisure.

The President then announced that the Trustees of the "Elliott Prize for Scientific Research" had awarded the prize for the year 1901 to Babu Sarasi Lal Sarkar, and laid on the table the following :—

REPORT ON THE ELLIOTT PRIZE FOR SCIENTIFIC RESEARCH FOR 1901.

The Trustees have received Essays from the following competitors for the prize :—

1. An essay dealing with the properties of recurring radix fractions. By Sarasi Lal Sarkar, M.A.
2. A Memoir on Singular Solutions of Differential Equations. By Jnan Saran Chakravarti, M.A.
3. A new method of solving Quartics by Radicals. By Nripendra Nath Chattopadhyay.
4. Self-Acting pump. By Atul Krisna Day.

The Trustees, after consulting experts as provided in the scheme, adjudge the prize for the year 1901 to Babu Sarasi Lal Sarkar, M.A.

T. RALEIGH, <i>Vice-Chancellor, Calcutta University.</i>	}	Trustees.
A. PEDLER, <i>Director of Public Instruction, Bengal.</i>		
J. WOODBURN, <i>President, Asiatic Society of Bengal.</i>		

CALCUTTA :  
4th February, 1902. }

The President then addressed the meeting.

ANNUAL ADDRESS, 1901.

GENTLEMEN,

I do not propose to detain you to-night with a long address. As it happens, I have been engrossed during the last two weeks in other matters, which have left me scant leisure, but I do not shelter myself behind that excuse. It would be an unworthy return for the honour you paid me in electing me your President if I did. But it is not possible that any man can know or profitably address you on all the varied subjects with which the Society concerns itself, and I think I introduced a worthy variation in the customs of our body in leaving to the experts whom we make our Secretaries the duty of explaining, as they alone can properly do, the researches of the year in their several departments. They have prepared reports of much interest, which will be separately placed before you, and I shall content myself with drawing

your attention to the most prominent of the facts they mention. However unlearned any one of us may like myself be in specific branches of our enquiries, I am quite certain that there is not one of us who is not interested in every research, which unfolds new features of Eastern life, and in the conclusions which those researches add to our general knowledge.

Before, however, going on to these more special questions, I may congratulate the Society upon the position it holds at the end of this year. The roll of its members stands higher than it has done for sixteen years. Its financial position has correspondingly improved, and the balance at its credit now stands at the respectable figure of Rs. 1,60,000. I do not think it has shirked, to attain this useful end, any of its understood and traditional duties. For instance, it has persevered faithfully in its self-imposed but invaluable duty of publishing, for the information and use of the learned, ancient manuscripts of importance which have come under its cognizance. The Society spent upwards of Rs. 10,000 last year in the furtherance of its *Bibliotheca Indica*. The published fasciculi were chiefly from Sanskrit manuscripts. Two of these are of much importance: one a treatise of the 18th century on the Vedanta philosophy; the other a codification of the 15th century of the existing rules of Hindu law and ritual. Important progress was made in the printing of Sir George King's costly, but very valuable, memoir on the Flora of the Malayan Peninsula—a work in which the Government of the Straits Settlements has now taken a warm and practical interest. Upon the contributions of the members to the *Journal of the Society* I shall presently say something. I am speaking at present only of the financial side of our business. We have our buildings in good repair; for the first time we have insured them. But though we stand well, we might stand better, and there are many directions in which larger money help from us is most necessary for the prosecution of researches, both scientific and literary. We have therefore seriously considered the question whether we might not with advantage sell our present house and its site and transfer ourselves to a cheaper situation. Your decision will, of course, depend upon the offers which may be made to you.

A proposal of cardinal importance was also brought before you for altering the status of the Society by including in its scope the development of Indian art, and especially by an enlarged attention to the application of science in Eastern studies. The decision of the Society has been to leave its name and status unchanged. If I may say so, I think that decision was right. The Society has an ancient and honoured name. Its special and proper objects have been consecrated

by the lapse of years. The scientific students it was proposed to allure to our rolls have their independent and specialised organizations, and I think the majority of the Society were right in the belief that the originators of the proposal would not succeed in merging these Associations in the wider and more general body of the Asiatic Society. Our Society on its old and time-honoured basis is losing no ground. On the contrary, it is growing in strength and vigour, and it is to my mind certain that the interest of its enquiries must steadily reach out to and fascinate an increasing circle of Indians and Europeans alike. A great Indian scholar, like our friend Pandit Haraprasād Shāstri, whose contributions to our journals show such wide reading and thought, cannot fail to attract his countrymen to our rooms; and there is hardly a year, in which we are not delighted by the accretion of young Englishmen, like Captain McMahon and Mr. Maclagan, who find time in all their busy lives to discern and track out things of value to our knowledge of this great India. May the Society ever grow and prosper.

Permit me now to speak to you very briefly of some of the results of the researches of the year.

In the Philological Section, the most important contribution was a paper by Mr. A. H. Francke on the grammar of the Ladakhi dialect with three original documents in that language on the history of Ladakh, a paper which, I understand, has already attracted much attention among the scholars of Europe. Mr. Theobald has made a new and exhaustive examination of the copper coins of Ancient India, Mr. Hoey has continued his interesting and ingenious enquiries into sites connected with the life of Buddha, and progress has been made by others in the identification of places of note in the ancient history of India. Perhaps I may be permitted in this connection to make some reference to the conservation of ancient monuments in Bengal. They are not so numerous as in some of the other provinces of India. They are, I am afraid, less imposing or beautiful, but some of them are of high merit. The stone temples of Bhubaneshwar are small compared to the great pagodas of Southern India, but they are beautiful specimens of the stone-carver's art in the seventh century. There are many of them in excellent preservation, and the most precious of them have been or are being restored with a neatness and care which is most creditable to the engineers and their workmen, and will now certainly be safe for a long time to come. In the Malda district there are at Gaur and Paudua the remains of Muhammadan buildings of far greater magnitude and number. The damage to them is unfortunately greater. The Adina Mosque in Paudua must have been in its time one of the largest and

noblest mosques in India ; and at Gaur there are specimens of work in coloured tiles which is unique in Bengal. The repair and where possible the restoration of some of these beautiful buildings is a work of great difficulty and delicacy, but it has begun, and I trust that the result both there and at Bhubaneswar will be the preservation to the student of history and of art of specimens, which he will prize, of the ancient architecture of Bengal. I have just returned from a long promised visit to the great fort of Rhotas. The buildings are comparatively modern, but they are historical, and they are almost the only examples we have in Bengal of the conditions of eastern military life a couple of hundred years ago. Fortunately these buildings are almost perfect, practically as sound as when Hamilton visited and mapped them in 1824, and they will command, perhaps, increasingly as the generations pass, the keen interest of the traveller and the historian of this country.

On the scientific side of the Society's work we had a particularly minute and convincing investigation by Major Rogers on the connection between malaria and water-supply. His enquiries were conducted in the riparian municipalities to the North of Calcutta and are now under the practical consideration of the local bodies which govern them. Sir George King, Major Prain and Mr. Gamble have been adding to their botanical discoveries, and Major Alcock has pursued those singularly interesting studies in marine life which in his modesty he calls Zoological Gleanings. His observations on the protective and warning devices of animals, of their adaptations of colour for their protection from their habitual enemies, would attract the quick attention of any who have the smallest knowledge of zoological science. I wish some of these learned gentlemen would take compassion on those who are unlearned or busy, or both. They would earn the grateful thanks of those who stand sorrowfully outside their ranks, if they would prepare for us small guide-books to the bird-life and the plant-life of defined areas, where birds and flowers are many and attractive. It is impossible for any one but a skilled botanist to track out a flower through the vast pages of Hooker's seven volumes. Mr. Gamble set an excellent example by his manual on the trees and shrubs of the Eastern Himalays, but his book is meant for the forester or the planter. What is wanted is a popularly written manual, all the better if it is illustrated, in which the enquirer can easily and quickly learn the names of the birds and flowers around him. Illustrations can now be very cheaply made, and those who have seen the charming little volumes of, I think, the Tract Society on the common wild flowers of England, will know how a book of the kind attracts hundreds to studies in natural history, who otherwise pass by unheeded the beautiful objects with which nature surrounds their path. A small

museum will be opened in Darjeeling next summer, confined to specimens of the birds and butterflies and pictures of the flowers of the Darjeeling hills, but handier methods are wanted, and I hope the want will be supplied. I forgot to mention the lists of the Simla flowers prepared by Mr. Babington-Smith, and of the Mahableshtar flora by Mr. Bridwood, both of them valuable, but neither equal to the delightful standard of the little book I mentioned about English wild flowers. I cannot mention these researches without coupling with them the name of our late Secretary, Mr. deNicéville. His death is a loss we all deeply deplore. It was characteristic of his life that his death came from his devotion to his scientific pursuits. It was on a naturalist's expedition to the lower valleys of the Himalayas that he caught the fever, which caused his untimely and lamented end.

On the Anthropological side we are indebted to that assiduous composer, Major Waddell, for a memoir on the tribes of the Brahmaputra Valley, and to Mr. Holland for another on the Coorgs and Yerusas.

And now, gentlemen, I have sketched as rapidly I could the outlines of the work of the Society in 1901, and drawn your attention to the more important and interesting of the matters you will find in our records. It remains for me only to congratulate you again on the progress of the Society, and to thank you for the honour you did me in electing me to the office I regretfully lay down. It will be hereafter a gratifying memory if I have been able in my intercourse with my brother officers to persuade them to cultivate according to their several tastes, habits of observation outside the catchery which vary and brighten work, and which continuously deepen by practice their interest in the past or the future of this illimitable country.

The President announced that the Scrutineers reported the result of the election of Officers and Members of Council to be as follows:—

*President.*

The Hon. Mr. C. W. Bolton, C.S.I., I.C.S.

*Vice-Presidents.*

H. H. Risley, Esq., B.A., C.I.E., I.C.S.

Colonel T. H. Hendley, C.I.E., I.M.S.

R. D. Oldham, Esq., A.R.S.M., F.G.S.

*Secretary and Treasurer.*

Honorary General Secretary:—J. Macfarlane, Esq.

Treasurer:—W. K. Dods, Esq.

*Additional Secretaries.*

Philological Secretary :—T. Bloch, Esq., Ph.D.

Natural History Secretary :—F. Finn, Esq., B.A., F.Z.S.

Anthropological Secretary :—E. A. Gait, Esq., I.C.S.

Joint Philological Secretary :—Mahāmāhopādhyāya Haraprasād Shāstri, M.A.

*Other Members of Council.*

Major A. Alcock, M.B., LL.D., F.R.S.

J. D. Nimmo, Esq.

C. L. Griesbach, Esq., F.G.S., C.I.E.

A. Pedler, Esq., F.R.S.

J. Bathgate, Esq.

T. H. D. La Touche, Esq., B.A.

Captain L. Rogers, M.D., B.Sc., I.M.S.

Kumar Ramessur Maliah.

Arnold Caddy, Esq., M.D., F.R.C.S.

The Meeting was then resolved into the Ordinary General Meeting.

The Hon. Mr. C. W. Bolton, C.S.I., I.C.S., President, in the chair.

The Chairman before taking his seat said :—

“GENTLEMAN,—Two pleasing duties devolve on me at the outset on assuming the office of President of this Society. In the first place, I have to thank you for the great honour which I have received at your hands to-night. Recalling some names of the many distinguished men who have presided over the Society I felt much hesitation in acquiescing in the wish of the Council to nominate me for election to that dignity. You have now been good enough to ratify the Council's nomination, and it remains to me only to couple with my grateful acknowledgment the assurance that it will be my earnest endeavour throughout my tenure of office to promote the welfare of the Society. My second duty and privilege, is to express to our late President, Sir John Woodburn, our deep obligation for his constant and active interest in the management and the work of the Society. We are all aware of the great responsibility and burden of his position at the head of this Province, and of the numerous demands on his time. Nevertheless, and, I fear, at the sacrifice of precious leisure and rest, he has taken a full share in the business of the Society, and for this reason our thanks to him are all the more deeply felt.”



The minutes of the last meeting were read and confirmed.

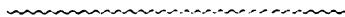
Forty-two presentations were announced.

Lt.-Col. G. Ranking, I.M.S., Mr. F. P. Dixon, Babu Girish Chand Ghosh, Mr. A. C. Sen, Dr. C. Schulden, and Lala Shyamlal, were ballotted for and elected Ordinary Members.

It was announced that Lieutenant B. Scott and Mr. W. A. Talbot had expressed a wish to withdraw from the Society.

The Kumar Sahib of Bansberia brought for exhibition the original **sanad** issued by the Mogul Emperor Aurangzeb conferring on Raja Rameswar Rai, the hereditary title of "Rai Mahasai;" also a book of original coloured designs made by an ancestor of his in the 18th century for the decoration of a temple.

The General Secretary reported the presentation from the Bombay Branch of the Royal Asiatic Society, of 7 silver coins found in the Ratnagiri District.





PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.  
FOR MARCH, 1902.

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The Monthly General Meeting of the Society was held on Wednesday, the 5th March, 1902, at 9 P.M.

THE HON. MR. C. W. BOLTON, C.S.I., President, in the chair.

The following members were present:—

Maulavi Abdul Wali, Major A. Alcock, F.R.S., Major W. J. Buchanan, I.M.S., Mr. F. Finn, The Revd. E. Francotte, S.J., Col. T. H. Hendley, C.I.E., Dr. W. C. Hossack, Babu Parmeshwar Lall, Mr. W. A. Lee, Captain A. F. McArdle, I.M.S., Mr. J. Macfarlane, Mr. E. B. H. Panton, Rai Ram Brahma Sanyal Bahadur, Mahamahopadhyaya Haraprasad Shastri, Babu Chunder Narayan Singh, Babu Lakshmi Narayan Singh.

*Visitors*:—Mr. J. B. Fuller, C.I.E., Mr. E. W. Harper, Mr. B. M. Morton, Mr. H. E. Stapleton, Mr. H. Wheeler.

The minutes of the last meeting were read and confirmed.

Fifteen presentations were announced.

Babu Rajendra Chandra Shastri and Raja Binoy Krishna Deb Bahadur, were balloted for and elected Ordinary Members.

The President announced the receipt of a remittance of Rs. 8,750 from the Government of the Strait Settlements, being contribution for

the purpose of defraying the cost of publication of Sir George King's *Materials for a Flora of the Malayan Peninsula.*

Mr. F. Finn read an obituary notice of the late Mr. L. de Nicéville.

By the death of Charles Lionel Augustus de Nicéville, Entomologist to the Government of India the world of science loses a brilliant and successful worker. He was born in 1852, and came of a noble Huguenot family long domiciled in England, and was the last baron of his line. His father was a member of the medical profession. He was educated at St. John's College at Hurst Pier Point, near Brighton, and gave early evidence of entomological tastes, as a schoolfellow informs us that he spent all his spare time in studying insects instead of participating in the ordinary school games. After leaving school he was for some time employed in a bank, but came out to India, and held non-gazetted appointments from 1876, his last one being that of Clerk of the Calcutta Small Cause Court, in which employment he was well known for many years in Calcutta. His holidays and daily leisure he employed in the Study of Oriental butterflies, on which he was recognized as the greatest authority. His papers on this subject were over 50 in number, and were of the very greatest importance, as he was a naturalist of the all-round type, not only studying his specimens in the cabinet but collecting largely for himself, and devoting much attention to breeding. By this method he experimentally proved that in no less than four cases seasonal forms of the same butterfly had been wrongly separated as species, and by applying this knowledge was able greatly to elucidate the history of their forms. He described many new species of butterflies and contributed much to our knowledge of the distribution of these insects, travelling in the course of his entomological researches far and wide in the east, from Ladakh to Japan and Sumatra. His researches were carried on for many years in a room allotted to him in the Indian Museum, where he kept his very fine and extensive collection, which has lately been acquired by purchase by that institution. It was his custom to daily resort to the museum for two or three hour's study before breakfast, and thus he was able to get through a great amount of work during the many years in which he pursued his studies.

His results were published in several scientific Journals, especially in those of the Asiatic Society of Bengal, and of the Bombay Natural History Society. Of both of these he was a member, in the latter case an honorary corresponding one, and he served them loyally and well. More than once he officiated as Natural History Secretary to the Asiatic Society, and once as the Secretary for Anthropology, and from his long

connection with the Society, dating from 1881, he was a living repository of its observances and traditions. To the Bombay Society he was of the greatest assistance, as he long undertook the task of correcting the proofs of their Journal, at which he was most painstaking and assiduous. The qualities of method and industry were, indeed, most characteristic of him, and make his published work of the very highest of value.

In addition to his connection with these Indian scientific societies, he was a member of the Linnean and the Entomological Societies, and in 1888 was elected a Corresponding Member of the Zoological Society, London, to whose Proceedings he also contributed.

His great work on the Butterflies of India, Ceylon and Burmah, was unfortunately never finished, but such portions of it as were published have been of the very greatest use. For three years from 1881 to 1884 he was put on special duty in the Indian Museum, whose exhibition collection of Butterflies he arranged, and at the beginning of the past year, to his great satisfaction, he was attached officially to that institution on the creation of the post of Government Entomologist. He attacked the work of economic entomology with his wonted energy, and in the pursuit of his studies in the Darjeeling Terai contracted the fatal attack of fever and pneumonia which caused his untimely death.

This has come as a terrible blow to his numerous friends, for his singularly kind and genial disposition had endeared him to all.

With a wide capacity for enjoyment he combined singularly simple tastes, and both in this and in his equanimity of temper and cheerfulness of mind showed himself a true philosopher. While he also realized in the fullest degree Chaucer's noble definition of the true gentleman as one who is always courteous and ever on the alert to do a kindness whenever he can. He leaves but one child, a daughter, and the heartfelt sympathy of all who knew and loved him in the east and at home will be with this young lady and her relatives in this sad bereavement.

*List of Scientific Papers by* LIONEL DE NICÉVILLE, F.E.S., C.M.Z.S.

Some new species of Rhopalocerous Lepidoptera from the Indian Region, Journ. As. Soc. Bengal, 1880, pt. 2, pp. 245-248 (in collaboration with Capt. G. H. L. Marshall, R.E.)

List of Diurnal Lepidoptera from Port Blair, Andamans, with descriptions of some new or little-known species and of a new species of *Hestia* from Burmah, Journ. As. Soc. Bengal, 1880, pt. 2 pp. 223-243, pl. XIII (in collaboration with Mr. J. Wood-Mason).

List of Butterflies taken in Sikhim in October, 1880, with notes on Habits, etc., Journ. As. Soc. Bengal, 1881, pt. 2, pp. 49-60.

- List of Diurnal Lepidoptera inhabiting the Nicobar Islands, Journ. As. Soc. Bengal, 1881, pt. 2, pp. 224-238 with a woodcut (in collaboration with Mr. J. Wood-Mason).
- Second List of Rhopalocerous Lepidoptera from Port Blair, Andaman Islands, with descriptions of and on, new and little-known species and varieties, Journ. As. Soc. Bengal, 1881, pt. 2, pp. 243-261, pl. XIV (in collaboration with Mr. J. Wood-Mason).
- Second List of Butterflies taken in Sikhim in October 1882, with notes on Habits, etc., Journ. As. Soc. Bengal, 1882, pt. 2, pp. 54-66.
- Second List of Diurnal Lepidoptera inhabiting the Nicobar Islands, Journ. As. Soc. Bengal, 1882, pt. 2, pp. 14-20, pl. III, and two woodcuts (in collaboration with Mr. J. Wood-Mason).
- On a new little-known Rhopalocera from the Indian Region, Journ. As. Soc. Bengal, 1883, pt. 2, pp. 65-91, pls. I, IX-X.
- Descriptions of a new species of the Rhopalocerous Genus *Cyrestes* from the great Nicobar Islands, Journ. As. Soc. Bengal, 1883, pt. 2, pp. 1-3, pl. I.
- List of Butterflies of Calcutta and its neighbourhood, with notes on Habits, Foodplants, etc., Journ. As. Soc. Bengal, 1885, pt. 2, pp. 39-54.
- Fourth List of Butterflies taken in Sikhim in October, 1884, with notes on Habits, Journ. As. Soc. Bengal, 1885, pt. 2, pp. 1-5.
- Descriptions of some new Indian Rhopalocera, Journ. As. Soc. Bengal, 1885, pt. 2, pp. 117-124, pl. II.
- On the Life-History of certain Calcutta species of *Satyrinæ*, with special reference to the Seasonal Dimorphism alleged to occur in them, Journ. As. Soc. Bengal, 1886, pt. 2, pp. 229-238, pl. XII.
- On some new Indian Butterflies, Journ. As. Soc. Bengal, 1886, pt. 2, pp. 249-256, pl. XI.
- List of the Lepidopterous insects collected in Cachar, Journ. As. Soc. Bengal, 1886, pt. 2, pp. 343-393, pls. XV-XXIII (in collaboration with Mr. J. Wood-Mason).
- List of the Lepidopterous insects collected in Tavoy and in Siam during 1884-85, by the Indian Museum Collector, under E. C. Pitman, Esq., C.I.E., Journ. As. Soc. Bengal, 1886, pt. 2, pp. 413-442, pl. XX (in collaboration with Mr. H. Elwes).
- Descriptions of some new and little-known Butterflies from India with some notes on the seasonal Dimorphism in the genus *Melanites*, P.Z.S., 1887, pp. 448-467, pls. XXXIX-XL.
- Description of a new Satyrid from India, P. As. Soc. Bengal, 1887, p. 147.

- Butterflies and Ants, Journ. Bombay Nat. Hist. Soc., 1888, vol. III, pp. 164-168, pls. XXVI-XXVII.
- On new and little-known Butterflies from the Indian Region, with a Revision of the genus of *Plesioneura* of Felder and of Authors, Journ. Bombay Nat. Hist. Soc., 1889, vol. IV, pp. 163-194.
- On new and little-known Butterflies from the Indian Region with descriptions of three new genera of *Hesperidae*, Journ. Bombay Nat. Hist. Soc., 1890, vol. V, pp. 199-225, pls. D. E.
- Note on the Pupæ of two Indian Butterflies of the subfamily Nemeobunæ, P. As. Soc. Bengal, 1890, pp. 138-141.
- On new and little-known Butterflies from the Indo-Malayan Region, Journ. Bombay Nat. Hist. Soc., 1891, vol. VI, pp. 341-398, pls. F. J. G.
- On new and little-known Butterflies from the Indo-Malayan Region, Journ. Bombay Nat. Hist. Soc., 1892-93, vol. VII, pp. 322-356, pls. H, I, J.
- On new Sumatran Butterflies, Journ. Bombay Nat. Hist. Soc., 1892-93, vol. VII, pp. 555-557.
- On new or little-known Butterflies from the Indian Region, Journ. As. Soc. Bengal, 1892, pt. 2, pp. 273-293, pls. XIII-XIV.
- Note on the Indian Butterflies comprised in the subgenus *Pademna* of the genus *Euploea*, Journ. As. Soc. Bengal, 1892, pt. 2, pp. 237-245.
- Note on three Indian Butterflies, *Euthalia Nara*, *E. Sahadeva* and *E. Anyte*, P. As. Soc., 1892, pp. 144-146.
- On new and little-known Butterflies from North-East Sumatra collected by Hofrath Dr. L. Martin, Journ. Bombay Nat. Hist. Soc., 1893-94, vol. VIII, pp. 87-56, pls. K, L, M.
- On *Erities*, an Oriental genus of Satyrid Butterflies from the Indo-Malayan region, Journ. As. Soc. Bengal, 1894, pt. 2, pp. 1-58, pls. I-IV.
- On new and little-known Butterflies from the Indo-Malayan Region, Journ. Bombay Nat. Hist. Soc., 1894-95, vol. IX, pp. 259-321 and 366-410, pls. N, O, P, Q.
- A List of the Butterflies of Sumatra with special reference to the species occurring in the North-East of the Island, Journ. As. Soc. Bengal, 1895, pt. 2, pp. 357-555.
- On new and little-known Lepidoptera from the Indo-Malayan Region, Journ. Bombay Nat. Hist. Soc., 1895-97, vol. X, pp. 13-40 and 169-194, pls. R, S, T.
- Descriptions of the *Neptis prasilini*, Boisduval and some species allied to it, Journ. As. Soc. Bengal, 1897, pt. 2, pp. 533-541.
- A List of Butterflies of Mussoorie in the Western Himalayas and neighbouring regions, Journ. Bombay Nat. Hist. Soc., 1897-98, vol. XI,

- pp. 205-221 and 368-389 and 585-605, pls. U, V, W (in collaboration with Mr. P. W. Mackinnon, F. E. S.)
- On new and little-known Butterflies from the Indo- and Austro-Malayan Regions, Journ. As. Soc. Bengal, 1897, pt. 2, pp. 343-577, pls. I-IV.
- A List of the Butterflies of Bali, Lombok, Sambawa and Sumba, Journ. As. Soc. Bengal, 1897, pt. 2, pp. 668-724 (in collaboration with Mr. H. J. Elwes).
- On new and little-known Butterflies from the Indo-Malayan, Austro-Malayan, and Australian Regions, Journ. Bombay Nat. Hist. Soc., 1898, vol. XII, pp. 13-161, pls. X, Y, Z and AA.
- On a small collection of Butterflies from Buru in the Moluccas, Journ. As. Soc. Bengal, 1898, pt. 2, pp. 308-321.
- An Annotated List of the Butterflies of the Ké Isles, Journ. As. Soc. Bengal, 1898, pt. 2, pp. 251-283, pl. I (in collaboration with Messrs. Kühn and Heinrich).
- Notes on some Butterflies from Tennasserim in Burmah, Journ. Bombay Nat. Hist. Soc., 1898, vol. XII, pp. 329-336, pl. BB.
- Note on *Callinaga* and aberrant genus of Asiatic Butterflies, Journ. As. Soc. Bengal, 1900, pt. 2, pp. 150-155.
- Note on the Avian genus *Harpactes*, Swainson, Journ. As. Soc. Bengal, 1900, pt. 2, Ap. 278.
- The food-plants of the Butterflies of the Kanara District of the Bombay Presidency, with a Revision of the species of Butterflies there occurring, Journ. As. Soc. Bengal, 1900, pt. 2, pp. 187-278.
- Note on the Butterflies comprised in the subgenus *Euplœa*, Journ. As. Soc. Bengal, 1901, pt. 2, pp. 12-38.
- On new and little-known Lepidoptera from the Oriental Region, Journ. Bombay Nat. Hist. Soc., 1901, vol. XIII, p. 157.
- A list of Butterflies from Ceylon with notes on the various species, Journ. As. Soc. Bengal, 1899, pt. 2, pp. 170-233.
- On Indian Pests. *Rhopalocera*, Ind. Mus. Notes, vol. I, pp. 9-14.
- Notes regarding the *Delias Sanaca*, Moore, Tr. E. Soc., 1889, pp. 343-345.
- The Butterflies of India, Burmah and Ceylon.  
 Vol. I, Calcutta, 1883, 8vo., pp. VII—94, pls. I-IX and woodcuts.  
 Vol. II, 1886, pp. 1-332, Calcutta and London, pls. XVIII-XXIV.  
 Vol. III, 1890, Calcutta, pp. XII—503, pls. XXV-XXIX.
- Description of a new morphid Butterfly from North-Eastern India, Journ. Bombay Nat. Hist. Soc. V., p. 131, pl. C.
- A Butterfly destructive to fruit, Ind. Mus. Notes, vol. I, pp. 193-194.
- Note on the Indian and Malayan Peninsula Butterflies comprised in the subgenus of *Stictoplœa* of the genus *Euplœa*. P. Asiat. Soc. Bengal, 1892, pp. 153-161.



- Descriptions of two new species of Butterflies from Upper Burmah, Journ. Bombay Nat. Hist. Soc. X, p. 633.
- Description of a new Nymphaline Butterfly from Burmah, Ann. Nat. Hist. (6), XVII, p. 396.
- A Revision of the Pierine Butterflies of the genus *Dercas*, Ann. Nat. Hist. (7) II, pp. 479-484.
- On a new genus of Butterflies from Western China, allied to *Vanessa*, Journ. As. Soc. Bengal, 1899, pl. 2, p. 234.

The General Secretary exhibited two photographs of an ancient gun found under ground in the Goalpara District, forwarded by the Deputy Commissioner of Goalpara as a presentation to the Society.

The following papers were read :—

1. *History of Nepal and surrounding countries, compiled chiefly from MSS. lately discovered.*—By PROF. C. BENDALL, M.A. Communicated by the Philological Secretary.
2. *Note on the Bābhans or Bheimhār Brāhmans.*—By MAHAMAHOPADHYAYA HARAPRASAD SHASTRI.
3. *Historical criticism in the Muhammadan Schools.*—By CAPTAIN J. STEPHENSON, I.M.S.
4. *Note on a find of copper coins in the Wun District, Berar.*—By CAPTAIN WOLSELEY HAIG, I.S.C.
5. *An account of the late Maharaja Nubkissen Bahadur, drawn up for MR. A. STERLING, Persian Secretary to Government, on the 30th April, 1825, with an Introductory note by MR. S. C. HILL, and an appendix by MAHAMAHOPADHYAYA NILMANI MUKERJEE.*
6. *On some cases of abrupt variation in Indian Birds.*—By F. FINN, B.A., F.Z.S.
7. *Materials for a Flora of the Malayan Peninsula, No. XIII.*—By SIR GEORGE KING, K.C.I.E., LL.D., F.R.S.
8. *Noviciæ Indicæ, No. XIX.—A new Indian Dendrobium.*—By MAJOR D. PRAIN, I.M.S.



**PROCEEDINGS**  
OF THE  
**ASIATIC SOCIETY OF BENGAL.**  
FOR APRIL, 1902.

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The Monthly General Meeting of the Society was held on Wednesday, the 2nd April, 1902, at 9 P.M.

COL. T. H. HENDLEY, C.I.E., Vice-President, in the chair.

The following members were present:—

Major A. Alcock, F.R.S., Mr. J. Bathgate, Mr. F. Finn, Mr. D. Hooper, Babu Parmeshwar Lall, Rai Bahadur Ram Brahma Sanyal, Mahamahopadhyaya Haraprasad Shastri.

The minutes of the last meeting were read and confirmed.

Nine presentations were announced.

Captain Maddox, I.M.S., Babu Jaladhi Chunder Mukerjee, Mr. J. B. Fuller, C.I.E., Babu Raj Chunder Chunder, and Mr. H. Wheeler, were balloted for and elected Ordinary Members.

It was announced that Mr. H. D. Carey and Mr. K. M. Chatterjee, had expressed a wish to withdraw from the Society.

The Secretary reported the death of Mr. V. R. Painsday, an Ordinary Member of the Society.

The Secretary read the names of the following gentlemen who had been appointed to serve on the various Committees for the present year.

*Finance and Visiting Committee.*

Dr. T. Bloch, Mr. F. Finn, Mr. E. A. Gait, Mr. J. D. Nimmo, Mr. F. E. Pargiter, Mr. H. H. Risley, Mahamahopadhyaya Haraprasad Shastri.

*Library Committee.*

Dr. T. Bloch, Mr. D. Hooper, Mr. C. W. McMinn, The Hon. Dr. Asutosh Mukerjee, Mr. F. Finn, Mahamahopadhyaya Haraprasad Shastri, Mr. E. Thornton.

*Philological Committee.*

Maulavi Ahmad, Dr. T. Bloch, Babu Pratap Chandra Ghosh, Shams-ul-Ulama Mahomed Shaikh Gilani, The Hon. Dr. Asutosh Mukerjee, Mr. F. E. Pargiter, Major D. O. Phillott, Pandit Satyavrata Samasrami, Mahamahopadhyaya Haraprasad Shastri, Mahamahopadhyaya Chandra Kanta Tarkalanker, Dr. G. Thibaut, Babu Nagendra Nath Vasu, Mr. A. Venis, Lt.-Col. L. A. Waddell, Dr. E. D. Ross.

*Coins Committee.*

Lt.-Col. D. S. E. Bain, Dr. T. Bloch, The Hon. Mr. J. A. Bourdillon, Babu Panchanan Mukerjee, Mr. F. E. Pargiter, Mr. E. Thurston, Mr. M. J. Seth.

The Secretary reported the presentation of one silver coin from the Honorary Secretary, Bombay Branch, Royal Asiatic Society, found in the Ahmedabad District.

Major Alcock in course of conversation referred to the desirability of having a photograph of Mr. E. Blyth prepared for the Society. It was suggested that it would be interesting to have portraits of other distinguished members. It was decided to ask the Council to consider the matter.

Mahamahopadhyaya Haraprasad Shastri exhibited a collection of copies of tattooed designs.

The following papers were read :—

1. *On specimens of two Mauritian Birds in the collection of the Asiatic Society.*—By F. FINN, B.A., F.Z.S.

2. *On hybrids between the guinea-fowl and common-fowl.*—By F. FINN, B.A., F.Z.S.

3. *Notes on animals kept in the Alipur Zoological Garden, No. 1.*—By RAI BAHADUR RAM BRAHMA SANYAL.

4. *On the origin of chess.*—By MAJOR H. G. RAVERTY. Communicated by the Philological Secretary.





PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.  
FOR MAY, 1902,

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The Monthly General Meeting of the Society was held on Wednesday, the 7th May, 1902, at 9 P.M.

THE HON. MR. C. W. BOLTON, C.S.I., I.C.S., President, in the chair.

The following members were present :—

Dr. T. Bloch, Rai Chunilal Bose Bahadur, Mr. I. H. Burkill, Major W. J. Buchanan, I.M.S., Dr. A. Caddy, Mr. W. K. Dods, Mr. F. Finn, Captain A. F. McArdle, I.M.S., Mr. J. Macfarlane, Kumar Rameshwar Maliah, Mr. H. H. Mann, Mr. B. D. Oldham, Captain L. Rogers, I.M.S., Dr. E. D. Ross, Rai Bahadur Ram Brahma Sanyal.

*Visitors* :—Mr. H. St. John Jackson, Mr. Macleod, Mr. R. W. Turnbull.

The minutes of the last meeting were read and confirmed.

Twenty-four presentations were announced.

Mr. A. Garrett, I.C.S., Babu Jogendra Nath Sen Vidyabhushan, M.A., Mr. E. W. J. Bartlett, and Mr. J. H. Marshall, were balloted for and elected Ordinary Members.

The Council recommended the Revd. Mr. A. H. Francke, Moravian Missionary, Leh, Ladakh, proposed by Dr. T. Bloch, seconded by Mahamahopadhyaya Haraprasad Shastri, for election as an Associate Member at the next meeting.

The Revd. A. H. Francke, Moravian Missionary, Leh, Ladakh, who has been proposed for election as an Associate Member of the Society, has made himself known as a very good Tibetan scholar. A valuable publication of his, a Grammar of the Ladakhi dialect of Tibetan, has just appeared as Extra No. 2 to Journal, Part I, for 1891. Other papers by him, published partly in the Society's Journal, partly in other serials, deal principally with the language, popular literature and folklore of that part of Tibet, where he is stationed, and with which he is intimately acquainted. It is hoped that, becoming more closely connected with our Society, he will offer us for publication further results of those interesting researches, which he pursues with much ardour. He is not likely to become an Ordinary Member.

The General Secretary reported the death of Dr. Albrecht Weber, an Honorary Member of the Society.

The President announced :—

1. That Dr. T. Bloch having returned from tour, had taken over charge of the duties of Philological Secretary from Mahamahopadhyaya Haraprasad Shastri.

2. That Captain A. F. McArdle, I.M.S., had been appointed Treasurer in the place of Mr. W. K. Dods, resigned.

A cordial vote of thanks was proposed by the President to Mr. W. K. Dods for his services as the Treasurer of the Society, which was carried by acclamation.

The General Secretary read the following extract received from the Secretary to the Malda Mahomedan Association.

“Proposed by Munshi Shaikh Zamiruddin and seconded by Haji Ali Tanafza and carried unanimously that the tomb of the late Munshi Gholam Hossain, the author of *Reazus-Salatin*, which exists in a dilapidated condition in Mahulla Chouk Morbonali in this town of English Bazar be thoroughly repaired and enclosed with suitable railings and that the expenses be met from the funds of the Association.”

The General Secretary reported the presentation of one gold coin found in the Poona District from the Honorary Secretary, Bombay Branch, Royal Asiatic Society.

The following papers were read :—

1. *A note on the Son Bhandar Cave near Rajgir.*—By DR. T. BLOCH.  
(Abstract.)

In this paper I endeavour to determine the date and original destination of the Son Bhandar or ‘Gold Treasury’ Cave near Rajgir. It



consists of two artificial rock-excavations at the south-eastern foot of the Baibhar Hill, near Rajgir, in District Patna. One of those is now in a dilapidated state. They are generally believed to have been made by Buddhists in the 2nd or 3rd century B.C. I think, however, that an inscription in the outside wall of one of them gives us a clue to their age and original inhabitants. It is a Sanskrit verse in the *Upajāti* metre, written in two lines, and saying that 'the excellent teacher, Muni Vairadeva, made two beautiful caves, which were renowned on account of Arhants, and which were suitable for ascetics in order to obtain Nirvana.' There can be no doubt that the two caves referred to are the very ones, where the record is found, and as the writing belongs to the 3rd century A.D., we are constrained to put down their age to that period. But the inscription, moreover, shows that they were occupied not by Buddhists, but by Jains. The reference to the Arhants and the title *muni* borne by Vairadeva, instead of the Buddhist title *bhikṣu* or *śākyabhikṣu*, both point to this, and I think the name *Vairadeva* may be added as an additional proof of the same kind. *Vaira*, I take as a corruption of *vajra*, which is very frequent in the Prakrit of the Jains, and which is met with as the name of a section of this order. There is further just below the inscription a carved figure, now mutilated, of a Jain *Tīrthānkara*, which corroborates the above assumption.

As the caves at the time of the visit of the Chinese pilgrims probably were inhabited by Jains, to whom they originally belonged, we need not try to identify them with any of the Buddhist sites mentioned by the pilgrims. They probably have been left unnoticed, as, for a similar reason, the caves in the Barabar and Nagarjuni Hills near Gaya. General Cunningham's attempt to identify them with the Saptaparna Cave, the traditional site of the first Buddhist Council, has never met with any approval.

2. *A contribution to the history of Western Bundelkhand.*—By CHAS. A. SILBEREAD, I.C.S.

3. *A new Inscription from Umga in the District of Gaya.*—By PARAMESHWAR DAYAL. Communicated by the Philological Secretary.

(Abstract.)

The Inscription, which is here published for the first time, is on a loose slab of stone lying on the top of the Gauri-Shankar Hill, one of the highest peaks of Umga group of hills in the southern part of the District of Gaya. It contains in its historical portion a list of twelve Rajas down to Bhairavendra. The same occurs also in another published inscription from Umga, but the present inscription helps to make

some additions and corrections to the other published list. The inscription then records the consecration by Bhairavendra of some images of Umā, Maheça and Gaheça, which may still be seen lying on the top of the hill close to the inscribed slab. It contains a date purporting to be Monday, the 12th tithi of the dark fortnight of Jyais̥ṭha, in the Vikrama year 1500. This date is somewhat puzzling. For, on calculating all the possible European equivalents, as I have done with the help of Professor Jacobi's Tables, I find that it corresponds to Monday, the 7th May, 1442 A.D., the year being the *current* Vikrama year beginning with Caitra, and the arrangement of the lunar fortnights being according to the scheme beginning with full-moon (*pūrṇimānta*). The existence of *current* Vikrama years in dates, however, being a matter of very great uncertainty, the calculation can not be considered satisfactory; but at present I see no other way out of the difficulty.

The author refers also to the tradition pointing to Bhairavendra as the builder of the great brick temple at Konch, 4 miles from Tikari, in District Gaya, and 25 miles from Umga. I think this tradition deserves very great credit, for the close resemblance in style between this temple and the many temples at Umga, which, as we know, were mostly erected by Bhairavendra, must strike even a casual observer. Generally, the Konch temple is put down to 700 A.D. But in my opinion the local tradition is far more to the point.

Finally, the author relates the traditional history of the successors of Bhairavendra. He died childless, and his widowed Queen adopted as her successor one Bhānu Singh, a Sisonchia Rajput from Udaipur, who happened to come to Umga on a pilgrimage to Gaya. He became the ancestor of the present Rajas of Deo. The sixth in descent from him, Atibal Singh, removed his capital from Umga to Deo, where the family still resides, the present Raja being a minor, his father having died in 1898.

4. *On an early Arabic MS., relating to famous horses.*—By DR. E. D. Ross.

(Abstract.)

This manuscript belongs to the very valuable Khuda Bakhsh Collection at Bankipore. It comprises 23 folios of 13 lines each. The full title of the work is *Al-Ḥalba fī asmā'i 'l-khayli 'l-mashhūra fī l-Islām wa 'l-Jāhiliyya*, i.e. "The Hippodrome. On the names of famous horses in the days of Islam and in the time of Ignorance." The list includes the names of 237 horses, among which eight belonged to the Prophet. In the case of horses of purely historical fame, reference is made either to the battle in which they were present or to the

Tradition by which they have become famous. In the case of horses who owe their fame to the poets, verses in which their names occur are quoted in full. In a few cases, the author apparently knowing nothing of the horse in question, or having lost his reference, merely mentions that the horse was "famous." In many instances we find genealogies of horses, which in some cases go back five or six generations. There have been many Arab writers on hippology and on the veterinary art, but I believe the present "Stud-Book" is among the older writers unique of its kind.

Our Asiatic Society's Library is sadly deficient in the important item of catalogues of manuscripts. On this account before committing the above statement to print I wrote to Mr. E. G. Ellis of the British Museum on the subject. He kindly sent me the following reply: "I can find nothing out about the *Kitab ul-Ḥalbah* of Muḥ. b. 'Alí b. Kámil. A work of a similar nature was compiled for Dr. Perron by Muḥ Ayyáḍ al Tantawí. Dr. Perron published a translation of it in the first volume of his "*Le Nâcéri. La Perfection des Deux Arts, Traité complet d'Hippologie et d'Hippiatrie Arabes ... Traduit de l'Arabe d'Abou Bekr ibn Bedr*" 2 pt. Paris 1852—60. Al-Tantawí's treatise however contains a good many more names of horses than your MS does. Unfortunately he does not name any of his sources." The MS. is in the author's own hand, and is probably unique. He gives his name in the colophon as Muḥammad ibn 'Alí ibn Kámil, and says that he composed and wrote this work in A. H. 677 (A.D. 1278). The introduction contains a dedication to the vezír Abú 'l-Mu-fákhír Muḥammad ibn Abú 'Abdu'llah Muḥammad ibn Abú 'l-Ḥasan 'Alí. I have unfortunately been unable to identify either the author or his patron. He quotes frequently from the following writers on the horse. Abú 'Ubayda, died A.H. 209. Al-'Asmá'í, died A. H. 216, and Ibn al-'Arabí, died A.H. 543. I may add that I have prepared a transcript of the text for publication.

5. *On a collection of birds from the Chin Hills.*—By LIEUT. H. WOOD, R.E., and F. FINN, B.A., F.Z.S., Deputy Superintendent of the Indian Museum.

6. *Notes on animals at the Alipur Zoological Garden, No. 2.*—By RAI BAHADUR RAM BRAHMA SANYAL, Superintendent of the Garden.

7. *Note on a disputed point in the life-history of Helopeltis theivora.*—By H. H. MANN, B.Sc.

8. *Some Anthropological notes on Calcutta Juvenile Criminals.*—By MAJOR W. J. BUCHANAN, I.M.S.



PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.

FOR JUNE, 1902,

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The Monthly General Meeting of the Society was held on Wednesday, the 4th June, 1902, at 9-15 P.M.

THE HON. MR. C. W. BOLTON, C.S.I., I.C.S., President, in the chair.

The following members were present:—

Mr. J. Bathgate, Dr. T. Bloch, Major W. J. Buchanan, I.M.S., Mr. F. Finn, Mr. H. E. Kempthorne, Captain A. F. McArdle, I.M.S., Mr. J. Macfarlane, Kumar Rameshwar Malliah, Mr. H. H. Mann, Dr. E. D. Ross, Mahamahopadhyaya Haraprasad Shastri, Mr. E. Thornton, Mr. D. B. Wallace, Captain H. J. Walton, I.M.S., Pandit Jogendra Nath Vidyabhushan.

*Visitors*:—Babu Sarasi Lal Sarkar, Mr. H. Sudlow.

The minutes of the last meeting were read and confirmed.

Twelve presentations were announced.

Mr. A. A. Ghuznavi and Pandit Satis Chandra Acharya Vidyabhushan, were balloted for and elected Ordinary Members.

The Revd. A. H. Francke was balloted for and elected an Associate Member.

A vacancy having occurred owing to the death of Dr. Albrecht Weber, the Council recommended Monsieur R. Zeiller for election as an Honorary Member at the next meeting, setting forth his qualifications as follows:—

Professor René Zeiller, Ingénieur en chef des Mines, Membre de l'Institut, is not only one of the leading palæontologists of Europe but has made a special study of the *glossopteris* flora of South Africa, South America, and of India, and was the first to establish the true character of *Vertebraria* as the rhizome of *glossopteris*.

It was announced that Mr. J. G. Lorimer had expressed a wish to withdraw from the Society.

The Secretary reported the death of Mr. E. E. Oliver, an Ordinary Member of the Society.

The President presented to Babu Sarasi Lal Sarkar the Elliott Gold Medal for his essay dealing with the properties of recurring radix fractions.

The President announced that he had received an invitation from the Director, Ecole Française d' Extrême-Orient, Saigon, to the Congrès International des Orientalistes at Hanoi in December 1902, and gave further particulars.

The Philological Secretary exhibited some drawings of the ruins at Gaur and Panduah, in the District of Maldah.

The following papers were read:—

1. *Three new inscriptions from Gaya.*—By DR. T. BLOCH.

(Abstract.)

Two of those inscriptions belong to the time of Nāyapāla, that is about 950 A.D. They mention Paritoṣa, Śūdraka and Viśvarūpa, father, son and grandson, local chiefs of considerable independence, who are known to us already from two other Gaya inscriptions. They built a number of temples at Gaya. One of those two new inscriptions is now inside a small shrine in the compound of the Vishnupad Temple. It says that Viśvarūpa adorned Gaya by temples of Gadādhara and other deities. It is impossible to say to which temple it refers; it is certainly not the present temple of Gadādhara, which, as all other shrines at Gaya, is of much later date. Inside the modern Gadādhara temple exists a duplicate of this inscription, at least the 2nd and 3rd verses of both are identical. Unfortunately, the remaining portion of it is now covered by a statue of Vishnu, and the owner of the temple does not allow to remove it, in order to copy the whole inscription. As, however, it opens with an invocation to the Sun-God, we may conclude that it referred to the erection of a temple of that deity.

The second inscription, with which I am dealing in this paper, is near the Akṣaya-vata or the eternal banyan tree. It mentions the erection by the same Viśvarūpa of a number of shrines, the names of which partly still survive around this locality. Among them is a shrine or image of the Lord of the banyan tree (*vateśu*) at the eternal banyan tree (*akṣayavate*). The inscription is of importance for the local history of Gaya, as it proves the existence of several of the sacred *tirthas* at Gaya at a period, which is far anterior to the date of the present temples at those places.

The third inscription is close to the eternal banyan tree, at the shrine of Prapitāmaheśvara. It is a small record, written in bad Sanskrit prose, but it is interesting both on account of its date, as also for one other reason. The date is recorded as the Vikrama year 1299, the new-moon *tithi* of Jyaiṣṭha, a Thursday, when the Suratrāṇa Maujadina was reigning. *Suratrāṇa* is the well-known Sanskrit corruption of *Sultān*, and *Maujadina* stands for *Mu'izzu-d-din*, and can only refer to the Delhi Sultān Mu'izzuddīn Bahrām Shāh, who was taken prisoner on the 10th May, 1272 A.D., and killed on the 19th following. Calculating all the six possible European equivalents of the Sanskrit date, I find that both the 1st May, 1242 A.D., and the 18th June, 1273 A.D., correspond, both being a Thursday, coupled with the new-moon *tithi* of Jyaiṣṭha. But, as Mu'izzuddīn is still referred to as the reigning king, only the first date is admissible, and the inscription thus was engraved only a few days before the death of Mu'izzuddīn.

The inscription may be technically called a *sākṣi-śrāvana*, or invocation of witnesses. It is incumbent upon every pilgrim to Gaya, either at the end of each station or at the completion of the whole pilgrimage, to call several deities as witnesses that, by going through the prescribed rites, he has freed himself of the debts which he owes to his ancestors. In a similar manner, in this inscription, Kāmadeva, who seems to have come from the North-West, says: I have done Gaya. Witness thereof is Prapitāmaha. The temple of Prapitāmaheśvara, where the inscription is found, is at present the last stage to which the pilgrims go, and, as Kāmadeva has selected this particular spot for an invocation of this kind, which is incumbent upon the pilgrims at the completion of their tour, we may conclude, that in one important point at least the present ritual existed already some 650 years ago.

2. *On some variations in Snipe (with exhibition of specimens).*  
—By F. FINN, B.A., F.Z.S., Deputy Superintendent of the Indian Museum.

3. *Tombs on the Hab river in Sind and Southern Beluchistan.*—  
By J. PH. VOGEL, Ph.D.

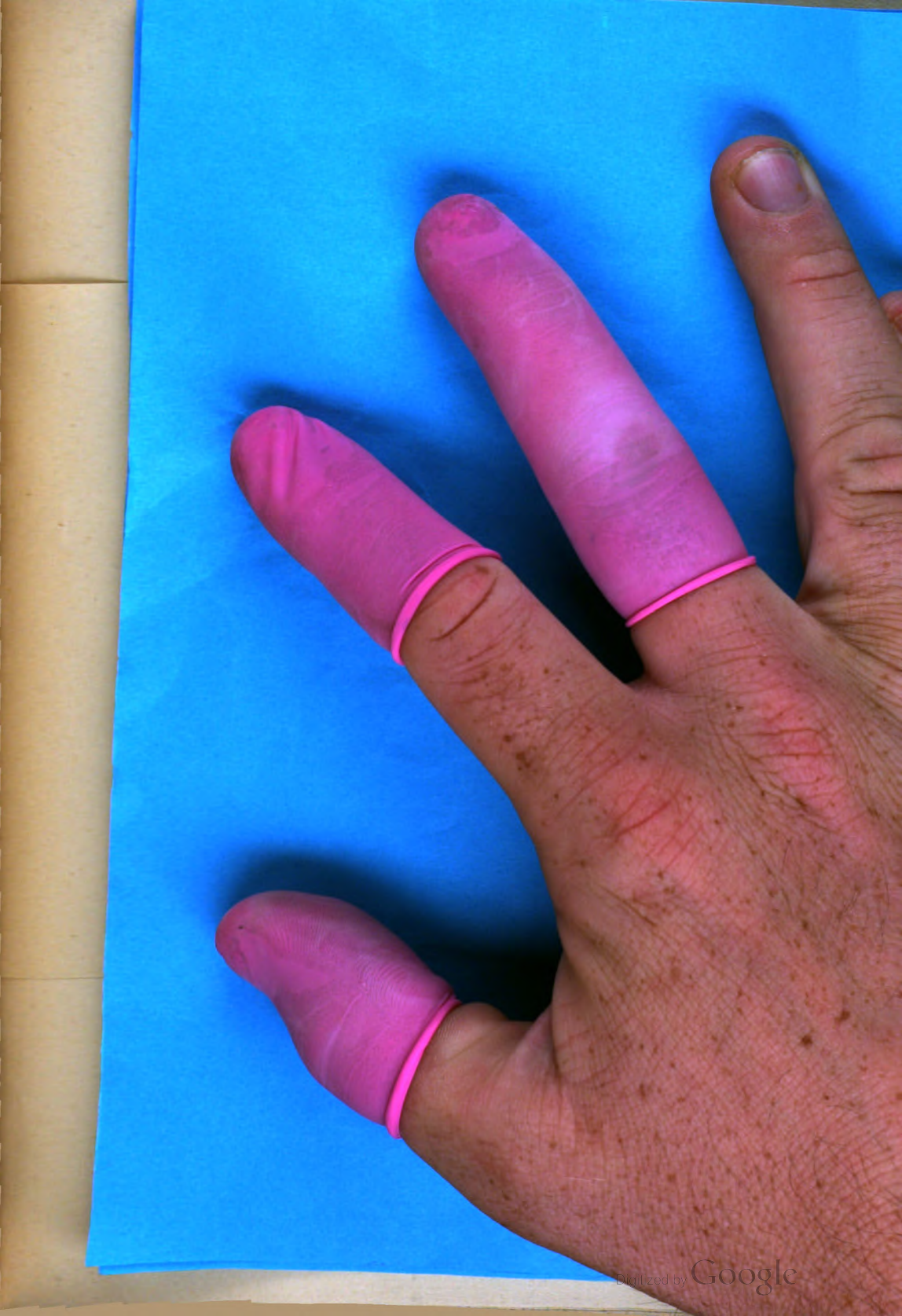
(Abstract.)

This paper describes a number of Muhammadan tombs, which are found at various places in distances from 10 to 50 miles from Karachi, and which exhibit some peculiarities. Some of them consist of several oblong sarcophagi, raised one upon the other, and the dead corpses were deposited inside them, not buried below ground, as was usually the fashion all over India. This mode of burying the dead is called the *Shāmi* (or Syrian) fashion, as opposed to the *Rūmi* (or Turkish) fashion, the usual one in India. It is evidently an importation from the West, as it is said to exist also in Seistan and along the Mekran coast. Another peculiarity is the existence near these Muhammadan tombs of rude carvings of a man on horseback; he often is represented as wearing a bow or sword, and attended by other men on foot, wearing matchlock. Some tombs, evidently of females, have representations of female ornaments, instead of the figure of the horseman. The author compares those carvings with similar ones, which are very common in the Himalayan districts, where they are called *muhras*. They were set up by Rajputs after the death of their chief, whose effigy they are meant to show, and the author suggests that the existence of similar representations at the Muhammadan tombs in Sind may be due to the fact, that the Burfat tribe, to whom those tombs belonged, were of Rajput origin. From inscriptions on some of the tombs in the Rūmi fashion, we learn that they belong to the middle of the 18th century. The author is of opinion that the tombs of the Shāmi fashion may be older, as this mode of burial apparently had become superseded later on by the common Indian fashion, but he is not inclined to put them down to a much earlier age, say not further than 1550 A.D.

4. *On a pair of abnormal Deer Horns (with exhibition of specimen).*—By F. FINN, B.A., F.Z.S., Deputy Superintendent of the Indian Museum.

5. *On Melanic specimens of the common Indian Squirrel (Sciurus palmarum).*—By RAI BAHADUR RAM BRAHMA SANYAL.







PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.  
FOR JULY AND AUGUST, 1902.

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The Monthly General Meeting of the Society was held on Wednesday, the 2nd July, 1902, at 9-15 P.M.

THE HON. MR. C. W. BOLTON, C.S.I., I.C.S., President, in the chair.

The following members were present:—

Mr. J. Bathgate, Dr. T. Bloch, Major W. J. Buchanan, I.M.S., Mr. I. H. Burkill, Mr. F. Finn, Mr. H. H. Hayden, Mr. T. H. D. LaTouche, Captain A. F. McArdle, I.M.S., Mr. J. Macfarlane, Major F. P. Maynard, I.M.S., Mr. J. D. Nimmo, Dr. E. D. Ross, Mahamahopadhyaya Haraprasad Shastri, Pandit Satischandra Acharyya Vidya-bhushan, Mr. D. R. Wallace, Captain H. J. Walton, I.M.S.

*Visitors*:—Mr. J. R. Blackwood, Mrs. Maynard, Mr. G. Wallace.

The minutes of the last meeting were read and confirmed.

Eighteen presentations were announced.

Mr. L. F. Morshead, I.C.S., Mr. F. Doxey, Mr. H. M. Leake, Dr. Wm. Roy Macdonald, M.B., and Mr. J. Luke, were balloted for and elected Ordinary Members.

Monsieur R. Zeiller was balloted for and elected an Honorary Member.

It was announced that Lt.-Col. L. A. Waddell, I.M.S., had expressed a wish to withdraw from the Society.

The President announced that Dr. E. D. Ross had been appointed to officiate as the Philological Secretary of the Society during the absence of Dr. T. Bloch.

Dr. T. Bloch exhibited some copper coins of Aurangzebe.

The following papers were read :—

1. *General notes on variation in Birds, with exhibition of Specimens living and dead.*—By F. FINN, B.A., F.Z.S., Deputy Superintendent of the Indian Museum.

2. *Notes on Mohammedan Inscriptions from Behar.*—By DR. T. BLOCH.



The Monthly General Meeting of the Society was held on Wednesday, the 6th August, 1902, at 9-15 P.M.

THE HON. MR. C. W. BOLTON, C.S.I., I.C.S., President, in the chair.

The following members were present :—

Mr. J. Bathgate, Rai Chunilal Bose Bahadur, Dr. A. Caddy, Mr. H. Doxey, The Revd. E. Francotte, S. J., Mr. H. H. Hayden, Mr. T. H. D. LaTouche, Captain A. F. McArdle, I.M.S., Mr. J. Macfarlane, Mr. W. C. Macpherson, Kumar Rameshwar Maliah, Mr. R. D. Oldham, Mr. W. Parsons, Dr. E. D. Ross, Pandit Yogesa Chandra Sastree, Dr. C. Schulden, Mahamahopadhyaya Haraprasad Shastri, Pandit Satchandra Acharyya Vidyabhushan, Captain H. J. Walton, I.M.S., Mr. H. Wheeler.

*Visitors* :—Babu Hiralal Sinha, Mr. T. H. Smith.

The minutes of the last meeting were read and confirmed.

Seventy-two presentations were announced.

Mr. H. W. Peal was balloted for and elected an Ordinary Member.

It was announced, that Lt.-Col. G. M. Porter, R.E., had expressed a wish to withdraw from the Society.

The General Secretary reported the presentation of one gold and one silver coin found in the Ahmednaggar District and Ahmedabad Collectorate, respectively, from the Honorary Secretary, Bombay Branch, Royal Asiatic Society.

Mahamahopadhyaya Haraprasad Shastri exhibited a picture of Prithvi Raj, the last Hindu King of Delhi, carrying away Samyunka from the Svayamvara, and also the picture of a Bengali Brahmana who planned the present city of Jeypore in Rajputana.

The following papers were read :—

1. *Some notes concerning the People of Mungeli Tahsil, Bilaspur District.*—By THE REV. E. M. GORDON. *Communicated by the Anthropological Secretary.*

(Abstract.)

This paper from its detailed nature does not tend itself to summarising. The first part deals with the separate castes, for instance, the

Chamārs, and the first and most numerous division of them, the Satnāmīs.

(1) These taboo many articles of food, e.g., Masur-ki-dal because of its resemblance to blood. Among them are a select few, the Jahariyās, who will never sleep on a bed. Their stricter observances are now rapidly being disused.

(2) The Chuñgiyā Chāmārs are chiefly distinguished from the Satnāmīs by their indulgence in smoking and idolatry. They rear no poultry, goats, or pigs, will eat flesh of cattle that have died a natural death, and use intoxicants.

(3) The Kanaujiyā Chāmārs have a better right to the name than the preceding classes, as they work in leather. They are dirty and drunken.

(4) The Ahirwār Chāmārs, few in number, resemble the preceding.

The paper concludes with some notes on beliefs and practices common to various castes. Marriage by capture may still be traced. There is a peculiar relation between maternal uncle and nephew (Māmā and Bhācā), who for instance by being in the same house render it liable to damage by lightning. The killing of a cat outcasts the offender. It is reckoned lucky to give contemptuous names to children, unlucky to let them be seen freely when quite young.

Belief in Witchcraft, and the evil eye is very prevalent.

During cholera epidemics the people are reluctant to use the name of the disease, and carry iron about them as a prophylactic.

The winnowing pan is supposed to add weight to a conveyance in which it is placed, so in case of moving a household, this article is held in the hand of some one who goes on foot.

2. *On Tidal Periodicity in the Earthquakes of Assam.*—By R. D. OLDHAM, F.G.S.

3. *On the Authorship of Vidvanmoda-Tarangini.*—By MAHAMAHOPADHYAYA HARAPRASAD SHASTRI.

4. *An unknown Commentary on the Maqámát of Harírí.*—By DR. E. D. ROSS.

(Abstract.)

1. A new commentary on the Maqámát of Harírí.

The most famous commentaries on Harírí's difficult work are those of Mutarizzí and Sherísí; there are many others known to scholars, but lately I came across one in the Khuda Bakhsh Library at Bankipore, which is quite unknown and to which a peculiar interest attaches. It is an autograph copy, and although the portion containing Maqámát 2

to 25 inclusive is missing, the first and last folios are fortunately intact. The commentary, like its fellows, is chiefly grammatical and the text of the *Maqámát* is not reproduced. The colophon tells us that it was composed in the year A.H. 680 (A.D. 1281) by a certain 'Omar Ibn 'Othman Ibn 'Omar al-Baydháwí, and in the introduction we are told that he wrote it at the request of his brothers and uncles. It is not at all improbable that this man was the nephew of the famous Qoran commentator 'Abdullah Ibn 'Omar al-Baydháwí who died in A.H. 685 (A.D. 1286.) He may have been the son of 'Othman the brother of 'Abdullah, and thus the great commentator would have been among the "uncles" who encouraged his undertaking. I hope to publish in Part I. of the Journal the introduction, colophon and the commentary on one *Maqámá* as a specimen of the author's style.

5. *Biographical note on Khayr-ud-Din Mohammad the Historian.*—  
By DR. E. D. ROSS.

In the forthcoming number of Part I. of the Journal Dr. Ross is giving a full account of this paper.





**PROCEEDINGS**  
OF THE  
**ASIATIC SOCIETY OF BENGAL.**  
FOR NOVEMBER, 1902,

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The Monthly General Meeting of the Society was held on Wednesday, the 5th November, 1902, at 9 P.M.

THE HON. MR. C. W. BOLTON, C.S.I., I.C.S., President, in the chair.

The following members were present :—

Mr. C. G. H. Allen, Mr. J. Bathgate, Mr. F. Doxey, Mr. D. Hooper, Babu Parmeshwar Lall, Mr. J. Macfarlane, Dr. C. Schulten, Mahamahopadhyaya Haraprasad Shastri, Babu Chandra Narain Singh, Pandit Satis Chandra Vidyabhusana, Mr. C. R. Wilson.

The minutes of the last meeting were read and confirmed.

Three hundred and forty-one presentations were announced.

Mr. A. Chaudhuri, Kumar Birendra Chandra Singh, Mr. A. H. Lewes and Mr. E. Vredenburg, were elected Ordinary Members during the recess, in accordance with Rule 7.

It was announced that Mr. C. L. Griesbach, Mr. R. P. Dewhurst, Major C. E. M. Green, I.M.S., and Mr. G. W. Place had expressed a wish to withdraw from the Society.

The General Secretary reported the death of Captain A. F. McArdle, I.M.S., an Ordinary Member of the Society.

The General Secretary read a letter from Monsieur R. Zeiller, thanking the Society for being elected an Honorary Member.

The General Secretary reported that Mr. E. A. Gait and Pandit Satis Chandra Vidyabhushan had been appointed to serve on the Philological Committee of the Society during the present year.

The President announced that Mr. C. R. Wilson had been appointed Treasurer of the Society in the place of Captain A. F. McArdle, deceased.

With reference to a note by Mr. E. A. Gait, the Anthropological Secretary, relative to contributions to Part III of the Society's Journal, the President announced that the Council had approved of Mr. Gait's proposal to have short notes on Anthropological subjects published as a supplement to Part III of the Journal, and he had further authorised the addition of a similar supplement to other Parts of the Journal.

The General Secretary reported the presentation of the following coins:—

From the Superintendent, Government Museum, Madras, two copper coins.

From the Government of the United Provinces of Agra and Oudh, three silver coins.

The following papers were read:—

1. *Reynard the Fox in Ladakh*.—By THE REV. A. H. FRANCKE.

In the following I shall give all those tales of Reynard the Fox which I have collected in Ladakh, in out-line, simply to draw attention to the fact of their existence in a Tibetan-speaking country. The full Tibetan text with translation must be kept for a later publication. These tales seem to be proper folklore; for of the existence of a literary edition of such tales I have not yet heard. The different episodes were not told singly, nor at several occasions, but together, as if forming one story.

Although in this country I am unable to compare the Ladakhi tales with the immense literature which has been written on Reynard the Fox in various countries, I shall probably make no mistake in stating that they are comparatively near to the German tales. In both countries we have a king lion, and the bear and the wolf are both duped by the fox. The fox is asked to appear before the lion's court. He is willing to go, but on the way there he plays new tricks on his accusers. Besides that, the Ladakhi tale No. 8 is almost exactly the same as one of the German episodes of Reynard the Fox.

1.

The lion, the king, had invited the bear and the fox to eat a goat with him. He told them to go to the brook and to wash the intestines

of the goat. There the fox could not keep from eating half of the goat's stomach. The other half he gave the bear, saying: "In case the lion should ask who ate the stomach, you had better look to the ground, whilst I shall arrange for both of us!" When the lion asks who ate the stomach, the bear actually looks to the ground, whilst the fox points with his paw towards him. The lion takes the behaviour of the bear for shame and him for the trespasser, and kills him on the spot.

## 2.

Another goat is killed, and the fox is sent to the water to wash the stomach. He cannot help eating all of it. When back before the lion, he says that it was not his fault if the stomach was gone. "A lion came out of the water and took it. I had to hasten to get away!" The lion, the king, went to the water with the fox and saw his own image reflected in the water. This he took for the water-lion, jumped at him and was drowned.

## 3.

When the lion was dead, the fox got him out of the water, took off his skin and put it on himself. Then he goes to the lion's den and sits down on the throne. After some time the lion's wife, who had been out with the children, comes back and takes the fox for her husband, king lion. The fox sends the lioness into the hills to find some food for the family. When she is gone, the fox eats all her children, and runs away.

## 4.

Next he went to the wolf's den, where only the wolf's wife and children were present. He said he wished to speak to father wolf, and sent his wife to call him home. When she had left, he ate her children and fled away.

## 5.

When father wolf came home, he was furious and resolved at once to seek the fox and to revenge his children. After a long time he found the fox in a forest, where he was gathering resin. He asks if it was he, who had eaten his children. The fox pretends not to know of anything, as he had always been gathering resin. "What for?" "To make an ointment for the eyes. If this ointment is smeared on the eyes, you will be able to see the land of the gods (*lha yul*) as well as the land of the nāgas (*klu yul*)." The wolf wishes to try and loses his sight for two days. Finally he succeeds in scratching off the resin.

## 6.

Again the wolf goes to find the fox. He sees him on the top of a mountain plaiting a basket (*gundum*). He goes up and says: "Are you

not the one who gave me the ointment?" "No, that must have been somebody else. I have always been making baskets!" "What for?" "If you enter this basket, you will know at once where there is meat and butter!" The wolf is very hungry, wishes to try, and enters the basket. Then the fox kicks the basket, and it rolls down the hill.

## 7.

After some time the wolf sees the fox who is measuring sand with a bushel. "Did you not send me down from the top of the hill?" "Not that I know of. I have always been measuring sand!" "What for?" "I shall take it to the village, and there I shall exchange it for flour and butter!" The wolf who is hungry, wishes to go with the fox. He is allowed, if he will carry the bags. The fox ties the bags on the wolf's back, jumps on the top of them, and they start for the village. There the fox begins to cry: "*shangla wa zhon!*" (The fox is riding on the wolf!) All people come armed with sticks. The fox runs away, and the wolf who cannot run on account of the heavy load, is beaten to death.

## 8.

[Another] wolf sees the fox standing in a pond with his tail in the water. "What are you doing that for?" "I am catching fish. If you will put in your tail until next morning, you will find that a great many fishes have bitten and seized your tail." The wolf goes in the water to try, and finds in the morning that his tail is frozen in the ice, for it was a cold night. Again he is caught and beaten.

## 9.

The wolf and the bear (probably relatives of the previous ones) go to the lion, the king (probably a new one), and complain on account of the impudence of the fox. The king tells them to bring the fox before him. The fox is quite ready to go. On the way to the king's court they see a Lama who is riding on a horse, with an umbrella over his head, a bag for food on his back, and shoes on his feet. The fox says: "If you like I will get you the Lama's umbrella!" "How could you?" "Wait a little and let me go in front of the Lama!" This he does and pretends to be limping. The Lama dismounts and tries to catch the fox. To be able to run better, the Lama puts the umbrella on the road and takes off his shoes and the bag. When the fox and the Lama are out of sight, the bear and the wolf carry away the umbrella, the bag, and the shoes. After this the fox, who had an easy escape, joins the bear and the wolf again. As his share in the booty he only asks for the food which is willingly given to him. The wolf receives the shoes, and the fox tells him that, with their help, he will be able to run much

quicker than he ever could before. The fox ties the strings of the shoes as tight as possible, and when they see a herd of goats, the wolf is sent for a trial. When the goat-herds see him, the wolf tries to run away, but cannot, on account of the shoes. He is killed by the goat-herds. Meanwhile the bear who was delighted to have received the umbrella, had gone home to his cave high up in the rocks. Unfortunately his children, who had never seen an umbrella, were frightened by their father, ran out of the cave and fell down the precipice. The mother who tried to hold them by their tails, fell down behind them, and the father bear who wished to hold his wife, tumbled down behind her. Then nobody was left to bring the fox before the king.

## 10.

The fox had stolen a calf and had tied it up near his house to graze there. He said: "When you see the wolf coming, you must cry, and I will come and deliver you!" Then he goes away to get some leather. After a short time he heard the calf crying and went there to deliver it. There was no wolf and the calf said: "I was crying only because I enjoyed the grass so much!" The wolf goes away and the same thing happens again. Then the fox becomes angry and resolves not to go to the calf again. Now the wolf actually comes and carries the calf away.

*Notes.*

To No. 8. It is remarkable that the obscene conclusion of the German version of this tale is apparently not known in Ladakh.

To No. 10. This tale seems to be an alien element in the cycle of the fox-tales. It is not necessary to be a fox if one wishes to be wiser than a calf. This story seems to have been borrowed from an incident in the Rhea Sylvia-tales which were told in this Journal, *ante*, Part III, 1902, pp. 4-13.

2. *The Saraks of Orissa.*—By MAHAMAHOPADHYAYA HARAPRASAD SHASTRI.

3. *Some notes on the Rājvaṃçi Caste.*—By MONMOHAN ROY, Deputy Magistrate, Rangpur. (Communicated by the Anthropological Secretary).

## (Abstract.)

The terms Rājvaṃçi and Koch have generally been assumed to apply to the same ethnic group, but the author of this paper gives good reasons for believing that they really include two communities of entirely different origin. When the Mongoloid Koches rose to power in the west of Assam, and the north of North Bengal, they gradually fell under the influence of Hinduism and began to assume the name Rājvaṃçi which

was already the appellation of the great bulk of the admittedly Hindu population in their neighbourhood. The original Rājvaṃṣis were of Dravidian origin. Near the headquarters of the Koch rule the title Rājvaṃṣi was applied to all alike, and a considerable racial mixture took place. But further away the Koches did not so readily obtain recognition as Rājvaṃṣis and remained a distinct community. To this day, in most parts of Rangpur, Koches and Rājvaṃṣis may be seen living in the same village, but in all other respects quite distinct, and there is no intermarriage between them. There is a general consensus of opinion, amongst the persons consulted by the author of this paper, as to the marked difference in physical type between the two communities over the greater part of the Rangpur district. Further north, there has been a good deal of intermingling, but even there the two types can be clearly distinguished. The author goes on to point out other differences. The Koch worships Siva and Sakti while the true Rājvaṃṣi is a Vaiṣṇava. The former drinks spirits and eats pork, but the latter usually abstains from both. The former shows traces of matriarchal polyandry but the latter does not.

The paper is an interesting one, and, if the theory advanced in it is accepted, we have at once an explanation of the great differences of opinion which have from time to time been expressed by different observers as to the physical affinities of these people. Some, whose opinion is entitled to the highest respect, have declared them to be Mongoloid, while others, equally competent, have held that they are of Dravidian origin.

4. *The Licchavi race of Ancient India.*—By SATIS CHANDRA VIDYĀBHŪṢAṆA, M.A., M.R.A.S.

(Abstract.)

The Licchavis, mentioned in the *Manu-saṃhitā* as *Vrātya-Kṣatriyas* but described by Sanang Setsen and Csoma as a branch of the Scythian race, came into India about the 8th century B.C. Samuel Beal thinks that the scene found at Sānchi probably refers to the stupa raised by the Licchavis over their share of the relics of Buddha. The appearance, etc., of the men shows that they were a branch of the race called Yue-chi (by Chinese writers) and allied to the people of Kuche. They, as a confederate of eight republican clans, settled in Vaiçāli, corresponding to modern Basārh in the Muzaffarpur District. About 540 B.C., they were conquered by Ajāta-çatru, Emperor of Magadha. But afterwards they became very powerful in India, and about 471 B.C. Çiçu-nāga, who was a member of their race, became installed in the kingdom of Magadha. According to the *Mahāvamṣa*, the Çiçunāga

dynasty ruled there for about one hundred years, but according to the *Viṣṇu-purāṇa* for 362 years. About 320 B.C. the celebrated Indian Emperor, Candra-Gupta, married a Licchavi girl, named Kumāradevi. That the Licchavis were then at least of equal rank and power with the early Guptas is shown by the pride in this alliance, manifested by the latter. The Licchavis, who were Buddhists, afterwards accepted Brāhmanism and became absorbed in the military caste about the 7th century A.D. when Hinduism revived in India.

The kings of Nepal, Tibet, Ladak, and Mongolia too, trace their descent from the Licchavis. The Licchavi conquest of Nepal is assigned to Newarit, whose age is unknown. More than thirty kings of this race had reigned in Nepal before Jayadeva I. ruled there about 330-355 A.D. His successors were all Licchavis. Thus Amṇu-barma, who was a contemporary of Hwentsang and reigned in Nepal in 635-650 A.D., belonged to the Licchavi race. Ņa-khri-tsan-po, the first king of Tibet, was a member of this race. The 32nd in descent from him was Srang-tsan-gam-po who, about 627 A.D., married the daughter of Amṇu-varma the Licchavi king of Nepal. The rulers of Ladak and Mongolia do likewise claim descent from the Licchavis.

5. *Folklore of the Kolhān.*—By C. H. BOMPAS, I.C.S. (*Communicated by the Anthropological Secretary*).

(Abstract.)

This is an interesting collection of Ho folk-tales, gleaned by Mr. Bompas from the lips of the people themselves, while he was Deputy Commissioner of Singhbhum. The Hos, or Larka Kols, who inhabit the Kolhān in the west of that district, are closely connected with the Santāls of the Sonthal Parganas and the Mundās of Ranchi.

These primitive tribes are rapidly coming under the influence of Hinduism, and their traditions are fast fading from their memory.





PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL,  
FOR DECEMBER, 1902.

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ERRATUM.

In the Proceedings, No. II, February, 1902, page 45, *substitute*  
“Rajah Mahasai” for “Rai Mahasai.”

Tocher, Pandit Satis Chandra Vidyabhusan, Mr. D. R. Wallace, Mr. H. Wheeler, Mr. C. R. Wilson, Mr. H. C. Woodman.

*Visitor*:—Babu Ganga Mohan Laskar.

The minutes of the last meeting were read and confirmed.

Twenty-two presentations were announced.

Pandit Harnarain Shastri Sahitya Bhushan was balloted for and elected an Ordinary Member.

It was announced that Captain W. F. O'Connor, R.A., had expressed a wish to withdraw from the Society.

The General Secretary reported the death of Sir John Woodburn, K.C.S.I., and Mr. John Cockburn, Ordinary Members of the Society.

The President announced that the Council at their last meeting passed the following Resolution :—

The Council received with profound sorrow the intimation of the death of their late President, Sir John Woodburn; and they offer their deep sympathy to Lady Woodburn and her family in their great bereavement.

In doing so, he addressed the meeting as follows :—

We have met to-night for the first time since the death of Sir John Woodburn, and you will, I am sure, desire that the occasion should not pass without an expression from me of the feeling with which the intimation of the sad event has been received by the members of the Society. We share in the sorrow which is felt throughout this Province and in the other Provinces where Sir John Woodburn served, and we mourn the loss of a member who took a deep interest in the work of our Society, and manifested his concern for its welfare by undertaking, at much inconvenience to himself, the duty of its President. In that, as in every other position which he was called to fill, he displayed the high qualities which won him the admiration and esteem of all classes. We had personal experience of the pleasure of association with him, and it was with no common regret that we saw the close of his tenure of office. We hoped to see him again among us, to read the paper which he then announced his intention of preparing on the work carried out by his Administration for the conservation of the valuable archæological remains at Gour and Pandua in the district of Malda, but the realisation of that hope has sadly passed away. Of his connection with the Society more may be appropriately said in the next Presidential Address. I would now propose that we join the Council in the Resolution which they have passed by recording the following Resolution :—

The members of the Asiatic Society of Bengal assembled in monthly meeting desire to unite with the Council in expressing their sorrow at the lamented death of their late President, Sir John Woodburn, and in respectfully offering their sympathy to Lady Woodburn and her family.

The Resolution was adopted.

The President announced that owing to Mr. Finn's illness Captain Rogers, I.M.S., had been appointed to officiate as the Natural History Secretary of the Society.

The General Secretary reported that by order of Council, the Library will in future be open to the Members of the Society from 10 A.M. to 2 P.M. on Sundays.

Mahamahopadhyaya Haraprasad Shastri exhibited the image of a Buddha Chaturbhuja from Kanchananagar in Burdwan.

The following papers were read:—

1. *The Vrātya and Saṅkara theories of Caste.*—By SATIS CHANDRA VIDYĀBHŪṢAṆA, M.A.

(Abstract.)

In the Hindu *çāstras* castes have been classified as (1) *Mūla* (original), (2) *Vrātya* (fallen) and (3) *Saṅkara* (mixed). The *Mūla* or original castes are Brāhmaṇa, Kṣatriya, Vaiçya and Çūdra, that is, the priest, warrior, trader and servant that are said to have sprung respectively from the mouth, arms, thighs and legs of Brahma the Supreme Being. Each of the four original castes had to observe certain religious rites enjoined on it by *Çāstras*. Those members of the first three castes who did not observe these rites, specially those who failed to invest themselves with the sacred thread at the proper time had to be degraded from their community. These negligent members were called *Vrātya* or fallen. *Vrātya* is thus defined to be a Brāhmaṇa, Kṣatriya or Vaiçya who has lost caste through non-observance of *Çāstrik* rites. This is the generally accepted signification of the word *Vrātya*. My own view about the *Vrātya* castes is, however, a little different. In the Vedic literature we find that the word *Vrātya* bears a wide signification. There we find that all people whether natives of India or foreigners who were not within the pale of Brāhmanic civilization were also included among *Vrātyas*. It is in this latter sense that the word has been very extensively used in our sacred literature. The Vedic religion did not spread over India in a single day. It required hundreds of years to penetrate into the distant corners of this vast continent. In the ancient literature we find minute descriptions of the sacrifices on the Sarasvatī and Dṛṣadvatī only. The region lying between these two rivers was called *Brahmāvarta* corresponding to most parts of the Punjab. The Punjab was in fact the place wherein Brāhmanic civilization took root at a considerable antiquity. Most other places in India and outside were then inhabited by people who did not observe the Vedic rites. These people were called *Vrātyas*. In the Vedas it has been said that in the beginning all were *Vrātyas*. In the Tāṇḍya-pañcaviṃṣa Brāhmaṇa of the Sāma-Veda the Kauçitakis have been specially denoted as *Vrātyas* and *Yajñāvakiṛṇa* (unfit to sacrifice). No trace of the Kauçitaki people is now to be found in India. In the *Ṣaḍviṃṣa* Brāhmaṇa and *Çranta-sūtra* of Lāṭyāyana the *Vrātyas* are described as living in large number in the west of India. According to Dr. Weber these western *Vrātyas*, who alone knew how to perform the *Syena* sacrifice, referred to the ancient Persians. In the 5th

book of the Atharva-veda we find that the Angas and Magadhas in the east and Gandharis, Mujvantas, Čūdras, Mahāvṛṣas and Vāhlikas in the north-west were known to the Hindus. Now Anga corresponds to modern Bhagalpur, Magadha to Behar, Gāndhāra to Peshwar, Vahlika to Balkh, etc.

The Manu-saṁhitā, too, affords us with a pretty long list of the Vṛātya people. From among the Vṛātya Brāhmaṇas included in the list of Manu I may mention only the Āvantya and Vāṭadhāna. The Āvantyas were the Brāhmaṇas of Avanti or modern Ujjain. The Vāṭadhāna is probably the same as Veṭhadina or Veṭhadipa mentioned in the celebrated canonical Pali work Mahāparinibbāna sutta (Chap. 6) and other Buddhist works. According to the description of the Pali works it may be asserted that Veṭhadipa was situated in the district of Shahabad. Avanti or Ujjain, which was a part of Malwa, was a head-quarters of Buddhism up to about 71 B.C., and the Brāhmaṇas of Veṭhadipa actually took a prominent part in preserving the relics of Buddha so early as in the year 543 B.C. It is therefore not altogether unreasonable to conjecture that the Brāhmaṇas called Āvantya and Vāṭadhāna were regarded as Vṛātyas on account of their being devotees to Buddha and his religion.

Vṛātya Kṣatriyas mentioned by Manu were the Jhalla, Malla, Nicchivi, Naṭa, Karaṇa, Khasa, Draviḍa, Pauṇḍraka, Auḍra, Kāamboja, Yavana, Čaka, Pārada, Pahlava, Cina, Kirāta and Darada.

Of these the tribes called Jhalla, Naṭa, Karaṇa and Khasa still exist in various districts of Northern India occupying social positions inferior to those of the Rājaputs. The Mallas were a Buddhist people that lived in Pāvā and Kusināra in the district of Goruckpore. The Nicchivis (Licchavis) were also Buddhists. They lived in Vaiçāli corresponding to modern Basārḥ in the district of Muzaffarpore, and were very powerful in the 5th century B.C. The Draviḍas were the Dravidians of Southern India. Pauṇḍrakas were the people of Puṇḍravardhana corresponding to modern Dinājpur and Māldah in Northern Bengal. Auḍras were the people of Orissa. The Kāambojas were the people that inhabited the Hindu Kush mountain which separates the Giljit valley from Balkh. The Yavanas were the Bactrian Greeks, and the Śakas were the same as the people of Sakai in Central Asia. Pārada and Pahlava were also two foreign tribes. Cinas were the people of China and the Daradas of Dardistan in the north-western frontier of Kashmir. The Kirātas were a flat-faced people that were very numerous in Sikkim, East Nepal and Tibet. The tribe called Kāruṣa mentioned in the Viṣṇupurāṇa has been described as Vṛātya-vaiçya in the Manu-saṁhitā.

From the above it is evident that people of Persia, Balkh, Sakai,

Skythia, Sérivé, China, Dardistan, Nepal, Sikkim, Behar, Orissā Northern Bengal, Southern India, Bhagalpur, etc., have all been called Vṛātyas or non-observers of Vedic rites.

In the first paragraph of this paper the distinction between a pure caste and a Vṛātya caste has already been indicated. It now remains to give a short account of the sacrifice by which a Vṛātya could be admitted into a pure caste. In the Tāṇḍya-pañcaviṃṣa Brāhmaṇa of the Sāma-veda this sacrifice called Vṛātya-stoma has been described at length. It is of various kinds, of which two may be mentioned here. The first called *Hīna-vṛātya* was a sacrifice that was performed for the conversion of the unfranchised people, and the second called *Gara-gir* was that for the re-admission of the degraded ones. In the Lātyāyana Āraṇasūtra of the Sāma-veda, Chap. 8, Sect. 6, it is stated that a Vṛātya-stoma could be performed by a learned and pure Brāhmaṇa at the requisition of at least thirty-three Vṛātyas. When such a sacrifice was performed the Vṛātyas, having secured the rights and privileges of the twice-born castes, might afterwards learn the Vedas, perform sacrifices, receive presents and dine with Brāhmaṇas without being required to submit to penance. This is a very brief account of the Vṛātya theory.

In later Sanskrit works the word Vṛātya is very seldom found. The term that repeatedly occurs here is *Saṃkara*. According to tradition Saṃkara signifies those castes that are said to have been produced by a mixture of different castes. As the mixture can take place in innumerable ways the number of mixed castes is unlimited. Thus the four original castes by intermarriage can give rise to twelve mixed castes. These twelve by mixture among themselves and with the four original castes may produce hundreds of other castes. In this way the mixed castes may be multiplied infinite-fold. This is a very brief statement of the traditional theory. My own theory about the Saṃkara is quite different. In my opinion the Vṛātya people having entered the hierarchy of Brāhmaṇas were called Saṃkara. Those who did not follow the Vedic rituals in the beginning were designated as Vṛātyas and these afterwards having observed those rites and being admitted into the Brāhmaṇic society were called Saṃkara. Thus the Niṣāda described in the Lātyāyana Āraṇasūtra of the Sāma-veda as an aboriginal tribe has been mentioned in the Manu-saṃhitā as a mixed caste born of a Brāhmaṇa father and Ādriya mother. The Ābhīras who, according to the Viṣṇu-purāṇa (Book IV, Chap. 24) conquered Magadha and reigned there for several hundred years, have been mentioned in the Manu-saṃhitā as a mixed caste born of a Brāhmaṇa father and Ambaṣṭha mother. The Karaṇa, Pauṇḍraka, Malla, etc., have been regarded by Manu as Vṛātya Kṣatriyas. But in later Sanskrit works they

have been described as mixed castes. Thus in the *Brahma-vaiavarta Purāṇa* the *Karāṇa* is mentioned as having been born of a *Vaiçya* father and *Çūdra* mother, the *Paṇḍraka* from a *Vaiçya* father and *Çuṇḍi* mother, and the *Malla* from a *Leṭa* father and *Tibara* mother. The *Kirāta* mentioned in the *Manu-saṁhitā* as *Vrātya Kṣatriya* has been described in the *Ballāla Charita* as a mixed caste born from a *Vaiçya* father and *Brāhmaṇa* mother. The *Sarākas* returned in the Government Census as a Jain or Buddhist sect have been mentioned in the *Brahmavaiavarta Purāṇa* as a Hindu caste born of a *Jolā* father and *Weaver* mother. In reality *Saraks* were immigrants from *Serike* and *Sarogie* the same people as *Sorgae* that lived at the mouth of the *Indus*. The *Kols* who are evidently an aboriginal wild people of India have been designated in the same *Purāṇa* as a mixed caste born of a *Leṭa* father and *Tibara* mother. The *Kaivartas* who were perhaps the original inhabitants of *Bengal* have been described in the *Manu-saṁhitā* as a mixed caste born from a *Niṣāda* father and *Aogavi* mother, but in the *Purāṇas* as that born from a *Kṣatriya* father and *Vaiçya* mother. The *Andhra*, *Chola* and *Pāṇḍya* tribes of the *Dravidian* people became in course of time reckoned as pure *Kṣatriyas*. The *Tāmila* tribe of *Draviḍa* made several inroads into *Ceylon* and in the 5th century A.D. five *Tāmils* Kings successively reigned in the island. The *Tāmils* came towards the north too and the *Tāmbuli* caste of *Bengal* was perhaps formed by them.

From what we have found here it is evident that the traditional *Saṅkara* process of birth exists in mere theories, but does not correspond to actual facts. No caste ever came into existence in the way presupposed by the traditional theory. It is, however, undeniable that there are some rare instances of the father and mother being of different castes, but in those cases the children get the rank of either of the parents. In *Darjeeling* I met with several men of the *Chatri* caste whose father was *Brāhmaṇa*, but mother *Chatri*, but I never met with a single instance in which a *Brāhmaṇa* father and *Chatri* mother gave birth to a child that produced a third caste. Though the *Saṅkara* process of birth is an absolute myth it must be admitted that the theory of *Saṅkara* castes expounded in the *Brāhmaṇic Çāstras* is indeed very grand. The *Brāhmaṇic* legislators by tracing the original four castes from the different limbs of *Brahma* the Supreme Being and then deriving all other castes from a mixture of the four thoroughly established the unity and common footing of all the members of the *Hindu* society. All castes from *Brāhmaṇas* to *Caṇḍālas* are shown to be directly or indirectly connected with the Supreme Being and the gradations of honour existing among the members of different castes are also duly maintained. But it should be observed here that the *Vrātya* theory was very much simpler,

for it assumed only four classes of people. The Vrātya people having performed the Vrātya-stoma could freely mix with members of the four pure and original castes on terms of equality.

2. *Four inscriptions of Mahāsiva Gupta and Mahābhava Gupta of Kalinga and Kosala.*—By MAHĀMAHOPĀDHYĀYA HARAPRASĀD SHĀSTRĪ, M.A.

Babu Rangalāl Banerji edited one set of three Charters of Mahābhava Gupta in the *Ind. Ant.*, Vol. V, in 1876. He edited another set by Mahāsiva Gupta in *Jour. Beng. As. Soc.* in 1877. Babu Pratāp Chandra Ghosh edited another set in the same year in the same Journal. Dr. R. Mitra edited a fourth set of the Charters in 1882 in the same Journal again.

In the third volume of the *Epi. Ind.* Mr. Fleet re-edited these four chapters and edited two more which came into his possession.

I have got four new charters of these kings here. They belong to the same Mahābhava Gupta and Mahāsiva Gupta like their predecessors. The plates have been deciphered by Babu Ganga Mohan Laskar, M.A., Government Research Scholar, under my directions. But they afford very little new information. It is a wonder that with 10 inscriptions in our possession we do not yet precisely know who the kings were and where and when they reigned.

As pointed out by Mr. Fleet the Epigraphy belongs to a period subsequent to 1000 A.D., but I do not think very long after 1000 A.D.

The kings are said to have reigned over the countries of *Kosala*, which means Gondvana and Kalinga or Trikalinga, a very vague word meaning sometimes the whole coast from Madras to Bengal sometimes the Northern Sarkars and Countries including the Eastern Provinces of the Nizam.

Mr. Fleet says that their capital, sometimes called Vināstapura and sometimes Yayātinagara, on the Mahanadi is the modern Kataka. Babu M. M. Chakravartti doubts if this could be correct. That these two names apply to the same city there is no doubt, for a certain number of slokas have been applied to the descriptions of both and in both these descriptions the city is said to be on the Mahānadi.

The lately discovered Sena records speak both of Yayātinagara and of Vinitapura. The Pavaradūta written by a courtier of Lakshma-sena speaks of Yayātinagara and Ballāla Carita speaks of Vinitapura where the persecuted Banias found a refuge.

The villages granted with strange Dravidian names are extremely difficult to identify.

The plates will be properly edited in the Journal or in *Epi-graphia*.

3. *The identification of Ramagiri, the starting-point of the cloud in the cloud-messenger of Kalidāsa with Ramagarha Hill in the Suguṛjā State.*—By MAHĀMAHOPĀDHYĀYA HARAPRASĀD SHĀSTRĪ, M.A.

Rāmagiri, the starting-point of the cloud-messenger in Kalidāsa's well-known poem Meghadūta and the temporary residence for a year of the banished and love-sick Yaksha was identified by Horace Hayman Wilson in 1813 with Rāmatec, 28 miles north-east of Nāgapura. It is a place sacred to Rāma and it is in the neighbourhood of Sitabaldi the famous hill on which the British Residency was attacked by Appa Saheb in 1818. The first verse of the Meghadūta speaks of Rāma's hermitage with its waters sanctified with the ablutions of Sītā.

But when the south-east monsoon, which commences about the 19th June or about the beginning of the Bengali month of Aṣāḍhīa, began to blow it would carry the cloud towards Malwā, and not to Amarakantaka (ancient Amrakūta). So for a long time I doubted the correctness of Wilson's identification.

My readings, however, brought to my notice another Rāmagarha or Rāmagiri a few miles to the east of the Amrakūta. This Rāmagarha is also sacred to Rāma and there are pools, rills and brooks sanctified by the holy baths of Sītā. It is described in the 13th volume of Cunningham's Arch. Report as a single hill on a small plain with spurs and a peak. The small plain is surrounded on the north and towards north-east and north-west by high range of hills which a rain-cloud is not expected to cross over. So when the south-east monsoon strikes upon a piece of cloud resting on the spurs of Rāmagiri it will drive the cloud north-west. Obstructed there the cloud will veer round to the Amrakūta. So I thought Rāmagarha in the Sarguja State would be our Rāmagiri.

But an unexpected corroboration was afforded by a study of the works on Rāmagarha. It has two caves very ancient indeed, one is now called the Jogimārā cave, the other Sītābanjirā cave. These caves have inscriptions in Asoka characters. These have not yet been deciphered. Cunningham tried his hand at it, but could not do much. He was anxious to find in it some record of Devadatta, the cousin and opponent of Buddha. But I found two love-songs in these inscriptions.

The first song translated into English will run thus:—

I salute the beautifully-formed one who shows us the gods. I salute the beautiful form that leads us to the gods. He is much in quest at Vārānāsi. I salute the god-given one for seeing his beautiful form.

The second song:—

The heart of a lady living at a distance (from her lover) is set



to flames by the following three:—Sadam Bagara and the poet. For her this cave is excavated. Let the god of love look to it.

Why and how and by whom the caves were excavated cannot now be determined but the existence of Asoka inscriptions show that the caves must be as old as the 2nd or 3rd century B.C. The love-songs must have inspired Kālidās with the idea of connecting them with one of his heroes and he has connected it with the story of the love-sick Yaksha in banishment.

4. *A study on the constitution of Dimercurammonium Salts.*—By P. C. RĀY, D.Sc.

5. *Dimercurammonium Nitrate, Part I.*—By P. C. RĀY, D.Sc.



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LIST OF MEMBERS  
OF THE  
ASIATIC SOCIETY OF BENGAL.  
ON THE 31ST DECEMBER, 1901.

LIST OF OFFICERS AND MEMBERS OF COUNCIL  
OF THE ASIATIC SOCIETY OF BENGAL  
FOR THE YEAR 1901.

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*President :*

His Honor Sir John Woodburn, M.A., K.C.S.I.

*Vice-Presidents :*

H. H. Risley, Esq., B.A., C.I.E., I.C.S.

Colonel T. H. Hendley, C.I.E., I.M.S.

Major A. Alcock, M.B., C.M.Z.S., I.M.S.

*Secretary and Treasurer.*

Honorary General Secretary: T. H. Holland, Esq.,  
F.G.S., A.R.C.S., succeeded by Major A. Alcock, I.M.S.

Treasurer: W. K. Dods, Esq.

*Additional Secretaries.*

Philological Secretary: T. Bloch, Esq., Ph.D.

Natural History Secretary: L. de Nicéville, Esq., F.E.S.,  
C.M.Z.S.

Anthropological Secretary: F. E. Pargiter, Esq., B.A.,  
I.C.S.

Joint Philological Secretary: Mahāmāhopādhyāya Hara-  
prasād Shastri, M.A.

*Other Members of Council.*

J. D. Nimmo, Esq.

Dr. Mahendralal Sircar, M.D., D.L., C.I.E.

C. L. Griesbach, Esq., F.G.S., C.I.E.

A. Pedler, Esq., F.R.S.

S. C. Hill, Esq., B.A., B.Sc.

J. Bathgate, Esq.

F. Finn, Esq., B.A., F.Z.S.

The Hon. Mr. C. W. Bolton, C.S.I., I.C.S.

T. H. D. La Touche, Esq., B.A.



## LIST OF ORDINARY MEMBERS.

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R. = Resident. N. R. = Non-Resident. A. = Absent. N. S. = Non-Subscribing.  
L. M. = Life Member. F. M. = Foreign Member.

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N. B.—Members who have changed their residence since the list was drawn up are requested to give intimation of such a change to the Honorary General Secretary, in order that the necessary alteration may be made in the subsequent edition. Errors or omissions in the following list should also be communicated to the Honorary General Secretary.

Members who are about to leave India and do not intend to return are particularly requested to notify to the Honorary General Secretary whether it is their desire to continue Members of the Society; otherwise, in accordance with Rule 40 of the Rules, their names will be removed from the list at the expiration of three years from the time of their leaving India.

Date of Election.		
1901 June 5.	R.	Abdu· Rahman, A. F. M., Barrister-at-Law. <i>Calcutta</i> .
1894 Sept. 27.	N.R.	Abdul Wali, Maulvie. <i>Dinajpur</i> .
1895 May 1.	N.R.	Abdus Salam, Maulvie, M.A. <i>Cuttack</i> .
1888 Feb. 1.	F.M.	Adamson, Lieut.-Col. Charles Henry Ellison, M.S.C. <i>Europe</i> .
1901 Aug. 7.	N.R.	Adams, Margaret. Baptist Zenana Mission. <i>Delhi</i> .
1888 April 4.	R.	Ahmud, Shams-ul-ulama Maulvie, Arabic Professor, Presidency College. <i>Calcutta</i> .
1888 Feb. 1.	R.	Alcock, Major Alfred William, M.B., LL.D., F.R.S., Superintendent, Indian Museum. <i>Calcutta</i> .
1885 Mar. 4.	L.M.	Ali Bilgrami, Sayid, B.A., A.B.S.M., F.G.S. <i>Hyderabad</i> .
1899 Jan. 4.	N.R.	Ali Hussain Khan, Nawab. <i>Bopal</i> .
1900 Aug. 1.	R.	Allen, C. G. H., I.C.S. <i>Calcutta</i> .
1874 June 3.	R.	Ameer Ali, The Hon'ble Mr. Justice, M.A., C.I.E., Barrister-at-Law, Judge, High Court. <i>Calcutta</i> .
1893 Aug. 31.	N.R.	Anderson, Major A. R. S., B.A., M.B., I.M.S. <i>Port Blair</i> .
1884 Sept. 3.	R.	Anderson, J. A. <i>Calcutta</i> .
1890 July 2.	N.R.	Arnold, Thomas Walker, B.A., M.E.A.S. <i>Lahore</i> .
1870 Feb. 2.	L.M.	Baden-Powell, Baden Henry, M.A., C.I.E. <i>Europe</i> .
1901 Jan. 2.	R.	Badshah, K. J., B.A., I.C.S. <i>Calcutta</i> .
1898 Nov. 2.	N.R.	Bailey, The Revd. Thomas Grahame, M.A., B.D. <i>Wazirabad</i> .
1891 Mar. 4.	N.R.	Baillie, D. C., I.C.S. <i>Ghazipur</i> .

Date of Election.		
1898 Aug. 3.	N.R.	Bain, Lieut.-Col., D. S. E., I.M.S. <i>Mercara.</i>
1891 April 1.	N.R.	Baker, Edward Charles Stuart. <i>Debrugarh.</i>
1900 Aug. 29.	A.	Baker, The Hon. Mr. E. N., C.S.I., I.C.S. <i>Europe.</i>
1889 May 1.	R.	Banerji, The Hon. Mr. Justice Guru Das, M.A., D.L., Judge, High Court. <i>Calcutta.</i>
1896 Mar. 4.	N.R.	Banerji, Satish Chandra, M.A. <i>Allahabad.</i>
1869 Dec. 1.	L.M.	Barker, R. A., M.D. <i>Europe.</i>
1885 Nov. 4.	R.	Barman, Damudar Das. <i>Calcutta.</i>
1877 Jan. 17.	N.R.	Barman, H. H. The Maharaja Radha Kishor Dev. <i>Tipperah.</i>
1898 Mar. 2.	N.R.	Barnes, Herbert Charles, I.C.S. <i>Shillong.</i>
1894 Sept. 27.	R.	Basu, Nagendra Natha. <i>Calcutta.</i>
1898 May 4.	R.	Bathgate, J. <i>Calcutta.</i>
1895 July 3.	L.M.	Beatson-Bell, Nicholas Dodd, B.A., I.C.S. <i>Europe.</i>
1876 Nov. 15.	F.M.	Beveridge, Henry, I.C.S., (retired). <i>Europe.</i>
1900 April 4.	N.R.	Bingley, Captain A. H., I.S.O. <i>Simla.</i>
1898 Nov. 2.	N.R.	Black, Robert Greenhill. <i>Jalpaiguri.</i>
1859 Aug. 3.	L.M.	Blanford, William Thomas, LL.D., A.R.S.M., F.G.S., F.R.G.S., F.Z.S., F.R.S. <i>Europe.</i>
1897 Feb. 3.	N.R.	Bloch, Theodor, PH.D. <i>Gya.</i>
1893 Feb. 1.	N.R.	Bodding, The Revd. P. O. <i>Rampore Haut.</i>
1885 Mar. 4.	R.	Bolton, The Hon. Mr. Charles Walter, C.S.I., I.C.S. <i>Calcutta.</i>
1895 July 3.	N.R.	Bouham-Carter, Norman, I.O.S. <i>Mymensingh.</i>
1890 July 2.	R.	Bonnerjee, Womes Chunder, Barrister-at-Law, Middle Temple. <i>Calcutta.</i>
1897 June 2.	N.R.	Bose, Annada Prasad, M.A. <i>Rajshahi</i>
1895 Mar. 6.	A.	Bose, Jagadis Chandra, M.A., D.Sc., Bengal Education Service. <i>Europe.</i>
1880 Nov. 3.	N.R.	Bose, Pramatha Nath, B.Sc., F.G.S. Geological Survey of India. <i>Camp Raipur, C.I.</i>
1900 Jan. 19.	R.	Bose, Rai Chuni Lal, Bahadur, M.B., F.C.S. <i>Calcutta.</i>
1895 April 3.	R.	Bourdillon, The Hon. Mr. James Austin, C.S.I., I.O.S. <i>Calcutta.</i>
1860 Mar. 7.	L.M.	Brandis, Sir Dietrich, K.C.I.E., PH.D., F.L.S., F.R.S. <i>Europe.</i>
1900 Aug. 1.	R.	Brown, Major E. Harold, M.D., I.M.S. <i>Calcutta.</i>
1901 Sept. 25.	R.	Buchanan, Major W. J., I.M.S. <i>Calcutta.</i>
1887 May 4.	R.	Bural, Nobin Chand, Solicitor. <i>Calcutta.</i>
1901 June 5.	R.	Burkill, I. H. <i>Calcutta.</i>
1896 Jan. 8.	N.R.	Burn, Richard, I.C.S. <i>Allahabad.</i>
1900 May 2.	N.R.	Butcher, Flora, M.D. <i>Palwal.</i>
1898 Sept. 30.	R.	Cable, Ernest. <i>Calcutta.</i>
1896 Jan. 8.	R.	Caddy, Dr. Arnold. <i>Calcutta.</i>
1901 Jan. 2.	R.	Campbell, Duncan. <i>Calcutta.</i>
1901 Mar. 6.	N.R.	Campbell, W. E. N., I.C.S. <i>Mirzapur, N.-W. P.</i>
1895 July 3.	N.R.	Carey, Hirzel Denis de Mussenden, I.C.S. <i>Burdwan.</i>
1895 July 3.	N.R.	Carlyle, Robert Warrant, C.I.E., I.C.S. <i>Balasore.</i>

Date of Election.		
1890 June 4.	N.R.	Chakravarti, Man Mohan, M.A., B.L., Deputy Magistrate. <i>Midnapur.</i>
1901 Mar. 6.	N.R.	Chakravarti, Manmatha Nath. <i>Tamluk, Midnapur.</i>
1901 June 5.	R.	Chapman, E. P., I.C.S. <i>Calcutta.</i>
1898 Nov. 2.	R.	Chatterjea, Kishori Mohan, Judge, Court of Small Causes. <i>Calcutta.</i>
1894 Aug. 1.	N.R.	Chatterjee, M. N. <i>Patiala.</i>
1893 Sept. 28.	N.R.	Chaudhuri, Banawari Lala, B.Sc., Edin. <i>Mymensingh.</i>
1899 Jan. 4.	A.	Clemow, Dr. Frank Gerard, M.D., Edin. D.P.H., Camb. <i>Europe.</i>
1880 Aug. 26.	F.M.	Clerk, Major-Genl. Malcolm G. <i>Europe.</i>
1881 May 4.	N.R.	Cockburn, John, Opium Department. <i>Cawnpore.</i>
1889 Nov. 6.	R.	Colville, William Brown. <i>Calcutta.</i>
1890 Dec. 3.	A.	Connan, William, C.E. <i>Europe.</i>
1898 June 1.	N.R.	Cordier, Dr. Palmyr. <i>Pondicherry.</i>
1876 Mar. 1.	F.M.	Crawford, James, B.A., I.C.S. <i>Europe.</i>
1901 June 5.	R.	Crawford, Major D. G., I.M.S. <i>Hughli.</i>
1887 Aug. 25.	R.	Criper, William Risdon, F.C.S., F.I.C., A.R.S.M. <i>Calcutta.</i>
1877 June 6.	A.	Croft, Sir Alfred W., M.A., K.C.I.E. <i>Europe.</i>
1895 July 3.	N.R.	Cumming, John Ghest, I.C.S. <i>Patna.</i>
1898 Aug. 26.	N.R.	Cuppige, Captain W. A., I.S.C. <i>Dibrugarh.</i>
1873 Dec. 3.	F.M.	Dames, Mansel Longworth, I.C.S. <i>Europe.</i>
1896 Mar. 4.	R.	Das-Gupta, Jogendra Nath, B.A., Barrister-at-Law. <i>Calcutta.</i>
1901 Aug. 28.	N.R.	Das, Govinda. <i>Benares.</i>
1865 June 7.	N.R.	Das, Raja Jay Krishna, Bahadur, C.S.I. <i>Moradabad.</i>
1879 April 7.	N.R.	Das, Ram Saran, M.A., Secy., Oudh Commercial Bank, Limited. <i>Fyzabad, Oudh.</i>
1900 July 4.	N.R.	Das, Syam Sunder, B.A. <i>Benares.</i>
1896 Dec. 2.	A.	Davis, Arthur William, I.C.S. <i>Europe.</i>
1895 Sept. 19.	N.R.	De, Kiran Chandra, B.A., I.C.S. <i>Faridpur.</i>
1895 Dec. 4.	N.R.	Delmerick, Charles Swift. <i>Budaon.</i>
1893 Mar. 1.	A.	Deussen, Dr. Paul. <i>Europe.</i>
1900 May 2.	N.R.	Dev, Kumar Satindra, Rai Mahesaya. <i>Bansberia.</i>
1899 Aug. 30.	N.R.	Dev, Raj Kumar Satchidanand, Bahadur. <i>Deogarh, Sambalpur.</i>
1896 Jan. 8.	N.R.	Dewhurst, R. Paget, I.C.S. <i>Unao.</i>
1901 June 5.	N.R.	Dey, Nundolal. <i>Tamluk, [Midnapur.]</i>
1898 Jan. 5.	R.	Dods, W. K. <i>Calcutta.</i>
1886 June 2.	R.	Doyle, Patrick, C.E., [F.R.A.S., F.R.S.E., F.G.S.] <i>Calcutta.</i>
1901 Feb. 6.	N.R.	Drake-Brockman, Major H. E., I.M.S. <i>Bombay.</i>
1892 Sept. 22.	A.	Drury, Major Francis James, M.B., I.M.S. <i>Europe.</i>
1889 Jan. 2.	N.R.	Dudgeon, Gerald Cecil, Holta Tea Co., Ltd., <i>Palam-pur.</i>
1879 Feb. 5.	N.R.	Duthie, J. F., B.A., F.L.S. <i>Saharanpur.</i>
1892 Jan. 6.	N.R.	Dutt, Gerindra Nath. <i>Hatwa.</i>

Date of Election.		
1877 Aug. 30.	R.	Dutt, Kedar Nath. <i>Calcutta.</i>
1892 Aug. 25.	R.	Dutt, Rai Narsingh Chunder, Bahadur. <i>Howrah.</i>
1900 April 4.	R.	Dyson, Major Herbert Jekyl, F.R.C.S., I.M.S. <i>Calcutta.</i>
1900 July 4.	R.	Earle, A., I.C.S. <i>Calcutta.</i>
1901 June 5.	N.R.	Ede, Francis Joseph, C. E., A.M.I.C.E., F.G.S. <i>Silchar Cachar.</i>
1871 Dec. 2.	N.R.	Eliot, John, M.A., C.I.E., F.R.S. <i>Simla.</i>
1900 April 4.	A.	Evans, The Hon. Sir Griffith, K.C.I.E. <i>Europe.</i>
1900 Mar. 7.	R.	Fanshawe, Arthur Upton, C.S.I., I.C.S. <i>Calcutta.</i>
1900 Aug. 29.	N.R.	Fanshawe, The Hon. Mr. H. C., C.S.I., I.C.S. <i>Delhi.</i>
1901 Mar. 6.	N.R.	Fergusson, J. C. <i>Hardoi, Oudh.</i>
1899 Jan. 4.	A.	Ferrar, Lieutenant, M. LL., I.S.C. <i>Europe.</i>
1894 Dec. 5.	R.	Finn, Frank, B.A., F.Z.S., Deputy Superintendent, Indian Museum. <i>Calcutta.</i>
1898 Sept. 30.	R.	Firminger, The Revd. Walter K., M.A. <i>Calcutta.</i>
1892 May 4.	A.	Forrest, G. W., B.A. <i>Europe.</i>
1900 Dec. 5.	N.R.	Gabriel, E. V., I.C.S. <i>Begu Serai.</i>
1893 Jan. 11.	R.	Gait, Edward Albert, I.C.S. <i>Calcutta.</i>
1899 Aug. 30.	R.	Garth, Dr. H. C. <i>Calcutta.</i>
1859 Aug. 3.	L.M.	Gastrell, General James Eardley. <i>Europe.</i>
1889 Jan. 2.	R.	Ghose, Jogendra Chandra, M.A., B.L. <i>Calcutta.</i>
1889 Mar. 6.	R.	Ghosha, Bhupendra Sri, B.A., B.L. <i>Calcutta.</i>
1869 Feb. 3.	R.	Ghosha, Pratapa Chandra, B.A. <i>Calcutta.</i>
1897 Dec. 6.	A.	Godfrey, Captain Stuart, I.S.C. <i>Europe.</i>
1861 Feb. 5.	N.S.	Godwin-Austen, Lieut.-Colonel H. H., F.R.S., F.Z.S., F.R.G.S. <i>Europe.</i>
1899 Aug. 2.	R.	Goenka, Roomall. <i>Calcutta.</i>
1896 Nov. 4.	A.	Grant, A. J., I.C.S. <i>Europe.</i>
1897 July 7.	N.R.	Grant, Captain J. W., I.M.S. <i>Sirohee.</i>
1898 Aug. 3.	R.	Green, Major Charles Robert Mortimer, F.R.C.S. I.M.S. <i>Calcutta.</i>
1876 Nov. 15.	F.M.	Grierson, George Abraham, PH.D., C.I.E., I.C.S. <i>Europe.</i>
1885 Dec. 2.	R.	Griesbach, C. L., C.I.E., F.G.S., Director, Geological Survey of India. <i>Calcutta.</i>
1900 Dec. 5.	L.M.	Grieve, J. W. A. <i>Kalimpong.</i>
1901 April 3.	N.R.	Guha, Abhaya Sankara. <i>Shillong.</i>
1898 June 1.	N.R.	Gupta, Bepin Behari. <i>Chota Nagpur.</i>
1898 April 6.	N.R.	Gupta, Krishna Govinda, I.C.S., Barrister-at-Law. <i>Cuttack.</i>
1898 Jan. 5.	N.R.	Gurdon, Captain P. R. T., I.S.C. <i>Gauhati.</i>
1901 Mar. 6.	N.R.	Habibur Rahman Khan, Moulvie. <i>Bhikampur.</i>
1892 Jan. 6.	N.R.	Haig, Captain Wolseley, I.S.C. <i>Berar.</i>
1899 April 5.	N.R.	Hare, Major E. C., I.M.S. <i>Gauhati.</i>
1901 Jan. 2.	R.	Harris, Lieut-Col. G. F. A., I.M.S. <i>Calcutta.</i>

Date of Election.		
1884 Mar. 5.	L.M.	Hassan Ali Qadr, Sir Synd, Nawab Bahadur, K.C.I.E. <i>Murshedabad.</i>
1897 Feb. 3.	R.	Hayden, H.H., B.A., B.E., F.G.S., Geological Survey of India. <i>Calcutta.</i>
1875 Mar. 3.	R.	Hendley, Col. Thomas Holbein, C.I.E., I.M.S., Inspector General of Civil Hospitals, Bengal. <i>Calcutta.</i>
1892 Aug. 3.	R.	Hill, Samuel Charles, B.A., B.Sc. <i>Calcutta.</i>
1872 Dec. 5.	A.	Hoernle, Augustus Frederick Rudolf, PH.D., C.I.E. <i>Europe.</i>
1878 Mar. 6.	A.	Hoey, W., PH.D., I.C.S., (retired). <i>Europe.</i>
1891 July 1.	A.	Holland, Thomas Henry, F.G.S., A.E.C.S., Geological Survey of India. <i>Europe.</i>
1898 Feb. 2.	R.	Hooper, David, F.C.S. <i>Calcutta.</i>
1884 Mar. 5.	A.	Hooper, The Hon. Mr. John, B.A., I.C.S. <i>Europe.</i>
1901 Dec. 4.	R.	Hossack, Dr. W. C. <i>Calcutta.</i>
1873 Jan. 2.	L.M.	Houstoun, G. L., F.G.S. <i>Europe.</i>
1890 Dec. 3.	A.	Hyde, The Revd. Henry Barry, M.A. <i>Europe.</i>
1866 Mar. 7.	F.M.	Irvine, William, I.C.S., (retired). <i>Europe.</i>
1899 April 5.	A.	Kemphorne, H. E. <i>Europe.</i>
1882 Mar. 1.	N.R.	Kennedy, Pringle, M.A. <i>Mozufferpur.</i>
1867 Dec. 4.	A.	King, Sir George, M.B., K.C.I.E., LL.D., F.L.S., F.R.S., I.M.S., (retired). <i>Europe.</i>
1881 Mar. 2.	N.R.	King, Lucas White, B.A., LL.B., C.S.I., I.C.S. <i>Dharamsala.</i>
1896 Aug. 27.	A.	Konstam, Edwin Max, I.C.S. <i>Europe.</i>
1896 July 1.	R.	Küchler, George William, M.A. <i>Calcutta.</i>
1891 Feb. 4.	N.R.	Kupper, Raja Lala Bunbehari. <i>Burdwan.</i>
1899 Aug. 30.	N.R.	Lal, Dr. Mannu. <i>Banda.</i>
1887 May 4.	L.M.	Lanman, Charles R. <i>Europe.</i>
1889 Mar. 6.	N.R.	LaTouche, Thomas Henry Digges, B.A., Geological Survey of India. <i>Mandalay.</i>
1900 Sep. 19.	R.	Law, The Hon. Sir Edward F. G., K.C.M.G. <i>Calcutta.</i>
1889 Nov. 6.	R.	Lee, W. A., F.R.M.S. <i>Calcutta.</i>
1900 May 2.	R.	Leistikow, F. R. <i>Calcutta.</i>
1889 Feb. 6.	R.	Little, Charles, M.A., Bengal Education Service. <i>Calcutta.</i>
1899 Dec. 6.	N.R.	Lorimer, J. G., I.C.S. <i>Malakhand.</i>
1869 July 7.	F.M.	Lyall, Sir Charles James, M.A., K.C.S.I., C.I.E., LL.D., I.C.S., (retired). <i>Europe.</i>
1870 April 7.	L.M.	Lyman, B. Smith. <i>Europe.</i>
1896 Mar. 4.	N.R.	MacBlaine, Frederick, I.C.S. <i>Purueah.</i>
1901 Aug. 7.	R.	Macfarlane, J., Librarian, Imperial Library. <i>Calcutta.</i>
1893 Jan. 11.	L.M.	Maclagan, E. D., M.A., I.C.S. <i>Multan.</i>

Date of Election.			
1891 Feb. 4.	R.	Macpherson, Duncan James, M.A., C.I.E., I.C.S.	<i>Calcutta.</i>
1896 Feb. 5.	A.	Macpherson, William Charles, I.C.S.	<i>Europe.</i>
1893 Aug. 31.	N.R.	Mahatha, Purmeshwar Narain.	<i>Mozufferpur.</i>
1895 Aug. 29.	R.	Mahomed Gilani, Shams-ul-Ulama Shaikh.	<i>Calcutta.</i>
1898 Nov. 2.	N.R.	Maitra, Akshaya Kumar, B.A., B.L.	<i>Rajshahi.</i>
1889 Jan. 2.	R.	Maliah, Kumar Ramessur.	<i>Howrah.</i>
1893 July 5.	A.	Mangos, C. D.	<i>Europe.</i>
1901 June 5.	R.	Mann, H. H., B.Sc.	<i>Calcutta.</i>
1889 Mar. 6.	A.	Mann, John, M.A.	<i>Europe.</i>
1893 Mar. 1.	N.R.	Marriott, Charles Richardson, I.C.S.	<i>Monghyr.</i>
1892 April 6.	N.R.	Maynard, Major F. P., I.M.S.	<i>Bankipur.</i>
1900 May 2.	R.	McArdle, Captain Andrew Augustine Frayne, B.A., M.B., I.M.S.	<i>Calcutta.</i>
1901 Aug. 28.	R.	McLeod, Norman.	<i>Calcutta.</i>
1899 Feb. 1.	N.R.	McMahon, Captain A. H., C.S.I., C.I.E., I.S.C.	<i>Quetta.</i>
1899 Mar. 1.	N.R.	McMinn, C. W., B.A., I.C.S., (retired).	<i>Comilla.</i>
1886 Mar. 3.	L.M.	Mehta, Rustomjee Dhunjeebhoy, C.I.E.	<i>Calcutta.</i>
1895 July 3.	F.M.	Melitus, Paul Gregory, C.I.E., I.C.S.	<i>Europe.</i>
1900 Mar. 7.	A.	Meyer, William Stevenson, I.C.S.	<i>Europe.</i>
1900 Jan. 19.	A.	Michie, Charles.	<i>Europe.</i>
1884 Nov. 5.	R.	Middlemiss, C. S., B.A., Geological Survey of India.	<i>Calcutta.</i>
1884 Sept. 3.	R.	Miles, William Harry.	<i>Calcutta.</i>
1870 July 6.	R.	Miller, Albert Bermingham, B.A., Barrister-at-Law, Official Trustee.	<i>Calcutta.</i>
1898 April 6.	R.	Milne, Captain C. J., I.M.S.	<i>Calcutta.</i>
1874 May 6.	F.M.	Minchin, F. J. V.	<i>Europe.</i>
1896 July 1.	N.R.	Misra, Rai Lakshmi Sanker, Bahadur.	<i>Benares.</i>
1897 Jan. 6.	N.R.	Misra, Tulsi Ram.	<i>Barielly.</i>
1899 Mar. 1.	R.	Mitra, J. C., M.A., B.L.	<i>Calcutta.</i>
1901 Aug. 28.	R.	Mitra, Kumar Narendra Nath.	<i>Calcutta.</i>
1897 Nov. 3.	R.	Mitra, Saroda Churan, M.A., B.L.	<i>Calcutta.</i>
1901 Jan. 2.	N.R.	Mittra, Karttik Chandra, M.A., B.L.	<i>Midnapur.</i>
1901 Aug. 7.	N.R.	Molony, E., I.C.S.	<i>Ghaziipur.</i>
1895 July 3.	N.R.	Monahan, Francis John, I.C.S.	<i>Shillong.</i>
1898 May 4.	R.	Mookerjee, R. N.	<i>Calcutta.</i>
1898 Sept. 30.	R.	Moore, The Revd. Herbert Octavius, M.A.	<i>Calcutta.</i>
1894 June 6.	N.R.	Muhammad Shibli Nomani, Shams-ul-Ulama Maulvie, Professor of Arabic in the Muhammadan Oriental College.	<i>Aligarh.</i>
1879 May 7.	A.	Muir, J. W., M. A., I. C. S., (retired).	<i>Europe.</i>
1901 Jan. 2.	N.R.	Mukerjee, Dr. U. C.	<i>Birbhoom.</i>
1894 Aug. 30.	R.	Mukerjee, Sib Narayan.	<i>Uttarpara.</i>
1900 May 2.	R.	Mukerji, Phani Bhushan, B.Sc.	<i>Calcutta.</i>
1899 Sept. 29.	R.	Mukharji, Jotindra Nath, B.A.	<i>Calcutta.</i>
1886 May 5.	R.	Mukhopadhyaya, The Hon. Dr. Asutosh, M.A., D.L., F.R.A.S., F.R.S.E.	<i>Calcutta.</i>
1892 Dec. 7.	R.	Mukhopadhyaya, Panchanana.	<i>Calcutta.</i>

Date of Election.		
1901 April 3.	R.	Mullick, Pramatha Nath. <i>Calcutta.</i>
1901 June 5.	N.R.	Mullick, Ramani Mohan. <i>Meherpur.</i>
1885 June 3.	N.R.	Naemwoollah, Maulvie, Deputy Magistrate. <i>Etawah.</i>
1901 Mar. 6.	N.R.	Nevill, H. R., I.C.S. <i>Naini Tal.</i>
1900 Dec. 5.	R.	Nicoll, John. <i>Calcutta.</i>
1889 Aug. 29.	L.M.	Nimmo, John Duncan. <i>Calcutta.</i>
1901 Feb. 6.	R.	Noetling, Dr. F. <i>Calcutta.</i>
1892 Oct. 27.	F.M.	Norvill, Dr. Frederic H. <i>Europe.</i>
1885 Feb. 4.	N.R.	Nyayaratna, Mahāmāhopādhyāya Mahesa Chandra, C.I.E. <i>Benares.</i>
1899 Jan. 7.	N.R.	O'Brien, P. H., I.C.S. <i>Purneah.</i>
1900 Dec. 5.	N.R.	O'Connor, Captain W. F., B.A. <i>Kashmir.</i>
1900 Aug. 29.	A	O'Dwyer, Michael Francis, B.A., I.C.S. <i>Europe.</i>
1880 Dec. 1.	N.R.	Oldham, R. D., A.R.S.M., F.G.S., Geological Survey of India. <i>Karachi.</i>
1883 Aug. 30.	F.M.	Oliver, Edw. Emmerson, M.I.C.E. <i>Europe.</i>
1887 July 6.	N.R.	Oung, Moung Hla. <i>Rangoon.</i>
1901 April 3.	N.R.	Paindsay, V. R. <i>Benares.</i>
1901 Jan. 2.	N.R.	Pande, Pandit Ramavatar. B.A., I.C.S. <i>Jhansi.</i>
1880 Aug. 4.	L.M.	Pandia, Pandit Mohanlall Vishnulall, F.T.S., <i>Muttra.</i>
1901 Aug. 28.	R.	Panton, E. B. H., I.C.S. <i>Calcutta.</i>
1880 Jan. 7.	R.	Pargiter, Frederick Eden, B.A., I.C.S. <i>Calcutta.</i>
1901 June 5.	R.	Parsons, W. <i>Calcutta.</i>
1899 Aug. 2.	N.R.	Peake, C. W., M.A., Bengal Education Service. <i>Bankipur.</i>
1873 Aug. 6.	R.	Pedler, Alexander, C.I.E., F.R.S., Director of Public Instruction, Bengal. <i>Calcutta.</i>
1888 June 6.	L.M.	Pennell, Aubray Percival, B.A., I.C.S. <i>Europe.</i>
1881 Aug. 25.	R.	Percival, Hugh Melville, M.A., Bengal Education Service. <i>Calcutta.</i>
1877 Aug. 1.	N.R.	Peters, Lieut.-Colonel C. T., M.B., I.M.S. <i>Bombay.</i>
1889 Nov. 6.	N.R.	Phillott, Major D. C., I.S.C. <i>Kerman, Persia.</i>
1896 Jan. 8.	F.M.	Place, George William, B.A., LL.B., I.C.S. <i>Europe.</i>
1901 June 5.	R.	Porter, Lieut.-Col. G. M., B.E. <i>Calcutta.</i>
1889 Mar. 6.	R.	Prain, Major David, M.A., M.B., LL.D., I.M.S., Royal Botanic Garden. <i>Sibpur.</i>
1889 Mar. 6.	N.R.	Prasad, Hanuman, Raes and Zemindar. <i>Chunar.</i>
1896 Sept. 25.	N.R.	Pringle, A. T. <i>Madras.</i>
1880 April 7.	N.R.	Rai, Bipina Chandra, B.L. <i>Jessore.</i>
1895 Aug. 29.	N.R.	Rai, Jatindra Nath Chaudhery, M.A., B.L. <i>Taki.</i>
1901 June 5.	N.R.	Rai, Lala Lajpat. <i>Lahore.</i>
1900 April 4.	R.	Raleigh, The Hon. Mr. T. <i>Calcutta.</i>
1898 Aug. 3.	N.R.	Ram, Sita, M.A. <i>Ballia, N.-W. P.</i>
1890 Mar. 5.	R.	Ray, Prafulla Chandra, D.Sc., Bengal Education Service. <i>Calcutta.</i>

Date of Election.		
1887	May 4.	R. Ray, Prasanna Kumar, D.Sc. (Lond. and Edin.), Bengal Education Service. <i>Calcutta.</i>
1884	Mar. 5.	R. Risley, Herbert Hope, B.A., C.I.E., I.C.S. <i>Calcutta.</i>
1900	April 4.	R. Rogers, Captain Leonard, M.D., B.Sc., M.B.C.P., F.R.C.S., I.M.S. <i>Calcutta.</i>
1900	Aug. 29.	N.R. Rose, H. A., I.C.S. <i>Lahore.</i>
1901	Dec. 4.	R. Ross, E. Denison, Ph.D. <i>Calcutta.</i>
1896	Dec. 2.	N.R. Row, B. Suryanaran, B.A. <i>Bellary.</i>
1895	Mar. 6.	A. Rowe, Frederick James, M.A. <i>Europe.</i>
1889	June 5.	N.R. Roy, Maharaja Girjanath. <i>Dinagepur.</i>
1885	Mar. 4.	R. Rustomjee, Harjeebhoy Manickjee. <i>Calcutta.</i>
1896	Aug. 27.	N.R. Samman, Herbert Frederick, I.C.S. <i>Barisal.</i>
1899	June 7.	N.R. Sarkar, Chandra Kumar. <i>Kowkanik.</i>
1898	Mar. 2.	R. Sarkar, Jadu Nath. <i>Calcutta.</i>
1897	Nov. 3.	R. Saunders, C. <i>Calcutta.</i>
1900	Dec. 5.	R. Schwaiger, Imre George. <i>Calcutta.</i>
1893	Jan. 11.	L.M. Scindia, His Highness the Maharaja. <i>Gwalior.</i>
1899	Mar. 1.	R. Scott, Lieutenant Bernard, I.S.C. <i>Calcutta.</i>
1900	Dec. 5.	N.R. Sen, Birendra Chandra, I.C.S. <i>Dinajpur.</i>
1901	Aug. 28.	R. Sen, Upendranath. <i>Calcutta.</i>
1885	April 1.	R. Sen, Yadu Nath. <i>Calcutta.</i>
1897	Dec. 1.	R. Seth, Mesrovb J., Armenian, Examiner, Calcutta University. <i>Calcutta.</i>
1900	Mar. 7.	R. Shastree, Pandit Yogesha Chandra. <i>Calcutta.</i>
1885	Feb. 4.	R. Shastri, Mahāmāhopādhyāya Haraprasād, M.A. <i>Calcutta.</i>
1900	May 2.	R. Shrager, Adolphe. <i>Calcutta.</i>
1899	May 3.	N.R. Silberrad, Chas. A., I.C.S. <i>Lalitpur, Bundelkhand.</i>
1893	Mar. 1.	N.R. Singh, Maharaja Kumara Sirdar Bharat, I.C.S. <i>Ghazipur.</i>
1895	Aug. 29.	R. Singh, Lachmi Narayan, M.A., B.L. <i>Calcutta.</i>
1892	Mar. 2.	L.M. Singh, The Hon. Raja Ooday Pratab. <i>Binga.</i>
1889	Aug. 29.	N.R. Singh, H. H. The Maharaja Prabhu Narain, Bahadur. <i>Benares.</i>
1892	Aug. 3.	N.R. Singh, H. H. The Hon. Maharaja Pratap Narain. <i>Ajodhya, Oudh.</i>
1895	Aug. 29.	N.R. Singh, Ram Din. <i>Bankipur.</i>
1889	Nov. 6.	N.R. Singh, H. H. The Hon. Maharaja Rameshwara, Bahadur. <i>Darbhanga.</i>
1894	Feb. 7.	N.R. Singh, H. H. Raja Vishwa Nath, Bahadur, Chief of Chhatarpur.
1901	Aug. 7.	R. Singha, Chandra Narayan. <i>Calcutta.</i>
1894	July 4.	N.R. Sinha, Kunwar Kushal Pal, M.A. <i>Narki P.O., Agra District.</i>
1899	June 7.	N.R. Sinha, Purnenda Narayan. <i>Bankipur.</i>
1867	April 3.	R. Sircar, Dr. Mahendra Lal, M.D., C.I.E., D.L. <i>Calcutta.</i>
1897	Jan. 6.	R. Sircar, Amrita Lal, F.C.S. <i>Calcutta.</i>



Date of Election.		
1872 Aug. 5.	N.R.	Skrefsrud, The Revd. Laurentius Olavi. <i>Rampore Haut.</i>
1901 Dec. 4.	N.R.	Spooner, D. Brainerd. <i>Benares.</i>
1899 Nov. 1.	N.R.	Srivastavya, Lala Shyam Sunder Lal. <i>Pertabgarh.</i>
1898 April 6.	R.	Stark, Herbert, B.A. <i>Calcutta.</i>
1901 Mar. 6.	N.R.	Stebbing, E. P. <i>Dehra Dun.</i>
1891 Aug. 27.	A.	Stein, M. A., PH.D. <i>Europe.</i>
1895 July 5.	A.	Steinberg, Alfred Frederick, I.C.S. <i>Europe.</i>
1899 Aug. 30.	R.	Stephen, St. John, B.A., LL.B. Barrister-at-Law. <i>Calcutta.</i>
1900 Aug. 29.	N.R.	Stephenson, Captain John, I.M.S. <i>Jhelum.</i>
1899 Mar. 1.	R.	Tocher, A. <i>Calcutta.</i>
1868 June 3.	R.	Tagore, The Hon. Maharaja Sir Jotendra Mohun, Bahadur, K.C.S.I. <i>Calcutta.</i>
1898 April 6.	R.	Tagore, Maharaja Prodyat Coomar. <i>Calcutta.</i>
1897 Dec. 1.	N.R.	Talbot, W. A. <i>Belgaum.</i>
1893 Aug. 31.	N.R.	Tate, G. P., Survey of India. <i>Hongkong.</i>
1878 June 5.	N.R.	Temple, Colonel Richard Carnac, C.I.E., I.S.C. <i>Port Blair.</i>
1875 June 2.	N.R.	Thibaut, Dr. G., Muir Central College. <i>Allahabad.</i>
1898 Nov. 2.	R.	Thornton, Edward, A.R.I.B.A. <i>Calcutta.</i>
1847 June 2.	L.M.	Thuillier, Lieut.-Genl. Sir Henry Edward Landor, K.T., C.S.I., F.R.S., B.A. <i>Europe.</i>
1891 Aug. 27.	N.R.	Thurston, Edgar. <i>Madras.</i>
1871 April 5.	A.	Trefftz, Oscar. <i>Europe.</i>
1861 June 5.	L.M.	Tremlett, James Dyer, M.A., I.C.S., (retired). <i>Europe.</i>
1893 May 3.	N.B.	Vandja, Raja Ram Chandra. <i>Mayurbhanga, District Balasore.</i>
1898 Feb. 2.	R.	Vasu, Amrita Lal. <i>Calcutta.</i>
1900 Aug. 29.	N.R.	Vaughan, Major J. C., I.M.S. <i>Burdwan.</i>
1890 Feb. 5.	N.R.	Venis, Arthur, M.A., Principal, Sanskrit College. <i>Benares.</i>
1901 Mar. 6.	N.R.	Vogel, Dr. J. Ph. <i>Lahore.</i>
1894 Sept. 27.	L.M.	Vost, Major William, I.M.S. <i>Jaunpur.</i>
1895 July 5.	N.R.	Waddell, Lieut.-Col. Lawrence Austine, M.B., LL.D., C.I.E., I.M.S. <i>Almora, N.-W. P.</i>
1901 Aug. 7.	R.	Walker, Dr. T. L. <i>Calcutta.</i>
1900 Jan. 19.	R.	Wallace, David Robb. <i>Calcutta.</i>
1901 June 5.	N.R.	Walsh, E. H., I.C.S. <i>Darjeeling.</i>
1889 Nov. 6.	A.	Walsh, Major John Henry Tull, I.M.S. <i>Europe.</i>
1900 April 4.	N.R.	Walton, Captain Herbert James, M.B., F.R.C.S., I.M.S. <i>Bombay.</i>
1865 May 3.	A.	Waterhouse, Major-General James, I.S.C., (retired). <i>Europe.</i>
1874 July 1.	R.	Watt, Dr. George, C.I.E. <i>Calcutta.</i>

Date of Election.		
1899 Sept. 29.	A.	Weldon, The Most Revd. James Edward Cowell, D.D. <i>Europe.</i>
1896 Feb. 5.	A.	Williams, Captain Charles E., I.M.S. <i>Europe.</i>
1891 May 6.	N.R.	Wilson, Charles Robert, M.A., Bengal Education Service. <i>Bankipur.</i>
1899 Aug. 30.	R.	Wood, E. Seymour, F.G.S. <i>Calcutta.</i>
1892 Jan. 6.	R.	Woodburn, The Hon. Sir John, M.A., K.C.S.I., I.C.S. <i>Calcutta.</i>
1900 Dec. 5.	R.	Woodman, H. C., I.C.S. <i>Calcutta.</i>
1894 Sept. 27.	R.	Woodroffe, John George, Bar.-at-Law. <i>Calcutta.</i>
1894 Aug. 30.	N.R.	Wright, Henry Nelson, B.A., I.C.S. <i>Allahabad.</i>
1898 July 6.	R.	Wyness, James, C.E. <i>Calcutta.</i>

### SPECIAL HONORARY CENTENARY MEMBERS.

Date of Election.		
1884 Jan. 15.		Dr. Ernst Haeckel, Professor in the University of Jena.
1884 Jan. 15.		Charles Meldrum, Esq., C.M.G., M.A., LL.D., F.R.A.S., F.R.S. <i>Mauritius.</i>
1884 Jan. 15.		Professor A. H. Sayce, Professor of Comp. Philology. <i>Oxford.</i>
1884 Jan. 15.		Professor Emile Senart, Member of the Institute of France. <i>Paris.</i>

### HONORARY MEMBERS.

1848 Feb. 2.		Sir Joseph Dalton Hooker, G.C.S.I., C.B., M.D., D.C.L., LL.D., F.L.S., F.G.S., F.R.G.S., F.R.S. <i>Berkshire.</i>
1860 Nov. 7.		Dr. Albrecht Weber. <i>Berlin.</i>
1875 Nov. 3.		Dr. Otto von Böttlingk. <i>Leipzig.</i>
1879 June 4.		Professor Edward Bayles Cowell, D.C.L. <i>Cambridge.</i>
1879 June 4.		Dr. Albert Günther, M.A., M.D., PH.D., P.L.S., F.Z.S., F.R.S. <i>Surrey.</i>
1879 June 4.		Dr. Jules Janssen. <i>Paris.</i>
1879 June 4.		Professor P. Regnaud. <i>Lyons.</i>
1881 Dec. 7.		Lord Kelvin, G.C.V.O., D.C.L., LL.D., F.R.S.E., F.R.S. <i>Glasgow.</i>
1883 Feb. 7.		William Thomas Blanford, Esq., LL.D., A.R.S.M., F.G.S., F.R.G.S., F.Z.S., F.R.S. <i>London.</i>
1883 Feb. 7.		Alfred Russell Wallace, Esq., LL.D., D.C.L., F.L.S., F.Z.S., F.R.S. <i>Dorset.</i>
1894 Mar. 7.		Sir George Gabriel Stokes, Bart, M.A., D.C.L., LL.D., D.SC., F.C.P.S., F.R.S.E., F.R.S. <i>Cambridge.</i>
1894 Mar. 7.		Mahāmāhāpodhyāya Chandra Kanta Tarkalankara. <i>Calcutta.</i>
1894 Mar. 7.		Professor Theodor Noeldeke. <i>Strassburg.</i>
1895 June 5.		Lord Rayleigh, M.A., D.C.L., D.SC., LL.D., PH.D., F.R.A.S., F.R.S. <i>Witham, Essex.</i>

Date of Election.	
1895 June 5.	Lt.-Genl. Sir Richard Strachey, R.E., G.C.S.I., LL.D., F.R.G.S., F.G.S., F.L.S., F.R.S. <i>London.</i>
1895 June 5.	Charles H. Tawney, Esq., M.A., C.I.E. <i>London.</i>
1896 Feb. 5.	Lord Lister, F.R.C.S., D.C.L., M.D., LL.D., D.SC., F.R.S. <i>London.</i>
1896 Feb. 5.	Sir Michael Foster, K.C.B., M.A., M.D., D.C.L., LL.D., D.SC., F.L.S., F.C.S., F.R.S. <i>Cambridge.</i>
1896 Feb. 5.	Professor F. Kielhorn, PH.D., C.I.E. <i>Göttingen.</i>
1896 Feb. 5.	Professor Charles Rockwell Lanmann. <i>Massachusetts, U.S.A.</i>
1899 Feb. 1.	Dr. Augustus Frederick Rudolf Hoernle, PH.D., C.I.E. <i>Oxford.</i>
1899 Dec. 6.	Professor Edwin Ray Lankester, M.A., LL.D., F.R.S. <i>London.</i>
1899 Dec. 6.	Sir George King, K.C.I.E., M.B., LL.D., F.L.S., F.R.S. <i>London.</i>
1899 Dec. 6.	Professor Edward Burnett Tylor, D.C.L., LL.D., F.R.S. <i>Oxford.</i>
1899 Dec. 6.	Professor Edward Suess, PH.D., For. Mem. R.S. <i>Vienna.</i>
1901 Mar. 6	Professor J. W. Judd, C.B., LL.D., F.R.S. <i>London.</i>

## CORRESPONDING MEMBER.

Date of Election.	
1866 May 7.	Schlagintweit, Dr. Emil. <i>Zweibrücken.</i>

## ASSOCIATE MEMBERS.

1874 April 1.	Lafont, The Revd. Father, E., C.I.E., S.J. <i>Calcutta.</i>
1875 Dec. 1.	Bate, The Revd. J. D., M.R.A.S. <i>Kent.</i>
1875 Dec. 1.	Abdul Hai, Maulvie. <i>Calcutta.</i>
1882 June 7.	Giles, Herbert. <i>Europe.</i>
1884 Aug. 6.	Moore, F., F.L.S. <i>Surrey.</i>
1885 Dec. 2.	Führer, Dr. A. <i>Europe.</i>
1886 Dec. 1.	Das, Rai Bahadur Sarat Chandra, C.I.E. <i>Calcutta.</i>
1892 April 6.	Samasrami, Satya Vrata. <i>Calcutta.</i>
1892 Dec. 7.	Brühl, P. J. <i>Sibpur.</i>
1899 April 5.	Sanyal, Rai Bahadur Ram Brahma. <i>Calcutta.</i>
1899 April 5.	Bhandari, Visnu Prasad Raj. <i>Nepal.</i>
1899 Nov. 1.	Francotte, The Revd. Father E., S.J. <i>Calcutta.</i>

## LIST OF MEMBERS WHO HAVE BEEN ABSENT FROM INDIA THREE YEARS AND UPWARDS.\*

\* *Rule 40.*—After the lapse of 3 years from the date of a member leaving India, if no intimation of his wishes shall in the interval have been received by the Society, his name shall be removed from the List of Members.

The following members will be removed from the next Member List of the Society, under the operation of the above Rule:—

Arthur William Davis, Esq., I.C.S.  
 J. W. Muir, Esq., M.A., I.C.S.  
 Frederick James Rowe, Esq., M.A.

### LOSS OF MEMBERS DURING 1901.

#### BY RETIREMENT.

Maulavie Abdul Aziz Khan, B.A.  
 Julian James Cotton, Esq., B.A., I.C.S.  
 William Dods, Esq.  
 Ernest Binfield Havell, Esq.  
 Sayid Mahomed Latif Khan Bahadur.  
 Vincent Arthur Smith, Esq., I.C.S.  
 Shams-ul-Ulama Muhammad Zaka-ullah.

#### BY DEATH.

Nawab Ashan-ullah Khan Bahadur.  
 The Most Revd. Paul Goethals, D.D., S.J.  
 Surgeon-General Robert Harvey, M.D., LL.D., F.R.C.P., C.B., D.S.O.  
 Dr. Albrecht von Krafft, PH.D.  
 Babu Shamlal Mullick.  
 Lionel deNiceville, Esq., F.R.S., C.M.Z.S.  
 G. F. Reader, Esq.

#### BY REMOVAL.

##### *Under Rule 9.*

Dr. Thomas H. Aquino.  
 O. V. Bosanquet, Esq., I.C.S.  
 Babu Rajchandra Chandra.  
 Maulavie Mahomed Abdullah, M.A.  
 C. A. Radice, Esq., I.C.S.  
 Kumar Birendra Chandra Singh.

##### *Under Rule 38.*

Pandit Behari Lal Chaube.  
 Dr. Sarat Chandra Laharry, PH.D.  
 Babu Bajeswar Mitra.  
 Thakur Garuradhawaya Prasad Singh.  
 Donald Sunder, Esq.  
 Pandit Mahendra Nath Vidyanidhi.

##### *Under Rule 40.*

Henry Kerchener Walter Arnold, Esq.  
 J. A. Cave-Brown, Esq., I.C.S.  
 Romesh Chunder Dutt, Esq., C.I.E., I.C.S. (retired.)  
 Frederick Alexander Shillingford, Esq.  
 Dr. W. J. Simpson.

[APPENDIX.]

ABSTRACT STATEMENTS  
OF  
RECEIPTS AND DISBURSEMENTS  
OF THE  
ASIATIC SOCIETY OF BENGAL  
FOR  
THE YEAR 1901.

1901.

# STATEMENT

## *Asiatic Society*

Dr.

TO ESTABLISHMENT.				Rs.	As.	P.	Rs.	As.	P.
Salaries	...	...	...	3,956	8	9			
Commission	...	...	...	424	3	2			
Pension	...	...	...	56	0	0			
							4,436	11	11
TO CONTINGENCIES.									
Stationery	...	...	...	117	1	0			
Lighting	...	...	...	42	8	0			
Taxes	...	...	...	884	4	0			
Postage	...	...	...	542	2	6			
Freight	...	...	...	73	8	5			
Meeting	...	...	...	85	9	0			
Auditor's fee	...	...	...	100	0	0			
Miscellaneous	...	...	...	307	7	0			
Registration fee	...	...	...	15	0	0			
							2,167	7	11
TO LIBRARY AND COLLECTIONS.									
Books	...	...	...	288	9	7			
Binding	...	...	...	688	13	0			
Catalogue	...	...	...	100	0	0			
							1,077	6	7
TO PUBLICATIONS.									
Journal, Part I	..	...	...	958	0	0			
Journal, Part II	...	...	...	896	10	0			
Journal, Part III	...	...	...	1,273	15	0			
Proceedings	...	...	...	480	8	0			
							3,609	1	0
To Printing charges of Circulars, Receipt-forms, &c.	...	...	...	...	207	1	0		
„ Personal Account (Writes-off and Miscellaneous)	...	...	...	...	423	2	0		
TO EXTRAORDINARY EXPENDITURE.									
Royal Society's Scientific Catalogue	...	...	...	450	9	9			
Furniture	...	...	...	112	10	0			
Repairs	...	...	...	5,060	1	3			
Insurance fee	...	...	...	312	8	0			
							5,925	13	0
Balance	...	...	...	1,61,059	0	3			
							1,78,905	11	8
Total Rs.				...			1,78,905	11	8

No. 1.

*of Bengal.*

1901.

## Cr.

			Rs.	As.	P.	Rs.	As.	P.
By Balance from last Report	...	...	...			1,59,276	6	0
<b>BY CASH RECEIPTS.</b>								
Publications sold for cash	...	...	325	10	9			
Interest on Investments	...	...	3,445	12	0			
Rent of Rooms on the Society's ground floor	...	...	1,200	0	0			
Allowance from Government of Bengal for the Publication of Anthropological and Cognate Sub- jects	...	...	2,000	0	0			
Ditto from Government of Assam	...	...	1,000	0	0			
Ditto from Government of India for Royal Society's Scientific Catalogue	...	...	1,000	0	0			
Miscellaneous	...	...	81	7	3			
						9,052	14	0
Max Müller Memorial Fund	...	...	...			140	0	0
<b>BY PERSONAL ACCOUNT.</b>								
Admission fees	...	...	1,344	0	0			
Subscriptions	...	...	8,353	0	0			
Sales on credit	...	...	461	0	0			
Miscellaneous	...	...	278	7	8			
						10,436	7	8

Total Rs.	...	<u>1,78,905</u>	<u>11</u>	<u>8</u>
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W. K. DODS,  
Honorary Secretary and Treasurer,  
Asiatic Society of Bengal.

Examined and found correct.  
MEUGENS, KING & SIMSON,  
Auditors.

**STATEMENT**  
*1901. Oriental Publication Fund in Account*

**Dr.**

TO CASH EXPENDITURE.

			Rs.	As.	P.	Rs.	As.	P.
Printing charges	...	...	5,926	14	0			
Editing charges	...	...	4,172	13	2			
Salaries	...	...	1,573	11	3			
Freight	...	...	59	12	0			
Stationery	...	...	95	5	0			
Postage	...	...	308	1	9			
Commission on collection	...	...	23	15	3			
Contingencies	...	...	173	2	6			
To Personal Account (Writes-off and Miscellaneous)			12,333	10	11			
Balance			20	13	0			
			8,940	5	2			
Total Rs.			21,294	13	1			

**STATEMENT**

*Sanskrit Manuscript Fund in Account*

**Dr.**

TO CASH EXPENDITURE.

			Rs.	As.	P.	Rs.	As.	P.
Salaries	...	...	1,004	0	0			
Travelling charges	...	...	325	9	6			
Printing	...	...	895	0	0			
Postage	...	...	38	9	6			
Stationery	...	...	2	8	0			
Furniture	...	...	353	8	0			
Contingencies	...	...	239	3	0			
To Personal Account (Writes-off and Miscellaneous)			2,858	6	0			
Balance			3	0	0			
			7,345	12	2			
Total Rs.			10,207	2	2			



## No. 2.

*with the Asiatic Society of Bengal.* 1901.

## Cr.

			Rs.	As.	P.	Rs.	As.	P.
<b>By Balance from last Report</b>	...	...	...			10,561	12	11
<b>BY CASH RECEIPTS.</b>								
<b>Government allowance</b>	...	...	9,000	0	0			
<b>Publications sold for cash</b>	...	...	607	11	5			
<b>Advances recovered</b>	...	...	61	13	3			
						9,669	8	8
<b>BY PERSONAL ACCOUNT.</b>								
<b>Sales on credit</b>	...	...	1,057	12	6			
<b>Miscellaneous</b>	...	...	5	11	0			
						1,063	7	6
<b>Total Rs.</b>								
						21,294 13 1		

W. K. DODS,  
*Honorary Secretary and Treasurer,*  
*Asiatic Society of Bengal.*

Examined and found correct.  
MEUGENS, KING & SIMSON,  
*Auditors.*

## No. 3.

*with the Asiatic Society of Bengal.*

## Cr.

			Rs.	As.	P.	Rs.	As.	P.
<b>By Balance from last Report</b>	...	...	...			6,952	2	2
<b>BY CASH RECEIPTS.</b>								
<b>Government allowance</b>	...	...	3,200	0	0			
<b>Publications sold for cash</b>	...	...	29	0	0			
						3,229	0	0
<b>BY PERSONAL ACCOUNT.</b>								
<b>Sales on credit</b>	...	...				26	0	0
<b>Total Rs.</b>								
						10,207 2 2		

W. K. DODS,  
*Honorary Secretary and Treasurer,*  
*Asiatic Society of Bengal.*

Examined and found correct.  
MEUGENS, KING & SIMSON,  
*Auditors.*

1901.

STATEMENT  
*Personal*

Dr.

			Rs.	As.	P.	Rs.	As.	P.
To Balance from last Report	...	...	...			2,239	12	9
To CASH EXPENDITURE.								
Advances for purchase of Sanskrit Manuscripts, &c.	...	...	...			948	12	11
To Asiatic Society	...	...	10,436	7	8			
„ Oriental Publication Fund	...	...	1,063	7	6			
„ Sanskrit Manuscript Fund	...	...	26	0	0			
						11,525	15	2

Total Rs. ... 14,714 8 10

STATEMENT  
*Invest*

Dr.

			Value.			Cost.		
			Rs.	As.	P.	Rs.	As.	P.
To Balance from last Report	...	...	1,65,300	0	0	1,65,730	8	4
„ Cash	...	...	5,000	0	0	4,809	5	6
Total Rs.	...	...	1,70,300			1,70,539 13 10		

FUNDS.*	PERMANENT.						TEMPORARY.						TOTAL COST.		
	Value.			Cost.			Value.			Cost.					
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Asiatic Society ...	1,45,900	0	0	1,45,487	10	0	23,100	0	0	23,776	7	1	1,69,244	1	1
Trust Fund ...	1,300	0	0	1,395	12	9	...	...	...	...	...	...	1,395	12	9
	1,47,200	0	0	1,46,783	6	9	23,100	0	0	23,776	7	1	1,70,539	13	10

No. 4.

Account.

1901.

Cr.

	Rs.	As.	P.	Rs.	As.	P.
By Cash Receipts ...	...	...	...	...	...	...
„ Asiatic Society ...	423	2	0	11,166	7	3
„ Oriental Publication Fund ...	20	13	0			
„ Sanskrit Manuscript Fund ...	3	0	0			
				<u>446</u>	<u>15</u>	<u>0</u>

By Balance.	Due to the Society.			Due by the Society.		
	Rs.	As.	P.	Rs.	As.	P.
Members ...	3,775	6	8	271	11	0
Employés ...	30	0	0	350	0	0
Miscellaneous	56	15	2	139	8	3
	<u>3,862</u>	<u>5</u>	<u>10</u>	<u>761</u>	<u>3</u>	<u>3</u>

... 3,101 2 7

Total Rs. ... 14,714 8 10

W. K. Dods,  
Honorary Secretary and Treasurer,  
Asiatic Society of Bengal.

Examined and found correct.  
MEUGENS, KING & SIMSON,  
Auditors.

No. 5.

ment.

Cr.

	Value.			Cost.		
	Rs.	As.	P.	Rs.	As.	P.
By Balance * ...	...	...	...	...	...	...
	1,70,300	0	0	1,70,539	13	10
Total Rs.	<u>1,70,300</u>	<u>0</u>	<u>0</u>	<u>1,70,539</u>	<u>13</u>	<u>10</u>

W. K. Dods,  
Honorary Secretary and Treasurer,  
Asiatic Society of Bengal.

Examined and found correct.  
MEUGENS, KING & SIMSON,  
Auditors.

STATEMENT  
*Trust*

1901.

Dr.						Rs. As. P.
To Pension ... ..	...	...	...	...	...	48 0 0
„ Balance ... ..	...	...	...	...	...	1,299 11 10
Total Rs.						1,347 11 10

STATEMENT  
*Cash*

Dr.						Rs. As. P.
To Balance from last Report ... ..	...	...	...	...	...	10,167 11 10
RECEIPTS.						
To Asiatic Society .. ..	...	...	...	...	...	9,192 14 0
„ Oriental Publication Fund ... ..	...	...	...	...	...	9,669 8 8
„ Sanskrit Manuscript Fund ... ..	...	...	...	...	...	3,229 0 0
„ Personal Account ... ..	...	...	...	...	...	11,166 7 3
Total Rs.						43,425 9 9

STATEMENT  
*Balance*

Dr.						Rs. As. P.
To Cash ... ..	...	...	...	...	...	5,003 13 0
„ Investments ... ..	...	...	...	...	...	1,70,539 13 10
„ Personal Account... ..	...	...	...	...	...	3,101 2 7
Total Rs.						1,78,644 13 5

No. 6.

*Fund.*

1901.

Cr.

				Rs. As. P.
By Balance from last Report	...	...	...	1,347 11 10
Total Rs.				1,347 11 10

W. K. Dods,  
Honorary Secretary and Treasurer,  
Asiatic Society of Bengal.

Examined and found correct.  
MEUGENS, KING & SIMSON,  
Auditors.

No. 7.

*Account.*

Cr.

				Rs. As. P.
<b>EXPENDITURE.</b>				
By Asiatic Society	...	...	...	17,423 9 5
„ Oriental Publication Fund	...	...	...	12,333 10 11
„ Sanskrit Manuscript Fund	...	...	...	2,858 6 0
„ Personal Account	...	...	...	948 12 11
„ Investments	...	...	...	4,809 5 9
„ Trust Fund	...	...	...	48 0 0
Balance				5,008 13 0
Total Rs.				43,425 9 9

W. K. Dods,  
Honorary Secretary and Treasurer,  
Asiatic Society of Bengal.

Examined and found correct.  
MEUGENS, KING & SIMSON,  
Auditors.

No. 8.

*Sheet.*

Cr.

				Rs. As. P.
By Asiatic Society	...	...	...	1,61,059 0 8
„ Oriental Publication Fund	...	...	...	8,940 5 2
„ Sanskrit Manuscript Fund	...	...	...	7,345 12 2
„ Trust Fund	...	...	...	1,299 11 10
Total Rs.				1,78,644 13 5

W. K. Dods,  
Honorary Secretary and Treasurer,  
Asiatic Society of Bengal.

Examined and found correct.  
MEUGENS, KING & SIMSON,  
Auditors.

*List of all Societies, Institutions, &c., to which the Publications of the Asiatic Society have been sent during the year, or from which publications have been received.*

\* Societies, &c., which have received the Asiatic Society's publications, and have sent their publications in return.

† Societies, &c., which have received the Asiatic Society's publications, but have sent none in return.

§ Societies, &c., whose publications have been received, but to which none have been sent in return.

\* Aberdeen :—University of Aberdeen.

\* Adelaide :—Royal Geographical Society of Australasia.

\* Allahabad :—Editor, *Pioneer*.

† Amsterdam :—Royal Zoological Society.

\* ——— :—Koninklijke Akademie van Wetenschappen.

\* Angers :—Société d' Etudes Scientifiques d' Angers.

\* Baltimore :—Johns Hopkins University.

\* Batavia :—Society of Arts and Sciences.

\* ——— :—Kon. Natuurkundige Vereeniging in Nederlandsch-Indië.

§ Bellary :—Editor, *Astrological Magazine*.

\* Benares :—Nagari Pracharini Sabha.

\* Berlin :—Entomologischer Verein.

\* ——— :—Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte.

† ——— :—Gesellschaft Naturforschender Freunde zu Berlin.

\* ——— :—Royal Academy of Sciences.

\* ——— :—Seminar für Orientalische Sprachen.

§ ——— :—Laboratorium & Museum.

† Berne :—Société Suisse d' Entomologie.

§ Birmingham :—Natural History and Philosophical Society.

\* Bombay :—Bombay Anthropological Society.

\* ——— :—Bombay Branch, Royal Asiatic Society.

\* ——— :—Editor, *Indian Antiquary*.

\* ——— :—Natural History Society.

§ ——— :—Government Observatory.

§ ——— :—Marine Survey of India.

† Bonn :—University of Bonn.

\* Bordeaux :—Académie Nationale des Sciences, Belles-Lettres et Arts.

\* ——— :—Société Linnéenne.

\* Boston :—Natural History Society.

§ ——— :—American Oriental Society.

\* Brisbane :—Royal Society of Queensland.

- § Brisbane :—Queensland Museum.  
 § ——— :—Department of Agriculture.  
 † Brookville :—Society of Natural History.  
 \* Brunswick :—Verein für Naturwissenschaft.  
 \* Brussels :—Académie Royale des Sciences.  
 † ——— :—Musée Royal d' Histoire Naturelle de Belgique.  
 \* ——— :—Société Entomologique de Belgique.  
 \* ——— :—Société Royale Malacologique de Belgique.  
 \* ——— :—Société Royale des Sciences de Liège.  
 § ——— :—Musée du Congo.  
 † Budapest :—Hungarian Central Bureau for Ornithological Observations.  
 \* ——— :—Royal Hungarian Academy of Sciences.  
 § ——— :—Société Hongroise de Géographie.  
 § ——— :—Editor, *Aquila*.  
 \* Buenos Ayres :—National Museum.  
 † ——— :—Academia Nacional de Ciencias de la Republica Argentina.  
 \* Caen :—Société Linnéenne de Normandie.  
 \* Calcutta :—Agri-Horticultural Society of India.  
 \* ——— :—Geological Survey of India.  
 \* ——— :—Editor, *Englishman*.  
 § ——— :—Editor, *Indian and Eastern Engineer*.  
 \* ——— :—Editor, *Indian Daily News*.  
 § ——— :—Editor, *Indian Engineering*.  
 \* ——— :—Editor, *Indian Mirror*.  
 § ——— :—Editor, *Indian Lancet*.  
 \* ——— :—Indian Meteorological Department.  
 \* ——— :—Indian Museum.  
 § ——— :—Institution of Electrical Engineers.  
 § ——— :—Maha-bodhi Society.  
 § ——— :—Photographic Society of India.  
 \* ——— :—Royal Botanic Gardens.  
 \* ——— :—Survey of India.  
 \* ——— :—Tuttobodhini Shova.  
 \* ——— :—Sanskrit College.  
 § ——— :—Imperial Library.  
 § ——— :—Botanical Survey of India.  
 † ——— :—University Library.  
 § ——— :—Editor, *Indian Gardening and Planting*.  
 † ——— :—Mahomedan Literary Society.  
 \* Cambridge :—University Library.  
 \* Cape Town :—South African Museum.

- \* Cape Town :—South African Philosophical Society.
- † Cassel :—Verein für Naturkunde.
- † Cherbourg :—Société Nationale des Sciences Naturelles.
- \* Chicago, Ill. :—Field Columbian Museum.
- \* Christiana :—University Library.
- † Clinton, Wiss. :—Editor, *American Antiquarian and Oriental Journal*.
- \* Colombo :—Ceylon Branch, Royal Asiatic Society.
- \* Copenhagen :—Société Royale des Antiquaries du Nord.
- † Cuttack :—Cuttack Library.
- \* Danzig :—Naturforschende Gesellschaft.
- \* Dehra Dun :—Great Trigonometrical Survey.
- \* Dresden :—Entomologischer Verein "Iris."
- \* ——— :—Königlich Zoologisches und Anthropologisch-Ethnographisches Museum.
- † Dublin :—Royal Dublin Society.
- \* ——— :—Royal Irish Academy.
- † Edinburgh :—Royal Society.
- § ——— :—Royal Physical Society.
- † ——— :—Scottish Geographical Society.
- \* Florence :—Società Italiana d' Antropologia e Etnologia.
- † ——— :—Società Africana d'Italia.
- \* Frankfurt :—Senckenbergische Naturforschende Gesellschaft.
- \* ——— :—Naturwissenschaftlicher Verein des Reg.-Bez. Frankfurt.
- \* Geneva :—Société de Physique et d' Histoire Naturelle.
- \* Genoa :—Museo Civico di Storia Naturale.
- † Giessen :—Oberhessische Gesellschaft für Natur und Heilkunde.
- \* Graz :—Naturwissenschaftlicher Verein für Styria.
- § Greenwich :—Royal Observatory.
- \* The Hague :—Köninklijk Instituut voor de Taal- Land- en Volkenkunde van Nederlandsch-Indië.
- \* ——— :—Netherlands Entomological Society.
- \* ——— :—The State Archives.
- § Halifax :—Nova Scotian Institute of Science.
- \* ——— :—Kaiserliche Leopoldinisch-Carlinische Akademie.
- † Hamburg :—Naturhistorisches Museum.
- † ——— :—Naturwissenschaftlicher Verein.
- \* Hamilton (Canada) :—Hamilton Association.
- \* Havre :—Société de Géographie Commerciale du Havre.
- \* Helsingfors :—Societas pro Flora et Fauna Fennica.
- \* ——— :—Société Finno-Ougrienne.
- \* ——— :—Société des Sciences de Finlande.



- \* Honolulu :—Bernice Pauahi Bishop Museum.
- § Indianapolis, Ind. :—Academy of Sciences.
- § ————— :—Geological Survey.
- § Ithaca :—Cornell University.
- † Kiew :—Société des Naturalistes.
- \* Königsberg :—Physikalische-Oekonomische Gesellschaft.
- † La Plata :—Museo de La Plata.
- \* Lahore :—Editor, *Civil and Military Gazette*.
- † ——— :—Agricultural Society.
- \* Lawrence, Kansas :—Kansas University.
- \* Leipzig :—Deutsche Morgenländische Gesellschaft.
- § ——— :—K. Sächsische Gesellschaft der Wissenschaften.
- † Leyden :—Royal Herbarium.
- \* Liège :—Société Géologique de Belgique.
- \* Liverpool :—Literary and Philosophical Society.
- † ——— :—University College.
- \* London :—Anthropological Institute.
- \* ——— :—Editor, *Academy*.
- \* ——— :—Editor, *Athenæum*.
- \* ——— :—British Museum.
- \* ——— :—Geological Society.
- § ——— :—India Office.
- \* ——— :—Institution of Civil Engineers.
- \* ——— :—Institution of Electrical Engineers.
- \* ——— :—Institution of Mechanical Engineers.
- \* ——— :—Editor, *Nature*.
- \* ——— :—Linnean Society.
- \* ——— :—Royal Asiatic Society of Great Britain and Ireland.
- \* ——— :—Royal Astronomical Society.
- \* ——— :—Royal Geographical Society.
- \* ——— :—Royal Institution of Great Britain.
- \* ——— :—Royal Microscopical Society.
- \* ——— :—Royal Society.
- \* ——— :—Royal Statistical Society.
- \* ——— :—Zoological Society.
- § ——— :—British Association.
- § Lucknow :—Government Horticultural Gardens.
- § ——— :—Provincial Museum.
- † Lyons :—Société d' Agriculture, d' Histoire Naturelle et des Arts Utiles.
- † ——— :—Muséum d' Histoire Naturelle.

- † Lyons :—Société d' Anthropologie.
- \* Madison, Wis. :—Wisconsin Academy of Sciences; Arts and Letters.
- § Madras :—Agri-Horticultural Society.
- § ——— :—British Medical Association.
- † ——— :—Literary Society.
- \* ——— :—Government Central Museum.
- § ——— :—Editor, *Indian Journal of Education*.
- § ——— :—Government Observatory.
- \* Manchester :—Literary and Philosophical Society.
- † Massachusetts :—Tufts College.
- § Mauritius :—Royal Alfred Observatory.
- § Melbourne :—Australasian Association.
- \* ——— :—Royal Society of Victoria.
- \* Mexico —Sociedad Científica “ Antonio Alzate.”
- § ——— :—Instituto Geológico.
- § Montevideo :—Museo Nacional de Montevideo.
- \* Moscow :—Société Impériale des Naturalistes.
- \* Munich :—K. Bayerische Akademie der Wissenschaften.
- § ——— :—Ornithologischer Verein.
- § Mysore :—Geological Department.
- § ——— :—Meteorological Department.
- § Nagpur :—Experimental Farm.
- \* Nantes :—Société des Sciences Naturelles de l' Ouest de la France.
- † Naples :—Società Africana d' Italia.
- \* New Haven :—Connecticut Academy of Arts and Sciences.
- § ——— :—Yale University.
- \* Newport (R. I.) :—Natural History Society.
- \* New York :—American Museum of Natural History.
- \* Nürnberg :—Naturhistorische Gesellschaft.
- \* Ottawa :—Geological and Natural History Survey of the Dominion of  
Canada.
- § ——— :—Literary and Scientific Society.
- § ——— :—Royal Society of Canada.
- † Oxford :—Bodleian Library.
- † ——— :—Indian Institute.
- § ——— :—Oxford University Museum.
- \* Paris :—Société de Géographie.
- \* ——— :—Société d' Anthropologie.
- \* ——— :—Société Asiatique.
- § ——— :—Société Philomathique de Paris.
- \* ——— :—Musée Guimet.
- † ——— :—National Library.

- \* Paris:—Société Zoologique.
- † ———:—Société Académique Indo-Chinoise.
- \* ———:—Muséum d' Histoire Naturelle.
- \* Pennsylvania:—University of Pennsylvania.
- \* Philadelphia:—Academy of Natural Sciences.
- § ———:—American Academy of Political and Social Science.
- \* ———:—American Philosophical Society.
- § ———:—Franklin Institute.
- † ———:—Editor, *Journal of Comparative Medicine and Surgery*.
- \* Pisa:—Società Toscana di Scienze Naturali.
- § Prague:—K. K. Sternwarte.
- § Rio de Janeiro:—Observatorio do Rio de Janeiro.
- § Rome:—Società degli Spettroscopisti Italiani.
- \* ———:—Società Romana di Antropologia.
- § ———:—R. Accademia dei Lincei.
- § Roorkee:—Editor, *Indian Forester*.
- \* Saigon:—École Française d' Extrême Orient.
- § St. Louis:—Academy of Sciences.
- \* St. Petersburg:—Comité Géologique.
- † ———:—Imperial Library.
- \* ———:—Russian Geographical Society.
- \* ———:—Académie Impériale des Sciences.
- \* ———:—Hortus Petropolitanus.
- § ———:—Russisch-Kaiserliche Mineralogische Gesellschaft.
- § Saharanpur:—Government Botanical Gardens.
- \* San Francisco:—Californian Academy of Arts and Sciences.
- \* Seoul:—Korea Branch, Royal Asiatic Society.
- \* Shanghai:—China Branch, Royal Asiatic Society.
- \* Simla:—United Service Institution of India.
- § Singapore:—Straits Branch, Royal Asiatic Society.
- \* Springfield, Ill.:—Illinois State Laboratory of Natural History.
- § ———:—Newberry Library.
- \* Stettin:—Entomological Society.
- \* Stockholm:—Entomologiske Tidsskrift.
- \* ———:—Royal Swedish Academy of Sciences.
- \* ———:—Royal Academy of Belles Lettres, History and Antiquities.
- \* Stuttgart:—Verein für vaterländische Naturkunde in Württemberg.
- \* Sydney:—Royal Society of New South Wales.
- † ———:—Anthropological Society of Australia.

- \* Sydney :—Linnean Society of New South Wales.
- § ——— :—Editor, *Science of Man*.
- § Taiping :—Government of Perak.
- \* Toronto :—Canadian Institute.
- \* Tokyo :—Imperial University of Japan.
- † Trieste :—Società Adriatica di Scienze Naturali.
- † ——— :—Museo Civico di Storia Naturale.
- \* Tring :—Zoological Museum.
- \* Turin :—Reale Accademia delle Scienze.
- † Ulwar :—Ulwar Library.
- \* Upsala :—University of Upsala.
- \* Valparaiso :—Deutscher Wissenschaftlicher Verein.
- † ——— :—Museo de Historia Natural de Valparaiso.
- \* Vienna :—Anthropologische Gesellschaft.
- \* ——— :—K. K. Akademie der Wissenschaften.
- \* ——— :—K. K. Geologische Reichsanstalt.
- \* ——— :—K. K. Naturhistorisches Hofmuseum.
- † ——— :—Ornithologischer Verein in Wien.
- \* ——— :—K. K. Zoologisch-Botanische Gesellschaft.
- § Washington :—Biological Society of Washington.
- † ——— :—Bureau of Statistics.
- \* ——— :—Commissioners of the Department of Agriculture.
- \* ——— :—Smithsonian Institution.
- § ——— :—United States Department of Labor.
- \* ——— :—United States Geological Survey.
- § ——— :—United States National Museum.
- § ——— :—Academy of Sciences.
- \* Wellington :—New Zealand Institute.
- \* ——— :—Polynesian Society.
- \* Yokohama :—Asiatic Society.
- \* ——— :—Deutsche Gesellschaft für Natur- und Völkerkunde Ostasiens.
- \* Zagreb :—Archæological Society.
- † Zurich :—Naturforschende Gesellschaft.

PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.

EDITED BY

THE HONORARY SECRETARY.



JANUARY TO DECEMBER,  
1903.



CALCUTTA:

PRINTED AT THE BAPTIST MISSION PRESS  
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1904.

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**PROCEEDINGS**  
OF THE  
**ASIATIC SOCIETY OF BENGAL.**  
FOR JANUARY & FEBRUARY, 1903.

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The Annual Meeting of the Society was held on Wednesday, the 4th February, 1903, at 9 P.M.

THE HON. MR. C. W. BOLTON, C.S.I., I.C.S., President, in the chair.

The following members were present:—

Mr. J. Bathgate, The Hon. Mr. J. A. Bourdillon, C.S.I., Mr. P. J. Brühl, Mr. I. H. Burkill, Mr. J. N. Das Gupta, Mr. F. Doxey, Mr. E. A. Gait, Lt.-Col. G. W. A. Harris, I.M.S., Mr. H. H. Hayden, Mr. D. Hooper, Dr. Wm. Roy Macdonald, Dr. H. H. Mann, Mr. W. H. Miles, Mr. L. Morshead, The Hon. Dr. Asutosh Mukhopadhyaya, Mr. B. D. Oldham, Mr. H. W. Peal, Captain L. Rogers, I.M.S., Dr. E. D. Ross, Rai Ram Brahma Sanyal Bahadur, Pandit Jogesh Chandra Shastree, Dr. C. Schulten, Mahamahopadhyaya Haraprasad Shastri, Pandit Satis Chandra Vidyabhushan, Mr. C. B. Wilson.

*Visitors*:—Mr. M. Churchill-Shaun, Mr. E. C. Cotes, Mr. B. A. Gupta, Mr. F. J. Norman, Rai Sahib Jaimat Rai, Mr. Tokiwo Yokoi.

According to the Rules of the Society, the President ordered the voting papers to be distributed for the election of officers and members of Council for 1903, and appointed Mr. D. Hooper and Dr. H. H. Mann to be Scrutineers.

The President then called upon the Secretary to read the Annual Report.

## ANNUAL REPORT FOR 1902.

The Council of the Society have the honour to submit the following Report on the state of the Society's affairs during the year ending 31st December, 1902.

### Member List.

There is a steady increase in the list of Ordinary Members.

During the year under review 32 Ordinary Members have been elected and we have lost 26, namely, 14 by withdrawal, 8 by death, 1 by removal under Rule 9, and 3 by removal under Rule 40. The total number of members at the close of 1902 was 334, against 328 for the preceding year: of these 126 were Residents, 126 Non-Residents, 14 Foreign Members, 21 Life Members, 46 Absent from India, and one a Special Non-Subscribing Member, as will be seen from the following table, which also shows the fluctuations in the numbers of Ordinary Members during the past six years:—

YEAR.	PAYING.				NON-PAYING.				GRAND TOTAL.
	Resident.	Non-Resident.	Foreign.	Total.	Life.	Absent.	Special Non-Subscribing.	Total.	
1897 ... ..	106	115	9	230	22	35	1	58	238
1898 ... ..	122	108	11	241	23	35	1	59	300
1899 ... ..	120	119	13	252	21	27	1	49	301
1900 ... ..	116	124	18	258	22	60	1	53	311
1901 ... ..	123	133	13	269	22	36	1	59	328
1902 ... ..	126	126	14	266	21	46	1	68	334

We have to deplore the death of the following Ordinary Members: Mr. John Cockburn, The Hon'ble Sir Griffith Evans, K.C.I.E., General J. E. Gastrell (Life Member), Captain A. F. McArdle, I.M.S., Babu Karttik Chandra Mitra, Mr. E. E. Oliver, M.I.C.E., Mr. V. R. Painsay, and The Hon'ble Sir John Woodburn, K.C.S.I.

There was one death amongst the Honorary Members, *viz.*, Dr. Albrecht Weber. During the year, on the recommendation of the Council, Monsieur R. Zeiller was elected as an Honorary Member in the

place of Dr. Weber. Thus the number of Honorary Members stands at 26.

One Associate Member has been elected during the year, namely, the Revd. A. H. Francke. The number stands at 13.

The lists of Special Honorary Centenary Members and Corresponding Members continue unaltered from last year, the numbers standing at 4 and 1 respectively.

No members compounded for their subscription during the year.

#### **Indian Museum.**

There was only one change amongst the Trustees, caused by the resignation of Mr. W. K. Dods, and the Hon'ble Mr. J. A. Bourdillon, C.S.I., has been appointed to fill the vacant place. The other Trustees who represent the Society are Mr. A. Pedler, F.R.S., Dr. Mahendralal Sircar, C.I.E., Mr. G. W. Kuchler, M.A., and Mr. T. H. Holland, F.G.S.

#### **Finance.**

The Appendix contains the usual Classified Statements showing the accounts of the Asiatic Society.

Under Statement No. 1 will be found the account of receipts and disbursements of the Asiatic Society during the year 1902.

Statement, Nos. 2 and 3 show how the money administered through the Society in the Oriental Publication and Sanskrit Manuscript Funds has been spent during the past year. A fixed allowance of Rs. 750 per month is given by the Government of India to the Oriental Publication Fund and a yearly sum of Rs. 3,200 is paid by the same authority to the credit of the Sanskrit Manuscript Fund.

Statement No. 4 gives an account of monies due by and to the members of this Society.

In Statement No. 5 an account is given of the sums invested in Government Securities and held in deposit by the Bank of Bengal.

Statement No. 6 shows the sum invested in Government Security known as the Trust Fund, the interest of which is applied to the payment of pensions to old servants of the Society.

The cash receipts and expenditure of the Society as well as those of the different funds are summed up in Statement No. 7.

Statement No. 8 exhibits the balance sheet of the different Statements.

The Budget Estimate for 1902 was taken at the following figures : Receipts Rs. 18,375, Expenditure Rs. 18,011-4-0 (Ordinary Rs. 16,911-4-0, Extraordinary Rs. 1,100-0-0).

Taking into account only the ordinary items of receipts and expen-

diture for the year 1902, the actual results have been: Receipts Rs. 27,727-6-0, Expenditure Rs. 13,529-4-0.

The Receipts thus show an increase of Rs. 8,352-6-0, while the Expenditure shows a saving of Rs. 3,382 on the Budget Estimate, leaving a balance in favour of the Society, on its ordinary working, of Rs. 14,198-2-0. In addition to this, a sum of Rs. 1,000 has been added to the Reserve Fund on account of entrance fees paid during the year.

There is an increase in Receipts under the heads of "Subscriptions," "Interest on Investments," "Government Allowances," and "Miscellaneous." Subscriptions were estimated at Rs. 7,500, while the actuals were Rs. 7,689-5-0, the excess being due to some of the arrear subscriptions from members having been realized. During the year Temporary Investments were made and there is thus an increase of Rs. 345-8-0 under the head of "Interest on Investments." Owing to a grant of Rs. 8,750 from the Government of the Straits Settlements for the purpose of defraying the cost of publication of Sir George King's Materials for a Flora of the Malayan Peninsula "Government Allowances" show an increase. There is an increase of Rs. 205-1-0 under the head "Miscellaneous." This is due to an advance recovered from the Baptist Mission Press.

The falling-off in the Receipts under the head "Sale of Publications" is due to Messrs. Luzac and Co. not having submitted their Statement of Sales during 1902.

Our expenses have been well within the sanctioned Budget Estimate except in respect of "Contingencies" and "Books." Owing to the payment of Rs. 96 to Messrs. Mackintosh, Burn and Co. for their report on the valuation of the Society's house and site and Rs. 106-10-0 spent in repairing bookcases, there is an increase of Rs. 174-14-8 under the head "Contingencies." "Books" were estimated at Rs. 2,000, whilst the expenditure has been Rs. 2,755-8-8. This is due to the adjustment of Messrs. Luzac and Co.'s account to end of March 1902. There is a very slight increase under the head "Freight."

Owing to the death of our late Collecting Sircar, there is an expenditure of Rs. 4 only under the head "Pension." During the year no payments have been made to the Oriental Gas Co. for lighting. Certain bills were returned to them, as the amounts seemed to be unusually high. The bills have not been re-submitted for payment.

There were three Extraordinary items of expenditure during 1902 under the heads of "Royal Society's Catalogue," "Max Müller Memorial Fund," and "Furniture" not provided for in the Budget. The expenditure on the Royal Society's Catalogue has been Rs. 1,037-10-0, while the receipts under this head received as subscriptions on account of the Central Bureau has been Rs. 510. Rupees 38-6-0 has been spent on account

of the Max Müller Memorial Fund, and a sum of Rs. 60 has been paid to Messrs. Johnston and Hoffmann for preparing an enlarged photograph of the late Mr. E. Blyth for the Society.

There has been an expenditure of Rs. 1,150 under the head "Library Catalogue." Out of Rs. 1,100 budgetted for the Society's Library Catalogue, Rs. 800 has been paid to Mr. H. B. Perie in full settlement of the compiler's remuneration, the remainder has been paid to the assistant who is revising the Catalogue.

The Budget Estimate of probable Ordinary Receipts and Expenditure for 1903 has been fixed as follows: Receipts Rs. 18,500, Expenditure Rs. 16,949-4-0.

On the Receipts side the estimated income under the head "Interest on Investments" has been increased by Rs. 100 on account of the interest on Temporary Investments. "Rent of Rooms" shows an increase. This is due to the Photographic Society of India being charged an increased rent of Rs. 25 per month.

"Sale of Publications" has been reduced by Rs. 100, taking into account the sale of last year.

On the Expenditure side, the changes in last year's estimate are small. "Lighting" has been increased by Rs. 40 to meet gas bills unpaid last year. During last year the servants of the Society have been supplied with cold weather uniforms and to meet this bill an extra sum of Rs. 100 has been budgetted for under the head "Contingencies."

The item of "Postage" has been reduced by Rs. 50, as the expenditure of last year has been smaller than usual.

There will, however, be three Extraordinary items of expenditure to be dealt with during the year 1903. Rupees 1,000 has been budgetted for under the head "Library Catalogue." This includes the pay of the assistant who is revising the Library Catalogue and other expenses that may be incurred in connection therewith. It is contemplated to fit the Society's rooms with electric lights and fans at an approximate cost of Rs. 2,500. As the Council propose to purchase a considerable number of new books for the Society's library, a sum of Rs. 2,000 has been allotted for the purpose in addition to Rs. 2,000 budgetted for under the head "Books." During the past two years comparatively few new books have been purchased for the Library.

## BUDGET ESTIMATE FOR 1903.

## Receipts.

	1902.			1902.			1903.		
	Estimate.			Actuals.			Estimate.		
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Subscriptions ...	7,500	0	0	7,689	5	0	7,500	0	0
Sale of Publications ...	700	0	0	562	8	0	600	0	0
Interest on Investments ...	5,700	0	0	6,045	8	0	5,800	0	0
Rent of Rooms ...	1,375	0	0	1,375	0	0	1,500	0	0
Government Allowances ...	3,000	0	0	11,750	0	0	3,000	0	0
Miscellaneous ...	100	0	0	305	1	0	100	0	0
<b>Total ...</b>	<b>18,375</b>	<b>0</b>	<b>0</b>	<b>27,727</b>	<b>6</b>	<b>0</b>	<b>18,500</b>	<b>0</b>	<b>0</b>

## Expenditure.

	1902.			1902.			1903.		
	Estimate.			Actuals.			Estimate.		
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Salaries ...	3,800	0	0	3,711	6	3	3,800	0	0
Commission ...	425	0	0	420	5	5	425	0	0
Pension ...	52	0	0	4	0	0	.....		
Stationery ...	120	0	0	119	1	0	120	0	0
Lighting ...	60	0	0	.....			100	0	0
Municipal Taxes ...	884	4	0	884	4	0	884	4	0
Postage ...	550	0	0	450	11	3	500	0	0
Freight ...	60	0	0	60	6	8	60	0	0
Meetings ...	80	0	0	75	0	0	80	0	0
Contingencies ...	300	0	0	474	14	8	400	0	0
Books ...	2,000	0	0	2,755	8	8	2,000	0	0
Binding ...	750	0	0	608	12	0	750	0	0
Journal, Part I ...	2,100	0	0	1,023	5	6	2,100	0	0
"    "    II ...	2,100	0	0	964	1	3	2,100	0	0
"    "    III ...	2,000	0	0	514	13	1	2,000	0	0
Proceedings ...	600	0	0	492	4	6	600	0	0
Printing circulars, &c.	200	0	0	172	5	6	200	0	0
Registration Fee ...	5	0	0	5	0	0	5	0	0
Auditors' Fee ...	100	0	0	100	0	0	100	0	0
Petty Repairs ...	100	0	0	68	0	3	100	0	0
Insurance ...	625	0	0	625	0	0	625	0	0
<b>Total ...</b>	<b>16,911</b>	<b>4</b>	<b>0</b>	<b>13,529</b>	<b>4</b>	<b>0</b>	<b>16,949</b>	<b>4</b>	<b>0</b>

**Extraordinary Expenditure.**

	1902.		1902.		1903.	
	Estimate.		Actuals.		Estimate.	
	Rs.	As. P.	Rs.	As. P.	Rs.	As. P.
Library Catalogue ...	1,100	0 0	1,150	0 0	1,000	0 0
Royal Society's Catalogue	.....		1,037	10 0	.....	
Max Müller Memorial Fund	.....		38	6 0	.....	
Furniture ...	.....		60		.....	
Electric Lights and Fans	.....		.....		2,500	0 0
Books ...	.....		.....		2,000	0 0
<b>Total ...</b>	.....		.....		<b>5,500</b>	<b>0 0</b>

**Agencies.**

Our London Agency is still in the hands of Messrs. Luzac and Co. They have submitted Statement of sales during 1901 and Statement of goods supplied to end of March 1902. £76-8-10, due to them up to the end of March 1902, has been remitted. The value of the publications sent to them during the year amounts to £83-6-6, representing 667 pieces of the *Journal and Proceedings* and Rs. 481, representing 1,005 components of the *Bibliotheca Indica*. From them we have received books and papers of the value of £18-6-9.

Our Continental Agent is Mr. Otto Harrassowitz, to whom we have sent publications valued at £26-8-0 and Rs. 601-12-0, of which £4-6-5 and Rs. 196-7-0 worth have been sold for us. The balance of £54-17-2, due to him to end of June 1902, has been remitted.

**Library.**

The total number of volumes or parts of volumes added to the Library during the year was 2,955, of which 897 were purchased and 2,058 presented or received in exchange for the Society's publications.

As recommended by Council certain periodicals purchased for the Society's Library were discontinued.

On the recommendation of the Library Catalogue Sub-Committee, the new edition of the Society's Library Catalogue, compiled by Mr. H. B. Perie, is being remodelled under the supervision of the General Secretary and it is hoped that the manuscript will be sent to press early this year.

**International Catalogue of Scientific Literature.**

During the year 1902, the work of the Catalogue, the preparation of the Index-slips or cards as required by the International Catalogue Committee has been steadily increasing. Nineteen batches, making a total of 905 slips, were sent to the Director of the Catalogue.

The first copies of the Catalogue, the parts for Chemistry and

Botany, were received during the latter end of September. Of these 73 copies were distributed to subscribers and 6 copies were presented at the request of the Director to the Editors of Indian Journals for review.

Subscriptions have been received and sent to the Director from the Government of Burma and the Kashmir Museum.

The Government of United Provinces of Agra and Oudh have advised the remittance of their subscription, and the Political Agent, Central India, of a part of his subscription direct to London.

#### **Max Müller Memorial Fund.**

The list for subscriptions to the Max Müller Memorial Fund is still open. Rupees 716 has been received, which amount, after deducting sundry expenses, will be remitted.

#### **Proposed Re-organization of the Society.**

In last year's report it was stated that the final consideration of the proposed alterations in the status of the Society was postponed, pending a further report from the Committee. A Meeting was called of the remaining Members of the Committee appointed to consider the proposed re-organization of the Society, but there was no quorum. The Council resolved that the question of re-organizing the Society and extending its operations should stand over until the finances of the Society had been placed on a more settled basis.

#### **Proposed sale of the Society's premises.**

In order to ascertain what sum is likely to be received by the sale of the Society's house and site the Council obtained a report from Messrs. Mackintosh, Burn and Co. on the valuation of the Society's house and site. The report was circulated to the Members of the Sub-Committee and a plan had been lithographed of the premises. The plan with a covering circular was sent to several House Agents, but no reply has been received. The Council have now resolved to abandon the proposal, and it has been decided to fit the Society's rooms with electric lights and fans.

#### **Exchange of Publications.**

During the past year the Council accepted four applications for exchange of publications with other Societies, *viz.*: (1) from the Royal Botanic Gardens, Peradeniya, the Society's *Journal*, Part II, for their *Annals*; (2) from the Government of Mysore, Geological Department, the Society's *Journal*, Parts I-III, being exchanged for their publications; (3) from the New York Botanical Garden, the Society's *Journal*, Part II, for their *Bulletin*; (4) from the Académie Malgache de Tana-



narive, the Society's *Journal*, Parts I-III, and *Proceedings* being exchanged for their publications.

#### Secretaries and Treasurer.

Dr. T. Bloch carried on the duties of Philological Secretary and Editor of the *Journal*, Part I, till June when he was absent on leave and Dr. E. D. Ross took charge of the office.

Mr. F. Finn continued Natural History Secretary and Editor of the *Journal*, Part II, till November when he left India on furlough and Captain L. Rogers, I.M.S., kindly agreed to carry on the work.

Mr. E. A. Gait carried on the duties of the Anthropological Secretary and Editor of the *Journal*, Part III, throughout the year.

Mr. J. Macfarlane carried on the duties of General Secretary and Editor of the *Proceedings* throughout the year.

Mr. W. K. Dods resigned the office of Treasurer in March and Captain A. F. McArdle, I.M.S., was appointed. Captain McArdle continued till his death in October when Mr. C. R. Wilson kindly consented to undertake the work.

Mahamahopadhyaya Haraprasad Shastri was in charge of the *Bibliotheca Indica* and the search for Sanskrit manuscripts and carried on the duties of Joint Philological Secretary throughout the year.

Mr. J. H. Elliott continued Assistant Secretary and Librarian throughout the year.

#### Publications.

There were published during the year ten numbers of the *Proceedings* (Nos. 10 and 11 of 1901 and Nos. 1-9 of 1902), containing 92 pages of letter-press. Owing to the increase in the number of members the printing of the Society's *Proceedings* was increased to 650 copies for February and 600 copies for other months instead of 575 copies as usual.

Of the *Journal*, Part I, three numbers were published (Extra No. 1 of 1901, and No. 1 and Extra No. 1 of 1902) containing 375 pages of letter-press and 19 plates. The Extra No. 1 of 1901 consists of Dr. A. F. R. Hoernle's report on A Collection of Antiquities from Central Asia, Part II, with 13 facsimile plates issued under separate cover, all of which were paid by the Government of India. The Extra No. 1 of 1902 is Colonel J. Davidson's notes on the Bashgali (Kāfir) language and it was printed at the office of the Superintendent of Government Printing, India, free of charge.

Of the *Journal*, Part II, four numbers were published (No. 2 of 1901 and Nos. 1-3 of 1902), containing 208 pages of letter-press and 9 plates. A contribution of Rs. 8,750 was received from the Government of the Straits Settlements for the purpose of defraying the cost of publication

of Sir George King's Materials for a Flora of the Malayan Peninsula. In thanking the Colonial Government, the Council forwarded 30 copies of the Society's *Journal* from 1889-1901 containing the earlier numbers of the Flora and promised the same number of the future issues. The Council further proposed to add to the title-page of the later issues of the *Journal* the following words "Published with the assistance of His Excellency the Governor of the Straits Settlements."

Of the *Journal*, Part III, three numbers were published (No. 2 of 1901 and Nos. 1-2 of 1902) containing 137 pages of letter-press and 7 plates. In connection with the proposed discontinuance of the grant of Rs. 1,000 per year for *Journal*, Part III, from the Assam Administration, the Secretary to the Chief Commissioner of Assam was furnished with a report showing the work done and the necessity for the continuance of the grant subject to a further consideration of the question five years hence. On a note by Mr. E. A. Gait, the Anthropological Secretary, relative to contributions to Part III, of the Society's *Journal*, the Council agreed to have short notes on Anthropological subjects published as a supplement to Part III, of the *Journal* and they further authorised the addition of a similar supplement to other parts of the *Journal*.

#### Proceedings.

The papers and abstracts published in the *Proceedings* are, some of them at least very interesting. The proceedings serve as a vehicle for the ready circulation of interesting discoveries made by busy men who cannot write long papers for the *Journal* and do not wish to keep back information which might be useful. Babu Manmohan Rāya's paper on the Rajavaṅḡis and Cochs removes a common notion that these are one and the same caste. The writer proves that these castes belong to two distinct races of men; the Rajavaṅḡis are of Mongolian while the Cochs are of Dravidian descent. Babu Satish Chandra Acharya's paper on the Licchavi race of ancient India attempts to prove that even 2,400 years ago Mongolian tribes settling in India passed as Kshatriyas. Mahamahopadhyaya Haraprasad Shastri's paper on the Magi shows that the ancient sacerdotal caste of the Magi in Persia settled in India from time to time and introduced astrology and necromancy in the country and that their descendants are still to be found all over India exercising the profession of astrologer passing as brahmans of an inferior quality. The same writer has another paper on the organization of the caste system in Bengal in the thirteenth century by Ballala Sen belonging to the last Hindu dynasty of Bengal. The Rājā from political reasons degraded the Suvarnavanikas and raised the Kaivarttas in the hierarchy of the caste system.

### Journal, Part I.

In the Philological Section of the Society's *Journal* three numbers have been published, covering altogether 357 pages of letter-press; exclusive of four separate plates. Besides these an extra number of Vol. LXX, Part I, has been issued, containing plates illustrating Dr. Hoernle's Report on Central Asian Antiquities.

Materials for another number are ready, but the delays of the printers and the fact that some of the contributors are resident in England, have made it impossible to publish a second number of Part I during 1902. It is a moot question whether it would not be more satisfactory from the points of view both of accuracy and expedition, if articles by home residents, and these include quite half the contributions to the Society's *Journal*, could be printed at home. That is to say: a paper received from England having been sanctioned in Calcutta should be sent back to the author to print, correct, and forward to the Philological Secretary, ready for incorporation with the rest of the number. The most important philological contribution made during the past year was a study of the *Bashgali* language by Colonel J. Davidson, C.B. *Bashgali* is one of the many dialects of *Kafiristan*. These notes consist of altogether 195 pages. The first 66 are devoted to an account of the grammar of this dialect, which present great difficulties, and in many points seems to defy analysis. Following this is a collection of upwards of 1,750 short sentences in English and *Bashgali*, which not merely form very valuable material for travellers who may be in need of using that language but will also doubtless be of the utmost interest to philologists. In the *Journal* itself we have a most interesting continuation of Dr. Hoernle's report on the British collection of Central Asia. Herein he deals with every aspect of the manuscripts of this remarkable collection. Many of these manuscripts still remain to be deciphered. Dr. Hoernle has, however, by patient research been able to decipher the alphabet of certain documents of which the language yet remains to be identified. The Revd. T. Grahame Bailey, of Wazirabad, furnishes some interesting specimens of the secret vocabulary employed by the *Cührās*, a tribe of professional thieves, who apparently while using ordinary Punjabi introduce private words and slang expressions where there is need for secrecy. Mrs. Francke has contributed a translation of a Tibetan document relating to the history of Ladakh which completes a former series of translations and texts contributed to this *Journal* on the same subject. There were several other papers of interest published during the year.

### Journal, Part II.

During the last year four numbers of Part II of the Society's

Journal have been issued containing a number of important and interesting papers, botany, zoology and general subjects being all well represented.

Among the botanical papers are included a further important contribution by Sir George King of Materials for a Flora of the Malayan Peninsula, which carries the work on to the end of the Calycifloræ, eight orders being included and eighteen new species described. Some new species of Orchidæ from North-West and Central India have been described by Mr. J. F. Duthie and a new Indian Dendrobium by Major Prain, I.M.S. An important paper entitled On the Variation of the Flower of *Ranunculus Arvensis* has been contributed by Mr. I. H. Burkill, based on the laborious examination of over 6,000 flowers, curves illustrating the variations of the different parts being worked out, and he finds that the sepals vary least, then the petals, then the carpels, while the stamens vary most; so that the variation of this flower is broadly similar to what is seen in a general view of the whole Phanerogamic Sub-Kingdom.

The Zoological series contain a variety of papers, among which the following may be mentioned: a list of Butterflies of Hong-Kong and Southern China by the late Lionel de Nicéville, the last contribution to science of that hard-working and gifted naturalist and some new species of Hymenoptera, by Major C. G. Nurse. Mr. F. Finn has contributed several interesting papers on variations in Indian Birds, illustrated by five plates, on hybrids between the Guinea Fowl and the Common Fowl and on specimens of two Mauritian Birds. An interesting series of notes on Animals in the Alipore Zoological Gardens have been contributed by the Superintendent of the Garden, Rai R. B. Sanyal Bahadur, including the subjects of Telegony and Melanic species of the Common Palm Squirrel. A paper on A Collection of Birds from Upper Burma, by Lieut. H. Wood and F. Finn, includes a description of two species illustrated by plate which had not previously been found among the Indian fauna, while several very rare birds are in the collection, which has nearly all been presented by Lieut. Wood to the Indian Museum. Major J. Manners-Smith has contributed a paper on Wolf Hybrids in Gilgit. Lastly, Dr. Harold H. Mann has presented an interesting note on the life history of the insect known popularly as the mosquito blight which causes such extensive damage on tea garden, with regard to which he concludes that the whole life history is spent on the tea bushes and not partly on other trees in the jungle close by as previously thought, a very important discovery from the practical point of view.

Among the general papers is an important one entitled Studies in the Chemistry and Physiology of the Tea Leaf, also by Dr. Mann,

in which he shows that the most important agent in producing the flavouring of tea is an enzyme, and that this materially increases during the process of withering, while the largest amount is found in the tip leaves, which make the best tea, and that the amount of phosphates in the soil increases the amount of enzyme and the quality of the tea; all highly important points. Another very interesting paper in this section is one on Tidal periodicity in the Earthquakes of Assam by Mr. R. D. Oldham, Superintendent, Geological Survey of India, in which he considers the effect of the tidal stresses set up by the attraction of the sun on the time of occurrence of earthquakes recorded in Assam since the great one of 1897, and he concludes that there is such a relationship.

Altogether the year has been a good one in this section, both the number and the variety of the papers having maintained a high level.

### Journal, Part III.

In all, three numbers of this part of the Journal, containing ten papers, were issued during the year, *viz.* : No. 2 for 1901, and Nos. 1 and 2 for 1902. The first of these numbers contains a paper by Mr. T. H. Holland, F.G.S., on the Coorgs and Yeruvás, in which the affinities of the two tribes are discussed on an anthropometrical basis. Apart from the fact that the Coorgs are shown to differ in a very marked degree from their Dravidian neighbours, this paper contains an interesting discussion on the manner of applying in practice the results obtained from anthropometry.

Amongst other papers may be mentioned Mr. Friend-Pereira's account of the "Marriage Customs of the Khonds," the "Folklore of the Kolhān," by Mr. C. H. Bompas, I.C.S., and "Some Notes on the Rājvañçi Caste" by Babu Monmohan Roy. The last mentioned paper offers an explanation of the divergent views that have been expressed regarding the origin of the Rājvañçis of North Bengal and of the Koch and other tribes in their neighbourhood. It appears that the original Rājvañçi was a Dravidian, but that the term has also been assumed by the Mongoloid Koch, and that in some parts the assumption of the name has been accompanied by intermarriage between the two groups. It has recently been arranged to add a supplement to this part of the Journal for the publication of miscellaneous notes on anthropological subjects.

### Coins.

16 coins were presented to the Society by the Governments of Bombay, Madras, United Provinces of Agra and Oudh during the year under review. Of these 2 are gold, 12 silver, and 2 copper coins. The

gold coins comprise: a coin of Shri Pratap Harihara (Vijayanagar Dynasty), found in the Ahmednagar collectorate and a half pagoda of Shri Pratap Deva Raya of the first Vijayanagar Dynasty found in the Poona District. The remaining are not of much importance.

The question of the proposed amalgamation of the two collections of coins now held separately by the Indian Museum and the Asiatic Society made by the Hon'ble Mr. J. A. Bourdillon was referred to the Trustees of the Indian Museum. The Trustees have asked the Council the probable purchased price of the collections of coins belonging to the Society and Dr. Bloch has undertaken to make the valuation.

#### Bibliotheca Indica.

Twenty-five fasciculi were published during the Calendar year 1902; of these two were in the Arabic-Persian, and the rest in the Sanskrit Series. The cost of the year's publication came up to Rs. 6,426-0-6. The average cost of fasciculus being Rs. 257; Rs. 92 in editing-fees and Rs. 165 in printing charges.

Three new works have been commenced: two in the Sanskrit Series and one in the Arabic-Persian.

1. Bodhicaryyavātāratikā by Prajnākanamati. Since the discovery of Buddhism and Buddhist literature in Nepal by Brian Hodgson in the early part of the nineteenth century, Bodhicaryyāvātāra by Çāntinātha has engaged the attention of Oriental scholars all over the world. It was described at length by Dr. Rājendralāla Mitra in his Nepalese Buddhist Literature and published by Professor Minaev at St. Petersburg. It is the best handbook of the later Mahāyāna School, written in standard Sanskrit and in an engaging style, but without a commentary it could not be thoroughly studied and properly translated. A search was instituted by Mahāmahopādhyāya Haraprasād Shāstri and his efforts was completely successful by the discovery of a complete copy of Prajnā-kara's Commentary, and another copy of a portion of it, in 1895. In 1898 the same Pandit found a tippana in the Darbar Library, Nepal. Professor La Vallée Poussin of Ghent found a copy of the Tibetan translation of the work in Europe and undertook to bring out an edition of the Text and Commentary filling up the gaps and lacunæ in the commentary from the Tibetan. The first fasciculus of his work was published in 1902.

2. Çatasāhasrikā Prajnāpāramita reported to have been brought up from the Nether world by Nāgārjuna. This too was discovered by Brian Hodgson in Nepal. A Tibetan version of it was published in the *Bibliotheca Indica* by Babu Pratāpa Çandra Ghoṣa. The work is in prose, but, if measured in verses of 32 letters each, its extent will come to

one hundred thousand verses, hence it is called the *Çatasāhasrikā*. It is full of repetitions like many great Buddhist works. After finishing the publication of the Tibetan version, Babu Pratāpa Çandra offered to edit the Sanskrit original and the permission was gladly accorded by the Council. In the very first year the learned editor has pushed the work through four fasciculi.

3. The *Riyazu-s-Salātin*, a history of Bengal, by Ghulan Husain Sālin is a well-known work written in the eighteenth century at Malda. The English translation of the work has been entrusted to Maulvi Abdus Salan, M.A., Bengal Provincial Service, and he has published one fasciculus during the year under review.

#### Search for Sanskrit Manuscripts.

The search for manuscripts was conducted by Mahamahopadhyaya Haraprasad Shastri during the year under review. About 200 manuscripts were collected and more than 200 notices of rare manuscripts made in various districts of the Provinces of Bengal. The Shastri undertook three trips to Nadia, one to Burdwan, and one to Puri. His assistants, the travelling Pandits, worked in the districts of Puri and Birbhūm, visiting other districts too on occasions. The search in the city of Navadvīpa is very nearly complete. Three or four private collections only remain to be examined. The examination resulted in the discovery of about 30 manuscripts which were known only from quotations.

The Report having been read and some copies having been distributed, the President invited the meeting to consider it at their leisure.

The President announced that only one essay had been received in competition for the Elliott Prize for Scientific Research for the year 1902, sent to Mr. Pedler, one of the Trustees, for report, and that the result had not yet been received by the Society.

The President also announced that the Barclay Memorial Medal for the year 1902 had been offered to Major Ronald Ross, F.R.C.S., C.B., C.I.E., F.R.S., I.M.S. (Retired).

The President then addressed the meeting.

#### ANNUAL ADDRESS, 1902.

GENTLEMEN,

It is not incumbent on your President to deliver an Address on the termination of his first year of office, and, following precedent, I

might have refrained from preparing one on this occasion. I have been loath, however, to meet you this evening without supplementing with some remarks the Annual Report which lies before you, and would ask you to accept these remarks indulgently, as the fullest contribution which official duties have permitted me to make to the proceedings to-night. On reference to some of the Presidential Addresses of the past, I am regretfully conscious of the unfavourable comparison which mine may evoke, but it would have been beyond the power of myself, and of those to whom I could look for assistance, to undertake in the present season a full review of all that has been done not only in India, but elsewhere also, and not only by this Society, but also by other Societies, by *Savants* and by Departments of the Government, in the branches of literature and science with which, by its aims and constitution, our Society is concerned. Such a task must be postponed to a later occasion.

I would, in the first place, speak to you on what I would term homely matters, relating to our building, its internal arrangements, and the improvements which are desirable. The Annual Report alludes to the proposal which has been under consideration for the disposal of our premises. It was hoped by the members with whom the proposal originated that a sufficient sum would be obtained for the acquisition of a site and the erection of a new building, with residential quarters for the Secretary, and that there might even be an adequate balance to provide for a paid Secretaryship. These anticipations have, however, proved too sanguine. No offer has, in fact, been made for the purchase of the premises, and it seems clear that they could not be sold at a price which would justify our parting with them for accommodation elsewhere. The proposal must, therefore, be abandoned. Nor is this, in my opinion, much to be regretted. Our building is old, but it provides us with this spacious hall for our meetings and it admits of improvement. That which has specially suggested itself to me is the raising of the floor of the ground rooms and passage, which now show signs of constant dampness and cannot, for that reason, be fully used. The matter is under enquiry, and I trust that professional opinion will be in favour of the work, and that it may be carried out at moderate cost. An improvement of the drainage outside may simultaneously be effected. The arrangements for the lighting of our rooms and for punkahs should also be brought up-to-date, by the introduction of electric lights and fans, and provision for this change has been made in the Budget for the ensuing year. The gas has now to be supplemented by lamps, which are an inconvenience, and the antiquated hanging punkahs should give place to the more convenient electric fans now in general use. Our Library



demands much attention. The space now available in the almirahs is deficient, two rows of books being found on many of the shelves, and a thorough re-arrangement of the volumes should be effected, after the removal of such as may be dispensed with, and the provision of additional almirahs, for which space would be found in the improved rooms on the groundfloor. We are fortunate in having as our General Secretary, Mr. Macfarlane, the Librarian of the Imperial Library, whose advice and assistance in this matter will be of great advantage to the Council. He has already undertaken the revision of the Catalogue, and will advise as to the purchase of new books, in regard to which too little has been done in recent years. The expenditure to be incurred on this and on the improvements in the building will be well within our financial capacity.

The proposal to modify the status of the Society, which was mentioned in the last Annual Report, has been indefinitely postponed, and may be regarded as abandoned, by a resolution of the Council that it should stand over until the finances of the Society have been placed on a more settled basis. It erred, in my opinion, in seeking to give too scientific a character to the Society, and to alter its name of Asiatic Society, which so well recalls the objects of its foundation and its great achievements in the cause of Oriental research. What the history of the Society has been I would here briefly notice. Founded in 1784, on the initiation of Sir William Jones, it is among the oldest learned Societies of the world. It has published, first, in its volumes of Asiatic Researches, and subsequently in its Journal, innumerable papers of the highest value on the literature, language, history, archæology, and ethnography of India and other Asiatic countries, and on the natural sciences, including astronomy, meteorology, geology, zoology, and botany. It commenced early the formation of a Library and a Museum, giving the lead by more than one generation to the Government in its Natural History collection, including geological specimens. That collection, for many years in charge of the distinguished naturalist Blyth in its zoological section, was eventually made over to the Government in 1866 and converted into the Imperial Museum, now located in the great building in Chowringhee. The Library remains with us, and now consists of over 40,000 volumes, of which about 11,000 are manuscripts. The publication of Oriental works was systematically undertaken by the Society in 1835, and its *Bibliotheca Indica* Series of publications has since included a very large number of original texts and of translations of the leading works of Brahmanic literature and of works in Arabic and Persian. The conservation of Sanskrit Manuscripts has been another important work of the Society, and both in this and in the *Bibliotheca Indica* section it has received

liberal pecuniary aid from the Government. The Society has also a large collection of coins of great interest to the numismatist. The transfer of this collection to the Indian Museum has been suggested, but it is a question which will demand thorough consideration. Credit is especially due to the Society for the discovery of keys to the ancient Indian alphabets, for the early investigations in the languages of Ancient India, including Pali, for the light which has been thrown on the history of India and of the adjacent countries on the North-West by the labours of the great numismatists who have been among its members, and for the development of the study of the Indian vernaculars.

This, gentlemen, is the brief record of the Society's work. It is a record on which we may well look with pride, and which the world of learning and of science will acknowledge to be worthy of the aspirations of the distinguished men to whom the Society owes its birth. Have we cause to fear that the Society has not still before it a long career of usefulness on its present basis? I think not. The era of great discoveries in India itself may have passed. No undiscovered Asoka pillars, Buddhist Topes and Buddhist caves, no undeciphered inscriptions and coins of an unknown language and an unknown epoch, and no great unpublished work in the Sanskrit and Semitic classics may remain to win for antiquarians and scholars the reputation of a William Jones, a Horace Hayman Wilson, a James Prinsep, an Alexander Cunningham, and a Blochmann, to mention but a few of our distinguished past members, but a large field is yet open for valuable, if minor, work in the exploration of great ruins and historical sites, and in the editing and translating of unpublished works of interest and repute. And discoveries, though not so great as in the past, will doubtless be made in various parts of India. Beyond India, Central Asia and Mongolia, the ancient realm of Jenghis Khan and Tamerlane, now opened by the construction of the great Russian railway, present an immense region for research; and the ruins of Cambodia, notably the ancient city of Angkor, are already engaging the attention of the French Oriental Society of Cochin-China, to whose Congress last December our members were courteously invited. Our Journals have been always open to papers relating to Asiatic countries other than India, and not a few such contributions will be found in their pages.

In archæology, philology, and anthropology, in particular, much remains to be done in India. The conservation of ancient monuments is an organized department of the Government, and Archæological Surveyors are attached to the Provinces. Archæological enquiry is a special duty of these gentlemen, but there is still room for private workers in the

same field, and they should not be discouraged. Their collaboration will be of value, and they may find reasons, from time to time, for differing from the official archæologists. There is always much scope for controversy, and our Journals may be enlivened by rival contributions. They are not wanting in evidence that the antiquarian and the philologist may often be assigned a place in the *genus irritabile* to which the poet is proverbially ascribed. I would specially invite officers employed in land settlements and surveys, as some have, indeed, already done, to notice antiquities, shrines and strange local observances which they may find in the course of their operations. Philology is also receiving much enlightened help from the Government. The deputation of Dr. Grierson to prepare a Linguistic Survey of India gives promise of great development in philological studies. His labours cannot but attract attention to the numerous languages and dialects of India, and enlist the co-operation of many in the same fruitful field for long years to come. We are already indebted to him, and his former co-adjutor, Dr. Hoernle, for much advancement in the knowledge of the Bihari vernaculars. Another important work carried out at the expense of the Government has now been completed, and will, I trust, be soon published—the compilation of a Tibetan-English Dictionary, with Sanskrit Synonyms, by Rai Bahadur Sarat Chandra Das, C.I.E. This work, as distinguished from the Dictionary of Csoma de Körös, which was based on the classical language of Tibet, and that of Jäachke, which has a similar basis and reproduces also largely the language of Western Tibet, claims the merit of dealing specially with the language of the central country and of the modern and current literature, and also of furnishing the Sanskrit equivalent of each Tibetan term—an important contribution towards the exact study of Tibetan literature, which is so largely founded on Sanskrit. In the Sanskrit rendering of the Tibetan valuable help has been given by Pandit Satis Chandra Acharjya Bidyabhusan, one of our promising junior members; and the Rev. Graham Sandberg and the Rev. A. Heyde have also very materially improved the whole work by a thorough revision. Anthropological research has been stimulated in the past by the successive Census operations, and will receive fresh stimulus from the recent Census. We have as Secretary in that section Mr. Gait, the officer to whom the Census was entrusted in Bengal, and the Society may look to much valuable work at his hands. We owe to his suggestion the apparently small, but important, innovation of publishing short notes in our Journals, which the Council have sanctioned. It is hoped that many persons who are in a position to contribute interesting anthropological, philological, and other items of information which, though too small to be published as separate papers,

are well deserving of permanent record, will avail themselves of the facility afforded to them. Such notes, instructive in themselves, will often suggest enquiry, which will add to the store of information on the subjects dealt with. These minor points for discussion will often suggest themselves to students in language and literature, in anthropology and in archæology.

In other branches of science more and more is being done in India under the auspices of the Government or by private individuals, and the Society affords, through the medium of its Journal, a ready means of communicating to the world observations and results which interest the student and the man of business.

Speaking now generally, I would say that a Society which embraces so wide a range of subjects as ours cannot fail to find at all times interesting matter for discussion. New theories in science are constantly presented to the world: some survive to an enduring acceptance; some pass away after a stormy life of controversy; and some perish almost at their birth; but all afford matter for thought, speculation, and discussion. The vicissitudes of scientific ingenuity are humourously alluded to in the following lines of Moore, which I am tempted to quote to you:—

“In science, too—how many a system, raised  
 Like Neva's icy domes, awhile hath blazed  
 With lights of fancy and with forms of pride,  
 Then, melting, mingled with the oblivious tide!  
 Now earth usurps the centre of the sky,  
 Now Newton puts the paltry planet by;  
 Now whims revive beneath Descartes' pen,  
 Which now, assailed by Locke's, expire again.  
 And when, perhaps, in pride of ohemic powers,  
 We think the keys of Nature's Kingdom ours,  
 Some Davy's magic touch the dream unsettles  
 And turns at once our alkalis to metals.”

I trust, gentlemen, that the remarks which I have offered on our past and future work have sufficed to make it clear that this Society has still before it a life of robust vitality. I would express the hope that our numbers may increase, and that we may count on additions to our list of active members. The Annual Report indicates a steady growth in our Members' list during the past five years, but the roll falls short of the figures attained in some former years, and we may reasonably look forward to an accession of members. Many may be deterred

by a modest diffidence from entering the portals of a learned Society, but we demand no thesis for admission into our ranks, and we do not expect, although we are always gratified, to receive contributions from our members. In the words of Sir William Jones, we do not require "any other qualification than a love of knowledge and a zeal for the promotion of it;" and that zeal may manifest itself by general support to the Society as well as by active labour on its behalf.

I now pass to a brief notice of our publications and of the papers read at our meetings during the past year. The former include three works in the Bibliotheca Indica Series, of which the first is a Commentary on the best handbook of the later Mahāyāna School of Buddhism. A copy of this work, which was greatly needed for the proper translation of the handbook, was discovered by Mahāmahopādhyāya Haraprasād Shāstri in the Durbar Library of Nepal, and an edition of it and of the handbook is being brought out, Professor Poussin of Ghent having undertaken the task for the Society. Another philosophic Buddhistic work in Sanskrit under publication is in the editorial charge of Babu Pratāpa Chandra Ghōṣa. The first portion of a translation, by Maulvi Abdus Salam, Deputy Collector, of the Riyazu-s-Salatīn, a well-known Muhammadan history of Bengal written in the eighteenth century at Malda, has also been published. Of the Journal of our Philological Section three Parts appeared during the year, of which two were Extra numbers containing Dr. Hoernle's erudite report on a collection of antiquities from Central Asia, and a valuable contribution from Colonel J. Davidson, in the form of notes and short sentences, on the grammar and language of the Bashgali dialects of Kafiristan. The publication of Sir George King's Materials for a Flora of the Malayan Peninsula was continued in the Natural History Part of the Journal, the Government of the Straits Settlements contributing largely to the cost, in appreciation of this important work. Of the Anthropological Part of the Journal three numbers were published; containing, among others, papers of great interest by Mr. Holland on the Coorgs and Yeruvas of Southern India, by Mr. Friend-Pereira on the Marriage Customs of the Khonds, by Mr. Bompas on the Folk-lore of the Kolhān and by Babu Monmohan Roy on the Rājvanṇi Caste of North-Eastern Bengal. I would congratulate Mr. Holland on his versatile excursion into research outside of his special domain of Geology, in which he has done so much good work for the Government, and express the hope that both he and the other gentlemen whose papers I have mentioned will place us under further obligation for many interesting contributions to our Journal. Dr. Ross, our Philological Secretary, has drawn attention to the delay which occurs through the printing in India of contributions to our Journal by home residents,

and the matter will be considered by the Council. I trust that our Journal will be fuller during the present year.

Of the papers read at our meetings many have appeared in our Proceedings and Journal, and the rest should be published shortly. The list is a long one, comprising 45 papers, and we are much indebted to the contributors. Mr. Finn, our late Natural History Secretary, favoured us with several of his always interesting papers on Birds, and Mahāmahopādhyāya Haraprasād Shāstri, our Joint Philological Secretary, gave us much information on subjects which lie within his special branch of research; while among the papers which I have not noticed in referring to the issues of our Journal, I would specially mention the thoughtful and suggestive paper On Tidal Periodicity in the Earthquakes of Assam, by Mr. Oldham, the excellent Anthropological Notes on Calcutta Juvenile Criminals by Major Buchanan, the Inspector-General of Jails in Bengal, and Dr. Mann's Notes on the Tea Bug, or Mosquito Blight, of Assam, and on the enzymes of the Tea Leaf, both of which record the results of enquiries of great importance to the Tea Industry. Major Buchanan's Notes indicate the marked similarity in physical and anatomical peculiarities which exists between the boy criminal of this city and his social type in the European cities. He has disarmed protest on behalf of those well-behaved and worthy members of society to whom nature has inconsiderately given one or more of these peculiarities, by disclaiming any intention of proving more than that the peculiarities are found in far greater number in the individual criminal, and among criminals as a class, than among normal individuals.

It is my duty to refer to the death during the past year of our Treasurer, Captain McArdle, and our late President, Sir John Woodburn. The Council recorded resolutions of sympathy and condolence on these sad events, and a similar resolution on the death of our late President was passed at the last monthly meeting, which has been respectfully conveyed to Lady Woodburn. Captain McArdle had at an early age attained distinction as a naturalist, and his premature death has been a loss to science, and to this Society, in whose proceedings he would have taken a prominent part. The late Lieutenant-Governor was for many years a member of the Society, and he gave practical evidence of his interest in its work by holding in 1900 and 1901 the position of its President, and taking a share in the duties of the Council, amidst the ceaseless labours of his great official charge. In the universal regret at his death none felt more than the members of this Society, who always received from him the genial and patient courtesy which won the admiration of all. You will remember, gentlemen, his promise on the last occasion on which he addressed us, that he would

read at some future meeting a paper on the work of conservation of monuments done at Gaur and Pandua in the district of Malda during his administration. It is due to his memory in this Society that I should, on this occasion, however briefly, place before you some account of that work.

The ruins of Gaur have for more than a hundred years attracted the notice of Englishmen, and we have early descriptions of them, besides that, accompanied by photographic illustrations, which is so well known to us as the work of Mr. Ravenshaw, edited and published by his widow in 1878. No systematic restoration and preservation of the most striking and beautiful among them appears, however, to have been undertaken until the present day. On the contrary, the work of destruction, begun in early years, was apparently allowed to continue in our time. Mr. Ravenshaw remarks that there is not a village, scarce a house, in the district or the surrounding country which does not bear evidence of having been constructed from these ruins, materials from them having been carried even as far as the cities of Murshidabad, Rajmahal, and Rangpur; and a footnote of his book brings to notice the strange, but melancholy, fact that in the early days of our revenue administration the right to dismantle Gaur of the beautiful enamelled bricks which adorned its buildings was farmed out to the landholders of the district! The capital of the Hindu Kings of Bengal, Gaur, passed, by conquest, into the hands of the Muhammadan rulers of the Province in 1198, and it was during their occupation that it attained its enormous dimensions and its magnificence, until its sack by Sher Shah in 1537, followed by its depopulation by a virulent epidemic of plague in 1575, led to its abandonment. During the centuries which have since passed the climate and the spoliation to which I have referred have necessarily left of the city but a number of scattered ruins, many in hopeless dilapidation, but some fortunately retaining enough of their structure and beauty to merit and reward careful preservation. Among these are the large Golden Mosque, the Dakhil Gate, the Qadam Rasul Mosque, the Minār, the Tantipārā Mosque and the Lattan Mosque, on all of which work has been done by the Bengal Government. The Golden Mosque, or Bāradarwāji, commenced by Husain Shāh and completed by his son Nasrat Shāh between 1521 and 1532 A.D., was perhaps the finest of the Gaur mosques. The principal portion now left is a corridor, having arched openings at each end and eleven graceful arches on each side, surmounted by domes, the whole being faced with large blocks of black hornblende, and the total length being 180 feet by 80 feet. The arches and the crowns of the domes have been repaired, the fallen domes have been restored and facing stones have been put in part of the walls. The stones in a tower at the northern

gate have also been re-set. It is proposed to replace at the springing level of the arches a band of a peculiar blue-coloured stone, which is still procurable. The Dakhil Gate, or northern entrance to the Fort, with a frontage of 70 feet, has an arch of great height, leading into a corridor of 112 feet in length and containing four doors on either side opening into rooms which were probably used by the guard. It was a substantial structure of small red bricks, ornamented with embossed bricks, and having towers at the four corners, and is believed to have been built by Bārbak Shāh between 1460 and 1474. The work of restoration on this gateway consists, for the present, of the rebuilding of the front or northern arch over the entrance, all damaged and missing ornamental bricks being replaced, and of the repairing of the lower portions of the wall of the main rooms. The Qadam Rasul Mosque, which is covered by a single dome, with minarets at the four corners, contains, as its name implies, a stone believed by the faithful to bear an impress of the Prophet's foot, which is said to have been brought from Medina by Husain Shāh, whose son, Nasrat Shāh, built the mosque in 1530. It is much resorted to by pilgrims, and is in fair preservation. Little was required to be done on it, and the work has been completed. The Minar, which is outside the eastern gate of the Fort, is about 80 feet high, a spiral staircase leading to the top, where stood a small apartment covered by a dome, which has fallen in. It is believed to have been built about 1488. The brickwork up to the top and the spiral staircase have been repaired. Of the Tantipārā Mosque, which was probably erected between 1474 and 1481, unfortunately not much remains. It is elegantly and profusely ornamented with embossed bricks, and the interior is supported by massive stone pillars, the western side being occupied by elegantly carved prayer niches. Fallen pillars have been re-erected and the brickwork in front of the pilasters and arches done up; and several tombs lying within the precincts will be repaired and re-covered by the stones which formerly lay on them. Not far from this mosque is the Lattan or Painted Mosque, supposed to have been built by the same monarch. It was greatly admired by Franoklin, who visited Gaur in 1810, and its great proportions, its pillars, its domes, its minarets and its beautiful tilework of variegated colours, are very appreciatively described by him; but it is now in a very dilapidated condition. The walls of the southern bays of the main room have been repaired with all the old coloured tiles which could be found, the result being very satisfactory. It is proposed to restore experimentally one arch and one bay with new coloured tiles, as subdued as possible; but, if the result is unsatisfactory, the arches under the still standing domes will be repaired with ordinary brick-



work. On the outside only work which is absolutely necessary to prevent a wall from falling, and the repairing of cracks in the domes, will be undertaken. Of the other remains of Gaur some may possibly receive repairs hereafter. Perhaps the most notable, however, the Bais Gaji wall, seems to be beyond any material help. Its crest is so thickly covered by trees and jungles, whose roots descend far into the brick-work, that the removal of these might lead to an early collapse of great portions of the ruin. This remarkable wall, which surrounded the palace enclosure, is of great thickness, and 22 yards (Bāis Gaj), or 66 feet, in height.

Pandua lies, in an opposite direction, at much the same distance from Malda as Gaur. It was a smaller city, but the kings resided there at some periods, and the present remains include the Adina Mosque, to which Gaur had no equal, and which must have been among the largest mosques in India. This mosque, which was erected by Sikandar Shāh about 1369 A.D., is a quadrangular building, with an inner court, 500 feet in length from north to south and 300 feet in width. Four rows of pillars in blackstone on the western, and two on the northern, eastern and southern, sides supported domes, resting on every set of four pillars, and open arches led into the inner court. The walls were faced outside with black hornblende, and ornamented within by trellis work on three sides, while one side contains prayer niches of hornblende elaborately sculptured. The mosque was entered on the west side by a small door, through a transept eighty feet high, on one side of which stands the Badshah ka Takht, or King's Throne, a stone platform supported by three rows of massive hornblende pillars, twenty-one in number, and on the other the pulpit, of beautiful carved stone, ascended by several steps. Of the domes only a number of those which covered the north-western portion of the mosque remain. The Badshah ka Takht survives in fair preservation, as also the greater part of the western walls. Most of the pillars have fallen, but their bases are in position. The full extent to which the repairs of the mosque will be carried has not been finally settled, but much will be undertaken, especially for the restoration of the Badshah ka Takht and the Pulpit, and the repair of the domes. The north wall, the south transept wall, several arches and some domes have been repaired. Pandua also had its Golden Mosque, built in 1585, a beautiful work in hornblende, the walls of which survive, the interior containing a fine pulpit. Repairs have been done to the walls and arches, the pulpit and the minars. Another mosque, the Eklakhi, lies at a short distance. It is a building of embossed bricks and hornblende, eighty feet square, covered by a single dome, and contains the tombs of Giyasuddin Shāh, his wife, and his daughter-in-law. It was pro-

bably constructed by that sovereign, whose reign terminated in 1397. Repairs have been done to the walls, the floor and the tombs, those which it may be advisable to effect in the dome remaining. The tombs of the saints Mir Kutb Alam and Makdum Shāh are also interesting objects at Pandua.

In addition to the repairs, I should mention that in all cases, at both Gaur and Pandua, *débris* and jungle have been cleared from the interiors of the monuments and the ground outside, and that it is proposed to surround each ruin with a green sward. A constant struggle must, indeed, be maintained against the growth of jungle on the ruins themselves and in their immediate neighbourhood. A considerable sum has been, and will still be, spent on the work of saving these ruins from further dilapidation which has been so earnestly taken up by the Government of Bengal. When all that is requisite and possible has been done, a new illustrated and descriptive account of them would, I doubt not, be very acceptable to the public.

Sir John Woodburn visited Gaur thrice and Pandua twice. Both places were also visited by His Excellency the Viceroy in February last. Those of us who were present will recall the pleasure with which we listened to the paper on Ancient Monuments in India which His Excellency, as Patron of this Society, did us the honour of reading at the Annual Meeting three years ago. His Excellency's profound and practical interest in the historical monuments and antiquities of India has since been demonstrated by inspections of them throughout the country; and at Gaur and Pandua his instructions and suggestions have guided, and will guide, much of the work of restoration and conservation, the essential principle in the restorations being, as I understand, that only such should be undertaken as are necessary to prevent further dilapidation.

While Gaur and Pandua demanded his first care, Sir John Woodburn also saw the need of action at Bhubaneshwar in the Puri District, and, under his orders, repairs have been undertaken on several of the numerous temples which have made the fame of that place with the antiquarian. The great Lingarāj Temple, especially, has received much attention, and repairs have been carried out on the principal of the sacred tanks. Some petty restorations have also been effected in the exceedingly interesting Khandagiri and Udaigiri caves of the same neighbourhood, some of which date back to the second century B.C. His Excellency the Viceroy also saw Bhubaneshwar.

I have myself, gentlemen, had the opportunity of visiting Gaur, Pandua and Bhubaneshwar, and to those who take an interest in antiquities I commend visits to them when the chance offers. Gaur and

Pandua are unfortunately at present not easy of access, but they will, it may be hoped, be reached, without great inconvenience, from Calcutta hereafter by the extension of the railway through Murshidabad to the Ganges, to connect with the Bengal and North-Western system. To Bhubaneswar the journey by rail is convenient and pleasant.

The President announced that the Scrutineers reported the result of the election of officers and members of Council to be as follows:—

*President.*

The Hon'ble Mr. C. W. Bolton, C.S.I., I.C.S.

*Vice-Presidents.*

H. H. Risley, Esq., B.A., C.I.E., I.C.S.

Col. T. H. Hendley, C.I.E., I.M.S.

R. D. Oldham, Esq., A.R.S.M., F.G.S.

*Secretary and Treasurer.*

Honorary General Secretary:—J. Macfarlane, Esq.

Treasurer:—C. R. Wilson, Esq., M.A., D. Litt.

*Additional Secretaries.*

Philological Secretary:—T. Bloch, Esq., Ph.D.

Nat. Hist. Secretary:—Captain L. Rogers, M.D., B.Sc., I.M.S.

Anthropological Secretary:—E. A. Gait, Esq., I.C.S.

Joint Philological Secy.:—Mahamahopadhyaya Haraprasad Shastri.

*Other Members of Council.*

A. Pedler, Esq., F.R.S., C.I.E.

J. Bathgate, Esq.

T. H. D. La Touche, Esq., B.A.

Kumar Ramessur Maliah.

Arnold Caddy, Esq., M.D., F.R.C.S.

E. D. Ross, Esq., Ph.D.

The Hon. Dr. Asutosh Mukhopadhyaya, M.A., D.L., F.R.S.E.

I. H. Burkill, Esq.

H. E. Kempthorne, Esq.

The Meeting was then resolved into the Ordinary General Meeting.

THE HON. MR. C. W. BOLTON, C.S.I., I.C.S., President, in the chair.

The minutes of the December Meeting were read and confirmed.

The Council reported that owing to the Delhi Darbar no meeting was held in January.

Twenty-six presentations were announced.

Rai Bahadur Bhawan Das and Mr. Abdul Alim were balloted for and elected Ordinary Members.

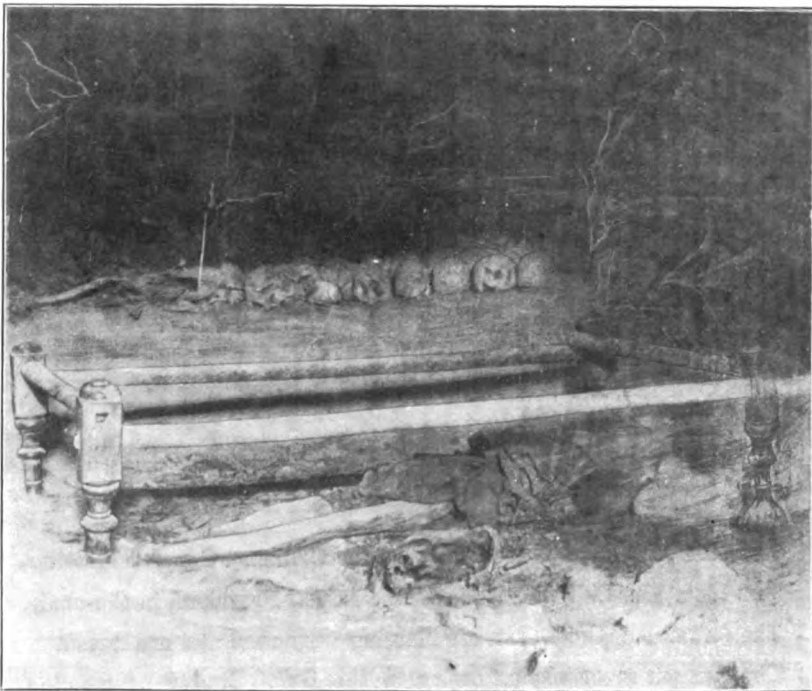
It was announced that Major H. E. Drake-Brockman, Lieut. B. Scott and Rai Chuni Lal Bose Bahadur, had expressed a wish to withdraw from the Society.

The General Secretary reported the death of General J. E. Gastrell, a Life Member of the Society.

The President announced that Lieutenant-Colonel G. Ranking, I.M.S., re-elected a Member of the Society on 5th February, 1902, having not paid his entrance fee, his election has become null and void under Rule 9.

The General Secretary reported the presentation of three silver coins from the Government of United Provinces of Agra and Oudh.

The Anthropological Secretary exhibited the accompanying photograph of a cave found by Lieutenant Macleod near the small village of



Pandran in the Jhālāwan Country, south-east of Kalat in Baluchistan, which had apparently been used as a burying place—the following account

of the place by Lieutenant Macleod was received with the photograph, from Mr. R. Hughes-Buller, Superintendent, Imperial Gazetteer, Baluchistan.

Pandran is a pretty place on a basin of the hills with plenty of water from two springs on the west. The village, which contains five or six Banniah shops and about fifty houses, is situated round an elevated rock known as Anbir. There is much cultivation and plenty of trees.

Due west of the village at a distance of about a quarter of a mile is an extraordinary cave situated in the skirt of the hill. All the ground round is rolling and in the side of one of the folds is a hole just big enough for a large man to squeeze through. It is said that this hole was uncovered and exposed to view by a flood or erosion of the ground some 50 or 60 years ago. On entering the hole, which is almost in the centre, one finds oneself in an underground vault consisting of a front chamber and two recesses. The breadth of the chamber is about 18 feet and the length to the back of each recess about 16 feet. The recesses are round with domed roofs; the front chamber also has a domed roof. Thus:—

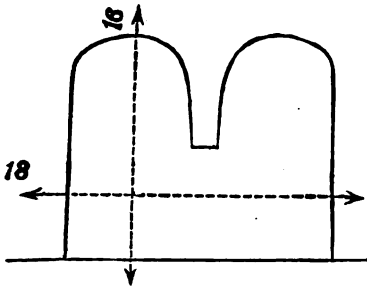


Fig. 1.

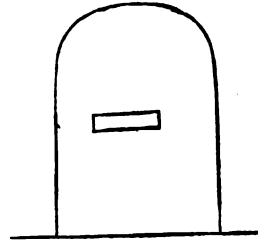


Fig. 2.

Section of right-hand recess.

The whole appears to have been hewn out of the conglomerate rock. At the left-hand corner of the centre partition is a heap of bones and with this exception there is nothing in the left-hand recess.

In the right-hand recess a niche has been cut out of the rock about 6' x 3' x 3'. In it there are twenty-five skulls, one of them is a small one and appears to be that of a child. The rest appear to be those of adults. There are also the ribs and leg-bones of a child down to the knees. In the centre of the right-hand recess lies a bed which, according to the country people, when the vault was just opened, supported a skeleton. The strings of the bed have now, however, given way and the skeleton, which is evidently that of a man, is lying on its back, on

the ground below the bed. There are holes, which appear to be those of a bullet or arrow on the right temple and at the left side of the back of the skull.

Lying near the bed is the skeleton of a large dog which the people say was tied to the bed or *charpoy* by a string when first observed. Between the bed and the back of the recess are a few bones. The bed is firmly made of rounded wood (including the frame) and is still in good condition. Lieutenant Macleod seated himself on it when exploring the cave. Over the ribs and head of the corpse was a coarse cloth, thin, and of a dirty yellow colour.

The natives point to another place about 20 yards away and say that there is another vault there in which women's skeletons are to be found. No one living appears to have ever entered the second cave, if it exists as alleged.

The natives hold the place in considerable awe and have a theory that the place was the scene of a fight. The whole vault was extraordinarily symmetrical.

The following papers were read :—

1. *Note on the occurrence of Motacilla Taiwana (Swinhoe) near Calcutta.*—By CAPTAIN H. J. WALTON, I.M.S.

2. *Gayā Ārādha and Gayāwāls.*—By L. S. S. O'MALLEY, I.C.S. Communicated by the Anthropological Secretary.

(Abstract).

The Gayā District, says Mr. O'Malley, is remarkable for the diversity of religious beliefs found there. It is the cradle of Buddhism and still attracts devout pilgrims from distant countries. The real working religion of the great majority of the inhabitants is the propitiation of devils, while Gayā itself is the place to which all pious Hindus resort whose ancestors require deliverance from the condition of evil spirits by means of the Gayā Ārādha. The popularity of this Ārādha seems to date from comparatively recent times. The Gayāwāl Brāhmanas who conduct the ceremony profess to be of the Vaiṣṇava sect, but the most prominent place in the invocations offered, is taken by Yama, the God of death, whose presentation in the local legends is very far removed from the conception given in the Vedas, and is more that of the popular devil. The ceremony performed, moreover, affords clear traces of the propitiation and worship of ancestors, and of the primitive conception of roaming spirits. These circumstances and the fact that the Dhāmis, whose Brāhmanical origin is doubtful, take the offerings at certain points, all go to show that the popular demonolatriy of the district has

had a large share in the origin of what is now regarded as a perfectly orthodox and highly meritorious rite. The origin of the Gayāwāls is uncertain. They are ignorant and dissolute, but during the ceremony over which they preside, they are worshipped even as Viṣṇu himself. They are gradually dying out, and in the meantime, they have peculiar practices of adoption for which there is no authority in the *Śāstras*. These are described at some length in Mr. O'Malley's paper.

3. *Some Notes on the Religion and Superstitions of the Orāṣns.*—By REV. F. HAHN. *Communicated by the Anthropological Secretary.*

(Abstract).

The author enumerates the various objects of worship which he classifies under three heads—benevolent spirits, malevolent spirits and noxious spirits and apparitions. He then proceeds to describe the various priestly offices and the lands assigned for religious purposes. Certain prevalent superstitions are discussed and a list is given of a number of totemistic septs with the *taboo* attached to each. Most of these totems are already enumerated in Mr. Risley's book on the tribes and castes of Bengal.

4. *Notes on the Koch, Poliyā and Rājvaṃçi in Dinājpur.*—By HARI-MOHAN SINHA. *Communicated by the Anthropological Secretary.*

(Abstract).

This paper, like that by Babu Monmohan Roy, which was read at the November meeting, deals with the group of tribes in North Bengal, who are often classed together as Rājvaṃçi-Koch, but it approaches the subject from a different standpoint and deals with the social distinctions which now exist rather than with the ethnic affinities of the different groups. It appears, however, incidentally that the term Rājvaṃçi has a different application in Dinājpur from that which it appears to have in the Rangpur District. It is shown that the term Deçi refers not to a distinct caste, but to a subdivision both of the Koch and of the Poliyā castes.

A full analysis of these interesting tribes still remains to be written.

5. *The green bug and other jassids as food for birds.*—By H. W. PEAL, F.E.S.

6. *Contributions towards a Monograph of the Oriental Aleurodids.*—By H. W. PEAL, F.E.S.

7. *The function of the vasiform orifice of the Aleurodids.*—By H. W. PEAL, F.E.S.

## LIBRARY.

The following additions have been made to the Library during 1902.

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- . *Epigraphia Indica*, Vols. VI, Parts 7., VII, 1-3.
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- . *Calcutta Review*, Vols. CXIV, Nos. 227-228., CXV, 229.
- . *Geological Survey of India, Memoirs*, Vols. XXXII, Parts 3., XXXIV, 1-2; *Report*, 1901-1902; *Memoirs, Palæontologia Indica, New Series*, Vol. II, No. 1.
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PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.  
FOR MARCH, 1903.

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The Monthly General Meeting of the Society was held on Wednesday, the 4th March, 1903, at 9 P.M.

COLONEL T. H. HENDLEY, C.I.E., Vice-President, in the chair.

The following members were present :—

Major W. J. Buchanan, I.M.S., Mr. I. H. Burkill, Babu Girindra Nath Dutt, Mr. E. V. Gabriel, Mr. H. E. Kempthorne, Mr. C. Little, Mr. W. S. Meyer, Mr. J. Nicoll, Mr. A. Pedler, Pandit Yogesa Chandra Sastree, Mahamahopadhyaya Haraprasad Shastri, Dr. C. Schulten, Babu Chandra Narayan Singh, Mr. E. P. Stebbing, Pandit Satis Chandra Vidyabhusana, Mr. C. R. Wilson.

The minutes of the last meeting were read and confirmed.

Ten presentations were announced.

Mr. Charles Gilbert Rogers, F.L.S., and Captain Andrew Thomas Gage, I.M.S., were balloted for and elected Ordinary Members.

It was announced that Mr. J. C. Mitra had expressed a wish to withdraw from the Society.

The General Secretary reported the death of Professor Edward Bayles Cowell and Sir George Gabriel Stokes, Honorary Members of the Society.

At the request of the Council Mahamahopadhyaya Haraprasad Shastri contributed an obituary notice of Professor Cowell, and the Hon. Dr. Asutosh Mukhopadhyaya of Sir George Stokes.

E. B. Cowell, Esq., M.A., came to India as Professor of the Presidency College, Calcutta, and remained in Calcutta till the year 1864. He was Professor of History in that College, and Principal of the Sanskrit College. His notes brought the History of India by Elphinstone up to date, and the Sanskrit College flourished greatly under his fostering care. He studied *Alaṅkāra* and *Nyāya* in the Classes, and there are still many old students of the College who remember him sitting on the benches listening attentively to the Professors and taking notes. But he derived his knowledge of Hindu Philosophy mainly from our illustrious countryman Mahamahopadhyaya Maheshchandra Nyayaratna, C.I.E. Though as Principal he had no teaching-work assigned to him, he often taught English to students, and gave prizes and presents to smart Sanskrit pupils. He left some money for the foundation of a Grammar Scholarship in the Sanskrit College.

He was for years Secretary of the Asiatic Society of Bengal, and edited several Sanskrit works for the *Bibliotheca Indica* Series. I still hold a letter written by him to my brother Nandakumar Tarkaratna who was joint editor of *Vaiṣeṣika Darṣana* in this Series. Till the last year of his life he corresponded with his numerous Indian friends on literary topics and his letters breathe a spirit of freshness and vivacity rare in that old age.

HARAPRASAD SHASTRI.

The following is an extract from an obituary notice written by Prof. C. Bendall for the *Athenæum* and reprinted in the *Journal of the Royal Asiatic Society*, April, 1903, on pages 419 ff:—

Cowell was born at Ipswich, January 23rd, 1826, and was educated at Ipswich School. During his schooldays he used to read in the Public Library, and there in 1841 came on Sir William Jones' works, reading especially the translation of the Sanskrit play "Sakuntala." "I well remember," he said, in a memorable address given to the Royal Asiatic Society in 1898, "the joy of finding a Persian Grammar among his works, and I soon learned the characters.....and began to study the anthology." From this book, he added, he gave, "thirteen years afterwards,.....FitzGerald his first lesson in the Persian alphabet." In the same year he saw Professor H. H. Wilson's "Sanskrit Grammar" advertised, which he bought not long after. "Of course, I found Sanskrit too hard," he continued, "but I returned to Persian meanwhile, reading alone the "Shāhnāmah" and Hāfiz." His first guide in Oriental studies was Colonel Hockley, an old Bombay officer settled in Ipswich, with whom he read *Jāmi*. On leaving school he at first entered into commerce under his father, and it was in course of business visits to London that he formed the acquaintance of H. H.

Wilson, then Librarian of the India House. He gradually acquired considerable proficiency in Sanskrit; for in 1851 he published a translation of Kālidāsa's play "Vikramorvaśi." His actual systematic study under Wilson commenced, however, only in 1853, as we learn from his address to the Cambridge Electoral Roll. In 1847 he married Miss Elizabeth Charlesworth, and in 1850 entered the University of Oxford, being then obliged, as a married man, to enter a hall (Magdalen Hall), not a College. He took honours both in Classics (First Class, Final 1854) and in Mathematics, and the University somewhat tardily acknowledged his eminence by the honorary degree of D.C.L. in 1896. In 1856 he was appointed Professor of History at Presidency College, Calcutta, and in 1858 also Principal of the Sanskrit College in the same City. Here he remained till 1864, and laid the real foundation of his reputation as an Orientalist, the happy combination of wide and deep Western Culture with the concentrated traditional lore of the Eastern pandit.

In 1867 Cowell was elected to the Chair of Sanskrit, then just established at Cambridge, where the rest of his life was spent, both as a University Professor and a Fellow of Corpus Christi College (1874). Here he taught not only Sanskrit of varied periods and styles (*e.g.*, Indian Philosophy, thirty years ago hardly known in the Continental Universities), but also Comparative Philology and Persian. These subjects have now been provided by the University with separate teachers, and the same has been done for elementary Sanskrit, and justly, so as to economize the lavish expenditure of precious time that Cowell would bestow as freely on the beginner as on the advanced student. His Pali classes, started some five and twenty years ago, have resulted in the Cambridge translation of the Jātaka-book, under his guidance. More recently he read Zend with several pupils.

His own mental history may be illustrated by some of his chief works. To the Calcutta period belong his two editions and translations of Upaniṣads, and the text and translation of the difficult work of Indian logic, the "Kusumāñjali." Many native scholars were at the same time encouraged to edit texts which appeared with English introductions by the Professor. Similarly, on his return to England, his first Cambridge pupil, Palmer Boyd, was induced to translate the newly discovered Buddhist drama, 'Nāgānanda, which appeared with an introduction by Cowell. To the same time belongs his new edition of the Prakrit Grammar of Vararuci, of which he had issued a first edition in Oxford days. Two important works published in Cambridge days represent the continuance of researches in Indian philosophy begun in India. These are the "Aphorisms of Śāṅḍilya" (1878), and the Sarvadarśana-saṃgraha," translated (portions also by Mr. A. E. Gough) in 1882.

Among the more recent of his important works were his text and translation of the "Buddhacarita" (1893-4), a publication which has created great interest amongst critical scholars abroad. Most characteristic, too, was his work for and with others. He more than once accepted the task, at times ungrateful, of finishing works of deceased scholars. Such were Wilson's version of the "Rigveda" (finally completed by his pupil, Mr. W. F. Webster), and the huge work of Mādhava left incomplete by Goldstücker. His chief works done with others were: "The Black Yajurveda" (edited partly with Dr. Röer, 1858-64; Catalogue of Buddhist Sanskrit MSS. (with Dr. Eggeling), 1875; "Divyāvādāna," edited with the late R. A. Neil, 1886; "Harṣacarita," translated with Mr. F. W. Thomas, 1897. Lastly, let it never be forgotten that it was he, the scholar, known to the few, who introduced Omar Khayyam to FitzGerald, whose version is known wherever English literature is known.

#### SIR GEORGE GABRIEL STOKES.

Sir George Gabriel Stokes was born on the 13th August, 1819, at Skreen, Sligo, of which parish his father was Rector. At the age of sixteen, he was placed in Bristol College, of which Dr. Jerrard was Principal. He entered Pembroke College, Cambridge, in 1837, graduated in 1841 as Senior Wrangler and First Smith's Prizeman, became Fellow of his College in the same year, and in 1849, succeeded King as Lucasian Professor of Mathematics in the University of Cambridge. He continued to occupy Newton's chair till the day of his death which took place on the 1st February, 1903. Stokes was elected a Fellow of the Royal Society in 1851, acted as its Secretary from 1854 to 1885, as its President from 1885 to 1890, and as its Vice-President down to 1892. The Royal Society awarded him the Rumford Medal in 1852 and the Copley Medal in 1893. The Cambridge Philosophical Society awarded him its first Hopkins Prize, in 1867. He represented the University of Cambridge in Parliament from 1887-91.

It would be impossible within the limits of a brief obituary notice to give any adequate account of the scientific work of Sir George Stokes and its far-reaching consequences. There was no department of physical science, except electricity, which was not enriched by his brilliant original investigations. Students of hydro-dynamics can scarcely realize what advance was made by his great paper on the viscosity of fluids, published just sixty years ago. This was followed seven years later, by the paper on the effect of the internal friction of fluids on the motion of pendulums, which illustrates the wonderful mathematical resources of the author and his capacity for their application to the problems of physical science. Between these two papers came the epoch-making paper on the theory

of oscillatory waves, containing a masterly investigation of the motion of steep deep-seawaves. Of his contributions to the theory of light, the most important are the Memoir on the dynamical theory of diffraction published in 1849, and the Memoir on the refrangibility of light communicated to the Royal Society in 1852. The first of these papers contains the mathematical theory of the propagation of motion in a homogeneous elastic medium, followed by an elaborate experimental investigation establishing that the plane of polarization is the plane perpendicular to the direction of vibrations in plane-polarized light. The second paper contains a description of his now famous discovery of *fluorescence*. But although his contributions to hydro-dynamics, elasticity of solids and fluids, wave-motion in elastic solids and fluids, and the theory of optics are of enduring value, it would be a mistake to suppose that his contributions to pure mathematics were less original or less important. As an illustration we may refer to the theorem, now known as Stokes' theorem, which enables us to convert surface-integrals into line-integrals; it was first set as an examination question in a Smith's Prize-paper and is of as wide an application as the theorem of Green. Reference may also be made to his paper on definite integrals published in 1850; the theorems contained in this paper admit of extremely interesting applications to the theory of the rainbow.

The University of Cambridge undertook the publication of his collected mathematical and physical papers many years ago; the first volume was published in 1880, the second in 1883, and the third in 1901. These volumes bring us down to 1852. The Royal Society Catalogue shows that up to 1883, Stokes had published 106 original papers. It is to be hoped that a complete collection of the remaining papers will be speedily re-published.

Stokes was an Honorary Member of the most famous scientific societies of Europe and America which felt honoured by associating his name with themselves. He was elected an Honorary Member of this Society in 1894.

ASUTOSH MUKHOPADHYAYA.

The Chairman announced that Mr. E. P. Stebbing had been appointed to officiate as the Natural History Secretary of the Society during the absence of Captain L. Rogers, I.M.S.

The General Secretary read the names of the following gentlemen who had been appointed to serve on the various Committees for the present year:—

*Finance and Visiting Committee.*

Dr. T. Bloch, Mr. E. A. Gait, Mr. H. H. Risley, Mahamahopadhyaya

Haraprasad Shastri, Dr. E. D. Ross, Hon. Dr. Asutosh Mukhopadhyaya, Mr. J. Bathgate, Mr. H. E. Kempthorne.

*Library Committee.*

Dr. T. Bloch, Mr. D. Hooper, Mr. C. W. McMinn, Hon. Dr. Asutosh Mukhopadhyaya, Mahamahopadhyaya Haraprasad Shastri, Mr. E. Thornton, Mr. H. H. Mann.

*Philological Committee.*

Maulavi Ahmad, Dr. T. Bloch, Babu Pratapa Chandra Ghosh, Shams-ul-Ulama Mahomed Shaikh Gilani, Hon. Dr. Asutosh Mukhopadhyaya, Major D. C. Phillott, Pandit Satyavrata Samasrami, Mahamahopadhyaya Haraprasad Shastri, Mahamahopadhyaya Chandrakanta Tarkalankara, Dr. G. Thibaut, Babu Nagendra Nath Vasu, Mr. A. Venis, Dr. E. D. Ross, Mr. E. A. Gait, Pandit Satis Chandra Vidyābhūṣaṇa.

*Coins Committee.*

Lt.-Col. D. S. E. Bain, Dr. T. Bloch, Hon. Mr. J. A. Bourdillon, Babu Panchanan Mukerjee, Mr. E. Thurston, Mr. M. J. Seth, Mr. H. N. Wright.

Mr. Burkill exhibited on behalf of Mr. J. T. Tyson a dagger found in the soil of virgin forest near Chalsa, in the Bengal Duars. The origin of the dagger is quite unknown. It is now  $14\frac{3}{4}$  inches long and before rust ate the tip off was probably about an inch longer. The blade is  $6\frac{1}{2}$  inches long, has been two-edged and has had a median line down each face. It is  $1\frac{1}{4}$  inches broad at the broadest part. Where it begins to narrow to fit into the hilt two holes have been bored through the blade; these holes are  $\frac{1}{4}$  inch long,  $\frac{1}{8}$  inch broad, and  $\frac{3}{4}$  inch apart.

The hilt is very small being only  $3\frac{1}{2}$  inches long; it is in section elliptic, the long axis  $1\frac{1}{8}$  inch at the middle of the grip and the short  $\frac{1}{2}$  inch. The ends of the hilt are wider than the middle. The blade and the hilt are in the same straight line. The finish of the hilt is good, but the blade fits very badly into it and a great deal of packing must have been put into the joint of the two. The hilt, Mr. D. Hooper finds, is made of an alloy of copper and tin: and the only ornamentation present consists of two simple lines round it.

The following papers were read:—

1. *The Śarāka caste of India identified with the Sērīkē people of Central Asia.*—By SATIS CHANDRA VIDYĀBHŪṢAṆA, M.A., M.R.A.S.

(Abstract.)

The people known as Śarāka or Sārāka live in West Bengal, Chota Nagpur, Orissa, and even in Assam. The celebrated ethnologist, Mr.



H. H. Risley, was perhaps the first scholar who gave a systematic account of the Śarāka caste which, according to him, is a Hinduised remnant of the early Jain people. Mr. Streatfield (Deputy Commissioner of Ranchi), observes that the Śarāks are purely Aryans in blood and seem originally to have been Jains though, however, they do now worship Hindu gods. Mr. E. A. Gait, who regards them as Buddhists, has given an elaborate account of them in the last Census Report of Bengal. Mahāmahopādhyāya Haraprasad Shāstri says that they are reciters of "Baudh mantras" or Buddhist formulas. In the *Brahma-vaivarta-purāṇa* they are regarded as a mixed Hindu caste born from a father who was a Mleccha weaver and a mother who was a Hindu weaver. Taking their own evidence we find that they call themselves Hindus, have priests of their own caste and also occasionally employ Brahmans. The Śarākas of Chota Nagpur as a rule are well-to-do land-holders and money-lenders, while those of West Bengal and Orissa are mostly excellent weavers. Dr. Dalton, in his *Descriptive Ethnology of Bengal*, mentions an Assamese hill tribe called Śarāka, that is a branch of the Hill Miris inhabiting the north of Bordoloni on both banks of the hill course of the Subanshiri river. They entered Assam by plundering some of the villages there, obtained under the Assam Raj a sort of prescriptive right to levy black-mail, and now receive annually from the British Government an equivalent in the form of a money-payment. Their religion consists in the belief in sylvan deities.

In the North-Western Provinces and Central India there are classes of people called Saraogies. They live in great number in Muzaffernagar, Mainpuri, Benares, Jaipur, Hoshangabad, &c. They are very rich and influential, and are Jains by religion.

The scholars, whose opinions have been quoted above, almost unanimously hold that Śarākas and Saraogies are identical in race, and that these two names are mere corruptions of *Śrāvaka* which is a Jain or Buddhist technicality for a religious devotee. While expressing my indebtedness to the abovementioned scholars for the interesting accounts they have given of the Śarāka and Saraogie castes, I beg altogether to differ from them in respect of the origins of the castes themselves.

In my humble opinion neither the term Śarāka nor Saraogie can be derived from *Śrāvaka*. The Pali form of *Śrāvaka* is *Sāvaka*, which can hardly assume the form Śarāka or Saraogie in which *ra* is so prominent. I believe the name *Sarāka* is derived from *Sērikē*, which was a vast province in Central Asia. The chapter which Ptolemy has devoted to *Sērikē* has given rise to various unprofitable controversies. The land of *Sērikē* is variously supposed to have lain in one or other of the many countries that intervene between Eastern Turkistan in the north and

the province of Pegu in the south. Scholars now generally maintain that Sērikē comprised the northern parts of China or those which travellers and traders reached by land. The ancestors of Indian Śarākas did therefore probably originally come here from Northern China. The Śarākas of India like the people of Northern China are noted for their skill in weaving. In Sanskrit literature such as in the works of Kālidāsa and others, *Cīnāṇṇuka* or Chinese cloth, is a general name for all soft silken cloths. It is scarcely necessary for me to state here that the intercourse between the Indians and Chinese has existed since a very remote antiquity. According to the Mahābhārata (2-26-9) Bhagadatta, King of Assam, sent Kirāta and Chinese soldiers to the great war of Kurukṣetra, near Delhi. Kālidāsa in his Raghuvamśa states that Raghu, King of Ayodhyā, set out for conquest through the north-western frontier of India, conquered many people such as Utsava-Samketas, or U-tsang tribe in Central Tibet and came back to his capital through the north-eastern frontier crossing the Brahmaputra or Sangpo river in Assam. But perhaps the most intimate relation between India and China grew up with the establishment of Buddhism in the latter country. Between 2nd and 10th centuries A.D., hundreds of Indian missionaries went to China and Chinese pilgrims came to India. The Śarākas were in all probability traders who followed the land-route previously trodden over by religious pilgrims. The period of their migration to India was probably the 12th century A.D.

The Sarnogies, I believe, are descended from the Sorgæ mentioned by Megasthenes (Fragm. LVI) and Pliny (Hist. Nat. VI) in their list of the Indian races. The two cities possessed by the Sorgæ are located by Megasthenes near the base of the Caucasus Mountain along the northern frontier of Afghanistan. The Sorgæ were perhaps the same as the people living in the city of Sariga which, according to Ptolemy, was situated in Area in the north-western part of Afghanistan. In the sacred books of the Jains themselves it is found that Acharyya Jina Sena, 643 years after the death of Mahāvira, i.e., 116 in A.D., converted 82 Rajput villages and two villages of Vaiśyas at a place now called Khandela near Sikar in the north of Jaipur. The people who were thus converted were known under the name of Saraogies. Believing in this account supplied by the Jains themselves we may conclude that the people called Sorgæ that, in the time of Megasthenes in the 4th century B.C., lived in the north-western part of Afghanistan, advanced in the 2nd century A.D. so far down as up to the north of Jaipur in Rajputana and became designated as Saraogies.

I have not been able to trace any kinship of the Śarākas of West Bengal, Chota Nagpur, Orissa and Assam, with the Saraogies of North-

Western Provinces and Central India. In my opinion Śarākas and Saraogies are quite different people. The former who belong to the Mongolian race, entered India about the 12th century A.D. through the north-eastern frontier and introduced much improvement in the art of weaving, &c., and generally in trade and commerce. The latter, who are a branch of the Caucasian race, came into India about the 2nd century A.D. through the north-western frontier and formed themselves into a most influential community of traders and money-lenders. The Saraogies are Jains while the Śarākas are practically Hindus though originally they perhaps accepted other creeds too.

2. *On the origin of the Nīkmard fair in Dinājpur.*—By MAULAVI ABDUL WALLI.

(Abstract.)

This fair or *melā* commences on the 1st Baiçākh and lasts for a week. It is attended by about a hundred thousand people of all classes and religions. Some come for pleasure and others for trade. It is held in honour of a Muhammadan fakir from Bokhara whose *soubriquet* was Nīkmard, "the holy man." According to the legend there was a Hindu rājā named Pitrāj, who, being childless, begged the saint to pray for him and promised him a handsome reward, if he should be blessed with a son. A son was born, but the rājā forgot his promise, and Nīkmard with his disciples engaged in hostilities. The rājā defeated and killed him. He was canonized as "Nīkmard the Martyr." The care of his shrine and the profits from the fair are now in the hands of the fakirs of Baliyā-Dighi.

3. *On the history of the Hutwa Raj.*—By GIRINDRA NATH DUTT, B.A.

(Abstract.)

The Rajas of Hutwa are of the same caste as the Rajas of Benares, Bettiah, and Tikari. They are popularly called Babhuns or Bhumihar Babbans to which caste the majority of the landed aristocracy of Behar belong. The Hutwa Raj family dates its origin from a prehistoric age. The present minor Maharaj-Kumar traces his descent from a long line of ancestors whom he counts up to 102 degrees above him. The founder of the dynasty was Raja Bir Sen. Allowing even an average of 25 years for each life, Raja Bir Sen would be about 25 centuries older than the present progeny of his and this would carry us back some six centuries before the Christian era, i.e., nearly about the historical date of Buddha's birth. The patronymic of the earlier Rajas was "Sen" which in the 16th descent was changed to "Sinha" and in the 83rd to "Mull" and in the 87th to "Shahi" which last patronymic still continues in the

family. The 83rd Raja, Jai Mal, seems to have flourished during the period when Baber defeated Mahommed Lodi\* and appointed Darya Khan governor of Behar (1529) and the 86th Raja who obtained the title of Maharaja was Kallyan Mull who flourished in the reign of Akbar in 1600 A.D. and made Kallyanpur his seat. The 87th in descent, Khemkaran, obtained both the title of Maharaja Bahadur and Shahi in the reign of Jahangir 1625 A.D. The 95th who flourished in about 1719 was Maharaja Jubraj Shahi who wrested Pergannah Seepah, which still forms a portion of the Raj, from Raja Kabul Mahmud of Barheria and the 98th Maharaja Sirdar Shahi who flourished till 1747 invaded the principality of Majhauri, in Gorruckpur, and demolished their fortress. One of the conditions on which Sirdar Shahi made peace with the Majhauri Raja was that the latter was not to go about with *Nishan* and *Dunkas*, ensigns of Rajaship, until he had re-taken these by force from the Hosseypore (Hutwa) Rajas. These *Nishan* and *Dunkas* of Majhauri are said to be still in possession of the Tumcohi Rajas, the elder branch of the Hutwa Raj family, residing in Gorruckpore District. The 99th of the line was Maharaja Fateh Shahi Bahadur who was a rebel against the British Government in 1767. At the end of the year 1767 when the Revenue Collector of Sircar Saran demanded rent on behalf of the Company Fateh Shahi not only refused to pay but gave fight to the Company's troops sent against him in consequence and it was with much difficulty that these troops succeeded in expelling him from Hosseypore and his Raj was farmed out by the Government. Fateh Shahi retired into the jungles bordering on the then Independent Dominion of the Vizeer of Oudh and the Province of Behar and commenced depredations making raids into the District, to plunder villages and stop the collections of revenue and killed the Government farmer Govind Ram. The Raj was then farmed out by Government to his cousin Babu Basant Shahi and one Mir Jhumla, both of whom he killed in a night attack and sent the head of the former to his wife at Hosseypore who with her husband's head on her lap ascended the funeral pyre entrusting his minor son, Mohesh Dutt Shahi to the charge of a Rajput feudal lord Dhujjoo Singh. By his secure position in the jungle Fateh Shahi baffled all attempts of the British troops to seize his person or to check his depredations. The Government of Warren Hastings declared Fateh Shahi to have forfeited his zemindary and wrote to the Nawab of Oudh to settle the part of the zemindary lying in his dominion with the Government farmer with whom the rest of his zemindary was settled; but nothing was done as the British Government was soon after deeply engrossed with

\* Copper coins of the Lodis are often found in these parts. The author found some as also the former D.S.P., Mr. Knyvett, near Katya outpost in 1898.

the rebellion of Cheyt Singh of Benares when Fateh Shahi with an enormous army again invaded the country, but was driven away after a hard struggle by the combined forces of Dhujjoo Singh and the English under Captain Lucas. Fateh Shahi at last became a *fakir* in 1808, after leading the life of a Robin Hood continuously for 18 years and a retired life for 24 years. The armour which he used to wear is said to exist still in the Tumcohi Raj.

In 1785 when Government granted the zemindary of Hosseypore to Babu Mohesh Dutt Shahi, son of Babu Basant Shahi, he died a little before the birth of his posthumous son (afterwards Maharaja Bahadur), Chatterdhari Shahi. On the 21st January, 1791, the Government of Lord Cornwallis conferred on Chatterdhari Shahi, a minor of five years old, the confiscated estate of Hosseypore which passed under the protection of the Court of Wards, then newly formed. The Government of Lord Auckland on the 27th February, 1837, conferred on Chatterdhari Shahi the title of "Maharajah Bahadur." Chatterdhari Shahi rendered valuable services to British Government during the Mutiny of 1857-58 by placing the whole resources of the Raj at the disposal of Government and, though a very old man, himself fighting against the mutineers and restoring peace and order in the District. As he died soon after the mutiny the British Government granted to his successor, the 100th in descent, Maharaja Rajendra Protap Shahi Bahadur, a perpetual rent-free *Jaagir* in Shahabad, from the confiscated estates of the rebel Kuar Singh, yielding an annual rental of Rs. 20,000. Rajendra Protap Shahi was installed Maharaja Bahadur in 1858 and died in 1871. The great Hosseypore Raj case by which the Privy Council decreed the estate to be an impartible Raj descendible to the eldest son to the exclusion of all younger brothers took place in his time. He was succeeded by his son the late Maharaja Sir Krishna Protap Shahi Bahadur, K.C.I.E., the 101 in descent, under whom the prosperity of the Hutwa Raj reached its zenith. He died in October, 1896, leaving a son of four years old and a daughter, and the Court of Wards has taken up the administration of the Raj during the minority of the minor Maharaja Guru Mahadevasram Prosad Shahi.

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**PROCEEDINGS**  
OF THE  
**ASIATIC SOCIETY OF BENGAL.**  
FOR APRIL, 1903.

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The Monthly General Meeting of the Society was held on Wednesday, the 1st April, 1903, at 9 P.M.

THE HON. MR. C. W. BOLTON, C.S.I., I.C.S., President, in the chair.

The following members were present:—

Mr. S. Abdul Alim, Mr. C. G. H. Allen, Mr. I. H. Burkill, Mr. T. H. Holland, Mr. D. Hooper, Mr. H. E. Kempthorne, Mr. T. D. La Touche, Mr. C. Little, Mr. J. Macfarlane, Kumar Ramessur Maliah, Mr. H. H. Mann, Major F. P. Maynard, I.M.S., Major D. Prain, I.M.S., Dr. E. D. Ross, Pandit Yogesa Chandra Sastree, Dr. C. Schulten, Mr. E. P. Stebbing, Pandit Satis Chandra Vidyabhūṣaṇa, Mr. H. Wheeler, Mr. C. R. Wilson, Mr. H. C. Woodman.

The minutes of the last meeting were read and confirmed.

Fifteen presentations were announced.

Mr. M. Churchill Shann and Maulavi Syed Abul Aas were balloted for and elected Ordinary Members.

The President announced that the Council had elected Mr. F. E. Pargiter, B.A., I.C.S., a member of Council and Vice-President of the Society, in the place of Col. T. H. Hendley, C.I.E., resigned.

The General Secretary reported that Mr. E. P. Stebbing, Natural History Secretary, had been appointed to serve on the Finance Committee of the Society during the present year.

It was announced that Col. T. H. Hendley, I.M.S., had expressed a wish to withdraw from the Society.

The General Secretary reported the death of Mr. W. Connan, an Ordinary Member of the Society.

The General Secretary reported the presentation of 27 silver coins from the Government of United Provinces of Agra and Oudh.

The General Secretary announced the presentation of three large photographs of Sculptures by Mr. A. E. Caddy.

The General Secretary read the following circular issued by a Committee of the British Association for the purpose of collecting photographs of Anthropological interest, forwarded by Mr. T. H. Holland, Director, Geological Survey of India.

## BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

### ANTHROPOLOGICAL PHOTOGRAPHS COMMITTEE.

*President* : C. H. READ, F.S.A., Pres., Anthr. Inst., British Museum, W.C.

*Secretary* : J. L. MYRES, F.S.A., F.R.G.S., Christ Church, Oxford.

This Committee was appointed by the British Association for the Advancement of Science in September, 1898, to provide for the "Collection, Preservation, and Systematic Registration of Photographs of Anthropological Interest."

A similar Committee on Geological Photographs was appointed in 1889, and has organised the valuable collection preserved in the Museum of Practical Geology. The Royal Geographical Society has gradually collected a large number of geographical photographs, many of which are also of anthropological interest. More recently the Hellenic Society has announced a large special collection for the use of students of the topography, civilisation and art of Greece. And the Anthropological Institute possesses a considerable collection of photographs, which have been lately mounted and classified; and has permitted the registration of these in the list of the new Anthropological Photographs' Committee.

The considerations which led to the appointment of this Committee are briefly as follows :—

(1) A very large number of Anthropological phenomena can only be studied in the field, or by means of accurate reproductions: but the latter are in many cases difficult to procure, except where typical ex-



amples have been regularly published ; and even then it is frequently of advantage to be able to acquire separate copies of single plates or illustrations, for purposes of comparison, without breaking up a collection or a volume.

(2) On the other hand, most travellers, collectors, and museum officials find it necessary to make many photographic negatives in the course of their own work, for which they themselves have no further use, but which they would gladly make accessible to other students, if any scheme existed by which this could be done without trouble to themselves. Such negatives also accumulate, and take up valuable space ; and are very liable to damage through neglect.

(3) Further, though many professional photographers in remote parts of the world have made admirable use of their opportunities of recording native types, customs, and handiwork, there has hitherto existed no single record of what has been done in this direction ; with the result that valuable collections have remained practically inaccessible to those in whose interest they have been made. In the case of the Hellenic Society, already cited, the inclusion, in the reference collection, of selected prints from the negatives of professional photographers abroad has been found to be of great advantage to teachers and students ; who consult it with the view of choosing the best representations to add to their own series.

What appears therefore to be required is, in the first place, a Register of the photographic negatives which can be made generally available, illustrated by a permanent print from each, preserved at an accessible centre ; together with an arrangement by which properly qualified students may be enabled to have duplicate prints made from them for their own use, at a reasonable price. In any such scheme it would be understood that the copyright, for purposes of publication, would remain with the owner of the negative, and that all duplicate prints distributed under this arrangement would be subject to that qualification.

In establishing such a Register or Collection of Anthropological Photographs, the Committee invites the co-operation of all owners of suitable photographic negatives, who are requested to submit for registration one unmounted print from each negative (which will be mounted by the Committee and preserved either at the office of the British Association, or in some central and accessible place) ; together with a full description of the photograph. The latter should state, as on the form appended :—

- (1) The subject of the photograph, and the place where the original is (or was) to be found.
- (2) The name and address of the owner of the negative.

- (3) The whereabouts of the negative itself ; *i.e.*, whether it is retained by the owner, or deposited with a professional photographer or with the Committee.
- (4) The terms on which prints, enlargements, and lantern slides will be supplied when ordered through the Committee.

The Committee has made arrangements for the storage, and insurance, of any negatives which may be deposited on loan ; and for the production of prints and lantern slides from them to order : and a number of negatives have already been so deposited.

Additional copies of the form appended may be obtained from the Secretary to the Committee, MR. J. L. MYRES, Christ Church, Oxford, or from the office of the BRITISH ASSOCIATION, Burlington House, London, W.

The General Secretary read the following appeal from the Committee of the Memorial Fund to the late Dr. R. Rost.

MEMORIAL

TO THE LATE

DR. R. ROST, C.I.E., LL.D., M.A., Ph.D.,

LIBRARIAN TO THE INDIA OFFICE.

Dear Sir,

The undermentioned Committee has been formed for the purpose of collecting subscriptions to erect a Memorial Tablet or a Bronze Bust to the Memory of the late Dr. R. Rost, the eminent Oriental Scholar, who for so many years held with distinction the Librarianship of the India Office, and at all times rendered such valuable help to Students and to Oriental researches.

It is proposed to erect the Memorial in the India Office Library, and permission to do so has been obtained from the Secretary of State for India.

The Honorary Secretary to the Fund will be glad to hear at an early date if you wish to participate in this Memorial.

A Subscription Form is annexed.

Yours faithfully,

The Committee :

THE RIGHT HON. LORD AVEBURY.	PROFESSOR T. W. RHYS DAVIDS.
SIR GEORGE BIRDWOOD, K.C.I.E.	SIR JOHN JARDINE, K.C.I.E.
DR. JAMES BURGESS, C.I.E.	C. P. LUCAS, ESQ., C.B.
REV. J. ESTLIN CARPENTER, M.A.	DR. M. A. STEIN.
C. G. LUZAC, ESQ., <i>Honorary Secretary and Treasurer.</i>	

The Philological Secretary read abstracts from a report by Sir Charles Lyall, the representative of the Government of India at the last Congress of Orientalists, which was held at Hamburg in September, 1902. A copy of the report was forwarded to the Society by Government :—

6TH DECEMBER, 1902.

SIR,

I have the honour to state that, in accordance with the request conveyed in your letter of the 3rd June, 1902 (R. and L. 7231 1902), I attended the XIIIth Congress of Orientalists, held at Hamburg from the 4th to the 10th September inclusive.

Although I was the only official representative of the Indian Government present, the Congress was attended by several gentlemen either now or lately in Indian service. On the whole, however, the number of representatives of India present was less than at previous Congresses.

The business of the Congress commenced with an informal meeting on the evening of the 4th September, followed by a formal opening on the morning of the 5th, after which the sectional sittings proceeded uninterrupted (with the interval of Sunday the 7th) until the 9th inclusive. The 10th was devoted to the final general meeting called to consider the resolutions passed in the Sections. The time available was thus rather short—only half that allotted to the XIIth Congress at Rome in October 1899—and it was not possible, as on the last occasion, to attend continuously more than one Section. I was able, however, to be present at most of the sittings of the Indian Section (II. A); and at some of those of the Islamic Section (VI).

In the Indian Section on the afternoon of the 5th September I read Dr. G. A. Grierson's Report on the present stage of his work on the Linguistic Survey of India (copy attached), and presented to the Congress the two volumes (No. III. Tibeto-Barman: Bodo, Naga and Kachiu languages, and No. VI. Indo-Aryan: Eastern Hindi) which had been completed since the XIIth Congress was held at Rome in 1899. A vote of thanks to the Indian Government for the organization of this splendid work was unanimously passed by the Section, and their best wishes were ordered to be conveyed to Dr. Grierson for the successful completion of his great undertaking.

On the afternoon of the 6th September, before the combined Indian and Central Asian Sections, Dr. M. A. Stein delivered a lecture on his journey of archaeological exploration in Eastern Turkestan, and exhibited a number of beautiful lantern views of the scenes visited and objects found during his expedition. He also showed a select collection of the antiquities

and specimens of writing brought back by him. I think I may say that this lecture was one of the most interesting and most appreciated features of the Congress. A resolution expressing the thanks of the Congress to the Government of India for the encouragement to Oriental research given by their support of Dr. Stein's expedition, and appreciation of the highly important results achieved, proposed by Professor Henri Cordier, of Paris, and seconded by Professor Macdonell, of Oxford, was passed, which, having been confirmed by the general meeting at the end of the Congress, will be noticed further on.

A meeting was held on the 8th September of the International Committee of the India Exploration Fund, at which I presided. Little in the way of collecting subscriptions for this object in the countries representatives of which attended had been possible during the years which have elapsed since the Rome Congress of 1899; but the proceedings taken were described, and further measures likely to promote the interest of the Fund discussed. It was resolved to invite the general meeting to re-appoint the committee.

Professors Kuhn and Scherman, of Munich, laid before the Indian Section a report on the progress made with their Indian Bibliography, to which a subvention has been promised by the Secretary of State for India in Council.

I annex to this report extracts from the 10th Bulletin of the Congress setting forth the resolutions formally passed at the general meeting of the 10th September, so far as they touch on subjects of interest to the Indian Government.

Resolution No. 14 deals with the newly established "International Association for the Exploration of Central and Eastern Asia," with headquarters at St. Petersburg.

Resolution No. 15 deals with the publication of the Proceedings of the Congress. It will be seen that it has been decided no longer to publish communications *in extenso*, and it may be expected that the abstract of Proceedings which, under the new arrangement, will form the record of the Congress, will be received at an early date.

I have, etc.,

C. J. LYALL.

The Under Secretary of State  
for India.

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*Resolutions of the XIIIth International Congress of Orientalists, passed at the General Meeting of the 10th September, 1902.*

No. 3. The combined Indian, Central Asian, and Far Eastern Sections of the XIIIth International Congress of Orientalists, held at

Hamburg, beg to express their thanks to His Excellency the Viceroy and the Government of India for the great encouragement they have extended to Oriental learning and research, by granting to Dr. M. A. Stein the necessary leisure and means for the prosecution of his recent explorations in Eastern Turkestan. The thanks of the XIIIth International Congress of Orientalists are equally to be conveyed to Mr. G. Macartney, C.I.E., the political representative of the Government of India at Kashgar, and to the Mandarins Pan-Darin and Khan Daloi, of the Provincial Government of Chinese Turkestan, for the very effective help they had given to Dr. Stein in the course of his archæological and geographical explorations about Khotan, as well as to Mr. Petrovsky, the Imperial Consul-General of Russia at Kashgar, for the valuable assistance rendered by him towards the safe transport of Dr. Stein's collection of antiquities, from Turkestan to Europe. They desire at the same time to express their appreciation of the highly important results which have rewarded the labours of the scholar selected by the Government of India, and which represent an ample return for the outlay incurred, owing to the practical nature of the operations conducted by him. They would also venture to express the hope that facilities will be given to him for completing the publication and elaboration of the results obtained, and that the Government will be pleased to sanction any necessary extension for this purpose of Dr. Stein's present deputation. Finally, they venture to express the hope, that when circumstances permit, the interest of archæological research will be allowed to benefit by Dr. Stein's special experience and previous knowledge, which are likely to facilitate considerably the further explorations which it is desirable should be entrusted to him in the interests of India.

No. 5. (Translation). The XIIIth International Congress of Orientalists is requested to nominate afresh the committee appointed in Rome to promote the establishment of the "India Exploration Fund," and to instruct it to report to the next Congress the results of the action taken by it.

Agreed to on the 10th September, 1902.

No. 6. The Indian Section of the XIIIth Congress of Orientalists at Hamburg has received, with the greatest satisfaction, the report on the progress of the proposed "Manual of Indo-Aryan Bibliography," edited by Professor E. Kuhn and Professor L. Scherman, laid before the Section by Professor Kuhn.

The Section wishes to convey their best thanks to the Government of India for the subvention of this undertaking, so important for Indian studies, and recommends it to the support of learned Societies.

No. 8. Read a report on the resolutions of the committee appointed

to consider the necessity for a critical edition of the text of the *Mahābhārata*. Resolved :

That a competent scholar should be sent to India to collect the necessary MSS., and that Dr. Lüders should be selected for this work. The cost of this would be about 500, and the time required one year. Professor Bloomfield was authorised to represent this committee in America for the purpose of obtaining a contribution towards this amount.

No. 9. At the XIIIth International Congress of Orientalists held at Hamburg in September, 1902, Count F. L. Pullé, Professor of Sanskrit in the University of Bologna, having exhibited and explained in the Indian Section the highly interesting historical series of cartographic representations of India collected by him with infinite care and research, the Section expresses an earnest hope that means may be found to make this important set of maps generally accessible by publication to those interested in geographical and cartographic research.

No. 12. (Translation). In consideration of the circumstance that the same manuscript is often copied by several scholars, and published by them without knowledge of the work done upon it by others, the Chief Librarians of the University Libraries, College Libraries, and the British Museum are requested to have a record kept of each person who makes a copy of a MS., and to give information to any later copyist, on his application, as to whether, and by whom, a MS. has previously been copied.

No. 14. (Translation). On the 8th September, 1902, those members of the Committee of the "International Association for the Exploration of Central and Eastern Asia" appointed at the XIIth International Congress of Orientalists in Rome who were present at the XIIIth Congress in Hamburg assembled under the presidency of Dr. W. von Radloff (St. Petersburg). A draft of the statutes of the proposed association, prepared by scholars at St. Petersburg, was submitted for discussion, and settled paragraph by paragraph in French by the meeting.

The President having informed the meeting that he was authorised to state, on the part of the Russian Government, that that Government intended to constitute a Russian Committee of the Association, under the Jurisdiction of the Imperial Ministry for Foreign Affairs, the meeting resolved :—

- (1) To confirm the statutes of "the Association for the Historical, Archæological, Linguistic, and Ethnographic Exploration of Central and Eastern Asia";
- (2) To entrust the members chosen at Rome, MM. W. von Radloff

and Serge von Oldenburg, with the formation of a Central Committee of the said Association ; and

(3) To name the following members as representatives of the several countries :—

*France.*—MM. H. Cordier, E. Senart, and M. A. Foucher.

*Great Britain.*—Lord Reay, Professor Rhys-Davids, and Dr. A. Stein (India).

*Germany.*—Drs. R. Pischel, Grünwedel, Ernst Kuhn, and E. Leumann.

*Holland.*—Drs. Kern, De Groot, and De Goeje.

*Denmark.*—Dr. V. Thomsen.

*Sweden.*—Dr. D. Montelius.

*Norway.*—Dr. J. Lieblein.

*Finland.*—Dr. O. Donner.

*Austria.*—Ritter J. von Karabacek and Professor L. von Schroeder.

*Hungary.*—Dr. A. Vambéry and Dr. Herrmann.

*Switzerland.*—Professor Ed. Naville.

*Italy.*—Professor L. Nocentini.

*America.*—Professor F. Hirth.

No. 15. Especially as experience has shown, that the publication *in extenso* of all the communications presented at the Congress can follow only so late afterwards that the contents of many contributions are overtaken by the advance in science before they can appear;

And whereas it would not be difficult for every contribution to be published in some one of special journals or periodicals where it would come more directly to the knowledge of those working in the particular subject.

Therefore the General Session of the XIIIth International Congress of Orientalists resolves that—

The issuing of the communications *in extenso* be given up. That the Executive Committee in Hamburg be entrusted with the duty of publishing within at least six months, the essential points of those contributions and discussions, of which a *résumé* is handed to the General Secretary within one month after the close of the Congress. The length of the single *résumés*, so far as possible, shall not exceed two printed pages, of the form and size of the previous reports. The Congress requests that the Board of Directors of the German Oriental Society lend their aid to the Executive Committee in Hamburg in the matter of publication.

*Report on the Progress of the Linguistic Survey of India presented to the XIIIth International Congress of Orientalists.*

The Linguistic Survey of India has made considerable progress since I had the honour of submitting a report to the XIIth Oriental Congress. I laid before that Congress two volumes, one containing the survey of the Bengali language, and the other a collection of various languages, spoken on the North-Western Frontier of British India. I have now the honour to lay before the present Congress two more volumes, one dealing with the Bodo, Nāga, and Kachin groups of the Tibeto-Burman family, and the other dealing with Eastern Hindī.

The Survey has now arrived at a stage at which I can forecaste its extent, and the probable number of volumes which it will contain. Subject to subsequent revision, the following is the proposed list of volumes:—

- Vol. I. Introductory.
- Vol. II. Mōn-Khmēr and Tai families.
- Vol. III., Part I. Tibeto-Burman languages of Tibet and North Assam.
- Part II. Bodo, Nāga, and Kachin groups of the Tibeto-Burman languages.
- Part III. Kuki-Chin and Burma groups of the Tibeto-Burman languages.
- Vol. IV. Dravido-Munda languages.
- Vol. V. Indo-Aryan languages, Eastern group.
- Part I. Bengali and Assamese.
- Part II. Bihāri and Oriyā.
- Vol. VI. Indo-Aryan languages, Mediate group (Eastern Hindī.)
- Vol. VII. Indo-Aryan languages, Southern group (Marāṭhi.)
- Vol. VIII. Indo-Aryan languages, North-Western group (Sindhī, Lāhndā, Kashmiri, and the "Non-Sanskritic" languages.)
- Vol. IX. Indo-Aryan languages, Central group.
- Part I. Western Hindī and Panjābī.
- Part II. Rājasthāni and Gujarāṭi.
- Part III. Himalayan languages.
- Vol. X. Iranian family.
- Vol. XI. "Gipsy" languages and supplement.

As regards the progress made in these volumes:—

- Vol. I. must naturally wait till all the rest has been finished.
- Vol. II. is complete in manuscript, and is now in the press.



Vol. III., Part I., is in the competent hands of Professor Conrady. If he is at the Congress he will be able to report the progress which he has made.

Part II., has been printed, and is ready for issue, save for a few corrections, and for the maps which are still with the printer. This is one of the volumes which (without the maps), I have the honour to lay to-day before the Congress.

Part III., is complete in manuscript, and is now in the press.

Vol. IV., has not yet been touched.

Vol. V. Both parts are complete, and in the press. They are nearly printed off.

Vol. VI. This is complete. It is one of the volumes which (without its map) I have the honour to lay to-day before the Congress. The map has been passed for press, but could not be issued in time for the Congress.

Vol. VII. This is complete in manuscript.

Vol. VIII. This has not yet been touched.

Vol. IX. In Part I. Western Hindi is rapidly approaching completion in manuscript. Panjābī has not yet been touched. In Part II. "Gujarāti" includes the Bhil languages and Khāndśī. These two have been finished in manuscript. The rest of Gujarāti and Rājasthāni have not yet been touched. Part III. has not yet been touched.

Vol. X. This is nearly all in type.

Vol. XI. Not yet touched. By "Gipsy" languages, I mean the various secret languages, spoken by the numerous wandering tribes who are found in all parts of India.

Such satisfactory progress could not have been made had it not been for the help which has been given to me by my Assistant, Dr. Sten Konow, and I am glad to have this opportunity of gratefully acknowledging it. Much of the success of the Survey will be due to his learning and indefatigable industry. While almost every page of the Survey which has been prepared up to the present date has passed under the eyes of us both, he is specially responsible for the sections, dealing with the Kachin and Kuki-Chin Groups, for Marāṭhī and for the Bhil languages and Khāndśī. I hope that, after the Congress, he will be able to prepare the sections dealing with the Muṇḍa and the Dravidian languages.

Of the volumes which have been completed, those dealing with the

Indo-Chinese languages have presented far the greatest difficulties. Specimens of numerous languages which were hitherto almost unknown have been prepared, and have been illustrated by short grammars and vocabularies. That the result has been altogether satisfactory cannot be maintained. Students of languages will not require to be told of the difficulties which are experienced in reducing an unknown language to writing for the first time. Moreover, few of the specimens were recorded by scholars. Many of them were obtained by Government officials, who were ignorant of the languages dealt with, and had to trust to uneducated interpreters. Mistakes were, therefore, almost inevitable. No other method was, however, possible for obtaining specimens of the tongues of some of the wild tribes who inhabit the eastern frontier of India, and I am fully sensible of the care and enthusiasm which have been displayed by many of my brother officials in their collection. On the whole, considering the means at their disposal, the various specimens have been found to be surprisingly correct. Although absolute accuracy has not been attained, a great step in advance has been made in our knowledge of the languages of a number of little known Indo-Chinese tribes. For instance, Dr. Konow has been able to make a satisfactory grouping of that mass of kindred languages which goes under the name of Kuki-Chin, and this volume will be one of the most interesting of the Survey. Thanks to friends, it has been found possible to give some account of the dialects of the interesting Khasi language, one of which employs infixes as well as prefixes in its word-formation, and thus throws considerable light on the structure of the speeches of the Môn-Khm̄r family. Through the kind help of Sir Charles Lyall, a full account has been given of Mikir, one of the most important Tibeto-Burman languages of Assam, about which very little has hitherto been known. Finally, an attempt has been made to give a description of Ahom, the ancient Tai language of Assam, now for many years extinct.

Dr. Konow has been able to finally place Marāṭhī in its true relation in regard to the other Aryan languages of India, and has incidentally thrown much light on the relationship of the various Prakrit dialects to each other. A summary of the results of his enquiries will shortly appear in the "Indian Antiquary." He has also succeeded in classing the Bhil languages. These are certainly closely connected with Gujarāṭī. Towards the south they borrow a little from Marāṭhī, but the basis of their language is still Gujarāṭī. Closely connected with the Bhil languages is Khāṇḍeśī, which can no longer be considered to be a dialect of Marāṭhī as hitherto supposed. None of the Bhil languages shows any traces of connection with the Muṇḍa tongues, except a very few words which have survived in their vocabulary.

I have every confidence that I shall, if all goes well, be able to report the completion of the Survey at the next Oriental Congress.

GEORGE A. GRIERSON.

CAMBERLEY,

30th August, 1902.

The following papers were read:—

1. *An ancient cave and some ancient stupas in the District of Gaya.*—  
By PARMESHWAR DOYAL. *Communicated by the Philological Secretary.*

2. *On two remarkable rain-bursts in Bengal, and some of the more prominent features of the monsoon season in Northern India in 1902.*—By  
C. LITTLE, M.A.

(Abstract.)

The paper on two remarkable rain-bursts in Bengal, etc., is divided into three parts. The first contains a few general, and in some cases, explanatory remarks of an introductory character. In the second, all the information available collected chiefly from published reports regarding two of the most extraordinary disturbances in the writer's experience, is given, arranged in tabular form and accompanied by brief remarks. These disturbances, in his opinion, entered India from Central Asia and were, he believes, the direct cause of most important changes in monsoon conditions in Northern and Western India. One of the effects of the disturbances was the heavy bursts of rainfall in Bengal Proper and Assam. The first of these bursts began suddenly and ended as suddenly on the 30th June. The other occurred with equal suddenness on the 11th August. The immediate effect of the first general disturbance was the commencement of what is called monsoon weather over the whole of Northern India as far west as the Simla Hills. The effect of the second was, he believes, that extraordinary change which occurred in Western India when on the twelfth stroke of the hour a large part of the Empire was saved from a renewal of devastating drought.

In the third part the writer has attempted to show how these two disturbances divided the past monsoon season into periods, during each of which the line of advance of cyclonic storms from the Bay had a marked peculiarity. It is a matter of common knowledge that in each of these periods there was an exceptional distribution of rainfall, shown by excess in one part and great defect in another. What is suggested is that this abnormal distribution of rainfall, must be due to the same causes as the eccentric behaviour of the cyclonic storms, generally called recurring; and that it is a matter of first class importance that the problem of the recurring should be investigated and solved. Being a definite

problem it must have well defined, and ascertainable data, and quotations are given supporting the opinion that these data are not indicated by ground level observations. Further as all the variations occur within the Indian boundaries the necessary information is probably available without reference to foreign sources.

3. *Economic Entomology: Its study, aims, and objects.*—By E. P. STEBBING, I.F.S., F.L.S.

The necessity for the serious study of Economic Entomology in a great agricultural country like India has forced itself into prominence during the last few years, and now that active steps are being taken in the matter it may prove of interest to consider what such a study really involves and the nature of the results to be expected from it.

Economic Entomology may be defined as the study of the life-histories of Injurious Insects with a view to instituting remedial measures against them. As we shall see later, this latter branch of the subject involves the study of, firstly, the life-histories of insects predaceous upon, or parasitic upon, or in, the pests; and, secondly, the experimenting with various insecticides with a view to testing their practical efficiency before recommending them for general use. The aid of the Economic Botanist will be required to identify Insect fungi which may live as parasites upon our insect foes; for the study of such and the preparation and stocking of cultures may give us a terribly efficient weapon against these minute enemies. The mention of the Economic Botanist leads me to a small digression. It has not, I think, been generally understood in India, and the country by no means stands alone in this respect, that there is a vast gulf between the Science of Botany and that of Entomology and consequently between the Botanist and the Entomologist. I allude here only to the economic aspect of the work in both cases. No man can hope to be an expert in both save in some small country and area whose flora and insect fauna are already known. In India this ideal state of affairs is very far ahead. The fields before both experts are vast and almost untouched and require years of patient working and observation to achieve the results that will be of such benefit to the country at large. The man who endeavours to specialise in both may do well enough as a beginning, just as one man can run the secretariat of a budding State. As the latter flourishes the one-man rule has to give way, departments are formed, and the work parcelled up. The revenue man, receiving a paper on financial matters, promptly labels it 'Finance' and sends it off to its proper quarter. The Economic Botanist and the Economic Entomologist are in much the same relation to one another. They can help each other, but each requires all his time for his own particular subject, and, if a true

specialist, makes no pretence at working in a line foreign to him. The difference may be said to be almost equally wide between the Economic Entomologist and the Museum Entomologist. The latter especially interests himself in the classifications of insects, gives names to new genera and species; considers, in the light of fresh discoveries, the re-arrangement of the grouping of families or the formation of new ones, etc., and keeps watch over the valuable type collections of the nation, all work requiring careful training, deep reading, much microscopic labour, and an enthusiasm for the subject. The Economic Entomologist, on the other hand, studies insects from a very different point of view. His aim is to find out where the insect lives, what it feeds upon, the periods spent in the various stages of its life-history, *i.e.*, how long it spends in the egg-stage, grub-stage, etc. Whether at one time of the year it lives upon a certain kind of crop, changing its food plant later on or seeking neighbouring patches of scrub jungle to lie up in when the fields of the plant it is partial to are lying fallow. This knowledge enables him to draw out his plans for attacking noxious pests. To him the fact that the insects he has discovered and is studying are new to science is, though interesting, quite of secondary importance. Their habits and life-histories and the best means of combating them are his chief concern. To his companion in the Museum he leaves the other portion of the work.

With this brief digression we will now devote ourselves to a consideration of how the Economic branch of the science, or the work in the field, can best be studied, our object being the protection of vegetation of use to man by discovering means to check undue increases of noxious insect pests.

With reference to the position of the *Insecta* in the Animal Kingdom. Perhaps if I say here that insects lie roughly halfway up the scale, *i.e.*, halfway between the simplest animal, the one-celled *Amœba* and that highly and complexly constituted being known as Man, having as near relatives the crabs and lobsters, spiders and scorpions on the one hand, and the centipides, and millipedes and, still higher up, the starfish on the other, their position will be sufficiently defined for our present purpose.

In dealing with the subject it will be necessary to first consider briefly the stages in the development of an insect. We all know what such an animal is like and he who lays no claim to the slightest acquaintance either with their classification or varied modes of life is able in the generality of cases to recognise an insect. The ordinary layman equally knows that an insect passes through various stages of development. The gaudy butterfly, gracefully floating on azure wings in the brilliant sunlight, does not come into being as such and its transcendent beauty can no more be perceived in its earlier stages than can the glorious loveliness

of budding girlhood be traced in the baldheaded, toothless, newly-born babe. Both are slowly developed. The insect commences life as an egg. From this egg hatches out a grub which in form is often totally unlike the future adult. It is in this grub stage that all increases in size usually take place. The grub changes to a pupa or chrysalis, a resting stage, during which the insect does not feed and usually remains quiescent. In this stage of rest the internal complex organs arrive at maturity and the wings are acquired. When this development is complete the insect emerges in its adult or perfect form and subsequent to this all further growth ceases. Any common butterfly goes through these changes. This state of affairs is, however, not always fully carried out, as in some Orders of insects the third or pupal stage is absent. In these cases the young ones on hatching out from the egg usually resemble the parents in form, but not in size; the wings are always absent and colouration and markings may undergo modifications. Such insects acquire their wings and full size by a series of moults, the outer skin being shed at intervals, the last moult producing the perfect insect with fully-developed wings. The common North-West or Migratory Locust (*Acridium peregrinum*) is an instance of this mode of growth. There is one more point in connection with the structure of insects to which attention must be drawn, a most important one since, as we shall see later on, on it depends the nature of the remedies we bring into force to combat serious attacks. This important point is the form of the mouth parts that may be present. In this respect insects may be roughly divided up into three groups according as to whether they have a mouth formed for biting, for sucking, or a combination of the two. In the biting mouth, biting jaws or mandibles are present, by means of which the plant tissues are bitten through before being devoured. Instances of such a mouth may be seen in the locust or any common beetle. In the sucking mouth the biting jaws are absent or are mere rudiments and the mouth consists of a long tube or proboscis often furnished with one or more piercing organs to enable the insect to pierce through tissues of plants and then insert the tube and suck up the sap. Bugs, plant lice, and scale insects have such a mouth. In the biting and sucking mouth both mandibles and the sucking tube are present, as may be seen in the common bee. As I have said, these different forms of mouth bear a constant and definite relation to the method of life and feeding operations of the insect and therefore to the methods that can be introduced to combat its attacks. We are now in a position to consider the first step—the study of the life-histories of pests.

It may be taken as a cardinal point in remedial work that the more one knows about the habits and life-history of a given species of insect

the better are the chances of discovering a cheap and efficient remedy for controlling it.

Many insects, for example, can be dealt with only in the active feeding condition; with others the eggs are the easiest destroyed, whilst in others again the quiescent or over-wintering stage is the easiest disposed of. We must therefore be able not only to recognise it in its different stages, but must know just how long it remains in each and just how it comports itself in each. Each new insect which makes itself unpleasantly prominent must be studied throughout its life round before we can say that we know best how to fight it, and when commencing the work in a new country this investigation into the pest's life-history is the point from which we must start.

I have said that the Insect must be studied throughout all its stages of egg, grub, pupa and adult, *i.e.*, through its life cycle, and this in itself is no light task, as it requires high powers of observation and much patience in investigation work, which may have to extend over several years.

Unfortunately, however, when the life cycle has been watched through the work is often by no means complete for the particular insect under surveillance may pass through several such in the year, and this is more particularly the case in tropical countries. In our own Northern clime (England) some insects in favourable seasons may pass through two life cycles in the year—one in the spring or early summer, a second in the late summer or autumn. But this is nothing to what happens in tropical countries. In such the life cycles are greatly increased and three, four, or even as many as seven or more, generations of a pest may be run through in the one year and to add to the perplexities and worries the study of such entails the insects of the various generations or cycles may vary in appearance, sometimes in a marked degree. For example, many Indian butterflies have received different names from eminent scientists owing to their great variations in markings, colouration, and even shape in the various generations they pass through in the year; the subsequent study of their life-histories has shown them to be but the spring and summer forms of one and the same insect. Thus the Economic Entomologist is able to help and set right the work of his museum comrade. But this forms by no means the sum total of the vagaries of Insect life. We have seen that an Insect may have several life cycles in the year the individuals in which may vary in colour, shape, etc. But others go farther and spend one of their life cycles on one portion of a plant, *e.g.*, on the leaves and twigs above ground; whilst the other is totally unlike the first in appearance and may be spent on the roots.

The well-known *Phylloxera* of the vine is an insect of this kind and for years the root-feeding form was described as a different species. Again there are other insects which at one stage of their life-history are able to produce young in large numbers parthenogenetically, these maturing very rapidly and doing the same in their turn, the process continuing for several months on end from the spring to autumn. At this latter season a sexual generation is produced which lays the winter eggs, which in the succeeding spring gives rise to the parthenogenetic females. It thus becomes obvious that the efficient study of Economic Entomology requires a previous very considerable and intimate acquaintance with the habits of the different groups of Insects and also requires one to be prepared for the startling vagaries the effect of a semi-tropical or tropical climate has upon them in their various life cycles. It is this that makes it difficult, if it does not lead to absolute confusion, to make use of observations and remedial measures which have been worked out or found effectual in other countries. The theory that what holds good for, say, Europe or America, will be equally applicable in a country like India is a fallacy which cannot be too widely exposed. To act on the assumption that because an Insect has such and such a life-history in, we will say England or North Europe, appears at such and such times, etc., that therefore we know the life-history of that same insect (for some pests are cosmopolitan in their range) or of closely allied forms, in a country like India is not only to involve the science in a dangerous and hopeless medley of inaccurate postulations and assumptions, but also to risk wasting large sums of money in endeavouring to combat pests who are not at the time in the stage at which the remedial work has a chance of meeting with success, and whose life-history in this country is quite different to what it is supposed to be from European analogies. A well-known and experienced Entomologist, Mr. Walter F. H. Blandford, who worked at Economic Entomology for the India Office for several years and consequently obtained a wide knowledge of this phase of the subject, used to continually reiterate his warnings as to the danger of taking anything for granted in a country like India, and my own experience has proved over and over again the justice of his contention. The Economic Entomologist in India must go into the field or orchard, plantation or forest and study the pest carefully on the ground though the inns and outs of a series of life cycles before he can safely prescribe remedies on a large scale. Even in the outer Himalayas, where conditions are more similar to Europe and North America, the investigator must proceed warily and deduce nothing 'because it is so in Europe' without first carefully verifying his opinions by observation.



We have seen that the study of Economic Entomology first prescribes a knowledge of the life-histories of noxious pests and that this is the first work to be taken in hand. Having made ourselves acquainted with these, we are now in a position to consider what remedies may be introduced to combat them.

It may be said, the question has been pertinently asked very often, 'But why bother about remedies from whose introduction a very problematical good is to be derived, when India has gone on all these years without them?' I would retort that the world went on for a good many centuries without the telegraph and railway, that Englishmen managed to exist in some comfort in Calcutta for considerably over a century without the electric fan and light and yet no one doubts their usefulness and necessity at the present day. The agricultural requirements of the country have not stood still; they have advanced. The study of the science under consideration has become of such importance owing to the large increase in the cultivated tracts in the country and to the much larger development in this respect which the great irrigation schemes promise. It is an axiom in Economic Entomology that to increase the food-plant of an insect over large contiguous areas is to increase the numbers of the pest itself since finding so much of its favourite food close together enables it to increase with ease, the usual checks it would have to overcome in its natural surroundings being absent. It will be obvious to everyone that a large irrigation scheme will help the insect to perfection. We come then to the question of remedies. Remedial measures divide themselves into two groups:—

(1) Those applicable through the agency of man.

(2) Those which Nature herself puts into force to prevent, or bring down to normal proportions, undue increases of any particular members of her animal kingdom.

The first group, the question of remedial measures to be introduced by man's agency, will be considered in detail later on, but we may show briefly here *en passant* how the knowledge of the life-history leads to, or suggests one class of remedy to be employed. We have seen how the mouth parts in insects vary, some being furnished with a biting mouth, whilst others have a sucking one. Now the presence of one or the other of these forms of mouths will decide, in the case of the insecticide sprays, the nature of the spray to be used. The obviousness of this will be evident when it is mentioned that some spraying mixtures are merely contact ones, whereas others must be taken internally to have killing effects. The first are used against sucking insects which have usually soft bodies, their spiracles, or air-breathing openings at the side of the body, being large and exposed. It is useless using a poisonous spray

requiring to be taken internally, against such insects since they feed by suction, inserting their proboscis into the tissues of the plant. A liquid, which merely coats the external surfaces, will not be taken internally and will not therefore affect the insect. If, however, a liquid of a thick soapy nature, *e.g.*, such as kerosene emulsion, is sprayed upon the plant it will thickly coat the leaves and stems and cover and clog up the breathing openings of the sucking insects feeding upon it and suffocate and kill them.

The second class of spraying solutions alluded to—the poisonous ones—are for internal application. They are for use against insects with biting mouth parts. These are often hard bodied externally and would not be affected by the soapy liquids. In feeding upon the leaves, etc. which have been sprayed over with the poisonous mixture they take the poison internally and are got rid of.

We shall refer to other remedial measures applicable by man later on. The above two have been touched upon to show how the class of remedy employed may depend entirely upon the structure and manner of feeding of the insect. It will, however, be obvious that neither of the two above mentioned remedies would be of the slightest use against a pest which spends its life inside the stem of a plant or beneath the bark of a tree, or the dangerous portion of its existence buried in the ground feeding upon the roots. We shall consider methods of combating such attacks at greater length later on.

We now come to the question of natural remedies or nature's checks. These may consist of parasites, either insect or fungus. Such checks follow nature's laws and pertain to her department, but it may be shown that such can, when thoroughly understood by man, be assisted and spread by his agency.

It is probable that most insects are subject to these natural checks, *i.e.*, that most insects have at least one insect parasite preying upon them and some may be subject to several. These natural checks are of two kinds—the parasitic forms and the actively predaceous forms.

The parasitic forms live as true parasites inside the bodies of their hosts. Examples of such are the Ichneumon flies, Chalcid flies, and Tachnid flies—all exceedingly common and numerous in India. Important as they are however to man, but little is at present known about them in the country and our knowledge is not at present sufficient to make any successful use of them.

The predaceous group comprises those insects which actively prey upon species of their class, feeding externally upon them, living in the same haunts, and passing very similar lives. These are very commonly mistaken for noxious pests by the uninitiated; in fact, it may be said

that this is the rule in India. It is the old fable of killing the goose which lays the golden eggs; for the want of elementary knowledge in this respect undoubtedly leads to the extermination of many of man's friends. These predaceous insects are often sent to the Museum as injurious to crops, etc., when they have probably been doing, as far as in them lay, the greatest good by keeping within bounds the much less obvious crop pest in the fields. Two instances of this nature may be quoted here:—

A certain beetle, by name *Cicindela punctata*, one of a family known as the Tiger beetles owing to their predaceous proclivities, is common in India. Both in its grub and mature beetle stage it actively preys upon other insects and at times is to be found swarming in fields under crops. As the insect is brightly coloured and very active, flying and running well, it is very conspicuous, and if the crops are suffering from the attacks of insect pests the cultivator at once jumps to the conclusion that the easily seen and numerous tiger beetle is the cause. If he has heard that insects are at times a source of danger, he at once proceeds to kill off as many of what are really his friends as he can. The real cause of the damage is probably some small inconspicuous insect which escapes his notice, but upon which the tiger beetle is actively feeding.

The second instance I will quote is to be found amongst the ladybird beetles (*Coccinellidæ*). Most people know what a ladybird beetle is like, the little oval, reddish, brightly-coloured insects with spots on their back of our childhood and nursery days. The greater bulk of these seemingly harmless insects are eminently predaceous, both as grubs and beetles. Plant lice, scale insects, etc., form their bill of fare and they suck them as dry as one would suck an orange. One of these insects has earned for itself a world-wide reputation, having been imported by the Americans into the Florida orange groves at a time when the orchards were so badly attacked by the fluted scale insect that trees were dying in hundreds and the industry seemed threatened with extinction. The importation of the ladybird beetle and the business-like way it set about clearing the trees of the scale saved thousands of pounds worth of capital and many homes from ruin.

Observations are showing that these ladybird beetles are likely to play an important part in India in the future in the hands of the Economic Entomologist, for there is no doubt that we have many valuable species in this country which only require proper investigation to prove most useful and deadly weapons when wielded by the expert. Once their life-histories have been studied and the localities they live in have been ascertained, it will be a simple matter to arrange for obtaining consignments for distribution to areas where it has been proved that their intro-

duction will be of great value. It should be pointed out, however, and the point is an important one, that such weapons should only be made use of by those thoroughly conversant with them and that the importation of such insects into localities should not be attempted until it has been ascertained that there are no local beetles already performing this work. A large sum was expended by Southern India planters in importing a ladybird beetle from Australia to clear off the coffee scale. No result happened, as the business was not in the hands of an expert who would have conducted things properly, and the money was wasted. Attempts of this nature made by those who do not understand what is required to be done nor how to do it only bring such work into disrepute.

We now come to a further consideration of the remedies applicable by the agency of man and here we meet a subject about which little is at present known in India. This being so it would be a useless waste of time going into a long dissertation upon the various kinds of spraying mixtures (already alluded to shortly above) and special spraying machines, the various appliances for using gases to kill scale insects, and other up-to-date remedial measures chiefly introduced by Americans and largely in use in that country. Conditions are altogether different in India, the two chief difficulties against work of this nature being the great areas which have to be dealt with, and the ignorance, conservatism, and religious prejudices of the ryot.

But while we are not in a position at present to advise the application in India of these numerous and useful remedies, which are doing so large an amount of good in other countries, we may consider for a moment with profit the lines upon which we should advance.

Although a general use of sprays and spraying machines cannot be as yet advocated, it is not for a moment meant that in certain cases such will not be useful. Their practical utility and possibility must first, however, be experimented with and demonstrated by the specialist before they are introduced for general use to the ryot. For instance, to give one illustration. There is a beetle commonly known as the rice hispa (*Hispa senescens*) which commits, at times, great harm in the rice fields by feeding upon the leaves and reducing them to mere yellow bundles of the harder fibres of the leaf. Both the grub and beetle feed in this way upon the leaf. Now this attack is started by the beetle laying its eggs upon the leaves of the young rice seedlings whilst they are still in the small nurseries in which the young plants are reared before being put out into the fields. When the seedlings are transplanted out into the rice fields the beetle accompanies them either as a grub or pupa on the leaves and is thus spread widely all over the country. It goes through several generations subsequently upon the rice plants and at

times does great damage. This is, I think, a case for the effective use of a poisonous spraying mixture, as it could be easily applied whilst the seedlings are still in the nursery in small compact blocks and the attack could thus be checked in its initial stages. Once this treatment has been conclusively proved by careful experiment to be effective there can be no reason why the Bengal rice hispa should not be kept within bounds. Attention has been already drawn to the point which will bear reiteration that such experiments must be carried out by experts if they are to prove successful, otherwise they become objects of unmerited ridicule.

Another class of remedies which can only here be mentioned since nothing is known of their capabilities are the parasitic insect fungi. The locust fungus is a case in point. Much good has been attained by its use in some parts of the world, though in India it has been said to have been unsuccessful. I have experimented with it myself, using consignments from the Cape and America, and it is certainly deadly to small locusts and grasshoppers and I do not hold the opinion that it is useless for the purpose in view, *i.e.*, that of killing off locusts during big invasions.

There are, however, other forms of remedies entirely different from the above, measures which depend upon an accurate knowledge of the habits of the pests to be attacked. Amongst such may be mentioned the well-known trench system for getting rid of locusts. The successful use of this depends entirely upon our knowledge of the fact that young locusts soon after hatching and before they have acquired wings pack together and march in serried brigades down to the nearest crops. They can at this stage be driven into trenches dug for the purpose and exterminated.

A cricket (*Brachytrupes achætinus*) at times does great damage to the roots and stems of young tea, indiarubber, and various other plants in nurseries. It lives in holes in the loose soil of the nursery beds or adjacent areas and in the day time can with profit be dug up and killed off. Internal borers, such as the caterpillar of the sugarcane moth, can be effectively attacked when their action on the cane is understood. The removal and burning of all infected canes as soon as the insect is observed to be at work in them, and whilst they are still young, will do much towards stamping out this pest.

Finally, we come to a remedial measure of quite a different nature to those considered above, and that is the careful study of the various varieties of particular crops and the attacks to which they are subject, with a view to selecting for future use that variety which is the most resistant to such attacks. There can be little question that such in-

vestigations will result in most advantageous results. Of course it may be found that occasionally recommendations will conflict upon this point. For instance, a variety which the Entomologist has proved to be least attacked by insect pests many prove to be seriously infected by fungus ones, but it is not improbable that many of these latter follow, or are the result of insect attacks, the insect committing the first injury to the plant and thus providing a means of ingress for the fungus.

The variety of seed least subject to attack and the variety of plant should, then, be discovered and introduced to the ryot and we shall then have made a great advance in dealing with our numerous insect foes.

### SUMMARY.

In the above paper we have shortly considered the Science of Economic Entomology: its study, aims, and objects. After a few brief words on the importance of the work in such a great agricultural country as India, we proceeded to define the term as the study of the life-histories of injurious insects with a view to instituting remedial measures against them, this latter question involving an acquaintance with the habits of insects, predaceous and parasitic, upon the noxious pests and with the capabilities of various insecticides and other remedial measures. We saw that the aid of the Economic Botanist would be required to identify parasitic insect fungi and to prepare cultures of such for use against crop pests. The difference between the sciences of Botany and Entomology was glanced at and the impossibility of a man being an Economic expert in both in a country the size of India pointed out and reasons for this statement given. Attention was also drawn to the difference in the work of the Museum and Economic or field Entomologist. How the former was concerned with the classificatory portion of the work and with the care of the valuable State type collections, whereas the latter confined himself to the study of the life-histories and habits of insects in the field with the object of working out remedies against them.

After mentioning the position of the *Insecta* in the Animal Kingdom and describing shortly the various stages in the life of an insect, we saw that the mouth parts of insects vary, some having a biting mouth, others a sucking one, whilst others again have a combination of the two; and that the presence of a particular form of mouth might decide the nature of the insecticide to be used against them.

It was then shown that the first step in the work was the study of the life-history, it being a cardinal point that the more one knows about such the greater will be the chance of devising some remedy against the pest. Many insects, we saw, can only be attacked in their active feeding

stage, others in the egg or in the quiescent over-wintering stage. It therefore becomes necessary to be able to recognise our pest in all its stages of life. The matter becomes complicated, since when this has been accomplished it may be found that there are several life-cycles in the year and that the stages in one or more of them may differ from the earlier or later ones. These variations reach their maximum in tropical countries, where the number of life-cycles passed through in the year may be as many as seven. Further complications arise owing to what is known as alternation of generations, an insect living in one form, say, on the stem or leaves of a plant at one period of its life and in quite a different form on the roots at a later stage and season. We also saw that parthenogenesis occurred when large numbers of females are born alive by a female and in turn produce young ones, this state of affairs occurring through the spring and summer months, a true sexual generation only appearing in the autumn, this latter generation differing in appearance from the parthenogenetic females. This state of things compelled the conclusion that we cannot rely upon the fact that life-histories and remedies worked out and applicable in Europe or America will be of use to us or equally justified in India. To do so will be to court disaster. The life-histories of even cosmopolitan insects will vary in India and will be different in different parts of the Continent. In introducing remedies the susceptibilities of the Indian ryots must be taken into account and care be exercised to introduce only such as will be possible to them and at the same time within their means.

We then considered the question of remedies and as to why their study and introduction was necessary. It was pointed out that the large increase of areas under cultivation and their greater increase which the future held promise of, owing to the great irrigation projects now under consideration, made the study of Economic Entomology an imperative matter, it being an axiom that an increase in the area under any one food plant meant an increase in the insect pests partial to it, since there was so much food of easy access to them.

In considering the subject of remedial measures we showed that they divided themselves into two heads: (1) Those applicable through the agency of man; and (2) natural checks brought into play by Nature herself. In the first group we touched briefly upon the question of using spraying mixtures and the reason why some such, as, *e.g.*, kerosine emulsion, were only applicable to insects with sucking mouths, since they were required to clog up the breathing apparatus; whilst others were designed for use against biting insects, since they were of a poisonous nature and were sprayed upon plants in order that they should be taken internally with the parts of the plant consumed by the pest.

We then turned to consider the second group—Nature's remedial measures on natural checks. Such followed Nature's laws, but can, when thoroughly understood, be pressed into the service of man. We stated that it is probable that most insects are subject to such checks, which are of two kinds—the parasitic or internal feeding group and the predaceous or external feeding group. It was shown that little was known of the first lot, which comprised the Ichneumon, Chalcid, and Tachnid flies. The second group are better known in some parts of the world, though this is not the case in India. Cultivators often send them as pests to their crops, overlooking the real one upon which the predaceous insect is actively feeding. It was pointed out that such should be studied and protected so as to make use of them by introducing them into parts of the country where they do not at present exist, but where they are likely to prove beneficial to combat pests. Instances of a tiger beetle and lady-bird beetle useful in this way were quoted. Stress was laid upon the point, however, that these checks should only be used by specialists after they have well studied them in the field. If used by the ignorant they are likely to do more harm than good and bring ridicule upon the question of the effective use of such.

Finally, the question of the remedies applicable through the direct agency of man was more fully considered. Although little is known upon the subject, and it was useless introducing to the uneducated ryot the up-to-date American apparatus, it was too early to say that spraying mixtures could not be effectively used under certain conditions in India, but their exhaustive trial by the expert was first necessary before they were recommended to the ryot. The life history of the Rice Hispa was instanced as a case in point, when by spraying the nurseries before the seedlings were put out into the fields much might be done to check the spread of the pest. But that the trial of such remedies must only be carried out by responsible persons who thoroughly understood what had to be done or they would be brought into disrepute. The question of fungus remedies is still in its infancy, but the experiments with locust fungus are not considered sufficient to warrant its condemnation in India and it would be advisable to further experiment with it.

Other remedial measures were of a different nature and depended upon an accurate knowledge of the habits of the insects. Of such, to quote a few instances, were the trench system for killing young locusts, searching out the holes of cricket pests and digging up and killing them, and the search for sugarcane stems infected by internal borers and cutting them out and burning them.

Lastly, we pointed out that the most satisfactory of all remedial measures would be effected by the study of the varieties of plants which



best resisted attacks and introducing them to the cultivator. That this system should be followed both in the case of seeds and plants and that great results might be expected from work of this nature.

4. *An ancient Assamese Fortification and the legends relating thereto.*  
—By WALTER N. EDWARDS and H. H. MANN.

(Abstract.)

The paper describes the occurrence on the banks of the Buroi River, a tributary of the Brahmaputra from the North, in Assam, of an ancient Assamese fortification consisting of two walls, the longer one about three hundred yards long, and ten feet thick, built of faced stone, and facing the plains. These occur in dense cane jungle, just beyond British territory, in the Daphla country in the Himalayas. The Assamese origin of the fortifications is indicated by the type of brick with which the stones are occasionally mixed.

The local Daphla story attached to the fortification is that an Assamese Raja went into the hills and there defended himself from his own people in the plains, but no time or date is assigned, even vaguely, to it.

The whole consideration of the local traditions lead the authors to connect it with the fate of Arimatta, or Arimuri. (cir. 1250 A.D.) the local story of whose life is given, but about whose ultimate fate the traditions among the natives on the spot differ considerably.

5. *Noviciæ Indicæ*, XX. *Some additional Scrophularinæ.*—By D. PRAIN.

(Abstract.)

The writer, having had to assort the Indian material of *Scrophularinæ* in the Herbarium of the Royal Botanic Garden at Shibpur, finds that, owing to extensions of territory on both the North-Western and the North-Eastern frontiers of the Indian Empire, a number of species have now to be accounted for as Indian that are not dealt with in the *Flora of British India*. Following the practice which he commenced fifteen years ago, when this series of papers was begun, the writer now offers descriptions of the species that are new to India, arranged as nearly as possible after the manner of the *Flora* itself, to which the papers of this series are intended as supplements. These descriptions will necessarily benefit chiefly those members of the Society who may be botanising near the various Indian Frontiers; to render the paper of use to other botanical members as well, new localities are indicated for species that are already dealt with in the *Flora*.

The species here described as new to India are the following:—*Verbascum erianthum* Benth.; *Linaria Griffithii* Benth.; *Linaria odora* Bieb.; *Scrophularia cabulica* Benth.; *Adenosma inopinatum* n. sp.; *Adenosma hirsutum* Kurz; *Herpestis chamædryoides* H. B. & K.; *Torenia Benthiana* Hance; *Vandellia punctata* n. sp.; *Phtheirospermum tenuisectum* Bur. & Franch.; *Pedicularis diffusa* Prain; *Lathraea purpurea* Cummins.

6. *On the acquisition of alar appendages by the Spruce form of Chermes abietis-piceæ.*—By E. P. STEBBING, I.F.S., F.L.S.

(Abstract.)

In July, 1893, Mr. Smythies, late Conservator of Forests, in the Central Provinces, discovered the winged form of a species of *Chermes* issuing from galls on Spruce (*Picea Morinda*) trees, at Deoban, in the Jaunsar Forests of the N.-W. Himalayas (elevation 9,200 ft.) These insects were identified by Mr. G. B. Buckton, F.R.S., as belonging to the species *Chermes abietis* of Linnæus and Kaltenbach.

In the spring and early summer of 1901 and 1902 I had opportunities of studying this *Chermes* and discovered the interesting and important fact that, whereas in the case of the European species, one generation of the insect is spent on the Spruce whilst another is passed upon the larch, in the N.-W. Himalayas the other generation of the parallel series is passed, not upon the larch which is not found in those mountains, but upon the silver fir (*Abies Webbiana*). For this reason, I call the insect provisionally *Chermes abietis-piceæ*.

The note deals shortly with the egg and larval stages, the latter being spent in chambers within the gall.

It then describes fully the way in which the diamond-shaped covers of the chambers, into which the gall is divided, open along their upper edges into a narrow lip-shaped slit by which the larvæ leave the Spruce gall or false cone, for it looks like a young fir cone go through their final moult, and appear with their alar appendages folded up in tight little rolls upon the thorax. These latter almost immediately unroll under the influence of the sun and warm air currents. At this stage, the insect is remarkably brightly coloured. The colours soon darken, however, and about a couple of hours after leaving the chamber in the gall the insect is dull-coloured and inconspicuous.

PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.  
FOR MAY, 1903.

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The Monthly General Meeting of the Society was held on Wednesday, the 6th May, 1903, at 9-15 P.M.

THE HON'BLE MR. JUSTICE F. E. PARGITER, B.A., I.C.S., Vice-President, in the chair.

The following members were present :—

Mr. S. A. Alim, Mr. J Bathgate, Mr. I. H. Burkill, Mr. D. Hooper, Mr. C. Little, Mr. H. H. Mann, Major F. P. Maynard, I.M.S., Dr. E. D. Ross, Rai Bahadur Ram Brahma Sanyal, Pandit Yogeśa Chandra Sastree, Dr. C. Schulten, Mr. E. P. Stebbing, Pandit Satis Chandra Vidyabhusana, Mr. E. Vredenburg.

*Visitors* :—Dr. M. M. Masoom, Mr. H. Maxwell-Lefroy, and Mr. D. H. W. Ritchie.

The Minutes of the last meeting were read and confirmed.

Fourteen presentations were announced.

Mr. W. N. Edwards was ballotted for and elected an Ordinary Member.

It was announced that the Revd. H. O. Moore, Lt.-Col. G. F. A. Harris, I.M.S., and Mr. L. W. King had expressed a wish to withdraw from the Society.

The Chairman announced :—

1. That Dr. T. Bloch having returned from tour, had taken charge of the duties of the Philological Secretary from Dr. E. D. Ross.

2. That the Hon'ble Dr. Asutosh Mukhopadhyaya had been appointed to officiate as the Treasurer of the Society during the absence of Mr. C. R. Wilson.

The General Secretary reported the presentation of the following coins :—

From Babu Rampada Chatterjee, Sub-Deputy Collector, Kishenganj, Purnea—1 gold and 7 silver coins.

From the Government of United Provinces of Agra and Oudh—15 silver coins.

From the Bombay Branch, Royal Asiatic Society—2 gold coins.

The following papers were read :—

1. *The origin of the kap section of the Bārendra Class of Brahmans of Bengal.*—By PANDIT YOGĒŚA CHANDRA SĀSTREE.

(Abstract)

In the 12th century A.D. during the reign of Ballala Sena the number of the Brahmans brought to Bengal by Adisura became immensely increased. There were 350 Brahmans in Bārendrabhūmi and 750 in Rārhabhumi. He sent 250 Brahmans from among 350 Bārendra Brahmans to the south-eastern provinces of India and divided the remaining 100 into three sections, namely : (1) Kulins, (2) Çuddhaçrotriyas, and (3) Kastaçrotriyas. Maitra, Bhīma, Rudra, Sanyaminee, Lahiree, Bhaduree, Sadhu, and Bhadara, these 8 houses were the Kulins and Karanja, Nandanabasi, Bhattasali, Lauree, Champati, Jhampati, Atirtha and Kamadeva, these 8 houses were the Çuddha Çrotriyas. Udayanacharya, the author of Kusumanjali, was born in the house of Bhaduree and Kulluka Bhaṭṭa, the author of Manvartha Muktavali, was born in the house of Nandanabasi. Besides the above 16 houses of Kulins and Suddha Srotriyas, there were 84 houses of Kasta Çrotriyas.

The *kap* section was originated from the Kulin under the following circumstances : one Nrisinha Laurial of Santipore, having been insulted in a dinner given by Sukadevacharya, of the village Brahmanbala, determined to raise his social position. In order to fulfil his object Nrisinha persuaded Madhu Maitra of Majgram, the most respectable Kulin among the Kulins of the then existing society, to marry his daughter. On account of this marriage Madhu was excommunicated from the society by the sons of his former wife.

On the annual Çrāddha day of Madhu's father he invited Dhain (देई) Bagchi, his brother-in-law, to dine at his house, as he did not expect to get any Brahman of his own village or its vicinity. On that day Dhain Bagchi having been obstructed by a fencing made by Madhu

while entering into his house, exclaimed—"Well Sir,—what a *kap* have you created here?" In reply, Madhu said: "Yes Sir, I have created a *kap* there." Afterwards he heard everything from Madhu and convened a meeting of Kulins and Srotriyas of Majgram and its vicinity to judge the conduct of Madhu's sons. In that meeting Madhu's sons were found guilty of disregarding and illtreating their father.

Thereupon Dhain Bagchi declared that the sons of Madhu Maitra, by his first wife, should not be henceforth classed among the Kulins. They should be called *kāp*. Their position in the society would be an intermediate one. He also declared that henceforth, should any Kulin touch their water or come in contact whatsoever with them, he also would be a *kap*. The latter declaration was afterwards modified by Raja Kamsa Narayana Ray, of Tahirpore, who ruled that a Kulin should not lose his Kulinship, unless he married the daughter of a *kap* or allowed his daughter to marry a *kap*. This rule is still in existence.

2. *Note on the information supplied by meteorological observations at Hill stations.*—By C. LITTLE, M.A.

In a paper read by me at the last monthly meeting of this Society I advocated the extension of meteorological observation to heights above the ground level, to which it has hitherto been confined in India. In the subsequent discussion the President asked whether the information recorded at Hill stations could not be used in discussing atmospheric conditions at the same level, but at a distance from the Hills. The answer to such a question could be on general lines only in the absence of direct observation, and so far as I remember the opinion I expressed was, that information collected on the summits of isolated peaks may in some respects be useful, but that in the Himalayas the influence of the ridges and valleys must deprive meteorological observations of much of their value except for discussions of local interest.

Since the meeting I have met with an instance in which the information collected at Hill stations not only does not appear to represent atmospheric conditions, but may even be misleading to those who may rely upon Hill stations in general discussions. As it appears to me to be important that there should be no misunderstanding in this matter, I have thought it advisable to offer this note to the Society with reference to the President's question, although it contains no information new to meteorologists.

In a paper in the December number of the *U.S. Monthly Weather Review*, on the semi-diurnal periods in the earth's atmosphere, Professor Frank H. Bigelow points out that the semi-diurnal period extends to a short distance only from the earth's surface as shown by the various

direct observations recorded from time to time in Europe and America. He says: "In past years, before it was recognised that the single period prevails throughout the atmosphere, except in its lowest layers, efforts were made to account for the surface double period in two ways (1) by referring it to a dynamic forced wave involving the entire atmosphere as was done by Lord Kelvin, and (2) by seeking to explore the possible connections between the observed waves and the manometric waves due to temperature effects in the lower strata." He goes on to point out how neither of these theories is satisfactory, and states "Like so many other scientific problems which are difficult of solution the trouble apparently lies in the fact that the necessary observations have not been made in the right place. It was supposed that the variations noted at the ground were common to the adjacent strata up to considerable heights, but since meteorologists have succeeded in getting some upper air observations this supposition turns out to be contrary to the fact."

I give herewith tracings showing the diurnal variation of pressure at Calcutta, Lahore, Simla, Trivandrum, and Angustia, also the variation of pressure between Lahore and Simla, from which it will be seen that the diurnal variation is much the same at Hill stations as in the plains, whereas observations in Europe and America would lead one to expect that at 7,000 feet above the plains the variation would be of quite a different form as given by Professor Bigelow. A copy of the curve given in the *Monthly Weather Review* is attached for comparison.

3. *Insecta Indica*, I. Coleoptera, 1. *Notes on the Bostrichidæ of the Indian Region, Part I.*—By E. P. STEBBING, I.F.S.

(Abstract.)

With the exception of the *Lepidoptera* and *Rhynchota*, a portion of the *Hymenoptera*, a family (the *Mantodea*) of the *Orthoptera*, and another (*Cerambycidæ*) of the *Coleoptera*, but little work has up to the present been undertaken in the direction of cataloguing or monographing the rest of the known *Insecta* of the Indian Region. It is, therefore, extremely difficult for workers in the country to find out what is known about a family they may be interested in, and equally so to discover (without going to the collections themselves which is generally impossible) to what extent that family is represented by specimens in the Indian Museum at Calcutta.

The work already accomplished on these lines is easily summarised. It consists of:—

(1) A series of papers on the *Rhynchota* of the Indian Region by the late Mr. E. T. Atkinson, I.C.S. Read before the Asiatic Society and

afterwards published in Vols. LIII to LVII (1884 to 1888) of Part II of the Journal. Species represented in the Indian Museum collections are noted.

(2) A Catalogue of the Moths of India by E. C. Cotes and Colonel Swinhoe. Commenced in 1887, completed in 1889.

Species represented in the Indian Museum collections are noted.

(3) Catalogue of the Mantodea by Mr. J. Wood-Mason, Superintendent, Indian Museum. Two parts 1889 and 1891.

(4) Butterflies of India by L. de Nicéville, 3 Vols., 1883 to 1890. A fourth Volume is complete in manuscript. No notes have been made as to whether the species enumerated are represented in the Indian Museum collections: but as the Trustees of the Museum purchased the whole of Mr. de Nicéville's valuable collection, it is probable that most of the species referred to are in the Museum collections.

(5) The Moths of British India in the Fauna Series by Sir G. Hampson, Bart., Vols. I-IV, 1892-1896.

(6) The Hymenoptera of British India in the Fauna Series by Colonel C. Bingham, Vol. I, Bees, Wasps (1897). Vol. II, Ants and Cuckoo-Wasps (1903).

(7) The Rhynchota (Heteroptera) of British India in the Fauna Series by Mr. W. L. Distant, 1 Vol. only published as yet (1902).

The second volume of Distant's *Rhynchota* and Gahan's volume on the Longicorn *Coleoptera* will be issued shortly.

No mention is made in the volumes of the Fauna Series as to whether the species described are present in the Indian Museum collections or not.

In addition to the above papers, new species are of almost monthly appearance in one or other of the numerous scientific serials and magazines which record such. These will not be listed here, as few will be obtainable by the ordinary student in the country. I may mention, however, the constant appearance of important papers in Indian Museum Notes which may be said to hold the position of being the central and chief entomological publishing centre for the Indian Region; the continuation of the Moth's of the Fauna Series in the Journal of the Bombay Natural History Society, which has also had some papers on Indian Hymenoptera and Butterflies, and the excellent papers on the Coccidæ of the Indian Region by Mr. Ernest Green in Indian Museum Notes.

It will, however, be evident that a vast amount of work still remains to be undertaken. In these papers an attempt will be made to add something to what has already been so successfully commenced. It is not proposed to limit their scope to any one Order, although the *Coleoptera* will receive considerable attention. In the case of every species

mentioned, a reference will be made as to the whether it is represented or otherwise in the Indian Museum Collections. If it is not, every effort will be made to procure specimens of it for these collections. New species in the Author's possession will, when possible, be described; and short references will be given as to distribution, habits, etc., of the insects noticed.

#### Coleoptera 1.

##### Notes on *Bostrichidae* of the Indian Region. Part I.

Until comparatively recently little was known about the *Bostrichidae*, which had been little studied. Mr. P. Lesne, of the Paris Museum, has remedied this state of affairs, and in a classical Monograph (still unfinished) has revised the whole of the group. In these papers, which are confined to the mention of species inhabiting the Indian Region, I have made use of this revision, adding where possible any fresh information upon the life-histories, distribution, etc., that research and my own personal observations, have brought to light.

The family may be considered of some economic importance, since the well-known bamboo borers which are widely distributed throughout the Indian Region belong to it.

Of the four tribes into which Mr. Lesne divides the family, but two, the *Dinoderinae* and *Bostrichidae*, have representatives in India.

The *Dinoderinae* are considered in this paper.

It includes four genera, of which two *Dinoderus* and *Rhisopertha* have representatives in the Indian Region.

*Dinoderus* is represented by five Indian species: *D. distinctus*, *D. pilifrons*, *D. punctatissimus*, *D. minutus* and *D. brevis*.

*Rhisopertha* is represented by one species, *Rhisopertha dominica*.

These six species are shortly treated of in the present paper.

[*Note*.—On reconsidering the question the Author has determined to publish the series of papers entitled *Insecta Indica* in Indian Museum Notes. This paper will therefore appear *in extenso* in that publication.]

4. *Silajatu: an ancient Eastern Medicine*.—By DAVID HOOPER, F.C.S.

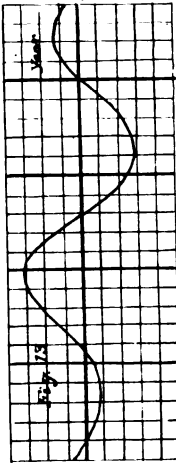




Vol. IX.

Vol. V.

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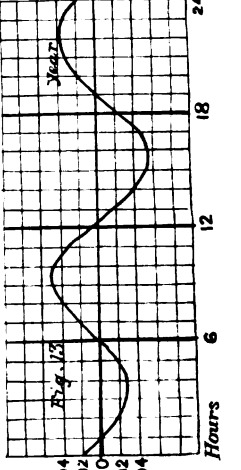
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ALIPORE.

Plate LXXVII.  
LAHORE.

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Vol. V.  
Plate LXXXII.

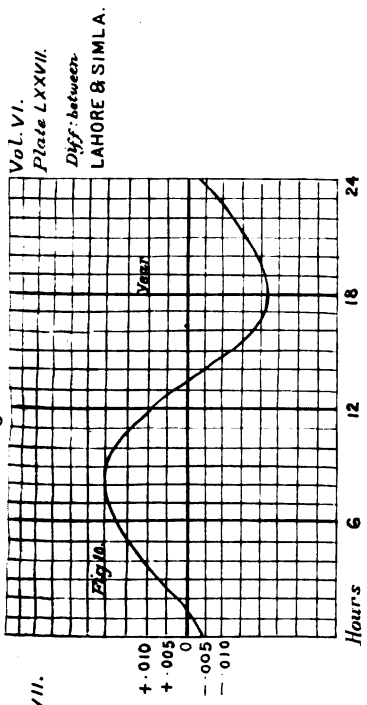
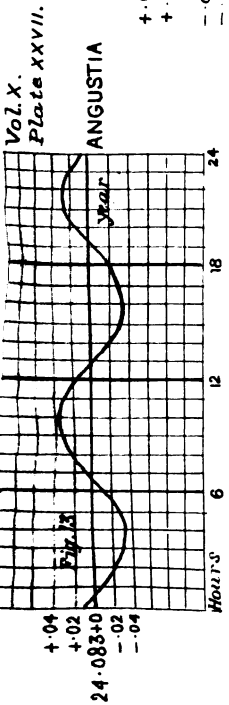
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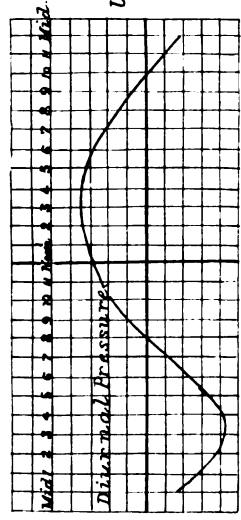
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U.S. Weather Review.

The numbers to the right of the diagrams refer to the "Indian Meteorological Memoirs."



PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.  
FOR JUNE, 1903.

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The Monthly General Meeting of the Society was held on Wednesday, the 3rd June, 1903, at 9-15 P.M.

The HON. MR. JUSTICE F. E. PARGITER, B.A., I.C.S., Vice-President, in the chair.

The following members were present:—

Mr. J. Bathgate, Dr. T. Bloch, Mr. I. H. Burkill, Mr. D. Hooper, Mr. J. Macfarlane, Mr. C. Michie, Mr. L. Morshead, Dr. C. Schulten, Mr. E. P. Stebbing, Pandit Satis Chandra Vidyabhusana, Mr. E. Vredenburg.

*Visitors*:—Dr. Mirza Muhammad Masoom, The Hon. Mr. Justice Rampini, Mr. H. Sudlow.

The minutes of the last meeting were read and confirmed.

Fourteen presentations were announced.

Mr. Hari Nath De was balloted for and elected an Ordinary Member.

Mr. Burkill exhibited some irregular casings or tests of a faggot worm from Miraj, near Kolhapur. Faggot worms are the caterpillars of Psychid moths, which protect their soft bodies by making over them casings—faggot-like—of bits of thin twigs glued to the outside of a silken bag. Usually just so many bits of twig are used as are required to cover the circumference.

The casings shown were made of the white thorns of the Babul (*Acacia arabica*; L.); and in a few of them extra thorns had been cut and attached outside the regular casing by the blunt ends in such a way as to stand out at angles varying up to 45°. The casing, so made more spiny, may be more forbidding to a hungry bird, but must be particularly inconvenient to the worm which carries it through the forks of the small branches in search of food.

Where the extra spines had been added, it seemed to have been done in an attempt to lengthen the casing. Two worms had only added one extra spine each, but one worm had added eleven outside the fifteen which made its proper casing.

The Natural History Secretary, Mr. Stebbing, exhibited some Jute rope attacked by beetles and grubs, the external surface of the strands of the rope being pitted with shot holes. The insects performing this work are species of *Sitodrepa*, being closely allied to the well-known book-worm pest, *Sitodrepa panicea*, L., which bores little shot holes into books in our libraries, usually, guided by some unerring instinct, selecting the most valuable ones. The beetles exhibited are tiny, elongated, almost torpedo-shaped insects, yellowish brown in colour, the largest being just under  $\frac{1}{8}$ th inch in total length, whilst the smaller is about half the size. The whole life cycle of the pest is spent within the jute rope, the beetles probably only leaving it during the pairing period. The beetle bores into the rope from the outside, making a horizontal tunnel until it reaches the centre, on reaching which it turns and bores parallel to the longitudinal axis. In the borings it lays its eggs; from these, little white grubs hatch out, which feed upon the internal rope fibre, reducing it to powder and consequently undermine its strength. Badly infested rope can be snapped across at the attacked spots, when the interior will be found full of grubs, pupæ, perhaps beetles, and brownish powder. The insect runs through, in all probability, a number of generations in the year, a life cycle in the hot weather or rains being probably passed through in three months, *i.e.*, the beetle lays eggs, the eggs hatch into grubs, the latter become full fed and change to pupæ and the latter giving rise to mature beetles within this period. This insect belongs to the same family (Ptinidæ), though to a different genus, as the well-known so-called cheroot 'weevil,' *Lasioderma testaceum*. The jute rope exhibited had a diameter of  $\frac{1}{4}$  inch. It is probable that thicker ones are also attacked. Washing the strands over with turpentine would doubtless act as a preventative to attack, whilst at the same time destroying the insects at work inside.

Mr. Stebbing also exhibited some live caterpillars, probably belong-

ing to the family *Tineidæ*, but perhaps very closely related to one or two of the genera of the family *Psychidæ*, specimens of whose larval cases were exhibited by Mr. Burkill: the classification of some of these genera being still open to much revision. The insects in question were extremely curious. They had been found attacking the hair of a mounted *Ovis hodgsoni* head. The long greyish hair had been almost entirely destroyed by these small caterpillars. The caterpillars are little canary-yellow insects with bright brown heads. They live inside a little flat elongated case, made apparently from the hairs, which are spun into a close parchment-like material. The case is left open at both ends, and the caterpillars make use of this peculiarity, appearing now at one end and now at the other, the diameter being sufficiently wide at the middle of the case to enable the larva to turn round inside by doubling up upon itself. When it wishes to do this it attaches the end of the case by a silken strand to the surface upon which it is crawling, backs down the case, turns round inside and appears at the other end, the mouth at the end of the case it has left closing automatically, whilst that at the other end opens. Mr. Stebbing mentioned that the specimens had been only brought to him that morning by the Head Taxidermist of the Indian Museum, and so he had not yet been able to observe the further stages of its life-history. From the above few remarks they are likely to prove of great interest. The hair of the head attacked was ruined.

The following papers were read:—

1. *A note on the Moran language of Upper Assam.*—By MAJOR P. R. T. GURDON, I.A.

(Abstract.)

This paper gives a vocabulary of the language of the Morans, a tribe of Upper Assam, together with the corresponding words in the Kachari, Dimāsā (or Hill Kachari) languages, and Hodgson's Bodo, which probably is Mech. The comparison proves a strong linguistic affinity between them, and the same probably exists between Deori, Chutiya and the Garo language also, both of which belong to the Bodo group.

2. *Materials for a Flora of the Malay Peninsula, No. 14.*—By SIR GEORGE KING, K.C.I.E., F.R.S., and J. SYKES GAMBLE, C.I.E., F.R.S.

(Abstract.)

The paper now presented to the Society is the joint work of Mr. J. S. Gamble, F.R.S., C.I.E., late of the Indian Forest Department, and of Sir George King, F.R.S., late Superintendent of the Royal Botanic Garden, Calcutta. It contains an account of the Natural Order *Capri-*

*foliaceæ*, which is entirely the work of Mr. Gamble. The larger part of it is, however, occupied by an account of those genera of the large Order *Rubiaceæ* which have more than one ovule in each cell of the ovary. The text of the paper devoted to this order is preceded by a key to these genera, of which there are thirty—none of them being new. The species of *Rubiaceæ* described number 164, and of these 50 are new. In a second paper on *Rubiaceæ* an account will be given of the genera which are characterised by having only a single ovule in each cell of the ovary, and that paper will be accompanied by a key to these uni-ovular genera.

3. *Note on the Faqirs of Baliya-Dighi in Dinajpur.*—By MAULAVI ABDUL WALI.

(Abstract.)

This order of Faqirs belongs to the followers of Shah Madar. They reside at Mauza Baliya-Dighi, within the Hemtabad police station in the district of Dinajpur. Their beliefs and practices are in many ways Anti-Islamic. They grow long hair on their head, put on coloured cloths, and use shackles of iron and long iron tongs. They never take food touched by other persons, and subsist mainly on unboiled rice, clarified butter and salt. They do not eat fish or meat. It would seem that they are a survival of a corrupt form of Sufism mixed with Hindu ideas. They possess a *Sanad* granted by Shah Shuja to Shah Sultan Hasan Muria Burahna, of which a copy is published in this paper, and which gives curious details of the former powers and privileges of these Faqirs.

4. *On some Archæological remains in the District of Rajshahi.*—By MAULAVI ABDUL WALI.

(Abstract.)

This is a note on two ancient mosques, one at Bagha and the other at Kusumba, in the District of Rajshahi. It contains a copy of an official report on them, written by Mr. J. S. Carstairs in 1872, and some more details of the traditions attached to each mosque. From inscriptions, which still exist at both places, it appears that the Bagha Mosque was built in 930 A.H. = 1523-4 A.D. by Nuşrat Shāh, the son of Ḥusain Shāh, while the Kusumba Mosque was built during the reign of Ghiyāşuddin Bahādur Shāh, the son of Muḥammad Ghāzi, of the Sūri family, in the Hijrī year 966, which corresponds to 1558-9 A.D. Although there is a large endowment connected with the Bagha Mosque, it has been allowed to fall into a bad state of repair.



5. *Note on the discovery of Thanasimus sp. prox. nigricollis* Lew. in the N.-W. Himalayas, with some remarks on its life-history.—By E. P. STEBBING.

(Abstract.)

In June 1902, whilst touring in the Tehri Garhwal forests in the N.-W. Himalayas, the writer discovered and took a number of specimens of both larvæ and adults of a species of *Thanasimus prox. nigricollis* Lew. a beetle of the family *Cleridæ*. After remarking upon the close affinities some of the insects found in the N.-W. Himalayas appear to have with those of parts of Japan, the author goes on to show the importance of the discovery of the *Thanasimus* in the valuable coniferous forests in which it was found. It was pointed out that the insect is an eminently predaceous one, and feeds upon both bark and wood-boring *Scolytidæ*, amongst the species fed upon being some serious conifer pests. It thus takes the place in North India of the European *T. formicarius* which has the same habits in Continental forests, and thus forms one of the most valuable of the insect allies of the forester in those parts. So great is the importance attached to this latter insect in fact that, during some severe bark-boring attacks experienced in America in the pine forests of West Virginia, Virginia and Maryville, between 1890-1892, a well known America entomologist, Dr. Hopkins, was deputed to Europe to make a collection of living larvæ and adults of the predaceous clerid for importation into America. This experiment was conducted to a satisfactory issue.

Our Indian *Thanasimus* has pink elongated larvæ which feed upon the larvæ of the Scolyted beetle upon which it itself as an adult lives, and it is thus of great service during both the grub and adult stages of its existence. The pink grubs seek out the bark-boring grubs in the galleries in the bark of the tree. The clerid beetles, on the other hand, spend the whole of their life outside the tree, and seize the bark beetles upon the bark of the trees either whilst engaged in boring into or issuing from the tree.

The *Thanasimus* adult is probably to be found during most of the months between April and October. The writer by experiment has proved it to feed upon 10 different species of Scolytid beetles.

As the Indian *Thanasimus* is much larger than its European confrère, being almost double the size, it is probably of even greater value in the forest, since it consumes a greater number of beetles during its existence. The beetles is polygamous.

As an instance of the immense amount of good such an insect can do in the forest the following illustration of the immense powers of rapid reproduction possessed by *Scolytidæ* is quoted.

A calculation was made that from eggs laid by the two species *Scolytus major* and *minor*, Steb. MS., in a deodar tree 100 ft. in height to the spot where the crown commenced and 3 ft. in diameter at the base, some 56,300 adults issued in July from eggs laid in April-May, due allowance being made for a large mortality. These 56,300 beetles at once laid the eggs of the second generation in other trees, and taking but 50 per cent. of the resulting larvæ as arriving at maturity, the enormous total of 1,550,000 adults is arrived at, all the result of the April eggs. This shows the rapid rate at which these beetles increase under favourable conditions.

6. *Note about certain sections of the Kakars living in the Zhob District of Baluchistan. Collected by RAI SAHIB DIWAN JAMIAT RAI, Special Assistant to the Superintendent, Imperial Gazetteer, Baluchistan. Communicated by the Anthropological Secretary.*

(Abstract.)

The Kakars are an Afghan tribe in Baluchistan. They amount to over one hundred thousand persons, and are to be found in the largest numbers in Zhob, Quetta-Pishin, and Thal-Chotiali. The paper describes some social customs prevailing among the Mehtarzai and Sargara sections of this tribe, especially ceremonies at child-birth, betrothal and marriage, rain-compelling charms, and other usages. It also gives a legendary account of the origin of the Sanzar Khel section of the Kakars, and a description of some of the primitive Kakar dwellings in Tang Haidarzai.

7. *Exorcism of Wild Animals in the Sunderbans.—By D. SUNDER, Commissioner in the Sunderbans. Communicated by the Anthropological Secretary.*

(Abstract.)

This is an interesting account on the charms used by the fakirs in the Sunderbans to chase away tigers. Between the months of October and May crowds of wood-cutters come in boats from Barisal, Khulna, Faridpur, Calcutta, for the purpose of cutting timber. Their belief in the power of the fakir to protect them against the attacks of wild animals, especially tigers, is so strong that nothing will induce them to proceed to the jungles without their fakir, and no work is begun in the forests by wood-cutters until the fakir has gone through his charms and incantations, and has performed his pujas for the dispersion of all noxious animals. These are described with great detail. The prayers are directed to a curious mixture of gods and godlings. We find there Jaga-bandhu, Mahadev, Monsha (the goddess of Serpents), Rупapori (a

spirit of the jungles), Kali-Mai, Ospori (a jungle spirit having wings), Berra Thakurain (the wife of Dakho Raja, the father of Durga), Rakhya Chand (another form of Kali), Ghazi Saheb and his brother Kalu, Chawal Pir, Ram Ghazi and Bāstu Devatā (the goddess of the earth). Further, we have Hingli, Bingli, and Mangala, said to be deities of the jungles and the fathers of tigers, also Azrael the rider, alleged to be a spirit who is always on the backs of tigers. If it happens that the fakir himself, instead of the wood-cutters, is carried off by the tiger, the people often explain this by saying that, because the propitiation of the deities of the jungle in those places had been neglected for a long time, the tigers there consequently had become very angry.

8. *The occurrence of Melanterite (Ferrous Sulphate) in Baluchistan.*—By DAVID HOOPER, F.C.S.

9. *Notes on Chirand in the Saran District.*—By NUNDO LALL DEY.

(Abstract.)

Chirand is six miles to the East of Chupra. It contains an ancient fort, upon which four Hindu temples have been built. There also stands a mosque, built by Husain Shah of Bengal in 1503 A. D. Numerous Buddhist images had been found there, and ancient mounds are seen at several places close to it. The author explains the word 'Chirand' as a compound of *chir*, meaning 'a portion cut off' and *ānd*, which he takes as a corruption of *Ānanda*. There is a tradition that the remains of *Ānanda*, the famous disciple of Buddha, were divided into two parts after cremation, and that one half was deposited in the Mahāvana-Kūṭāgāra, in one of the suburbs of Vaisāli. The latter place was shown to the Chinese pilgrims. There is, further, a legend still current at Chirand that it was the capital of king Mayūradhvaja, who sawed down his son in order to satisfy the craving for human flesh of Siva, who came to the king in the disguise of an old Brahman to test his generosity. Combining all these facts, the author suggests an old mound close to Chirand as the probable site of the tower, containing half of *Ānanda's* remains, and he sides with Dr. Hoey as regards the position Vaisāli who has recently located it at Chirand, in contradiction to Basar, in the Muzaffarpur District, which used to be the generally accepted site of Vaisāli. However this may be, it appears that the ruins at Chirand deserve a careful exploration, as they are promising of important results.

10. *The Mughs of the Sunderbans, Backergunge District.*—By D. SUNDER, Commissioner in the Sunderbans. Communicated by the Anthropological Secretary.



PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.  
FOR JULY, 1903.

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The Monthly General Meeting of the Society was held on Wednesday, the 1st July, 1903, at 9-15 P. M.

The Hon. Mr. Justice F. E. Pargiter, B.A., I.C.S., Vice-President, in the chair.

The following members were present :—

Mr. J. Bathgate, Dr. T. Bloch, Mr. I. H. Burkill, The Rev. E. Francotte, S.J., Mr. T. H. Holland, Mr. H. E. Kempthorne, Mr. W. A. Lee, Mr. C. Little, Major F. P. Maynard, I.M.S., Mr. J. Nicoll, Mahamahapadhyaya Haraprasad Shastri, Mr. E. P. Stebbing, Pandit Satis Chandra Vidyabhusan, Mr. E. Vredenburg, and Mr. D. R. Wallace.

*Visitors* :—The Hon. Mr. Justice Rampini, Mr. R. R. Simpson, and Mr. G. Wallace.

The minutes of the last meeting were read and confirmed.

Twenty-nine presentations were announced.

Maharaja Jagadindra Nath Roy Bahadur and Mr. H. Maxwell Lefroy were balloted for and elected Ordinary Members.

The Chairman announced that the Elliott Prize for Scientific Research for the year 1902 had not been awarded, as the essay received in competition was not of sufficient merit to justify the award of the Prize.

The Chairman also announced that Mr. T. H. Holland had been elected a member of the Council of the Society.

The General Secretary reported that the Hon. Mr. Justice F. E. Pargiter had been appointed to serve on the Finance and Philological Committees, and Dr. E. D. Ross on the Library Committee of the Society during the present year.

The Natural History Secretary exhibited pupæ and moths, together with drawings of all the stages in the life-history of the Tineid larvæ shown at the last meeting feeding upon hair taken from a badly attacked mounted head of an *Ovis hodgsoni*. The first of these larvæ changed to pupæ on the 6th June, and others followed suit on the following days, until by the 25th all had pupated. In doing this, they attach themselves either amongst the hairs by means of thin silken strands, or more often collect gregariously together in bunches. The covers of the box in which they were kept were all made in this way, the larvæ congregating together and spinning their cases together. They pupate within the case. Pupation lasts but a few days only, the first moths issuing on 11th June, whilst others followed on 14th and subsequent days, and are still emerging. The pupæ moves itself to the mouth of the case, when the moth is ready to emerge, and protrudes beyond it to facilitate the exit of the moth. Thus, when the latter has escaped, the empty pupal case remains projecting from the mouth. The pupa is brown in colour and very small. Length 6 millim. The figure shows the larval cases collected gregariously together, and an empty pupal case projecting from the mouth of the larval case.

The moth is a tiny grey insect with very long fringes to its wings, which are longish and narrow and covered with long scales especially near the inner angles of the lower wings. Wing Exp.—13·2 millim.

Mr. Stebbing also exhibited a small species of *Thanasimus prox. formicarius*, which is predaceous upon the larvæ of the Bamboo shot-borer *Bostrichus pilifrons*, an insect known as 'ghoong' in many parts of India. The larvæ are long and white in colour, and also feed upon the Bostrichid larvæ in their galleries in the bamboos. When full-fed they pupate in the bamboo, and the beetles live inside it and feed upon the shot-borer's larvæ. They probably only leave the galleries to pair. They are very active and excessively voracious.

This beetle will be described in a subsequent paper.

The exhibit shows the larvæ, pupæ and adults of the *Thanasimus*, as also the larvæ, pupæ and adults of the *Bostrichus pilifrons*.

The following papers were read :—

1. *Notes on Sundribun Plants.*—By D. PRAIN.

The writer has recently published a paper (*Records, Bot. Survey of India*, vol. ii. n. 4) dealing with the *Flora of the Sundribuns*. He had occasion there to call attention to the fact that a number of species have been recorded from this region in Roxburgh's *Hortus Bengalensis*, published in 1814, and that a few of the species there mentioned have not been collected in the area since Roxburgh's time. The specimens themselves that would have verified Roxburgh's statements were removed from Calcutta in 1828 and are now entirely lost to India. Those, however, who have to follow Roxburgh's published work are so struck by the closeness and accuracy of his observations that, when he makes a definite statement, they accept its correctness in the face of any amount of *negative* evidence.

The species that are recorded from the Sundribuns by Roxburgh, for which the record had been unverified by subsequently collected specimens when the writer's paper went to press hardly a year ago, were *Flemingia congesta*, *Mezonnuron cucullatum*, *Bruguiera parviflora*, *Arthrocnemum indicum*, *Salicornia brachiata*, *Dendrobium Pierardi* and *Pteris vittata*. Since the paper was sent to the printer, a native collector, who had been sent to obtain seeds of various Sundribun species, has brought in specimens of *Salicornia brachiata*, which he found in abundance not far from Matla (Canning Town). And immediately after the publication of the paper the writer received from a careful observer, Mr. J. Lancaster, Secretary to the Agricultural and Horticultural Society of India, an interesting note regarding *Dendrobium Pierardi*, which is worthy of being recorded.

'In June 1896, Mr. Lancaster, being unwell, was sent for a fortnight's change of air by Sir C. C. Stevens, then President of the Society, and through the kindness of Capt. Petley was enabled to join the "Tigris" which was proceeding to stock the Refuge-Houses along the seaface of the Sundribuns.

The steamer went direct to the most distant Refuge-House, two days' journey east of the Matla. While running down the lane of water leading to the house the boat took the ground, a not unusual accident at the sharp turn known as the Devil's Elbow.

The delay consequent on this was taken advantage of by Mr. Lancaster to examine through a glass the islands east and west of the position. Detecting to the east, on Bangadhony Island, a tree rather taller than usual with a forked stem and apparently a clump of orchids in the fork, Mr. Lancaster accompanied by Mr. Hogg, late of the Calcutta Police, proceeded to this tree, and climbing its gnarled and twisted trunk,

obtained a clump of a *Dendrobium*. This he mounted on his return to Calcutta, and obtained flowers later on which proved it to be *Dendrobium Pierardi*. The plant is still alive in the Society's garden at Alipur, and though the block on which it was originally placed has decayed, its roots have laid hold of some wire netting and *Vanda teres* stems, and it thrives in quite as exposed a position as that in which it was found.'

Thus, though the writer was unaware of the fact, Roxburgh's record of *Dendrobium Pierardi* from the Sundribuns area, which by the way is the *locus classicus* for the species, had already been amply confirmed, and there is little doubt that similar happy accidents will in time lead to a confirmation of Roxburgh's other and as yet unverified records. The writer would esteem it a favour if members of the Asiatic Society interested in the Sundribuns would communicate with him should they contemplate visiting on official duty, or for purposes of sport, this very enticing region, when he would be glad to indicate to them what, from the botanical standpoint, still calls for observation and investigation.\*

2. *Notes on the Grām Devatā or tutelary village deity of Orissa*.—By JAMINI MOHAN DAS, Deputy Magistrate, Cuttack. (Communicated by the Anthropological Secretary.)

(ABSTRACT.)

Throughout the plains of Orissa, every village has a tutelary goddess, called Grām Devatā or Ṭhākuraṇī. She is generally established under the shade of a tree, and commonly represented by a piece of shapeless stone, surrounded by several smaller pieces representing her children. Carved images are also met with, though very rarely, and sometimes the trunk of a tree, supposed to possess supernatural properties, is worshipped as the village Goddess. The Kandhs of Nāyagarh, however, believe their village deity to be of the male sex, and use a wooden post, 2½ feet high, to represent it. Besides the generic name, Grām Devatā, each Goddess has a specific name, which is generally one of the thousand names of Kālī. The most noticeable feature of the Grām Devatā worship is the non-priestly caste of the men who conduct it. In the plains, the Nāpit, Māli, Rāul, or Bhopā is usually the priest,

\* Since this paper was read, the Rev. Mr. Le Quesne, of Bhowanipur, has kindly communicated plants of *Randia dumetorum*, raised from seeds collected in an abandoned Sundribun settlement at Gaoroba. The writer has also just learned that in other places which mark the sites of habitations of the old dacoits and salt-smugglers who infested the Sundribuns, are to be found growing examples of *Mimusops Elengi*—the Bakūl tree.



while the aborigines select men from their own tribes. The worship of the village Goddess is largely supported by small rent-free grants of land, which is held by the priest, who gets in addition daily doles from the rich men of the village, and weekly doles from the poorer people. Thursday is considered specially auspicious for the regular *pūjā* of the Goddess. Special offerings are made at all festive occasions, and the *Ṭhākuraṅgī* receives particular attention on the out-break of epidemic diseases. The ceremonies performed on these occasions are the same as elsewhere in India. The people have a peculiar means of knowing the wishes and decrees of the Goddess. In almost every village is a male or female medium, called *Kālaṣṭ*, through whom the Goddess communicates with the people. He appears before the Goddess holding two sticks in his hands, and swings his body to and fro. After a time he begins to tremble, and in the course of his confused mutterings gives out some secrets of the village, to win the confidence of the people. He then predicts evil to some and good to others, prescribing at the same time the remedies required in the shape of special offerings to the Goddess and special favours to himself. Certain village Goddesses in the plains are regarded as "Parama-Vaiṣṇavis," and animal sacrifices are not allowed before them. Such sacrifices are also sparingly made before the other Goddesses, probably owing to the spread of Vaishnavism. Fowls are also let loose before some of the Goddesses by the upper classes of Hindus, who do not eat them, and they are killed by the lower classes who eat them.

Finally, the author points to the practice of animal sacrifices, the offerings of fowls, the relegation of the priestly function to the Sudra castes, and the shapeless form of the images as indicating the aboriginal origin of this form of worship.

3. *A note on the life-history of Ohermes abietis-piceæ, Steb. Ms.*—By E. P. STEBBING.

(ABSTRACT.)

In a previous paper read before this Society at the Meeting held on April 1st last, I gave an account of the mode of development of the alar appendages of the Spruce form of *Ohermes abietis-piceæ*. It is my intention here to describe in detail the observations I have up to the present been able to make on the life-history of this exceedingly remarkable and interesting insect, which lives at elevations of between 7000 to 9500 feet upon Spruce and silver fir trees in the N.-W. Himalayas.

The genus *Ohermes* belongs to the great family *Aphidæ* or Plant Blights, one of the families of the *Rhynchota* or bugs, insects provided with a proboscis or beak by means of which they suck out the juices of plants.

It is not too much to say that man himself would be exterminated off the face of the earth if this particular order of insects were not kept in check by their numerous predaceous and parasitic foes. But the genus is especially remarkable, in common with the well-known *Phylloxera* which commits such serious depredations in European vineyards, owing to the fact that one generation of individuals assume different habits to the one that has preceded them, and so set up the phenomenon known as "parallel series." It is well-known that in the case of the *Phylloxera*, one generation lives in galls upon the leaves, whilst a succeeding one lives underground upon the roots of the vine. There is a European form of the *Chermes* here described, and its life-history has been the subject of the most lively discussion amongst European scientists, the investigations of such renowned observers as Blochmann, Dreyfus and Cholodkovsky standing out the most prominently. Perhaps the latter may be said to have given us the most lucid explanation in his paper published as recently as 1890. This European form, which is named *Chermes abietis-laricis*, lives upon the Spruce and larch. The writer discovered the *Chermes* here dealt with in the N.-W. Himalayas. In this region the larch does not exist, and its place is taken by the Silver fir which is generally to be found associated with the Spruce. The life-history of the insect upon these trees, which appears to differ in a few points from that of its European confrere, may be briefly summarised as follows:—A wingless parthenogenetic female of the *Chermes* either deposits her eggs upon Spruce twigs and branches in the autumn, or hibernates through the winter upon the tree and lays her eggs in the April of the following year. These eggs, which are numerous, hatch out at the beginning of May, and the young larvæ collect round the base of the young developing needles on the branches and by suction cause them to swell up at their bases. The needles thus coalesce, enclosing the young larvæ, into a gall or pseudo-cone. This grows on until it has the appearance of a young, green fir-cone. Inside it becomes partitioned off into a number of cells, in each of which a number of young larvæ live and grow to maturity. In the middle of July they are ready to undergo their last moult. The cone then opens by shrinkage at the edges of the little doors, with one of which each compartment is furnished, and the little fat purple larvæ crawl out on to the outside of the false cone. They at once shed their last skin and become perfect winged insects, most gorgeously coloured, though these colours fade within a few hours. These insects now take on different habits; some of them remain on the Spruce and lay eggs thereon out of which young are hatched, which probably grow into the hibernating females, whose offspring next year produce the galls upon the tree. But another portion migrate to the Silver fir (in

Europe it would be the larch) ; here they lay eggs from which arise the wingless parthenogenetic females which either lay eggs upon the stems and branches of the new or secondary plant in the autumn or hibernate on it through the winter and lay eggs in April. These eggs are invariably laid within white cottony masses which render their presence upon the trees easily perceivable. These eggs hatch out in the beginning of May, and the young, crimson-coloured larvæ crawl up on to the newly-developed spring needles of the tree and suck out their juices. Part of these become nymphs and go on to the winged condition, and then about the middle of July fly back to the Spruce, whilst the rest remain wingless and lay eggs that give rise to yet another wingless generation ; in fact, it may be said that a second pair of parallel series is formed upon the Silver fir, of which one is wingless and exclusively parthenogenetic and continues to live for an indefinite period upon the tree, whilst the other becomes winged and returns to the Spruce. I have not as yet traced the further life-history of these winged individuals beyond ascertaining the fact that they really do return to that tree. It is probable, however, that they at once lay eggs, which give rise to a sexual generation. These latter lay upon the Spruce the egg which gives rise to the wingless parthenogenetic ♀ which starts the life-cycle by laying the eggs from which hatch out the young larvæ whose action produces the galls or pseudo-cones.

It is considered probable that it will be held that the discovery and working out of the life-histories of this insect and that of the *Thanasimus* sp. (the Clerid predaceous upon bark-beetles) whose habits were discussed in a paper read at the last Meeting, are amongst the most important, as they are scientifically as well as economically amongst the most interesting of the entomological investigations made in this country.

4. *Notes on the Hindus in the Nuskhî Tahsil of the Ohagai Agency in Baluchistan.*—By H. RAI SAHIB DIWAN JAMIAT RAI, *Special Assistant to the Superintendent, Imperial Gasetteer, Baluchistan. Communicated by the Anthropological Secretary.*

(ABSTRACT.)

These notes are the outcome of enquiries made from some of the principal Hindu shop-keepers of Nuskhî. There are in all about thirty families, old inhabitants, some of whom have been in the Tahsil for five generations. They are all Arora Hindus, and the majority of them came from Kachi and Shikarpur. They all know Brahui, and most of the men speak Baluchi also, but in their homes they speak the Jatki dialect. There are also about twenty families in Shorawak, in Afghan territory. They have not very clear ideas about their religion. The

majority profess Sikhism, but the Shikarpuris worship Darya Bakhsh, the River Pir of Sind. So far as is known, none of the Hindus have been converted to Muhammedanism. There is, however, an instance of a Hindu taking a Muhammedan girl as wife. Hindus have been in the habit of buying and keeping Muhammedan slaves. These Hindus have some peculiar usages of their own. Thus a Muhammedan can clean his pots with ashes, sand, or dust, but he must not wash them with water. A Muhammedan may bring them water in a skin, a brass pot, or an earthen-pitcher. A Hindu may wash with water the baking-stove belonging to a Muhammedan, sprinkle salt on it, and then bake his bread on it. A Muhammedan must not touch food belonging to a Hindu, but he may carry it in a pot or a piece of cloth. The author then goes into details with regard to the ceremonies at betrothal, marriage, child-birth and death; but these do not appear to differ essentially from the customs prevailing amongst the Hindus in the Panjab.

5. *The exceptional heat in Bengal, and its probable cause.*—By C. LITTLE, M.A.

(ABSTRACT.)

The temperature tables given for Calcutta and other parts of India show that between the middle of April and the 25th of May excessive heat continued without interruption, though not without fluctuation in Bengal; while beyond the western frontier of Bengal there was either normal, or, as in the north-west, exceptionally low temperature. The progressive character of the temperature recorded at Alipore, since the establishment of the observatory there, is referred to; and it is pointed out that 107°.4 registered during the past season is the highest recorded with one exception, *viz.*, 108°.2 on the 12th of June, 1901. This latter value is to some extent of doubtful accuracy. It is also shown that the temperature at Calcutta exceeded 103° eleven times during April and May 1903, whereas during the previous ten years the average number of days on which that figure was exceeded was less than three. It is claimed that excessive temperature of that nature as regards intensity and duration in Bengal, must, in the absence of relatively high temperatures in the west, be due to well defined causes not indicated by the ground-level observations. Reference is made to the direction of the upper current, and the writer states that his own observations of the course followed by thunderstorms during the past season as well as the cloud movement, whenever cloud was visible, indicate that the air-current overhead was, during the period of heat, from the west instead of from the more usual north-westerly direction. Assuming that a westerly current from Central India is warmer than a north-westerly current

from the directions of the Himalayas and Central Asia, it is shown that the more abnormal features of the weather in Bengal may be explained, the excessive heat by impaired convection, and the failure of thunderstorms by the diminished vertical temperature gradient.

6. *Notes about the Wanechis (Spin Tarin Afghans) of the Shahrig Tahsil, Thal Chotiali, Baluchistan.*—By RAI SAHIB JAMIAT RAI, *Special Assistant to the Superintendent, Imperial Gazetteer, Baluchistan.* Communicated by the Anthropological Secretary.

(ABSTRACT.)

The Wanechis are a section of the Spin Tarin Afghans. These, with a few exceptions, have left their original home in Pishin, and migrated southwards to Shahrig and Duki Tahsils of Thal Chotiali. Numerically their strongest group is the Wanechi, which is said to come of an alien stock. Theoretically an Afghan tribe, as we find it in Baluchistan, is constituted from a number of kindred groups of agnates. That is to say, descent is through the father, and the son inherits the blood of the father. Affiliated with a good many tribes, however, are to be found a certain number of alien groups known as *Mindūn* or *Hamsāyah*. The latter term means: "living in the same shade." These groups are admittedly not united to the tribe by kinship. The number of Wanechis according to the last census is 2,802, and the sections specified are twenty. The paper then goes into further details with regard to the sub-divisions or clans making up the various sections, their origin, their grouping in time of tribal warfare, the division of looted property, transit-dues levied by some tribes, their marriage customs, and compensations paid for various offences, such as murder, injury, theft and adultery.

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PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.  
FOR AUGUST, 1903.

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The Monthly General Meeting of the Society was held on Wednesday, the 5th August, 1903, at 9-15 P.M.

THE HON'BLE MR. C. W. BOLTON, C.S.I., I.C.S., President, in the chair.

The following members were present :—

Mr. J. Bathgate, Mr. I. H. Burkill, Dr. A. Caddy, Mr. J. N. Das-Gupta, Dr. W. C. Hossack, Mr. C. Little, Mr. J. Macfarlane, Kumar Ramessur Maliah, The Hon'ble Mr. Justice F. E. Pargiter, Mr. C. G. Rogers, Pandit Yogeśa Chandra Sastree, Mahamahopadhyaya Haraprasad Shastri, Mr. E. P. Stebbing, Pandit Satis Chandra Vidyabhusana, Mr. E. Vredenburg, and Mr. E. H. Walsh.

*Visitors* :—Mr. I. A. Black, Mr. R. Enthoven, Mr. L. L. Fermor and Mr. H. G. Pearson.

The minutes of the last meeting were read and confirmed.

Thirty-three presentations were announced.

Mr. Abdur Rahim and Dr. Mirza Muhammad Masoom were balloted for and elected Ordinary Members.

It was announced that Lt.-Col. C. H. E. Adamson had expressed a wish to withdraw from the Society.

The General Secretary reported the death of Babu Ram Din Singh, an Ordinary Member of the Society.

With reference to a Circular issued by a Committee of the British Association for the purpose of collecting photographs of Anthropological interest, printed in the Proceedings of the Society for April 1903, the President announced that the Council had agreed to the establishment of a local Indian depôt for the storage of negatives, and the Society had further undertaken to store the negatives.

The President also announced that the Council had approved of the proposal of the Hon'ble Mr. Justice F. E. Pargiter, Vice-President, to use the Society's Meeting Hall for the purpose of arranging a popular lecture on some scientific subject on the 10th August, 1903, at 9-15 p.m. The Council had further undertaken the business of the lecture itself at a charge to cover expenses incurred from the sale proceeds of the tickets, and entrusted the matter to a Sub-Committee consisting of the Vice-President, Mr. E. P. Stebbing, the Hon'ble Dr. Asutosh Mukhopadhyaya, and the General Secretary. Members of the Society will be admitted free and tickets sold to Scientific Institutions at a large reduction.

The General Secretary reported :—

1. That Mr. T. H. Holland had been appointed to serve on the Finance Committee of the Society during the present year.
2. That the order of Council relative to the Library being open to the members of the Society from 10 A.M. to 2 P.M. on Sundays, had been revoked.
3. That the Council had appointed Pandit Mahendra Nath Mukhopadhyaya as the Pandit for the Oriental Library of the Society in the place of Pandit Charu Chandra Bhattacharyya, resigned.

The Natural History Secretary, Mr. Stebbing, exhibited the various stages in the metamorphosis of a species of *Olania prox. crameri* which defoliates Casuarina (*Casuarina equisetifolia*) trees in the Madras Presidency, and made a few remarks upon its life-history. The insect, of which specimens of the various stages and diagrams were shown, belongs to the family *Psychidæ*, commonly called the bag-worms because of the habit the larvæ have of preparing for themselves early in life small cases of bits of stick, leaves, etc., in which they live and pupate. In the present instance the case is made of the small green branches of the tree arranged in a cylindrical manner. The green soon fades, and the case then assumes the dirty grey colour of pieces of stick. The caterpillar feeds upon the needle-like leaves of the tree, and its protective case doubtless helps to protect it against birds which, owing to the very thin foliage of the Casuarina, would quickly see it feeding upon the tree had it not some form



of protection. The grub takes alarm at the slightest motion and immediately withdraws itself into its case. It is a heavy feeder. It pupates within the case, closing down the bag opening at the exterior end after fixing the case to a branch, and then turning round inside the case so as to hang head downwards. The moth escapes at the lower end of the case. Only the male leaves the case; the female is wingless and consists of an elongated yellow sac with no legs or mouth parts. She is fertilised by the ♂ within the case itself, and this is the reason for the great extension of the abdominal tip in the male moth. The female lays her eggs in the case. About 9 days are spent in the pupal stage by the July generation of the insect.

The eggs laid by the July-August moths hatch out within a few days of being laid, the young larvæ at once leaving the case and scattering over the young branches of the tree. These are those of the second generation of the year.

In the discussion that followed Mr. Rogers said that he had noticed some faggot worms on the Casuarinas in Port Blair (the Andamans), and suggested that they might be the larvæ of the same species as Mr. Stebbing had obtained in Waltair and Ganjam (Madras).

Mr. Rogers then drew attention to the occurrence of young Casuarina trees on the North and West Coast of the Little Andaman and also their occurrence in Car Nicobar (West Coast) and Great Nicobar also on the West Coast, and suggested that as the genus was so far as he knew essentially an Australian one, that the seed might have been water-borne and have come across from Madras. The seed of the Casuarina ripens in Madras in May, and the South-West monsoon commences early in June, which would seem to point the possibility of the introduction of the Casuarina into the Nicobars and Andamans in this way. It is true the Casuarinas have been planted at Port Blair (Andamans) and Nancowry (Central Nicobars) on the hills near the harbour, but few young seedlings have resulted naturally from these trees, the young trees referred to above being confined to the sea-shore.

Dr. A. Caddy stated that he knew Australia and that the genus, with the exception of *Casuarina equisetifolia*, was confined to the Australian Continent, but that the species named had been reported from Madagascar.

Mr. Bathgate then asked how the moth could have got to the Andamans from Madras. Mr. Stebbing pointed out that there was no proof of the identity of the species, as no moths had been reared by Mr. Rogers in the Andamans, and it was therefore impossible to say that the larvæ noticed as occurring in that locality were identical with those collected in the Casuarina plantations of Madras.

The following papers were read :—

1. *Chronology of the Eastern Ganga Kings of Orissa.*—By **MONMOHAN CHAKRAVARTI**, M.A., B.L., M.R.A.S., *Deputy Magistrate.*

(Abstract.)

The chronology of the Eastern Ganga kings is in a confused state. The object of this article is to clear this confusion as far as possible with the help of inscriptional and other records.

The fourteen Eastern Ganga kings from Cōḍaganga to Nṛsimha Dēva IV have been taken in hand one by one, all the date references noted in a tabular form, the first and last year deduced, the relationship and titles noted, and then all available informations likely to throw light on the chronology have been gathered and discussed. Eighty-one date-extracts of inscriptions have been quoted in the tables, most of them published in full for the first time, besides references to other inscriptions in the accounts given below each table.

The following approximate times of the Orissan Ganga kings have been arrived at:—

Cōḍaganga	...	...	Çaka 998-1069.
Kāmārṇava VII.	...	...	Ç. 1069-1078.
Rāghava	...	...	Ç. 1078-1092.
Rājarāja II.	...	...	Ç. 1092-1112.
Aniyaṅka <i>alias</i>	Anaṅga-		
bhīma II.	...	...	Ç. 1112-1120.
Rājarāja III.	...	...	Ç. 1120-1133.
Anaṅgabhīma III.	...	...	Ç. 1133-1160.
Nṛsimha Dēva I.	...	...	Ç. 1160-1186.
Bhānu Dēva I.	...	...	Ç. 1186-1200/1.
Nṛsimha Dēva II.	...	...	Ç. 1200/1-1227/8.
Bhānu Dēva II.	...	...	Ç. 1227/8-1249/50.
Nṛsimha Dēva III.	...	...	Ç. 1249/50-1274/5.
Bhānu Dēva III.	...	...	Ç. 1274/5-1300/1.
Nṛsimha Dēva IV.	...	...	Ç. 1300/1-reigning in Ç. 1324 and probably in Ç. 1346.
Dark Period	...	...	Ç. 1346(?)-1356/7.

The article ends with a genealogical table of the entire Ganga family from Virasimha, the reputed founder, to Nṛsimha Dēva IV., with their respective years of reign.

2. *Himalayan Summer Storms and their influence on Monsoon Rain-fall in Northern India.*—By **C. LITTLE**, M.A.

3. *A List of Tibetan Books brought from Lhasa by the Japanese monk, Mr. Ekai Kawa Gochi.*—By **E. H. WALSH**, I.C.S.

4. *On the life history of a species of Arbela, new to the Indian Museum Collections, which is proving a destructive pest in Casuarina plantations in Madras.*—By E. P. STEBBING.

(Abstract.)

How little is really known about our insect foes in India is becoming increasingly evident day by day. An insect suddenly swarms over an area in numbers owing to some particularly favourable conditions in its surroundings, it commits serious depredations in the fields, orchards, or forests of the tract it is invading and specimens are sent for identification to specialists. The odds are greatly in favour of its being unknown to science. Instances of this state of affairs are numerous, and it may be said that, leaving out of account the butterflies and one or two other groups which have received attention, it is easier to pick up a new species than to collect one that is known. The moth known as *Arbela tetraonis* Moore, about whose life-history I wish to put on record a few notes, furnishes an illustration of the aptness of the above remarks, since although new to the Indian Museum Collections and rare in collections generally, its larva has been known for some years as a destructive bark eater in *Casuarina* (*Casuarina equisetifolia*) plantations on the eastern seaboard of Madras. There may, however, be said to be some excuse for its having remained so long undescribed, since it belongs to a family of moths closely allied to the *Cossidæ* which have been little studied and the life-histories of whose members are little known, the larvæ often living in the interior of the woody portions of trees. The moths are rarely seen; in colouration they often greatly resemble the surfaces upon which they rest, and being poor fliers they do not move about much and, owing to the method of living of the larvæ, they are difficult to breed out. The pupal stage of the English Goat Moth is known and has been described, but very little is known about the pupæ of other members of the *Cossid* family, and practically nothing is on record about the Indian *Arbelidæ*. The description of the pupal stage of this insect given in the paper is therefore of some interest and importance.

After noting on the members of the families represented in the Indian Museum, including an unnamed specimen, which is labelled 'de Nicéville, Calcutta, 1891,' and which is not unlike the insect here dealt with, the paper gives a description of the larva, pupa, and moth\*; and then alludes to the portions of the life-history at present known and describes the method of feeding of the larva. This is important. The

\* This insect has since been very kindly identified for me by Mr. G. C. Dudgeon as *Arbela tetraonis* Moore. E.P.S., 2nd November, 1903.

caterpillar feeds entirely upon the bark, building for itself covered ways under which it takes shelter. These galleries, which resemble glorified termite galleries, are composed entirely of the excreta bound together with fine silk. These covered ways are very conspicuous upon the bark of the tree, being from  $\frac{1}{3}$ rd to  $\frac{1}{2}$ " in breadth externally, and from 9" to as much as 18" in length, and reddish brown in colour. An infested tree can always be told by the presence of these galleries which doubtless serve to protect the caterpillar from the attacks of birds and other predaceous foes. The bark is eaten away either in thin irregular-shaped patches in the neighbourhood of the galleries or gnawed down to the wood beneath the covered ways. These latter run up or down the tree or may nearly or quite encircle it. When the insect is plentiful the trees are killed out by it. On becoming full fed the larva leaves the bark and bores right into the wood until it reaches the centre of the tree where it pupates. On maturing, the pupa by means of rows of spines with which it is encircled, wriggles and pulls itself along the gallery in the wood until it reaches the outside; it then pushes through the covered way till about  $\frac{1}{3}$ rd of its length protrudes. The anterior end then splits down and the moth escapes. Moths emerge between March and July.

The insect appears to be fairly common in Chatrapur (Ganjam), Godavari, Cuddalore, Nellore (S. Arcot), and in North Arcot. In these places valuable Government Casuarina plantations exist, formed either with the object of stopping the encroachment of the shifting sand dunes on to the cultivated lands, or on to roads, etc., or to provide wood and fuel for the local population for whom little other wood save that of palm trees exists. It will be seen, therefore, that the attacks of an insect of this nature are of importance since they may ruin the result of many years' work. Unfortunately the insect is not alone but has other insect allies which aid it in the work of destruction.

In a discussion which followed Mr. Pargiter, Vice-President, stated that when stationed in the Sunderbuns some years ago he had seen a larva which appeared to live and feed in a very similar manner to the *Arbela* larva described by Mr. Stebbing.

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**PROCEEDINGS**  
OF THE  
**ASIATIC SOCIETY OF BENGAL.**  
FOR NOVEMBER, 1903.

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The Monthly General Meeting of the Society was held on Wednesday, the 4th November, 1903, at 9 P.M.

THE HON. MR. JUSTICE F. E. PARGITER, B.A., I.C.S., President, in the chair.

The following members were present :—

Mr. J. Bathgate, Dr. T. Bloch, Mr. I. H. Burkill, Rev. E. Francotte, S.J., Mr. T. H. Holland, Dr. W. C. Hossack, Mr. C. Little, Mr. J. Macfarlane, Dr. M. M. Masoom, Mr. C. W. McMinn, Mr. C. Michie, Mr. L. Morshead, Pandit Yogesa Chandra Sastree, Mr. E. P. Stebbing, Pandit Satis Chandra Vidyabhusana, Mr. E. Vredenburg, Mr. D. R. Wallace, Mr. E. H. Walsh, Major J. H. Tull Walsh, I.M.S., and Dr. C. R. Wilson.

*Visitors* :—Mr. J. A. Black and Mr. V. H. Jackson.

The minutes of the last meeting were read and confirmed.

Eighty-one presentations were announced.

Mr. J. Hope Simpson, Nawab M. M. Hosein Khan, The Right Rev. Dr. Reginald Stephen Copleston, Mr. J. C. Faunthorpe, Professor C. Ito, Dr. A. S. Allan, and Mr. T. D. Edelston, were elected Ordinary Members during the recess in accordance with Rule 7.

It was announced that Dr. F. Noetling, Mr. E. S. Wood, and Mr. A. F. M. Abdur Rahman had expressed a wish to withdraw from the Society.

The General Secretary reported the death of Mr. W. B. Colville, an Ordinary Member of the Society.

The President announced :—

1. That the Council had appointed Mr. E. H. Walsh, I.C.S., Anthropological Secretary of the Society in the place of Mr. E. A. Gait, resigned.

2. That during the absence of the Hon. Dr. Asutosh Mukhopadhyaya, Mr. J. Macfarlane had been carrying on the duties of Treasurer, and that Dr. C. R. Wilson, having returned from leave, had taken over charge of the office of Treasurer from Mr. Macfarlane.

3. That Mr. E. P. Stebbing had been appointed to serve on the Library and Library Catalogue Committees, and Mr. I. H. Burkill on the Library Committee of the Society during the present year.

4. That the Council had appointed Pandit Asutosh Tarkatirtha as the Resident Pandit attached to the Search for Sanskrit Manuscripts, in the place of Pandit Hari Kishore Goswami, resigned.

5. That the Council had decided that the Members of the Bombay, Madras, Ceylon, and Singapore Branches of the Royal Asiatic Society, when in Calcutta, should have the right of attending the Society's General Meetings.

6. That the Council had decided that the Secretaries of the various branches should be responsible for recording the discussions on papers, and they should decide whether the discussion, or what part of it, should be printed.

7. That in connection with the Scientific Lectures delivered in the Society's Hall, the Council had resolved that they could not undertake the business any further.

8. That the Council had further resolved that the system of transliteration adopted by the Royal Asiatic Society should be also adopted by the Asiatic Society of Bengal.

The General Secretary reported for confirmation by the General Meeting that the Hon. Mr. Justice F. E. Pargiter, B.A., I.C.S., had been elected President, *vice* the Hon. Mr. C. W. Bolton, C.S.I., I.C.S., resigned.

The General Secretary reported the presentation of 2 gold, 6 silver, and 2 copper coins from the Honorary Secretary, Bombay Branch, Royal Asiatic Society, found in the various districts in the Bombay Presidency.

Mr. E. H. Walsh exhibited a collection of stone implements found in the Darjeeling district.

The Natural History Secretary, Mr. Stebbing, exhibited specimens of the ♂ and ♀ moths of *Duomitus leucōnotus*, Walker, a species of

the family Cossidæ which is to be found in Calcutta. Also coloured drawings of the larva, pupa, and moth, and a piece of the stem of *Cassia nodosa*, Ham., showing on the inside the tunnels made in the wood by the larva and on the outside empty pupal cases, from which the moths had escaped, protruding from holes in the bark.

Mr. Stebbing pointed out that the moths exhibited could be easily distinguished from a closely related species *D. stria* by the fact that the latter has a black thorax instead of the snowy white one present in the moths exhibited. The curious point about the moths exhibited was to be found in the relative size of the ♂ and ♀. Hampson in the Fauna gives the spread of wings of the ♀ moth as considerably in excess of that of the male, his measurements being ♂ 98-128, ♀ 180 millims: in the specimens bred out in Calcutta, none of the 32 moths reached these sizes, whilst the smallest ♂ measured had a wing expanse of but 70 millim, that of the smallest ♀ being 77 millim. It is believed that the larva depicted in the coloured drawings is shown to-night for the first time, as no previous record of its ever having been taken or described was discoverable. It will be noted that its colouring is vivid, which is often the case with wood boring moth larvæ, but that it is practically hairless. The larva is only about half-grown and is shown enlarged in the drawing. The pupa, also depicted here for the first time, is also rather remarkably coloured for a moth pupa. The drawing also shows a section through a branch in which is depicted the tunnels made by the larva and the bent position of the pupa at the time the moth escapes from it.

The section of the stem shows the large tunnels made in the wood of the tree by the caterpillar whilst feeding in the trunk, and also numerous empty pupa cases protruding from the bark.

It will be unnecessary to comment upon them further at present since they are fully described and explained in a paper to be read later on at the present meeting.

The following papers were read :—

1. *On General Maclagan's paper about the Jesuit Mission to Akbar.*—  
By H. BEVERIDGE, I.C.S., (retired).

(Abstract.)

This paper is a supplement to an article by General Maclagan on the three Jesuit Missions to Akbar's court. The author first discusses the references to Akbar's religious reforms found in the Akbar-nāmah, and shows that the date therein given for the visit of Rodolfo Aquaviva, the first Portuguese missionary, must be erroneous. He then refers to another passage in the same work, where it is stated that in 1578 A.D.

a Portuguese arrived from Bengal, whose name is spelt *Partāb Bār* or *Tār*. The author proves that this must have been Pietro Tavares, a Portuguese captain who was at Akbar's court in the same year. Tavares, apparently, deserves the credit of having been the first to introduce Portuguese priests to Akbar. He induced him to send for Egidio or Julian Pereira, the vicar of Sātḡāon, and then the latter suggested to Akbar that he should send for priests from Goa. It was this which led to Akbar's sending an ambassador to Goa, and to the mission of Rodolfo Aquaviva and his companions. Later on the author gives further reasons in support of General Maclagan's identification of Padre Farmaliūn, another priest mentioned in the Akbar-nāmah, with the Greek Sub-deacon Leon Grimon, who probably reached Goa on his way back to his own country from China and from there went to Akbar's court where he appears to have remained for 13 years.

2. *Some new plants from Eastern Asia.*—By D. PRAIN.

(Abstract.)

This paper contains descriptions of one genus and ten species previously undescribed or imperfectly characterised. They are as follows:—**CONVOLVULACEÆ:** *Erycibe albiflora* Hallier f.; *E. Henryi* Prain; *E. Forbesii* Prain; *E. leucocoryloides* sp. nov.; *E. sapotacea* Hallier f. and Prain; *E. citriniflora* Griff.; *E. Wallichii* Prain and Hallier f.; *E. magnifica* Prain; *Lettsomia sphaerocephala* Prain. **LABIATÆ:** *Nosema* Prain gen. nov.; *N. capilatum* Prain.

3. *The Tibetan Language and Recent Dictionaries.*—By E. H. WALSH, I.C.S.

(Abstract.)

The paper is divided into two parts. The first part reviews the two Dictionaries that have recently appeared, of the Tibetan Language, namely, the Tibetan-English Dictionary compiled by Rai Sarat Chandra Das Bahadur, and Revised by Rev. G. Sandberg and Rev. A. W. Heyde, and published by the Bengal Government, and the Tibetan-Latin-French Dictionary of the Catholic Missionaries compiled by the Rev. A. Desgodins, published at Hongkong. It reviews the Dictionary of Rai Sarat Chandra Das and compares it with the Dictionary of Father Desgodins and compares them both with the previous Dictionary of Jäschke with regard to the new matter contained by each.

These two Dictionaries have been compiled independently, and from materials collected from independent sources. That of Father Desgodins appeared shortly before that of Rai Sarat Chandra Das, and it would



have been useful if an appendix shewing such words as are found in that Dictionary which do not appear in Rai Sarat Chandra Das's had been added.

In point of new matter Rai Sarat Chandra Das's Dictionary contains much more than Father Desgodins.' The chief difference between them is that Rai Sarat Chandra Das's is primarily a Dictionary of the Literary Language and contains a vast amount of research authorities, and examples from Tibetan writers. It also contains a number of new words of the current colloquial language but unfortunately no distinguishing mark has been made to shew which these are. A feature of the Dictionary is also the Sanskrit synonyms which have been compiled by Pandit Satis Chandra Acharjya. In the case of Desgodins' Dictionary there are also a number of new words, and these are mainly colloquial words, both of the Eastern dialects and of the Central language and Southern dialects. The collection of materials for this Dictionary was commenced by M. Renon, the founder of the French Chinese-Tibetan Mission in 1852, and the missionaries have been collecting and collating material ever since. This accounts for the number of new words probably those in use in the Eastern dialects which the Dictionary contains.

It is a pity that these new words could not have been shewn as an appendix in Rai Sarat Chandra Das's Dictionary. The paper gives a brief review of the history of the Tibetan Literary Language, and points out that the Literary language differs so entirely from the spoken language that it is practically unintelligible to the modern Tibetan, more so than the English of Chaucer would be to the modern Londoner, and that consequently what is now required is a Standard Dictionary of Current and Colloquial Tibetan.

Part II considers the lines on which such a Dictionary should be compiled.

Pandit Satis Chandra Acharjya said that the suggestion that a list shewing the words to be found in Desgodins that do not occur in Rai Sarat Chandra Das's Dictionary, was a good one, and that such a list could still be made and published in connection with the Appendix to the Dictionary of Buddhist terms which he was engaged in preparing.

Rev. Fr. E. Francotte said that it had been Father Desgodins intention to have published his Dictionary in English as well as Latin and French, as making it more generally useful, but this had not been carried out.

4. *An Instance of a Prosthetic g in an Indo-Aryan Language.*—By G. A. GRIERSON, C.I.E., PH.D., D. Litt., I.C.S.

Certain of the Romance languages exhibit a tendency to prefix the letter *g* to words originally beginning with *u* or *v*. Thus,—

Latin, *vado* ; Italian, *guido* ; Provençal, *guá* ; French, *gué*.

Latin, *vagina* ; Italian, *guatna* ; French, *gaîne*.

The same peculiarity occurs in Welsh, as in *gweddw* ; Latin, *vidua* ; Sanskrit, *vidhavā* ; a widow.

In Eranian languages we find the same tendency in Balōci. Thus, Avesta, *vāta* ; Balōci, *gwāt*, wind : Avesta, *visaiti-* ; Balōci *gist*, twenty.

(N.B.—Balōci also prefixes *g* to words beginning with vowels other than *u*).

The same prosthesis explains a form of the pronoun of the third person occurring in the Braj Bhākhā dialect of Western Hindī, which has not hitherto been noted by grammarians. It is prevalent in the district of Aligarh, and the east of the district of Agra, and is *gu* or *gwa*, he, that ; oblique singular, *gwā* ; nominative plural, *gwē* ; obl. plur., *guni* or *gunan*. Connected with it is *gwā* or *āgwā*, there. Examples of its use are,—

*gunan jē kahī*

by-them this was-said, i.e., they said so.

*gunan kahā parihai.*

to-them what will-fall, i.e., what do they care ?

That the *g* in these words is similar to the prosthetic *g* of the Romance languages, Welsh, and Balōci, is shown by the fact that it is prefixed, in the same locality, to other words beginning with *u*. Thus, *gunnis*, or *unnis*, nineteen ; *guntis*, for *untis*, twenty-nine ; *guntālis*, for *untālis*, thirty-nine *gurancās*, for *uncās*, forty-nine ; *gunhattar*, for *unhattar*, sixty-nine, and so on.<sup>1</sup>

To the south of the area in which Braj Bhākhā is spoken lies the Dāṅg, or broken country of Kerauli and the east of the Jaipur State. Here we find the prosthetic *g* weakened to *h*, the word for 'he' being *wha* (i.e., *hwa*) or *ū*.

It will have been observed that the Aligarh *gwa* has no final *h*, as there is in the Standard Western Hindi *wah*. If we assume that the Dāṅgi *hwa* is a weakened form of the Aligarh *gwa*, we find an explanation for the final *h* of *wah*, which would thus be only an instance of metathesis, *wah* and *wha* being the same word. The change was no doubt helped by the fact that the Standard Western Hindi word for 'this,' viz., *vah*, does terminate in an original *h*, being derived from the Apabhraṃṣa *ṣhu*.

5. *On the Life-History and habits of the Moth Duomitus leuconotus*, Walker, in Calcutta.—By E. P. STEBBING.

(Abstract.)

At the last meeting of this Society I read a paper on the life-history of a species of *Arbela* destructive to *Casuarina* plantations in

<sup>1</sup> Mr. Dames informs me that he has heard Mār-wāri treasurers also using these forms when counting. I have not found them in any specimens which I have received from Rajputana.

Madras, and exhibited to the Members present at the meeting species of that insect. I pointed out that the habits of the Indian members of the family *Arbelidæ*, and its large and closely related family *Cossidæ* were almost unknown, neither the larvæ, which are wood feeders and live in trees, nor pupæ of the greater number of described species being known. Since that meeting I have been able to carry out a series of observations on the life-history of a member of the *Cossidæ*, a family known to many in England owing to the abundance of the common red Goat moth caterpillar which riddles elms and willows throughout the country. In India the life-histories of two representatives of the family are known owing to their economic importance. These are *Duomitus nigar* the 'Black borer,' and *Zeuzera coffeæ* the Red 'borer' of the Planters in Southern India. Both are pests in coffee plantations. The moth whose life-history this paper deals with bears the name of *Duomitus leuconotus*, Wlk., and specimens of the various stages in its life-history have been already exhibited to Members.

The paper points out that the measurements of the Calcutta specimens of the moth taken this year differ from those given in Hampson's *Moths in the Fauna of British India*, males in the case of the Calcutta specimens, being as much as 28 millims less than the sizes quoted by Hampson, whilst in the females the disparity is very much greater, the smallest female measured having a wing expanse of 103 millims less. Technical descriptions are given of the larva and pupa which, it is believed, have never before been figured or described.

The moths appear on the wing in the latter half of September, and are to be found during the remainder of that month and up to about the third week in October. They are extremely sluggish during the daytime but are exceptionally powerful fliers at night. The ♂ lives but a few days and dies after pairing with the ♀. The latter lays eggs shortly after pairing and dies as soon as she has finished ovipositing. The eggs are laid on the bark. The larvæ on hatching out bore into the tree and spend this stage of their existence tunneling in and feeding on the wood. It is probable that nearly two years, if not more, are passed in this stage. When full fed the larva carries its tunnel to the outside, eating through the bark and ejecting the wood refuse so that the latter part of its tunnel is quite clean, the rest being blocked by its excrement and wood particles. Having thus provided for the escape of the pupa it backs down its tunnel for about 3 inches and pupates. A short time only is spent in this stage. When the moth is ready to emerge, the pupa wriggles up the tunnel to the outside until it projects half of its length beyond the bark. The pupal skin then splits down anteriorly and the moth crawls out.

The insect commits serious damage to *Cassia nodosa*, Ham., a tree of this species in the Indian Museum compound having been killed this year by the larvæ, between 30 and 40 moths being obtained from it.

The President asked whether the presence of immature larvæ at the time when the moths were maturing and issuing indicated that the larvæ spent more than one year in that stage of their existence. Mr. Stebbing replied that although this would not be so in the case of an insect which passed through several generations in the year, which generations might overlap so that at any one time eggs, larvæ pupæ, and mature insects would be found together; yet in the case of an insect of which adults only appeared once in the year the presence of half-grown larvæ would indicate the probability of more than a year being passed in that stage.

The Rev. Fr. Francotte asked whether the larvæ depicted in the coloured illustrations were natural size or enlarged. He pointed out that the larvæ of the Goat moth which riddled willow trees in England were 4 inches in length. Mr. Stebbing explained that the larvæ illustrated were half-grown ones enlarged. That it was probable that they exceeded the Goat moth larva in size when fullgrown. In reply to a query from Rev. Fr. Francotte as to whether this was the largest Indian Cossid known, Mr. Stebbing replied that there was one other, a closely allied species *Duomitus strix*, Cram. which was usually larger.

6. *Some notes concerning the people of Mungeli Tehsil, Bilaspur District.*—  
By THE REV. E. M. GORDON.

(Abstract.)

These notes are a continuation of a series of similar notes by the same author which were published in the Society's Journal, Part III, No. 2, of 1902.

They give a number of interesting examples of the Folklore and Customs of the people of the Mungeli Tehsil, also one of their songs, and a number of stories.

Some of the items of folklore, such as their aversion to spilling or passing salt, and their beliefs about the howling of dogs are interesting on account of their counterpart to current beliefs elsewhere.

Mr. McMinn pointed out that though not so stated in the paper, these beliefs and customs were probably those of particular castes, and must not be taken as generally prevalent throughout the Mungeli Tehsil with which he was well acquainted.

7. *A note on Stone Implements found in the Darjeeling District.*—By E. H. WALSH, I.C.S.

(Abstract.)

The paper describes a collection of stone implements found in the Darjeeling District (which were also exhibited) and points out that they are everywhere believed to be thunderbolts, the weapons of the gods, and to possess various protective and medicinal powers, and expresses the opinion that some of them are modern forgeries, made by the medicine-men, with whom they are generally found, and who find it necessary to have one to use as a charm, or rub it in water for medicine. The axe-heads exhibited also included for comparison, some the Shan States of Upper Burma.

8. *The Tibetan Game of De Sho.*—By E. H. WALSH, I.C.S.

(Abstract.)

The paper describes this game and gives as an example a game as actually played through. The game is played by three players with dice which are thrown in a small wooden bowl on to a round leather cushion, and in the method of play the game bears certain resemblances to backgammon though differing entirely in other respects.

Each player has nine counters called "dogs" and it is his object to collect as many of these as he can to form a pack at one point, as he can then "kill" any smaller pack of his adversaries at any other point, that he can reach by the throw of the dice which puts those dogs so killed out of play and they have then to start the round again from the beginning.

The winner is the one who gets all his "dogs" through first. There is considerable skill in playing the game well.





PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.

FOR DECEMBER, 1903.

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The Monthly General Meeting of the Society was held on Wednesday, the 2nd December, 1903, at 9 P.M.

THE HON'BLE MR. A. PEDLER, C.I.E., F.R.S., in the chair.

The following members were present :—

Dr. A. S. Allan, Mr. J. Bathgate, Mr. I. H. Burkill, Dr. A. Caddy, Mr. F. Doxey, Mr. T. D. Edelston, Revd. E. Francotte, S. J., Mr. T. H. Holland, Mr. D. Hooper, Mr. H. E. Kempthorne, Mr. W. A. Lee, Mr. J. Macfarlane, Dr. M. M. Masoom, Mr. W. H. Miles, Mr. C. W. McMinn, Major D. Prain, I.M.S., Pandit Yogesa Chandra Sastree, Dr. C. Schulten, Pandit Satis Chandra Vidyabhushan, Mr. D. B. Wallace, Dr. C. R. Wilson, Mr. J. Wyness.

*Visitors* :—Dr. F. Alffers, Syed Ameer Ali, Mr. C. Anninos, Miss Devereux, Mr. W. Dods, Mr. and Mrs. C. A. Giannacopolo, Mr. and Mrs. N. Giannacopolo, Mr. V. H. Jackson, Mrs. Kempthorne, Mr. H. D. Lindquist, Mr. J. W. Meares, Mr. H. K. Scott, Mr. E. D. Zalichi,

The minutes of the last meeting were read and confirmed.

Forty-four presentations were announced.

It was announced that Mr. A. B. Miller had expressed a wish to withdraw from the Society.

The Chairman announced :—

1. That Dr. E. D. Ross had kindly undertaken to carry on the duties of the Philological Secretary of the Society during the absence of Dr. T. Bloch, on tour.

2. That Captain L. Rogers, I. M. S., had been appointed Natural History Secretary of the Society, *vice* Mr. E. P. Stebbing, resigned.

3. That Dr. E. D. Ross had been appointed Anthropological Secretary of the Society, *vice* Mr. E. H. C. Walsh, resigned.

Mr. T. H. Holland exhibited a meteorite which fell with the meteor seen in Eastern Bengal on October 22nd.

The stone weighs 622 grammes and is covered with a thin black crust formed by the fusion of the rock during its rapid flight through the air. Several stones were known to have fallen with this meteor, and the complete investment with fused crust of the one exhibited shows that fusion of the surface occurred after the break-up of the meteorite. Besides the complete proof that the meteor resulted in an actual fall of stones, special interest attaches to this occurrence on account of the observations made from so many points of view, permitting Mr. Little to calculate its actual path and speed.

Mr. T. H. Holland also exhibited some crushing mills used by ancient gold miners in Chota Nagpur.

Grooved stones and ground pebbles occur by the thousand in the jungles of Singhbhum district, where apparently they were used by a past and unknown generation of gold miners. The rounded pebbles and the larger grooved stones appear to have performed the functions respectively of pestle and mortar, although nothing of the kind is now known in use, and no tradition is known locally of the work done by the people of the past. Judging by the great numbers of these stones in Singhbhum, prospecting operations must have been carried on on a large scale; but, like the miners who attempted to boom this area 12 years ago, the ancient workers did not apparently obtain sufficient inducement to develop deep workings.

Mr. E. Vredenburg, of the Geological Survey, exhibited specimens of sodalite from Kishengarh, having an unexplained property of changing its colour.

The sodalite was obtained in Kishengarh, Rajputana, with the comparatively rare group of rocks known as eleolite-syenites. Besides the deep-blue and usual variety of sodalite, one form when freshly broken has a carmine colour. The carmine colour, for some unexplained reason, disappears after a few seconds' exposure to direct sunlight, or after a few minutes in a bright electric light, recovering its colour again when kept in darkness for about a fortnight. Whilst the fading of coloured minerals is rare, the recovery of colour in this way is without



parallel amongst minerals; and, in view of the fact that the association is just that of the rarer earths, it is not unnatural to suspect the existence of some phenomenon akin to the forms of fluorescence and radio-activity which have recently attracted so much attention.

The General Secretary exhibited a spiral ring dug up at Alladand in Swat by a burial party, received from Major S. H. Godfrey, I.A., Political Agent, Dir, Swat, and Chitral.

The chief interest of this ring appears to lie in the story current among the people that the idol worshippers who were displaced by the Muhammadans wore similar rings, and the legend that the Kafirs of Kafirstan are the direct descendants of the former inhabitants of Swat.

The women of Kafirstan to this day wear iron coil ornaments on their headdress of the shape of this gold plated spiral ring. It has been somewhat damaged by incisions doubtless made at the time it was exhumed to ascertain whether the gold was solid.

The following papers were read:—

1. *On 'Isā Khān, the ruler of Bhāti in the time of Akbar.*—By H. BEVERIDGE, I.C.S. (retired).

(ABSTRACT.)

The history of 'Isā Khān has already been noticed by Dr. Wise in his valuable account of the Bārā Bhūyas of Eastern Bengal published in 1874. The object of Mr. Beveridge's present paper is to add some particulars about 'Isā Khān taken from the third volume of the Akbar-nāma a source not directly consulted by Dr. Wise. The Akbar-nāma it may be observed appears to have been written after the Āin, for in the Āin, 'Isā is incorrectly called 'Isā Afghan, whereas the Akbar-nāma, agreeing with the family tradition as reported by Dr. Wise, correctly states that 'Isā's father was a Rājput of Baiswāra in Oudh whose name was Kālī Dās Gajdāni. In the reign of Salim Shāh, the son of Sher Shāh, Kālī Dās who had settled in the fluviatile region of Bengal rebelled, and was eventually by stratagem made prisoner and put to death. According to the family tradition Kālī Dās became a Muḥammadan before his death and received the title of Sulaimān Khān. But this cannot have been the case as his two sons 'Isā and Ishmael were sold as slaves and carried off into Central Asia. On the death of Salim Shāh, in 1554, their uncle, after much searching, found them and brought them back to Bengal. 'Isā by his ability and prudence rose to be the chief of the bārā bhūyas or twelve zemindars of Bengal. Ruler of Bhāti, he professed submission to the higher rulers of Ben-

gal, Sulaiman Kararāni and Dāūd; but he had the good sense to keep aloof from them. Bhāti seems roughly to correspond with the districts of Dacca and Maimansingh. Khizr-pūr on the Ganges is described as the thoroughfare to and from Bhāti. Sonārgāon and Agara Sindur on the old Brahmaputra were important cities. 'Isā's residence is said to have been at the populous city of Katrābuh which may be identified with Katibāri near Sābhār in the Mānikganj sub-division where there is still a tappa called Kāthorābo. Abul Faḡl describes in detail the campaigns of the imperial general Shāhbāz Khān against 'Isā in 1584 and 1585. There are also some nine other references to 'Isā in the third volume of the Akbar-nāma, and we are told more than once of his making submission and sending presents. But he was never really subdued. His swamps and creeks enabled him to preserve his independence as effectually as the Aravalli Hills protected Rānā Pratāp of Udaipūr. 'Isā's death took place in 1599-1600 in the 44th year of Akbar's reign. His son Dāūd, according to Abul Faḡl, gave Mān Singh some trouble. Ralph Fitch who was at Sonargaon about 1586 mentions 'Isā Khān as 'the chief king of all these countries,' and 'a great friend to Christians.' Mr. Gait in his paper on the Koch kings of Kām-rūp, published by the Society in 1893, tells us that Rajah Nar Narayan of Kuch Bihar conferred with the Emperor Akbar to attack 'the Gaur Pāsha' who was defeated and had to fly to the Faringhis. Mr. Beveridge suggests that 'the Gaur Pāsha' of the Kuch Bihar records is 'Isā Khān.

2. *Noviciæ Indicæ XXI.—An undescribed Indian Musa*—By D. PRAIN.

(ABSTRACT.)

Three years ago, a native collector in the service of the Royal Botanic Garden, Shīp-pur, sent to Calcutta the rootstocks of a *Musa* from the Jaboca Naga country. The plant has thriven well and has recently flowered. It proves to be a new species, belonging to the section *Eumusa*, and is now described under the name *Musa nagensium*.

3. *The Later Mughals (1707-1803)*.—By WILLIAM IRVINE, I.C.S., (retired).

(ABSTRACT.)

Mr. Irvine's paper is a continuation of his previous contributions on the subject of the Later Mughals which have been published in the Society's *Journal*, Part I, in 1896, 1898, and 1903. It completes the story of the reign of the worthless Farrukhsiyar and shows how his various ill-conceived ill-executed attempts to free himself from the two

Sayyads recoiled on his own head and led to his deposition and death. The narrative extends to twenty-three carefully written sections.

Undeterred by the failure of his plot to get Ḥusain 'Ali destroyed by Dāūd Khān in 1715, a piece of treachery which the two Sayyad brothers never forgot or forgave, Farrukhsiyar continued to intrigue against them with every likely person he could think of. But as he was at once suspicious and faithless he failed to rally anyone of any importance to his side. It was probably by the emperor's orders that his favourite Mir Jumlah ventured to return to Delhi in 1716, but, when the *wazīr* Quṭbu-l-mulk remonstrated, the emperor took fright and sent peremptory orders to Mir Jumlah to withdraw to Lāhor. Mir Jumlah's troops were then secretly encouraged to mutiny in the hope that they might attack Quṭbu-l-mulk, but as this plot too failed to take effect, the emperor professed to be very angry with Mir Jumlah, deprived him of all his titles and offices, and forced him to leave for Lāhor at once.

It occurred to Farrukhsiyar that it had been a mistake to remove all the old officials, who would have furnished a useful counterpoise to the overwhelming influence of the Sayyads. In this view he reappointed 'Ināyatullah Khān on his return from Makka *diwān* of the *khāleṣah* and the *tan* and also governor of Kashmīr. 'Inayatullah's attempts to reform the Treasury only annoyed the *wazīr* who was lazy and slack, and the corrupt Hindu officials who were enriching themselves with his connivance. The new *diwān* made himself particularly unpopular by reimposing the *jasiyah* and by reviving the rules of 'Ālamgir. In the same way other officials of the old school were appointed to various positions of trust, but it was soon clear to the emperor that they would be no sufficient counterpoise to the power of the *wazīr*.

Farrukhsiyar now changed his plans and made what was perhaps the greatest mistake of his life. He chose a new favourite Muhammad Murād, Kashmīri, I'tiqād Khān, whom he loaded with honours and clung to as the right man for any desperate undertaking. The sudden elevation of Murād gave offence to friends and foes alike and was one source of strength to the emperor, for Murād was a braggart and a coward and afraid to take any steps against the *wazīr*. Under the advice of I'tiqād Khān the emperor had recourse to Sarbuland Khān, who did not consider it worth his while to attack Quṭbu-l-Mulk unless he became *wazīr* instead; then to Ajit Singh, who at once went over to the opposite side; and then to Nizāmu-l-mulk who suggested the recall of his cousin Muḥammad Amin Khān.

At last the patience of the Sayyad brothers gave way. Ḥusain 'Ali

returned to Delhi and the Sayyad adherents took possession of the place. They expected that Farrukhsiyar would now be a mere puppet in their hands. But Farrukhsiyar was obstinate and refused to move according to their directions. There was nothing for it but to depose Farrukhsiyar and bring out one of the imprisoned scions of the house of Taimur and place him on the throne. Accordingly on February 28th, 1719, Rafi'u-d-darajāt, the youngest of the three sons of Rafi'u-sh-shān, was taken just as he was found in his ordinary clothes with a string of pearls round his neck, and was seated straightway by the *wazīr* and Ajit Singh on the jewelled peacock throne in the *diwān-i-'ām*. Farrukhsiyar was seized, blinded and imprisoned in the room over the Tirpoliyā or triple gate within the fortress. After an imprisonment of two months, during which he seems to have been treated with unnecessary harshness, he was put to death on the night of April 27th, 1719.

Mr. Irvine cannot hold it wrong to have removed from power such a worthless thing as Farrukhsiyar. Nor does he think that the Sayyads were specially to blame for blinding him, which was the usage of the day. He condemns the excessive strictness of the confinement and the execution. The most prominent element in Farrukhsiyar's character was weakness. He was strong neither for evil nor for good. He might have shown himself amiable and inoffensive, leaving his powerful ministers to take their own course. He might have got rid of them at the earliest possible moment after his accession, following the example of many of his illustrious predecessors. But Farrukhsiyar was not morally strong enough to do anything decisive. Consequently for seven years the Government was in a condition of unstable equilibrium. In private life he was profuse and liberal, which made him the darling of the lower orders. He loved fine clothes and good horses. He was passionately fond of wrestling, archery, horsemanship, hunting, polo-playing, and other soldierly exercises, and was physically a fine man. Mr. Irvine believes that the date of his birth was the 19th Ramaẓān, 1094 H. He proclaimed himself emperor at Patna on the 29th Šafar, 1124 H. or March 6th, 1712. The only well-known edifice constructed in his reign was a third arch of marble to the mosque at the Quṭb, added in 1130 H.

4. *Noviciae Indicæ XXII. An undescribed Araliaceous genus from Upper Burma*—By D. PRAIN.

(ABSTRACT.)

Among the plants obtained by a native collector of the Royal Botanic Garden, Calcutta, while working in the Kachin Hills under the kind supervision of Lieutenant Cruddas, S.C., Commandant of the Military

Police Battalion at Myitkyina, one of the most striking is a hitherto uncharacterised Araliacean plant which cannot be referred to any known genus of the order. It is accordingly made the type of a new genus *Woodburnia*, dedicated to the memory of our lamented former President, H.H. Sir John Woodburn, K.C.S.I. The species *W. floribunda* exhibits the character, unusual in the order, of having simple umbels, and has the further unusual feature of remarkably large flowers.

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**LIST OF MEMBERS**  
**OF THE**  
**ASIATIC SOCIETY OF BENGAL.**  
**ON THE 31ST DECEMBER, 1902.**

LIST OF OFFICERS AND MEMBERS OF COUNCIL  
OF THE ASIATIC SOCIETY OF BENGAL  
FOR THE YEAR 1902.

---

*President :*

The Hon'ble Mr. C. W. Bolton, C.S.I., I.C.S.

*Vice-Presidents :*

H. H. Risley, Esq., B.A., C.I.E., I.C.S.  
Colonel T. H. Hendley, C.I.E., I.M.S.  
R. D. Oldham, Esq., A.R.S.M., F.G.S.

*Secretary and Treasurer.*

Honorary General Secretary : J. Macfarlane, Esq.  
Treasurer : Captain A. F. McArdle, I.M.S., succeeded by  
Mr. C. R. Wilson, M.A., D. Litt.

*Additional Secretaries.*

Philological Secretary : T. Bloch, Esq., Ph.D., succeeded  
by Dr. E. D. Ross.  
Natural History Secretary : F. Finn, Esq., B.A., F.Z.S.  
Anthropological Secretary : E. A. Gait, Esq., I.C.S.  
Joint Philological Secretary : Mahāmāhopādhyāya Hara-  
prasād Shastri, M.A.

*Other Members of Council.*

Major A. Alcock, M.B., LL.D., F.R.S.  
J. D. Nimmo, Esq.  
C. L. Griesbach, Esq., F.G.S., C.I.E.  
A. Pedler, Esq., F.R.S.  
J. Bathgate, Esq.  
T. H. D. La Touche, Esq., B.A.  
Captain L. Rogers, M.D., B.Sc., I.M.S.  
Kumar Ramessur Maliah.  
Arnold Caddy, Esq., M.D., F.R.C.S.

## LIST OF ORDINARY MEMBERS.

R. = Resident. N.R. = Non-Resident. A. = Absent. N.S. = Non-Subscriber.  
 L.M. = Life Member. F.M. = Foreign Member.

N.B.—Members who have changed their residence since the list was drawn up are requested to give intimation of such a change to the Honorary General Secretary, in order that the necessary alteration may be made in the subsequent edition. Errors or omissions in the following list should also be communicated to the Honorary General Secretary.

Members who are about to leave India and do not intend to return are particularly requested to notify to the Honorary General Secretary whether it is their desire to continue Members of the Society; otherwise, in accordance with Rule 40 of the Rules, their names will be removed from the list at the expiration of three years from the time of their leaving India.

Date of Election.		
1901 June 5.	R.	Abdur Rahman, A. F. M., Barrister-at-Law. <i>Calcutta.</i>
1894 Sept. 27.	N.R.	Abdul Wali, Maulvie. <i>Ranchi.</i>
1895 May 1.	N.R.	Abdus Salam, Maulvie, M.A. <i>Cuttack.</i>
1888 Feb. 1.	F.M.	Adamson, Lient.-Col. Charles Henry Ellison, S.C. <i>Europe.</i>
1901 Aug. 7.	N.R.	Adams, Margaret. Baptist Zenana Mission. <i>Delhi.</i>
1888 April 4.	R.	Ahmud, Shams-ul-ulama Maulvie, Arabic Professor, Presidency College. <i>Calcutta.</i>
1888 Feb. 1.	A.	Alcock, Major Alfred William, M.B., LL.D., C.I.E., F.R.S. <i>Europe.</i>
1885 Mar. 4.	L.M.	Ali Bilgrami, Sayid, B.A., A.R.S.M., F.G.S. <i>Hyderabad.</i>
1899 Jan. 4.	N.R.	Ali Hussain Khan, Nawab. <i>Bopal.</i>
1900 Aug. 1.	R.	Allen, C. G. H., I.C.S. <i>Calcutta.</i>
1874 June 3.	R.	Ameer Ali, The Hon'ble Mr. Justice, M.A., C.I.E., Barrister-at-Law, Judge, High Court. <i>Calcutta.</i>
1893 Aug. 31.	A.	Anderson, Major A. R. S., B.A., M.B., I.M.S. <i>Europe.</i>
1884 Sept. 3.	A.	Anderson, J. A. <i>Europe.</i>
1890 July 2.	N.R.	Arnold, Thomas Walker, B.A., M.R.A.S. <i>Lahore.</i>
1870 Feb. 2.	L.M.	Baden-Powell, Baden Henry, M.A., C.I.E. <i>Europe.</i>
1901 Jan. 2.	R.	Badshah, K. J., B.A., I.C.S. <i>Calcutta.</i>
1898 Nov. 2.	N.R.	Bailey, The Revd. Thomas Grahame, M.A., B.D. <i>Wazirabad.</i>
1891 Mar. 4.	N.R.	Baillie, D. C., I.C.S. <i>Ghazipur.</i>
1898 Aug. 3.	N.R.	Bain, Lient.-Col. D. S.E., I.M.S. <i>Mercara.</i>
1891 April 1.	F.M.	Baker, Edward Charles Stuart. <i>Europe.</i>
1900 Aug. 29.	R.	Baker, The Hon. Mr. E. N., C.S.I., I.C.S. <i>Calcutta.</i>

Date of Election.		
1889 May 1.	R.	Banerji, The Hon. Mr. Justice Guru Das, M.A., D.L., Judge, High Court. <i>Calcutta.</i>
1896 Mar. 4.	N.R.	Banerji, Satish Chandra, M.A. <i>Allahabad.</i>
1869 Dec. 1.	L.M.	Barker, R. A., M.D. <i>Europe.</i>
1885 Nov. 4.	R.	Barman, Damudar Das. <i>Calcutta.</i>
1877 Jan. 17.	N.R.	Barman, H. H. The Maharaja Radha Kishor Dev. <i>Tipperah.</i>
1898 Mar. 2.	N.R.	Barnes, Herbert Charles, I.C.S. <i>Shillong.</i>
1902 May 7.	R.	Bartlett, E. W. J. <i>Calcutta.</i>
1894 Sept. 27.	R.	Basu, Nagendra Natha. <i>Calcutta.</i>
1898 May 4.	R.	Bathgate, J. <i>Calcutta.</i>
1895 July 3.	L.M.	Beatson-Bell, Nicholas Dodd, B.A., I.C.S. <i>Europe.</i>
1876 Nov. 15.	F.M.	Beveridge, Henry, I.C.S. (retired). <i>Europe.</i>
1900 April 4.	N.R.	Bingley, Major A. H., I.S.C. <i>Simla.</i>
1898 Nov. 2.	N.R.	Black, Robert Greenhill. <i>Sylhet.</i>
1859 Aug. 3.	L.M.	Blanford, William Thomas, LL.D., A.R.S.M., F.G.S., F.R.G.S., F.Z.S., F.R.S. <i>Europe.</i>
1897 Feb. 3.	R.	Bloch, Theodor, PH.D. <i>Calcutta.</i>
1893 Feb. 1.	N.R.	Bodding, The Revd. P. O. <i>Rampore Haut.</i>
1885 Mar. 4.	R.	Bolton, The Hon. Mr. Charles Walter, C.S.I., I.C.S. <i>Calcutta.</i>
1895 July 3.	A.	Bonham-Carter, Norman, I.C.S. <i>Europe.</i>
1890 July 2.	A.	Bonnerjee, Womes Chunder, Barrister-at-Law, Middle Temple. <i>Europe.</i>
1897 June 2.	N.R.	Bose, Anada Prasad, M.A. <i>Rajshahi.</i>
1895 Mar. 6.	R.	Bose, Jagadis Chandra, M.A., D.Sc., C.I.E., Bengal Education Service. <i>Calcutta.</i>
1880 Nov. 3.	N.R.	Bose, Pramatha Nath, B.Sc., F.G.S. Geological Survey of India. <i>Shillong.</i>
1895 April 3.	R.	Bourdillon, The Hon. Mr. James Austin, C.S.I., I.C.S. <i>Calcutta.</i>
1860 Mar. 7.	L.M.	Brandis, Sir Dietrich, K.C.I.E., PH.D., F.L.S., F.R.S. <i>Europe.</i>
1900 Aug. 1.	A.	Brown, Major E. Harold, M.D., I.M.S. <i>Europe.</i>
1901 Sept. 25.	R.	Buchanan, Major W. J., I.M.S. <i>Calcutta.</i>
1887 May 4.	R.	Bural, Nobin Chand, Solicitor. <i>Calcutta.</i>
1901 June 5.	R.	Burkill, I. H. <i>Calcutta.</i>
1896 Jan. 8.	N.R.	Burn, Richard, I.C.S. <i>Allahabad.</i>
1900 May 2.	N.R.	Butcher, Flora, M.D. <i>Pahwal.</i>
1898 Sept. 30.	A.	Cable, Ernest. <i>Europe.</i>
1896 Jan. 8.	R.	Caddy, Dr. Arnold. <i>Calcutta.</i>
1901 Jan. 2.	A.	Campbell, Duncan. <i>Europe.</i>
1901 Mar. 6.	N.R.	Campbell, W. E. N., I.C.S. <i>Mirzapur.</i>
1895 July 3.	R.	Carlyle, Robert Warrant, C.I.E., I.C.S. <i>Calcutta.</i>
1890 June 4.	R.	Chakravati, Man Mohan, M.A., B.L. Deputy Magistrate. <i>Hooghly.</i>
1901 Mar. 6.	N.R.	Chakravarti, Manmatha Nath. <i>Tumruk, Midnapur.</i>
1902 April 2.	R.	Chandra, Raj Chander, Attorney-at-Law. <i>Calcutta.</i>

Date of Election.		
1901 June 5.	N.R.	Chapman, E. P., I.C.S. <i>Mozuffarpore.</i>
1894 Aug. 1.	N.R.	Chatterjee, M. N. <i>Patiala.</i>
1902 Aug. 27.	R.	Chaudhuri, A., Barrister-at-Law. <i>Calcutta.</i>
1893 Sept. 28.	R.	Chaudhuri, Banawari Lala, B.Sc., Edin. <i>Calcutta.</i>
1899 Jan. 4.	A.	Clemow, Dr. Frank Gerard, M.D., Edin. <i>Europe.</i>
1880 Aug. 26.	F.M.	Clerk, Major-Genl. Malcolm G. <i>Europe.</i>
1889 Nov. 6.	A.	Colville, William Brown. <i>Europe.</i>
1890 Dec. 3.	A.	Connan, William, C.E. <i>Europe.</i>
1898 June 1.	N.R.	Cordier, Dr. Palmyr. <i>Pondicherry.</i>
1876 Mar. 1.	F.M.	Crawford, James, B.A., I.C.S. <i>Europe.</i>
1901 June 5.	A.	Crawford, Major D. G., I.M.S. <i>Europe.</i>
1887 Aug. 25.	R.	Criper, William Risdon, F.C.S., F.I.C., A.R.S.M. <i>Calcutta.</i>
1877 June 6.	A.	Croft, Sir Alfred W., M.A., K.C.I.E. <i>Europe.</i>
1895 July 3.	N.R.	Cumming, John Ghest, I.C.S. <i>Patna.</i>
1898 Aug. 26.	N.R.	Cuppige, Captain W. A., I.S.C. <i>Dibrugarh.</i>
1873 Dec. 3.	F.M.	Dames, Mansel Longworth, I.C.S. <i>Europe.</i>
1896 Mar. 4.	R.	Das-Gupta, Jogendra Nath, B.A., Barrister-at-Law. <i>Calcutta.</i>
1901 Aug. 28.	N.R.	Das, Govinda. <i>Benares.</i>
1865 June 7.	N.R.	Das, Raja Jay Krishna, Bahadur, C.S.I. <i>Moradabad.</i>
1879 April 7.	N.R.	Das, Ram Saran, M.A., Secy., Oudh Commercial Bank, Limited. <i>Fyzabad, Oudh.</i>
1900 July 4.	N.R.	Das, Syam Sunder, B.A. <i>Benares.</i>
1895 Sept. 19.	N.R.	De, Kiran Chandra, B.A., I.C.S. <i>Faridpur.</i>
1902 Mar. 5.	R.	Deb Raja Binoy Krishna, Bahadur. <i>Calcutta.</i>
1895 Dec. 4.	N.R.	Delmerick, Charles Swift. <i>Budaon.</i>
1893 Mar. 1.	A.	Deussen, Dr. Paul. <i>Europe.</i>
1900 May 2.	N.R.	Dev, Raja Satindra, Rai Mahesaya. <i>Bansberia.</i>
1899 Aug. 30.	N.R.	Dev, Raj Kumar Satchidanand, Bahadur. <i>Deogarh, Sambalpur.</i>
1901 June 5.	N.R.	Dey, Nundolal. <i>Tamluk, Midnapur.</i>
1902 Feb. 5.	N.R.	Dixon, F. P., I.C.S. <i>Balasure.</i>
1898 Jan. 5.	F.M.	Dods, W. K. <i>Europe.</i>
1902 July 2.	R.	Doxey, F. <i>Calcutta.</i>
1886 June 2.	R.	Doyle, Patrick, C.E., F.R.A.S., F.R.S.E., F.G.S., <i>Calcutta.</i>
1902 Jan. 8.	N.R.	Drummond, J. R., I.C.S. <i>Shahpur.</i>
1892 Sept. 22.	R.	Drury, Major Francis James, M.B., I.M.S. <i>Calcutta.</i>
1889 Jan. 2.	N.R.	Dudgeon, Gerald Cecil, Holta Tea Co., Ld. <i>Palampur.</i>
1879 Feb. 5.	N.R.	Duthie, J. F., B.A., F.L.S. <i>Saharanpur.</i>
1892 Jan. 6.	N.R.	Dutt, Gerindra Nath. <i>Bankipore.</i>
1877 Aug. 30.	R.	Dutt, Kedar Nath. <i>Calcutta.</i>
1892 Aug. 25.	R.	Dutt, Rai Narsingh Chunder, Bahadur. <i>Howrah.</i>
1900 April 4.	A.	Dyson, Major Herbert Jekyl, F.R.C.S., I.M.S. <i>Europe.</i>

Date of Election.		
1900 July 4.	R.	Earle, A., I.C.S. <i>Calcutta.</i>
1901 June 5.	N.R.	Ede, Francis Joseph, C.E., A.M.I.C.E., F.G.S. <i>Silchar, Cachar.</i>
1871 Dec. 2.	A.	Eliot, Sir John, M.A., K.C.I.E., F.R.S. <i>Europe.</i>
1900 Mar. 7.	A.	Fanshawe, Sir Arthur Upton, C.S.I., K.C.I.E., I.C.S. <i>Europe.</i>
1900 Aug. 29.	A.	Fanshawe, The Hon. Mr. H. C., C.S.I., I.C.S. <i>Europe.</i>
1901 Mar. 6.	N.R.	Fergusson, J. C. <i>Hardoi, Oudh.</i>
1899 Jan. 4.	A.	Ferrar, Lieutenant, M. LL., I.S.C. <i>Europe.</i>
1894 Dec. 5.	A.	Finn, Frank, B.A., F.Z.S. <i>Europe.</i>
1898 Sept. 30.	R.	Firminger, The Revd. Walter K., M.A. <i>Calcutta.</i>
1892 May 4.	A.	Forrest, G. W., B.A. <i>Europe.</i>
1902 April 2.	N.R.	Fuller, The Hon'ble Mr. J. B., C.I.E. <i>Shillong.</i>
1900 Dec. 5.	N.R.	Gabriel, E. V., I.C.S. <i>Indore.</i>
1893 Jan. 11.	R.	Gait, Edward Albert, I.C.S. <i>Calcutta.</i>
1902 May 7.	N.R.	Garrett, A., I.C.S. <i>Mozuffarpore.</i>
1899 Aug. 30.	R.	Garth, Dr. H. C. <i>Calcutta.</i>
1902 June 4.	N.R.	Ghaznavi, A. A. <i>Mymensing.</i>
1889 Jan. 2.	R.	Ghose, Jogendra Chandra, M.A., B.L. <i>Calcutta.</i>
1902 Feb. 5.	R.	Ghosh, Girish Chander. <i>Calcutta.</i>
1889 Mar. 6.	R.	Ghosha, Bhupendra Sri, B.A., B.L. <i>Calcutta.</i>
1869 Feb. 3.	N.R.	Ghosha, Pratapa Chandra, B.A. <i>Vindychal.</i>
1897 Dec. 6.	A.	Godfrey, Captain Stuart, I.S.C. <i>Europe.</i>
1861 Feb. 5.	N.S.	Godwin-Austen, Lieut.-Colonel H. H., F.R.S., F.Z.S., F.R.G.S. <i>Europe.</i>
1899 Aug. 2.	R.	Goenka, Roomall. <i>Calcutta.</i>
1896 Nov. 4.	A.	Grant, A. J., I.C.S. <i>Europe.</i>
1897 July 7.	N.R.	Grant, Captain J. W., I.M.S. <i>Muscat.</i>
1876 Nov. 15.	F.M.	Grierson, George Abraham, PH D., C.I.E., I.C.S. <i>Europe.</i>
1900 Dec. 5.	L.M.	Grieve, J. W. A. <i>Kalimpong.</i>
1901 April 3.	N.R.	Guha, Abhaya Sankara. <i>Shillong.</i>
1898 June 1.	N.R.	Gupta, Bepin Behari. <i>Chota Nagpur.</i>
1898 April 6.	N.R.	Gupta, Krishna Govinda, I.C.S., Barrister-at-Law. <i>Outtack.</i>
1898 Jan. 5.	N.R.	Gurdon, Captain P. R. T., I.S.C. <i>Gauhati.</i>
1901 Mar. 6.	N.R.	Habibur Rahman Khan, Maulvie. <i>Bhikampur.</i>
1892 Jan. 6.	N.R.	Haig, Captain Wolseley, I.S.C. <i>Berar.</i>
1899 April 5.	F.M.	Hare, Major E. C., I.M.S. <i>Europe.</i>
1901 Jan. 2.	R.	Harris, Lieut.-Col. G. F. A., I.M.S. <i>Calcutta.</i>
1884 Mar. 5.	L.M.	Hassan Ali Qadr, Sir Syud, Nawab Bahadur, K.C.I.E. <i>Murshedabad</i>
1897 Feb. 3.	R.	Hayden, H. H., B.A., B.E., F.G.S., Geological Survey of India. <i>Calcutta.</i>
1875 Mar. 3.	R.	Hendley, Col. Thomas Holbein, C.I.E., I.M.S., Inspector-General of Civil Hospitals, Bengal. <i>Calcutta.</i>



Date of Election.		
1892 Aug. 3.	A.	Hill, Samuel Charles, B.A., B.Sc. <i>Europe.</i>
1872 Dec. 5.	A.	Hoernle, Augustus Frederick Rudolf, PH.D., C.I.E. <i>Europe.</i>
1878 Mar. 6.	A.	Hoey, W., PH.D., I.C.S. (retired). <i>Europe.</i>
1891 July 1.	A.	Holland, Thomas Henry, F.G.S., A.R.C.S. <i>Europe.</i>
1898 Feb. 2.	R.	Hooper, David, F.C.S. <i>Calcutta.</i>
1884 Mar. 5.	N.R.	Hooper, The Hon. Mr. John, B.A., I.C.S. <i>Allahabad.</i>
1901 Dec. 4.	B.	Hossack, Dr. W. C. <i>Calcutta.</i>
1873 Jan. 2.	L.M.	Houstoun, G. L., F.G.S. <i>Europe.</i>
1890 Dec. 3.	N.R.	Hyde, The Revd. Henry Barry, M.A. <i>Madras.</i>
1866 Mar. 7.	F.M.	Irvine, William, I.C.S. (retired). <i>Europe.</i>
1899 April 5.	R.	Kempthorne, H. E. <i>Calcutta.</i>
1882 Mar. 1.	N.R.	Kennedy, Pringle, M.A. <i>Mozuffarpore.</i>
1867 Dec. 4.	A.	King, Sir George, M.B., K.C.I.E., LL.D., F.L.S., F.R.S., I.M.S. (retired). <i>Europe.</i>
1881 Mar. 2.	N.R.	King, Lucas White, B.A., LL.B., C.S.I., I.C.S. <i>Dharamsala.</i>
1896 Aug. 27.	A.	Konstam, Edwin Max, I.C.S. <i>Europe.</i>
1896 July 1.	B.	Küchler, George William, M.A., Bengal Education Service. <i>Calcutta.</i>
1891 Feb. 4.	N.R.	Kupper, Raja Lala Bunbehari. <i>Burdwan.</i>
1899 Aug. 30.	N.R.	Lal, Dr. Mannu. <i>Banda.</i>
1902 Feb. 5.	N.R.	Lal, Lala Shyam. <i>Cawnpore.</i>
1902 Jan. 8.	N.R.	Lall, Parmeshwara. <i>Gya.</i>
1887 May 4.	L.M.	Lanman, Charles R. <i>Europe.</i>
1889 Mar. 6.	R.	La Touche, Thomas Henry Digges, B.A., Geological Survey of India. <i>Calcutta.</i> [ <i>cutta.</i> ]
1900 Sep. 19.	R.	Law, The Hon. Sir Edward F. G., K.C.M.G., C.S.I. <i>Cal-</i>
1902 July 2.	N.R.	Leake, H. M. <i>Dalsing Sarai.</i>
1889 Nov. 6.	R.	Lee, W. A., F.R.M.S. <i>Calcutta.</i>
1900 May. 2.	A.	Leistikow, F. R. <i>Europe.</i>
1902 Oct. 29.	R.	Lewes, A. H. <i>Calcutta.</i>
1889 Feb. 6.	R.	Little, Charles, M.A., Bengal Education Service. <i>Calcutta.</i>
1902 July 2.	R.	Luke, James. <i>Calcutta.</i>
1869 July 7.	F.M.	Lyall, Sir Charles James, M.A., K.C.S.I., C.I.E., LL.D., I.C.S. (retired). <i>Europe.</i>
1870 April 7.	L.M.	Lyman, B. Smith. <i>Europe.</i>
1896 Mar. 4.	N.R.	MacBlaine, Frederick, I.C.S. <i>Purneah.</i>
1902 July 2.	R.	Macdonald, Dr. William Roy. <i>Calcutta.</i>
1901 Aug. 7.	R.	Macfarlane, John, Librarian, Imperial Library. <i>Calcutta.</i>
1893 Jan. 11.	L.M.	Maclagan, E. D., M.A., I.C.S. <i>Multan.</i>
1891 Feb. 4.	A.	Macpherson, Duncan James, M.A., C.I.E., I.C.S. <i>Europe.</i>

Date of Election			
1896 Feb. 5	R.	Macpherson, The Hon'ble Mr. William Charles,	C.S.I., I.C.S. <i>Calcutta</i> .
1902 April 2	N.R.	Maddox, Captain R. H., I.M.S.	<i>Ranchi</i> .
1893 Aug. 31	N.R.	Mahatha, Purmeshwar Narain.	<i>Mozuffarpore</i> .
1895 Aug. 29	R.	Mahomed Gilani, Shamas-ul-Ulama Shaikh.	<i>Calcutta</i> .
1898 Nov. 2	N.R.	Maitra, Akshaya Kumar, B.A., B.L.	<i>Rajshahi</i> .
1889 Jan. 2	R.	Maliah, Kumar Ramessur.	<i>Howrah</i> .
1893 July 5	A.	Mangos, O. D.	<i>Europe</i> .
1901 June 5	R.	Mann, H. H., B.Sc.	<i>Calcutta</i> .
1889 Mar. 6	A.	Mann, John, M.A.	<i>Europe</i> .
1893 Mar. 1	A.	Marriott, Charles Richardson, I.C.S.	<i>Europe</i> .
1902 May 7	N.R.	Marshall, J. H.	<i>Simla</i> .
1892 April 6	R.	Maynard, Major F. P., I.M.S.	<i>Calcutta</i> .
1901 Aug. 28	R.	McLeod, Norman.	<i>Calcutta</i> .
1899 Feb. 1	N.R.	McMahon, Captain A. H., C.S.I., C.I.E., I.S.C.	<i>Quetta</i> .
1899 Mar. 1	N.R.	McMinn, C. W., B.A., I.C.S. (retired).	<i>Comilla</i> .
1886 Mar. 3	L.M.	Metha, Rustomjee Dhunjeebhoj, C.I.E.	<i>Calcutta</i> .
1895 July 3	F.M.	Melitus, Paul Gregory, C.I.E., I.C.S.	<i>Europe</i> .
1900 Mar. 7	N.R.	Meyer, William Stevenson, I.C.S.	<i>Madras</i> .
1900 Jan. 19	R.	Michie, Charles.	<i>Calcutta</i> .
1884 Nov. 5	R.	Middlemiss, C. S., B.A., Geological Survey of India.	<i>Calcutta</i> .
1884 Sep. 3	R.	Miles, William Harry.	<i>Calcutta</i> .
1870 July 6	R.	Miller, Albert Bermingham, B.A., Barrister-at-Law,	Official Trustee. <i>Calcutta</i> .
1898 April 6	N.R.	Milne, Captain C. J., I.M.S.	<i>Bombay</i> .
1874 May 6	F.M.	Minchin, F. J. V.	<i>Europe</i> .
1896 July 1	N.R.	Misra, Rai Lakshmi Sanker, Bahadur.	<i>Benares</i> .
1897 Jan. 6	N.R.	Misra, Tulsi Ram.	<i>Bareilly</i> .
1899 Mar. 1	R.	Mitra, J. C., M.A., B.L.	<i>Calcutta</i> .
1901 Aug. 28	R.	Mitra, Kumar Narendra Nath.	<i>Calcutta</i> .
1897 Nov. 3	R.	Mitra, The Hon'ble Mr. Justice Saroda Churan,	M.A., B.L. <i>Calcutta</i> .
1901 Aug. 7	N.R.	Molony, E., I.C.S.	<i>Ghasipur</i> .
1895 July 3	N.R.	Monohan, Francis John, I.C.S.	- <i>Shillong</i> .
1898 May 4	R.	Mookerjee, R. N.	<i>Calcutta</i> .
1898 Sep. 30	R.	Moore, The Revd. Herbert Octavius, M.A.	<i>Calcutta</i> .
1902 July 2	R.	Morshead, L. F., I.C.S.	<i>Calcutta</i> .
1894 June 6	N.R.	Muhammad Shibli Nomani, Shams-ul-Ulama Maulvie,	Professor of Arabic in the Muhammadau Oriental College. <i>Aligarh</i> .
1902 April 2	R.	Mukerjee, Jaladhi Chunder.	<i>Calcutta</i> .
1901 Jan. 2	N.R.	Mukerjee, Dr. U. C.	<i>Birbhoom</i> .
1894 Aug. 30	R.	Mukerjee, Sib Narayan.	<i>Uttarpara</i> .
1900 May 2	R.	Mukerji, P. B., B.Sc.	<i>Calcutta</i> .
1899 Sept. 29	R.	Mukharji, Jotindra Nath, B.A.	<i>Calcutta</i> .
1886 May 5	R.	Mukhopadhyaya, The Hon. Dr. Asutosh, M.A., D.L.	F.R.A.S., F.R.S.E. <i>Calcutta</i> .

Date of Election.		
1892 Dec. 7.	R.	Mukhopadhyaya, Panchanana. <i>Calcutta.</i>
1901 April 3.	R.	Mullick, Pramatha Nath. <i>Calcutta.</i>
1901 June 5.	N.R.	Mullick, Ramani Mohan. <i>Meherpur.</i>
1885 June 3.	N.R.	Naemwoollah, Maulvie, Deputy Magistrate. <i>Etawah.</i>
1901 Mar. 6.	N.R.	Nevill, H. R., I.C.S. <i>Naini Tal.</i>
1900 Dec. 5.	R.	Nicoll, John. <i>Calcutta.</i>
1889 Aug. 29.	L.M.	Nimmo, John Duncan. <i>Calcutta.</i>
1901 Feb. 6.	R.	Noetling, Dr. F. <i>Calcutta.</i>
1892 Oct. 27.	F.M.	Norvill, Dr. Frederic H. <i>Europe.</i>
1885 Feb. 4.	N.R.	Nyayaratna, Mahāmāhopādhyāya Mahesa Chandra, C.I.E. <i>Benares.</i>
1899 Jan. 7.	N.R.	O'Brien, P. H., I.C.S. <i>Purneah.</i>
1900 Aug. 29.	A	O'Dwyer, Michael Francis, B.A., I.C.S. <i>Europe.</i>
1880 Dec. 1.	R.	Oldham, R. D., A.R.S.M., F.G.S., Geological Survey of India. <i>Calcutta.</i>
1887 July 6.	R.	Oung, Moung Hla. <i>Calcutta.</i>
1901 Jan. 2.	N.R.	Pande, Pandit Ramavatar, B.A., I.C.S. <i>Jhansi.</i>
1880 Aug. 4.	L.M.	Pandia, Pandit Mohanlall Vishnulall, F.T.S., <i>Muttra.</i>
1901 Aug. 28.	A.	Panton, E. B. H., I.C.S. <i>Europe.</i>
1880 Jan. 7.	A.	Pargiter, Frederick Eden, B.A., I.C.S. <i>Europe.</i>
1901 June 5.	R.	Parsons, W. <i>Calcutta.</i>
1899 Aug. 2.	N.R.	Peake, C. W., M.A., Bengal Education Service. <i>Bankipur.</i>
1902 Aug. 6.	R.	Peal, H. W. <i>Calcutta.</i>
1873 Aug. 6.	R.	Pedler, Alexander, C.I.E., F.R.S., Director of Public Instruction, Bengal. <i>Calcutta.</i>
1888 June 6.	L.M.	Pennell, Aubray Percival, B.A., Bar.-at-Law. <i>Europe.</i>
1881 Aug. 25.	R.	Percival, Hugh Melville, M.A., Bengal Education Service. <i>Calcutta.</i>
1877 Aug. 1.	N.R.	Peters, Lieut.-Colonel C. T., M.B., I.M.S. <i>Bombay.</i>
1889 Nov. 6.	N.R.	Phillott, Major D. C., I.S.C. <i>Kerman, Persia.</i>
1889 Mar. 6.	R.	Prain, Major David, M.A.; M.B., LL.D., I.M.S., Royal Botanic Garden. <i>Sibpur.</i>
1889 Mar. 6.	N.R.	Prasad, Hanuman, Raes and Zemindar. <i>Chunar.</i>
1896 Sept. 25.	N.R.	Pringle, A. T. <i>Madras.</i>
1880 April 7.	N.R.	Rai, Bipina Chandra, B.L. <i>Jessore.</i>
1895 Aug. 29.	R.	Rai, Jatindra Nath Chaudhery, M.A., B.L. <i>Barnagar.</i>
1901 June 5.	N.R.	Rai, Lala Lajpat. <i>Lahore.</i>
1900 April 4.	R.	Raleigh, The Hon. Mr. T. <i>Calcutta.</i>
1898 Aug. 3.	N.R.	Ram, Sita, M.A. <i>Ballia.</i>
1890 Mar. 5.	R.	Ray, Prafulla Chandra, D.Sc., Bengal Education Service. <i>Calcutta.</i>
1887 May 4.	R.	Ray, Prasanna Kumar, D.Sc. (Lond. and Edin.), Bengal Education Service. <i>Calcutta.</i>
1884 Mar. 5.	R.	Risley, Herbert Hope, B.A., C.I.E., I.C.S. <i>Calcutta.</i>

Date of Election.		
1900 April 4.	R.	Rogers, Captain Leonard, M.D., B.Sc., M.R.C.P., F.R.C.S., I.M.S. <i>Calcutta.</i>
1900 Aug. 29.	N.R.	Rose, H. A., I.C.S. <i>Lahore.</i>
1901 Dec. 4.	R.	Ross, E. Denison, Ph.D. <i>Calcutta.</i>
1896 Dec. 2.	N.R.	Row, B. Suryanaran, B.A. <i>Bellary.</i>
1889 June 5.	N.R.	Roy, Maharaja Girjanath. <i>Dinagepur.</i>
1885 Mar. 4.	R.	Rustomjee, Harjeebhoy Manickjee, C.I.E. <i>Calcutta.</i>
1896 Aug. 27.	N.R.	Samman, Herbert Frederick, I.C.S. <i>Barisal.</i>
1899 June 7.	N.R.	Sarkar, Chandra Kumar. <i>Kowkanik.</i>
1898 Mar. 2.	N.R.	Sarkar, Jadu Nath. <i>Bankipore.</i>
1897 Nov. 3.	A.	Saunders, C. <i>Europe.</i>
1902 Feb. 5.	R.	Schulten, Dr. C. <i>Calcutta.</i>
1900 Dec. 5.	N.R.	Schwaiger, Imre George. <i>Delhi.</i>
1893 Jan. 11.	L.M.	Scindia, His Highness the Maharaja. <i>Gwalior.</i>
1902 Feb. 5.	N.R.	Sen, A. C., I.C.S. <i>Rungpur.</i>
1900 Dec. 5.	N.R.	Sen, Birendra Chandra, I.C.S. <i>Dinajpur.</i>
1901 Aug. 28.	R.	Sen, Upendranath. <i>Calcutta.</i>
1885 April 1.	R.	Sen, Yadu Nath. <i>Calcutta.</i>
1897 Dec. 1.	N.R.	Seth, Mesrovb J. <i>Singapore.</i>
1900 Mar. 7.	R.	Shastree, Pandit Yogesha Chandra. <i>Calcutta.</i>
1885 Feb. 4.	R.	Shastri, Mahāmāhopādhyāya Haraprasād, M.A. <i>Calcutta.</i>
1902 Dec. 3.	N.R.	Shastri, Harnarain. <i>Delhi.</i>
1902 Mar. 5.	R.	Shastri, Rajendra Chandra, M.A. <i>Calcutta.</i>
1900 May 2.	R.	Shrager, Adolphe. <i>Calcutta.</i>
1899 May 3.	N.R.	Silberrad, Chas. A., I.C.S. <i>Lalitpur, Bundelkhand.</i>
1893 Mar. 1.	N.R.	Singh, Maharaja Kumara Sirdar Bharat, I.C.S. <i>Ghazipur.</i>
1902 Sep. 24.	R.	Singh, Kumar Birendra Chandra. <i>Calcutta.</i>
1895 Aug. 29.	R.	Singh, Lachmi Narayan, M.A., B.L. <i>Calcutta.</i>
1892 Mar. 2.	L M	Singh, The Hon. Raja Ooday Pratab. <i>Binga.</i>
1889 Aug. 29.	N.R.	Singh, H. H. The Maharaja Prabhu Narain, Bahadur. <i>Benares.</i>
1892 Aug. 3.	N.R.	Singh, H. H. The Hon. Maharaja Pratap Narain. <i>Ajodhya, Oudh.</i>
1895 Aug. 29.	N.R.	Singh, Ram Din. <i>Bankipur.</i>
1889 Nov. 6.	N.R.	Singh, H. H. The Hon. Maharaja Rameshwara, Bahadur. <i>Darbhanga.</i>
1894 Feb. 7.	N.R.	Singh, H. H. Raja Vishwa Nath, Bahadur, Chief of Chhatarpur.
1901 Aug. 7.	R.	Singha, Chandra Narayan. <i>Calcutta.</i>
1894 July 4.	N.R.	Sinha, Kunwar Kushal Pal, M.A. <i>Narki P.O., Agra District.</i>
1899 June 7.	N.R.	Sinha, Purnenda Narayan. <i>Bankipur.</i>
1867 April 3.	R.	Sircar, Dr. Mahendra Lal, M.D., C.I.E., D.L. <i>Calcutta.</i>
1897 Jan. 6.	R.	Sircar, Amrita Lal, F.C.S. <i>Calcutta.</i>
1872 Aug. 5.	N.R.	Skrefsrud, The Revd. Laurentius Olavi. <i>Rampore Haut.</i>

Date of Election.		
1901 Dec. 4.	N.R.	Spooner, D. Brainerd. <i>Benares</i>
1899 Nov. 1.	N.R.	Srivastavya, Lala Shyam Sunder Lal. <i>Pertabgarh.</i>
1898 April 6.	N.R.	Stark, Herbert A., B.A. <i>Cuttack.</i>
1901 Mar. 6.	N.R.	Stebbing, E. P. <i>Dehra Dun.</i>
1891 Aug. 27.	A.	Stein, M. A., Ph.D. <i>Europe.</i>
1895 July 5.	A.	Steinberg, Alfred Frederick, I.C.S. <i>Europe.</i>
1899 Aug. 30.	R.	Stephen, St. John, B.A., LL.B. Barrister-at-Law. <i>Calcutta.</i>
1900 Aug. 29.	N.R.	Stephenson, Captain John, I.M.S. <i>Gujrat.</i>
1899 Mar. 1.	R.	Tocher, A. <i>Calcutta.</i>
1868 June 3.	R.	Tagore, The Hon. Maharaja Sir Jotendra Mohun, Bahadur, K.C.S.I. <i>Calcutta.</i>
1898 April 6.	R.	Tagore, Maharaja Prodyat Coomar. <i>Calcutta.</i>
1893 Aug. 31.	N.R.	Tate, G. P. <i>Hongkong.</i>
1878 June 5.	N.R.	Temple, Colonel Richard Carnac, C.I.E., I.S.C. <i>Port Blair.</i>
1875 June 2.	N.R.	Thibant, Dr. G., Muir Central College. <i>Allahabad.</i>
1898 Nov. 2.	R.	Thornton, Edward, A.R.I.B.A. <i>Calcutta.</i>
1847 June 2.	L.M.	Thuillier, Lieut.-Genl. Sir Henry Edward Landor, Kt., C.S.I., F.R.S., R.A. <i>Europe.</i>
1891 Aug. 27.	N.R.	Thurston, Edgar. <i>Madras.</i>
1871 April 5.	A.	Trefftz, Oscar. <i>Europe.</i>
1861 June 5.	L.M.	Tremlett, James Dyer, M.A., I.C.S. (retired). <i>Europe.</i>
1893 May 3.	N.R.	Vanja, Raja Ram Chandra. <i>Mayurbhanga, District Balasore.</i>
1898 Feb. 2.	R.	Vasu, Amrita Lal. <i>Calcutta.</i>
1900 Aug. 29.	R.	Vaugham, Major J. C., I.M.S. <i>Calcutta.</i>
1890 Feb. 5.	N.R.	Venis, Arthur, M.A., Principal, Sanskrit College. <i>Benares.</i>
1902 May 7.	R.	Vidyabhushan, Jogendra Nath Sen. <i>Calcutta.</i>
1902 June 4.	R.	Vidyabhushan, Pandit Satis Chandra, M.A. <i>Calcutta.</i>
1901 Mar. 6.	N.R.	Vogel, Dr. J. Ph. <i>Lahore.</i>
1894 Sept. 27.	L.M.	Vost, Major William, I.M.S. <i>Jaunpur.</i>
1902 Oct. 29.	R.	Vredenburg, E. <i>Calcutta.</i>
1901 Aug. 7.	A.	Walker, Dr. T. L. <i>Europe.</i>
1900 Jan. 19.	R.	Wallace, David Robb. <i>Calcutta.</i>
1901 June 5.	N.R.	Walsh, E. H., I.C.S. <i>Durjeeling.</i>
1889 Nov. 6.	A.	Walsh, Major John Henry Tull, I.M.S. <i>Europe.</i>
1900 April 4.	R.	Walton, Captain Herbert James, M.B., F.R.C.S., I.M.S. <i>Calcutta.</i>
1865 May 3.	A.	Waterhouse, Major-General James, I.S.C. (retired). <i>Europe.</i>
1874 July 1.	R.	Watt, Sir George, Kt., C.I.E. <i>Calcutta.</i>
1899 Sept. 29.	A.	Welldon, The Most Revd. James Edward Cowell, D.D. <i>Europe.</i>
1902 April 2.	R.	Wheeler, H., I.C.S. <i>Calcutta.</i>

Date of Election.		
1896 Feb. 5.	A.	Williams, Captain Charles E., I.M.S. <i>Europe.</i>
1891 May 6.	R.	Wilson, Charles Robert, M.A., Bengal Education Service. <i>Calcutta.</i>
1899 Aug. 30.	R.	Wood, E. Seymour, F.G.S. <i>Calcutta.</i>
1900 Dec. 5.	R.	Woodman, H. C., I.C.S. <i>Calcutta.</i> [ <i>cutta.</i>
1894 Sept. 27.	R.	Woodroffe, John George, Barrister-at-Law. <i>Cal.</i>
1894 Aug. 30.	N.R.	Wright, Henry Nelson, B.A., I.C.S. <i>Allahabad.</i>
1898 July 6.	R.	Wyness, James, C.E. <i>Calcutta.</i>

### SPECIAL HONORARY CENTENARY MEMBERS.

Date of Election.		
1884 Jan. 15.		Dr. Ernst Haeckel, Professor in the University of Jena.
1884 Jan. 15.		Charles Meldrum, Esq., C.M.G., M.A., LL.D., F.R.A.S., F.R.S. <i>Mauritius.</i>
1884 Jan. 15.		Professor A. H. Sayce, Professor of Comp. Philology. <i>Oxford.</i>
1884 Jan. 15.		Professor Emile Senart, Member of the Institute of France. <i>Paris.</i>

### HONORARY MEMBERS.

1848 Feb. 2.		Sir Joseph Dalton Hooker, G.C.S.I., C.B., M.D., D.C.L., LL.D., F.L.S., F.G.S., F.R.G.S., F.R.S. <i>Berkshire.</i>
1875 Nov. 3.		Dr. Otto von Böhtlingk. <i>Leipzig.</i>
1879 June 4.		Professor Edward Bayles Cowell, D.C.L. <i>Cambridge.</i>
1879 June 4.		Dr. Albert Günther, M.A., M.D., PH.D., P.L.S., F.Z.S., F.R.S. <i>Surrey.</i>
1879 June 4.		Dr. Jules Janssen. <i>Paris.</i>
1879 June 4.		Professor P. Regnaud. <i>Lyons.</i>
1881 Dec. 7.		Lord Kelvin, G.C.V.O., D.C.L., LL.D., F.R.S.E., F.R.S. <i>Glasgow.</i>
1883 Feb. 7.		William Thomas Blanford, Esq., LL.D., A.R.S.M., F.G.S., F.R.G.S., F.Z.S., F.R.S. <i>London.</i>
1883 Feb. 7.		Alfred Russell Wallace, Esq., LL.D., D.C.L., F.L.S., F.Z.S., F.R.S. <i>Dorset.</i>
1894 Mar. 7.		Sir George Gabriel Stokes, Bart, M.A., D.C.L., LL.D., D.SC., F.C.P.S., F.R.S.E., F.R.S. <i>Cambridge.</i>
1894 Mar. 7.		Mahāmāhāpodhyāya Chandra Kanta Tarkalankara. <i>Calcutta.</i>
1894 Mar. 7.		Professor Theodor Noeldeke. <i>Strassburg.</i>
1895 June 5.		Lord Rayleigh, M.A., D.C.L., D.SC., LL.D., PH.D., F.R.A.S., F.R.S. <i>Witham, Essex.</i>
1895 June 5.		Lt.-Genl. Sir Richard Strachey, B.E., G.C.S.I., LL.D., F.R.G.S., F.G.S., F.L.S., F.R.S. <i>London.</i>
1895 June 5.		Charles H. Tawney, Esq., M.A., C.I.E. <i>London.</i>
1896 Feb. 5.		Lord Lister, F.R.C.S., D.C.L., M.D., LL.D., D.SC., F.R.S. <i>London.</i>

Date of Election.	
1896 Feb. 5.	Sir Michael Foster, K.C.B., M.A., M.D., D.C.L., LL.D., D.S.C., F.L.S., F.C.S., F.R.S. <i>Cambridge.</i>
1896 Feb. 5.	Professor F. Kielhorn, PH.D., C.I.E. <i>Göttingen.</i>
1896 Feb. 5.	Professor Charles Rockwell Lanmann. <i>Massachusetts, U.S.A.</i>
1899 Feb. 1.	Dr. Augustus Frederick Rudolf Hoernle, PH.D., C.I.E. <i>Oxford.</i>
1899 Dec. 6.	Professor Edwin Ray Lankester, M.A., LL.D., F.R.S. <i>London.</i>
1899 Dec. 6.	Sir George King, K.C.I.E., M.B., LL.D., F.L.S., F.R.S. <i>London.</i>
1899 Dec. 6.	Professor Edward Burnett Tylor, D.C.L., LL.D., F.R.S. <i>Oxford.</i>
1899 Dec. 6.	Professor Edward Suess, PH.D., For. Mem. R.S. <i>Vienna.</i>
1901 Mar. 6	Professor J. W. Judd, C.B., LL.D., F.R.S. <i>London.</i>
1902 Nov. 5.	Monsieur R. Zeiller. <i>Paris.</i>

## CORRESPONDING MEMBER.

Date of Election.	
1866 May 7.	Schlagintweit, Dr. Emil. <i>Zweibrücken.</i>

## ASSOCIATE MEMBERS.

Date of Election.	
1874 April 1.	Lafont, The Revd. Father, E., C.I.E., S.J. <i>Calcutta.</i>
1875 Dec. 1.	Bate, The Revd. J. D., M.R.A.S. <i>Kent.</i>
1875 Dec. 1.	Abdul Hai, Manlvie. <i>Calcutta.</i>
1882 June 7.	Giles, Herbert. <i>Europe.</i>
1884 Aug. 6.	Moore, F., F.L.S. <i>Surrey.</i>
1885 Dec. 2.	Führer, Dr. A. <i>Europe.</i>
1886 Dec. 1.	Das, Rai Bahadur Sarat Chandra, C.I.E. <i>Calcutta.</i>
1892 April 6.	Samasrami, Satya Vrata. <i>Calcutta.</i>
1892 Dec. 7.	Brühl, P. J. <i>Sibpur.</i>
1899 April 5.	Sanyal, Rai Bahadur Ram Brahma. <i>Calcutta.</i>
1899 April 5.	Bhandari, Visnu Prasad Raj. <i>Nepal.</i>
1899 Nov. 1.	Francotte, The Revd. Father E., S.J. <i>Calcutta.</i>
1902 June 4.	Francke, The Revd. A. H. <i>Leh.</i>

LIST OF MEMBERS WHO HAVE BEEN ABSENT FROM  
INDIA THREE YEARS AND UPWARDS.\*

\* *Rule 40.*—After the lapse of three years from the date of a member leaving India, if no intimation of his wishes shall in the interval have been received by the Society, his name shall be removed from the List of Members.

The following members will be removed from the next Member List of the Society under the operation of the above Rule:—

Dr. Paul Deussen.  
G. W. Forrest, Esq., B.A.  
Oscar Trefftz, Esq.

#### LOSS OF MEMBERS DURING 1902.

##### BY RETIREMENT.

Rai Bahadur Chuni Lal Bose, M.B., F.C.S.  
Hirzel Denis de Massenden Carey, Esq., I.C.S.  
Kishori Mohan Chatterjea, Esq.  
R. Paget Dewhurst, Esq., I.C.S.  
Major H. E. Drake-Brockman, I.M.S.  
Major Charles Robert Mortimer Green, F.R.C.S., I.M.S.  
C. L. Griesbach, Esq., C.I.E., F.G.S.  
J. G. Lorimer, Esq., I.C.S.  
Captain W. F. O'Connor, R.A.  
George William Place, Esq., B.A., LL.B., I.C.S.  
Lieut.-Col. G. M. Porter, R.E.  
Captain Bernard Scott, I.S.C.  
W. A. Talbot, Esq.  
Lieut.-Col. Lawrence Austine Waddell, M.B., LL.D., C.I.E., I.M.S.

##### BY DEATH.

##### *Ordinary Members.*

John Cockburn, Esq.  
The Hon'ble Sir Griffith Evans, K.C.J.E.  
General James Eardly Gastrell (Life member).  
Captain Andrew Augustine Frayne McArdle, B.A., M.B., I.M.S.  
Babu Karttik Chandra Mittra, M.A., B.L.  
Edw. Emmerson Oliver, Esq., M.I.C.E.  
V. R. Panidsay, Esq.  
The Hon'ble Sir John Woodburn, M.A., K.C.S.I., I.C.S.

##### *Honorary Member.*

Dr. Albrecht Weber.

##### BY REMOVAL.

##### *Under Rule 9.*

Lieut.-Col. George Ranking, I.M.S.

##### *Under Rule 40.*

Arthur William Davis, Esq., I.C.S.  
J. W. Muir, Esq., I.C.S.  
Frederick James Rowe, Esq., M.A.



[APPENDIX.]

ABSTRACT STATEMENTS  
OF  
RECEIPTS AND DISBURSEMENTS  
OF THE  
ASIATIC SOCIETY OF BENGAL  
FOR  
THE YEAR 1902.

1902.

# STATEMENT

## *Asiatic Society*

Dr.

				To ESTABLISHMENT.					
				Rs.	As.	P.	Rs.	As.	P.
Salaries	...	...	...	3,711	6	3			
Commission	...	...	...	420	5	5			
Pension	...	...	...	4	0	0			
							4,185	11	8
				To CONTINGENCIES.					
Stationery	...	...	...	119	1	0			
Taxes	...	...	...	884	4	0			
Postage	...	...	...	450	11	3			
Freight	...	...	...	60	6	8			
Meeting	...	...	...	75	0	0			
Auditor's fee	...	...	...	100	0	0			
Registration fee	...	...	...	5	0	0			
Petty repairs	...	...	...	68	0	3			
Insurance fee	...	...	...	625	0	0			
Miscellaneous	...	...	...	474	14	8			
							2,862	5	10
				To LIBRARY AND COLLECTIONS.					
Books	...	...	...	2,755	8	8			
Binding	...	...	...	608	12	0			
Catalogue	...	...	...	1,150	0	0			
Furniture	...	...	...	60	0	0			
							4,574	4	8
				To PUBLICATIONS.					
Journal, Part I	..	...	...	1,023	5	6			
Journal, Part II	...	...	...	964	1	3			
Journal, Part III	...	...	...	514	13	1			
Proceedings	...	...	...	492	4	6			
							2,994	8	4
To Printing charges of Circulars, Receipt-forms, &c.				...			172	5	6
„ Personal Account (Writes-off and Miscellaneous)				...			217	0	6
				To EXTRAORDINARY EXPENDITURE.					
Royal Society's Scientific Catalogue	...	...	...	1,037	10	0			
Max Müller Memorial Fund	...	...	...	38	6	0			
							1,076	0	0
Balance	...	...	...	...			175,538	11	3
							191,570	15	9
Total Rs.				...					

No 1.  
of Bengal.

1902.

Cr.				Rs. As. P.	Rs. As. P.
By Balance from last Report	...	...	...		161,059 0 3
BY CASH RECEIPTS.					
Publications sold for cash	...	...	...	247 6 0	
Interest on Investments	...	...	...	6,045 8 0	
Rent of Rooms on the Society's ground floor	...	...	...	1,375 0 0	
Allowance from Government of Bengal for the Publication of Anthropological and Cognate subjects	...	...	...	2,000 0 0	
Ditto from Government of Assam	...	...	...	1,000 0 0	
Ditto from Colonial Secretary, Straits Settlements, for cost of publications of Sir George King's Materials for a Flora of the Malayan Peninsula	...	...	...	8,750 0 0	
Miscellaneous	...	...	...	306 1 0	
					19,723 15 0
BY EXTRAORDINARY RECEIPTS.					
Max Müller Memorial Fund	...	...	...	576 0 0	
Subscriptions to Royal Society's Scientific Catalogue	...	...	...	510 0 0	
					1,086 0 0
BY PERSONAL ACCOUNT.					
Admission fees	...	...	...	928 0 0	
Subscriptions	...	...	...	8,398 0 0	
Sales on credit	...	...	...	318 14 0	
Miscellaneous	...	...	...	57 2 6	
					9,702 0 6
Total Rs.				...	191,570 15 9

C. R. WILSON,  
*Honorary Secretary and Treasurer,*  
*Asiatic Society of Bengal.*

Examined and found correct.  
MEUGENS, KING & SIMSON,  
*Auditors.*

**STATEMENT**  
*1902. Oriental Publication Fund in Account*

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Dr.

## To CASH EXPENDITURE.

				Rs.	As.	P.	Rs.	As.	P.
Printing charges	...	...	...	4,129	0	6			
Editing charges	...	...	...	2,297	0	0			
Salaries	...	...	...	1,519	8	0			
Freight	...	...	...	47	0	0			
Stationery	...	...	...	108	11	0			
Postage	...	...	...	223	11	3			
Commission on collection	...	...	...	23	4	7			
Contingencies	...	...	...	78	11	0			
							8,424	14	4
To Personal Account (Writes-off and Miscellaneous)	...	...	...				9	8	0
Balance	...	...	...				11,535	15	7
Total Rs.	...	...	...				19,970	5	11

**STATEMENT**  
*Sanskrit Manuscript Fund in Account*

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Dr.

## To CASH EXPENDITURE.

				Rs.	As.	P.	Rs.	As.	P.
Salaries	...	...	...	1,159	0	0			
Travelling charges	...	...	...	422	1	0			
Printing	...	...	...	97	5	0			
Postage	...	...	...	0	12	6			
Stationery	...	...	...	8	2	0			
Furniture	...	...	...	353	8	0			
Contingencies	...	...	...	18	2	0			
							2,058	14	6
Balance	...	...	...				8,518	13	8
Total Rs.	...	...	...				10,567	13	2

## No. 2.

*with the Asiatic Society of Bengal.*

1902.

## Cr.

			Rs.	As.	P.	Rs.	As.	P.
By Balance from last Report	...	...	...			8,940	5	2
BY CASH RECEIPTS.								
Government allowance	...	...	9,000	0	0			
Publications sold for cash	...	...	680	15	6			
Advances recovered	...	...	71	7	0			
						9,702	6	6
BY PERSONAL ACCOUNT.								
Sales on credit	...	...	...			1,327	10	3
Total Rs.			...			19,970	5	11

C. R. WILSON,  
*Honorary Secretary and Treasurer,*  
*Asiatic Society of Bengal.*

Examined and found correct.

MEUGENS, KING & SIMSON,  
*Auditors.*

## No. 3.

*with the Asiatic Society of Bengal.*

## Cr.

			Rs.	As.	P.	Rs.	As.	P.
By Balance from last Report	...	...	...			7,345	12	2
BY CASH RECEIPTS.								
Government allowance	...	...	3,200	0	0			
Publications sold for cash	...	...	15	0	0			
						3,215	0	0
BY PERSONAL ACCOUNT.								
Sales on credit	...	...	...			7	0	0
Total Rs.			...			10,567	12	2

C. R. WILSON,  
*Honorary Secretary and Treasurer,*  
*Asiatic Society of Bengal.*

Examined and found correct.

MEUGENS, KING & SIMSON,  
*Auditors.*

STATEMENT

1902.

Personal

Dr.

			Rs.	As.	P.	Rs.	As.	P.
To Balance from last Report	...	...	...			8,101	2	7
To CASH EXPENDITURE.								
Advances for purchase of Sanskrit Manuscripts, &c.	...	...	...			117	8	0
To Asiatic Society	...	...	9,702	0	6			
„ Oriental Publication Fund	...	...	1,327	10	3			
„ Sanskrit Manuscript Fund	...	...	7	0	0			
						11,036	10	9
Total Rs.						14,255 5 4		

STATEMENT

Invest

Dr.

			Value.			Cost.		
			Rs.	As.	P.	Rs.	As.	P.
To Balance from last Report	...	...	170,300	0	0	170,589	13	10
„ Cash	...	...	18,000	0	0	17,564	4	9
Total Rs.			188,300 0 0			188,104 2 7		

FUNDS.*	PERMANENT.						TEMPORARY.						TOTAL COST.		
	Value.			Cost.			Value.			Cost.			Rs.	As.	P.
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Asiatic Society ...	146,900	0	0	146,443	6	8	40,000	0	0	40,321	5	11	186,764	12	7
Trust Fund ...	1,400	0	0	1,339	6	0	...	...	...	...	...	...	1,339	6	0
	148,300	0	0	147,782	12	8	40,000	0	0	40,321	5	11	188,104	2	7

No. 4.

Account.

1902.

Cr.

	Rs.	As.	P.	Rs.	As.	P.
By Cash Receipts ... ..	...	...	...	...	...	...
„ Asiatic Society .. ..	217	0	6	10,515	14	9
„ Oriental Publication Fund .. ..	9	8	0	226	8	6

By Balance.	Due to the Society.			Due by the Society.		
	Rs.	As.	P.	Rs.	As.	P.
Members ...	4,078	0	2	141	6	0
Employés ...	30	0	0	350	0	0
Miscellaneous	35	12	8	139	8	9
	4,143	12	10	630	14	9

... 3,512 14 1

Total Rs. ... 14,255 5 4

C. R. WILSON,  
Honorary Secretary and Treasurer,  
Asiatic Society of Bengal.

Examined and found correct.  
MEUGENS, KING & SIMSON,  
Auditors.

No. 5.

ment.

Cr.

	Value.			Cost.		
	Rs.	As.	P.	Rs.	As.	P.
By Balance* ... ..	...	...	...	...	...	...
	188,300	0	0	188,104	2	7
Total Rs.	188,300	0	0	188,104	2	7

C. R. WILSON,  
Honorary Secretary and Treasurer,  
Asiatic Society of Bengal.

Examined and found correct.  
MEUGENS, KING & SIMSON,  
Auditors.

1902.

**STATEMENT**  
*Trust*

Dr.

						Rs. As. P.
To Pension ...	...	...	...	...	...	4 0 0
„ Balance ...	...	...	...	...	...	1,385 11 10
Total Rs.						1,389 11 10

**STATEMENT**  
*Cash*

Dr.

						Rs. As. P.	Rs. As. P.
To Balance from last Report ...	...	...	...	...	...	5,003 18 0	
<b>RECEIPTS.</b>							
To Asiatic Society ..	...	...	...	...	...	20,809 15 0	
„ Oriental Publication Fund ..	...	...	...	...	...	9,702 6 6	
„ Sanskrit Manuscript Fund ..	...	...	...	...	...	3,215 0 0	
„ Personal Account ...	...	...	...	...	...	10,515 14 9	
„ Trust Fund ...	...	...	...	...	...	90 0 0	
Total Rs.						44,383 4 3	49,387 1 3

**STATEMENT**  
*Balance*

Dr.

						Rs. As. P.	Rs. As. P.
To Cash ...	...	...	...	...	...	5,357 3 8	
„ Investments ...	...	...	...	...	...	188,104 2 7	
„ Personal Account ...	...	...	...	...	...	3,512 14 1	
Total Rs.						196,974 4 4	196,974 4 4



No. 6.  
*Fund.*

1902.

## Cr.

				Rs.	As.	P.
By Balance from last Report	...	...	...	1,299	11	10
„ Interest on Investments	...	...	...	90	0	0
			Total Rs.	1,389	11	10

C. R. WILSON,  
*Honorary Secretary and Treasurer,*  
*Asiatic Society of Bengal.*

Examined and found correct.  
MEUGENS, KING & SIMSON,  
*Auditors.*

No. 7.  
*Account.*

## Cr.

EXPENDITURE.				Rs.	As.	P.	Rs.	As.	P.
By Asiatic Society	...	...	...	15,815	4	0			
„ Oriental Publication Fund	...	...	...	8,424	14	4			
„ Sanskrit Manuscript Fund	...	...	...	2,053	14	6			
„ Personal Account	...	...	...	117	8	0			
„ Investments	...	...	...	17,564	4	9			
„ Trust Fund	...	...	...	4	0	0			
Balance			...				43,979	13	7
			Total Rs.				5,357	3	8
							49,337	1	3

C. R. WILSON,  
*Honorary Secretary and Treasurer,*  
*Asiatic Society of Bengal.*

Examined and found correct.  
MEUGENS, KING & SIMSON,  
*Auditors.*

No. 8.  
*Sheet.*

## Cr.

				Rs.	As.	P.	Rs.	As.	P.
By Asiatic Society	...	...	...	175,538	11	3			
„ Oriental Publication Fund	...	...	...	11,535	15	7			
„ Sanskrit Manuscript Fund	...	...	...	8,513	13	8			
„ Trust Fund	...	...	...	1,385	11	10			
			Total Rs.				196,974	4	4
							196,974	4	4

C. R. WILSON,  
*Honorary Secretary and Treasurer,*  
*Asiatic Society of Bengal.*

Examined and found correct.  
MEUGENS, KING & SIMSON,  
*Auditors.*



## LIBRARY.

THE following books have been added to the Library during the half year ended 30th June, 1903 :—

**Abinas Chandra Das.** *The Vaisya Caste, etc.* Calcutta, 1903, etc. 8°.

*In progress.*

*Presd. by the Author.*

**Asutosh Mukhopadhyay.** *The Law of Perpetuities in British India.* Calcutta, 1902. 8°.

*Tagore Law Lectures, 1898.*

*Presd. by the Calcutta University.*

**Balgobind.** *The Life of Raja Sir Shamshere Prakash, G.C.S.I., of Simour.* [With a portrait.] Calcutta, 1901. 8°.

**Bamber (M. Kelway).** *Report on Ceylon Tea Soils and their effects on the quality of tea.* Calcutta, 1900. 8°.

**Blanford (W. T.)** *Notes on Mr. W. M. Daly's Collection of Land and Fresh-water Mollusca from Siam.* [London, 1903.] 8°.

*From the Proceedings of the Malacological Society.*

*Presd. by the Author.*

**Bower (A. G.)** *The Family History of the Bansberia Raj.* Edited by A. G. Bower. Calcutta, 1896. 8°.

*Presd. by Rajah Satindra Deb Rai Mahashaya.*

**British Museum.** (*Natural History*). *Handbook of Instructions for Collectors, etc.* London, 1902. 8°.

———. *Report on the collections of Natural History made in the Antarctic Regions during the voyage of the "Southern Cross."* London, 1902. 8°.

———. *Guide to the Coral Gallery—Protozoa, Porifera or Sponges, Hydrozoa, and Anthozoa—in the...British Museum...With...illustrations.* [London,] 1902. 8°.

*Presd. by the British Museum.*

**Browne (Edward G.)** *A Literary History of Persia from the earliest times until Firdawsi.* London, 1902. 8°.



- Bühler ( )** The Sukritasamkirtana of Arisimha. Translated...by E. K. Burgess, *etc.* Bombay, 1903. 4°. *Reprinted from the Indian Antiquary.* *Presd. by Dr. J. Burgess.*
- Busteed (H. E.)** Echoes from Old Calcutta: being chiefly reminiscences of the days of Warren Hastings, Francis and Impey... Third edition. *Calcutta*, 1897. 8°.
- Collett (Colonel Sir Henry).** Flora Simlensis. A handbook of the flowering plants of Simla and the neighbourhood...With an introduction by W. B. Hemsley...illustrations...and a map. *London*, 1902. 8°.
- Congrès International des Etudes d'Extrême-Orient.** Compte rendu analytique des séances. *Hanoi*, 1903. 4°. *Presd. by the Ecole Française d'Extrême-Orient. Saigon.*
- Cranenburgh (D. E.)** The Calcutta Municipal Act, being Ben. Act III of 1899, with a digest of rulings under the Repealed Act and a copious index. By D. E. Cranenburgh. *Calcutta*, 1900. 8°.
- Crawford (Lieut.-Col. D. G.)** A Brief History of the Hughli District. *Calcutta*, 1903. 4°. *Presd. by the Inspector-General of Civil Hospitals, Bengal.*
- Daljit Singh, Sirdar.** Srimad Edward Ráj Abhikhek. The Coronation of the Emperor Edward VII. A Gurmukhi poem set to music with an English translation. *Lahore*, 1902. 8°. *Presd. by the Author.*
- Ernest (R.)** Buddhism and Science. *Rangoon*. [ ] 8°. *Presd. by the Author.*
- Ferrars (Max.) and (Bertha).** Burma...Second edition. *London*, 1901. 4°. *Presd. by the Government of Burma.*
- Finn (Frank).** How to know the Indian Ducks. *Calcutta*, 1901. 8°.
- Flasch (Adam).** Heinrich von Brunn. Gedächtnissrede, *etc.* *München*, 1902. 4°. *Presd. by the K. b. Akademie der Wissenschaften zu München.*
- The Gazetteer of Sikkim.** With an introduction by H. H. Risley. Edited in the Bengal Government Secretariat. *Calcutta*, 1894. 4°. *Presd. by the Government of Bengal.*



- Hill (S. C.)** The Life of Claud Martin, Major-General in the Army of the Honourable East India Company. *Calcutta*, 1901. 8°.
- Hirschfeld (Hartwig)** New Researches into the Composition and exegesis of the Qoran. *London*, 1902. 4°.  
*Asiatic Monographs, Vol. 3.*
- Kâlidâsa.** The Raghuvançā...Translated by P. De Lacy Johnstone. *London*, 1902. 8°.  
*Presd. by the Translator.*
- Kotô (B.) and Kanazawa (S.)** A Catalogue of the romanized geographical names of Korea. [*Tôkyô*, 1903.] 8°.  
*Presd. by the Tokyo Imperial University.*
- Lingum Letchmajee.** An Introduction to the Grammar of the Kui or Kandh language... Second edition. Revised and corrected. *Calcutta*, 1902. 8°.  
*Presd. by the Government of Bengal.*
- Mukerji (S. C.)** A short account of the Sudramani Rajas...Revised by A. B. Wann...With illustrations by Major G. E. Weigall... With a note on the temple of Hamsesvari by P. C. Mookerji...Second edition. [*Calcutta*,] 1902. 8°.  
*Presd. by Rajah Satindra Deb Rui Mahashaya.*
- Murdoch (John)** The Call of the Twentieth Century to Awakened India, etc. *Madras*, 1902. 8°.
- . Suggested Triad of Coronation boons to India...A letter, etc. *Madras*, 1903. 8°.  
*Presd. by the Author.*
- Nidhâmi-i-'Arûdi-i-Samarqandî.** The Chahâr Maqâla...Translated... by Edward G. Browne. *Hertford*, 1899. 8°.  
*Reprinted from the Journal of the Royal Asiatic Society.*
- Nishikanta Chattopâdhyâya.** Mricchakatikâ चक्रवर्ती...A Study *Mysore*, 1902. 8°.
- . Reminiscences of the late Justice Ranade. A lecture, etc. [*Mysore*, 1901.] 8°.
- . Some Reminiscences of Old England. A lecture, etc. [*Mysore*, 1902.] 8°.
- . The Study of History. A lecture, etc. [*Mysore*, 1902.] 8°.
- . The True Theosophist. A lecture, etc. [*Mysore*, 1892.] 8°.  
*Presd. by the Author.*





**Nitya Gopal Mukerji.** Handbook of Indian Agriculture. *Calcutta*, 1901. 8°.

**Ponder (C. F.) and Hooper (D.)** An Introduction to Materia Medica for India, etc. *Calcutta*, 1901. 8°.

**Praphulla Chandra Rāy.** A History of Hindu Chemistry, etc. *Calcutta*, 1902, etc. 4°. *In progress.*

**Ross (E Denison) and Browne (Edward G.)** Catalogue of two Collections of Persian and Arabic manuscripts preserved in the India Office Library. *London*, 1902. 8°. *Presd. by the Government of Bengal.*

**Royal Asiatic Society.** A Catalogue of South Indian Sanskrit Manuscripts—especially those of the Whish Collection—...Compiled by Dr. M. Winternitz...With an appendix by F. W. Thomas. *London*. 1902. 8°. *One of the "Asiatic Society Monographs."*

**Sarat Chandra Das.** A Tibetan-English Dictionary with Sanskrit Synonyms...Revised and Edited...By Graham Sandberg...and A. William Heyde. *Calcutta*, 1902. 4°. *Presd. by the Government of Bengal.*

**Sarat Chandra Mitra.** Note on the Sword-blade Vow and Bihāri Folk-tales of the "Man und Fuchs" Type. Two papers, etc. *Bombay*, 1902. 8°. *From the Journal of the Anthropological Society of Bombay.* *Presd. by the Author.*

**Seward (A. C.) and Arber (E. A. N.)** Les Nipadites des couches éocènes de la Belgique. *Bruzelles*, 1903. 4°. *Extrait des Mém. du Musée roy. d'Hist. Nat. de Belgique.* *Presd. by the Musée Royal d'Histoire Naturelle de Belgique.*

**Sharpe (Wm.)** The Dual Image. A Mystical poem of life. Revised edition. *London*, 1902. 8°. *Presd. by the Author.*

———. Ideal Gods, and other essays and poems, etc. *London*, 1900. 8°. *Presd. by the Author.*



- Teixeira (Pedro).** The Travels of Pedro Teixeira: with his "Kings of Harmuz" and extracts from his "Kings of Persia." Translated...by W. F. Sinclair...With introduction by D. Ferguson. London, 1902. 8°. *Works issued by the Hakluyt Society. Ser. II, No. 9. Presd. by the Government of India, Home Dept.*
- Tilly (Harry L.)** Glass Mesnics of Burma. With photographs. Rangoon, 1901. fol.
- U Gaung.** Translation of a Digest of the Burmese Buddhist Law concerning inheritance and marriages...Compared and arranged under the supervision of U Gaung, etc. Vol. I. Inheritance. Rangoon, 1902. 4°. *Presd. by the Government of Burma.*
- Vaughan (General Sir John L.)** A Grammar and Vocabulary of the Pushtū language...Second edition. Calcutta, 1901. 8°.
- Vidyaranya Swami, Sreemut.** A Handbook of Hindu Pantheism. The Panchadasi...Translated with copious annotations by Nandalal Dhole...Second edition. 2 vols. Calcutta, 1899, etc. 8°.
- Wilkins (W. J.)** Modern Hinduism: an account of the religion and life of the Hindus in Northern India. Second edition, London, [1900.] 8°.



## LIBRARY.

THE following books have been added to the Library during the months of July and August 1903 :—

**Abu Othman Amr Ibn Bahr Al-djahiz Basrensis.** *Tria Opuscula auctore Abu Othman Amr Ibn Bahr Al-djahiz Basrensi quae edidit G. van Vloten. Lugduni Batavorum, 1903. 8°.*

*Presd. by the University of Leyden.*

**Albemarle, Earl of.** *The Albemarle Papers. Being the correspondence of William Anne, Second Earl of Albemarle . . . With an appendix of letters from Andrew Fletcher, Lord Justice-Clerk, to the Duke of Newcastle, 1746-1748. Edited with introduction . . . by C. S. Terry. 2 vols. Aberdeen, 1902. 4°.*

*Aberdeen University Studies, No. 7.*

**Anderson (Peter John)** *Rectorial Addresses delivered in the Universities of Aberdeen, 1835-1900. Aberdeen, 1902. 4°.*

*Aberdeen University Studies, No. 6.*

*Presd. by the Aberdeen University.*

**Appaya Dikshita.** *Kuvalayānanda Kārikās or the Memorial verses of Appaya Dikshita's Kuvalayānanda. Edited and explained with an English tika commentary and translation . . . by P. R. Subrahmanya Sarinā. Calcutta, 1903. 8°.*

*Presd. by the Editor.*

**Bhārata-Yuddha.** *Oudjavaansch—Heldendicht uitgegeven door Dr. J. G. H. Gunning. [Text] 's-Gravenhage, 1903. 4°.*

*Presd. by the Koninklijk Instituut voor de Taal-, Land-en Volkenkunde van Nederlandsch Indië.*

**British Museum.** *Catalogue of the Sanskrit Manuscripts in the British Museum. By C. Bendall. London, 1902. 4°.*

*Presd. by the Trustees of the British Museum.*

**Castanhoso (Miguel de)** *The Portuguese Expedition to Abyssinia in 1541-1543 . . . With some contemporary letters, the short account of Bermudez, and certain extracts from Correa. Translated and edited by R. S. Whiteway. [With a bibliography of Abyssinia.] London, 1902. 8°.*

*Hakluyt Society's Publication, 2nd Series, No 10.*

*Presd. by the Government of India, Home Department.*



**Garrett (A.)** Notes on the Caves of Udayagiri and Khandgiri.  
[*Calcutta*, 1902.] Fol.

*Presd. by the Government of Bengal.*

**Ghulam Husain Khān, Sayid.** A Translation of the *S̄ir Mutaqherin* :  
or View of modern times, being an history of India from the year  
1118 to the year 1194 . . . of the Hedjrah ; containing the reigns of  
the seven last Emperors of Hindustan, and . . . an account of the  
English Wars in Bengal . . . down to the year 1783, etc. [Trans-  
lated by — Raymond, afterwards called Haji Mustafā.] 4 vols.  
*Calcutta*, [1902.] 8°.

**Hoffmann (Rev. J.)** Mundari Grammar. *Calcutta*, 1903. 8°.

*Presd. by the Government of Bengal.*

**Jackson (Lieut. R. P.)** Historical Records of the XIII Madras Infan-  
try. [*London*,] 1898. 8°.

*Presd. by the XIII Madras Infantry.*

**Muralidhur Roy.** Sree Krishna, etc. *Calcutta*, 1901. 8°.

*Presd. by the Author.*

**Newman (W.) & Co.** Newman's Guide to Darjeeling and its surround-  
ings, . . . With a chapter on Tibet and the Tibetans. Illustrated,  
*Calcutta*, 1900. 8°.

**Polo (Marco.)** The Book of Ser Marco Polo . . . translated and edited  
. . . by Col. Henry Yule . . . Third edition, revised throughout  
. . . by Henri Cordier, etc. 2 vols. *London*, 1903. 8°.

**Pratt (H. S.)** Monograph on Ivory Carving in Burma. (With a  
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edited in the original Prākrit, with a glossarial index, and an  
essay on the life and writings of the poet by S. Konow . . . Transla-  
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*Presd. by the Harvard University.*

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*Calcutta*, 1903. 8°.





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*Extract from Indian Museum Notes, vol. V, No. 3.*

*Presd. by the Author.*

**Yule (Col. Henry) and Burnell (A. C.)** Hobson-Jobson: a glossary of Colloquial Anglo-Indian words and phrases . . . New edition, edited by W. Crooke. *London*, 1903. 8°.

**Zoological Society of London.** Catalogue of the Library of the Zoological Society of London. Fifth edition. *London*, 1902. 8°.

*Presd. by the Zoological Society of London.*





PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.

EDITED BY  
THE HONORARY SECRETARY.



JANUARY TO DECEMBER,  
1904.

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CALCUTTA :  
PRINTED AT THE BAPTIST MISSION PRESS,  
AND PUBLISHED BY THE  
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PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.  
FOR JANUARY, 1904.

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The Monthly General Meeting of the Society was held on Wednesday, the 6th January, 1904, at 9 P.M.

JOHN BATHGATE, Esq., in the chair.

The following members were present :—

Maulavi Abdul Wali, Mr. W. K. Dods, Babu Girindranath Dutt, Mr. D. Hooper, Kumar Ramessur Maliah, Dr. M. M. Masoom, Mr. W. H. Miles, Captain L. Rogers, I.M.S., Pandit Yogesa Chandra Sastree, Mahamahapadhyaya Haraprasad Shastri, Pandit Satis Chandra Vidyabhusan, Mr. E. Vredenburg, and Dr. C. R. Wilson.

*Visitors* :—Mr. T. E. Corrie, Mr. F. M. Lane, Babu Ganga Mohan Laskar, and Capt. H. W. R. Simor.

The minutes of the last meeting were read and confirmed.

Forty-one presentations were announced.

Mr. Louis Stuart, Babu Harendra Krishna Mukerjee, Mr. V. H. Jackson, Pandit Gulab Shankar Dev Sarman, Babu Panna Lall, and Mr. R. P. Ashton, were balloted for and elected Ordinary Members.

The Chairman announced :—

1. That Mr. Abdur Rahim and Nawab M. M. Hosein Khan, elected Members of the Society on the 6th and 27th August 1903, respectively, not having paid their entrance fees, their elections have become null and void under rule 9.

2. That he had received only one essay in competition for the Elliott Prize for Scientific Research for 1903.

The General Secretary reported the presentation of 7 silver coins from the Government of United Provinces of Agra and Oudh, found in Jaunpur, Kheri and Fatehgarh Districts.

The following papers were read :—

1. *On the Antiquity and traditions of Shāhzādpur.*—By MAULAVI ABDUL WALI.

(Abstract.)

The author brings together all that is known of the traditions and ancient remains of Shāhzādpur, in the Sirājganj subdivision of the Pubna district, and thence attempts to reach the underlying substratum of fact.

Shāhzādpur has a small brick mosque of ancient construction with 28 black basalt columns and door jambs of the same probably taken from some Hindu temple. South of the mosque are more than twenty tombs including the shrines of Makhdūm Šāhib, the martyr, of Khwājah Kalān Danishmaud, his nephew, and of the darvish Shāh Yusuf. There are also two large burying places of martyrs. A fair is held annually near the mosque in April and May. Bokhāra pigeons are found round the mosque and in the neighbouring villages.

The tradition is that Makhdūm Shāh was the son of a king of Yaman in Arabia. With a large following, including his sister, three nephews, and twelve darvishes, he set out on a religious expedition for the spread of Islam. At Bokhāra they were given a few khāki coloured pigeons. At length they arrived in ships at Bengal which was then mostly under water. The pigeons discovered land near Shāhzādpur and Makhdūm Shāh and his followers took possession of it. In the conflict which followed between them and the Hindu rajah of the country most of the Moslems were martyred. Supernatural signs led the rajah to repent. He accordingly buried the martyrs with due solemnity and built the mosque.

The author points out that the king of Yaman whom the tradition calls the father of Makhdūm Shāh was a contemporary of the Prophet. His descendants may have emigrated to Trans-Oxcania or Bokhāra. Makhdūm Šāhib, a member of the family, may have been contemporary with Nizāmu-d-din Auliya, may have come to Bengal about the time of its conquest by Muḥammad-i-Bakht-Yar, and may have fought and died as the tradition says. As his ancestor was a Shāhzāda, the place of his death received the name of Shāhzādpur.



2. *The method of preparing Calendars and fixing festival dates by the Hindus.*—By GERINDRANATH DUTT, Superintendent, Rāj Hatwā.

(Abstract.)

This note has been prepared in response to a circular letter from Mr. E. A. Gait, Superintendent of Ethnography in Bengal, asking for information regarding the rules by which astrologers of all classes prepare calendars and fix the dates of festivals. The author explains the well-known differences between Siddhāntas and Karaṇas, between the pūrṇimānta system of Northern India and the amānta system of Southern India, and between the luni-solar year by which religious festivals are calculated and the solar year which is the Bengali civil year. He gives formulæ according to the Karaṇas or practical works in use. He defines the principal Hindu festivals as reckoned by the lunar months. He contends that in the early Vedic age the new year was calculated from the sun's entering the Pleiades, and that the vernal equinox was at the Pleiades about B.C. 2500.

3. *Further notes on the Bhojpuri dialects spoken in Sāran and on the origin of Kaythī characters.*—By GERINDRANATH DUTT, Superintendent, Rāj Hatwā.

(Abstract.)

The author considers that the present Bōjpuri dialect is an admixture of the Kanauijīā dialect and the Māgadhi dialect, the latter being the predominant element. He contrasts the Gaṇḍak and the Gōgrā valleys physically and linguistically. The Gōgrā valley is fertile and busy; men speak quickly and their words get clipped and shortened. The Gaṇḍak valley is sandy, unhealthy and backward. The population is dull and stagnant, and dialectical changes are fewer and slower.

The author would derive the Kaythī character mainly from Aśoka's Pāli character, so that in modern Kaythī we have in a veiled form the most ancient characters of India.

4. *The Khurda copper plate grant of Mād̥hava, king of Kalinga.* By GANGA MOHAN LASKAR, M.A., Government Research Scholar. Communicated by MAHAMAHOPADHYAYA HARAPRASAD SHASTRĪ.

(Abstract.)

This set of three copper plates comes from Khurda in Orissa and forms the second record ever discovered of king Mād̥hava and of the Sailodhhava dynasty from which he is sprung; the only other known record of this dynasty is a copper plate charter of the same king

Mādhava, found in the Baguḍa village of the Goomsur tāluk in the Ganjam district. Dr. Keilhorn gives an account of the Baguḍa plate in the *Epigraphia India*, Vol. III., p. 40.

The new record consists of three plates strung together by a ring, the ends of which are secured in a seal. The seal contains in relief the figure of a bull and the words, "Srē Sainyabhētasya" (*i.e.*, of the glorious Sainyabhēta.) All the plates are inscribed, the middle one on sides. The engraving is deep and legible.

The character of writing indicates that these plates cannot be later than the latter half of the seventh century. The plates enable us to revise the genealogy of the dynasty which stands thus :—

1. Sailodbhara, the founder.
2. Raṛabhita, descended from 1.
3. Sainyabhīta I, son of 2.
4. Yaśobhita I, descended from 3.
5. Sainyabhita II, son of 4.
6. Yaśobhita II, son of 5.
7. Mādhavarāya, Mādhavendra, or Mādhava Varman, son of 6.



PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.  
FOR FEBRUARY, 1904.

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The Annual Meeting of the Society was held on Wednesday, the 3rd February, 1904, at 9-45 P.M.

H. H. RISLEY, Esq., B.A., C.I.E., I.C.S., Vice-President, in the chair.

The following members were present:—

Syed Abdul Alim, Mr. J. Bathgate, Babu Monmohan Chakravarti, Mr. W. K. Dods, Mr. F. Doxey, Mr. J. N. Das Gupta, Mr. T. H. Holland, Mr. D. Hooper, Mr. V. H. Jackson, Mr. C. Little, Mr. J. Macfarlane, Dr. M. M. Masoou, Mr. W. H. Miles, Mr. L. Morshead, Hon. Dr. Asutosh Mukhopadhyaya, Mr. J. D. Nimmo, Mr. W. Parsons, H.H. The Maharaja Girja Nath Rai, Dr. E. D. Ross, Pandit Yogesa Chandra Sastree, Mahamahopadhyaya Haraprasad Shastri, Mr. A Tocher, Babu Nagendra Nath Basu, Pandit Satis Chandra Vidyabhushan.

*Visitors*:—Mr. E. C. Cotes, Mr. B. A. Gupta, Mrs. D. Hooper, Mrs. and Miss McMaster, Captain H. W. R. Senior.

According to the Rules of the Society, the Chairman ordered the voting papers to be distributed for the election of Officers and Members of Council for 1904 and appointed Messrs. W. K. Dods and V. H. Jackson to be Scrutineers.

The Chairman then called upon the Secretary to read the Annual Report.

## ANNUAL REPORT FOR 1903.

The Council of the Society have the honour to submit the following Report on the state of the Society's affairs during the year ending 31st December, 1903.

### Member List.

During the year under review 19 Ordinary Members were elected, 10 withdrew, 4 died, 3 were removed from the list under Rule 40, being more than 3 years absent from India, and 2 were struck off under Rule 9, not having paid their admission fees. The name of one member was replaced as he withdrew his letter of resignation under Rule 34. The total number of members at the close of 1903 was thus 335 against 334 at the preceding year; of these 127 were Resident, 126 Non-Resident, 15 Foreign, 21 Life, 45 Absent from India, and 1 Special Non-Subscribing Member, as will be seen from the following table which also shows the fluctuations in the number of Ordinary Members during the past six years:—

YEAR.	PAYING.				NON-PAYING.				GRAND TOTAL.
	Resident.	Non-Resident.	Foreign.	Total.	Life.	Absent.	Special Non-Subscribing.	Total.	
1898 ... ..	123	108	11	241	23	35	1	59	300
1899 ... ..	120	119	13	252	21	27	1	49	301
1900 ... ..	116	124	18	258	22	30	1	53	311
1901 ... ..	123	133	13	269	22	36	1	59	323
1902 ... ..	126	126	14	266	21	43	1	65	334
1903 ... ..	127	126	15	268	21	45	1	67	335

The four Ordinary Members the loss of whom by death during the year we have to regret, were Mr. M. N. Chatterji, Mr. W. B. Colville, Mr. W. Connan and Babu Ram Din Singh.

There were two deaths amongst the Honorary Members, *viz.*, Professor E. B. Cowell and Sir George Stokes, Bart.

The List of Special Honorary Centenary Members, Corresponding Members and Associate Members, continue unaltered from last year, there having been no casualties: their numbers stand at 4, 1, and 13, respectively.

No members compounded for their subscription during the year.

**Indian Museum.**

No presentations were made over to the Indian Museum.

The Trustees on behalf of the Society were:—

The Hon. Mr. A. Pedler, C.I.E., F.R.S.

Dr. Mahendralal Sarcar, C.I.E., D.L.

G. W. Kuchler, Esq., M.A.

T. H. Holland, Esq., F.G.S., A.R.C.S.

The Hon. Sir J. A. Bourdillon, K.C.S.I.

**Finance.**

The Accounts of the Society are shown in the Appendix under the usual heads.

Statement No. 8 contains the Balance Sheet of the Society, and of the different funds administered through it.

The financial position of the Society show a steady increase and the credit balance at the close of the year amounts Rs. 1,81,826-9-6, which is over six thousand rupees better than last year.

The Budget for 1903 was estimated at the following figures:—

Receipts Rs. 18,500 ; Expenditure Rs. 22,449-4 (Ordinary Rs. 16,949-4, Extraordinary Rs. 5,500).

Taking into account only the ordinary items of receipts and expenditure for the year 1903, the actual results have been:—Receipts Rs. 20,313-9-6. Expenditure Rs. 11,966-10-3, showing a balance in favour of the Society on its ordinary working of Rs. 8,346-15-3. Against this balance there has been several extraordinary items of expenditure amounting to Rs. 4,593-7-6. Notwithstanding this extraordinary expenditure there is still a saving of Rs. 3,753-7-9 during the year. In addition to this, a sum of Rs. 544 has been added to the Reserve Fund on account of entrance fees paid during the year.

There is an increase in receipts under every head except "Rent of Rooms" and this is due to the non-receipt of rent from the Photographic Society of India for one month, which has been received in 1904.

The ordinary expenditure was estimated at Rs. 16,949-4, but the amount paid out was only Rs. 11,966-10-3. The principal items in excess were "Lighting," "Meetings," and "Contingencies." "Lighting" was estimated at Rs. 100, while the actuals were Rs. 261-4. This increase is chiefly due to the payment of bills for electric lights and fans. Owing to expenses incurred in connection with two Scientific Lectures given in the Society's rooms, there is an increase of Rs. 54-3 under the head "Meetings."

The increase of Rs. 240-0-4 for Contingencies is due to various

sundry items of expenditure, *vis.*, for illuminating the Society's premises on the occasion of the Coronation celebration in Calcutta. There is a very slight increase under the heads "Freight" and "Proceedings."

The actual expenditure on the Journal was as follows :—

		Rs.	As.	P.			
Journal	{	Part I	...	...	636	4	6
		Part II	...	...	878	8	3
		Part III	...	...	228	5	6
Total ...					Rs. 1,743	2	3

against a budget provision of Rs. 6,200. This is less than the Budget estimate by Rs. 4,456-13-9, but it must be mentioned that several bills for printing the Journal have not yet been paid owing to an extra charge under the head "Alterations," which the Superintendent of the Baptist Mission Press has been asked to explain. Against these bills, a sum of Rs. 3,642-2 has been paid as "advance," which together with the actual expenditure on the three parts of the Journal amounts to Rs. 5,385-4-3.

There were three extraordinary items of expenditure during 1903 under the heads of "Royal Society's Catalogue," "Type-Writer and Duplicator," and "Max Müller Memorial Fund" not provided for in the Budget. The expenditure on the Royal Society's Catalogue has been Rs. 618-14-6, while the receipts under this head from subscription on behalf of the Central Bureau has been Rs. 1,647-11, which sum will be remitted during the current year. Rs. 532-8 has been spent for a Type-Writer and a Duplicator for the Society's office, and a sum of Rs. 669-10 has been remitted to the Secretary, Max Müller Memorial Fund. This amount was collected by the Society in aid of the fund.

Out of the sum of Rs. 1,000 budgetted for the Society's Library Catalogue, only Rs. 358-7 has been spent towards the salary of the assistant engaged in revising the Library Catalogue and other expenses incurred in connection therewith.

The Budget Estimate of probable Receipts and Disbursements for 1904 has been fixed as follows :—Receipts Rs. 17,700, Expenditure Rs. 17,254-4.

On the Receipt side, the estimated income under the head of "Interest on Investments" is based upon the actuals of the last year. "Rent of Rooms" has been decreased by Rs. 1,125 as the Photographic Society of India, owing to insufficiency of accommodation, have decided to vacate the rooms rented to them by the end of February 1904.

On the Expenditure side, the items of "Freight" and "Meetings" have been slightly increased. Lighting has been increased by Rs. 220

owing to electric lights and fans, and the item of Contingencies is based upon the actuals of the past three years. Other heads remain unaffected.

There will, however, be four Extraordinary items of expenditure to be dealt with during the year 1904. Rs. 1,000 has been budgetted for Library Catalogue to meet expenses that may be incurred during the year. Mr. A. E. Caddy has been entrusted with cleaning and varnishing the Society's pictures at a fee of Rs. 1,000, and he has received Rs. 500 as "advance." It is further under the consideration of the Council to reline and repair certain pictures, and Mr. Caddy is willing to carry out the work at a fee of not more than Rs. 800. A sum of Rs. 1,800 has been allotted for these purposes. The Council have ordered out from London oak gilt frames for the Society's pictures at an estimated cost of Rs. 3,000, and to pay off Messrs. Martin and Co. for renewing the floor of the entrance of the Society's premises. Their dues amount to a sum of Rs. 2,320.

#### BUDGET ESTIMATE FOR 1904.

	Receipts.								
	1903.			1903.			1904.		
	Estimate.			Actuals.			Estimate.		
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Subscriptions ...	7,500	0	0	7,901	8	0	7,500	0	0
Sale of Publications ...	600	0	0	1,316	6	0	600	0	0
Interest on Investments	5,800	0	0	6,541	8	0	6,000	0	0
Rent of Rooms ...	1,500	0	0	1,375	0	0	500	0	0
Government Allowances	3,000	0	0	3,000	0	0	3,000	0	0
Miscellaneous ...	100	0	0	179	3	6	100	0	0
<b>Total ...</b>	<b>18,500</b>	<b>0</b>	<b>0</b>	<b>20,313</b>	<b>9</b>	<b>6</b>	<b>17,700</b>	<b>0</b>	<b>0</b>

**Expenditure.**

	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Salaries ...	3,800	0	0	3,577	7	4	3,800	0	0
Commission ...	425	0	0	406	15	0	425	0	0
Stationery ...	120	0	0	98	8	0	120	0	0
Lighting ...	100	0	0	261	4	0	320	0	0
Municipal Taxes ...	884	4	0	884	4	0	884	4	0
Postage ...	500	0	0	420	2	0	500	0	0
Freight ...	60	0	0	65	10	9	75	0	0
Meetings ...	80	0	0	184	3	0	100	0	0
Contingencies ...	400	0	0	640	0	4	500	0	0
Books ...	2,000	0	0	1,813	13	7	2,000	0	0
Binding ...	750	0	0	390	0	0	700	0	0
Journal, Part I. ...	2,100	0	0	636	4	6	2,100	0	0
"    "    II ...	2,100	0	0	878	8	3	2,100	0	0
"    "    III ...	2,000	0	0	228	5	6	2,000	0	0
Proceedings ...	600	0	0	647	9	0	600	0	0
Printing circulars, &c. ...	200	0	0	153	11	0	200	0	0
Registration Fee ...	5	0	0	5	0	0	5	0	0
Auditor's Fee ...	100	0	0	100	0	0	100	0	0
Petty Repairs ...	100	0	0	.....			100	0	0
Insurance ...	625	0	0	625	0	0	625	0	0
<b>Total ...</b>	<b>16,949</b>	<b>4</b>	<b>0</b>	<b>11,966</b>	<b>10</b>	<b>3</b>	<b>17,254</b>	<b>4</b>	<b>0</b>

**Extraordinary Expenditure.**

	1903.			1903.			1904.		
	Estimate.			Actuals.			Estimate.		
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Library Catalogue ...	1,000	0	0	358	7	0	1,000	0	0
Royal Society's Catalogue	.....			618	14	6	.....		
Max Müller Memorial Fund	.....			669	10	0	.....		
Electric Lights and Fans	2,500	0	0	2,414	0	0	.....		
Books ...	2,000	0	0	.....			.....		
Type-writer and Duplicator	.....			532	8	0	.....		
Cleaning, Varnishing and Relining Pictures	.....			.....			1,800	0	0
Picture Frames	.....			.....			3,000	0	0
Repairs	.....			.....			2,320	0	0
<b>Total ...</b>	<b>5,500</b>	<b>0</b>	<b>0</b>	<b>4,593</b>	<b>7</b>	<b>6</b>	<b>8,120</b>	<b>0</b>	<b>0</b>



### Agencies.

Our London Agency is still in the hands of Messrs. Luzac & Co. Owing to the death of Mr. C. G. Luzac and the unsettled condition of the firm, we will probably have to change their London Agency. They have submitted a statement of sales during 1902 and 1903. The value of the publications sent to them during the year amounts to £75-4-6 representing 702 copies of the various issues of the *Journal* and the *Proceedings*, and Rs. 415-12-0 representing 723 fasciuli of the *Bibliotheca Indica*. The proceeds of the sale of the *Journal* and the *Proceedings* and of the *Bibliotheca Indica* during 1902 and 1903 were £17-16-6 and Rs. 53-14-0, respectively. From them we have received books and papers of the value of £23-5-5.

Our Continental Agent is Mr. Otto Harrassowitz, to whom we have sent publications valued at £32-6-6 and Rs. 368-14-0, of which £29-9-4 and Rs. 356-11-10 worth have been sold for us. From him we have received periodicals of the value of £1-5-6.

### Library.

The total number of volumes or parts of volumes added to the Library during the year was 2,426, of which 685 were purchased and 1,741 presented or received in exchange for the Society's publications.

In remodelling the new edition of the Society's Library Catalogue, the titles of numerous books had to be revised and as the number of slips prepared were too many to be inserted in the manuscript catalogue compiled by Mr. H. B. Perie, it has been found necessary to cut up the whole of the manuscript catalogue in order to arrange it for press. The work is close upon completion, and the manuscripts will be sent to press very shortly.

During the year there were several Meetings of the Library Committee relative to the proposed rejection of books from the Society's library. A number of books have been set aside, and the Council have decided to circulate a list of these among those members of Council who are not members of the Library Committee for their consideration, after which the lists will be laid before a General Meeting. Meanwhile these books are kept apart for inspection.

As an experiment, the Council have allowed the Imperial Library to borrow books from the Society for the use of its readers for three months. During the period from 28th October 1903, to 27th January 1904 only 4 works have been thus borrowed.

On the recommendation of the two Philological Secretaries, Babu Mahendra Nath Mukerjee was appointed Pandit for the Oriental Library in the place of Babu Charu Chandra Bhattacharya, resigned.

### International Catalogue of Scientific Literature.

During the year 1903, Index-slips to the number of 624 were sent to the Director of the Catalogue.

With the exception of the volume of Zoology (which has not yet been published), and the second part of Botany (expected shortly), the whole of the first annual issue of the Catalogue has been distributed to subscribers; of the second annual issue the volume of Astronomy has already been distributed, and that of Bacteriology is expected shortly.

In addition to the subscriptions mentioned in the last year's report the Governments of Bombay and Madras have remitted direct to London their subscriptions for sets and separate volumes of the first annual issue.

A sum of Rs. 1,647-11 representing the subscriptions of:—The Dewan of Mysore (for two sets), The Bombay University and the Native General Library, Bombay, The State Council, Jammu, Kashmir (one set.), and the Government of India (Home Department) for the volumes actually supplied, and part subscriptions from the Librarian, Imperial Library, has been received.

### Max Müller Memorial Fund.

From the sum of Rs. 716 collected by the Society in aid of the Max Müller Memorial Fund, Rs. 46-6 has been deducted for sundry expenses incurred by the Society, and the balance Rs. 669-10 has been remitted to Prof. A. A. Macdonell, Secretary to the Max Müller Memorial Fund. The thanks of the Executive Committee have been received for the amount.

### Barclay Memorial Medal.

During 1903, the Council of the Society awarded the Barclay Memorial Medal to Major Ronald Ross (I.M.S., retired) in recognition of his work in the investigation of the transmission of Malaria by the mosquito.

### Proposed Search for Persian and Arabic MSS.

The Society has made a representation to the Government of India, Home Department, showing the present position of the agency set up by Government in connection with the Society for the publication of Oriental Works and the search for and cataloguing of Oriental Manuscripts, and further suggesting for the consideration of Government whether a systematic search for Manuscripts of Persian and Arabic works might not suitably be instituted similar to the search for Sanskrit Manuscripts which has long been conducted in Bengal by the Society on behalf of Government.

### Society's Premises and Property.

The Society's rooms have been fitted with electric lights and fans by Messrs. Kilburn & Co. at a total cost of Rs. 2,354, and the much needed improvement to the floor of the entrance of the Society's premises has been carried out with patent stone and marble by Messrs. Martin & Co. at a cost of Rs. 2,320.

On a report by Mr. E. B. Havell on the pictures of the Society, the Council entrusted Mr. A. E. Caddy with the work of cleaning and varnishing the pictures and backing them with Willesden canvas at a fee of Rs. 1,000. The work has well advanced and Mr. Caddy has received Rs. 500 on account. There are several pictures that require relining and repairs to damaged parts, and for this there will be an additional expenditure of about Rs. 800, which is under the consideration of the Council.

It has been decided to bring out from London oak gilt frames for the Society's pictures, and Messrs. Smith and Uppard have been asked to supply them, the estimated cost being between £150 and £200.

### Exchange of Publications.

During the past year the Council accepted four applications for exchange of publications, *viz*:—(1) from the Cambridge Philosophical Society, the Society's *Journal*, Parts I-III and *Proceedings* for their *Proceedings*; (2) from the Royal Colonial Institute, London, the Society's *Journal*, Parts I-III and *Proceedings*, being exchanged for their *Journal*; (3) from the Servicio Meteorologico del Estado de Mexico, the Society's *Journal*, Part II, and *Proceedings* for their *Boletin*; (4) from Count F. L. Pullé, the Society's *Journal*, Parts I-III and *Proceedings* being exchanged for his *Studi Italiani di Filologia Indo-iranica*.

### Secretaries and Treasurer.

Dr. E. D. Ross carried on the duties of Philological Secretary and Editor of the *Journal*, Part I till April, when Dr. T. Bloch returned from leave and took charge of the work. Dr. Bloch continued till November when he was absent on tour, and Dr. Ross kindly consented to undertake the work in addition to his own duties as Anthropological Secretary, Dr. Bloch retaining the Editorship of the *Journal*.

Captain L. Rogers, I.M.S., continued Natural History Secretary and Editor of the *Journal*, Part II till February, when he left India on furlough and Mr. E. P. Stebbing was appointed to officiate for him. Mr. Stebbing left India on the furlough in November, and on the return of Captain Rogers in December, the latter took charge of the work.

Mr. E. A. Gait continued Anthropological Secretary and Editor of *Journal, Part III* till August, when he left India on leave and Mr. E. H. Walsh, I.C.S., was appointed to officiate for him. Mr. Walsh carried on the work till November, when he left Calcutta and Dr. Ross was permanently appointed.

Dr. C. R. Wilson continued Treasurer till April, when he left India on leave and the Hon. Dr. Asutosh Mukhopadhyaya was appointed to officiate for him. The Hon. Dr. Mukhopadhyaya left Calcutta temporarily in September, and Mr. J. Macfarlane carried on the work till October when Dr. Wilson returned and took charge of the office.

Mr. J. Macfarlane continued General Secretary and Editor of the *Proceedings* throughout the year.

Mahāmahopādhyāya Haraprasād Shāstri was in charge of the Bibliotheca Indica and the Search for Sanskrit Manuscripts, and carried on the duties of the Joint Philological Secretary throughout the year.

Mr. J. H. Elliott continued Assistant Secretary and Librarian throughout the year.

#### Publications.

There were published during the year nine numbers of the *Proceedings* (Nos. 10 and 11 of 1902 and Nos. 1-8 of 1903) containing 143 pages of letter-press and 1 plate.

Of the *Journal, Part I*, three numbers were published (No. 2 and Extra No. 2 of 1902 and No. 1 of 1903) containing 219 pages of letter-press and 1 plate. The Extra No. 2 of 1902 consists of Professor E. B. Cowell's Translation of the Three Episodes from the Old Bengali Poem "Caṇḍi." Indexes for 1899, 1901 and 1902 were also published. During 1902, the Council authorised the addition of a Supplement to the three parts of the *Journal*. No Supplement to *Journal, Part I*, was published. It has now been decided to publish short notes on numismatic questions, with illustrations, as a Supplement to *Journal, Part I*, and the Editorship has been entrusted to Mr. H. Nelson Wright, I.C.S.

Of the *Journal, Part II*, three numbers were published (No. 1-3 of 1903) containing 111 pages of letter-press and 6 plates. There was also published the Index for 1902.

Of the *Journal, Part III*, two numbers were published (Nos. 1-2 of 1903) containing 106 pages of letter-press. There were also published the Indexes for 1894-1898, 1899-1901 and 1902. In reply to the representation submitted by the Society in connection with the grant of Rs. 1,000 per year for *Journal, Part III*, from the Assam Administration, the Honourable the Chief Commissioner of Assam has decided to continue the annual grant to the Society for the collection of Anthropological and Ethnographical information in Assam pending further orders. The

Council have established a Depôt for the registration and storage of Anthropological Photographs in India at the Society's rooms similar to that which the British Association for the Advancement of Science has adopted in England. The circular issued by the British Association, with a note on the subject, is issued as a leaflet in the Society's Journal, Part III, No. 2 for 1903 and subsequent issues.

#### Proceedings.

The most interesting paper in the Proceedings is Babu Girindra Nāth Dutt's History of Hatwa Raj, tracing the descent of the present Rājā from Virasena, the great conqueror of southern India before the Christian era. The family flourished under the Moghal rule and came under the British rule in 1765 on the assumption of the Dewani of Suba Bangla by the East India Company. The discovery of the Sarāk caste of weavers in the district of Cuttack professing a sort of Buddhist creed throws some light on the process by which Buddhism gradually retired from the plains and is still hiding itself in retired nooks and corners of Eastern India. On this subject two papers were read: the one by Satisa Candra Ācāryya has been published. The discussion of the origin of the caste system produced some interesting papers. Pandit Satisa Candra Ācāryya attempted to prove that the ancients considered foreigners to be Vrātyas, *i.e.*, fallen from the original four castes. Pandit Yogesa Candra Sāstri wrote a paper on the origin of the Kāp section of the Vārendra class of Brāhmans of Bengal which throws new light on the question. Babu Hari Mohan Simha wrote a paper on the Koch people in Northern India. Mr. O'Mally's paper on Gayā Srādh is very interesting as showing what part demonworship still plays in Hindu rituals. The Orāṅns in Chota Nagpur are an interesting non-Aryan people, and their religion and superstition have been made the subject of an interesting paper by Rev. F. Hahn. He gives the number of totemistic septs and the taboo attached to each among this people.

Babu Monmohan Chakravati's paper on the Eastern Ganga Kings gives a list of fourteen kings from Choḍa Ganga, Saka 998, to Nrisimha Deva IV of Orissa, Saka 1346. M. M. Haraprasad Sāstri's paper identifies Rāmgarh in the Sarguja State with the Rāma Giri hill, the starting point of the cloud in Kalidasa's Meghadūta, and if his interpretation of the Asoka character inscriptions there be correct, it would be interesting to note that even secular subjects formed the objects of these inscriptions.

#### Journal, Part I.

Three numbers have been published during the last year, *viz.*, No. 2 of Vol. LXXI, No. 1 of Vol. LXXII, and Extra No. 2 of

Vol. LXXI. No. 2 of the Journal for 1903 is almost ready for issue.

The extra number is devoted to translations of extracts from the Bengali poem *Caṇḍi*, by our late lamented Honorary Member, Professor E. B. Cowell of Cambridge. The poem was composed by Mukunda Rām Cakravartī, who lived during the latter half of the sixteenth and the early part of the seventeenth century, and seems to have passed his life in the districts of Burdwan and Midnapur. It is a picture of Bengali village life as it actually existed in the sixteenth century, before any European influences had begun to affect the national character, and it is this vivid realism which gives such a permanent value to the descriptions.

The papers published in the other numbers of Journal Part I mostly deal with historical and linguistic matters. First of all, there is a valuable account by Professor C. Bendall of the history of Nepal and surrounding kingdoms from 1000-1600 A. D. It is based on materials collected by Professor Bendall during his last journey to Nepal, which he undertook in the cold weather of 1898-99, in the company of our Joint Philological Secretary, Mahāmahopādhyāya Hara Prasād Shāstri, and it will be reprinted as an introduction to the joint report on their discoveries, to which we may look forward at an early date. Professor Bendall collected a great number of colophons of MSS. furnishing historical dates, and by the help of these as well as by the native chronicles in the Mahārāja's library, especially a palm-leaf MS. of a *Vaṃāvali* he put together a very detailed record of the chronology of the kings, that ruled over Nepal and adjacent countries from 1000 to 1600 A. D. Babu Monmohan Chakravartti has done the same for the Eastern Ganga kings of Kalinga, who ruled over Orissa from the 12th century A.D. His materials generally consist in dated temple-inscriptions, of which many are to be found in Orissa as well as in the country south of it, now included in the Madras Presidency. The history of Western Bundelkhand has been described in an article by Mr. C. A. Silberrad, I.C.S. It gives an English translation of a modern vernacular history, written by Diwan Bijhe Bahadur Mazbut Singh, which is valuable on account of the many local traditions to which it refers.

As regards Muhammadan History in India, Mr. W. Irvine, late of the Civil Service, has given us a further contribution on the Later *Mughals*, dealing with the events during Farrukhsiyar's reign from March, 1713, to April 21st, 1716; while Dr. Ross has published an account of Faqīr Khair-ud-din Muḥammad, the historian of Shāh 'Ālam.

The history of the Licchavis of Vaisali forms the subject of an article by Paṇḍit Satisa Candra Vidyābhūṣaṇa. The author's theory

that the Licchavis were foreigners, coming from Nisibis, is, to say the least, startling. The same author also contributed a paper on the Mixed Castes, mentioned in the Sanskrit Law Books, in which he discussed the Ethnological meaning and probable derivation of all those caste names.

Chirand, a place of archæological interest in the district of Saran, which Dr. Hoey recently tried to identify with Vaisali, has been described in a note by Babu Nundo Lal Dey. Mr. Edward O'Brien, Deputy Commissioner of Kangra, contributed a grammar of the modern vernacular of the Kangra valley, with a glossary of words peculiar to that dialect.

Finally, as regards Tibet, we have ready for immediate issue two articles by Mr. E. H. C. Walsh, I.C.S. One deals with the Tibetan Dictionary by Rai Sarat Chandra Das Bahadur. The value of the work, as a Dictionary of the literary language, according to Mr. Walsh is of a high standard, but it misses at the same time the necessary completeness as regards the colloquial language, and he suggests the compilation of a purely colloquial Dictionary. The other article gives an interesting list of Tibetan books, collected by a Japanese Buddhist scholar in Tibet.

#### Journal, Part II.

During the last year three numbers of Part II of the Journal have been issued containing a number of interesting papers. The Zoological side has been well represented by papers on the Alenrodidae, a family of insects closely allied to the scale insects and very common in India, by Mr. H. W. Peal, illustrated by five plates each containing numerous figures, together with two other shorter papers by the same author. The papers of interest by Mr. E. P. Stebbing illustrated by a plate relate to a beetle (*Thanasimus*) which appears to be an active agent in destroying certain insects which damage forest trees, and on a parasitic insect of the spruce firs, while Captain H. J. Waltön contributes a note on the occurrence of rare birds near Calcutta.

The botanical papers include a description of some new *Scrophularinæ* by Major D. Prain. Among the papers on general subjects is an interesting communication on two rain-bursts in Bengal by Mr. C. Little, and one on an ancient Eastern Medicine by Mr. D. Hooper, while Dr. P. C. Ray contributes two articles on some mercury salts.

#### Journal, Part III.

Two numbers of this Part were issued during the year, comprising 106 pages. There were nine separate papers, and with each number were issued a Supplement. This last is an innovation suggested by

Mr. Gait; it has proved successful and a number of interesting notes were received from various quarters.

Among the papers published we may mention one on the *Gayā Ārādha and Gayāwāls*, by Mr. L. S. S. O'Malley. The *Gayā Ārādha* is a special form of orthodox Hinduism practiced in *Gayā* by a priestly caste, whose origin it is difficult to trace, called the *Gayāwāls*. These priests though almost entirely illiterate claim a very high position among *Brahmanas* and are treated with great respect and reverence. Their numbers are rapidly dwindling, and to-day there remain less than 300 pure *Gayāwāls*. Another paper was contributed by the Rev. F. Hahn on the Religious Superstitions of the *Orāōs*, which contains curious details of spirit worship and exorcism.

Mr. D. Sunder, Commissioner in the *Sundarbans*, published a paper on the charms and exorcism which are considered efficacious in that district for the dispersion and destruction of noxious animals. The wood-cutters who frequent the *Sundarbans* forests between the month of October and May never proceed to the jungle, we are told, without their *faqir*, who is supposed to possess the power to drive away the tigers. Mr. Sunder gives a translation of the various incantations employed by these *faqirs*.

Among the contributors of Notes to the Supplement were Major P. R. T. Gurdon; Mr. H. F. Howard, Mr. Gait, Mr. C. T. Stevenson-Moore, Babu Harimohana Simha and others.

### Coins.

Thirty-eight coins were presented to the Society by the Bombay Branch of the Royal Asiatic Society, the Government of the United Provinces of Agra and Oudh, and by Babu Rāmpada Chatterji, a Sub-Deputy Collector at Kishenganj, Purnea. Of these 5 are gold, 31 silver, and 2 copper coins. Among the gold coins there are two of Egyptian Kings, of A.D., 1439 and 1447, found at Aden—one of the Mamlūk Sultāns, found in the District of Ahmadabad, and a padma-ṭaṅka. The silver coins belong to the Moghul Emperors. One is a coin struck by the East India Company in the name of Shāhjahān II, at Bombay (Mumbai), and there are also several rupees of the Company from the Benares Mint. The copper coins belong to Ahmad Shāh I, of Guzerat, and to Ahmad Shāh II of the Bahmani Dynasty.

With reference to the proposed amalgamation of the two collections of coins now held separately by the Indian Museum and the Asiatic Society of Bengal, the Council resolved not to sell the Society's collection of old coins but to lend to the Trustees of the Indian Museum so many of the Society's coins as they may require for an indefinite period



to be utilized with the collection of old coins at the Museum, and the coins lent should be permanently marked for future identification with the letters A.S.B. with which other objects lent by the Society have been marked so as to be distinguishable, and when that has been done the coins should be merged for purposes of classification and exhibition with the Museum coins.

#### Bibliotheca Indica.

The Bibliotheca publication showed, during the year under review rather unusual activity. Thirty-five fasciculi were published, of which three were in the Arabic-Persian series, thirty-two in Sanskrit and none in Tibetan series. Twenty-three works were under publication. Of the thirty-two Sanskrit fasciculi, three related to Sanskrit grammar, five to Hindu Philosophy, three to the Vedas, one to the Kalpasūtras, fifteen to the Sanskrit law and ritual, one to Purāna, two to Buddhist Philosophy and two to Jaina Sanskrit. The three fasciculi in the Arabic Persian series are all English translations of historical works in Persian. Of the thirty-two Sanskrit fasciculi three only are English translations, one of a Purāna and two of a very difficult philosophical work, the rest, editions of Sanskrit works.

The cost of printing those fasciculi amounted to Rs. 4,416-10-0. The editing fees amounted to Rs. 4,748-8-0, giving an average of Rs. 262-0-0 per fasciculus. Seven new works were undertaken during the course of the year.

1-2. The Dānakriya Kaumudi Fasc 1-2 and Srāddhakriya Kaumudi Fasc 1-3 are really continuations of the Varṣa Kriyā Kaumudi or simply Kriyā kaumudi by the great compiler of Smṛti in Western Bengal named Govindānanda Kavikaṅkaṅācāryya, who flourished by the middle of the sixteenth century and preceded Raghunandana by a generation. The work of editing has been entrusted to a young Smṛti scholar of Bhāṭpāra, Paṇḍit Kamala Kṛṣṇa Kāvya-tirthā who seems to know his work well.

3. Vidhānā Pārijāta is a digest of civil and religions duties according to the Hindu Nāstras. It was compiled in 1625 A.D. by Ananta Bhaṭṭa, son of Nāga Bhaṭṭa and grandson of Jahnu Bhaṭṭa at Benares. The family professed the Kāṇva Sākhā of the White Yajur Veda. It has five chapters called Stavakas dealing with Srāddha-Vyavathāra and Prāyascitta. The publication of the work has been entrusted to Paṇḍit Tārāprasanna Vidyaratna, one of the Professors of Sanskrit grammar in the Sanskrit College, Calcutta.

4. Satādūṣaṇi is a work by Venkatānātha, the founder of the Y mark section of the Rāmānuja sect in Southern India. It purports to find one hundred objections to Saṅkara's nondual theory. It has a

commentary by Rāmānuja Dāsa, a disciple of Bādhūla Śrinivāsa. It is the standard work of a very large and influential section of the Hindus in Madras. Paṇḍit Seṣādri Ayer, the late personal assistant to the Director of Public Instruction, Madras, was entrusted with the edition of the Text with the Commentary. On his death, however, the editorship was transferred to the then Hon'ble P. Ānanda Cārṇu, Viśārada, Ray Bahadur, member of the Imperial Council for Madras. One fasciculus only of this work came out during the year under review but a good many sheets have since then been printed.

5. Tattvārthādhigamasūtra is a Jaina work professing to be a part of the teachings of Bardhamāna, the founder of the sect. It was put in the sūtra form by the great Jaina teacher Umāsvāti-vācaka with a commentary of his own. Umāsvāti is revered both by the Śvetāmbaras and Digambaras and is said to have flourished before the Christian era. The edition of the work has been entrusted to a young Jaina scholar of Ahmedabad, Mody Keṣavalāl Premcānd, a B.A. of the Bombay University. His work has been placed under the supervision of Professor Dr. Hermann Jacobi of the University of Bonn.

6. Nityācāraprādīpa by Narasiṃha Vājapeyī is to be differentiated from the Nityācārapaddhati by Vidyākara Vajapeyī which has just been finished in this series. One appears to be a supplement to the other, and both these form the standard compilation in Orissa on Smṛti. The edition has been entrusted to Paṇḍit Vinoda Vihāri Kāvya-tirtha who has just completed the other work.

7. Tantravārtika in Prose is a commentary on the Savarabhāṣya on the Mīmamsa Sūtras from chapter I, pāda II, to chapter III, pāda IV, by Kumārila Bhaṭṭa, the great predecessor of Saṅkara, and the great reorganiser of modern Brahmanic society throughout India. He flourished in the beginning of the eighth century, and commented on the Savarabhāṣya. The first part of his commentary, i.e., on Chapter I, pāda I, is written in verse and is called Sloka-Vārtika. The second part in prose up to Chapter III, pāda IV, is called the Tantra-Vārtika. The commentary on the rest is called the Tuptikā. Babu Gaṅgānāth Jhā, Professor of Sanskrit in the Muir Central College, Allahabad, was entrusted with the English translation of the first part, the Sloka-Vārtika, after making a creditable advance in that work, he applied for permission to translate the Tantra-Vartika which was gladly accorded. He has bought out one Fasciculus of the second work.

The descriptive catalogue of the works that have come to a close.

(1) Varṣa Kriyā Kaumudī by Govindānanda Kavikaṅkanācāryya came to a close during the year under review. This is the first volume

of the series by the author, the other volumes are in the course of publication. The editor, Kamala Kṛṣṇa Kāvya-tīrtha, has given a short preface discussing the date of the author and describing the MSS collected. His index giving the works consulted by the author is specially valuable.

(2) Nityacāra Paddhati, by Vidyākar Vājapeyi, composed in the fourteenth century in Orissa under the patronage of King Narasiṃha, was finished in seven fasciculi. Paṇḍit Vinoda Vihāri Kāvya Tīrtha, the discoverer of the work, has edited it with care and has given a preface discussing the date of the author and circumstances under which he wrote. The indices appended are valuable.

(3) Trikāṇḍa Maṇḍanam or Apastamba-sūtra-dhvanitārtha-kārikā by Bhāskara Misra, called Trikāṇḍa Maṇḍana, son of Kumāra Svāmi, who boasts of being a mace and an axe to the opponents in disputation, purports to be the versified essence of the 10th Praśna of the Āpastamba Srāuta Sūtras of the Black Yayurveda, treating of Soma Yāga. The editor, M. M. Candra Kānta Tarkālaṅkāra, has written a very meagre preface. He has not gone beyond his MSS. in editing this work.

(4) Āpastamba Srāuta Sūtra belonging to the Black Yayur Veda came to a close under the distinguished editorship of Prof. Dr. Richard Garbe of Tübingen in seventeen Fasciculi. The first twelve fasciculi were accompanied with a commentary by Varadutta Suta Ānarttiya, but the other fasciculi had no commentary. The editor has written an excellent preface discussing the peculiarities of language and grammar of Āpastamba, on the unity of the Sūtra collection of the Āpastamba School; on the position of these Sūtras in the ritual literature and topics of that sort. His index is extremely valuable.

#### Search for Sanskrit MSS.

M. M. Hara Prasād Sāstri was in charge of this department throughout the year. He took two trips to Benares, and his travelling Paṇḍits were touring in Orissa and in Western Bengal; nearly three hundred MSS. have been collected, of which about hundred acquired at Benares contained many interesting, and curious works. Many new digests of Hindu law and ritual have been brought to light. During the last three months the M. M. and his Paṇḍits were engaged in preparing an alphabetical list of all the MSS. in the Asiatic Society's rooms belonging to the Society and to Government. This list will be a valuable guide in acquiring new MSS in the future.

The Report having been read and some copies having been distributed, the Chairman invited the Meeting to consider it at their leisure,

The Chairman announced that the Elliott Prize for Scientific Research for the year 1903 would not be awarded, as the essay received in competition was not of sufficient merit to justify the award of the Prize.

Mr. H. H. Risley, Vice-President, then addressed the Meeting.

#### ANNUAL ADDRESS, 1904.

GENTLEMEN,

It is due to a series of accidents that I am called upon to take the chair to-night. The President, Mr. Bolton, is on leave in England and we, being old fashioned people and cherishing the traditions of a century ago, have not as yet adopted the relatively modern practice of making an officiating appointment in every casual vacancy. The two senior Vice-Presidents are also absent—a fact which only came to my notice a few days ago. Consequently it has been impossible for me to prepare an address reviewing the work of the Society, or the progress of any of the forms of research with which it deals, on the exhaustive scale achieved by Dr. Hoernle or even in the more modest fashion attempted by myself on a former occasion. I shall therefore merely call attention to some points of interest in the papers noticed in the report and shall then say a few words on the general question of the present position of the Society, and the causes which affect its influence and the character of its work.

The papers which interest me most are Mr. O'Malley's on Gaya and the Gayawals, and Dr. Hahn's on the Oraons. Both seem to support the position which I have taken up in the Census Report now being published, that the beginning of Animism and possibly of all religion are to be found in the recognition of indefinite impersonal powers, which are approached not by prayer but by magic, and that the personal element in religion is a later development. The legends cited by Mr. O'Malley are curious, but they are obviously of comparatively recent date, and they belong to the familiar class of myths that are evolved in the attempt to account for some ritual or usage that does not fit into the accepted system of religion. I suspect that the Gaya ritual is a survival of animistic observances older than either Buddhism or Hinduism, and adopted by the latter in that pleasingly Catholic spirit which is common to it and to the paganism of the Greeks and Romans. I cannot attempt to examine the question at length now, but I venture to think that it deserves further enquiry, and that a minute investigation of the Gaya ritual undertaken on the spot would disclose survivals pointing to its real origin. There is reason to believe that the Gaya district was once occupied by

the Munda Kols, and it seems possible that the hills near the town were worshipped by them as Marang Buru, and that the present worship may be a Hinduised version of some animistic ritual practised by the Mundas. The Asuras, I may add, figure very prominently in Munda religious traditions. An excellent account of the myths on the subject was given some years ago in the *Zeitschrift für Ethnologie* by Herr Jellinghaus, who was then a missionary in Ranchi.

Mr. Hahn refers to this legend in his paper on the Oraons. It is curious to read that when an Oraon has failed by magic to get rid of a disease caused by the impersonal powers which Mr. Hahn describes as evil spirits, he turns in prayer to Dherme the sun and says, "Now the case rests with thee." You will observe that he tries magic first and resorts to religion later on when his magic has failed him. That according to one school of thinkers is the normal course of evolution. The Oraons, like the Athenians, have an unknown God, but they build no altar to him. He haunts certain fields which must be kept fallow, though cattle may graze on them. Probably these are not conspicuous for fertility. Their medical practice is more simple than appetizing. It consists in sucking the navel of the patient and producing therefrom a worm which is the cause of the disease. The imagination of the sick man does the rest—an ancient principle which is now being revived on a large scale in America under a new name.

On Professor Bendall and Mr. Irvine's papers I have nothing to add to the notice in the report. Mr. Irvine shows incidentally how uncertain life was in the entourage of the Mughal Emperor who was a contemporary of Queen Anne, and what remarkably unpleasant methods were adopted in dealing with unpopular courtiers.

I now turn to the large question of the position and prospects of this Society. We all know that it is not the power that it was in its earlier days. We all know that people say that our meetings are dreary, that our journal appears at long and uncertain intervals, that its pages are devoid of all human or other interest. Well, that may be so; people must be presumed to know what interests them, and I should be the last person to call in question anything so infallible as popular opinion. But these things rather depend on the point of view, and the popular point of view is not invariably the most instructive one. I cannot help remembering how at a meeting of that august body, the British Association, a room was filled to overflowing to see a famous Polar explorer exhibit the rational dress—a pair of fur trousers—worn by the Eskimo ladies and to hear him descant in the most grotesque English imaginable on their undeniably capacious dimensions. For the scientific aspects of the explorer's work this cultured audience cared not a jot, and when the

first authority of the day on Polar geography got up to criticise some of the lecturer's conclusions on matters less attractive than female attire he was received with manifest signs of boredom and disapproval.

Yet when we have said, "Populus me sibilat, at mihi plaudo," is that quite the last word? I hardly think so, and that is why I have taken our position as a Society for the subject of this brief address. We shall all admit, when we have relieved our minds by a gibe at the Philistine in the street, that the authority and influence of the Society are not what they were a century ago. We do not do so much, and what we do does not attract so much general attention as it did. Those are the facts, there is no disputing them, but it seems worth while to make an attempt to discover their causes.

The standard explanation, a stock excuse for many things in India, is want of leisure. Every one is said to be too busy. The demands of official work, of business, of society are heavier than they were in the old days. People had time then to read and to think; they have no time now. That line of apology I would sweep aside as emphatically as His Excellency the Patron did five years ago, at the first meeting of the Society which he honoured with his presence. As crucial illustrations of its futility, I would appeal not only to the example of the Patron himself, who manages to find time for everything, but to the achievement of one of our Vice-Presidents, Mr. Pargiter, who has recently completed a critical edition and translation of the Markandeya Purana. Now if the absorbing labours of a Judge of the High Court present no barrier to his engaging in the most laborious form of linguistic research, how can the plea of overwork be put forward on behalf of the lighter duties—the mere distractions—of other branches of the public service, or of mercantile pursuits?

There is another stock apology which, like the former, is used in a loose general way to account for anything in India that is thought for the moment to be out of joint. We are told that since the days of railways and steamers Englishmen in India have become mere birds of passage, that they go to Europe so often that they lose their interest in the East, and get out of touch with the people and their ways. Consequently, so the argument runs, they no longer care to write papers for the Asiatic Society; its journal languishes and its meetings have become dull. The conclusion may or may not be true: the premise is, in my opinion, if not absolutely false, at any rate far too widely stated. There has never been a time when interest in India and in the East generally has been so keen and so widely diffused in Europe as it is at the present day. You see it in every branch of the subject with which this society deals, and it has been and will continue to be enormously quickened by the great political

movement which is now in progress—the scramble for possessions, trade interests and *points d' appui* in Asia. It is indeed hardly a paradox to say that if any one in this country is in want of a stimulus in the particular branch of study in which he is engaged, he will best find it in a visit to Europe and in contact with fellow-workers there. Any one of a dozen Societies will give him a cordial reception, and their enthusiasm revive his flagging energies. He will realise that the study of Indian subjects holds a higher place than it has ever done, that it is no longer treated as a thing apart which can be ignored with impunity, but that it enters into the solution of problems which a generation ago no one would have dreamed of approaching from the Indian point of view. Nor do I admit that the Europeans at work in India at the present day know less about the country and the people than their predecessors of a century ago. Of the country as a whole they know infinitely more because they have seen more, because trains and steamers move faster than boats and palanquins. Of the people also they can know more if they choose to take the trouble, for they have a better start. A good deal has been done of recent years by Mr. Crooke and others to arrange and systematise the vast mass of ethnographic information that is available. The ethnographic survey will add greatly to our stock of knowledge, and I am glad to be able to inform the society that for Assam the Hon. Mr. Fuller has modified the original scheme on lines which will give us a series of illustrated monographs on the tribes of that interesting province. In two or three years' time I hope that any one in any Province who desires to understand the structure and usages of Indian Society will find adequate guidance through the preliminary stages of the subject. It will rest with him to break new ground and to extend by research the information that has been placed at his disposal. For ignorance at any rate there will no longer be any excuse, and there will be the basis for that higher form of knowledge which consist in understanding the ways of alien races and appreciating their point of view.

For the real causes of the diminished influence of the Society we must look back to the history of its own growth and development. When our first President, Sir William Jones, gave to the world, as Sir Henry Maine admirably put it, "the modern science of Philology and the modern theory of Race," the Asiatic Society of Bengal had a practical monopoly of the new learning. The Calcutta scholars of that day, Jones, Colebrooke, Wilkins and Wilson, all of them active members of this Society, were the pioneers of the Sanskrit Renaissance as the Greek scholars of the 15th Century were of the revival of learning in Europe. But Calcutta was not long to remain the centre of Sanskrit studies. When the German Universities entered the field guided by Humboldt

and Wolff, and controlled by a Government too wise to leave the great national interest of higher education to the chances of private enterprise, the combination of industry and organization was bound to make itself felt. New centres of authority arose, and we now look to Germany for the latest light in the matter of Oriental Scholarship. One of the features of their method was the specialization of research. Some years ago when Professor Garbe visited India, I remember asking him some question about a passage in Manu. He explained the point, but added that the law books were not in his line and that for a really authoritative interpretation one should consult Bühler or Jolly. When people work on these lines can we wonder that our Society has been rather left behind in the domain of scholarship?

In the region of science, while the result has been the same, it has come about in rather a different way. When the Founder of the Asiatic Society defined the range of its inquiries as extending to whatever is performed by man or produced by nature, his words corresponded to the facts. We were then the sole organ of research in Asia. Whatever was done in Geology, Meteorology, Zoology, Botany was done at the instance of and through the agency of this Society, and the results of these researches were published in this Journal. Now all these branches of scientific activity have grown and developed on lines of their own. They have blossomed forth into separate departments, and they publish their own memoirs. This is the natural course of evolution. The Society has multiplied by fission, like the "philoprogenitive sponge" in Professor Daubeny's witty verses, and has given birth at successive epochs to the Geological Survey, the Meteorological Department, the Botanic Survey the Indian Museum and the Linguistic Survey—a flourishing family of which it may well be proud. Looking back at these procreative efforts, can we be surprised that the parent organism is if not exhausted at least somewhat attenuated, and that in comparison with the portly volumes which its descendants produce (Dr. Grierson's Survey occupies 16 quarto volumes) its own publications should have shrunk to rather slender dimensions?

What then is there left for us to do? We cannot—I would frankly admit the fact—aspire to rival the Germans in the matter of scholarship, at any rate not at present. It may be that my friends Dr. Ross and Hara Prasad Sastri will succeed in creating traditions of critical accuracy on the lines recognised as sound in Europe and will train up a generation of Joneses, Colebrookes and Wilsons. But it will take a long time, for modern scholarship is a hard mistress to serve, and demands an intellectual equipment, a range of knowledge, and a standard of accuracy far beyond the reach of the typical Maulvi or Pandit. Until that ideal



has been realised we must content ourselves with the useful if inconspicuous work that we do now—collecting manuscripts and publishing texts, furnishing the material which European scholars will work up. In this matter we have the great advantage of being on the spot, and any one who will read Pandit Hara Prasad Sastri's report on his operations will see what a large quantity of valuable manuscripts have been saved from destruction or oblivion by his exertions and by the patient enquiries of his travelling subordinates. We hope that the Government will now place us in a position to extend this system to Arabic and Persian Manuscripts. The extension has been suggested and is more than justified by Dr. Ross's discovery in the library of the Calcutta Madrasa of an autograph manuscript history of Gujarat and of the earlier Moghals, which throws a new light upon an important period of Indian history. Where the materials are so scanty, and their value is so often vitiated by the position or predilections of the writer, the search for fresh sources of information is a duty which this Society can most properly undertake.

Another line of possible activity is antiquarian research in which the man on the spot has an obvious advantage over the most laborious student working at a distance. We all of us know how much Mr. Wilson has done to elucidate the obscure and complicated problem of the Topography of Old Fort William and the Black Hole. He has now crowned his labour by producing a scale model of the old Fort which will, I believe, be exhibited next month in the Indian Museum. The model is a work of art in itself, and any one who chooses to study it can go to the actual sites, identify, with the help of the tablets erected under His Excellency the Viceroy's orders, the few portions of the original buildings that survive, and picture to himself exactly what the old Fort was like, and how it came to pass that 146 people were driven, without knowing where they were going, into the stifling cell, which Holwell describes as "a cube of 18 feet."

In connexion with the Fort and the Black Hole Mr. Wilson has not left much for any one who follows in his footsteps. But there are many localities in and around Calcutta which will repay similar exertions. Take for example the names of the Calcutta streets. I hear that all the Indian names are about to be recast on the Hunterian System, and that the street lamps will soon be embellished with some remarkable transformations of well-known names. Before this break is made with the past I trust some learned member of the Society will go into the question and tell us how the names themselves arose. A great deal of the early history of Calcutta is wrapped up in them and in name such as "Kolutola," which seems to record an ancient settlement of oil-pressers.

European and Armenian names demand investigation for the same reason. For all I know some one may have done this already; but the results are hidden away in forgotten papers of this Society and are not readily accessible. We want in fact some one to do for Calcutta in a systematic fashion what Sir Walter Besant did for London—to tell the story of its growth and development. If the facts are once cleared up you will find that plenty of romance goes with them.

I said above, and I fancy that no one will disagree with me, that in matters of scholarship the centre of authority has now been shifted to Europe. But mere scholarship is not every thing. It is only a means to the higher end of reconstructing the life of the past. In working towards this end students of the East have the great advantage that the present *is* the past or at any rate is so full of survivals of the past that it forms the only instructive commentary on the written record. Here it seems to me is the most promising field for the future researches of our Society. Let us admit that we are no longer supreme in scholarship, but let us endeavour to ascertain and analyse the actual facts of the present day—the customs, beliefs, superstitions and ritual that have descended without material alteration from very remote times. This may enable us to supplement and often to correct the conclusions of European scholars, to add colour to their descriptions, to reconstruct life in India as it was in the time of Buddha or perhaps even before Buddha and, as I ventured to suggest here five years ago, to elucidate not only Indian literature, but also those features in the life of the Greeks and Romans, which form part of the common heritage of the Aryans. If we attempt this, however, imperfectly we shall find for our selves ample and attractive occupation and we shall be doing useful work which no one else can do so well.

The Chairman announced that the Scrutineers reported the result of the election of Officers and Members of Council to be as follows:—

*President.*

The Hon'ble Mr. Justice F. E. Pargiter, B.A., I.C.S.

*Vice-Presidents.*

The Hon'ble Asutosh Mukhopadhyaya, M.A., D.L., F.R.S.E.

Major D. Prain, M.A., M.B., LL.D.

T. H. Holland, Esq., F.G.S., A.R.C.S.

*Secretary and Treasurer.*

Honorary General Secretary:—J. Macfarlane, Esq.

Treasurer:—C. R. Wilson, Esq., M.A., D. Litt.

*Additional Secretaries.*

Philological Secretary :—T. Bloch, Esq., Ph.D.

Nat. History Secretary :—Captain L. Rogers, M.D., B.Sc., I.M.S.

Anthropological Secretary :—E. D. Ross, Esq., Ph.D.

Joint Philological Secy. :—Mahamahopadhyaya Haraprasad Shastri.

*Other Members of Council.*

T. H. D. La Touche, Esq., B.A.

Kumar Ramessur Maliah.

Arnold Caddy, Esq., M.D., F.R.C.S.

I. H. Burkill, Esq., M.A.

H. E. Kempthorne, Esq.

Major A. Alcock, M.B., LL.D., C.I.E., F.R.S.

C. Little, Esq., M.A.

W. K. Dods, Esq.

The Hon'ble Mr. A. Earle, I.C.S.

The Meeting was then resolved into the Ordinary General Meeting.

THE HON. DR. ASUTOSH MUKHOPADHYAYA, M.A., D.L., Vice-President, in the chair.

The minutes of the last meeting were read and confirmed.

Forty presentations were announced.

Mr. Percy Brooke Bramley was balloted for and elected an Ordinary Member.

The Council reported that in consequence of the deaths of Prof. E. B. Cowell and Sir George Stokes, there were now six vacancies in the list of the Honorary Members. The Council therefore recommend the six following gentlemen for election as Honorary Members at the next Meeting.

Prof. Heinrich Kern, Leiden.

Dr. Ramkrishna Gopal Bhandarkar, C.I.E., Poona.

Dr. M. J. DeGoeje, Leiden.

Dr. Ignaz Goldziher, Budapest.

Sir Charles Lyall, London.

Sir William Ramsay, London.

*Professor Heinrich Kern*, born in Java in 1833, began his career as a scholar with contributions to the great Sanskrit Dictionary of Böhtlingk and Roth : from 1863-65 he was Sanskrit Professor in the college at Benares, and from the latter date he has been professor of Sanskrit in

Leyden. His connection with Java doubtless has led him to devote himself to ancient Javanese, and to Buddhism, in which subjects he is regarded as one of the chief living authorities. His work in Sanskrit has been most copious, and includes the edition of a text for the *Bibliotheca Indica*, and a translation of the same made for the Royal Asiatic Society.

J. MACFARLANE.

*Dr. Ramkrishna Gopal Bhandarkar*, M.A., first distinguished himself by literary and archæological controversies with distinguished European scholars, and researches in the Geography of Panini and of Alexander's invasion. He was one of the principal contributors to the *Indian Antiquary* from its foundation in 1873. His history of Deccan is a masterpiece of accurate scholarship, and his fame depends chiefly on the volumes, six in number, which he has written in connection with the search of Sanskrit manuscripts in India, which are regarded as models of descriptive catalogues.

He joined the Education Service shortly after he left college and retired eleven years ago. Shortly after he was made the Vice-Chancellor of the Bombay University, and is at the present moment a member of the Imperial Legislative Council of India, and an honorary member of numerous Oriental Societies.

HARAPRASHAD SHASTRI.

*Dr. M. J. DeGoeje*.—Professor of Arabic in Leyden, Holland. Has done most valuable work in editing the great historical and geographical works of Arabic writers: notably his editions of Tabari's *Chronicle* and of Edrisi.

*Dr. Ignaz Goldziher*.—Professor of Semitic Philosophy, Buda Pesth. Perhaps the first authority in Europe on Muhammedan Law, Theology and Tradition. He is the author of many valuable works dealing with these subjects. Among them may be mentioned his "History of philological learning among the Arabs" and his "Mohammedan Studies."

*Sir Charles Lyall*, K.C.S.I., etc., etc.—Has a European reputation for his knowledge of ancient Arabic poetry. He has published a text and commentary of the *Muallaqat* and some English translations from Arabic poetry. He is engaged on an important edition of the *Mufaḍḍaliyyât*.

E. DENISON ROSS.

*Professor Sir William Ramsay*, K.C.B., F.R.S., etc.—Eminent as an investigator in various departments of Chemistry. Sir Wil-

liam Ramsay's earlier researches were in the domain of organic chemistry. Later on he published a series of papers on Molecular Volumes, on the critical state and properties of liquids, and on molecular energy and the expansion of rarified gases, which were published in the year 1893. But the researches which secured for Sir William Ramsay world-wide reputation, are those which he carried on in conjunction with Lord Rayleigh, relating to the properties of argon, to be followed immediately after by the discovery of helium. The most recent of his researches treats of radio-activity, and, the production of helium from radium; these were communicated to the Royal Society in July last.

Sir William Ramsay is already a Foreign or Honorary Member of various Scientific Societies, among which may be mentioned, the French Academie des Sciences, the Royal Irish Academy, the Academies of Berlin and Turin, and the Philosophical Societies of Geneva and Leyden.

ASUTOSH MUKHOPADHYAY.

It was announced that Sir John Eliot had expressed a wish to withdraw from the Society.

The General Secretary reported the deaths of Mr. M. N. Chatterji and Mr. A. T. Pringle, Ordinary Members of the Society.

Read the following circular letter from the Government of India, Department of Revenue and Agriculture, No. 54-13-10, dated 28th November 1903, to the Government of Bengal, General Department, relative to the appointment of Dr. Denison Ross as the Honorary Epigraphist for Persian and Arabic Inscriptions.

"With reference to Mr. Muir-Mackenzie's Circular No. 38—17 of the 11th August 1892, and to paragraph 5 of the Government of India's Despatch No. 31 of the 16th June 1898, a copy of which was forwarded with this Department's Circular No. 1953—55, dated 13th June 1899, I am directed to state, for the information of His Honour the Lieutenant-Governor, that the Government of India have appointed Dr. Denison Ross, Principal of the Calcutta Madrassa, to be Honorary Epigraphist for Persian and Arabic Inscriptions.

2. I am to request that Archæological Surveyors may be instructed to forward to Dr. Ross all Persian and Arabic inscriptions and epigraphical materials relating thereto, which may be collected by themselves or sent to them by other Government officials. Arrangements for the publication of the epigraphical matter thus collected in the *Epigraphia Indica* are at present under consideration, and any

papers dealing with Persian and Arabic inscriptions and intended for publication there should therefore be sent to Dr. Ross."

The following paper was read:—

*The Line at Infinity.*—By INDUBHUSHAN BRAHMACHARI, M.A. Communicated by MR. C. LITTLE.

(Abstract.)

This paper contains a systematic and exhaustive investigation of the properties of what is known to Mathematicians as the Line at Infinity or Line Infinity. The position of any line on a plane may be completely determined, if we know the intercepts which this line makes upon two given intersecting lines which may be taken as the axes of coordinates. Now, if these intercepts become infinite in length, the line itself will move off to infinity. In other words, if the equation of the line situated within a finite region of the plane be  $\frac{x}{a} + \frac{y}{b} = 1$ , where  $a$  and  $b$  are the intercepts, the equation of the line at infinity will be the apparently paradoxical form  $1 = 0$  or constant  $= 0$ . The two fundamental properties of this imaginary line are, first, every point on this line is at infinity, and secondly, that every point at infinity lies on it, or in other words this line is the complete point representative of infinity. Consequently, the idea of direction must not be associated with this line. Moreover, it is at the same distance from all ordinary points, because every point of it is at an infinite distance. One of the most familiar instances of the appearance of the line at infinity is in the investigation of the properties of circles, namely it is the imaginary chord of intersection of all concentric circles. Another instance of its appearance is as the pole of the centre of a conic; in other words, it is the line joining the points of contact of the asymptotes of a hyperbola with the curve. To put the matter in another way, although the asymptote is a tangent whose point of contact is at infinity, it is itself not the line at infinity because it does not lie entirely at infinity.

The present paper contains a detailed examination of the properties of this line, and shows how its introduction enables us to obtain the solutions of various problems connected with real lines and conics. The paper also contains applications of the properties of this line in connection with the theories of reciprocation and projection.







**PROCEEDINGS**  
OF THE  
**ASIATIC SOCIETY OF BENGAL.**  
FOR MARCH, 1904.

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The Monthly General Meeting of the Society was held on Wednesday, the 2nd March, 1904, at 9 P.M.

C. LITTLE, Esq., M.A., in the chair.

The following members were present :—

Mr. R. P. Ashton, Mr. J. Bathgate, Mr. D. Hooper, Mr. V. H. Jackson, Mr. J. Macfarlane, Dr. M. M. Masoom, Pandit Yogesa Chandra Sastree, Dr. C. Schulten, Mahamahopadhyaya Haraprasad Shastri, Pandit Jogindra Nath Vidyabhushan, Pandit Satis Chandra Vidyabhushan, Mr. E. Vredenburg, Dr. C. R. Wilson.

*Visitor* :—Mr. W. J. A. Cunningham.

The minutes of the last meeting were read and confirmed.

Twenty-seven presentations were announced :—

Kumar Kamlananda Singha, Mr. W. H. Arden Wood, Mr. A. W. Pim, and Prof. E. J. Rapson, were balloted for and elected Ordinary Members.

Prof. H. Kern, Dr. Ramkrishna Gopal Bhandarkar, Dr. M. J. DeGoeje, Dr. Ignaz Goldziher, Sir Charles Lyall, and Sir William Ramsay, were balloted for and elected Honorary Members.

The General Secretary read the names of the following gentlemen who had been appointed to serve on the various Committees for the present year.

## FINANCE AND VISITING COMMITTEE.

Dr. T. Bloch, The Hon. Mr. A. Earle, Mr. H. H. Risley, Mahamahopadhyaya Haraprasad Shastri, Dr. E. D. Ross, The Hon. Dr. Asutosh Mukhopadhyaya, Mr. J. Bathgate, Mr. H. E. Kempthorne, Major A. Alcock, I.M.S., Mr. T. H. Holland, Mr. W. K. Dods.

## LIBRARY COMMITTEE.

Dr. T. Bloch, Mr. D. Hooper, Mr. C. W. McMinn, The Hon. Dr. Asutosh Mukhopadhyaya, Mahamahopadhyaya Haraprasad Shastri, Mr. F. Thornton, Dr. H. H. Mann, Dr. E. D. Ross, Mr. I. H. Burkill, Mr. E. Vredenburg.

## PHILOLOGICAL COMMITTEE.

Maulavi Ahmad, Dr. T. Bloch, Babu Pratap Chandra Ghosh, Shams-ul-Ulama Mahomed Shaikh Gilani, The Hon. Dr. Asutosh Mukhopadhyaya, Major D. C. Phillott, I.A., Pandit Satyavrata Samasrami, Mahamahopadhyaya Haraprasad Shastri, Mahamahopadhyaya Chandra Kanta Tarkalankara, Dr. G. Thibaut, Babu Nagendra Nath Vasu. Mr. A. Venis, Dr. E. D. Ross, Mr. E. A. Gait, Pandit Satis Chandra Vidyabhushan, Babu Monmohan Chakravarti.

## COINS COMMITTEE.

Lt.-Col. D. S. E. Bain, I.M.S., Dr. T. Bloch, The Hon. Sir J. A. Bourdillon, Babu Panchanan Mukerjee, Mr. E. Thurston, Mr. M. J. Seth, Mr. H. N. Wright, Dr. E. D. Ross, The Hon. Mr. A. Earle, The Hon. Mr. John Hooper.

The General Secretary reported the death of Dr. Mahendralal Sircar, an Ordinary Member of the Society.

At the request of the Council, the Hon. Dr. Asutosh Mukhopadhyaya contributed the following obituary notice of Dr. Mahendralal Sircar:—

The Society has lost by the death of Dr. Mahendra Lal Sircar, C.I.E., one of its oldest members. Dr. Sircar was born on the 2nd November, 1833 in Paikpara, near Howrah. After a distinguished scholastic career, in the Hare School and the Hindu College, he joined the Calcutta Medical College in 1854, where his career was exceptionally brilliant. In 1863, he was admitted to the degree of Doctor in Medicine. It is not necessary to refer in detail to his conversion to the Homeopathic faith and his consequent ostracism from orthodox Medical Society. He remained a staunch Homeopath to the end of his days and published numerous

writings in the *Calcutta Journal of Medicine* which he started in January 1848, and continued to edit for thirty-six years. In 1869, Dr. Sircar published a paper on the desirability of a national institution for the cultivation of the Physical Sciences by the natives of India, and it was through his unceasing efforts that the Indian Association for the cultivation of Science was founded six years later at a time when even Government Institutions hardly made adequate provision for the practical teaching of Science. Dr. Sircar continued to be the Secretary of the Institution till the day of his death, and so long as health permitted, systematically delivered courses of lectures there. Dr. Sircar was appointed a Fellow of the Calcutta University in 1870, and was for many years an active member of the Senate, directing his efforts mainly to secure for the experimental sciences a proper recognition amongst the studies of the University. He was for ten years a member of the Syndicate, for four years President of the Faculty of Arts and acted on several occasions as an examiner in scientific subjects for the M.A. and M.D. Examinations. In 1898 the University conferred on him the Honorary Degree of Doctor in Law, in recognition of his services to the cause of scientific education. He was made a C.I.E. in 1883, was appointed Sheriff of Calcutta in 1887, and was nominated by Government a member of the Bengal Legislative Council on four successive occasions. He was a Justice of the Peace and Presidency Magistrate from 1877, and for many years took an active part as a Municipal Commissioner in the Corporation of Calcutta. He maintained for many years a Charitable Homeopathic Dispensary, where he gave advice and medicine free to all classes and creeds; and more than ten years ago he founded a Leper Asylum at Deoghur.

He joined the Society in April 1867, served on the Council for eleven years between 1885 and 1901, and at the time of his death, was one of the Trustees of the Indian Museum on behalf of the Society.

The General Secretary reported the presentation of one coin from the Government of United Provinces of Agra and Oudh.

Pandit Yogesa Chandra Sastree exhibited an image of Manju Nath brought from Lhasa (Tibet), and also copper-plate grants from Rajputana and Guzarat.

This image of Manju Nath, otherwise called Manju Deva or Manju Sree, has been handed over to me by one of my European friends who secured it through a Lama from Lhasa in Tibet. It is a Buddhist deity generally worshipped by the Newars of Nepal.

It is stated in the 7th chapter of the *Brihat Swayambhupuran* that a sage named Manjusree came from China to the Swayambhu-

ksheṭra in Nepal and attained salvation there. He was afterwards worshipped as a god by several trading people who were Bouddhas. A full account of Manju Nath can be found in the book mentioned above, an Ms. copy of which exists in the Library of the Asiatic Society of Bengal.

On the pedestal of this image, it is inscribed that one Punabanta, who was a Tuladhar by caste and an inhabitant of **हिंडोल जादापीया** died at Lhasa. His living wife, named **ईन्द्राणी**, founded this image of Manju Nath in her own and husband's name on the 15th Phalgun of the 943 Nepali era (*i.e.*, in February, 1823 A.D.).

The image has got three heads and six hands. In two of three right hands there are—a sword, an arrow, while the third is offering aboon. In the three left hands there are—a book in the first, a bow in the second, and in the third the foot stalk of a lotus flower which is broken.

There is a female figure on the left side of the lap of this image of Manju Nath which can be presumed to be that of his wife. The two figures sitting on the pedestal in a worshipping position are females. Their names **पुष्पमति** and **दयामति** (virtuous mind and merciful mind).

The language of the inscription is a mixture of Sanskrit and Newari. The latter is a dialect of the hill tribes of Nepal and entirely unconnected with the former. The alphabets are also not purely Devanagri nor Newari but a mixture of the both.

The image, it seems to me, is made of gilt brass. The gilding is of a high order and is a proof of the antiquity of the image.

My same European friend gave me both of these copper-plate grants.

The language of the inscription in plate No. 1 is a mixture of Sanskrit and Marwari, and the characters are mostly Devanagri and occasionally Marwari. The inscription is deeply incised, and legible. Its size is  $8\frac{1}{2}$  inches by 7 inches.

The inscription is to the effect that Kubar Durjana Singhajee, son of Kubar Guman Singhajee and grandson of Maharao Siva Singhajee of Sirohi granted a village named (perhaps) **विडवार** to the shrine of **दीर्घादेवी** *i.e.*, **दीर्घा** for the purpose of establishing a vandara (inn) in connection with his temple to distribute food to the poor. The grant was made on the 5th Aswin of 1897 (Bikram's era) *i.e.*, in September, 1843 A.D.—14 years before the mutiny.

I found the name of Maharao Siva Singhajee in Hunter's Gazetteer to be the ruler of Sirohi State, who rendered a great deal of help to the British Government during the mutiny of 1857. It is not improbable that he is the man whose name we find in the inscription. Attempts are being made through the Governor-General's agent in Rajputana to throw further light on this grant. The inscription has an incorrect

Sanskrit verse at the end of it; which, when translated into English, runs thus:—"He who confiscates the land gift made either by himself or by someone else, lives in hell as long as the sun and moon endure."

The language of the inscription of the plate No. 2 is a mixture of Sanskrit and Guzerati, and the characters are Devanagri and Guzerati, and except in two or three places, are deeply cut and legible. Its size is  $8\frac{3}{4}$  inches by  $7\frac{1}{4}$  inches.

The inscription of this plate is to the effect that one Bai Sree Maha Kubar Bai made over a village named Meruojeshinagar to the shrine of Radhaje, whose temple is situated in the Islands of Dwaraka for the same purpose as that of the plate No. 1. The grant was made on the 7th Magha 1813 (Bikram's era) i.e., January, 1757 A.D.—4 months before the battle of Plassey.

The inscription of this plate also has an incorrect Sanskrit verse at the end of it containing 4 lines; the last two of which say the same thing as the plate No. 1; but the first two lines if translated into English would be: "He, who protects the land gift made either by himself or by any one else, lives in heaven as long as the sun and moon endure."

The following papers were read:—

1. *Mahals in Sarkar Lakhnau.*—By H. R. NEVILL, I.C.S.

(Abstract.)

In the Journal of the Asiatic Society of Bengal for 1884 there appeared an article by Mr. J. Beames 'On the Geography of India in the Reign of Akbar,' in which he dealt with the *mahals* and *sarkars* of the *subah* of Awadh as recorded in the *Ain-i-Akbari*.

Mr. Nevill is attempting to complete the work of Mr. Beames. The present paper relates only to the *sarkar* of Lakhnau.

Mr. Nevill rejects the view that Tara Singhaur is now included in the *pargana* of Daundia *Khera*. Tara Singhaur he identifies with a village called Singhaur Tara on the banks of the Ganges some seventeen miles south-east of Daundia '*Khera*, lying in latitude  $26^{\circ} 3'$  north and longitude  $80^{\circ} 53'$  east. Kahanjara is the village of Khanjar or Kahenjar in the north of *pargana* Sareni, in latitude  $26^{\circ} 11'$  north and longitude  $80^{\circ} 49'$  east. Lashkar is the modern village Nisgarh, also in *pargana* Sareni, in latitude  $26^{\circ} 6'$  north and longitude  $80^{\circ} 46'$  east. Deorakh is the hamlet now called Deorakhār in the centre of *pargana* Sareni. Haihar still gives its name to a small estate in Rai Bareli, in the north-west of *pargana* Dalman, four miles east of Lalganj. Kumbhi must be fitted into the *Parwa tahsil* of the Unao district, in *pargana* Mauranwam. Lastly, Pingwān or Bangwān is Bangawān in the Sadarpur *pargana* of Sitapur. This clears up the whole geography of the *sarkar*.

2. *Materials for a Flora of the Malayan Peninsula, No. 15.*—By SIR GEORGE KING, K.C.I.E., LL.D., F.R.S., &c., late Superintendent of the Royal Botanic Garden, Calcutta, and MR. JAMES SYKES GAMBLE, M.A., C.I.E., F.R.S., late of the Indian Forest Department.

(Abstract.)

The present paper contains practically the completion of the account of the large National order *Rubiaceæ*. Owing to an accident, it has unfortunately been found necessary to postpone the publication of the descriptions of the species of the genus *Psychotria* (numbering about 45) until the next paper of the present series. A key is here given to the remaining twenty-three genera of the family, the key to the first thirty having appeared in the last paper. In all 123 species, belonging to 22 genera, are now described; and, of these, 47 species are believed to be new to Science.

3. *The Buddhist Doctrine of "Middle Path."*—By PANDIT SATIS CHANDRA VIDYABHUSHAN, M.A. The paper will not be published.

(Abstract.)

The pandit explains the doctrine of the 'middle path' from two standpoints, ethical and metaphysical. Ethically the middle path consists in the avoidance of the two extremes of excessive self-indulgence and excessive self-mortification; metaphysically it consists in the avoidance of the two extremes of a belief in the reality of the world and a belief in its unreality. The world only appears to exist in virtue of conditions or relations. The relations are of four kinds: the causal condition as in the relation of the seed to the germ; the supporting condition as in the relation of fuel to fire; the condition of succession as between prior and posterior events; and the defining condition as in the relation of the eye to colour.

4. *Evidences of Slave trade in Moghul Empire.*—By MAHAMAHOPADHYAYA HARAPRASAD SHASTRI, M.A.

5. *Shoulder-headed and other forms of stone implements in the Santal Parganas.*—By REV. P. O. BODDING.

(Abstract.)

Mr. Boddling describes five new forms of stone implements found in the Santal Parganas.

1. Some wedge-shaped axes curved in a peculiar manner, the upper side being convex and the other concave.

2. Implements with squar eside edges, which used to be thought very rare in India.

3. A small oblong flat stone, the edge of which has been cut with small notches and which has probably done service as a saw.

4. Perforated stones, all of sandstone.

5. The 'shoulder-headed' celts of chert and sandstone. Some of them have two small notches, continuing a line down along each side of the neck down into the body of the stone. These notches are clearly marks left by the manufacturer, and show that the neck has been at least partially cut. The late Mr. Peal, arguing from the resemblance between these shoulder-headed celts and a kind of small iron hoe used in some Naga villages in weeding the hill paddy, assumed that the celts were minature hoes. Mr. Bodding thinks it equally likely that they may have been adzes. The fact that these cherts are found in the Malayan peninsula and in Chota Nagpur does not show that the present inhabitants of the two regions are connected. It shows that in a former age the same people have either been living in them, or there has been some kind of intercourse between the countries.

6. *Himalayan Summer Storm of September 24th, 1903, and the weather immediately subsequent to that date in Northern India*—By C. LITTLE, M.A.

(Abstract.)

The paper on the Himalayan Summer Storm of September 24th, 1903, and the weather immediately subsequent to that date in Northern India, is the third of a series dealing with similar occurrences during the past two years. Of these occurrences, which have been called Himalayan Storms, because they are first observed in the region of the Himalayas, two striking examples belong to the monsoon season of 1902, and are dealt with in a paper entitled "Two remarkable Rainbursts in Bengal." Two still more remarkable examples belong to the monsoon season of 1903, and it is the latter of these that is discussed in this paper.

Extracts are quoted from the *Englishman* and *Pioneer* to show the character of the weather in Northern India during the latter half of September and the extraordinary change that began in Bengal about the 24th September. Father Francotte closed the usual weekly weather report in the *Englishman* on September 15th with the remark—"This year, 1903, there seems therefore to be greater fear for a speedy termination of the rainy period," and in the *Pioneer* of September 28th there occurred the following remark:—"The sky is becoming clear all over Upper India and fine weather is now promised by the Meteorological Department."

Ten days later the *Pioneer* wrote as follows: "On the 26th or 27th September the Meteorological Bureau seems to have arrived at the conclusion that fine weather conditions were becoming established over Upper India just on the eve of one of the most heavy and prolonged bursts of rainfall that can ever have been recorded so late in the year. Even now the daily telegrams seem to shew no appreciation of the extraordinary character of the season, &c."

It is pointed out in the paper that the subordinates of the Weather Bureaus who issued the warnings thus criticised had no alternative on the present system of looking towards the sea region to the South of India for all changes in the monsoon rainfall. Also that in this as in previous cases of the same kind exceptionally fine settled weather prevailed over the southern sea and the Bay of Bengal just before the commencement of the period of heavy rainfall, and that there was no appearance of a cyclonic storm of even slight intensity having entered Northern India until the second stage of the disturbance. On the other hand it is pointed out that in the North of Bengal, at a time when weather was fine in the South, thunderstorms began and spread southwards over Bengal. They first occurred in Assam and the Darjeeling Himalayas on the 23rd or 24th, in support of which there is recalled the experience of Puja holiday-seekers who left Calcutta in fine weather and found the Darjeeling railway badly breached. The thunderstorms spread southwards, and the change occurred in Lower Bengal on the evening of the 25th. A temperature tracing is given showing the thunderstorms of the 25th and 26th at Calcutta, and the subsequent gradual formation of a depression over Lower Bengal. This depression was most marked on the 29th, after which it moved westward and recurving in Central India towards the United Provinces caused the commencement of the heavy burst of belated rainfall which called forth the criticism of the *Pioneer* already quoted.

It has been proved in these papers that such an occurrence as what is called a Himalayan storm is followed by remarkable series of depressions over the north of the Bay, a striking example being the series which saved Western India from crop failure in August 1902. On this occasion two depressions formed; the first has been already mentioned. The second formed a week later, and following an almost identical course, maintained the rainfall in the United Provinces.

Brief quotations are given from the writings of Mr. H. F. Blanford and Sir J. Eliot to show that on the system introduced by the latter it was impossible to foresee the change which then began, because on that system all such changes are initiated over the southern seas, and on this



occasion weather remained exceptionally fine for the season in that area. But Mr. Blanford discovered more than twenty years ago that to forecast rainfall in northern India something more than the report from ground-level observatories is wanted. "What is more especially wanted now is a knowledge of the prevailing movements of the higher atmospheric strata." Nothing more is known now of these upper atmospheric strata than when Mr. Blanford wrote, but in this paper it is maintained that the change which began at the end of September last was in the upper strata, and that the circumstances of the subsequent rainfall could not have been foreseen without a knowledge of these strata—an opinion which the quotations from Sir J. Eliot's writings show was, in all probability, not shared by him. The paper closes with short tables of meteorological statistics showing the progress of the disturbance over Bengal up to the commencement of the first depression. The tables are arranged, as in previous papers, to show that the same features were present as on the occasions therein referred to.

7. *Cyclone of 13th to 15th November, 1903, in the Bay of Bengal.*—  
By C. LITTLE, M.A.

(Abstract.)

The paper on the cyclone of 13th to 15th November in the Bay of Bengal is intended to show the importance of what is called 're-curling' in the more dangerous cyclones. Charts are given showing the tracks of two steamers, the 'Madura' from Calcutta to Rangoon and the 'Pentakota' from Rangoon to Calcutta, and the very curved path of the cyclone. The two steamers were on the outer edge of the storm at 8 A.M. on the morning of the 14th, and before midnight were involved in the central area of hurricane winds—the 'Madura' about 5 in the afternoon, the 'Pentakota' some hours later. The main object of the paper is to show that the rules laid down by Sir J. Eliot in the Handbook of Cyclonic Storms are of little assistance in enabling mariners to avoid the central area of a cyclone, that is of a severe cyclone, re-curling as up-to-date experience shows all severe cyclones to do. Both these ships during the 14th moved in a course more likely than any other to bring them near the central area, and this is the more striking in the case of the 'Madura' whose officers were engaged in a continued effort to apply the rules of the Handbook. The course of the 'Madura' on the chart and the narrative quoted in the paper show that those on board were unable to allow for re-curling until about 6 P.M., when the barometer began to rise and the centre had passed to the east of vessel. The opinion of the writer is given that this re-curling cannot be anticipated and allowed for by consideration of ground-level and sea-level obser-

vations; that at sea as on land where recurring is associated with striking differences in rainfall distribution, the phenomenon is probably connected with the character of the upper strata of the atmosphere. Quotations are given from the Indian Daily Weather Reviews, in which the statements are based strictly on the system introduced by Sir J. Eliot, to show that a very inadequate appreciation of the character of the storm was possible on that system, and that any warning which could have been issued from Simla must have been of a general and ill-defined character. The discussion shows that a failure to avoid the central area of a cyclone cannot, in the present state of our knowledge, be provided against by rules, and that until meteorologists have accounted for recurring the "full intelligence" of the mariner cannot be made a matter of question, as appears to be the case on the front page of the Handbook. It is incidentally pointed out that wireless telegraphy is not likely to be an aid in storm warning, as experience has shown that it cannot be relied on when thunder is occurring—an invariable accompaniment of cyclonic weather in the Bay. American Meteorologists have tried it and have given it up. They are now going on laying cables between the mainland and islands a short distance from the coast. The Telegraph Department in India have stated in their last administration report that wireless telegraphy fails when the the atmosphere is electrically disturbed. The only apparent method of investigation is that suggested by Mr. Blanford more than twenty years ago, a suggestion of enquiry into the upper strata which is now the main line of investigation carried on by the United States Weather Bureau, and a method of enquiry for which the area comprising Lower Bengal and the North of the Bay gives every prospect of success.

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PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.  
FOR APRIL, 1904.

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The Monthly General Meeting of the Society was held on Wednesday, the 6th April 1904, at 9 P.M.

The HON'BLE MR. JUSTICE F. E. PARGITER, B.A., I.C.S., President, in the chair.

The following members were present :—

Dr. A. S. Allan, Mr. R. P. Ashton, Major W. J. Buchanan, I.M.S., Mr. I. H. Burkill, Mr. W. K. Dods, The Revd. E. Francotte, S.J., Mr. D. Hooper, Dr. W. C. Hossack, Mr. W. A. Lee, Mr. A. H. Lewes, Kumar Ramessur Maliah, Mr. C. W. McMinn, Captain L. Rogers, I.M.S., Pandit Yogesa Chandra Sastree, Pandit Satis Chandra Vidyabhushan, Mr. E. Vredenburg, Mr. J. Wyness.

*Visitors* :—Captain Black, I.M.S., Mrs. and Miss McMaster, Mr. R. R. Simpson.

The minutes of the last meeting were read and confirmed.

Nineteen presentations were announced.

Mr. J. O. Miller, and Mr. M. J. Simpson, were ballotted for and elected Ordinary Members.

The General Secretary reported the death of Dr. U. C. Mukerjee, an Ordinary Member of the Society.

Read a circular relative to the XIV International Congress of Orientalists which will be held at Algiers in 1905.

The following is an abstract :—

The 14th International Congress of Orientalists will be held at Algiers during the Easter vacation of 1905.

The Committee draws attention to the fact that this is the first time the Congress has met in a Mussulman country, and hope that this interesting fact, together with the attraction of the climate and natural features of Africa, will ensure a large attendance. The Congress will, as before, devote itself to all branches of Oriental learning, though questions of local interest will receive special attention.

The subscription is 20 francs (ladies 10 francs), but this does not include the cost of the publications of the Congress.

Contributions on Oriental questions are invited. The address of the General Secretary is—M. Edmond Doutté, École Supérieure des Lettres, Parc de Fontaine-Bleue, Mustapha-Supérieur, Algiers.

Mr. E. Vredenburg on behalf of Mr. T. H. Holland exhibited further specimens of the Meteorite which passed over Calcutta on the 22nd October last.

Mr. I. H. Burkill exhibited some Burmese pottery ornamented in a very primitive manner.

At Thayetmyo two kinds of pottery clay are used for making pots ; the one gives ordinary cooking pots, the other gives a kind of terra cotta out of which vases are made.

The vases are ornamented by being polished in various designs by means of the hard bean of *entada scandens*.

Captain L. Rogers exhibited slides illustrating the Physiological Action and Antidotes of Snake poisons.

The following paper was read :—

*Note on the Chestnut.*—By W. GOLLAN, *Superintendent, Government Botanic Garden, Saharanpur.* Communicated by MAJOR D. PRAIN, I.M.S.

This tree has taken kindly to the Dehra Dun Valley, and it also exists on a small scale in the Kulu Valley, but outside of the two small areas the tree is rare, and will probably ever remain rare.

Here (Saharanpur) the tree flowers every season, but never ripens its nuts, and the same is the case over the Punjab and Upper Gangetic plains generally. At Aringadh, Mussoorie (5,500 feet), it also flowers every season but never ripens its nuts, and the same is probably the case at all the Hill Stations with the one exception of the Kulu Valley. As far as I can gather, the nuts are not yet an article of trade from the Kulu Valley, but a fairly large trade is done in them from Dehra Dun.

The only other centre I know of where the nuts are an article of trade is at Bhamo, Upper Burma, and there the nuts come in from China.

In the old reports of the Sabaranpur and Mussoorie gardens, prodigious quantities of nuts are noted by the late Dr. W. Jameson as having been imported from time to time from Europe into N.-W. India, but it is not clear from these reports that these nuts ever yielded plants that attained to the age of nut-bearing trees. The native tradition of this garden is that the chestnuts now bearing at Dehra Dun belong to stock introduced by Fortune from China along with the tea plant. The trees now bearing in the Kulu Valley may be of the self-same stock. The plants could easily have reached that valley from the Sabaranpur garden through the adjoining or neighbouring Kangra Valley where Dr. Jameson had charge of a Government experimental tea plantation.

The nuts now found at Dehra Dun and those which appear in the Bhamo bazar every season from China, are identical in general appearance. Both are very like the sweet chestnut of Europe, but neither are so well filled nor do they keep for so long. When perfectly fresh, they differ very little, if at all, from the nut of Europe, but they shrivel up and rot much sooner, and when a month old only a small percentage are fit to eat. I have tried both plants and seeds of chestnut from Europe, and in the course of an experience of over 25 years, have only established one plant at Arnigadh, Mussoorie, a grafted plant from Italy. This particular plant is over 20 years old and is still a round-headed bush 4 to 5 feet high and about the same through.

There are therefore very strong reasons for assuming that the European strain of sweet chestnut has been a most complete failure everywhere in Northern India, and that the small success we have had, is through seeds or trees of Chinese origin, introduced into N.-W. India by Fortune and established by Jameson.





PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.

FOR MAY, 1904.

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The Monthly General Meeting of the Society was held on Wednesday, the 4th May, 1904, at 9-15 P.M.

The HON. MR. JUSTICE F. E. PARGITER, B.A., I.C.S., President, in the chair.

The following members were present:—

Major A. Alcock, I.M.S.; Dr. A. S. Allan; Mr. R. P. Ashton; Mr. J. Bathgate; Dr. T. Bloch; Mr. I. H. Burkill; Dr. A. Caddy; Babu Monmohan Chakravarti; Mr. W. K. Dods; Mr. K. G. Gupta; Babu Jotindra Nath Mukerjee; Captain L. Rogers, I.M.S.; Mr. A. Shrager Pandit Jogindranath Vidyabhushan; Pandit Satischandra Vidyabhushan; Mr. E. Vredenburg; Lt.-Col. J. H. Tull Walsh, I.M.S.

*Visitors* :—Mrs. and Miss McMaster and Mr. P. M. Mukerjee.

The minutes of the last Meeting were read and confirmed.

Fifty-two presentations were announced.

Mr. Framjee Jamasjee Thanawala and Mr. K. N. Knox were ballotted for and elected Ordinary Members.

It was announced that Mr. T. W. Arnold and Mr. C. R. Marriott had expressed a wish to withdraw from the Society.

The General Secretary reported the death of Dr. Otto von Böhtlingk, an Honorary Member of the Society.

Dr. T. Bloch read the following obituary notice of Dr. Böhtlingk.

On the 1st April last, there occurred at Leipsic, in the high age of nearly 89 years, the death of one of the last surviving pioneers of Sanskrit studies in Europe, Dr. Otto von Böhlingk. Having completed his University studies at his native town, St. Petersburg, he went to Berlin and then to Bonn, at that time the leading University in Germany for Sanskrit Philology. Here he studied under Schlegel and Lassen, and first entered the arena of independent workers with a masterly edition and translation of Kalidasa's *Sakuntala*. This was soon followed by an edition of Panini, the first that appeared in Europe, which was essential for placing the study of Sanskrit in Europe in its beginning upon a sound, critical basis. After returning to St. Petersburg, Böhlingk was soon appointed a member of the Imperial Russian Academy of Science, a post which he held during his life-time, and which enabled him to devote all his time to scientific work, without being bound down by other official duties. A catalogue of his publications, which fills some eight or ten pages in print, shows how well he has used the leisure thus afforded to him. Having been a member of the St. Petersburg Academy for 25 years, he was, under the rules of that corporation, allowed to reside outside of Russia, and he first chose the small German University town of Jena as his residence, which he afterwards transferred to Leipsic, where he lived up to his death.

His *monumentum aere perennius* consists of the two great Sanskrit Dictionaries, of which he was the chief compiler, and which now generally go under the name of the St. Petersburg Dictionaries. Böhlingk's name will always survive in the history of Sanskrit Philology as that of its first great lexicographer. Planned at the outset of that science, when the enormous mass of Sanskrit literature existed almost entirely in manuscripts, the work could not have been brought to a successful end without that persevering energy, which formed such a marked trait in the character of the late great scholar. Witness of this are the ten stately volumes of the great and small St. Petersburg Dictionary, a real mine of treasure, indispensable to any serious worker in that field of research. There is scarcely any independent earlier work in Sanskrit or Comparative Philology, the author of which does not gratefully acknowledge his indebtedness to the St. Petersburg Dictionary. The compilation of such a monumental work covered a period of 35 years. In the great Dictionary Roth contributed the Vedic matter, while epic and classical Sanskrit was the domain of Böhlingk. Chief among other contributors were Aufrecht, Kern, Schiefner, Stenzler and Weber. The small Dictionary is primarily a compendium of the larger one, without the quotations, but contains also such additional matter, as had come to light in the meantime.



Böhtlingk's other works are legion, and it would be impossible here even to name them all. But mention must be made of his second edition and translation of Panini, by which he made the rules of that great grammarian easily accessible to those scholars who have no time to enter into the intricacies of native commentaries; his translations and editions of the principal Upanishads, the aim of which was to restore the often corrupt and incorrect text and to find its simple and original meaning, independent of the often fictitious explanations of Sankara and other commentaries; and, last but not least, his charming compilation, called "*Indische Sprüche*," a collection of those short epigrammatic verses, illustrative of Indian thought and life, which are spread over a large number of Sanskrit books, and which are perhaps the only kind of Indian poetry that really appeals to the European mind. During his last years Böhtlingk mostly wrote on Vedic passages, and although he never claimed to be a specialist in that line, his emendations and explanations of doubtful verses in the Veda were often striking and convincing. His active pen never rested, and even on his death-bed, suffering from a painful illness, he published a small Vedic article. When death came, it closed a life that may truly be called great in its devotion to science, and the memory of it will remain as long as Sanskrit Studies are cultivated.

The President announced :—

1. That Lt.-Col. J. H. Tull Walsh, I.M.S., had been elected a Member of the Council in the place of Major A. Alcock, F.R.S., resigned, and that Lt.-Col. Walsh had also been appointed to officiate as the General Secretary of the Society during the absence of Mr. J. Macfarlaue.
2. That Dr. T. Bloch having returned from tour had taken charge of the duties of the Philological Secretary from Dr. E. D. Ross.
3. That the Hon'ble Dr. Asutosh Mukhopadhyaya had been appointed to officiate as the Treasurer of the Society during the absence of Dr. C. R. Wilson.

The Philological Secretary exhibited photographs of an old shirt belonging to the King of Delhi, forwarded by Major H. C. Tytler, I.A., of Agra, and read the following account given by Major Tytler :—

The shirt, which belongs to Mrs. Tytler, my mother, is in very good order and is printed on both sides, I am told, with the chapters of the Koran in old Arabic letters; it was obtained by my father, Col. Tytler, after the siege of Delhi, and has remained in the possession of my mother since the death of my father.

My mother's story as to how it came into his possession is as

follows : This is the true history of the shirt given to your father by Ahsanullah Khan, the King's physician, who was a prisoner under our residence in the Fort of Delhi, which had been the house of the King's uncle.

It appears, from what he said, that this shirt was one of five that were copied from Mahomet's shirt by the Emam of Mecca, and sent one to each of the great Mahomedan Potentates. The way we got it was that Marie, our French maid, who used to wander about with the children all through the empty Palace, found it lying in the King's own Palace in the Saman Burj, and knowing your father liked curiosities for his museum, brought it to me saying, "Regardez Madame comme il est curieux," to which I replied, "All right, Marie, put it down on our bed, and when master comes I will shew it to him." As soon as your father came home, I showed it to him. He replied, "It must be some holy relic written in Arabic, and as I don't understand Arabic, I will take it to the King's physician and ask him what is its history."

As soon as your father showed him the shirt, he said, falling down on his knees and worshipping it, crying, "O! Sahib, where did you find it?" On being told what I have already stated, he said, "If that old fool of a king had not thrown it off his back, when he fled from the Palace, he would not be a prisoner now, nor would I be one." The shirt is written in old Arabic, which I think is termed Kufi, and has not been in use for very—very many years—something like 150 or 200: about this I know nothing for certain.

Dr. T. Bloch exhibited specimens of a collection of ancient inscribed clay seals found by him at Basarh, the site of ancient Vaisali.

The following papers were read :—

1. *Regnal Years of Shah Alam, Bahadur Shah.*—By WILLIAM IRVINE, I.C.S., (retired).

In Part I of the Journal for 1902, p. 66, Major Wolseley Haig describes a copper coin of Shāh 'Ālam Bahādur Shāh, issued by the mint of Elicipur. As read by Major Haig, this coin bears on one side the Hijra year 1122, and on the other the regnal year 3. The result is a discrepancy; for one or other of these two dates must be wrong, By an order recorded in Dānishmaud Khān's *Bahādur-shāh-nāmah*, the official commencement of the reign was fixed for the 1st Zu'l Hġjjah 1118 H. Thus we have :—

1st year, began 1st Zu'l Hġjjah 1118,	ended 30th Zu'l Qa'da 1119
2nd year     "             "             1119,	"             "             1120

3rd year,	began	1st Zu'l Hijjah	1120,	ended	30th Zu'l Qa'da	1121
4th year	"	"	1121,	"	"	1122

No part of the 3rd year of the reign could have fallen within the year 1122 H. Major Haig suggests a possible second mode of reckoning from the victory over Kām Bakhsh (3rd Zu'l Qa'dah 1120 H.). I have never seen any evidence that would support this alternative reckoning; has Major Haig any evidence to produce? If not, would it not be safer for him to reconsider his reading of the coin, and see whether "1122" should not be read as "1121"; or the figure "3" taken as "4." If this is not possible, then had we not better put the thing down to a mistake of the mint, rather than throw doubt upon the official reckoning in this reign?

2. *A forgotten City.*—By J. F. FANTHOM. *Communicated by the Philological Secretary.*

(ABSTRACT.)

The historians tell us that in the 9th year of his reign, corresponding to 1565, after his return from Mandu, Akbar founded a city at a village, one farsang to the south of Agra, the name of which is spelt Kalakrali by Abul Fazl, and Ghrawali by Badaoni. The city received the name Nagarain or in Persian Amnābād, both meaning the abode of rest. Akbar used to retire to this place for recreation, spending his time in hunting, playing polo, hawking, watching races and other sports. Already towards the end of his reign, as we learn from Badaoni, the city had been deserted and fallen into ruins.

After translating the passages in the Akbarnāmah and Badaoni relating to the foundation of Nagarain, the author identifies it with the modern village of Kakrali near Agra.

The President announced the resolution of the Council regarding the lending of certain objects to the Victoria Memorial Hall for public exhibition there.

ANNOUNCEMENT.

The President made the following announcement:—

GENTLEMEN,

I have now the duty to announce to you an important matter and the resolution of the Council regarding it. It is the proposal that

the Society should lend certain of the pictures and other valuable objects, that belong to it or are in its care, to the Trustees of the Victoria Memorial Hall for public exhibition there in accordance with the scheme of that institution. And I will now explain to you what has been settled, and the reasons which have led the Council to its decision.

You are aware that primarily that building is intended to commemorate Queen Victoria; but secondarily it "is intended to contain a collection of sculptures, paintings, arms, manuscripts, engravings and relics of every description—provided that they possess either conspicuous individual interest or historical value—connected with notable events or with the careers of remarkable men in the history of India in modern times." It is thus part of the scheme that the Hall should perpetuate the memory of the distinguished men in India, who added lustre to Queen Victoria's reign or who inaugurated movements that culminated in her reign. The Hall will become a National Gallery of British India. It is not intended, however, that the Hall should commemorate solely the glory of the British period, but also that it should perpetuate the fame of the preceding dynasties in modern India and of the great men who attained distinction under their rule, by exhibiting memorials of them and their times.

The Asiatic Society of Bengal, though founded before the late Queen's reign, maintained and increased its reputation during her reign; and its activity during her reign cannot well be dissociated from its foundation and early researches. The Society might therefore of itself expect (or even claim) that memorials of its most distinguished members should fittingly find a place in the Hall, and His Excellency the Viceroy has anticipated such an expectation by inviting the Society to lend (if a gift should be out of the question) certain of its treasures for exhibition in the Hall; and he suggested the following objects—

two portraits of its founder Sir William Jones (one of him as a youth and the other in middle age) (Nos. 67 and 41);

the portrait of Warren Hastings (No 65);

the bust of James Prinsep, the decipherer of the old inscriptions (No. 19); and the old cannon of Mir Jumla (No. 2).

When considering His Excellency's suggestion, the Council fully appreciated the honour which he proffered the Society in allowing it a part in such a noble national institution, and have discussed the matter with the fullest sense of its importance to the Society.

The Society's objects of art consist broadly of two classes; first, objects that it has acquired and that belong to it absolutely; and secondly, those that compose the "Home Bequest." The Society

has three portraits of Sir Wm. Jones—one of him as a youth and two of him in middle age; and of these two, one (No. 41 in the catalogue) is the original, and the other (No. 71) is a copy. The original portrait of Sir Wm. Jones in middle age, the bust of James Prinsep (No. 19), and the cannon (No. 2) are the Society's own property; but the copy of Sir Wm. Jones in middle age and the youthful portrait (No. 67), and also the picture of Warren Hasting belong to the "Home Bequest." The Society's functions in dealing with the two classes are not the same, and it is necessary for me therefore to explain the difference regarding the "Home Bequest."

Mr. R. Home was an artist who came to India about the close of the eighteenth century; he became a member of this Society in 1797, and was its Secretary for two years from 1802. At that time the Society had a museum, and he contributed towards it. He settled down in Lucknow and made a considerable collection of pictures, books, casts, &c. Before his death he expressed the wish that his collection might become of public benefit in Calcutta. Accordingly, after his death, Col. Home and Capt. Home presented the collection to the Society in compliance with their father's wish, in order that the objects should be preserved in some public institution in Calcutta, where they might be properly attended to and be at all times open to public inspection. This Society accepted that trust on 5th November, 1834 (*Journal*, 1834, Vol. III. p. 524). The collection then is not the Society's property, but is held by the Society in trust for the purpose mentioned.

At that time the Society had its own museum in this building, the Home Collection was placed here and was always open to the public. In 1837 the Society asked the Government for pecuniary aid "to convert that institution into a public and national concern," but the E.I. Co. declined (*Procdgs.* 1837, p. 493). In May 1857 the Society went further and resolved that a proposal should be made to the Government for "the foundation at Calcutta of an Imperial Museum, to which the whole of the Society's collections, except the Library, might be transferred" (*Procdgs.* 1857, p. 232); and after some hesitation the Government approved of the proposal in May 1862. The scheme sanctioned provided for the establishment of "the Indian Museum," with space enough to meet various scientific requirements, and also to accommodate this Society with the whole of its Library, property, and business; and it was agreed that the Society's collections should be transferred to the Government, (*Procdgs.* 1862, p. 320). That was the beginning of the present Indian Museum; and when the quadrangular portion of it was finished, the Society's Archæological

and Natural History collections were handed over to the Museum in 1876. The Museum, however, had to meet other needs and could not accommodate the Society and its business; hence the Government gave the Society pecuniary compensation instead (Proedgs, 1876, pp.59 73-77).

The Society therefore remained in this, its own house, and the Home Collection remained here also; but since the departure of its own museum, these premises have ceased to be open to the public as freely as before. At present it can hardly be said that the Home Bequest is at all times open to public inspection; and indeed the fine picture of Warren Hastings is so little known, that in a recent life of that great Governor a list of all known portraits of him is set out and makes no mention of our picture. The intention of the donors would certainly be carried out better, if the portraits already mentioned belonging to the Home Bequest, be exhibited in the Victoria Memorial Hall.

The Council approved therefore of His Excellency's request; and learning also that the Trustees of the Memorial Hall would welcome other objects of interest, the Council proposed to offer some other memorials from its collections for exhibition at the Hall, namely—

- a fine MS. of the Gulistan (No. 114);
- a fine MS. of the Bādshāh-nāma (No. 118);
- three old copper-plate inscriptions (No. 126, found at Amgāchi; No. 135, found in the Sambhalpur district; and No 136 found, at Augāsi);
- a stone edict of King Aśoka (No, 25);
- a portrait of Shāh Ghāzi-ud-din- Haidar, king of Oudh (No. 29);
- a portrait of James Grant Duff, who wrote the "History of the Mahrattas" (No. 51);
- a painting of the interview {between the Governor-General and the Raja of Kota (No. 107); and,
- a portrait of Nasarat Jang, Nawab of Dacca (No. 91).

The last-mentioned portrait belongs to the "Home Bequest," and all the rest are the Society's property. The MSS. and old inscriptions are kept in safe custody, but the inscriptions have been deciphered and published in the Journal. All these objects will attract far more public notice and interest if exhibited in the Memorial Hall; while their removal will not really impoverish the Society's rooms, for there is not space enough at present for the effective display of all the Society's painting and engravings. As regards the portrait of the Nawab of

Dacca, the Society will fulfil its duty under the trust better by lending it for exhibition at the Hall.

It may be mentioned here that other institutions, as well as private persons, have been invited to contribute to the treasures to be exhibited in the Memorial Hall, and have cordially responded. A full list of the objects so given or lent is published by the Trustees of the Hall, and three such instances may be mentioned here as lending countenance (if any support be thought necessary) to the proposal which the Council now lay before the members; namely, the statues of Warren Hastings and Lord Cornwallis in the Town Hall, and the bust of Sir Charles Metcalfe in the late Metcalfe Library (now the Imperial Library) will be transferred to the Victoria Hall; and the fine picture of Sir Elijah Impey in the High Court will be lent to the Hall.

Before making its final decision, however, the Council took some steps to ascertain the opinion of resident members, in order that it might feel assured it might make the loan of the objects specified with the grace that general and cordial approval would confer on the loan; and I am glad to say on behalf of the Council that the proposal has obtained wide appreciation among members, while we have been enabled to safeguard the just pride of the members in the Society's memorials of those very distinguished men, of whom it does not possess duplicate memorials. Fortunately there are only two such cases, namely, the picture of Warren Hastings and the bust of James Prinsep; and the Council have resolved to have copies of these made. There will then be the original and a copy of each, as also there are of the picture of Sir Wm. Jones in middle life. As regards the picture of Warren Hastings, which belongs to the "Home Bequest," the Society would be better discharging the trust it has undertaken, if the original is exhibited at the Victoria Hall. As regards the other two objects the Council has deferred the business of deciding whether the original or the copy should be lent to the Hall, till the copies are obtained; though I may perhaps add that it appears to be generally held, that only the originals could be lent consistently with a due appreciation of the Memorial Scheme and the Society's share in it.

I have now therefore to report on behalf of the Council to the members, that the Council has resolved to contribute the objects which I have mentioned, in order that they may be lent to the Victoria Memorial Hall for an indefinite period for public exhibition there.

It will be understood from what has been mentioned of the Society's history, that the Council's present resolution does not involve any revolutionary, nor even any novel, idea; indeed it falls far short of the proposal which the Society itself advocated and pressed on the Govern

ment in 1857 and 1858, for by that proposal "the whole of the Society's collections, except the Library," would have been transferred to the Imperial Museum. The Library was the only collection excepted; hence all the Society's own pictures and the "Home Bequest" (without distinction of originals and copies) would have passed out of the Society's custody. The Indian Museum however was not large enough for all that was advocated; and only the Archæological and Natural History collections were given away. The department that would have provided for Art was omitted, and our Art collection was not transferred. We may feel sure that in making this loan to the Victoria Hall we shall be furthering one at least of the objects which the Society had at heart, when pressed so earnestly for the establishment of the Indian Museum, and gave so freely of its own treasures to be of public use there.

The Council wishes it to be understood and recorded that the objects selected are not given away. They will remain the property of the Society, and the arrangement is a loan; for the scheme of the Memorial Hall is not to gain the ownership of all the objects contemplated, but to collect and place on public exhibition objects of the highest interest, which are now scattered about and lost to general knowledge. Furthermore, the Council can place this arrangement on record in this building by setting up a tablet to this effect in this, the general meeting-room.

I may further mention that the proposal to lend these objects enables the Society to render to the public some acknowledgment of the munificent encouragement which it has received from the State through a very long series of years. It is well-known to all members that the Society receives liberal pecuniary grants from the Government annually, and that without such aid the Society would have found it very difficult, if not impossible, to accomplish all that it has actually undertaken. The present Viceroy has evinced special interest in the Society, and has recently made a most generous grant for the repair and improvement of this building.

The Council therefore make this announcement to the members in the expectation, that they will unanimously unite with it in taking advantage of the present unique and graceful opportunity, that they will declare their appreciation of the Victoria Memorial Scheme and of the noble part offered to the Society in a building that is destined to become the National Gallery of India, and that they will also associate themselves with the State, with other public bodies, and with large-hearted individuals, in lending some of the Society's treasures to complete and adorn the Memorial Hall, and thereby to extend the fame of its own most illustrious members.



**REQUISITION.**

A Requisition to the President to refer the matter of the Loan to the Victoria Hall to the whole body of members:—

J. H. Tull Walsh.  
A. Alcock.  
Dr. T. Bloch.  
E. Vredenburg.  
Arnold Caddy.  
Jogindranath Vidyabhushan.  
Jatindranath Mookerjee.  
A. S. Allan  
R. P. Ashton.  
W. K. Dods.  
A. Shrager.  
John Bathgate.

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PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.  
FOR JUNE, 1904.

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The Monthly General Meeting of the Society was held on Wednesday, the 1st June 1904, at 9 P.M.

THE HON. MR. JUSTICE F. E. PARGITER, B.A., I.C.S., President, in the chair.

The following members were present:—

Mr. R. P. Ashton, Mr. J. Bathgate, Dr. T. Bloch, Mr. I. H. Burkill, Mr. W. K. Dods, Mr. J. R. Drummond, Mr. D. Hooper, Kumar Ramessur Maliah, Captain L. Rogers, I.M.S., Mahamahopadhyaya Haraprasad Shastri, Dr. G. Thibaut, Babu Jogindra Nath Vidyabhushan, Pundit Satis Chandra Vidyabhushan, Mr. E. Vredenburg, Mr. J. Wyness.

*Visitors*:—Mr. L. L. Fermor, Mr. J. M. Maclaren, and Mr. H. K. Scott.

The minutes of the last Meeting were read and confirmed.

One hundred and twenty-three presentations were announced.

The Hon. Mr. Justice H. L. Stephen, Mr. J. F. Hewitt, Mr. R. R. Simpson, Mr. G. E. Pilgrim, Mr. G. H. Tipper, and Babu Gopal Chandra Chatterjee were balloted for and elected Ordinary Members.

A vacancy having occurred owing to the death of Dr. Otto Böhtlingk, the Council recommended Dr. G. A. Grierson for election as an Honorary Member at the next Meeting.

The scientific career of Dr. G. A. Grierson is so well known to the members of this Society that only a few words are needed in order to

explain the grounds upon which the Council proposes his election as an Honorary member. He has devoted himself almost entirely to the study of Modern Indo-Aryan Vernaculars, in which branch he is now the first authority. The great Linguistic Survey of India, carried on by him, which is now approaching its end, forms a land-mark in this branch of research, and has brought to light a vast number of important facts which are likely to throw much new and interesting light on the many problems connected with Indian Philology, History and Ethnography. During his residence in India, Dr. Grierson has been most intimately connected with this Society, the prosperity of which he has still much at heart. He contributed a great variety of valuable publications to the Journal and the Bibliotheca Indica, and for many years he was a member of Council and also for some time Philological Secretary.

T. BLOCH.

It was announced that the Hon. Dr. Gooroo Dass Banerjee had expressed a wish to withdraw from the Society.

The General Secretary reported the death of Mr. H. M. Rustomjee, an Ordinary Member of the Society.

The President announced that the Hon. Dr. Asutosh Mukhopadhyaya had kindly consented to continue to act as Treasurer in the place of Dr. C. R. Wilson, resigned.

The General Secretary reported the presentation of one coin from the Government of United Provinces of Agra and Oudh.

The President announced the following resolution of the Council regarding the rejection of certain books from the Society's library.

The Council adopt the report of the Library Committee which has gone carefully through the catalogue of books, and resolve—(1) that the books weeded out by the Committee be rejected and disposed of; the medical works being placed in a collection by themselves; (2) that the best way of disposing of them is by sale, and that they be accordingly offered for sale; (3) that the first offer be made to the Imperial Library, and that, if it purchases any of these books, the prices of the books be settled between the Council and that Library according to the price-catalogues of Quaritch and other booksellers; (4) that the next offer be made to the Calcutta University, the Presidency and other Colleges and the Medical College, and that the prices of books bought by them be settled similarly; (5) that the remainder of the rejected books be disposed of by public auction under some arrangement by

which members and others can bid, and by which real prices may be obtained if possible; and (6) that all books rejected and disposed of be first stamped plainly and indelibly with a special stamp.

This decision will be reported to the next General Meeting, and members who wish to inspect these books are welcome to do so, while objections may be made under rule 64, if necessary.

The following papers were read:—

1. *On the names hitherto unidentified in four Dutch monumental inscriptions at Ohinsurah.*—By DR. C. R. WILSON, M.A.

(Abstract.)

The initials W.A., R.V.H., R.B., and J.V.H. occur on tombs at Chinsurah. By a search in Dutch records at the Hague they have been identified as of Willem Andries, died 1668, Rogier van Heyningen, died 1665, Rogier Berenaart, died 1732, and Jacob van Hoorn who died in 1712.

2. *Proposed identification of the name of an Andhra King in the Periplus.*—By DR. C. R. WILSON, M.A.

(Abstract.)

The Periplus mentions, as Kings of Kalliene or Kalayan, Saraganes, and after him Sandanes. The former is identified with Sātakarni, but while it is impossible to say which of the kings bearing this name is referred to, there can be no doubt that Sandanes should be corrected to Sandares or Sundares and identified with Sundara-Sātakarṇi. The paper shows that the reign of this king falls exactly in the time which, on independent grounds, has been accepted as the date of the Periplus.

3. *The Asiatic species of ORMOSIA.*—By MAJOR D. PRAIN, I.M.S.

(Abstract.)

Since the publication of the list of the Asiatic species of *Ormosia* in the *Society's Journal*, Vol. lxi. 2, pp. 175 *et seq.*, in 1900, further material has become available from China and Burma. This material permits the completion of the description of *O. yunnanensis* from China, the record of a new species *O. striata* Dunn (in *Journ. Linn. Soc.* xxxv. 492) from China, and the record and description of a new species, *O. tavoyana* from Southern Burma.

4. *Notes on the Roxburghiaceæ, with a description of a new species of STEMONA.*—By MAJOR D. PRAIN, I.M.S..

(Abstract.)

In this paper a new species of *Stemona* collected in Burma in 1892

by a native collector belonging to the Royal Botanic Garden, and recently again communicated by Mr. Burkill, is described. In connection with his description, a key to the known species of *Stemona*, with notes on their nomenclature and distribution, and a note on the distribution of *Stichoneuron*, have been added to the paper.

5. *Note on the titles used in Orissa.*—By J. M. DAS. *Communicated by the Anthropological Secretary.*

(Abstract.)

The people of Orissa love titles ; they were formerly granted by the King of Orissa, but later every big landholder exercised the privilege within his jurisdiction, and latterly they have even been obtainable by the election of caste men with or without the confirmation of the Raja of Puri. A list of these titles is given. New titles are, however, still being invented.



PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.

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FOR JULY AND AUGUST, 1904.

The Monthly General Meeting of the Society was held on Wednesday, the 6th July, 1904, at 9-15 P.M.

THE HON'BLE MR. JUSTICE F. E. PARGITER, B.A., I.C.S., President, in the chair.

The following members were present:—

Mr. R. P. Ashton, Dr. J. C. Bose, Mr. I. H. Burkill, Mr. T. H. Holland, Mr. D. Hooper, Mr. T. H. D. La Touche, Kumar Ramessur Maliah, Mr. H. H. Mann, Dr. M. M. Masoom, Dr. P. C. Ray, Captain L. Rogers, I.M.S., Pandit Yogesa Chandra Sastree, Mahamahopadhyaya Haraprasad Shastri, Pandit Satis Chandra Vidyabhusana, Mr. E. Vredenburg, Lieut.-Col. J. H. Tull Walsh, I.M.S.

*Visitors*:—Pandit Vindhyesvariprasad Dube, Mr. L. L. Fermor and Mr. H. E. Stapleton.

The minutes of the last meeting were read and confirmed.

Seventy-seven presentations were announced.

Maulavi Sayid Anlad Hasan, Mr. C. A. C. Streatfeild, Mr. W. S. Talbot, Mr. A. P. Charles, Mr. Muhammad Rafiq, Mr. Brajendra Nath De and Mr. R. O. Lees were balloted for and elected Ordinary Members.

Dr. G. A. Grierson was balloted for and elected an Honorary Member.

It was announced that Mr. A. Garrett had expressed a wish to withdraw from the Society.

The President announced that Captain L. Rogers, I.M.S., had been appointed to serve on the Finance Committee, in the place of Mr. J. Bathgate, resigned.

The President announced that the Council had appointed Babu Asutosh Dhar as cashier in the place of Babu Nritya Gopal Basu, retired on pension.

The General Secretary read the following circular letter from Messrs. Breitkopf & Härtel, relative to Popular Chants used at feasts or official ceremonies, and stated that the Council had resolved to take up the subject in connection with Journal Part III:—

*Leipzig, le 19 Mars 1904.*

MONSIEUR,

Le chant peut être considéré comme l'expression la plus parfaite de l'âme d'un peuple. Le mouvement actuel de la civilisation et de la science, qui tend à rapprocher les diverses nations, s'est fait sentir dans l'étude de la musique comme dans d'autres domaines, et l'on s'aperçoit chaque jour davantage de l'intérêt qu'offre l'examen comparatif des chants populaires et nationaux. C'est ainsi que l'Empereur d'Allemagne a fait rassembler les chants populaires allemands, autrichiens et suisses. C'est une tentative qu'il serait utile de poursuivre, en l'étendant à tous les pays et à toutes les races. Nous inspirant de cette idée, nous nous proposons de constituer un recueil des chants nationaux de tous les pays, qui ne serait plus une simple compilation comme on en a si souvent essayé, mais qui s'attacherait à retracer l'histoire du texte et de la musique de chaque hymne. Un recueil historique ainsi conçu permettrait d'embrasser d'un seul coup d'œil non seulement chaque chant national dans son développement isolé, mais encore le rôle actuel de la musique populaire dans l'histoire universelle. Nous avons chargé de la partie scientifique de cette entreprise Monsieur le Dr. H. Abert, de l'Université de Halle (Allemagne), qui est avantagusement connu par ses travaux sur l'histoire de la musique allemande, grecque et italienne.

Etant donné le puissant intérêt que présentent vos hymnes nationaux, nous nous permettons de vous prier de bien vouloir nous donner :

1° le texte de votre hymne national ou des chants populaires ayant une portée patriotique (exécutés dans les fêtes et cérémonies



officielles), et la traduction soit en français, en anglais, en allemand, en italien ou en espagnol ;

2° la musique de cet hymne dans la forme usitée chez vous. Dans le cas où il existerait, à côté de l'édition pour chant avec accompagnement d'un instrument, une autre avec accompagnement d'orchestre ou pour orchestre seul, cette dernière nous serait également bienvenue. Des éditions imprimées, lorsqu'il y en a, sont préférables aux copies. Nous vous serions reconnaissants de nous les envoyer, avec facture, ou de nous indiquer l'adresse de l'éditeur ;

3° l'histoire du texte et de la musique : nom de l'auteur et du compositeur ; les circonstances politiques ou sociales dans lesquelles les chants furent composés, et le sort qu'ils ont eu depuis leur publication.

Nous vous prions de bien vouloir nous fournir ces renseignements dans l'une ou l'autre des principales langues européennes mentionnées ci-dessus.

Nous osons espérer que vous voudrez bien nous aider à être aussi complets que possible, et que vos bonnes indications nous permettront de faire à vos chants nationaux la place qui leur revient dans un ouvrage comme celui que nous préparons.

Veillez agréer, Monsieur, avec nos remerciements anticipés, l'assurance de notre considération distinguée.

BREITKOPF & HÄRTTEL.

Prière d'adresser les communications à Monsieur le Dr. H. Albert, à l'Université de Halle s. Saale (Allemagne), Richard Wagner-Strasse 26.

The proposal to lend certain portraits and other objects of interest to the Victoria Memorial Hall for public exhibition there, of which intimation had already been given by circular to all members, was brought up for final disposal. The votes of the members were laid on the table and the President requested any members who had not expressed their opinion to take the present opportunity of filling in voting paper. Five such papers were filled in and with the 154 returned by members were scrutinized. The President appointed Messrs. T. H. D. La Touche and R. P. Ashton to be scrutineers. The Scrutineers reported as follows :—

For 127.  
Against 31.  
Carried.

Pandit Yogesa Chandra Sastree exhibited an image of Jvara (the god of fever).

This is the image of Jvara (god of fever). This deity is commonly known in India by the name of *Jvarasura* and is worshipped by the Hindus when epidemic fever sets about in the country.

This image, like that of Manju Nāth, a Buddhist deity which I exhibited here before, has got three heads, having three eyes on each, six arms; but it differs from that deity in respect of its legs which are three in number. In three of its right hands there are—an arrow in the first, a battle-axe in the second, and a mace in the third. In the three left hands there are—a bow in the first, a rope in the second, and a pitcher in the third.

The use of these weapons, as it is generally known, is that when a person falls a victim to Jvara, he (gvara) binds him (victim) with his rope and beats him with his mace and cuts the victim's veins with his axe, after which he takes away the victim's blood in his pitcher. If the person try to run away he (Jvara) shoots him with his arrow.

As to the origin of this deity it is stated in most of the Purans and in *Charak, S'usrat* and other works of the Hindu medical science, that Jvara originated from the breath of *Rudra* who was angry at having been insulted by *Daksha*, the father-in-law of *S'iva*.

This version of the origin of Jvara may be considered irrational and unscientific at the first sight; but if carefully considered it would appear that the scientific and most rational explanation is involved in the very conception of it. Jvara is commonly defined by all the nosologists to be the heat of the body caused by irascible state of the three humours, *viz.*, wind, bile and phlegm. Moreover, every one, when angry, conceives heat in his body, which also is a sort of (Jvara or fever). Hence it is obvious that the primary cause of Jvara fever) is anger as has been stated in the Purāns.

The following papers were read :—

1. *Totemism among the Khonds*—By J. E. FRIEND-PEREIRA, B.A.  
*Communicated by the Anthropological Secretary.*

2. *On a new Scirpus from Beluchistan and certain of its allies.*—By J. R. DRUMMOND, B.A., I.C.S.

The Monthly General Meeting of the Society was held on Wednesday, the 3rd August, 1904, at 9-15 P.M.

THE HON. MR. JUSTICE F. E. PARGITER, B.A., I.C.S., President, in the chair.

The following members were present :—

Mr. J. Bathgate, Mr. I. H. Burkill, Mr. T. H. Holland, Mr. D. Hooper, Mr. T. D. La Touche, Mr. H. H. Mann, Mr. C. Michie, Mr. C. S. Middlemiss, Mr. G. E. Pilgrim, Major D. Prain, I.M.S., Captain L. Rogers, I.M.S., Pandit Yogesa Chandra Sastree, Mr. G. H. Tipper, Pandit Satis Chandra Vidyabhusana, Mr. E. Vredenburg, Mr. J. Wyness.

Visitors :—Mr. N. Annandale, Mr. L. L. Fermor, and Mr. J. McNeil.

The minutes of the last meeting were read and confirmed.

Forty-eight presentations were announced :—

Mr. D. B. Parasnis, Major W. J. Bythell, R.E. and Mr. L. Leigh Fermor were balloted for and elected Ordinary Members.

It was announced that Mr. E. V. Gabriel has expressed a wish to withdraw from the Society.

The President announced that Mr. R. O. Lees had been elected a member of the Council in the place of Mr. C. R. Wilson, resigned.

Mr. E. Vredenburg exhibited specimens of fossil oysters and other marine shells obtained from excavations in Clive Street, Calcutta.

Mr. G. E. Pilgrim exhibited specimens of Pleistocene fossil bones obtained at about 80 feet below the Ganges river at Allahabad.

The following papers were read :—

1. *The Later Mughals (1707-1803)*.—By WILLIAM IRVINE, I.C.S., (retired).

(Abstract.)

This paper is a continuation of Mr. Irvine's articles on the Later Mughals. It narrates the events during the short reigns of Rafia-d-Darajāt and Rafia-d-Daulah, who were set up as puppet kings in 1719 A.D. by the Sayyids after the assassination of Farrukhsiyar. The

narrative is carried up to the beginning of the reign of Muhammad Shāh.

2. *On Dioscorea birmanica—a new species from Burma, and two allied species.*—By MAJOR D. PRAIN, I.M.S., AND I. H. BURKILL.

(Abstract.)

A common wild yam of Burma is described under the name of *Dioscorea birmanica*. An ally from South-West China is described under the name of *D. yunnanensis*, and reference is made to a plant of Perak which also seems to be allied.

3. *Rusot: An ancient Eastern Medicine.*—By DAVID HOOPER.

(Abstract.)

Rusot, identified with the Lykion of the ancient Greeks, is an extract of the wood of several species of *Berberis*. Several examples preserved in the Indian Museum have been chemically examined, and are found variable in the amount of berberine and other matter which they contain.

4. *Notes on the Khasis, Syntengs and allied Tribes inhabiting the Khasi and Jaintia Hills District in Assam.*—By MAJOR P. R. T. GURDON, I.A.

(Abstract.)

The general appearance and mode of life of these tribes is described. They are matriarchal, the youngest daughter inheriting from the mother, or failing daughters, the youngest niece, or again failing daughters and nieces, the youngest female cousin. They propitiate the spirits of departed ancestors by sacrifice, and worship them by memorial stones. The Khasis are divided into clans named after natural objects (totems apparently not now worshipped). They marry in strict exogamy, the husband remaining of little account: he visits his wife for many years in her mother's house; he never becomes admitted into his wife's clan; divorce is easy, and the women enjoy considerable freedom in their sexual relations. It is remarkable that the sex of the Supreme Being is not definite in the ideas of these people, and that with their matriarchy in their worship, they call on spirits of both sexes, viz., the primeval ancestress of the family, the maternal great-uncle, and the great-grandfather. The birth, marriage, divorce, death and other ceremonies are described, and an account of the memorial stones given.

**PROCEEDINGS**  
**OF THE**  
**ASIATIC SOCIETY OF BENGAL.**

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FOR NOVEMBER, 1904.

The Monthly General Meeting of the Society was held on Wednesday, the 2nd November, 1904, at 9-15 P.M.

The Hon. Mr. Justice F. E. Pargiter, B.A., I.C.S., President, in the chair.

The following members were present :—

Mr. I. H. Burkill ; Mr. J. Bathgate ; Mr. Hari Nath De ; Mr. F. Doxey ; Mr. D. Hooper ; Mr. T. H. D. La Touche ; Mr. A. H. Lewes ; Mr. J. Macfarlane ; Kumar Ramessur Maliah ; Mr. W. H. Miles ; Captain L. Rogers, I.M.S. ; Mr. C. Saunders ; Mr. H. E. Stapleton ; Pandit Satis Chandra Vidyabhusana.

The minutes of the last meeting were read and confirmed.

Seventy-four presentations were announced.

Mr. Nelson Annandale, Munshi Ahmad Hosain Khan, Mr. H. E. Stapleton, Mr. N. L. Hallward, Mr. W. B. de Courcy and Col. Longe, R.E., were announced to have been elected Ordinary Members during the recess in accordance with Rule 7.

It was announced that the Hon. Mr. W. C. Macpherson and Mr. J. C. Fauntleroy had expressed a wish to withdraw from the Society.

The General Secretary reported the death of Dr. C. R. Wilson, an Ordinary Member of the Society.

At the request of the Council, Mr. H. R. James of the Patna College, contributed an obituary notice of Dr. Wilson:—

CHARLES ROBERT WILSON.

(born March 27th, 1863; died July 24th, 1904).

Literature and education in India have suffered a great loss in the death of Charles Robert Wilson at the comparatively early age of 41 years. His loss will be very specially felt in this Society, with which he had been connected since 1891, and which he served in various capacities.

Mr. C. R. Wilson was elected a member of the Society on the 6th of May 1891. In January 1892 he took charge of the duties of Philological Secretary and editor of the Journal, Part I. In the year 1893 he was elected General Secretary of the Society, and continued in that office till 1897. During the years 1902, 1903 and part of 1904, he was Treasurer of the Society.

The following papers were contributed by Mr. Wilson:—

1. Note on an old Picture of the Riverside of Calcutta in 1788,—published in Proceedings for August 1892.
2. Note on the Topography of the River in the 16th Century from Hugly to the Sea as represented in the *Da Asia* of de Barros,—published in Journal, Part I, No. 2, 1892.
3. The Topography of Fort William,—published in Journal Part I, No. 2 of 1893.
4. An unrecorded Governor of Fort William,—published in Journal Part I, No. 2 of 1898.
5. On the Names hitherto unidentified in our Dutch Monumental Inscription,—published in Journal Part I, No. 3, 1904.
6. Proposed identification of the name of an Andhra King in the Periplus,—published in Journal Part I, No. 3, 1904.

In all his connection with this Society, Dr. Wilson will be remembered for his remarkable energy, his catholic sympathies, and for the extraordinary enthusiasm which he brought to bear on anything of whatever nature, which had once engaged his interest. He had also the true instinct for research. Outside the Society his more solid literary labours include the well-known two volumes of his 'Early Annals of the English in Bengal' and his not less familiar work in connection with the discovery and elucidation of the sites in the Old Fort, Calcutta. In both these undertakings his wonderful power of work, and his masterly grasp of the thing he had taken in hand, are displayed with conspicuous success. The two volumes of Annals have a permanent value,

while his re-creation of the Old Fort is a piece of work much needing to be done, and once for all well done.

But important as are these services to history and to archæology—and therefore to this Society—Dr. Wilson's highest distinction lies in another field and is of such a nature as to merit the grateful remembrance of the people of Bengal at large. This is his educational work, especially as shown in that rare quality, a warm personal sympathy with the individual student. In this respect his educational career has been unique. In his love for and devoted service to the student he stands alone in Bengal '*nec viget quidquam simile aut secundum.*'

This distinguishing characteristic was manifested at once when he first came out and started work at the Dacca College in 1887. Nothing is more difficult in educational work in India than to make a personal interest in students living and practical. This difficulty hardly existed for C. R. Wilson. He soon made a name for himself in the student world, and even excited some criticism without it. When he went to Calcutta in 1890, the same devotion was shown on a larger scale and its results remain permanently in the Calcutta University Institute. This institution was started by Babu Protap Chandra Mazumdar, the veteran leader of the Brahma Somaj, and was at first called the Society for the Higher Training of Young Men. But it had but a languid existence under that title. It was Mr. Wilson's energy as Secretary during 1893—1900 which, together with the interest taken in the scheme by Lord Lansdowne, Mr. Risley, Sir Charles Elliott and other benefactors gave it its present form. Mr. Wilson also started a paper—the *Calcutta University Magazine*—intended to be an organ of university opinion, which, though fallen on evil days, still exists. But it was his personal interest in and liking for Bengali students, and a real liberality and kindness towards those needing help which constitute Mr. Wilson's best claim to the grateful recollection of the Indian community. The various expressions called forth by his death are sufficient testimony that this has been felt and acknowledged.

But with all his sympathy for Indian students, Mr. Wilson did not fail to see the weak points in the characters of most of them, or the startling defects in their education as promoted by the Calcutta University. He was one of the first to advocate the thorough reform of the Calcutta system. Early in the nineties he, along with some others including the present Bishop of Madras, drew up a scheme with a view to practical reform. He was closely interested in the work of the Universities Commission and hopeful that some good would ultimately result

from its labours. In a letter dated April 23rd of this year, he writes : " I think it is clear that the fate of education depends altogether on Government. If they appoint well-selected senates and strengthen the teaching department everywhere, we may do better things. I should hope, at any rate, that the standard of the Entrance and F.A. Examinations will be raised, the size of classes reduced and the quality of the men improved." Now that reform has become a nearer reality he can ill be spared. For C. R. Wilson had the larger and more inspiring conception of university teaching. He thought a Professor existed for something more than the convenience of a College routine. He thought the Principalship of a College should be a position of real influence and distinction, not an intermediate step in an official hierarchy. He had, moreover, grasped two truths not, perhaps, very often practically recognised in Bengal. The one was, that educational work makes as high claims in India as elsewhere, and demands as complete a self-surrender and as thorough an identification of the teacher with the interests of the taught: that this duty is as binding at a Government College as under other conditions of service, and as possible of realisation. The other was that when a thing ought to be done, it can be done. He had not idly studied the Kantian ethic. Teachers, he knew, never can be mere units in a department. They must, if they are to do their work in any true sense, be independent sources of life and energy. They require a larger discretion than other Government servants. This larger freedom, by a happy combination of circumstances and temperament, C. R. Wilson was able to realise to a great extent. He was out-spoken to the point almost of brusqueness, and a mixture of simplicity and fearlessness carried him to the attainment of ends which, to minds more normally constituted, might have seemed denied by the conditions of the case. He did not parade his religious principles, but it was not possible to know him without recognising that in these was to be sought the mainspring of his character.

When Mr. Wilson went to Patna as Principal in 1900 (after previously officiating at the Government College there for a short time in 1897-98) he identified himself wholly with the duties of his new position and was able to show his unsparing devotion to the welfare of those under his charge. He went to Patna at a critical time, when the new buildings of the Behar School of Engineering were in course of completion and about to be opened. Without neglecting the older Arts College, he threw himself heart and soul into the work involved by the new—which he himself said more than doubled the responsibilities of



the Principalship—fought its battles, watched over its interests, and contributed very greatly to its ultimate success. Unfortunately plague came to Patna in 1901 and caused great anxiety to all in responsible positions through the alarm and confusion which prevailed. It would seem that the work and anxiety entailed on Mr. Wilson from these various causes laid the seeds of weak health which have resulted in his untimely death. He was very ill in July 1900—so ill that in spite of a great desire to do so—he was unable to be present at the ceremony, when in August of that year the Lieutenant-Governor, Sir John Woodburn, opened the Engineering School. Mr. Wilson got over his illness, but it left him weak, and the plague in 1901 brought fresh strain, so that in March 1902 he was feeling generally overtaxed and was intending to take a year's furlough. Just when his plans were laid for this purpose, came the offer of the post at the Record Office which he held at the time of his death. Though it took him from education, it was a post thoroughly suited to his tastes and abilities and the offer was made in a very flattering manner. He decided to give up his furlough and accept it. He took up his new work with eager interest; but his health failed more and more, though he was home for a few weeks in 1902 and again in 1903. It was while home in 1903 that he took the new degree of doctor of letters at Oxford. He had qualified for and taken the B. Litt. in 1901. In November 1903, the Chinese carpenters had completed under his instructions, the beautiful model of the Old Fort which is now placed in the Museum. He was also able to render efficient help to the Viceroy in his collections for the Victoria Hall—help which was handsomely acknowledged by Lord Curzon in his speech at the Museum in March 1904. It is pleasant to remember now that Dr. Wilson was thoroughly happy in this new work, and often contrasted the amenities attaching to it with the rubs and jars and rebuffs of the life educational. But his friends were shocked at his increasing emaciation. In May 1904, he went to Darjeeling, but instead of getting stronger he grew worse and he was ordered home. He was terribly weak throughout the voyage; but when he reached England and his friends, the doctors held out good hopes of his ultimate recovery. This hope has proved vain; the end came peacefully in his sleep on the night of 24th July, 1904.

It may well be supposed that his best work was yet to be done. But the work he has accomplished is considerable in amount and of varied nature, testifying to the versatility of his talents. Besides the two volumes of *Annals* there was the text-book in *Ethics*, prepared in collaboration with the Rev. E. M. Wheeler in 1896. Though

confessedly written to a syllabus for lecture purposes, it has merits of its own and served its purpose. Of much higher literary value and practical usefulness is the little history of India published in 1900. Simple in design and limited in range as this little book may seem, it is perfect in its kind and is unique among the various short histories prepared for the Indian school-boy. It does what none of the others attempts, presents the really salient features of the story of the Indian peninsula, in the way best calculated to win a child's interest. The Indian school-boy could not better be introduced to a study and love of India—broadly viewed. The versatility and gifts of the man whose early death we deplore are nowhere more conspicuous than in this little book. Those who know him best will recognise that there were elements of real greatness in his character and will lament the loss of what else he might have done had he lived. As already said he will be specially missed at the present time.

“Fame is the spur that the clear spirit doth raise  
—That last infirmity of noble mind—  
To scorn delights and live laborious days ;  
But the fair guerdon when we hope to find  
And think to burst out into sudden blaze,  
Comes the blind Fury with th' abhorred shears  
And slits the thin-spun life.

“But not the praise.”

The President announced :—

1. That in accordance with Rule 38 of the Society's Rules, the names of Captain W. A. Cuppage, I.A., Rai Narsingh Chandra Dutt, Babu Purnendu Narain Singh, Lala Shyam Sunder Srivastavya, Babu Suryanarain Rao, and Babu Manmathanath Chakravarti, had been posted up as defaulting members since the last General Meeting and will be removed from the member list.
2. That Mr. J. Macfarlane having returned from leave had taken over charge of the duties of the General Secretary from Lieut.-Col. J. H. Tull Walsh, I.M.S.
3. That during the absence of Dr. E. D. Ross, on short leave, Mr. Macfarlane had agreed to carry on the duties of the Anthropological Secretary.
4. That owing to the Hon'ble Mr. Justice Asutosh Mukhopadhyaya leaving Calcutta for a few weeks, the Council had appointed Mr. W. K. Dods to carry on the duties of Treasurer.

5. That Mr. T. H. D. La Touche, Captain L. Rogers, I.M.S., and Mr. H. E. Stapleton had been appointed to serve on the Library Committee of the Society during the present year.

The General Secretary reported the presentation of the following coins :—

Six coins from the Bombay Branch of the Royal Asiatic Society, forwarded with their letter, dated 14th June, 1904.

One coin from Government of United Provinces, forwarded with their letter No.  $\frac{3004}{x-c}$  13-1, dated 16th July, 1904.

The General Secretary read a report on a find of 110 coins forwarded by the Collector of Malda with his letter No. 700G, dated 3rd December, 1902, under Treasure Trove Act.

The find consists of :—

Coins of Independent Bengal	...	...	2
Coins of Sher Shah of Delhi	...	...	63
Coins of Islam Shah of Delhi	...	...	42
Coins of Muhammad Adil of Delhi	...	...	3
			<hr/>
			110
			<hr/>

The following papers were read :—

1. *Some Archæological remains in Bishnath.*—By WALTER N. EDWARDS.

(Abstract.)

The old earthworks round Bishnath and Pertabhur are described as well as the Buroi Fortification.

The two towns were formerly populous. The old name of the former was Visvanatha, while the latter certainly was Pretappur. The remains of various temples at Bishnath are traced.

2. *Noviciæ Indiæ XXIII.—Four orchids new to the Indian Flora.*—By D. PRAIN.

(Abstract.)

Descriptions of two new species *Microstylis Cardoni* from Chota Nagpur, and *Eulophia Campbellii*, from Manbhum and Singbhum; and also of *Lecanorchis japonica*, Bl., and *L. malaccensis*, Ridl., orchids now first added to the Indian Flora.

3. *Some Kolarian riddles current among the Mundaris in Chota Nagpur, Bengal.*—By REV. PAUL WAGNER. *Communicated by the Philological Secretary.*

(Abstract.)

A collection of one hundred Kolarian riddles in the vernacular and translated.

4. *Noviciæ Indicæ XXIV.—Some new Indian plants.*—By D. PRAIN.

(Abstract.)

Some notes on species of the orders—Anonaceæ, Sterculiaceæ, Celastraceæ, Leguminosæ, Rosaceæ, Combretaceæ, Orobanchaceæ, Labiatae and Monotropæ, together with descriptions of the following new species:—*Sterculia Kingii*, *Euonymus kachinensis*, *E. subsulcatus*, *E. viburnoides*, *E. Lawsonii*, *Celastrus membranifolia*, *C. Listeri*, *Gymnosporia sikkimensis*, *Cnidia Mansoni*, *C. Havilandi*, *Humboldtia Bourdilloni*, *Geum sikkimensis*, *Potentilla sikkimensis*, *Pyrus Kurzii*, *Terminalia burmanica*, *Christisonia Scortechinii* and *Elscholtzia kachinensis*.

5. *A Language map of West Tibet with notes.*—By A. H. FRANCKE.

(Abstract.)

The distribution is given of the Rong, Leth, Sham, Purig and Balti dialects in the Indus and Shayog valleys and in Zangskhar and Rubshu; and the chief characteristics are mentioned showing that the further we advance towards the North West the more is the pronunciation in agreement with written character. The tone system is not yet quite extinct in the Indus Valley.

North West of the range of Tibetan dialects are the Dard dialects, and it seems evident that formerly they extended further up the Indus Valley, and that the North Western parts of Ladakh as far as Saspol were peopled by Dards who since their colonisation of the valley have been tibetanised. We do not know what tribes they found there when they came, which was apparently from Gilgit. Traces of the Dard language still persist in the parts where they settled.

6. *Additions to the Collection of Oriental Snakes in the Indian Museum, Calcutta.*—By NELSON ANNANDALE.

(Abstract.)

A paper adding to our knowledge of the distribution of Typhlopidae, Uropeltidae, Colubridæ and Viperidæ in India.

7. *Some Notes on the Bahmani Dynasty.*—By MAJOR WOLSELEY HAIG, I. A.

(Abstract.)

Legends connect the cognomen Bahmani with the name of the priestly caste of the Hindus, but the name, originally written in the time of the founder of the Dynasty Bahman, though by his successors Bahmani, is obtained from Bahman the son of Isfandiyar their ancestor. The founder Alā'-u-d-din Hasan Gangu Bahmani had, according to historians, four sons—one of whom is never named: he seems to have been Dā'ūd who reigned as fourth of the line after his nephew Mujahid Shah. Mujahid was one of the sons of Dā'ūd's elder brother: a second son of whom is only once named. Muhammad Shah II the fifth of the dynasty was the son of Mahmud Khan and grandson of Alā'-u-d-din: Firuz Shah and Ahmad Shah, the eighth and ninth kings of the dynasty, are likewise grandsons—sons of Ahmad Khan who never reigned.

Firuz Shah was deposed by his brother in A.H. 825 and left several sons. The eldest Hasan Khan was unambitious and did not oppose, it seems, his uncle's designs. Mubarak Khan was a younger son, and his daughter the princess Makhdūma-i-Jahan was married to the eleventh king of the dynasty and became the mother of Nizam Shah and Shamsu-d-din Muhammad Shah III, twelfth and thirteenth kings. Ahmad Shah had seven sons, the eldest of whom Alā'-u-d-din Ahmad Shah II reigned after him. Ahmad Shah II had three sons and several daughters. His eldest son, Humayun Shah Zalim, succeeded him as eleventh king and put his brothers to death.

The son of Shamsu-d-din Muhammad Shah III is stated to have changed his name on ascending the throne: becoming from Ahmad Shahabu-d-din Mahmud Shah; the reason of this has never been explained. He had three sons who reigned after him. The date of the birth of the eldest is correctly A.H. 899. Kalimu-'lah the eighteenth and last of the dynasty may have been a son or may have been a younger brother of Ahmad Shah III.

8. On *Dioscorea deltoidea*, Wall., *D. quinqueloba*, Thunb., and their allies.—By D. PRAIN and I. H. BURKILL.

(Abstract.)

Diagnoses of the following species:—*D. Prazeri* (Upper Burma), *D. sikkimensis* (Sikkim and Nepal), *D. deltoidea*, Wall. (North-Western Himalaya), *D. panthaica* (Yunnan), *D. acerifolia*, Uline (Central China), *D. septemloba*, Thunb. (Japan), *D. nipponica*, Makino (Japan), *D. quinqueloba*, Thunb. (Japan), *D. tenuipes*, Franch. and Sav. (Japan), *D. Yokusai* (Japan), and *D. enneaeura* (Central China).

9. *Ashrafpur Plates of Devakhadga*—By GANGA MOHAN LASKAR.  
*Communicated by the Philological Secretary.*

(Abstract.)

The two copper plates referred to were found in 1884 or 1885 in the Dacca District. A description of the plates is given, and a translation of as much of the inscription on them as is preserved. The plates relate to the gift of land to Buddhist monasteries by King Devakhadga to secure the longevity of his son Rājarāja Bhaṭṭa, and by the said son. Who these princes were is not known. The line seems to have reigned in the eight and ninth centuries of the Christian era.

Prof. Vidhyabhusana thought that the characters in which the inscription is written belong to Western Bengal and that the plates therefore must have been brought over from that part of the country to Eastern Bengal. A glance at the tables appended to Bühler's Grun-driss, Vol. II, would show any one that the letters in which the inscriptions are written are the ordinary Gupta characters which were common not only in Western Bengal but all over North India at a certain period. Mr. Harinath De gave the following additional reasons for coming to the conclusion that the plates must have belonged to Eastern Bengal:—

- (1) The identification of *Talapāṣaka* in Plate B with *Talpara* a village near Ashrafpur where the plates were found.
- (2) The mention of *drona*—a very common land-measure in Eastern Bengal.
- (3) The fact that the plates were found deep under ground, beneath a huge mound which must have marked the site of the Monastery of Sanghamitra to which the lands were conveyed.

In conclusion he differed from Babu Ganga Mohan Laskar with respect to the *status* of the Khadga Dynasty. In Plate B mention is made of *vatsanāga pātaka* conveyed by the *Vrihat parameshwara*? What did this last word mean? He thought it must refer to the father of Rājārāja and not to any *over-lord*, in which case the name of the monarch would have been mentioned. It seemed probable that the usual oriental sense of decorum prevented the crown-prince from needlessly naming his royal father. King Devakhadga being therefore mentioned as the *Vrihat-parameshwara*, the dynasty therefore must have been of considerable importance.

The President brought the discussion to a close by making some observations as to the probability of the plate belonging to Eastern Bengal.

PROCEEDINGS  
OF THE  
ASIATIC SOCIETY OF BENGAL.

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FOR DECEMBER, 1904.

The Monthly General Meeting of the Society was held on Wednesday, the 7th December, 1904, at 9-15 P.M.

THE HON. MR. JUSTICE F. E. PARGITER, B.A., I.C.S., President, in the chair.

The following members were present:—

Maulavi Abdul Wali, Mr. N. Annandale, Mr. I. H. Burkill, Major W. J. Bythell, R.E., Mr. B. L. Chaudhuri, Mr. G. C. Dudgeon, The Hon. Mr. A. Earle, Mr. D. Hooper, Dr. W. C. Hossack, Mr. J. Macfarlane, Mr. E. D. Maclagan, Kumar Ramessur Maliah, Mr. H. H. Mann, Dr. M. M. Masoom, The Hon. Mr. Justice Saroda Charan Mitra, Captain L. Rogers, I.M.S., Dr. E. D. Ross, Pandit Yogesa Chandra Shastree, Mr. E. H. Stapleton, Pandit Satis Chandra Vidyabhushana, Mr. E. Vredenburg.

*Visitors*:—Mr. W. M. Aders, Babu Mahendranath Gupta, Mr. M. Hill, and Rev. A. W. Young.

The minutes of the last meeting were read and confirmed.

Twenty-four presentations were announced:—

Mr. E. G. Hill, Mr. R. Nathan and Rev. S. Endle were balloted for and elected Ordinary Members.

The General Secretary reported the death of Dr. Emil Schlagintweit, the only Corresponding Member of the Society.

The President announced :—

1. That the Hon. Mr. Justice Asutosh Mukhopadhyaya and Dr. E. D. Ross, having returned to Calcutta had taken over charge of the duties of Treasurer and Anthropological Secretary from Mr. W. K. Dods and Mr. J. Macfarlane, respectively.

2. That Dr. Ross had been appointed to officiate as Philological Secretary during the absence of Dr. T. Bloch.

3. That Mr. N. Annandale had been appointed Anthropological Secretary in the place of Dr. Ross.

The General Secretary read a report on a find of 6 coins forwarded by the Deputy Commissioner of Sangor with his letter No. 2296, dated 23rd June 1904, under the Treasure Trove Act.

The finds consists of :—

Rupee of Shahjahan of Tatta mint	...	...	1
Rupees of Aurangzeb of Surat mint	...	...	3
Rupee of Khambay (Cambay) mint	...	...	1
Rupee of Lucknow mint	...	...	1
			<hr/>
			6
			<hr/>

The General Secretary reported the presentation of the following coins :—

9 coins from the Bombay Branch of the Royal Asiatic Society, forwarded with their letter dated 26th September, 1904.

1 coin from the Deputy Commissioner of Bhandara, forwarded with his letter No. 3979, dated 30th September, 1904.

4 coins from the Government of United Provinces, forwarded with their letters Nos.  $\frac{3988}{x-c/28-1}$ ,  $\frac{4064}{x-c/48-1}$ ,  $\frac{4297}{x-c/44-1}$  dated 11th and 15th October and 7th November, 1904.

The Philological Secretary read an abstract relative to the Fourteenth International Congress of Orientalists to be held at Algiers in April, 1905.

The Oriental Congress, which met at Hamburg in 1902, fixed on Algiers as the meeting-place of the 15th Congress, and this is to take place in 1905 during the Easter holidays, under the patronage of the Governor-General of Algeria.

#### OFFICERS.

*President.*—M. René Basset, Directeur de l'École Supérieure des Lettres d'Alger, 77 rue Michelet, Mustapha, Algiers.



*General Secretary.*—M. Edmond Douttet, Professor in the École Supérieure des Lettres, Parc de Fontaine-Bleue, Mustapha Supérieur, Algiers.

*Treasurer.*—M. David, Chief of the Governor-General's Private Secretariat, Palais d'Hiver, Algiers.

#### SUBJECTS.

- I. India.—Aryan Languages and Indian Languages.
- II. Semitic Languages.
- III. Mussulman Languages (Arabic, Turkish, Persian).
- IV. Egypt : African Languages : Madagascar.
- V. Far East.
- VI. Greece and the East.
- VII. African Archæology and Mussulman Art.

The titles of papers intended to be read at the Congress should be sent either to the President of the Section to which they relate, or to the General Secretary, or the Assistant Secretaries.

The subscription has been fixed at 20 francs. Wives or female relations of members of the Congress who may accompany them will have a right to a ladies' ticket, value 10 francs. This ticket will entitle the holder to all the concessions which will be eventually granted to members of the Congress by Railway and Steamer Companies, but will not entitle them to the publications of the Congress.

Letters and enquiries concerning the Congress should be addressed to the General Secretary or one of the Assistant Secretaries. Names of intending members may now be sent to the Treasurer, and should be accompanied by the subscription, without which they will not receive attention. For the convenience of future members of the Congress they may also be addressed to—M. LEROUX, *Bookseller, 28 rue Bonaparte, Paris.*

A number of Tibetan pictures in the possession of the Imperial Library, and of Col. Longe, R.E., and other private owners in Calcutta were exhibited.

The following papers were read :—

1. *The Lizards of the Andamans, with the description of a new Gecko and a note on the reproduced tail in Ptychozoon homalocephalum.*—By N. ANNANDALE, B.A.

(Abstract.)

Out of the nine Geckos recorded from the Andamans, five or possibly six would seem to have been carried thither by man. The remaining

three are indigenous. One of the three is very nearly related to forms on the nearest mainland; the second has Malabar affinities; and the third Madagascan. The Andamans have three Agamids: Two are endemic; the other is a common Indian garden species, but is very local in the Andaman Islands. Of Varanidæ, the only species is Indo-Malayan. Of the Skinks the Andamans have several species. One of these occurs down the east side of the Bay of Bengal; one is confined to the Andamans and the remaining species have a distribution similar to that of the *Varanus* mentioned earlier.

The author describes *Gonatodes Andersonii*—a new species.

The scales of the reproduced part of the tail, dorsal and ventral surfaces, of *Ptychozoon homocephalum* are slightly smaller than those on the uninjured part, and the dorsal tubercles are absent: also the loose membrane is narrower, asymmetric and not lobed. This last point is important, as Müller had thought the lobes of specific importance.

2. *Vidyapati Thakur*.—By NAGENDRANATH GUPTA. Communicated by the President.

(Abstract.)

The paper contains facts relating to the life and work of this poet. Some four hundred new poems have been obtained in one collection, and they are pronounced genuine; altogether some six or seven hundred poems of his are known. He lived to a very great age; but the exact dates of his birth and death cannot be ascertained, though the day of the month on which he died is known. He was appointed Raj Pandit in an age of Pandits, and showed untiring activity through his life. In a village near Darbhanga is preserved a very valuable manuscript of his poems which has been examined.

3. *The Occurrence of an Aquatic Glow-worm in India*.—By N. ANNANDALE, B.A.

Until recently the Lampyridæ were regarded as purely terrestrial and aerial beetles. The great abundance of fire-flies on the banks of Oriental rivers and swamps, especially in wet weather, and the fact that most glow-worms (generally the larvæ of fire-flies) seem to affect damp situations, have led me to doubt whether this is the case in a considerable number of tropical forms, regarding the life-history of which nothing is known. In 1899<sup>1</sup> I first observed and collected an aquatic larval glow-worm at Patalung in Lower Siam, and I was able to confirm the observation at the same place in 1902<sup>2</sup>. At the beginning of November, 1904, I brought some water-weeds from a tank in the suburbs of Calcutta, and among their roots I subsequently found

<sup>1</sup> P.Z.S. 1900, pp. 862-865    <sup>2</sup>Fascic. Malay. Suppl., 1903, p. xiv.

what appears to be a second Lampyrid larva. It is not so brilliantly luminous as the Siamese form, but closely resembles it. Should I be able to rear it, I hope to publish a full description in due course. So far as I am aware, these are the only cases in which aquatic Lampyrids have been found.

I may say that I am getting together material for an account of the tank fauna of Calcutta, and will be glad to receive specimens of fresh-water animals of all kinds from the neighbourhood. If possible, arrangements will be made for their identification by specialists in Europe, unless they belong to groups which are being studied by naturalists at present in India.

4. *A note on Mahamahataka Chandeswara Thakkura of Mithila.*—By THE HON. MR. JUSTICE SARODA CHARAN MITRA.

(Abstract.)

Chandeswara Thakkura is known to lawyers as a leader of the Mithila School of the Mitakshara system of Hindu law; to Sanskrit scholars as the author of the Saptaratnakara, of which the law exposition is but a part, and which contains the whole duty of man. Up to the present time little has been known of him, but that he was a minister of a Raja of Mithila, named Hara Singh, and was living in 1314 A.D., thereafter going on a pilgrimage to Gujrat.

It is now found out that he came of an ancient family of Mithila Brahmins originating at a village called Visai not yet identified. His grandfather, Devaditya, was prime minister to the then Raja of Mithila, —a feudatory of the Sultan of Delhi; and his father, Vireswara, was a minister and the author of a work Chhandoga Paddhati. His brother was a great Pandit. Mr. Colebrooke has claimed that Chandeswara rather supervised the writing than wrote the Ratnakara, but there is no improbability in the general belief that he wrote it.



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FOR 1904.

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*turing Industries, Finance and Administration from . . . 1757 to*  
*1837.* *London*, 1902. 8°

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*them.* *London*, 1902. 8°



**Rouse (William Henry Denham)** Greek Votive Offerings. An essay in the history of Greek Religion. *Cambridge*, 1902. 8°

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*From the Bulletin of the United States National Museum.*

*Presd. by the Smithsonian Institution.*

**Seyffert (Oskar).** A Dictionary of Classical Antiquities, Mythology, Religion, Literature and Art. From the German . . . With additions, by H. Nettleship . . . J. E. Sandys . . . With . . . illustrations. *London*, 1902. 4°

**Skeat (Rev. Walter W.)** A concise Etymological Dictionary of the English Language . . . New edition, *etc.* *Oxford*, 1901. 8°

**Skrine (Francis Henry)** Life of Sir William Wilson Hunter, *etc.* [With plates.] *London*, 1901. 8°

**Smith (Arthur H.)** China in Convulsion . . . With illustrations and maps. 2 vols. *Edinburgh* and *London*, 1901. 8°

**Srisvar Vidyalkankar.** Dilli-Mahotsava-Kavyam. A Sanskrit Poem on the Delhi-Durbar in six cantos . . . Edited with . . . notes . . . by Kokilesvar Bhattacharyya Vidyaratna. With . . . portraits. [*Calcutta*,] 1903. 8°

*Presd. by the Editor.*

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*In progress.*

*Presd. by the Survey.*

**SUSHRUTA.** Sushruta Sanhita . . . Edited . . . by Pandit Jivananda Vidyasagara. Fourth edition. *Calcutta*, 1899. 8°

*Presd. by Dr. A. F. B. Hoernle.*

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*From the Bulletin of the United States National Museum.*

*Presd. by the Smithsonian Institution.*



**Thomson (Major George S.) and (Dr. John)** A Treatise on Plague, etc. London, 1901. 8°

**Thurston (Edgar)** Monograph on the Ivory Carving Industry of Southern India. With . . . plates. Madras, 1901. fol.  
*Presd. by the Author.*

THE TIMES ATLAS. New edition, etc. London, 1900. fol.

**Townsend (Meredith)** Asia and Europe. Studies presenting the conclusions formed by the author in a long life devoted to the subject of the relations between Asia and Europe. Westminster, 1901. 8°

**'Umar Khayyām.** The Ruba'iyat of Omar Khayyam. Translated by E. Fitzgerald. With a commentary by H. M. Batson and a biographical introduction by E. D. Ross. London, 1900. 8°

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**Watt (Sir George) and Mann (Harold H.)** The Pests and Blights of Tea Plants. (Second edition.) Calcutta, 1903. 8°  
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**Woodroffe (John George)** The Law relating to Receivers in British India. Calcutta, 1903. 8°  
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**Yate (Major A. C.)** Lieutenant-Colonel John Haughton, Commandant of the 36th Sikhs, a hero of Tirah. A memoir. London, 1900. 8°

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LIST OF MEMBERS  
OF THE  
ASIATIC SOCIETY OF BENGAL.  
ON THE 31ST DECEMBER, 1903.

LIST OF OFFICERS AND MEMBERS OF COUNCIL  
OF THE ASIATIC SOCIETY OF BENGAL  
FOR THE YEAR 1903.

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*President :*

The Hon'ble Mr. C. W. Bolton, C.S.I., I.C.S., succeeded  
by The Hon'ble Mr. Justice F. E. Pargiter, B.A., I.C.S.

*Vice-Presidents :*

H. H. Risley, Esq., B.A., C.I.E., I.C.S.  
R. D. Oldham, Esq., A.R.S.M., F.G.S.

*Secretary and Treasurer.*

Honorary General Secretary : J. Macfarlane, Esq.  
Treasurer : C. R. Wilson, Esq., M.A., D. Litt.

*Additional Secretaries.*

Philological Secretary : T. Bloch, Esq., Ph.D.  
Natural History Secretary : E. P. Stebbing, Esq., F.E.S.  
Anthropological Secretary : E. A. Gait, Esq., I.C.S.,  
succeeded by Mr. E. H. Walsh, I.C.S.  
Joint Philological Secretary : Mahāmāhopādhyāya Hara-  
prasād Shastri, M.A.

*Other Members of Council.*

The Hon'ble Mr. A. Pedler, C.I.E., F.R.S.  
J. Bathgate, Esq.  
T. H. D. La Touche, Esq., B.A.  
Kumar Ramessur Maliah.  
Arnold Caddy, Esq., M.D., F.R.C.S.  
E. D. Ross, Esq., Ph.D.  
The Hon'ble Asutosh Mukhopadhyaya, M.A., D.L.  
I. H. Burkill, Esq., M.A.  
H. E. Kempthorne, Esq.  
T. H. Holland, Esq., A.R.C.S., F.G.S.

## LIST OF ORDINARY MEMBERS.

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R. - Resident. N.B. - Non-Resident. A. - Absent. N.S. - Non-Subscribing.  
L.M. - Life Member. F.M. - Foreign Member.

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N.B.—Members who have changed their residence since the list was drawn up are requested to give intimation of such a change to the Honorary General Secretary, in order that the necessary alteration may be made in the subsequent edition. Errors or omissions in the following list should also be communicated to the Honorary General Secretary.

Members who are about to leave India and do not intend to return are particularly requested to notify to the Honorary General Secretary whether it is their desire to continue Members of the Society; otherwise, in accordance with Rule 40 of the Rules, their names will be removed from the list at the expiration of three years from the time of their leaving India.

Date of Election.		
1903 Feb. 4.	R.	Abdul Alim. <i>Calcutta.</i>
1894 Sept. 27.	N.R.	Abdul Wali, Maulavie. <i>Ranchi.</i>
1895 May 1.	N.R.	Abdus Salam, Maulavie, M.A. <i>Backergunge.</i>
1903 April 1	N.R.	Abul Aás, Maulavi Syed, Rais and Zemindar. <i>Patna.</i>
1901 Aug. 7.	A.	Adams, Margaret. Baptist Zenana Mission. <i>Europe.</i>
1888 April 4	R.	Ahmud, Shams-ul-ulama Maulavie, Arabic Professor, Presidency College. <i>Calcutta.</i>
1888 Feb. 1.	R.	Alcock, Major Alfred William, M.B., LL.D., C.I.E., F.R.S. <i>Calcutta.</i>
1885 Mar. 4.	L.M.	Ali Bilgrami, Sayid, B.A., A.R.S.M., F.G.S. <i>Hyderabad.</i>
1899 Jan. 4.	N.R.	Ali Hussain Khan, Nawab. <i>Bopal.</i>
1903 Oct. 28.	R.	Allan, Dr. A.S., M.B. <i>Calcutta.</i>
1900 Aug. 1.	N.R.	Allen, C. G. H., I.C.S. <i>Darjeeling.</i>
1874 June 3.	R.	Ameer Ali, The Hon'ble Mr. Justice, M.A., C.I.E., Barrister-at-Law, Judge, High Court. <i>Calcutta.</i>
1893 Aug. 31.	A.	Anderson, Major A. R. S., B.A., M.B., I.M.S. <i>Europe.</i>
1884 Sept. 3.	R.	Anderson, J. A. <i>Calcutta.</i>
1890 July 2.	N.R.	Arnold, Thomas Walker, B.A., M.R.A.S. <i>Lahore.</i>
1870 Feb. 2.	L.M.	Baden-Powell, Baden Henry, M.A., C.I.E. <i>Europe.</i>
1901 Jan. 2.	R.	Badshah, K. J., B.A., I.C.S. <i>Calcutta.</i>
1898 Nov. 2.	A.	Bailey, The Revd. Thomas Grahame, M.A., B.D. <i>Europe.</i>
1891 Mar. 4.	N.R.	Baillie, D. C., I.C.S. <i>Ghasipur.</i>
1898 Aug. 3.	N.R.	Bain, Lieut.-Col. D. S. E., I.M.S. <i>Mercara.</i>
1891 April 1.	F.M.	Baker, Edward Charles Stuart. <i>Europe.</i>
1900 Aug. 29.	R.	Baker, The Hon. Mr. E. N., C.S.I., I.C.S. <i>Calcutta.</i>

Date of Election.			
1889 May 1.	R.	Banerji, (The Hon. Mr. Justice Guru Das, M.A., D.L., Judge, High Court. <i>Calcutta.</i>	
1896 Mar. 4.	N.R.	Banerji, Satish Chandra, M.A. <i>Allahabad.</i>	
1869 Dec. 1.	L.M.	Barker, R. A., M.D. <i>Europe.</i>	
1885 Nov. 4.	R.	Barman, Damudar Das. <i>Calcutta.</i>	
1877 Jan. 17.	N.R.	Barman, H. H. The Maharaja Radha Kishor Dev. <i>Tipperah.</i>	
1898 Mar. 2.	N.R.	Barnes, Herbert Charles, I.C.S. <i>Shillong.</i>	
1902 May 7.	R.	Bartlett, E. W. J. <i>Calcutta.</i>	
1894 Sept. 27.	R.	Basu, Nagendra Natha. <i>Calcutta.</i>	
1898 May 4.	R.	Bathgate, J. <i>Calcutta.</i>	
1895 July 3.	L.M.	Beatson-Bell, Nicholas Dodd, B.A., I.C.S. <i>Europe.</i>	
1876 Nov. 15.	F.M.	Beveridge, Henry, I.C.S. (retired). <i>Europe.</i>	
1900 April 4.	N.R.	Bingley, Major A. H., I.A. <i>Simla.</i>	
1898 Nov. 2.	N.R.	Black, Robert Greenhill. <i>Sylhet.</i>	
1859 Aug. 8.	L.M.	Blanford, William Thomas, LL.D., A.R.S.M., F.G.S., F.R.E.G.S., F.Z.S., F.R.S. <i>Europe.</i>	
1897 Feb. 3.	R.	Bloch, Theodor, PH.D. <i>Calcutta.</i>	
1893 Feb. 1.	N.R.	Bodding, The Revd. P. O. <i>Rampore Haut.</i>	
1885 Mar. 4.	A.	Bolton, The Hon. Mr. Charles Walter, C.S.I., I.C.S. <i>Europe.</i>	
1895 July 3.	A.	Bonham-Carter, Norman, I.C.S. <i>Europe.</i>	
1890 July 2.	A.	Bonnerjee, Womes Chunder, Barrister-at-Law, Middle Temple. <i>Europe.</i>	
1897 June 2.	N.R.	Bose, Annada Prasad, M.A. <i>Jalpaiguri.</i>	
1895 Mar. 6.	R.	Bose, Jagadis Chandra, M.A., D.S.C., C.I.E., Bengal Education Service. <i>Calcutta.</i>	
1880 Nov. 3.	R.	Bose, Pramatha Nath, B.S.C., F.G.S. <i>Calcutta.</i>	
1895 April 8.	N.R.	Bourdillon, The Hon. Sir James Austin, K.C.I.E., C.S.I., I.C.S. <i>Mysore.</i>	
1860 Mar. 7.	L.M.	Brandis, Sir Dietrich, K.C.I.E., PH.D., F.L.S., F.R.S. <i>Europe.</i>	
1900 Aug. 1.	A.	Brown, Major E. Harold, M.D., I.M.S. <i>Europe.</i>	
1901 Sept. 25.	A.	Buchanan, Major W. J., I.M.S. <i>Europe.</i>	
1887 May 4.	R.	Bural, Nobin Chand, Solicitor. <i>Calcutta.</i>	
1901 June 5.	R.	Burkill, I. H., M.A. <i>Calcutta.</i>	
1896 Jan. 8.	N.R.	Burn, Richard, I.C.S. <i>Allahabad.</i>	
1900 May 2.	N.R.	Butcher, Flora, M.D. <i>Palwal.</i>	
1898 Sept. 30.	R.	Cable, Ernest. <i>Calcutta.</i>	
1896 Jan. 8.	R.	Caddy, Dr. Arnold. <i>Calcutta.</i>	
1901 Jan. 2.	A.	Campbell, Duncan. <i>Europe.</i>	
1901 Mar. 6.	N.R.	Campbell, W. E. M., I.C.S. <i>Mirzapur.</i>	
1895 July 3.	R.	Carlyle, Robert Warrand, C.I.E., I.C.S. <i>Calcutta.</i>	
1890 June 4.	R.	Chakravati, Man Mohan, M.A., B.L. Deputy Magistrate. <i>Ohinsurah.</i>	
1901 Mar. 6.	N.R.	Chakravarti, Manmatha Nath. <i>Tamluk, Midnapur.</i>	
1901 June 5.	A.	Chapman, E. P., I.C.S. <i>Europe.</i>	
1902 Aug. 27.	R.	Chaudhuri, A., Barrister-at-Law. <i>Calcutta.</i>	

Date of Election.		
1893 Sept. 28.	R.	Chaudhuri, Banawari Lala, B.Sc., Edin. <i>Calcutta.</i>
1902 April 2.	R.	Chunder, Raj Chunder, Attorney-at-Law. <i>Calcutta.</i>
1899 Jan. 4.	A.	Clemow, Dr. Frank Gerard, M.D., Edin. <i>Europe.</i>
1880 Aug. 26.	F.M.	Clerk, Major-Genl. Malcolm G. <i>Europe.</i>
1903 Aug. 26	R.	Copleston, The Right Revd. Dr. Reginald Stephen, D.D. <i>Lord Bishop of Calcutta.</i>
1898 June 1.	F.M.	Cordier, Dr. Palmyr. <i>Europe.</i>
1876 Mar. 1.	F.M.	Crawford, James, B.A., I.C.S. <i>Europe.</i>
1901 June 5.	R.	Crawford, Major D. G., I.M.S. <i>Chinsurah.</i>
1887 Aug. 25.	R.	Criper, William Risdon, F.C.S., F.I.C., A.R.S.M. <i>Calcutta.</i>
1877 June 6.	A.	Croft, Sir Alfred W., M.A., K.C.I.E. <i>Europe.</i>
1895 July 3.	N.R.	Cumming, John Ghest, I.C.S. <i>Patna.</i>
1898 Aug. 26.	N.R.	Cuppige, Captain W. A., I.A. <i>Lucknow.</i>
1873 Dec. 3.	F.M.	Dames, Mansel Longworth, I.C.S. <i>Europe.</i>
1896 Mar. 4.	R.	Das-Gupta, Jogendra Nath, B.A., Barrister-at-Law. <i>Calcutta.</i>
1901 Aug. 28.	N.R.	Das, Govinda. <i>Benares.</i>
1903 Feb. 4.	N.R.	Das, Rai Bahadur Bhawan, M.A. <i>Hoshiarpur.</i>
1865 June 7.	N.R.	Das, Raja Jay Krishna, Bahadur, C.S.I. <i>Moradabad.</i>
1879 April 7.	N.R.	Das, Ram Saran, M.A., Secy., Oudh Commercial Bank, Limited. <i>Fyzabad, Oudh.</i>
1900 July 4.	N.R.	Das, Syam Sunder, B.A. <i>Benares.</i>
1903 June 3	N.R.	De, Hari Nath. <i>Dacca</i>
1895 Sept. 19.	N.R.	De, Kiran Chandra, B.A., I.C.S. <i>Faridpur.</i>
1902 Mar. 5.	R.	Deb Raja Binoy Krishna, Bahadur. <i>Calcutta.</i>
1895 Dec. 4.	N.R.	Delmerick, Charles Swift. <i>Budaon.</i>
1900 May 2.	N.R.	Dev, Raja Satindra, Rai Mahesaya. <i>Bansberia.</i>
1899 Aug. 30.	N.R.	Dev, Raj Kumar Satohidanand, Bahadur. <i>Deogarh, Sambalpur.</i>
1901 June 5.	R.	Dey, Nundolal. <i>Calcutta.</i>
1902 Feb. 5.	N.R.	Dixon, F. P., I.C.S. <i>Chittagong.</i>
1898 Jan. 5.	R.	Dods, W. K. <i>Calcutta.</i>
1902 July 2.	R.	Doxey, F. <i>Calcutta.</i>
1886 June 2.	R.	Doyle, Patrick, C.E., F.R.A.S., F.R.S.E., F.G.S., <i>Cal- cutta.</i>
1902 Jan. 8.	N.R.	Drummond, J. R., I.C.S. <i>Shahpur.</i>
1892 Sept. 22.	R.	Drury, Major Francis James, M.B., I.M.S. <i>Cal- cutta.</i>
1889 Jan. 2.	N.B.	Dudgeon, Gerald Cecil, Holta Tea Co., Ld. <i>Palam- pur.</i>
1879 Feb. 5.	F.M.	Duthie, J. F., B.A., F.L.S. <i>Europe.</i>
1892 Jan. 6.	R.	Dutt, Gerindra Nath. <i>Calcutta.</i>
1877 Aug. 30.	R.	Dutt, Kedar Nath. <i>Calcutta.</i>
1892 Aug. 25.	R.	Dutt, Rai Narsingh Chunder, Bahadur. <i>Howrah.</i>
1900 April 4.	A.	Dyson, Major Herbert Jekyl, F.R.C.S., I.M.S. <i>Europe.</i>
1900 July 4.	R.	Earle, The Hon. Mr. A., I.C.S. <i>Calcutta.</i>

Date of Election.			
1901	June 5.	N.R.	Ede, Francis Joseph, C.E., A.M.I.C.E., F.G.S. <i>Silchar, Cachar.</i>
1903	Oct. 28	R.	Edelston, T. D. <i>Calcutta.</i>
1903	May 6	N.R.	Edwards, Walter Noel. <i>Sootea, Assam.</i>
1871	Dec. 2.	N.R.	Eliot, Sir John, M.A., K.C.I.E., F.R.S. <i>Simla.</i>
1900	Mar. 7.	A.	Fanshawe, Sir Arthur Upton, C.S.I., K.C.I.E., I.C.S. <i>Europe.</i>
1900	Aug. 29.	A.	Fanshawe, The Hon. Mr. H. C., C.S.I., I.C.S. <i>Europe.</i>
1903	Aug. 26	N.R.	Faunthorpe, John Champion, I.C.S. <i>Naini Tal.</i>
1901	Mar. 6	N.R.	Fergusson, J. C. <i>Hardoi, Oudh.</i>
1899	Jan. 4.	A.	Ferrar, Lieutenant, M. L.L., I.A. <i>Europe.</i>
1894	Dec. 5.	A.	Finn, Frank, B.A., F.Z.S. <i>Europe.</i>
1898	Sept. 30.	R.	Firminger, The Revd. Walter K., M.A. <i>Calcutta.</i>
1902	April 2.	N.R.	Fuller, The Hon'ble Mr. J. B., C.I.E., I.C.S. <i>Shillong.</i>
1900	Dec. 5.	N.R.	Gabriel, E. V., I.C.S. <i>Indore.</i>
1903	Mar. 4	R.	Gage, Captain Andrew Thomas, M.A., M.B., B.Sc., F.L.S., I.M.S. <i>Sibpur.</i>
1893	Jan. 11.	A.	Gait, Edward Albert, I.C.S. <i>Europe.</i>
1902	May 7.	N.R.	Garrett, A., I.C.S. <i>Mozuffarpore.</i>
1899	Aug. 30.	R.	Garth, Dr. H. C. <i>Calcutta.</i>
1902	June 4.	N.R.	Ghaznavi, A. A. <i>Mymensing.</i>
1889	Jan. 2.	R.	Ghose, Jogendra Chandra, M.A., B.L. <i>Calcutta.</i>
1902	Feb. 5.	R.	Ghosh, Girish Chunder. <i>Calcutta.</i>
1889	Mar. 6.	R.	Ghosha, Bhupendra Sri, B.A., B.L. <i>Calcutta.</i>
1869	Feb. 3.	N.R.	Ghosha, Pratapa Chandra, B.A. <i>Vindiyachal.</i>
1897	Dec. 6.	A.	Godfrey, Captain Stuart, I.A. <i>Europe.</i>
1861	Feb. 5.	N.S.	Godwin-Austen, Lieut.-Colonel H. H., F.R.S., F.Z.S., F.R.G.S. <i>Europe.</i>
1899	Aug. 2.	R.	Goenka, Roomall. <i>Calcutta.</i>
1896	Nov. 4.	A.	Grant, A. J., I.C.S. <i>Europe.</i>
1897	July. 7.	N.R.	Grant, Captain J. W., I.M.S. <i>Muscat.</i>
1876	Nov. 15.	F.M.	Grierson, George Abraham, PH.D., C.I.E., I.C.S. <i>Europe.</i>
1900	Dec. 5.	L.M.	Grieve, J. W. A. <i>Kalimpong.</i>
1901	April 3.	N.R.	Guha, Abhaya Sankara. <i>Goalpara.</i>
1898	June 1.	N.R.	Gupta, Bepin Behari. <i>Outtack.</i>
1898	April 6.	N.R.	Gupta, Krishna Govinda, I.C.S., Barrister-at-Law. <i>Outtack.</i>
1898	Jan. 5.	N.R.	Gurdon, Major P. R. T., I.A. <i>Gauhati.</i>
1901	Mar. 6.	N.R.	Habibur Rahman Khan, Maulavie. <i>Bhikampur.</i>
1892	Jan. 6.	N.R.	Haig, Captain Wolseley, I.A. <i>Berar.</i>
1899	April 5.	F.M.	Hare, Major E. C., I.M.S. <i>Europe.</i>
1884	Mar. 5.	L.M.	Hassan Ali Qadr, Sir Synd, Nawab Bahadur, K.C.I.E. <i>Murshedabad</i>
1897	Feb. 3.	R.	Hayden, H. H., B.A., B.E., F.G.S., Geological Survey of India. <i>Calcutta.</i>

Date of Election.			
1892 Aug. 3.	A.	Hill, Samuel Charles, B.A., B.Sc.	<i>Europe.</i>
1872 Dec. 5.	A.	Hoernle, Augustus Frederick Rudolf, Ph.D., C.I.F.	<i>Europe.</i>
1878 Mar. 6.	A.	Hosy, W., Ph.D., I.C.S. (retired).	<i>Europe.</i>
1891 July 1.	R.	Holland, Thomas Henry, A.R.C.S., F.G.S. Director, Geological Survey of India.	<i>Calcutta.</i>
1898 Feb. 2.	R.	Hooper, David, F.C.S.	<i>Calcutta.</i>
1884 Mar. 5.	N.R.	Hooper, The Hon. Mr. John, B.A., I.C.S.	<i>Allahabad.</i>
1901 Dec. 4.	R.	Hossack, Dr. W. C.	<i>Calcutta.</i>
1873 Jan. 2.	L.M.	Houstoun, G. L., F.G.S.	<i>Europe.</i>
1890 Dec. 3.	N.R.	Hyde, The Revd. Henry Barry, M.A.	<i>Madras.</i>
1866 Mar. 7.	F.M.	Irvine, William, I.C.S. (retired).	<i>Europe.</i>
1903 Sept. 23.	N.R.	Ito, Professor C.	<i>Bombay.</i>
1899 April 5.	R.	Kempthorne, H. E.	<i>Calcutta.</i>
1882 Mar. 1.	N.R.	Kennedy, Pringle, M.A.	<i>Mozuffarpore.</i>
1867 Dec. 4.	A.	King, Sir George, M.B., K.C.I.E., LL.D., F.L.S., F.R.S., I.M.S. (retired).	<i>Europe.</i>
1896 Aug. 27.	A.	Konstam, Edwin Max.	<i>Europe.</i>
1896 July 1.	B.	Kühler, George William, M.A., Bengal Education Service.	<i>Calcutta.</i>
1891 Feb. 4.	N.R.	Kupper, Raja Lala Bunbehari.	<i>Burdwan.</i>
1899 Aug. 30.	N.R.	Lal, Dr. Mannu.	<i>Banda.</i>
1902 Feb. 5.	N.R.	Lal, Lala Shyam.	<i>Moradabad.</i>
1902 Jan. 8.	N.R.	Lall, Parmeshwara.	<i>Gya.</i>
1887 May 4.	L.M.	Lanman, Charles R.	<i>Europe.</i>
1889 Mar. 6.	N.R.	La Touche, Thomas Henry Digges, B.A., Geological Survey of India.	<i>Madras.</i>
1900 Sep. 19.	R.	Law, The Hon. Sir Edward F. G., K.C.M.G., C.S.I.	<i>Calcutta.</i>
1902 July 2.	N.R.	Leake, H. M.	<i>Dalsing Sarai.</i>
1889 Nov. 6.	R.	Lee, W. A., F.E.M.S.	<i>Calcutta.</i>
1903 July 1.	N.R.	Lefroy, Harold Maxwell.	<i>Surat.</i>
1900 May 2.	A.	Leistikow, F. R.	<i>Europe.</i>
1902 Oct. 29.	R.	Lewes, A. H.	<i>Calcutta.</i>
1889 Feb. 6.	R.	Little, Charles, M.A., Bengal Education Service.	<i>Calcutta.</i>
1902 July 2.	R.	Luke, James.	<i>Calcutta.</i>
1869 July 7.	F.M.	Lyall, Sir Charles James, M.A., K.C.S.I., C.I.E., LL.D., I.C.S. (retired).	<i>Europe.</i>
1870 April 7.	L.M.	Lyman, B. Smith.	<i>Europe.</i>
1896 Mar. 4.	A.	MacBlaine, Frederick, I.C.S.	<i>Europe.</i>
1902 July 2.	R.	Macdonald, Dr. William Roy.	<i>Calcutta.</i>
1901 Aug. 7.	R.	Macfarlane, John, Librarian, Imperial Library.	<i>Calcutta.</i>
1893 Jan. 11.	L.M.	Maclagan, E. D., M.A., I.C.S.	<i>Multan.</i>



Date of Election.		
1891 Feb. 4.	R.	Maoperson, Duncan James, M.A., C.I.E., I.C.S. <i>Calcutta.</i>
1896 Feb. 5	R.	Macpherson, The Hon'ble Mr. William Charles, C.S.I., I.C.S. <i>Calcutta.</i>
1902 April 2.	N.R.	Maddox, Captain R. H., I.M.S. <i>Ranchi.</i>
1893 Aug. 31.	N.R.	Mahatha, Purmeshwar Narain. <i>Mozuffarpore.</i>
1895 Aug. 29.	R.	Mahomed Gilani, Shamas-ul-Ulama Shaikh. <i>Calcutta.</i>
1898 Nov. 2.	N.R.	Maitra, Akshaya Kumar, B.A., B.L. <i>Rajshahi.</i>
1889 Jan. 2.	R.	Maliah, Kumar Ramessur. <i>Howrah.</i>
1893 July 5.	A.	Mangos, C. D. <i>Europe.</i>
1901 June 5.	A.	Mann, H. H., B.Sc. <i>Europe.</i>
1889 Mar. 6.	A.	Mann, John, M.A. <i>Europe.</i>
1893 Mar. 1.	N.R.	Marriott, Charles Richardson, I.C.S. <i>Bhagulpur.</i>
1902 May 7.	N.R.	Marshall, J. H. <i>Simla.</i>
1903 Aug. 5.	R.	Masoom, Dr. Mirza Muhammad. <i>Calcutta.</i>
1892 April 6.	N.R.	Maynard, Major F. P., I.M.S. <i>Darjeeling.</i>
1901 Aug. 28.	R.	McLeod, Norman. <i>Calcutta.</i>
1899 Feb. 1.	N.R.	McMahon, Captain A. H., C.S.I., C.I.E., I.A. <i>Quetta.</i>
1899 Mar. 1.	N.R.	McMinn, C. W., B.A., I.C.S. (retired). <i>Comilla.</i>
1895 July 3.	F.M.	Melitus, Paul Gregory, C.I.E., I.C.S. <i>Europe.</i>
1886 Mar. 3.	L.M.	Metha, Rustomjee Dhunjeebhoy, C.I.E. <i>Calcutta.</i>
1900 Mar. 7.	N.R.	Meyer, William Stevenson, I.C.S. <i>Simla.</i>
1900 Jan. 19.	R.	Michie, Charles. <i>Calcutta.</i>
1884 Nov. 5.	R.	Middlemiss, C. S., B.A., Geological Survey of India. <i>Calcutta.</i>
1884 Sep. 3.	R.	Miles, William Harry. <i>Calcutta.</i>
1898 April 6.	N.R.	Milne, Captain C. J., I.M.S. <i>Kasauli.</i>
1874 May 6.	F.M.	Minchin, F. J. V. <i>Europe.</i>
1896 July 1.	N.R.	Misra, Rai Lakshmi Sanker, Bahadur. <i>Benares.</i>
1897 Jan. 6.	N.R.	Misra, Tuls Ram. <i>Bareilly.</i>
1901 Aug. 28.	R.	Mitra, Kumar Narendra Nath. <i>Calcutta.</i>
1897 Nov. 3.	R.	Mitra, The Hon'ble Mr. Justice Saroda Churan, M.A., B.L. <i>Calcutta.</i>
1901 Aug. 7.	N.R.	Molony, E., I.C.S. <i>Ghasipur.</i>
1895 July 3.	N.R.	Monohan, Francis John, I.C.S. <i>Shillong.</i>
1898 May 4.	R.	Mookerjee, R. N. <i>Calcutta.</i>
1902 July 2.	R.	Morshead, L. F., I.C.S. <i>Calcutta.</i>
1894 June 6.	N.R.	Muhammad Shibli Nomani, Shams-ul-Ulama Maulavie, Professor of Arabic in the Muhammadan Oriental College. <i>Aligarh.</i>
1902 April 2.	R.	Mukerjee, Jaladhi Chunder. <i>Calcutta.</i>
1901 Jan. 2.	N.R.	Mukerjee, Dr. U. C. <i>Birbhoom.</i>
1894 Aug. 30.	R.	Mukerjee, Sib Narayan. <i>Uttarpara.</i>
1900 May 2.	R.	Mukerji, P. B., B.Sc. <i>Calcutta.</i>
1899 Sept. 29.	R.	Mukharji, Jotindra Nath, B.A. <i>Calcutta.</i>
1886 May 5.	R.	Mukhopadhyaya, The Hon'ble Dr. Asutosh, M.A. D.L., F.R.A.S., F.R.S.E. <i>Calcutta.</i>
1892 Dec. 7.	R.	Mukhopadhyaya, Panchanana. <i>Calcutta.</i>



Date of Election		
1901 April 3.	R.	Mullick, Pramatha Nath. <i>Calcutta.</i>
1901 June 5.	N.R.	Mullick, Ramani Mohan. <i>Meherpur.</i>
1885 June 3.	N.R.	Naemwoollah, Maulavie, Deputy Magistrate. <i>Etawah.</i>
1901 Mar. 6.	N.R.	Nevill, H. R., I.C.S. <i>Naini Tal.</i>
1900 Dec. 5.	R.	Nicoll, John. <i>Calcutta.</i>
1889 Aug. 29.	L.M.	Nimmo, John Duncan. <i>Europe.</i>
1892 Oct. 27.	F.M.	Norvill, Dr. Frederic H. <i>Europe.</i>
1885 Feb. 4.	N.R.	Nyayaratna, Mahāmāhopādhyāya Mahesa Chandra, C.I.E. <i>Benares.</i>
1899 Jan. 7.	A.	O'Brien, P. H., I.C.S. <i>Europe.</i>
1900 Dec. 5.	N.R.	O'Connor, Captain, W. F., R.A. <i>Darjeeling.</i>
1900 Aug. 29.	A.	O'Dwyer, Michael Francis, B.A., I.C.S. <i>Europe.</i>
1880 Dec. 1.	A.	Oldham, R. D., A.R.S.M., F.G.S., Geological Survey of India. <i>Europe.</i>
1887 July 6.	R.	Oung, Mounng Hla. <i>Calcutta.</i>
1901 Jan. 2.	N.R.	Pande, Pandit Ramavatar, B.A., I.C.S. <i>Jhansi.</i>
1880 Aug. 4.	L.M.	Pandia, Pandit Mohanlall Vishnulall, F.T.S., <i>Muttra.</i>
1901 Aug. 28.	A.	Panton, E. B. H., I.C.S. <i>Europe.</i>
1880 Jan. 7.	A.	Pargiter, The Hon'ble Mr. Justice Frederick Eden, B.A., I.C.S. <i>Europe.</i>
1901 June 5.	R.	Parsons, W. <i>Calcutta.</i>
1899 Aug. 2.	R.	Peake, C. W., M.A., Bengal Education Service. <i>Calcutta.</i>
1902 Aug. 6.	R.	Peal, H. W., F.E.S. <i>Calcutta.</i>
1873 Aug. 6.	R.	Pedler, The Hon. Mr. Alexander, C.I.E., F.R.S., Director of Public Instruction, Bengal. <i>Calcutta.</i>
1888 June 6.	L.M.	Pennell, Aubray Percival, B.A., Bar.-at-Law. <i>Rangoon.</i>
1881 Aug. 25.	R.	Percival, Hugh Melville, M.A., Bengal Education Service. <i>Calcutta.</i>
1877 Aug. 1.	N.R.	Peters, Lieut.-Colonel C. T., M.B., I.M.S. <i>Bombay.</i>
1889 Nov. 6.	F.M.	Phillott, Major D. C., I.A. <i>Europe.</i>
1889 Mar. 6.	R.	Prain, Major David, M.A., M.B., LL.D., I.M.S., Superintendent, Royal Botanic Garden. <i>Sibpur.</i>
1889 Mar. 6.	N.R.	Prasad, Hanuman, Raes and Zemindar. <i>Chunar.</i>
1896 Sept. 25.	N.R.	Pringle, A. T. <i>Madras.</i>
1880 April 7.	N.R.	Rai, Bipina Chandra, B.L. <i>Jessore.</i>
1895 Aug. 29.	R.	Rai Chaudhery, Jatindra Nath, M.A., B.L. <i>Barnagar.</i>
1901 June 5.	N.R.	Rai, Lala Lajpat. <i>Lahore.</i>
1900 April 4.	R.	Raleigh, The Hon. Mr. T. <i>Calcutta.</i>
1898 Aug. 3.	N.R.	Ram, Sita, M.A. <i>Moradabad.</i>
1890 Mar. 5.	R.	Ray, Prafulla Chandra, D.Sc., Bengal Education Service. <i>Calcutta.</i>

Date of Election.		
1887 May 4.	N.R.	Ray, Prasanna Kumar, D.Sc. (Lond. and Edin.), Bengal Education Service. <i>Dacca.</i>
1884 Mar. 5.	R.	Risley, Herbert Hope, B.A., C.I.E., I.C.S. <i>Calcutta.</i>
1903 Mar. 4.	N.R.	Rogers, Charles Gilbert, F.L.S., F.C.H., Indian Forest Department. <i>Port Blair.</i>
1900 April 4.	R.	Rogers, Captain Leonard, M.D., B.Sc., M.R.C.P., F.R.C.S., I.M.S. <i>Calcutta.</i>
1900 Aug. 29.	N.R.	Rose, H. A., I.C.S. <i>Lahore.</i>
1901 Dec. 4.	R.	Ross, E. Denison, Ph.D. <i>Calcutta.</i>
1896 Dec. 2.	N.R.	Row, B. Suryanaran, B.A. <i>Bellary.</i>
1889 June 5.	N.R.	Roy, Maharaja Girjanath. <i>Dinagepur.</i>
1903 July 1.	R.	Roy, Maharaja Jagadindra Nath, Bahadur. <i>Calcutta.</i>
1885 Mar. 4.	R.	Rustomjee, Harjeebhoy Manickjee, C.I.E. <i>Calcutta.</i>
1896 Aug. 27.	N.R.	Samman, Herbert Frederick, I.C.S. <i>Jessore.</i>
1899 June 7.	N.R.	Sarkar, Chandra Kumar. <i>Kowkanik.</i>
1898 Mar. 2.	N.R.	Sarkar, Jadu Nath. <i>Bankipore.</i>
1897 Nov. 3.	R.	Saunders, C. <i>Calcutta.</i>
1902 Feb. 5.	R.	Schulten, Dr. C. <i>Calcutta.</i>
1900 Dec. 5.	N.R.	Schwaiger, Imre George. <i>Delhi.</i>
1893 Jan. 11.	L.M.	Scindia, His Highness the Maharaja. <i>Gwalior.</i>
1902 Feb. 5.	N.R.	Sen, A. C., I.C.S. <i>Bankura.</i>
1900 Dec. 5.	N.R.	Sen, Birendra Chandra, I.C.S. <i>Dinajpur.</i>
1901 Aug. 28.	R.	Sen, Upendranath. <i>Calcutta.</i>
1885 April 1.	R.	Sen, Yadu Nath. <i>Calcutta.</i>
1897 Dec. 1.	R.	Seth, Mesrovb J. <i>Calcutta.</i>
1900 Mar. 7.	R.	Shastree, Pandit Yogesha Chandra. <i>Calcutta.</i>
1885 Feb. 4.	R.	Shastri, Mahāmāhopādhyāya Haraprasād, M.A. <i>Calcutta.</i>
1902 Dec. 3.	N.R.	Shastri, Harnarain. <i>Delhi.</i>
1902 Mar. 5.	R.	Shastri, Rajendra Chandra, M.A. <i>Calcutta.</i>
1903 April 1.	R.	Shaun, Montague Churchill. <i>Calcutta.</i>
1900 May 2.	R.	Shrager, Adolphe. <i>Calcutta.</i>
1899 May 3.	N.R.	Silberrad, Chas. A., I.C.S. <i>Banda.</i>
1903 Aug. 26.	N.R.	Simpson, J. Hope, I.C.S. <i>Naini Tal.</i>
1893 Mar. 1.	N.R.	Singh, Maharaja Kumara Sirdar Bharat, I.C.S. <i>Ghazipur.</i>
1902 Sep. 24.	R.	Singh, Kumar Birendra Chandra. <i>Calcutta.</i>
1895 Aug. 29.	R.	Singh, Lachmi Narayan, M.A., B.L. <i>Calcutta.</i>
1892 Mar. 2.	L.M.	Singh, The Hon. Raja Ooday Pratap. <i>Binga.</i>
1889 Aug. 29.	N.R.	Singh, H. H. The Maharaja Prabhu Narain, Bahadur. <i>Benares.</i>
1892 Aug. 3.	N.R.	Singh, H. H. The Hon. Maharaja Pratap Narain. <i>Ajodhya, Oudh.</i>
1889 Nov. 6.	N.R.	Singh, H. H. The Hon. Maharaja Rameshwara, Bahadur. <i>Darbhanga.</i>
1894 Feb. 7.	N.R.	Singh, H. H. Raja Vishwa Nath, Bahadur, Chief of Chhatarpur.
1901 Aug. 7.	R.	Singha, Chandra Narayan. <i>Calcutta.</i>

Date of Election.		
1894 July 4.	N.R.	Sinha, Kunwar Kushal Pal, M.A. <i>Narki P.O., Agra District.</i>
1899 June 7.	N.R.	Sinha, Purnenda Narayan. <i>Bankipur.</i>
1867 April 3.	R.	Sircar, Dr. Mahendra Lal, M.D., C.I.E., D.L. <i>Calcutta.</i>
1897 Jan. 6.	R.	Sircar, Amrita Lal, F.C.S. <i>Calcutta.</i>
1872 Aug. 5.	N.R.	Skrefsrud, The Revd. Laurentius Olavi. <i>Rampore Haut.</i>
1901 Dec. 4.	N.R.	Spooner, D. Brainerd. <i>Benares.</i>
1899 Nov. 1.	N.R.	Srivastavya, Lala Shyam Sunder Lal. <i>Pertabgarh.</i>
1898 April 6.	N.R.	Stark, Herbert A., B.A. <i>Cuttack.</i>
1901 Mar. 6.	A.	Stebbing, E. P. <i>Europe.</i>
1891 Aug. 27.	A.	Stein, M.A., PH.D. <i>Europe.</i>
1895 July 5.	A.	Steinberg, Alfred Frederick, I.C.S. <i>Europe.</i>
1899 Aug. 30.	R.	Stephen, St. John, B.A., LL.B. Barrister-at-Law. <i>Calcutta.</i>
1900 Aug. 29.	N.R.	Stephenson, Captain John, I.M.S. <i>Gujrat.</i>
1899 Mar. 1.	R.	Tocher, A. <i>Calcutta.</i>
1868 June 3.	R.	Tagore, The Hon. Maharaja Sir Jotendra Mohun, Bahadur, K.C.S.I. <i>Calcutta.</i>
1898 April 6.	R.	Tagore, Maharaja Prodyat Coomar. <i>Calcutta.</i>
1893 Aug. 31.	N.R.	Tate, G. P. <i>Seistan.</i>
1878 June 5.	N.R.	Temple, Colonel Sir Richard Carnac, Bart., C.I.E., I.A. <i>Port Blair.</i>
1875 June 2.	N.R.	Thibaut, Dr. G., Muir Central College. <i>Allahabad.</i>
1898 Nov. 2.	R.	Thornton, Edward, A.R.I., B.A. <i>Calcutta.</i>
1847 June 2.	L.M.	Thuillier, Lieut.-Genl. Sir Henry Edward Landor, K.T., C.S.I., F.R.S., R.A. <i>Europe.</i>
1891 Aug. 27.	N.R.	Thurston, Edgar. <i>Madras.</i>
1861 June 5.	L.M.	Tremlett, James Dyer, M.A., I.C.S. (retired). <i>Europe.</i>
1893 May 3.	N.R.	Vanja, Raja Ram Chandra. <i>Mayurbhanga, District Balasore.</i>
1898 Feb. 2.	R.	Vasu, Amrita Lal. <i>Calcutta.</i>
1900 Aug. 29.	A.	Vaugham, Major J. C., I.M.S. <i>Europe.</i>
1890 Feb. 5.	N.R.	Venis, Arthur, M.A., Principal, Sanskrit College. <i>Benares.</i>
1902 May 7.	R.	Vidyabhushan, Jogendra Nath Sen. <i>Calcutta.</i>
1902 June 4.	R.	Vidyabhushan, Pandit Satis Chandra, M.A. <i>Calcutta.</i>
1901 Mar. 6.	A.	Vogel, J. Ph., PH.D. <i>Europe.</i>
1894 Sept. 27.	L.M.	Vost, Major William, I.M.S. <i>Muttra.</i>
1902 Oct. 29.	R.	Vredenburg, E. <i>Calcutta.</i>
1901 Aug. 7.	A.	Walker, Dr. T. L. <i>Europe.</i>
1900 Jan. 19.	R.	Wallace, David Robb. <i>Calcutta.</i>
1901 June 5.	N.R.	Walsh, E. H., I.C.S. <i>Darjeeling.</i>
1889 Nov. 6.	R.	Walsh, Lieut.-Col. John Henry Tull, I.M.S. <i>Calcutta.</i>
1900 April 4.	N.R.	Walton, Captain Herbert James, M.B., F.R.C.S., I.M.S. <i>Bombay.</i>

Date of Election.	
1865 May 3.	A. Waterhouse, Major-General James. <i>Europe.</i>
1874 July 1.	A. Watt, Sir George, Kt., C.I.E. <i>Europe.</i>
1899 Sept. 29.	A. Weldon, The Revd. Dr. James Edward Cowell, D.D. <i>Europe.</i>
1902 April 2.	R. Wheeler, H., I.C.S. <i>Calcutta.</i>
1896 Feb. 5.	A. Williams, Captain Charles E., I.M.S. <i>Europe.</i>
1891 May 6.	R. Wilson, Charles Robert, M.A., D. LITT., Bengal Education Service. <i>Calcutta.</i>
1900 Dec. 5.	R. Woodman, H. C., I.C.S. <i>Calcutta.</i>
1894 Sept. 27.	R. Woodroffe, John George, Barrister-at-Law. <i>Calcutta.</i>
1894 Aug. 30.	N.R. Wright, Henry Nelson, B.A., I.C.S. <i>Allahabad.</i>
1898 July 6.	R. Wyness, James, C.E. <i>Calcutta.</i>

### SPECIAL HONORARY CENTENARY MEMBERS.

Date of Election.	
1884 Jan. 15.	Dr. Ernst Haeckel, Professor in the University of Jena.
1884 Jan. 15.	Charles Meldrum, Esq., C.M.G., M.A., LL.D., F.R.A.S., F.R.S. <i>Mauritius.</i>
1884 Jan. 15.	Professor A. H. Sayce, Professor of Comp. Philology. <i>Oxford.</i>
1884 Jan. 15.	Professor Emile Senart, Member of the Institute of France. <i>Paris.</i>

### HONORARY MEMBERS.

1848 Feb. 2.	Sir Joseph Dalton Hooker, G.C.S.I., C.B., M.D., D.C.L., LL.D., F.L.S., F.G.S., F.R.G.S., F.R.S. <i>Berkshire.</i>
1875 Nov. 3.	Dr. Otto von Böhtlingk. <i>Leipzig.</i>
1879 June 4.	Dr. Albert Günther, M.A., M.D., PH.D., F.Z.S., F.R.S. <i>Surrey.</i>
1879 June 4.	Dr. Jules Janssen. <i>Paris.</i>
1879 June 4.	Professor P. Regnaud. <i>Lyons.</i>
1881 Dec. 7.	Lord Kelvin, G.C.V.O., D.C.L., LL.D., F.R.S.E., F.R.S. <i>Glasgow.</i>
1883 Feb. 7.	William Thomas Blanford, Esq., LL.D., A.R.S.M., F.G.S., F.R.G.S., F.Z.S., F.R.S. <i>London.</i>
1883 Feb. 7.	Alfred Russell Wallace, Esq., LL.D., D.C.L., F.L.S., F.Z.S., F.R.S. <i>Dorset.</i>
1894 Mar. 7.	Mahāmāhāpodhyāya Chandra Kanta Tarkalankara. <i>Calcutta.</i>
1894 Mar. 7.	Professor Theodor Noeldeke. <i>Strassburg.</i>
1895 June 5.	Lord Rayleigh, M.A., D.C.L., D.SC., LL.D., PH.D., F.R.A.S., F.R.S. <i>Witham, Essex.</i>
1895 June 5.	Lt.-Genl. Sir Richard Strachey, R.E., G.C.S.I., LL.D., F.R.G.S., F.G.S., F.L.S., F.E.S. <i>London.</i>
1895 June 5.	Charles H. Tawney, Esq., M.A., C.I.E. <i>London.</i>
1896 Feb. 5.	Lord Lister, F.R.C.S., D.C.L., M.D., LL.D., D.SC., F.E.S. <i>London.</i>

Date of Election.	
1896 Feb. 5.	Sir Michael Foster, K.C.B., M.A., M.D., D.C.L., LL.D., D.SC., F.L.S., F.C.S., F.R.S. <i>Cambridge.</i>
1896 Feb. 5.	Professor F. Kielhorn, PH.D., C.I.E. <i>Göttingen.</i>
1896 Feb. 5.	Professor Charles Rockwell Lanmann. <i>Massachusetts, U.S.A.</i>
1899 Feb. 1.	Dr. Augustus Frederick Rudolf Hœrnle, PH.D., C.I.E. <i>Oxford.</i>
1899 Dec. 6.	Professor Edwin Ray Lankester, M.A., LL.D., F.R.S. <i>London.</i>
1899 Dec. 6.	Sir George King, K.C.I.E., M.B., LL.D., F.L.S., F.R.S. <i>London.</i>
1899 Dec. 6.	Professor Edward Burnett Tylor, D.C.L., LL.D., F.R.S. <i>Oxford.</i>
1899 Dec. 6.	Professor Edward Suess, PH.D., For. Mem. R.S. <i>Vienna.</i>
1901 Mar. 6.	Professor J. W. Judd, C.B., LL.D., F.R.S. <i>London.</i>
1902 Nov. 5.	Monsieur R. Zeiller. <i>Paris.</i>

## CORRESPONDING MEMBER.

Date of Election.	
1866 May 7.	Schlagintweit, Dr. Emil. <i>Zweibrücken.</i>

## ASSOCIATE MEMBERS.

Date of Election.	
1874 April 1.	Lafont, The Revd. E., C.I.E., S.J. <i>Calcutta.</i>
1875 Dec. 1.	Bate, The Revd. J. D., M.R.A.S. <i>Kent.</i>
1875 Dec. 1.	Abdul Hai, Maulavie. <i>Calcutta.</i>
1882 June 7.	Giles, Herbert. <i>Europe.</i>
1884 Aug. 6.	Moore, F., F.L.S. <i>Surrey.</i>
1885 Dec. 2.	Führer, Dr. A. <i>Europe.</i>
1886 Dec. 1.	Das, Rai Bahadur Sarat Chandra, C.I.E. <i>Calcutta.</i>
1892 April 6.	Samasrami, Satya Vrata. <i>Calcutta.</i>
1892 Dec. 7.	Brühl, P. J. <i>Sibpur.</i>
1899 April 5.	Sanyal, Rai Bahadur Ram Brahma. <i>Calcutta.</i>
1899 April 5.	Bhandari, Visnu Prasad Raj. <i>Nepal.</i>
1899 Nov. 1.	Francotte, The Revd. E., S.J. <i>Calcutta.</i>
1902 June 4.	Francke, The Revd. A. H. <i>Leh.</i>

LIST OF MEMBERS WHO HAVE BEEN ABSENT FROM  
INDIA THREE YEARS AND UPWARDS.\*

\* *Rule 40.*—After the lapse of three years from the date of a member leaving India, if no intimation of his wishes shall in the interval have been received by the Society, his name shall be removed from the List of Members.

The following members will be removed from the next Member List of the Society under the operation of the above Rule:—

Dr. Frank Gerard Clemow, M.D. (Edin).  
 Sir Alfred W. Croft, M.A., K.C.I.E.  
 Lieut. M. Ll. Ferrar, I.A.  
 A. J. Grant, Esq., I.C.S.  
 W. Hoey, Esq., PH.D., I.C.S. (retired).  
 C. D. Mangos, Esq.  
 John Mann, Esq., M.A.  
 The Revd. Dr. James Edward Cowell Welldon, D.D.  
 Captain Charles E. Williams, I.M.S.

### LOSS OF MEMBERS DURING 1903.

#### BY RETIREMENT.

A. F. M. Abdur Rahman, Esq.  
 Lieut.-Col. Charles Henry Ellison Adamson, I.A.  
 Lieut.-Col. G. F. A. Harris, I.M.S.  
 Col. Thomas Holbein, Hendley, C.I.E., I.M.S.  
 Lucas White King, Esq., B.A., LL.B., C.S.I., I.C.S.  
 Albert Bermingham Miller, Esq., B.A.  
 J. C. Mitra, Esq., M.A., B.L.  
 The Revd. Herbert Octavius Moore, M.A.  
 Dr. F. Noetling.  
 E. Seymour Wood, Esq.

#### BY DEATH.

##### *Ordinary Members.*

M. N. Chatterjee, Esq.  
 William Brown Colville, Esq.  
 William Common, Esq., C.E.  
 Babu Ram Din Singh.

##### *Honorary Member.*

Professor Edward Bayles Cowell, D.C.L.  
 Sir George Gabriel Stokes, Bart, M.A., D.C.L., F.R.S.

#### BY REMOVAL.

##### *Under Rule 9.*

Abdur Rahim, Esq.  
 Nawab M. M. Hosein Khan.

##### *Under Rule 40.*

Dr. Paul Deussen.  
 G. W. Forrest, Esq., B.A.  
 Oscar Trofftz, Esq.

[APPENDIX.]

ABSTRACT STATEMENTS  
OF  
RECEIPTS AND DISBURSEMENTS  
OF THE  
ASIATIC SOCIETY OF BENGAL  
FOR  
THE YEAR 1903.

1903.

# STATEMENT

## *Asiatic Society*

### Dr.

To ESTABLISHMENT.					Rs. As. P.	Rs. As. P.
Salaries	...	...	...	...	3,577 7 4	
Commission	...	...	...	...	406 15 0	
					3,984 6 4	
To CONTINGENCIES.						
Stationery	...	...	...	...	98 8 0	
Taxes	...	...	...	...	884 4 0	
Postage	...	...	...	...	420 2 0	
Freight	...	...	...	...	65 10 9	
Meeting	...	...	...	...	134 3 0	
Auditor's fee	...	...	...	...	100 0 0	
Registration fee	...	...	...	...	5 0 0	
Insurance fee	...	...	...	...	625 0 0	
Electric Punkhas and Lights	...	...	...	...	142 4 0	
Gas Lighting	...	...	...	...	119 0 0	
Miscellaneous	...	...	...	...	640 0 4	
					3,234 0 1	
To LIBRARY AND COLLECTIONS.						
Books	...	...	...	...	1,813 13 7	
Binding	...	...	...	...	390 0 0	
Catalogue	...	...	...	...	358 7 0	
Electric fittings	...	...	...	...	2,414 0 0	
Typewriter and Duplicator	...	...	...	...	532 8 0	
					5,508 12 7	
To PUBLICATIONS.						
Journal, Part I	...	...	...	...	686 4 6	
Journal, Part II	...	...	...	...	878 8 3	
Journal, Part III	...	...	...	...	228 5 6	
Proceedings	...	...	...	...	647 9 0	
					2,390 11 3	
To Printing charges of Circulars, Receipt-forms, &c.	...	...	...	...	158 11 0	
„ Personal Account (Writes-off and Miscellaneous)	...	...	...	...	177 9 6	
To EXTRAORDINARY EXPENDITURE.						
Royal Society's Scientific Catalogue	...	...	...	...	618 14 6	
Max Müller Memorial Fund	...	...	...	...	669 10 0	
					1,288 8 6	
Balance	...	...	...	...	181,826 9 6	
Total Rs.					198,564 4 9	



No 1.  
of Bengal.

1903.

Cr.				Rs. As. P.	Rs. As. P.
By Balance from last Report	...	...	...		175,538 11 3
BY CASH RECEIPTS.					
Publications sold for cash	...	...	259	0 0	
Interest on Investments	...	...	6,541	8 0	
Rent of Rooms on the Society's ground floor	...	...	1,375	0 0	
Allowance from Government of Bengal for the Publication of Anthropological and Cognate subjects	...	...	2,000	0 0	
Ditto from Government of Assam	...	...	1,000	0 0	
Miscellaneous	...	...	179	8 6	
					11,854 11 6
BY EXTRAORDINARY RECEIPTS.					
Subscriptions to Royal Society's Scientific Catalogue	...	...	...		1,647 11 0
BY PERSONAL ACCOUNT.					
Admission fees	...	...	544	0 0	
Subscriptions	...	...	8,299	0 0	
Sales on credit	...	...	1,033	4 0	
Miscellaneous	...	...	146	15 0	
					10,023 3 0
Total Rs.				...	198,564 4 9

C. B. WILSON,  
Honorary Secretary and Treasurer,  
Asiatic Society of Bengal.

Examined and found correct.  
MEUGENS, KING & SIMSON,  
Auditors.

## STATEMENT

### *1903. Oriental Publication Fund in Account*

Dr.

To CASH EXPENDITURE.				Rs.	As.	P.	Rs.	As.	P.
Copying	...	...	...	219	0	0			
Printing charges	...	...	...	4,416	10	0			
Editing charges	...	...	...	4,748	8	0			
Salaries	...	...	...	1,531	10	8			
Freight	...	...	...	68	9	0			
Stationery	...	...	...	38	7	0			
Postage	...	...	...	456	9	3			
Commission on collection	...	...	...	31	10	7			
Contingencies	...	...	...	40	5	9			
							11,551	6	3
To Personal Account (Writes-off and Miscellaneous)	...	...	...				7	3	8
Balance	...	...	...				11,241	3	8
Total Rs.							22,799	13	7

## STATEMENT

### *Sanskrit Manuscript Fund in Account*

Dr.

To CASH EXPENDITURE.				Rs.	As.	P.	Rs.	As.	P.
Salaries	...	...	...	2,358	2	0			
Travelling charges	...	...	...	883	13	6			
Postage	...	...	...	0	9	6			
Copying	...	...	...	22	1	0			
Purchase of manuscripts	...	...	...	1,868	15	0			
Contingencies	...	...	...	263	6	0			
							5,846	15	0
Balance	...	...	...				6,387	14	8
Total Rs.							11,784	13	8

No. 2.  
with the Asiatic Society of Bengal. 1903.

Cr.				Rs.	As.	P.	Rs.	As.	P.
By Balance from last Report	...	...	...				11,535	15	7
BY CASH RECEIPTS.									
Government allowance	...	...	...	9,000	0	0			
Publications sold for cash	...	...	...	428	1	0			
Advances recovered	...	...	...	82	6	9			
							9,510	7	9
BY PERSONAL ACCOUNT.									
Sales on credit	...	...	...				1,758	6	8
Total Rs.							22,799	18	7

C. R. WILSON,  
Honorary Secretary and Treasurer,  
Asiatic Society of Bengal.

Examined and found correct.  
MEUGENS, KING & SIMSON,  
Auditors.

No. 3.  
with the Asiatic Society of Bengal.

Cr.				Rs.	As.	P.	Rs.	As.	P.
By Balance from last Report	...	...	...				8,513	13	8
BY CASH RECEIPTS.									
Government allowance	...	...	...	3,200	0	0			
Publications sold for cash	...	...	...	15	0	0			
							3,215	0	0
BY PERSONAL ACCOUNT.									
Sales on credit	...	...	...				6	0	0
Total Rs.							11,784	13	8

C. R. WILSON,  
Honorary Secretary and Treasurer,  
Asiatic Society of Bengal.

Examined and found correct.  
MEUGENS, KING & SIMSON,  
Auditors.

STATEMENT

1903.

Personal

Dr.

	Rs.	As.	P.	Rs.	As.	P.
To Balance from last Report	...	...	...	3,512	14	1
To CASH EXPENDITURE.						
Advances for purchase of Sanskrit Manuscripts, &c.	...	...	...	4,018	0	6
To Asiatic Society	...	...	...	10,023	3	0
„ Oriental Publication Fund	...	...	...	1,753	6	3
„ Sanskrit Manuscript Fund	...	...	...	6	0	0
				11,782	9	3
Total Rs.	...	...	...	19,318	7	10

STATEMENT

Invest

Dr.

	Value.			Cost.		
	Rs.	As.	P.	Rs.	As.	P.
To Balance	...	...	...	188,300	0	0
				188,104	2	7
Total Rs.	...	...	...	188,300	0	0

FUNDS.*	PERMANENT.						TEMPORARY.						TOTAL COST.		
	Value.			Cost.			Value.			Cost.			Rs.	As.	P.
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.			
Asiatic Society ...	147,500	0	0	147,043	6	8	39,400	0	0	39,721	5	11	186,764	12	7
Trust Fund ...	1,400	0	0	1,339	6	0	...	...	...	...	...	...	1,339	6	0
	148,900	0	0	148,382	12	8	39,400	0	0	39,721	5	11	188,104	2	7

No. 4.

Account.

1903.

Cr.

				<b>Rs.</b>	<b>As.</b>	<b>P.</b>		<b>Rs.</b>	<b>As.</b>	<b>P.</b>
By Cash Receipts	...	...	...	...	...	...	...	11,384	5	6
" Asiatic Society	...	...	...	177	9	6				
" Oriental Publication Fund	...	...	...	7	8	8				
								<u>184</u>	<u>18</u>	<u>2</u>

By Balance.	Due to the Society.			Due by the Society.		
	Rs.	As.	P.	Rs.	As.	P.
Members ...	4,484	3	2	115	5	0
Subscribers ...	36	1	0	6	8	0
Employés ...	30	0	0	350	0	0
Baptist Mission Press ...	3,346	2	0	0	0	0
Mr. A. E. Caddy for cleaning pictures ...	500	0	0	0	0	0
Miscellaneous...	14	8	0	144	12	0
	<u>8,410</u>	<u>14</u>	<u>2</u>	<u>616</u>	<u>9</u>	<u>0</u>

... 7,794 5 2

Total Rs. ... 19,313 7 10

C. R. WILSON,  
Honorary Secretary and Treasurer,  
Asiatic Society of Bengal.

Examined and found correct.  
MEUGENS, KING & SIMSON,  
Auditors.

No. 3.

ment.

Cr.

					<b>Value.</b>	<b>Cost.</b>
				<b>Rs.</b>	<b>As.</b>	<b>P.</b>
By Balance*	...	...	...	...	...	...
				1,08,800		1,38,100
						<u>2 7</u>
				<u>Total Rs.</u>		<u>1,04 2 7</u>

C. R. WILSON,  
Honorary Secretary and Treasurer,  
Asiatic Society of Bengal.

Examined and found correct  
MEUGENS, KING & SIMSON,  
Auditors.

1903.

## STATEMENT *Trust*

Dr.		Rs. As. P.
To Balance ...	...	1,434 11 10
Total Rs.		1,434 11 10

## STATEMENT *Cash*

Dr.		Rs. As. P.	Rs. As. P.
To Balance from last Report ...	...	...	5,357 3 8
<b>RECEIPTS.</b>			
To Asiatic Society ...	...	18,002 6 6	
„ Oriental Publication Fund ...	...	9,510 7 9	
„ Sanskrit Manuscript Fund ...	...	3,215 0 0	
„ Personal Account ...	...	11,334 5 6	
„ Trust Fund ...	...	49 0 0	
		37,111 3 9	
Total Rs.		...	42,468 7 5

## STATEMENT *Balance*

Dr.		Rs. As. P.	Rs. As. P.
To Cash ...	...	4,991 15 11	
„ Investments ...	...	188,104 2 7	
„ Personal Account ...	...	7,794 5 2	
		200,890 7 8	
Total Rs.		...	200,890 7 8

No. 6.

*Fund.*

1903.

Cr.

				Rs.	As.	P.
By Balance from last Report	...	...	...	...	1,885	11 10
„ Interest on Investment	...	...	...	...	49	0 0
			Total Rs.	...	1,434	11 10

C. R. WILSON,  
Honorary Secretary and Treasurer,  
Asiatic Society of Bengal.

Examined and found correct.  
MEUGENS, KING & SIMSON,  
Auditors.

No. 7.

*Account.*

Cr.

EXPENDITURE.				Rs.	As.	P.	Rs.	As.	P.
By Asiatic Society	...	...	...	16,560	1	9			
„ Oriental Publication Fund	...	...	...	11,551	6	3			
„ Sanskrit Manuscript Fund	...	...	...	5,346	15	0			
„ Personal Account	...	...	...	4,018	0	6			
			Balance	...	...	...	37,476	7	6
							4,991	15	11
			Total Rs.	...	...	...	42,468	7	5

C. R. WILSON,  
Honorary Secretary and Treasurer,  
Asiatic Society of Bengal.

Examined and found correct.  
MEUGENS, KING & SIMSON,  
Auditors.

No. 8.

*Sheet.*

Cr.

				Rs.	As.	P.	Rs.	As.	P.
By Asiatic Society	...	...	...	181,826	9	6			
„ Oriental Publication Fund	...	...	...	11,241	8	8			
„ Sanskrit Manuscript Fund	...	...	...	6,387	14	8			
Trust Fund	...	...	...	1,434	11	10			
			Total Rs.	...	...	...	200,890	7	8
							200,890	7	8

C. R. WILSON,  
Honorary Secretary and Treasurer,  
Asiatic Society of Bengal.

Examined and found correct.  
MEUGENS, KING & SIMSON,  
Auditors.





## LIBRARY.

THE following books have been added to the Library from January to March, 1904.

AIYÂDGÂR-I-ZABIRÂN, Shatrôihâ-i-Airân, and Afdiya va Sahigiya-i-Sistân. Translated with notes by Jivanji Jamshedji Modi. *Bombay*, 1899. 8°

*Presd. by the Trustees of the Parsee Panchayet Funds  
and Properties, Bombay.*

AL-BATTÂNÎ SIVA ALBATENII OPUS ASTRONOMICUM. Ad fidem codicis escurialensis Arabice editum latine versum, adnotationibus instructum a Carolo Alphonso Nallino. *Mediolani Insubrum*, 1908. 4°

*In progress.*

*Pubblicazioni del Reale Osservatorio di Brera in Milano.*

*Presd. by the Reale Osservatorio de Brera in Milano.*

**Ameer Ali, Syed.** The Spirit of Islam, or the life and teachings of Mohammed. *Calcutta*, 1902. 8°

ARDA VIRAF NAMEH. The original Pahlavi text, with an introduction, notes, Gujarati translation, and Persian version of Zartosht Behram in verse. By Dastur Kaikhusru Dastur Jamaspji Jamasp Asa. *Bombay*, 1902. 8°

*Presd. by the Trustees of the Parsee Panchayet Funds  
and Properties, Bombay.*

**Arnott (M. H.)** Report with photographs of the repairs executed to some of the principal temples at Bhûbânêsvâr and caves in the Khândâgiri and Udaigiri Hills, Orissa, India, between 1898 and 1903. *London*, 1903. Obl.

*Presd. by the Government of Bengal.*

BABAD TANAH DJAWI, in proza. Javaansche Geschiedenis loopende tot het Jaar 1647 dër Javaansche Jaartelling. Uitgegeven door J. J. Meinsma. 's-Gravenhage, 1903. 8°

*In progress.*

*Presd. by the Koninklijk Instituut voor de Taal-, Land-en Volkenkunde van Nederlandsch-Indie.*



**Bailey (F. Manson)** Contributions to the Flora of British New Guinea  
[Brisbane, 1903.] fol.

*Presd. by the Author.*

**Bald (Claud)** Indian Tea : its culture and manufacture, etc. *Calcutta*,  
1903. 8°

**Beazley (C. Raymond)** On an hitherto unexplained manuscript of  
John de Plano Carpini. [London, 1902.] 8°

*From "the Geographical Journal."*

*Presd. by the Government of India, Home Department.*

**Bertrand (C.-Eg.)** Les Coprolithes de Bernissart. Première partie.  
Les Coprolithes qui ont été attribués aux Iguanodons. *Bruxelles*,  
[1903.] 4°

*Extrait des Mémoires Musée Royal d'Histoire Naturelle de Belgique.*

*Presd. by the Musée.*

**Bevan (Edwyn Robert)** The House of Seleucus... With plates and  
maps, 2 vols. *London*, 1902. 8°

**Boeck (Kurt)** Durch Indien ins verschlossene Land Nepal. Ethno-  
graphische und photographische Studienblätter, etc., *Leipzig*, 1903.  
8°

**BOMBAY RECORD OFFICE.** Press List of Ancient Documents preserved  
in the Bombay Record Office, 1646-1700. [Bombay, 1903.] fol.

*Presd. by the Government of Bombay.*

**Bradley-Birt (F. B.)** Chota Nagpore : a little-known province of the  
Empire... With an introduction by the... Earl of Northbrook... With  
...illustrations and a map. *London*, 1903. 8°

*Presd. by the Government of Bengal.*

**British Museum.** (*Natural History*). Catalogue of the Books,  
Manuscripts, Maps and Drawings in the British Museum, etc.  
*London*, 1903. 4°

*In progress.*

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Catalogue of the collections of Palæarctic Butter-  
flies formed by the late J. H. Leech, and presented to the...  
British Museum by his mother Mrs. E. Leech. By R. South.  
*London*, 1902. 4°

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First Report on Economic Zoology by F. V.  
Theobald. *London*, 1903. 8°



**British Museum.** A Monograph of the Tsetse-flies—Genus *Glossina*, Westwood—based on the collection in the British Museum by E. E. Ansten. With a chapter on Mouth-parts by H. J. Hansen. London, 1903. 8°

*Presd. by the Museum.*

**Buchanan (Major Andrew)** Malarial Fevers and Malarial Parasites in India . . . Second edition, enlarged. Calcutta, 1903. 8°

**Buckley (Charles Burton)** An Anecdotal History of old times in Singapore . . . from . . . 1819 to . . . 1867. With portraits and illustrations. 2 vols. Singapore, 1902. 8°

**BUDDHAJĪVANACARITAM.** [A brief Hindi translation of Lalitavistara. Edited by Khunnilāla Sāstrī.] Bareli, [1903.] 8°

*Presd. by the Editor.*

**BUNDEHESH.** The Pahlavi Bundeshesh, lithographed by Maneckji Rustomji Unvalla. Bombay, 1897. 4°

*Presd. by the Trustees of the Parsee Punchayet Funds and Properties, Bombay.*

**Burgess (James)** Digambara Jaina Iconography. Bombay, 1904. 4°  
*Reprinted from the "Indian Antiquary."*

*Presd. by the Author.*

**Butler (Alfred J.)** The Arab Conquest of Egypt and the last thirty years of the Roman Domiuion. [With maps.] Oxford, 1902. 8°

**THE CAMBRIDGE MODERN HISTORY.** Planned by . . . Lord Acton . . . Edited by A. W. Ward, . . . G. W. Prothero, S. Leathes. Cambridge, 1903, etc. 8°

*In progress.*

**Casserly (Capt. Gordon)** The Land of the Boxers, or China under the Allies. With . . . illustrations, etc. London, 1903. 8°

**Church (Percy W.)** Chinese Turkestan, with caravan and rifle. [With illustrations.] London, 1901. 8°

**Clemow (Frank G.)** The Geography of Disease. Cambridge, 1903. 8°

**Darab Dastur Peshotan Sanjana.** The Position of Zoroastrian Women in remote antiquity, as illustrated in the Avesta, the sacred books of the Parsees. Bombay, 1892. 8°

*Presd. by the Trustees of the Parsee Punchayet Funds and Properties, Bombay.*



- Darwin (Charles)** More Letters of C. Darwin. A record of his work in a series of hitherto unpublished letters. Edited by F. Darwin . . . and A. C. Seward . . . Illustrated. 2 vols. *London*, 1903. 8°
- Dauids (T. W. Rhys)** Buddhist India. [With plates.] *London*, 1903. 8°  
*Part of "The Story of the Nations."*
- Davidson (James W.)** The Island of Formosa, past and present. History, people, resources, and commercial prospects . . . With . . . maps . . . and . . . illustrations, etc. *London and New York*, 1903. 8°
- Edwardes (S. M.)** The Rise of Bombay. A retrospect. *Bombay*, 1902. 8°  
*Reprinted from Vol. X. of the Census of India Series, 1901.*  
*Presd. by the Government of India, Home Department.*
- Falke (Robert)** Der Buddhismus in unserem modernen deutschen Geistesleben. *Halle a. S.*, 1903. 8°
- Fausböll (V.)** Indian Mythology according to the Mahābhārata, in outline. *London*, 1903. 8°  
*Luzac's Oriental Religious Series, vol. I.*
- Finn (Frank)** The Birds of Calcutta. *Calcutta*, 1901. 8°
- Francke (Rev. A. H.)** Notes on a Collection of Stone-Implements from Ladakh. *Bombay*, 1903. 4°  
*Reprinted from the "Indian Antiquary."*
- \_\_\_\_\_. Ladakher Sprüchwörter und Rätsel. 2te Sammlung. [Tibetan.] 1903. 8°
- \_\_\_\_\_. The Ladakhi Pre-Buddhist Marriage Ritual. [Tibetan.] 1901. 8°
- \_\_\_\_\_. Reynard the Fox in Ladakh. [Tibetan Texts.] [1903.] 8°  
*Presd. by the Author.*
- Freshfield (Douglas W.)** Round Kangchenjunga: A narrative of mountain travel and exploration . . . With illustrations and maps. *London*, 1903. 8°
- Fuzli Rubbee, Khondkar.** The origin of the Musalmans of Bengal: being a translation of "Haqiqate Musalman-i-Bengalah." *Calcutta*, 1895. 8°





**Geiger (Wilhelm) and Windischmann (Friedrich H. H.)** Zarathushtra in the Gathas, and in Greek and Roman classics, translated from the German . . . With notes on M. Darmesteter's theory regarding the date of the Avesta . . . by Darab Dastur Peshotan Sanjana. *Leipzig*, 1897. 8°.

*Presd. by the Trustees of the Parsee Panchayet Funds  
and Properties, Bombay.*

**Gerrare (Wirt)** Greater Russia. The continental empire of the old world . . . With illustrations, etc. *London*, 1903. 8°

**Ghanasham Nilkanth Nadkarni, Rao Bahadur.** Journal of a Visit to Europe in 1896. *Bombay*, 1903. 8°

**Ghilardi (O.)** A Monograph on Wood-carving in Bengal. *Calcutta*, 1903. fol.

**Gibbs (E. J. W.)** A History of Ottoman Poetry... Edited by E. G. Browne. vol. i. *London*, 1900. 8°

**Grierson (G. A.)** Specimens of the Bengali and Assamese Languages. *Calcutta*, 1903. 4°

*Linguistic Survey of India, Vol. V, Pt. I.*

*Presd. by the Author.*

**Gurdon (Major P. R. T.)** Some Assamese Proverbs.—Second edition. *Shillong*, 1903. 8°

*Presd. by the Government of Assam.*

**Hakluyt [Richard]** The Texts and Versions of John de Plano Carpini and William de Rubruquis . . . Edited by C. R. Bleazley. *London*, 1903. 8°

*Presd. by the Government of India, Home Department.*

**Hall (H. Fielding)** The Soul of a People [the Burmese]. *London*, 1903. 8°

**Hallock-Greenewalt (Mary)** Pulse and Rhythm. [*Philadelphia*, 1903.] 8°

*Reprinted from the Popular Science Monthly.*

*Presd. by the Author.*

**Hann (Dr. Julius)** Hand book of Climatology . . . Translated with additional references and notes by R. De C. Ward. *New York*, 1903. 8°



- Harischandra A. Tälcherkar.** Lord Curzon in Indian Caricature: being a collection of cartoons, reproduced in miniature, selected from the illustrated comic Journals of India and arranged in chronological order with an elucidatory narrative. *Bombay*, 1902. 8°
- Hastings (James)** A Dictionary of the Bible . . . Edited by J. Hastings . . . Fifth impression, 4 vols. *Edinburgh*, 1903. 4°
- Hedin (Sven)** Central Asia and Tibet: Towards the holy city of Lassa . . . With . . . illustrations . . . and . . . maps, etc., 2 vols. *London*, 1903. 8°
- Hewlett (Richard T.)** A Manual of Bacteriology, clinical and applied . . . Second edition. [With plates.] *London*, 1902. 8°
- Hooker (Sir Joseph D.)** A Sketch of the Flora of British India. (under revision). *London*, 1904. 8°  
*Presd. by the Government of India, Revenue and Agricultural Department.*
- Huart (Clément)** A History of Arabic Literature. *London*, 1903. 8°
- Hunter (Sir William Wilson)** The India of the Queen and other essays . . . Edited by Lady Hunter, with an introduction by F. H. Skrine. *London*, 1903. 8°
- Ibn Qotaiba.** Liber poësis et poëtarum quem edidit M. J. De Goeje. *Ingduni-Batavorum*, 1904. 8°  
*Presd. by the Université de Leyde.*
- Imperial Library.** Catalogue of Books in the Reading Room. With supplement and index. *Calcutta*, 1903. 4°  
*Presd. by the Library.*
- India Office.** Catalogue of two collections of Sanskrit Manuscripts preserved in the India Office Library. By C. H. Tawney and F. W. Thomas. *London*, 1903. 8°  
*Presd. by the Government of Bengal.*
- Jackson (A. V. Williams)** Zoroaster, the Prophet of Ancient Iran. *New York*, 1899. 8°
- Jivanji Jamshedji Modi.** Astôdân, and recorded instances of children having been nourished by wolves and birds of prey. Two papers, etc. *Bombay*, 1889. 8°
- . Cucullin and Conloch and Rustam and Sohrâb. *Bombay*, 1893. 8°
- . Dante and Virâf and Gârdis and Kâus. *Bombay*, 1892. 8°



**Jivanji Jamshedji Modi.** A Dictionary of Avestic Proper Names, *etc.*  
[In Gujrati]. *Bombay*, 1892. 8°

—————. The Funeral Ceremonies of the Parsees, their  
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The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. This ensures transparency and allows for easy verification of the data.

In the second section, the author details the various methods used to collect and analyze the data. This includes both primary and secondary research techniques. The primary research involved direct observation and interviews with key stakeholders. Secondary research was conducted through a review of existing literature and industry reports.

The third section presents the findings of the study. It highlights several key trends and patterns observed in the data. These findings are supported by statistical analysis and visual representations such as charts and graphs. The results indicate a significant shift in consumer behavior over the period studied.

Finally, the document concludes with a series of recommendations based on the findings. These suggestions are aimed at helping organizations better understand their market and improve their strategic decision-making. The author notes that ongoing monitoring and evaluation will be necessary to track the effectiveness of these recommendations.



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