

TRANSACTIONS

OF THE

AGRICULTURAL AND HORTICULTURAL

SOCIETY OF INDIA.

VOL. V.

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1838.

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OF THE
AGRICULTURAL AND HORTICULTURAL SOCIETY
OF INDIA.

(1ST JANUARY, 1838.)

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Agricultural and Horticultural Society of India.

A General Meeting of this Society was held at the Town Hall, on Wednesday morning, the 8th November, 1837, at $\frac{1}{2}$ past 9 o'clock.

Present.

The Honourable Sir E. Ryan, President, in the Chair.

The Honourable Col. Rehling, W. Cracroft, Esq., W. Storm, Esq., A. Colvin, Esq., W. Ainslie, Esq., Dr. A. R. Jackson, R. Watson, Esq., John Allan, Esq., Dr. Huffnagle, E. Sterling, Esq., A. Grant, Esq., J. Colquhoun, Esq., Dr. Strong, D. W. H. Speed, Esq., D. B. Syers, Esq., Dewan Ramcomul Sen, W. Jackson, Esq., R. Walker, Esq., D. F. McLeod, Esq., N. B. E. Baillie, Esq., D. Hare, Esq., W. F. Gibbon, Esq., A. Beattie, Esq., G. A. Prinsep, Esq., E. Preston, Esq., T. Leach, Esq., G. F. Speed, Esq., M. A. Bignell, Esq., W. K. Ewart, Esq., M. M. Manuk, Esq., J. Jenkins, Esq., C. Trebeck, Esq., John Bell, Esq.

Visitors.—Mirza Mahomed Mehdi Meski, introduced by Dewan Ramcomul Sen; James Davenport, Esq., introduced by Dr. Strong; Capt. H. Drummond, introduced by W. Cracroft, Esq.

The proceedings of last meeting were read and confirmed.

The following gentlemen proposed at the last meeting, were duly elected members of the Society.

H. C. Tucker, Esq., C. S., James Fergusson, Esq., J. A. Dorin, Esq., Thomas Holroyd, Esq., Charles Bury, Esq., C. S., Captain R. B. Pemberton, Baboo Cossinauth Bose, J. H. D'Oyly, Esq., C. S., W. Luke, Esq., C. S., Munickjee Rustomjee, Esq., A. H. Sim, Esq., Lieut. W. Abercrombie, E. A. Dyce, Esq.

The following gentlemen were proposed, viz.

Meer Abbas Ali Khawn, proposed by H. Walters, Esq.; C. G. Millman, Esq., proposed by D. B. Syers, Esq.; E. A. Blundell, Esq., proposed by Sir E. Ryan; Mirza Mahomed Mehdi Meski, proposed by Dewan Ramcomul Sen, and J. S. Torrens, Esq., C. S., proposed by R. H. Cockerell, Esq., seconded by the Secretary.

C. Garstin, Esq., C. S., proposed by James Colquhoun, Esq., seconded by T. Maddock, Esq.

Captain W. M. Stewart, (Chunar), proposed by A. Beattie, Esq., and Captain H. Drummond, proposed by W. Cracroft, Esq., seconded by Dr. Strong.

W. G. Maxwell, M. D., and Lieut. W. C. Sibly, H. M's. 26th Regt., proposed by the Secretary, seconded by W. Storm, Esq.

REPORTS.

1.—On Dr. Jackson's motion made at last meeting, to allow each Committee to procure such standard books, as might be useful in coming to an opinion on questions submitted to their consideration.

The Committee recommend the adoption of Dr. Jackson's motion; and it was resolved,

That Members of Committee will send in the names of books required to the Secretary, who will procure them on the authority of the Committee of Papers.

Resolved,—That the Committee's Report be adopted in regard to other points therein referred to.

2.—On the motion of Captain Carter, touching a premium for the domestication of bees in the plains.

The Agricultural Committee to whom this question was referred, recommend that the proposal be allowed to lay over until they shall have collected more specific data.

Resolved,—That the Committee's recommendation be adopted.

3.—The Secretary read the report of the Nursery Committee, which described the Nursery to be in a promising condition, the sugar-cane plantation progressing both in vigour and extent from multiplying the plants by cuttings, &c. The Committee express a desire to have the number of members, increased both on the Nursery Committee and the Committee of Papers.

Resolved,—That the Nursery Committee's report be adopted, and with reference to the request of the present Committee, that the following gentlemen be solicited to give their assistance.

The President proposed the following:—

Dr. Huffleagle, W. F. Gibbon, Esq., and Captain Leach, additional Members of the Nursery Committee, and

W. Cracroft, Esq., M. A. Bignell, Esq., and W. K. Ewart, Esq., additional Members of the Committee of Papers.

4.—Report upon specimens of *Caoutchouc* forwarded by Dr. Helfer and by Captain Jenkins, the latter made under the directions of Lieutenant Vetch.

Resolved,—That the Committee's report be adopted and printed forthwith in the Transactions.

5.—Report upon the Tea Plant of Assam, by W. Griffith, Esq., accompanied by drawings and maps.

Resolved,—That Mr. Griffith's report be published in the Transactions.

6.—Report upon Silk Worm's Cocoons sent by Captain Jenkins, and forwarded by Messrs. Cantor and Co.

The Committee had submitted some of these through R. Watson, Esq., for trial, and the following extract from Mr. J. E. Warner's letter to Mr. Watson, dated Guttaul, 5th November, 1837, will exhibit the result.

"I am sorry to say, that although three or four of my best cattanies tried to reel off the Assam cocoons, they were unable to succeed. It appears to me, that Captain Jenkins sent them in a cutcha state, as the chrysalis have eaten their way out of some of the cocoons, and in those they have remained, the cocoons not being properly dried, the fibres have rotted. When I failed in the filature reel, I tried to wind them off on the *lottah* (on which the gootee-mal is made) but with no better success."

Motions submitted to the meeting.

Proposed by the President, in reference to the increasing correspondence and labours generally of the Secretary, that a salary be awarded to Mr. Bell of 300 rupees per month.

The President read a letter to his address, dated 30th October, 1837, from Mr. W. Anderson, Wellesley Street, Calcutta, forwarding some printed copies of Scott's Compendium, and suggesting with reference thereto, the formation of a "Joint Stock Association for the promotion of Agriculture."

The following communications were read.

From Captain Bogle, of Arracan, (without date) received October 3d, speaking most favourably of the soil of Arracan, as well adapted for producing all the staples of India, and desiring a supply of seeds for experiment. Alludes to specimens of wood, sent up by the H. C. brig *Mermaid*, which have been received.

est interest; encloses a printed circular and regulations of an Agricultural Society which was established by him at Bourbon some time ago.

From Major Sleeman, dated Simlah, 17th October, enclosing copies of a correspondence between Lieutenant Charles Brown and himself, on the subject of a charge to be made to applicants for the Otaheite cane from his Jubbulpore plantation, and requesting that the same may be brought to the notice of the Society.

Memorandum.—The Secretary had anticipated the concurrence of the Society, and had written to Major Sleeman, stating that, in as far as the Society's demands upon the plantation were concerned, there could not be the slightest objection to the moderate charge of four pice per cane, the rate at which it had been already sold, to keep up the stock of one of the most useful establishments in India.

From G. U. Adam, Esq., dated 30th October, on the subject of two bags of Tinnevelly cotton seeds received since, through the kindness of this gentleman, and of which a considerable portion has been already distributed to Captain Jenkins, Assam, to Mr. Blundell, Moulmein, and various parts of the interior of Bengal.

From E. A. Blundell, Esq., dated Moulmein, 19th October, acknowledging receipt of the Secretary's letter of the 19th September, and of the cotton seeds therein referred to.

From Dr. Campbell, of Nepal, dated 22nd October, promising to forward with reference to the Secretary's request, a sufficient quantity of the different Agricultural productions common to the valley, sufficient to sow 5 cottahs of each variety.

From W. Cracroft, Esq., dated 31st October, forwarding three samples of Caoutchouc. One in its original state produced at Penang, the other two prepared in England from South American produce.

From Lieutenant Hannington, dated Purulia, 12th October, acknowledging the Secretary's letter of the 18th September, offering to send an assortment of seeds; suggests the translation of such circulars as offer premia, into the vernacular languages.

Note.—This has been already done through the suggestion of Mr. Walters, at least in Bengalee, and the Hindee translation is now in press.

From Capt. Harkness, Secretary to the Committee of Agriculture and Commerce of the Royal Asiatic Society of Great Britain and Ire-

land, dated 11th May, 1837, intimating in reply to Mr. Bell's circular letter of the 4th April, 1836, a mutual wish on the part of the Committee to correspond with the Society.

Stating that the Committee have forwarded to the Government of Bengal, specimens of the lichens used in Europe for dyeing, and requesting the assistance of the Society in transmitting specimens of the same description of article employed in India, or any other of the products of this country which may appear adapted to the same object, for the purpose of being submitted to experiment.

From Jas. Prinsep, Esq., Secretary to the Asiatic Society of Bengal, dated November 2nd, giving cover, for the information of this Society, to copy of a letter addressed to the Right Honourable Lord Auckland, by the Secretary of the Royal Asiatic Society of Great Britain, on the part of the Committee of Agriculture and Commerce, transmitting several specimens of lichens above alluded to, and stating that the specimens of this weed with chemical tests, have been deposited in the Asiatic Society's Museum, for the inspection of Members. Forwards for the use of this Society five copies of the 1st part of proceedings of the Committee, which contains some information regarding the lichen.

Memorandum.—The Secretary has opened a correspondence with the Committee, by transmitting samples of the products of the valley of Nepal, recently received from Dr. Campbell.

From Mr. Veterinary Surgeon H. C. Hulse, of Muttra, dated 28th September, suggesting the offer of a premium by the Society for the heaviest and fattest country sheep. Offering to forward the plan of an establishment for the breeding, &c. of horses.

Mr. J. C. Marshman presented, in the name of the Author, a copy of Review of the Doctrines of the Ricardo, or New School of Political Economy, by Major W. H. Sleeman.

Some copies of proceedings of the Committee of Agriculture and Commerce, have been received through Messrs. Thacker and Co.

From Dr. Wallich, dated November 7th, forwarding extract of a letter to his address, received from Dr. Wight, of Madras, bearing dates the 20th and 23d October, on the subject of his cotton experiments.

Dr. Huffnagle presented specimens of the second crop of *Upland Georgia Cotton Seed*, and some pods from *acclimated seeds*. The cotton was considered of very superior quality.

Mr. Ewart submitted a mem. on experiments made by him at Leeds on a cask of American Upland Georgia cotton seed, weighing 1 cwt. 1 qr. 14 lbs. net, which produced

| | cwt. | qrs. | lbs. |
|-------------|----------------------------|------|------|
| Of Oil..... | 0 | 1 | 4 |
| Cake | 0 | 3 | 20 |
| | <hr style="width: 100%;"/> | | |
| | 1 | 0 | 24 |
| | 18 loss. | | |
| | <hr style="width: 100%;"/> | | |
| | Cwt. 1 | 1 | 14 |
| | <hr style="width: 100%;"/> | | |

1. The production of oil is not more than half of what the same quantity of rape seed would have produced.

2. The loss is considerable, owing, it is supposed, in part to the seed being in an unusually soft state.

3. This seed would not yield its oil at all without warming, or so little as to be of no practical use.

4. The heat applied was about the same as is used in crushing rape seed.

5. The seed yields its oil more tardily than rape.

6. The oil is more glutinous than rape oil.

7. It is more difficult to combine it with soap.

8. For these reasons it is thought not to be applicable to the uses of the mechanic or manufactures. It is thought it could not be refined.

In the event of its proving a drying oil, its colour would prevent its being used except for the most common purposes.

The cake has a different appearance from rape cake, but cannot say how far it would be equally valuable as a food, or a manure.

Some specimens of Maize were presented by W. Storm, Esq., the produce of Kishnaghur, grown by A. Macarthur, Esq., of Bamundee Factory, of Canadian seed sent from this Society.

Two plants of the Fungus Tribe were presented by D. McFarlan, Esq., some time ago, and omitted to be recorded before. They are more generally known by the name of Neptune's Cup.

Mr. Bell will be happy to supply any member who takes an interest in the propagation of fruit trees with a plant of the Mangosteen, of which he has received several as a present from Mr. Crane, of Singapore.

A notice was put in by Mr. Bell, as a competitor for the silver medal and premium for a cultivation of ten beegahs of guinea grass, which question was left to the decision of the Society, on a report from a Committee consisting of Dr. Jackson, Captain Leach and W. F. Gibbon, Esq., who agreed to meet and visit the cultivation.

Mr. Bell is also a competitor for the highest premium, on the production of one maund of guinea grass seed.

The quantity sent in to the Society by Mr. Bell, already amounts to one maund and twenty-one seers of well dried seed sifted from all stalks and impurities, which he presented to the Society, whether a successful competitor or not, and this quantity is sufficient to introduce this superior grass throughout all India, if the simple rules laid down by Mr. Bell for sowing and planting be observed.

Applicants are invited therefore to lose no time in sending for what quantity they require.

The thanks of the meeting were ordered to be offered for all these communications and presentations.

*Agricultural Society's Office, }
Town Hall, Nov. 8, 1837. }*

Nursery Committee's Proceedings.

(Read and adopted 8th November, 1837.)

A Meeting of this Committee took place at the Botanical Garden on Friday evening, 20th October, 1837, at 5 o'clock.

Present.—Dr. Wallich, Mr. Storm, Mr. Bell.

The Committee proceeded to visit the Nursery.

The Otaheite sugar-cane is doing well, and with reference to its having been planted out of season, and at different periods as received, is throwing out vigorous and numerous suckers. These the Committee would have ordered to be cut out had the quality and size of cane been a desideratum, but as the object of the Society is to have abundant plant for distribution, the Committee have deemed it expedient to cut down some of the largest cane in order to extend the cultivation, and these cuttings have been planted out in square holes, after the West India method.

The original beds are still susceptible of pruning and the Committee have resolved, to extend the cane piece as far as there is space on the

DONATIONS AND PRESENTATIONS
TO
THE AGRICULTURAL SOCIETY OF INDIA.

From 1st January to 31st December, 1837.

By Sir Thomas Anbury.

Seeds of a superior description of Melon, grown at a place called "Koreeapur," about 10 miles from the station of Saugor.

By J. Ardall, Esq.

A yam of an unusual size, the produce of a garden at Cossipore.

By Colonel Beatson.

A sample of Coffee grown in his garden.

A complete treatise on the culture of Tobacco.

By the Rev. T. Boaz.

A specimen of South American Cotton.

By Capt. A. Bogle, Commissioner at Arracan.

Two quart bottles of Sandoway Tobacco seed.

By C. H. Blake, Esq. of Dhoba.

Samples of five qualities of Sugar, some Treacle and Rum.

By W. Blundell, Esq. Commissioner at Moulmein.

Samples of Cotton, the produce of Pernambuco Seed.

By M. A. Bignell, Esq.

Specimens of Lycopodium from California.

By E. Bentall, Esq. Magistrate and Collector of Dinagepore.

A piece of cloth made of Silk, spun by the worm which feeds on the castor oil plant.

By Mr. C. R. Bell.

A small sample of Cotton and Seed, as plucked from the plant, in its original wild state, growing on the Island of Orotonga, (one of the South Sea Islands.)

By Col. J. Colvin.

A maund of Upland Georgia Cotton, from American Seed.

By J. C. Marshman, Esq. in the name of the Author.

A copy of the Doctrines of the Ricardo, or New School of Political Economy, by Major W. H. Sleeman.

By D. McFarlan, Esq.

Some plants of the Fungus tribe.

By J. McClelland, Esq.

Three copies of a catalogue of "Objects in Natural History," collected by him in Assam.

By Major J. A. Moore, Assistant to the Resident at Hydrabad.

A tin box containing samples of the Potatoes grown there.

A ditto, three nonpareil apples, and some grafts of the tree from which they were taken.

By the Honourable W. H. Melville, Governor General's Agent at Moorshedabad.

A box of seed of the Teak tree.

Samples of Cotton from Upland Georgia seed.

By J. P. Marcus, Esq. of Naunsagar, near Arrah.

Two bottles of the Roosa Grass seed, and a small phial of oil distilled by him from the grass.

By Dr. Montgomerie, of Singapore.

A box and two bundles of Sugar-cane of two kinds, the produce of the Island.

A model of a rice mill in common use at Malacca.

By Mr. J. W. Masters.

A paper on the treatment of Peach trees.

A ditto, containing an analysis of the soils received from Dr. Campbell, at Nepal.

By Col. D. McLeod.

Two parcels containing Melon seeds, one called the "Rock Melon of Saugor," the other "high flavoured Melon from Saugor."

By Capt. H. Macfarquhar, of Tavoy.

A specimen of Hemp grown in his garden, from a few shoots received from Col. Burney, of Ava.

By D. F. McLeod, Esq. Asst. to the Governor General's Agent in the Nerbuddah Territories.

Specimens of three varieties of country Cotton, the "Munnooa,"

REPORT
OF THE
AGRICULTURAL AND HORTICULTURAL SOCIETY
OF INDIA.
FOR THE YEAR 1837.

(Read 10th January, 1837.)

IN concluding its Report upon the Proceedings of the year 1836, the Society expressed a hope that the Public would be enabled to trace very satisfactory progress, that they would be satisfied with what had been done, and that they would cordially unite their efforts, towards advancing the future prospects and views of this body.

The Society has now the pleasing duty to confirm the realization of this hope to the fullest extent, by the most solid proofs that can be afforded, viz. increase in the number of its Members, and a rich augmentation of its funds, with a corresponding increase of interest in the objects of the Association, verified in three volumes of its Transactions, published within the last twelve months.

The first, and most essential point, to which the attention of Members is called, is that of Finance;—and the Society refers with satisfaction to the statement of the Collector, which has been read at the meeting this day, exhibiting a sum of Co's. Rs. 16,111 13 10 collected, being Rs. 2,678 11 9 in excess of the amount realized during the year 1836, or, deducting the surplus expenditure in 1837, a net increase of Rs. 2,230 10 7 remains.

Some heavy items appear in the Disbursements of 1837, especially under the head of printing charges ; but it will be borne in mind, that these were absolutely called for, as a means of collecting information, and circulating far and wide the offer of such inducements, as were deemed calculated to excite a spirit of enquiry and emulation in the field of Agricultural Improvement ; and the funds of the Society could not be more legitimately and usefully employed than in prosecuting and encouraging this object.

The next subject of interest, is the accession of Members, and the Society is happy to announce that the number of elections registered since the last Anniversary, exceeds the *aggregate* (not the average) of 5 preceding years ;—thus,

| | | |
|-----------------------------|------|--------------|
| Members elected in | 1832 | 19 |
| " " | 1833 | 11 |
| " " | 1834 | 13 |
| " " | 1835 | 44 |
| " " | 1836 | 59* |
| | | 146 Members. |
| Total Elections in 5 years, | | |
| | | 148 |
| Elected in 1837, | | |

In following up the question noticed in the last Report, on the ratio in which attention has been attracted to Agriculture, by the different classes and denominations of our Indian Society ; we obtain this result.

* Not 69, as printed in Italics in the Report of last year. The comparative inference there drawn, will show that *Sixty-nine* is a typographical error.

| | Elections from 1st May to 31st December, 1836. | | Elections from 1st January to 31st Dec. 1837. | | Result in 1837. | |
|--|--|--------------|---|--------------|-----------------|-----------|
| | Number. | per centage. | Number. | per centage. | Increase. | Decrease. |
| Civilians and others in Civil Employment,..... | 11 | 24½ | 41 | 27½ | 3½ | 0 |
| Military, | 5 | 11 | 17 | 11½ | ½ | 0 |
| Merchants and others engaged in Trade, | 2 | 4½ | 36 | 24½ | 19½ | 0 |
| Law Officers, | 0 | 0 | 5 | 3½ | 3½ | 0 |
| Indigo planters and others engaged in Agriculture, | 13 | 29 | 21 | 14 | 0 | 15 |
| Native gentlemen of rank and opulence, | 2 | 4½ | 9 | 6 | 1½ | 0 |
| European members of no particular profession, | 2 | 4½ | 0 | 0 | 0 | 4½ |
| Clergy, | 2 | 4½ | 2 | 1½ | 0 | 3½ |
| Honorary Members, | 3 | 7 | 1 | ½ | 0 | 6½ |
| Medical Men, | 5 | 11 | 16 | 11 | 0 | 0 |
| | 45 | 100 | 148 | 100 | 0 | 0 |

It is a subject of real gratification to find so great a proportionate increase, in the list of Mercantile names, and sure evidence of the inseparable interests of Agriculture and Commerce.

The Society hopes to see the favourable improvement in the per centage of Native Gentlemen steadily progress, though as regards their interest in the soil and wealth, it ought to augment ten thousand fold.

The Indigo Planters exhibit a *comparative* decrease, although the number of elections in 1837, exceeds those of 1836. Let us hope that they will come forward with their funds, if not with information, for with the command of Capital, this Society can do much,—without it, nothing.

While the Society records any accession of Members, it is bound to record also resignations, the number of which in the course of the year amounts to *three* only, viz. G. J. Siddons, Esq., C. S; Lieut. Meik, and Mr. Hamerton. The first named gentleman is leaving India for ever; the second, was going to some distant station; and the third, was prevented from want of time to attend to its proceedings;—but this deficiency is overbalanced by the return of several old Members from Europe, whose names are not included in the list of increase.

But all these most favourable indices of the Society's increasing pros-

perity, popularity, and utility, are damped in the painful duty it has now to perform, of alluding to the loss it has sustained by the death of some highly talented and respected members, during the past year.

The Rev. and Venerable Dr. Marshman was one of the few, who met in this Hall, on the 14th September, 1820, for the purpose of establishing a Society, of which his fellow-labourer, Dr. Carey, was the honoured founder; and he lived to see his exertions in connexion with those of his Colleagues, crowned with eminent success, since it is at this moment the most numerous, and well calculated to become one of the most important and useful institutions in India. Dr. Marshman, from first to last, laboured both by contribution and example, to attach others to the cause in which he took a zealous part. The death of this amiable man is recorded with feelings of deep regret.

Sir Benjamin Malkin, had not been many months a member, before death deprived the Society of one, whose talents were so eminently calculated to shed a lustre on this body.

The Society has also to record the deaths of Dr. Bramley, Colonel Cobbe, John Stewart, John Swinhoe, and J. C. Wilson, Esquires.

From this notice of a melancholy, though inadequate tribute of respect to the memory of Members, who have been separated from an interest in its proceedings, the Society would now turn to a cursory review of the principal objects that have engaged its attention during the past year, and to the additional demonstrations of the growing interest which has been attracted to the improvement of our Agricultural Resources.

In its last Report, the Society had the gratification of recording the names of six Branch Societies established within the year, 1836, viz. at Bangalore, Meerut, Hooghly, Burdwan, Beerbhoom, and Singapore.

This last year has enlisted six more Auxiliary Institutions, viz.

1. An Agricultural Society at Midnapore, F. Campbell, Esq. Secretary.
2. An Agricultural Society at Moorshedabad, J. W. Laidlay, Esq. Secretary.
3. An Agricultural Society at Cuttack, Major J. D. Syers, Secretary.
4. An Agricultural Society at Commillah, J. Davenport, M. D. Secretary.

5. An Agricultural Society at Azimghur, R. Montgomery, Esq. Secretary.

6. An Agricultural Society at Assam, Lieut. H. Bigge, Secretary.

If to these be added the Societies of Madras, Bombay and Lucknow, the total number of Societies, including that of Calcutta, will be *Sixteen*; and a still more gratifying result is obtained in the reflection that all these Institutions are linked in harmony, and in one common cause.

In the early part of 1837, circulars containing a series of Agricultural queries were printed, and forwarded to the several Branch Societies, to Members, and other individuals known for the interest they take in these pursuits, throughout every part of India;—and the Society is indebted to the following gentlemen for having already supplied much valuable information:—

To R. Mathews, Esq. of Derie, for information respecting the district of Shahabad.

To the Rev. Mr. Williamson, for replies furnished with reference to the Beerbhoom District.

To Major J. R. Ouseley, Principal Assistant to the Commissioner of the Saugor and Nurbuddah Territories, for replies furnished with reference to that part of the country.

To A. Ronald, Esq. of Dunearee, via Chuprah, for information conveyed, regarding the Eastern part of the District of Goruckpore.

To R. Montgomerie, Esq. Magistrate of Azimghur, for replies furnished, together with a Map of the District.

It is the intention of the Society to have this mass of interesting information classified and thrown into a condensed tabular form, which it is thought will be more acceptable as a ready reference, when more returns shall have been received,—and the Society takes this opportunity of offering its best thanks to those gentlemen who have already contributed their quota, and to express a hope, that others who have received copies of its circular, or may desire to have copies, will come forward and enable the Society to add, during the ensuing year, to its Transactions, a document which cannot fail to be highly interesting.

The Society's attention has been turned especially to the improvement of objects of Husbandry and Commerce,—and Premiums and Medals to a large amount have been offered with a view to promote these objects.

The following is an abstract, without specification of conditions, which will be found in the notices advertized for general information, and in circulars printed and distributed in English and the Vernacular languages.

| <i>Date.</i> | <i>Names of Objects.</i> | <i>Amount.</i> |
|--------------|--|------------------|
| 1837. | | <i>Co's. Rs.</i> |
| April. | For the best work on Indian Agriculture in all its branches, | 2,000 |
| | For Ditto, on the Agriculture of Bengal, ... | 1,000 |
| | For Ditto, on the Agriculture of the Western Provinces, | 1,000 |
| | | 4,000 |
| April. | For the best Samples of Sugar, Silk, Cotton, and Tobacco,—Four Gold Medals,—at an assumed value of 120 Rs. each Medal, | 480 |
| | For the second best Ditto, of the above articles,—Four Silver Medals,—at an assumed value of 18 Rs. each Medal, | 72 |
| | | 552 |
| July. | For imported Bulls, 1st, 2nd and 3rd best. | 1,200 |
| | For ditto Rams, Ditto, | 450 |
| | For the <i>best</i> Bull and Ram, a Gold Medal each, in addition, | 240 |
| | For the 2nd <i>best</i> Bull and Ram, a Silver Ditto each, | 36 |
| | For the <i>best produce</i> of imported Bulls, half the above amount, | 600 |
| | For the <i>best produce</i> of imported Rams, do, | 225 |
| | Gold and Silver Medals, as above, | 240 |
| | For the best bred Cow, imported from any part of the world, | 250 |
| | and the Silver Medal, | 18 |
| | For the best woolled Merino, or Saxony Ewe, and the Silver Medal, | 100 |
| | | 18 |
| | | 3,377 |

| | | | |
|-----------|--|-------|--------|
| 1837 | For a cultivation of 20 Beegahs of the best | | |
| July. | Guinea Grass, | 200 | |
| | and the Gold Medal, | 120 | |
| | For a ditto, of 10 ditto, of ditto, ditto,... | 100 | |
| | and the Silver Medal, | 18 | |
| | For a ditto, of 5 Ditto, of the best Lucerne, | 100 | |
| | and the Silver Medal, | 18 | |
| | For a ditto, of 2 ditto, of the best Clover, | 100 | |
| | and the Silver Medal, | 18 | |
| | For a Maund of Seed from the Guinea | | |
| | Grass Cultivation of 20 Beegahs,*... .. | 100 | |
| | For $\frac{1}{2}$ a Maund of Ditto, from do., of 10 do., | 50 | |
| | | <hr/> | 824 |
| August. | For 100 Otaheite Canes, imported from the | | |
| | Mauritius, or other places beyond the Con- | | |
| | tinent of India,... .. | 1,000 | |
| | For the <i>first</i> importer of 200 Canes, the | | |
| | <i>Gold</i> Medal, (in addition to a Rupee per | | |
| | Cane,) | 120 | |
| | For the <i>second</i> importer of the same num- | | |
| | ber,—the <i>Silver</i> Medal, (Ditto,) | 18 | |
| | For any individual who can exhibit a plan- | | |
| | tation of 50 Beegahs of Otaheite Cane, | | |
| | on, or before the 1st January, 1839,... .. | 2,000 | |
| | and the Gold Medal, | 120 | |
| | | <hr/> | 3,258 |
| November. | For a Maund of the best Caoutchouc, the | | |
| | produce of Assam, manufactured accord- | | |
| | ing to the South American mode,... .. | 100 | |
| | For 10 Seers of Ditto, the produce of ditto | | |
| | prepared over an earthen vessel, | 50 | |
| | For the best Specimens of Caoutchouc, the | | |
| | produce of any other part of India, in si- | | |
| | imilar quantities, and prepared in the same | | |
| | manner, | | |
| | Premia of 100 Rs. and 50 Rs. | 150 | |
| | | <hr/> | 300 |
| | Total Co's. Rupees, | | 12,311 |

The intrinsic value of medals is here assumed, for the sake of placing before the public, the sum of money that has been voted away, and to show that the funds of the Society are not locked up, for the sake of hoarding an unprofitable Capital. Reduced a few years ago, to a state bordering upon bankruptcy, it was absolutely necessary to *create* a fund, which has been happily effected within a very brief space, and the members will be enabled to judge, whether the Society husbanded the nucleus of its Financial Resources up to too late a period, with reference to the many Premiums it has undertaken to award.

This statement will also serve as a guide to members, in bringing forward motions involving large outlay ; how far it will be prudent to do so, both with reference to the present and future ; and a Society of such magnitude and importance, as this is likely to prove, ought always to have a reserve fund of certain amount, that no motion can touch, without which, its prosperity and stability are constantly exposed.

In the printing department great progress has been made. During the present year vol. 4th of the Transactions has been published, and vol. 5th (if not laid upon the table to-day) will be very shortly out of press. These volumes contain many interesting papers ; the most important of which are a Report on the Physical condition of the Assam Tea plant, with reference to geological structure, soil and climate, by John McClelland, Esq., Assistant Surgeon, Bengal Establishment ; and a report on the Tea plant of Upper Assam, by W. Griffith, Esq., Assistant Surgeon, Madras Establishment, presented to this Society by the Supreme Government.

A paper on the Agriculture and Rural Economy of the Valley of Nepal, by A. Campbell, Esq., Officiating Assistant to the Resident, and presented to this Society by Government, is an exceedingly interesting document, and well worthy of perusal.

Some highly interesting papers received from the Committee of Agriculture and Commerce of the Royal Asiatic Society, on the subject of Lichens, have been published, together with plates presented by Dr. Robert Wight, of Madras.

Several interesting communications on *Caoutchouc* have been printed, which will serve to shew the time and to whom the country is indebted for the introduction of this new source of wealth.

References made by this Society, to public bodies in England, will, in all probability, draw out much valuable information regarding this ar-

ticle, and will form an acceptable accompaniment to the documents already published.

The offer of Medals and Premia for the importation of Otaheite or Mauritius sugar-cane, has not been attended with success as yet ; but the Society is happy to intimate, on the Report of the Nursery Committee, that the specific object, for which a spot of ground was kindly lent by Dr. Wallich, has been now attained, viz. for the rearing of superior cane for distribution throughout the Lower Provinces ; and the Committee assure the Society, that they will very soon be able to make up for past disappointment, brought about by circumstances, over which they had no control.

Since the publication of the last Report, a continued distribution of Cotton seed, therein alluded to, has been followed up, and many Reports on samples will be found in the Transactions. It must be borne in mind, however, that this last year has been a season, unfavourable from great drought, to this plant in particular, and that the want of rain cannot be more fully established, than in the appalling fact, that the scarcity of water is *already* felt, in the vicinity of Calcutta, in so much, that private tanks are carefully guarded ;—what must it be, when a lapse of months must take place, before the thirst of millions can be quenched ?

The numerous questions now submitted to this Society, suggested the subdivision of labor, and Standing Committees have been elected, to report upon various subjects ; these Committees are as follow :—

- | | |
|--------------------------------|------------------------------------|
| 1. Cotton Committee. | 5. Caoutchouc and Oil Seeds ditto. |
| 2. Silk, Hemp, and Flax ditto. | 6. Improvement of Cattle ditto. |
| 3. Sugar ditto. | 7. Implements of Husbandry and |
| 4. Coffee and Tobacco ditto. | Machinery ditto. |

An addition to the number of Members on the Committee of Papers, and Nursery Committee, has likewise been made.

The nucleus of a Library of reference has been formed, and the Society is indebted to some of its Members for donations of books ; and to Societies abroad for various volumes and parts of their Transactions. The Society would take the liberty to suggest to Members, who may leave this country, that they would further the objects of the library greatly, by bestowing such works, as may be useful, rather than allow them to be sacrificed at auctions.

A resolution has been passed, by which a greater degree of regularity

is now observed in the proceedings of the General Meetings, viz. that of requiring motions made by Members to be registered and read, when submitted, and brought forward at the next monthly meeting, when parties absent may have an opportunity of either supporting or opposing them.

A revision of the Society's rules has been ordered, and is now under consideration by the Committee of Papers.

The Society has the pleasure to record its acknowledgements to the Committee of Agriculture and Commerce of the Royal Asiatic Society of Great Britain and Ireland, for a series of its proceedings; and takes this opportunity of congratulating that highly gifted and influential body, on the appointment of a Committee, the scene and objects of whose solicitude, are so intimately connected with the labours of this institution; and the Society fervently hopes, that by a cordial co-operation with the Committee of Agriculture and Commerce, the interests of both will be substantially advanced.

Before closing this brief review of the most important objects that have occupied the attention of the Society during the past year, it would be unmindful of what is due, were it to overlook the obligations under which it lies to the continued support of the Honourable East India Company, and no greater proof can exist of the warm interest taken in the amelioration of our Indian staples by the Honourable Court, than in the volume of Reports on Cotton Wool, Raw Silk and Indigo, published "by order of the East India Company in December, 1836, a volume containing such a mass of valuable and authenticated information, as at once to set at rest all supposition of lukewarmness, in what so deeply affects the best interests of the country; and the Society from this evidence, in connexion with the favourable opinion which the Honourable Court have been pleased recently to express in a despatch to the Supreme Government of its efforts, is strong in hope, that its endeavours will be seconded, and substantially supported, in whatever great measures it may hereafter undertake.

To the Supreme Government, the Society is also indebted for the prompt manner in which its wishes have been met, in respect to directing the transmission of periodical returns of grain, from the District Magistrates and Collectors, and to these Functionaries who have regularly

forwarded returns, in compliance with this requisition, the Society desires to express its thanks.

That the Society has not been in a condition, until now, to do *much good*, a reference to the state of its finances 3 years ago will fully demonstrate.

That it has lost no time in applying its newly acquired resources to the most useful purposes, has been shewn in an early part of this report; and that it will continue to do so to a less limited extent, must be equally manifest.

But it is scarcely necessary to remind Members, that the welfare and prosperity of the Society are in their hands, and much will depend upon their individual aid and influence, as well as upon their steady co-operation collectively, in promoting a continuance of the extraordinary success, which has attended the labours during the past year, of the **AGRICULTURAL AND HORTICULTURAL SOCIETY OF INDIA.**

Proposed by Mr. Cracroft, seconded by Dr. Wallich, that both the Collector's Report, and Annual Report be adopted.

Proposed by Dr. Wallich, seconded by Mr. G. A. Prinsep, that the special thanks of the Society be given to Mr. Bell, for having drawn up these Reports.