Public Works (1897) Department.

G.O., No. 21815

Dated 9th October 1897

[Despatch Abstract.]

Govt Gardens & Parks, Nilgiris. Proc:

Revenue Dept reviewing the Annual administration Report on the —, for 1896-97, recorded.

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[P.W. 25. 5,000—30-11-96.]

Indexed. ✓

Public works (1897) Department

Current Number: 7625

Government (1897) of Madras.

REVENUE.

Recd. 2 - 8 - } 1897.
Regd. 2 - 8 -

Enclosures -

Spare copies 10.

G.O., Nos. 559, 559A, 13th July 1897.

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Report on the Government Gardens and Parks, Nilgiris.

Reviewing the annual Administration — for the year 1896-97.

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GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

Read—the following letter from R. L. PROUDLOCK, Esq., Curator, Government Botanic Gardens and Parks, Nilgiris, to the Secretary to Government, Revenue Department (through the Collector of the Nilgiris), dated Ootacamund, 31st May 1897, No. 169:—

In accordance with the instructions contained in paragraph 2 of G.O., No. 212, Revenue, dated 23rd May 1896, I have the honour to submit the annual Administration Report of the Government Botanical Gardens and Parks, Nilgiris, for the official year ending 31st March 1897.

2. Two advance copies of the Report required by G.O., No. 464, Revenue, dated 30th May 1893, are also enclosed for submission to the Secretary of State.

ANNUAL ADMINISTRATION REPORT OF THE GOVERNMENT BOTANICAL GARDENS AND PARKS, NILGIRIS, FOR THE YEAR 1896-97.

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I.—Season and Rainfall.

The average annual rainfall of Ootacamund is 47 inches. The rainfall for the year was 76·07 inches, or 26·15 inches more than was registered during 1894–95, and 29·07 inches more than the average. The heaviest rainfall was in June when 26·91 inches of rain fell on 24 days. The monsoon burst with unusual violence, but did no material damage beyond blowing down a large unsightly old tree of *Cupressus macrocarpa, Hart.* and blowing a few branches off trees generally throughout the gardens. The fact that little damage was done is chiefly due to the sheltered position the gardens occupy in the Ootacamund valley.

2. The frosts were, upon the whole, not very severe, and no damage worth mentioning was done by them. It may, however, be mentioned that at the first sign of frost all the more valuable tender plants in beds in the lower parts of the gardens were lifted and transferred to the nurseries beyond the reach of frosts.

3. The year, upon the whole, was a fair one for gardening operations.

II.—General Condition of the Gardens and Parks.

4. (1) **Ootacamund**—(*a*) **Government Botanic Gardens.**—The gardens show signs of improvement in the lower part, due to a good many trees of species already well represented having been cut down. The result has been the opening up of a wider stretch of lawn and giving an almost clear view up the gardens for a considerable distance from the main entrance. The upper parts are still capable of being much improved.

5. The cleaning and overhauling of the nurseries have been put in hand, and the work is still being proceeded with. They were found to be in very bad order, and it will take some time to fully stock them with plants again. Without a well-stocked and well-ordered nursery it is hopeless to expect to keep a botanic garden in the condition it ought to be kept in.

6. The plants in the propagating houses have been considerably increased in number during the year; but the general condition of the houses and their contents is not all that could be desired.

7. The lower glass-house, just above the bandstand, which contained ordinary plants with no apparent special object in view, is now filled and kept bright with flowering plants and ferns. It is now "the conservatory" of the gardens, and visitors have access to it from sunrise to sunset every day throughout the year.

8. The English Oak (*Quercus Robur, L.*).—All the English Oak trees in the gardens were more or less filled with parasitic plants (species of Loranthus) and badly needed cleaning and pruning. They have been cleared of Loranthi and properly pruned. Several of the trees in the Oak plantation to the N.N.West of the propagating houses were so badly attacked that it was hopeless for them to recover, and so they were cut down. All the Oaks have now a much improved, healthy appearance.

9. *Polygonum sp.*—A beginning was made to root out this plant, but it is springing up again rapidly, and the ground will have to be gone over repeatedly in order to finally get rid of it. It has become a rampant weed, in patches which occupy a considerable area, in the upper parts of the gardens; and the task of extirpating it will be no ordinary one. It would be well if owners of property in Ootacamund were to destroy it at once wherever it might make its appearance on their grounds, as it is a formidable weed.

10. *Refuse Pit.*—A pit measuring 50′ × 30′ × 4′ was made for the reception of leaves and other garden refuse, as not a single excavated refuse pit existed in the gardens when the present curator took charge in February 1896.

11. *Ponds.*—The large pond at the bandstand and four of the smaller ones in other parts of the gardens were cleared of weeds and of silt.

12. *Repairs to the bandstand terrace wall.*—On two occasions two portions of this wall, measuring together 133 feet in length, fell into the pond; and both portions have been rebuilt with new material throughout. The old portions of the wall and the flower vases have been repaired, and the whole structure has been whitewashed.

13. *Labelling and painting.*—A good number of labels for trees and shrubs were written, and all the out-door garden seats and the three summer houses were painted during the year.

14. *Garden Buildings.*—The curator is very badly off for accommodation under this head. He is compelled to have his office in his house, which is not altogether convenient. He has also to use two of the out-houses belonging to his house as tool stores. The two small lodges at the entrance to the gardens, where valuable seeds have to be kept, have to serve as accommodation for the clerk's office, as seed stores, seed cleaning, packing and despatching room, herbarium, painter's room, museum,

and Government House visitor's-book room. While the Director of the Cinchona Department has kindly consented to allow the Curator's Library to remain in its old quarters (one of the rooms in his office) until such time as another room can be found, or a new building erected, for its accommodation.

15. *Boundaries.*—It may seem somewhat unusual to have to report that a garden which has been in existence for fifty years, and which has nearly three miles of boundary line, is entirely unfenced in, with the exception of two portions measuring together not more than three hundred yards.

16. (*b*) **Government House gardens**—*The terraced garden.*— This garden, which is situated immediately in front of the house, and which measures 280′ × 130′, received considerable attention during the year. The lawn was in bad order, and so it was dug over to a depth of two and three feet in order to get rid of the coarse and deep-rooted grasses, and to remove the boulders and smaller stones. After this was done, the whole was manured, and then planted with *Cynodon Dactylon, Pers.*, the common "Hurriali" grass. The new lawn is already giving promise of being an improvement on the old one.

17. All the old rose plants in the upper terrace were removed and replaced by 24 new standard roses, comprising 17 varieties, which were obtained by purchase from Bangalore. The flower beds, including the long border against the rose hedge, were taken in hand, re-arranged, the old soil removed to a depth of about 20 inches and replaced by rich fresh soil, manured and replanted.

18. The greater proportion of the plants in the remaining beds and borders in the immediate vicinity of the house were lifted; the soil was dug over and manured, and the beds were replanted with such suitable plants as were available.

19. Several new beds were made in different parts of the grounds; while two small valleys amounting together in area to $\frac{1}{4}$ of an acre were planted with Arum Lily (*Richardia africana, Kunth,*) and red-hot Poker plants (*Kniphofia aloides, Moench,*) with the object of increasing the means for supplying the demand for flowers for Government House.

A good number of indigenous trees were planted on the steep slopes above the house. Many plants, chiefly exotic, were also planted near several of the out-buildings with the object of ultimately screening them from view.

20. *Vegetable garden.*—This garden was maintained in fair order, and moderate quantities of vegetables were grown and supplied for the use of Government House.

21. *Lucerne (Medicago sativa, L.).*—This very valuable fodder was grown in the vegetable garden on a moderate scale and supplied for the use of the stable regularly throughout the season.

22. *Vegetable garden hedge and wire fence.*—The unsightly old hedge was cut down to within 3 feet of the ground, and the garden is now enclosed by a new barbed-wire fence, 800 feet in length, erected on the outside of the hedge.

23. *Blue Gum Tree (Eucalyptus Globulus, Lab.)*—Four large trees of this species were cut down within the vegetable garden.

24. *Manure Pits.*—Two manure pits, measuring 29′ × 21′ × $6\frac{1}{2}$′ and 25′ × 19′ × $5\frac{1}{3}$′, respectively, were dug for the reception of stable manure; and a smaller one, measuring 12′ × 11′ × $2\frac{1}{2}$′, was made for the reception of cattle manure.

25. *Improvement made to the Park.*—About $2\frac{1}{2}$ acres of rough pasture ground, immediately below the terraced garden and in front of the Military Secretary's bungalow, was treated during the year. Several large trees of *Acacia melanoxylon, R. Br.*, which were nearly killed by parasites, were cut down and their roots dug out; and quite 50 or 60 large roots of blue gum and of other trees, which had been left in the ground for the last few years, were taken out as they were most insightly. All the large protruding boulders and smaller stones were removed; and two long, disused, open drains were filled in. The seedling trees, rootsuckers, docks and other weeds were carefully dug out. Where the ground was too high it was cut down, and where it was too low it was made up, and the whole was top-dressed with good soil. The

result is that this portion of the grounds now presents a much neater appearance than it did before treatment.

26. All the oak trees were cleared of parasitic plants and pruned. The fine English oak, which stands in front of the Military Secretary's bungalow, is 54½ feet in height, 7 feet 8 inches in girth at 4 feet from the ground, and the circumference of the crown is 200 feet. It is one of the finest specimen oaks in Ootacamund.

27. (*c*) **Stone House Park.**—The whole of the park was gone over by a gang of coolies for the purpose of digging out the weeds, which in parts of the park had become very plentiful. The principal weeds are the common dock (*Rumex Nepalensis, Spreng.*), the Broom (*Cytisus scoparius, Link., Acacia dealbata, Link., Acacia melanoxylon, R.Br., Oenothera rosea, Soland.*, and one or two other species of *Oenothera*. It is worthy of note that all these plants, with the exception of the first-named species, are introductions to the Nilgiris.

28. (*d*) **Church Hill Park.**—Nothing was spent on this park during the year owing to the fact that it was rumoured in Ootacamund that it was the intention of Government to sell it for building purposes. The Curator himself saw a survey party engaged in surveying it—taking contour levels, and marking it off into blocks. For these reasons it was decided not to spend any money on it during the year 1896–97.

29. (*e*) **Crewe and Ottley Hall estates.**—The weeding, cleaning and hedge clipping have been attended to as usual.

30. (2) **Coonoor—Sim's Park.**—As the park had become somewhat overcrowded, a good number of trees, chiefly *Cupressus macrocarpa, Hart.*, were cut down, with the result that the central portion of the park, between the main entrance and the lake, now presents a more open and improved appearance. The park, upon the whole, has been kept in good order during the year.

31. (3) **Barliyar.**—In accordance with instructions contained in paragraph 6 of G.O., No. 212, Revenue, dated 23rd May 1896, a special report on these gardens was submitted to Government with this office letter No. 70, dated the 24th April 1897; and so, there appears no necessity to mention anything further about them in this report.

32. (4) **Gudalur.**—The same remarks as have just been made about Barliyar gardens apply to this one. The special report on them was submitted to Government with this office letter No. 344, dated 17th September, 1896.

III.—Herbarium.

33. The herbarium and the collection of seeds and fruits were removed to Madras during the year in accordance with instructions conveyed in paragraph 3 of G.O., No. 212, Revenue, dated 23rd May 1896, and in paragraph 1 of G.O., Mis. No. 154, dated 11th January 1897.

During the year 268 specimens—128 of them being orchids—were collected by the Curator in the district.

The following specimens were sent to the Director of the Botanical Survey of India on the 15th December 1896, viz.:—one *Cypripedium Lowii, Lindl.*; one *Sterculia diversifolia, G. Don*; one *Romneya Coulteri, Harv.*

IV.—Library.

34. The greater proportion of the books forming the library were transferred to the Central Museum, Madras, in accordance with instructions conveyed in G.O., Mis. No. 1094, dated 24th February 1897.

35. Sanction was accorded in G.O., Mis. No. 546, dated 28th January 1897, for the purchase of the undermentioned works for the gardens' library, viz.:—

1. Index Kewensis.
2. Kerner's Natural History of Plants.
3. Veitch's Manual of Orchidaceous Plants.
4. Nicholson's Dictionary of Gardening.
5. Milner's Art and Practice of Landscape Gardening.
6. Robinson's English Flower Garden.

36. The following volumes have been presented to the library during the year, viz.:—

1. Kew Bulletin, from the Director, Royal Gardens, Kew.
2. Series of Agricultural ledgers, from the Government of India.
3. Reports of the Botanical Survey of India, from the Director.
4. Bulletin of the Botanical Department, Jamaica, from the Director of Public Gardens and Plantations, Jamaica.
5. Proceedings of the Agri-Horticultural Society of Madras, from the Honorary Secretary.

37. Of Rs. 700 provided under library Rs. 304–13–8 have been spent.

V.—Notes on Plants of Economic Interest.

38. *Ipecacuanha* (*Cephælis Ipecacuanha, Rich*).—Very little interest seems to be taken in the cultivation of this plant, the powdered annulated roots of which form the *Ipecacuanha* of commerce. In January the Curator visited Nilambur and took full notes (which are rather too lengthy to be incorporated in this report) of the conditions the few plants are grown under there under the care of Mr. Hadfield, the District Forest-officer. Suffice it to be stated that the condition of the plants does not give much promise of its cultivation ever becoming a commercial success in the climate of Nilambur unless some new and better method of cultivation is discovered and adopted. The climate seems to be altogether too dry for the plants in the dry season and they suffer, unless watered artificially.

39. *Jalap* (*Ipomœa Purga, Hayne*).—A small area at the top of the gardens was planted with jalap tubers in April 1896; but they are not fit to lift yet. The cultivation of this plant seems to have been carried on for many years past on the Dodabetta Cinchona Plantation and not in the Government gardens, although the amounts realised by the sale of the drug were, prior to the separation of the Cinchona department from the Botanic gardens and Parks, always credited to the garden revenue. It seems that there is greater scope for growing jalap on the Dodabetta Cinchona Plantation than in the gardens; and, it is no doubt the wisest policy for the Cinchona Department to continue to grow it in sufficient quantity to meet the regular demands for it by the Medical Stores departments. In the case of such a plant as the jalap, which has passed the introductory or experimental stage, it is perhaps as well that the gardens should be relieved of the work of cultivating it on a large scale. The Cinchona Department will no doubt continue the cultivation of the drug on a scale sufficient to meet the demands for it by the several Medical Stores departments; while, in future, only a small stock will be grown on in the gardens in order to meet any demands for fresh tubers from persons who may apply for them for the purpose of cultivating the drug.

40. *Tampico Jalap* (*Ipomœa simulans, Hanbury,*).—Mr. W. T. Thiselton-Dyer, C.M.G., Director of the Royal Gardens, Kew, sent out, recently, 28 tubers of Tampico jalap—one lot being from Tonayan and the other from Tlacolulam in the Canton of Jalapa, Vera Cruz, Mexico. It will be observed that this is a different species from the one already grown here for the production of jalap. Their growth will be carefully attended to, and watched with interest, in these gardens.

41. *Japanese Bamboos.*—A collection of eighteen plants, comprising nine varieties, was made over to the gardens by E. D. M. Hooper, Esq., Acting Conservator of Forests, Southern Circle, in July 1896. Half of the plants were planted in the Ootacamund gardens and half in Sim's Park, Coonoor. Those planted in the Ootacamund gardens are doing fairly well, but those in Sim's Park have made no growth yet.

42. A collection of 79 fruit trees, including varieties of Apple, Pear, Peach, Plum, Apricot, Walnut, Sweet Chestnut, Persimmon, Blackberry and Dewberry, was purchased at a nominal rate from the Saharanpur Botanical Gardens. The plants have been planted in the nursery, where they are doing well so far.

43. *Kola nut* (*Cola acuminata, Schott and Endl.*).—Mr. E. C. Duff, Editor of "*Planting Opinion*," Coonoor, very kindly gave ten seeds of this West African tree to the department. They were sown at Burliyar, but only six or seven of them germinated, and these are doing well.

44. *Nyassaland Wild Coffee.*—A specimen of this, with six seeds, was sent by Mr. E. C. Duff for identification. The Curator forwarded the specimen and two seeds to the Director, Royal Gardens, Kew, for identification. It was returned duly named — *Cremaspora africana, Benth.*; and the name has been communicated to Mr. Duff. The remaining four seeds have been sown at Burliyar.

45. *The Nilgiri Hill Gooseberry* (*Rhodomyrtus tomentosa, Wight.*).—Some jelly was made from the fruit of this shrub and sent to Kew, and a report on it appeared in Nos. 113–114 of the Kew Bulletin for May and June 1896.

46. *Dandelion* (*Taraxacum officinale, Wigg.*).—No indents for dandelion root were received during the year from any of the Medical Stores departments, and so the crop here has not yet been lifted. It can well be left growing for another year or longer without deteriorating in value.

47. *Chiretta.*—Messrs. Babannaya and Co., Mangalore, wrote for information regarding the "chiretta" plant in this Presidency. They were informed that the true "chiretta" plant (*Swertia Chirata, Buch.—Ham.*) is a native of the mountainous regions of Northern India and that it is not found in Southern India, but that a substitute for it (*Exacum bicolor, Roxb.*) appeared to be used in Ootacamund. The nature of their inquiry led the Curator to suspect that it was just possible that a substitute for the true species might be used here. He accordingly obtained two samples of the dried "chiretta" plant—one from the Ootacamund Bazaar and the other from the Ootacamund Hospital. Both proved upon examination to be identical, namely, *Exacum bicolor, Roxb.*—a native of the Deccan Peninsula. Although belonging to different genera, both species belong to the same natural order (Gentianaceæ), and, therefore, doubtless possess bitter tonic properties in common.

48. *The Douglas Fir* (*Pseudotsuga Douglasii, Carr.*).—The District Forest-officer, Nilgiris, forwarded a packet of seeds of this species with the request that they might be sown and, should they germinate, that he would like to have half of the resultant seedlings, the other half to be kept for the gardens. The seeds were sown in two boxes on the 26th October 1896 and it has been interesting to watch the process of germination of the seeds of this conifer. A certain proportion of the seeds germinated in three weeks, and the remainder have been germinating in succession, week after week, till the end of March; in other words, the process of germination has been going on in succession over a period of five months. The seedlings are only about 1 to 1½ inches in height at present, but they are in a perfectly healthy and promising condition. This species grows to a height of 150 to 200 feet, and forms immense forests in British Columbia and Oregon. Many of the precipitous slopes on the higher parts of the Nilgiris might be profitably planted with species belonging to the natural order Coniferæ.

VI.—Financial.

49. (*a*) *Receipts.*—The budget estimate of receipts for 1896–97 was Rs. 3,800. This figure was reduced to Rs. 3,450 when framing the revised estimate for 1896–97, as it was anticipated that there would be no sale of jalap. This was approved of by Government in G.O., No. 573, Revenue, dated 29th October 1896, and accepted in G.O., No. 812, Financial, dated 25th November 1896.

The actuals for the year have been Rs. 2,765–11–2, which is Rs. 684–4–10 less than the revised estimate. Compared with the receipts of the previous year the income for the period under review shows a falling off of Rs. 884–5–2, and this is caused by a marked decrease under the amount realized by the sale of plants, seeds and flowers from the Government gardens and the sale-proceeds of the produce of the Burliyar gardens.

50. The value of seeds, plants, &c., issued gratis, or in exchange for gifts made to the gardens, amounted to Rs. 429–8–6; and, if this sum be added to the money realized, during the year, *i.e.*, Rs. 2,765–11–2, it will give an aggregate of Rupees 3,195–3–8.

51. (*b*) *Expe diture.*—By G.O., No. 686, Financial, dated 10th October 1896, and G.O., No. 812, Financial, dated 25th November 1896, the sum of Rs. 28,077 was accepted by Government as the revised budget estimate for 1896–97, against Rs. 27,800 the budget estimate for same year approved of in G.O., No. 928, Financial, dated 27th November 1895.

The actual expenditure was Rs. 25,862–4–4, which is less than the revised estimate by Rs. 2,214–11–8. The saving has been effected under "Soldiers' garden seeds" and other heads.

VII.—Miscellaneous.

52. (*a*) The small triangular space at the junction of Wood House Lane and Old Garden Road was marked out, put into shape, dug, manured and planted with grass, with an English oak tree planted in the centre. The cost of the work, amounting to Rs 10–7–0, was defrayed by the municipality. No charge was made for the oak plant.

53. (*b*) The triangular space at Charing Cross was dug over, manured and turfed. In the three corners of the triangle small low rockeries were made and planted with 874 plants. The cost of the work done and borne by this department amounted to Rs. 1-6-11-0, being Rs. 77–7–0 for labour and Rs 109–4–0 being value of the plants supplied for planting the three rockeries.

54. The work of removing the decaying old tree of *Acacia melanoxylon, R. Br.*, which stood within the triangle, was done by the municipality. The base of the stem, with root, has not been destroyed yet; and it is hoped that after it has become well seasoned that a section will be cut from it and placed in the collection of timbers in the small room at the main entrance to the gardens.

55. (*c*) The grounds surrounding the Collector's, Sub-Judge's, Post and Telegraph offices were cleared of weeds and put into better order and several new paths were marked out. As soon as the rainy season approaches many trees, shrubs and other plants will be planted in suitable places. The cost, amounting to Rs. 735, has been defrayed by the Public Works Department.

56. (*d Cinchona propagation.*—The work of raising cinchona seedlings for the Cinchona department was undertaken by the Curator of the Government Botanic Gardens at the request of the present Director of the Cinchona department, who agreed to pay for the services of one gardener on Rs. 10 per month for the purpose of looking after the work. During the year some thousands of seedlings of *Cinchona officinalis, Linn.* (Crown bark) were raised from seeds received from Jamaica, and the seedlings were handed over to the Cinchona department from time to time as required.

57. (*e*) *Nuisances.*—The trespass of cattle and the stealing of cattle manure from the several parks and gardens are of constant occurrence and are by far the worst, and it seems there exists no means for adequately punishing the offenders. The stealing of grass, firewood, flowers, plants and wire-netting round flower beds are minor evils, or, in other words, not of such frequent occurrence as those first referred to.

The earth-rat is very common in Ootacamund. It burrows under lawns and casts up heaps of earth which are very unsightly. This rat seems to defy all efforts of man to reduce its numbers.

58. (*f*) *Seeds for Soldiers' gardens.*—In accordance with instructions given in paragraph 2 of G.O., No. 337, Revenue, dated 18th July 1896, the Curator checked

the indents for seeds after they were received from the Officers Commanding the several regiments in the Madras Command. In the revised estimates for 1896–97 a sum of Rs. 3,600 was sanctioned in G.O., No. 812, Financial, dated 25th November 1896, for the purchase of seeds for soldiers' gardens. The expenditure amounted to Rs. 2,995–2–11, thus showing a saving of Rs. 604–13–1 under this head during the year under review.

59. (*g*) *Return of Stores.*—In accordance with G.O., No. 920, Financial, dated 18th September 1893, communicated to this office with G.O., No. 3616, Revenue, dated 2nd October 1893, an inventory of the valuable stock in the custody of the Curator has been made.

60. (*h*) *Service registers.*—All the service-books have been written up to date.

61. (*i*) Messrs. C. MacDonald and T. Burrows have held the appointments of overseers during the year M.R.Ry. S. V. Ramanujam Chetty has been clerk in charge of the office. and Manikiam Pillai has been acting herbarium assistant during the year; both of them have worked very well.

62. (*j*) *Concluding remarks.*—The hearty acknowledgments of the Curator are due—to W. T. Thiselton-Dyer, Esq., C.M.G., F.R.S., Director of the Royal Gardens, Kew, for a small collection of interesting tree seeds, for tubers of a new kind of jalap, and for that valuable publication, the "Kew Bulletin of Miscellaneous Information"; to D. Morris, Esq., C.M.G., D.Sc., M.A., Assistant Director, Royal Gardens, Kew (who takes a keen interest in economic botany—especially in regard to the development of the resources of the British Empire), for his ready response and kindness in giving advice and in furnishing information regarding economic plants whenever it was asked for; to Dr. George King, C.I.E., F.R.S., &c., Director of the Botanical Survey of India and Burma, for the very acceptable collections of seeds and of plants he has so very generously forwarded from time to time, and for much valuable advice; to the Hon'ble Mr. J. F. Price, C.S.I., Chief Secretary to the Government of Madras (who takes much interest in the gardens), for his very liberal contributions—especially of Japanese seeds—to the department; to Maurice Holtze, Esq., F.L.S., Director of the Botanic Gardens, Adelaide, South Australia, for a fine collection of Australian seeds; and to the lady and to all the remaining gentlemen who have very kindly made contributions of seeds, of plants, and of periodicals to the department during the year under review.

63. (*k*) The usual statements, six in number, are appended.

Ootacamund,
15th May 1897.

(Signed) R. L. PROUDLOCK,
Curator, Govt. Botanic Gardens and Parks.

Enclosures.

No. 1.—Comparative statement of rainfall in the Government Botanical Gardens, Ootacamund, for 1895–96 and 1896–97.

Months.	1895–96.		1896–97.	
	Number of rainy days.	Rainfall.	Number of rainy days.	Rainfall.
April	15	3·45	7	1·70
May	12	3·23	8	3·76
June	19	11·26	24	26·31
July	22	4·24	18	8·90
August	22	4·77	18	6·23
September	12	5·53	21	12·25
October	22	8·97	6	1·26
November	10	1·51	12	5·02
December	3	5·13	11	6·21
January	..	..	8	2·69
February	..	..	..	..
March	4	1·83	4	1·14
Total ..	141	49·92	137	76·07

No. 2.—Statement showing the Receipts of the Government Botanical Gardens and Parks, Nilgiris, for the official year ending 31st March 1897.

Particulars.	Actuals of 1895–96.	Budget estimate of 1896–97.	Actuals of 1896–97.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
Government Gardens, Ootacamund.			
Sale of plants, &c.	2,910 3 0	3,000 0 0	2,620 6 4
Government Garden, Burliyar.			
Sale of fruits, &c.	214 9 4	300 0 0	145 4 10
Government Medicinal Gardens, Ootacamund.			
Sale of Jalap, tubers, &c.	....	....	....
Total ..	3,124 12 4	3,300 0 0	2,765 11 2
Value of drugs supplied to Medical Department	525 4 0	150 0 0	....
Grand Total ..	3,650 0 4	3,450 0 0	2,765 11 2

No. 3.—Statement of Expenditure of Government Botanical Gardens and Parks, Nilgiris, for the official year ending 31st March 1897.

Particulars.	Actuals of 1895–96.	Budget estimate of 1896–97.	Actuals of 1896–97.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
Pay of the Curator	1,540 10 4	4,200 0 0	4,180 0 0
Exchange compensation allowance	289 9 2	553 0 0	539 5 0
Travelling allowance of the Curator	70 2 0	500 0 0	(*a*) 546 1 9
Pay of the Curator's office establishment	792 0 0	792 0 0	790 8 0
Total ..	2,692 5 6	6,045 0 0	6,055 14 9
Government Gardens, Ootacamund.			
Overseers	1,200 0 0	1,200 0 0	1,168 3 5
Pay of temporary establishment	4,997 13 7	5,500 0 0	5,393 11 3
Acclimatization of foreign plants (G.O., No. 874, dated 5th July 1872).	776 8 7	800 0 0	787 7 11
Labelling of plants	295 4 8	300 0 0	299 6 2
Contingencies	1,442 14 3	1,535 0 0	1,485 8 8
Horticultural implements and garden tools	82 14 0	200 0 0	76 4 0
Painting and repair of garden buildings	587 3 6	800 0 0	743 1 2
Herbarium Assistant and servants	384 1 0	396 0 0	396 0 0
Purchase of cabinets and materials for the herbarium	26 7 0	200 0 0	14 0 0
Library	160 7 7	700 0 0	304 13 8
Municipal assessment	156 0 6	250 0 0	247 11 10
Seeds for Soldiers' Gardens	3,397 3 3	3,600 0 0	2,995 2 11
Opening an experimental garden at Gúdalúr	145 0 1	200 0 0	75 2 5
Government Gardens, Burliyar.			
Temporary establishment and contingencies	497 7 11	500 0 0	427 12 8
Government Medicinal Garden.			
Temporary establishment and contingencies	289 15 8	300 0 0	298 6 0
Sim's Park.			
Temporary establishment and contingencies	1,993 14 1	2,000 0 0	1,890 13 9
Pay of watcher (G.O., No. 843, dated 14th July 1884)	108 0 0	108 0 0	108 0 0
Stone House Park.			
Temporary establishment and contingencies	691 13 10	700 0 0	645 10 3
Church Hill Park.			
Temporary establishment	95 7 8	100 0 0	..
Upper Norwood.			
Temporary establishment and contingencies	1,999 15 10	2,300 0 0	2,298 4 11
Crewe and Ottley Hall Estates.			
Temporary establishment	301 5 11	319 0 0	150 12 7
Total ..	19,629 14 11	22,008 0 0	19,806 5 7
Grand Total ..	22,322 4 5	28,053 0 0	25,862 4 4

(*a*) Including Rs. 274–15–9 sanctioned in G.O., Mis. No. 2839, dated 18th July 1896, on account of travelling expenses incurred by the transfer of R. L. Proudlock, Esq., from the Royal Botanic Gardens, Calcutta, to the Government Botanical Gardens and Parks, Nilgiris.

No. 4.—Return of Seeds and Plants distributed from the Government Botanical Gardens, Ootacamund and Burliyar, during the official year ending 31st March 1897.

Months.	Fruit trees.		Timber trees.		Ornamental shrubs and herbaceous plants.		Vegetable seeds.	
	Number of plants.	Value.	Number of plants.	Value.	Number of plants.	Value.	Number of packets.	Value.
1	2	3	4	5	6	7	8	9
		Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.
April 1896	..	..	304	31 0 0	56	32 11 0	95	26 0 0
May ,, ...	8	2 0 0	100	5 0 0	51	15 0 0	123	32 12 0
June ,, ...	..	..	5	3 0 0	8	38 8 0	151	59 13 6
July ,, ...	..	..	404	77 9 0	14	3 8 0	250	100 13 9
August ,, ...	..	..	25	8 15 0	110	18 8 0	99	34 12 6
September ,, ...	..	..	630	41 14 0	83	14 6 0	117	35 15 0
October ,, ...	..	..	735	77 8 0	76	12 14 0	100	41 13 6
November ,, ...	..	..	558	88 0 0	38	9 8 0	47	18 12 6
December ,, ...	..	..	20	12 0 0	4	2 12 0	72	20 13 0
January 1897	..	..	6	3 8 0	78	19 6 0	77	19 7 0
February ,, ...	..	..	1	1 0 0	14	3 4 0	43	12 12 0
March ,, ...	..	..	..	..	82	10 4 0	73	43 1 0
Total ..	8	2 0 0	2,788	349 6 0	614	180 9 0	1,247	446 13 9

Months.	Trees, flower and other seeds.		Bouquets and cut flowers.		Sundry receipts.		Total.
	Number of packets.	Value.	Number of bouquets or wreath and cut flowers.	Value.	Miscellaneous—fuel, grass, &c., charges.	Packing charges.	
	10	11	12	13	14	15	16
		Rs. A. P.	B. C.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
April 1896	89	17 14 0	2 ..	13 0 0	32 3 8	1 10 0	154 6 8
May ,, ...	76	12 15 0	1 ..	2 0 0	122 15 7	3 6 0	196 0 7
June ,, ...	68	9 12 0	4 ..	14 0 0	47 13 7	0 14 0	173 13 1
July ,, ...	101	34 10 0	2 ..	9 4 0	615 6 4	4 11 0	845 14 1
August ,, ...	36	35 2 0	3 ..	14 0 0	49 3 6	3 3 0	163 12 0
September ,, ...	63	25 12 0	3 ..	13 0 0	71 0 6	3 6 0	205 5 0
October ,, ...	33	11 10 0	2 ..	20 4 0	102 0 5	4 10 0	270 11 11
November ,, ...	12	9 6 0	1 ..	2 8 0	64 2 0	2 12 0	195 0 6
December ,, ...	25	17 12 0	1 ..	11 0 0	28 0 0	1 0 0	93 5 6
January 1897	64	24 14 0	5 ..	31 12 0	166 14 1	5 2 0	270 15 1
February ,, ...	17	2 12 0	3 ..	11 8 0	56 12 3	2 11 0	90 11 3
March ,, ...	59	12 9 0	1 ..	4 8 0	33 12 0	1 10 0	105 12 0
Total ..	643	215 0 0	28 ..	146 12 0	1,390 3 5	34 15 0	2,765 11 2

No. 5.—List of those to whom Seeds or Plants have been distributed gratis or in exchange for gifts made to the Government Gardens during the year 1896-97.

Date.	Names	Particulars.	Amount.
1896.			Rs. A. P.
1st April ..	W. Gollan, Esq., Superintendent, Government Botanic Gardens, Saharunpore.	18 plants, Lilium Nilagiricum ..	4 8 0
11th ,, ..	The Superintendent, Agri-Horticultural Society's Garden, Madras.	1 packet of bluegum seed ..	0 5 0
15th ,, ..	The Chief Commissioner, Andaman Islands ..	12 plants of Prinsepia	0 12 0
20th ,, ..	Mrs. Breithaupt, Thornley Bank, Bangalore ..	12 ,, of Ipecacuanha	6 0 0
21st May ..	F. W. F. Fletcher, Esq.	4 ,, of Coffea stenophylla ..	4 0 0
27th ,, ..	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Botanic Gardens, Sibpur, Calcutta.	1 packet of nutmeg seed	1 0 0
27th ,, ..	M. Ridley, Esq., Superintendent, Government Gardens and Parks, Lucknow.	2 packets of do.	2 0 0
5th June ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	8 kinds of orchids	8 0 0
12th ,, ..	Do. do. do.	4 do.	4 0 0
15th ,, ..	The Superintendent, Government Cinchona Plantations, Dodabetta, Nilgiris.	11 packets of English vegetable seeds.	2 13 6

No. 5.—List of those to whom Seeds or Plants have been distributed gratis or in exchange for gifts made to the Government Gardens during the year 1896-97—*cont.*

Date.	Names.	Particulars.	Amount.
1896.			Rs. A. P.
15th June ..	The Superintendent, Government Cinchona Plantations, Nedivattam, Nilgiris.	11 packets of English vegetable seeds	2 13 6
15th ,, ..	The Superintendent, Government Cinchona Plantations, Pykara, Nilgiris.	11 do. do.	2 13 6
15th ,, ..	C. M. Walsh, Esq., Eckford, Ootacamund ..	1 packet of flower seeds	0 4 0
18th ,, ..	R. Pantling, Esq , Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	3 kinds of orchids	3 0 0
20th ,, ..	W. Gollan, Esq., Superintendent, Government Botanic Gardens, Saharunpore.	5 kinds of bluegum seeds	1 9 0
3rd July ..	The Honorable Mr. J. F. Price, C.S.I., Trengwainton, Ootacamund.	12 bluegum plants of sorts ..	1 8 0
11th ,, ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	3 Ipomea plants of sorts	0 6 0
30th ,, ..	Do. do. do.	6 kinds of orchids	6 0 0
20th August ..	Do. do. do.	1 kind of orchid	1 0 0
25th ,, ..	Do. do. do.	23 kinds of orchids	23 0 0
1st September.	Do. do. do.	7 do.	7 0 0
17th ,,	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Royal Botanic Gardens, Sibpur, Calcutta.	4 do.	4 0 0
17th ,,	J. Cameron, Esq., F.L.S., Superintendent, Government Gardens, Bangalore.	15 trees, ornamental and herbaceous plants.	7 8 0
17th ,,	The Curator, Lloyd Botanic Garden, Darjeeling.	1 packet of Cupressus sempervirens.	0 4 0
20th ,,	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Royal Botanic Gardens, Sibpur, Calcutta.	4 plants, Retinospora Sp. ..	4 0 0
29th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	5 kinds of Australian tree seeds ..	1 4 0
5th October ..	Charles Gray, Esq., Coonoor	10 kinds of orchids	10 0 0
5th ,, ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	24 plants of Aerides maculosum ..	6 0 0
13th ,, ..	Do. do. do.	1 plant of Aerides lineare ..	0 4 0
14th ,, ..	The Honorable Mr. A. T. Arundel	15 kinds of orchids	15 0 0
17th ,, ..	P. Lancaster, Esq., Secretary, Agri-Horticultural Society of India, Calcutta.	7 do.	7 0 0
30th ,, ..	Do. do. do.	1 plant of Retinospora plumosa ..	1 0 0
4th November.	Professor I. B. Balfour, Keeper of the Royal Botanic Garden, Edinburgh.	76 plants of Aerides	19 0 0
4th ,,	John Fraser, Esq., Proprietor and Editor, "Gardening World," London.	1 packet of bluegum seed	0 10 0
4th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	24 orchids of sorts	12 0 0
7th ,,	The Honorable Mr. J. F. Price, C.S.I., Trengwainton, Ootacamund.	24 do.	12 0 0
27th ,,	Charles Gray, Esq., Coonoor	7 kinds of orchids	7 0 0
27th ,,	P. Lancaster, Esq., Secretary, Agri-Horticultural Society of India, Calcutta.	40 kinds of timber and herbaceous plants.	10 10 0
30th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	12 Petunia cuttings	0 12 0
8th December.	W. T. Thiselton-Dyer, Esq., C.M.G., C.I.E., F.R.S., Director, Royal Gardens, Kew.	12 plants of Osmunda regalis ..	3 0 0
8th ,,	Professor I. B. Balfour, Keeper of the Royal Botanic Gardens, Edinburgh.	17 kinds of orchids	17 0 0
8th ,,	Major-General E. S. Berkely, Thorold Gardens, Bitterne Park, Southampton, England.	12 plants of Impatiens Jerdonæ ..	3 0 0
8th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	12 do. do. ..	3 0 0
17th ,,	E. C. Duff, Esq., Editor, "Planting Opinion," Coonoor.	12 do. do. ..	3 0 0
1897.		3 kinds of orchids	3 0 0
29th January.	General Evezard	36 plants of Princepia utilis ..	2 4 0
2nd February.	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	1 plant of Cupressus Lawsoniana .	0 4 0
3rd ,,	Charles Gray, Esq., Coonoor	1 packet of bluegum seed ..	0 10 0
3rd ,,	Dr. G. King, F.R.S., C.I.E, Director of the Botanical Survey of India, and Superintendent, Royal Botanic Gardens, Sibpur, Calcutta.	23 kinds of orchids	23 0 0
6th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	1 packet of Pseudotsuga Douglasii.	1 0 0
3rd ,,	W. Gollan, Esq., Superintendent, Government Botanic Gardens, Saharunpore.	1 do. of Quercus glauca ..	0 8 0
24th ,,	W. T. Thiselton-Dyer, Esq., C.M.G., C.I.E., F.R.S., Director, Royal Gardens, Kew.	1 do. of ,, lamellosa ..	0 8 0
8th March ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	43 orchids and other plants] ..	6 2 0
27th ,, ..	Supplied to the Ootacamund Municipality for Charing Cross.	12 kinds of orchids	12 0 0
		16 Nilgiri lily bulbs	4 0 0
		124 orchids	31 0 0
		6 kinds of orchids	6 0 0
		874 ornamental plants	109 4 0
		Total ..	429 8 6

No. 6.—List of those who have been benefactors to the Gardens during the year 1896-97.

Serial number.	Names.	Particulars.		
		Packets of seeds.	Plants.	Name or class of seeds and plants.
1	W. T. Thiselton-Dyer, Esq., C.M.G., C.I.E., F.R.S., Director, Royal Gardens, Kew.	1	..	Pseudophœnix Sargentii, Wendl.
		5	..	Tree.
		..	28	Ipomœa simulans.
2	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Royal Botanic Gardens, Sibpur, Calcutta.	56	..	Tree.
		24	..	Creeper.
		26	..	Shrub.
		11	..	Herbaceous.
		1	..	Aegle marmelos.
		..	70	Ferns, palms and other ornamental trees.
		..	240	Orchids.
		..	18	Nymphæa sp.
3	The Honorable Mr. J. F. Price, C.S.I., Trengwainton, Ootacamund.	10	..	Tree.
		12	..	Ornamental tree.
		21	..	Flower, shrubs and creeper.
		..	694	Cauliflower and cabbage.
		..	367	Violets.
		..	2	Gynura aurantiaca.
		..	46	Artichoke.
		..	10	Chrysanthemum.
		..	8	Rhubarb.
		..	24	Carnations.
4	W. Gollan, Esq., Superintendent, Government Botanic Gardens, Saharunpore.	1	..	Primula Stuartiana, yellow variety.
		8	..	Conifers.
		2	..	Castanea vesca.
5	H. G. Hein, Esq., Superintendent, Government Agri-Horticultural Garden, Lahore.	6	..	Tree.
		37	..	Flower.
6	The Director, Botanic Garden, Adelaide, South Australia ..	104	..	Tree.
7	R. T. Baker, Esq., F.L.S., Botanist and Assistant Curator, Technological Museum, Sydney.	2	..	Do.
8	W. A. Kennedy, Esq., Curator, Botanic Gardens, Darjeeling.	2	..	Quercus lamellosa and Q. glauca.
9	The Superintendent, Agri-Horticultural Society's Garden, Madras.	12	..	Ornamental tree.
		13	..	Tree
10	Mr. G. H. T. Mayer, Superintendent, Memorial Gardens, Cawnpore.	1	..	Flower.
		1	..	Do.
		1	..	Creeper.
		5	..	Tree.
11	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	..	96	Orchids.
12	P. Lancaster, Esq., Secretary, Agri-Horticultural Society of India, Calcutta.	..	10	Do.
		..	8	Cannas.
13	C. G. Douglas, Esq., District Forest Officer, Nilgiris, forwarded by,	8	..	Tree seeds collected by the late R. Morgan, Esq., in British Central Africa.
14	E. D. M. Hooper, Esq., Acting Conservator of Forests, Southern Circle.	1	..	Pseudotsuga Douglasii.
		..	18	Japanese Bamboos.
15	The District Forest Officer, Kistna	1	..	"Gara tree."
16	Charles Gray, Esq., Coonoor	7	..	Tree.
		1	..	Ornamental.
		..	110	Do.
		..	84	Bulbs.
		..	19	Orchids.
17	E. C. Duff, Esq., Editor, "Planting Opinion," Coonoor ..	1	..	Cola acuminata.
		1	..	Nyassaland wild coffee.
		..	1	Coffea stenophylla.
18	M. Clementson, Esq., Ootacamund	3	..	Flower.
19	Major Keckewich, Ootacamund	..	35	Carnations.
20	Mrs. Batchelor, Ootacamund	..	1	Orchid.
21	W. M. Liddell, Esq., Nedivattam	..	2	Statice sp.
				Cichorium Intybus.
22	A. J. Alexander, Esq., Seaforth Estate	..	2	Orchids.
		..	1	Orchid.

Ootacamund,
15th May 1897.

(Signed) R. L. PROUDLOCK,
Curator, Govt. Botanic Gardens and Parks.

Endorsement Dis. No. 1268/97.

Forwarded. The report was received in this office on 31st May but has been detained as it seemed necessary to consult with the Curator about certain measures.

2. Mr. Proudlock has effected considerable improvement in the Government House and the Government Botanical Gardens, Ootacamund. The Church Hill Park has been wisely let alone, pending the decision of Government as to its future. The Gúdalúr Gardens so called have been abandoned.

3. I am in consultation with the Curator about increasing the revenue from cut flowers and about some theft of seeds in the Ootacamund Gardens. These matters, however, were rightly excluded from the annual Report.

(Signed) J. H. A. TREMENHEERE,
Collector.

Ootacamund,
12th June 1897.

Order—No. 559, Revenue, dated 13th July 1897.

Miscellaneous.

With his endorsement read above, the Collector of the Nilgiris submits the report of Mr. R. L. Proudlock on his management of the several Government gardens and parks on the Nilgiri Hills during the year 1896-97.

2. The report reached the Collector on the 31st May last, *i.e.*, on the day previous to that on which it was due in the Government office and it was received by Government only on the 14th June. The Collector is requested to arrange to dispose of the report earlier in future so that its transmission to Government may not be delayed.

3. The year under review was the first in which the gardens were under the control of the Collector of the district instead of under that of the Government Botanist. The appointment of a Government Botanist is still under correspondence between the Government of India and the Secretary of State. Pending final orders the work has been entrusted to Dr. A. G. Bourne, the Officiating Superintendent of the Central Museum, who will deal with all applications for botanical assistance. In consequence of this arrangement and the decision to ultimately make Madras the head-quarters of botanical work in this Presidency the Herbarium and the more valuable portion of the Library hitherto attached to the Government Gardens at Ootacamund have been transferred to Madras.

4. The Government observes that the Curator's report is modelled on those submitted in preceding years by the Government Botanist. As the Curator's duties are confined to the development and improvement of the gardens entrusted to his charge his reports in future should be confined to a statement of how these duties have been carried out during the year and all purely scientific matters should be excluded.

5. With reference to paragraph 14 of his report the Curator is requested to submit a separate report on the subject through the Collector.

6. The Government notes with satisfaction that considerable improvements have been effected in the gardens and parks under the Curator's management during the year under review. It is hoped that the rules defining the privileges of the public in the Government Botanical Gardens at Ootacamund and in Sim's Park at Coonoor which were framed in accordance with a suggestion made by Dr. King of Calcutta have answered their purpose.

7. In the course of the year the Curator was requested to report on the condition of the Government Gardens at Burliar and Gúdalúr. The Curator's report with regard to the Gúdalúr Experimental Garden showed that this garden had proved a failure. It was accordingly decided to abandon it. As regards the Burliar Garden, the Curator's report showed that it also had been greatly neglected, but as the locality is eminently suitable for the experimental cultivation of exotic tropical plants the Government has decided to retain the garden and the Curator's proposals for its improvement have been approved.

8. The receipts from and the expenditure on the several gardens and parks during the year under review are compared with those of the two previous years in the following statement:—

	1894-95.	1895-96.	1896-97.
	Rs.	Rs.	Rs.
Receipts	5,204	3,696	3,195
Charges	25,076	22,848	25,862

The figures for receipts given above include the value of the seeds, plants, &c., issued *gratis* or in exchange for gifts made to the gardens, and the amount to be debited to free grants was Rs. 430 as against Rs. 46 in the previous year. The Government is, however, glad to observe that private gifts to the gardens also showed a considerable increase as compared with those of 1895–96 and desires to take this opportunity to tender its thanks to the contributors. For purposes of comparison it is desirable that the information given in statement 5 should be exhibited so as to distinguish between the seeds, plants, &c., given from the garden *gratis* and those distributed in exchange for others. Mr. Proudlock will be requested to carry out the necessary alteration in the statements in submitting future reports.

9. The expenditure during the year under review amounted to Rs. 25,862 as against Rs. 27,690, the sanctioned estimate for the same period, and Rs. 22,848, the actuals of the previous year. The increase for the year under review is chiefly under the head "Pay of the Curator" and is due to the fact that a considerable interval elapsed during the previous year between the death of the late Curator and the appointment of the present officer. As regards the figures for the revised and budget estimates, the Curator has in paragraph 51 of the report taken those given in the Government orders accepting tentatively the budget estimates of the department instead of those finally accepted by the Government of India and published in the "Civil Budget Estimate." In future reports, the figures given in the latter should be invariably taken for purposes of comparison and the reasons for any increase or decrease in the actuals as compared with the estimates briefly set forth for the information of Government. It is observed that in the report for 1895–96 the actuals of that year were shown as Rs. 22,322 while in the "Civil Budget Estimate" for 1897–98 they are shown as Rs. 22,848. The difference is apparently due to the adjustment in accounts made by the Accountant-General subsequent to the submission to Government of the report in question but the matter should have been noticed and the discrepancy explained by the Curator.

10. It having been found that in the matter of the supply of seeds for Soldiers' gardens, the quantity applied for in several cases had been altogether excessive while in certain others the seeds given were of plants which would not grow in the place from which the indent had been received, the Government in the year under review issued special orders to regulate the indent and supply of such seeds in the future. It is observed that there has been a decrease of over Rs. 400 in the expenditure under this head which is doubtless due to the stricter scrutiny thus prescribed.

11. The Government observes from paragraph 57 of the Curator's report that cases of cattle trespass and petty theft are frequent in the gardens and from paragraph 3 of the Collector's endorsement it would appear there has been also some theft of seeds apparently from the garden stores. These facts call for the exercise by the Curator of a stricter supervision and greater vigilance over his subordinates without whose connivance or privity the thefts could hardly have occurred.

(True Extract.)

for Ag. Secretary to Government.

To the Collector of the Nilgiris.
" the Public Works Department.
" the Director of Government Cinchona Plantations.
" the Board of Revenue (Land Revenue).
" " (Revenue Settlement, Land Records and Agriculture).
" the Superintendent, Government Central Museum.
" the Surgeon-General (through the Public Department).
" the Honorary Secretary, Agri-Horticultural Society.
" " Wynaad Planters' Association.
" " Nilgiri " "
" " Yercaud " "

Endorsement No. 559A.

Copy to the Government of India, Revenue and Agricultural Department.

(Signed) G. STOKES,
Ag. Secretary to Government.

Exd. A. F. Eccliston.

200 Copies

Public Works Department

Government {1897} of Madras.

REVENUE.

Read. } 1897. *Enclosures*

Regd. } *Spare copies*

G.O., Nos. 559, 559A, 13th July 1897.

No 2181 W & Gauges

Recorded.

(Sd) D. Rice
W

JULY.

To

The S.E. W. Circle.

Report on the Government Gardens and Parks, Nilgiris.

Reviewing the annual Administration — for the year 1896-97.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

Read—the following letter from R. L. PROUDLOCK, Esq., Curator, Government Botanic Gardens and Parks, Nilgiris, to the Secretary to Government, Revenue Department (through the Collector of the Nilgiris), dated Ootacamund, 31st May 1897, No. 169:—

In accordance with the instructions contained in paragraph 2 of G.O., No. 212, Revenue, dated 23rd May 1896, I have the honour to submit the annual Administration Report of the Government Botanical Gardens and Parks, Nilgiris, for the official year ending 31st March 1897.

2. Two advance copies of the Report required by G.O., No. 464, Revenue, dated 30th May 1893, are also enclosed for submission to the Secretary of State.

ANNUAL ADMINISTRATION REPORT OF THE GOVERNMENT BOTANICAL GARDENS AND PARKS, NILGIRIS, FOR THE YEAR 1896-97.

Contents.

I. Season and Rainfall.
II. General condition of the Gardens and Parks.
  (1) Ootacamund—
    (*a*) Government Botanic Gardens.
    (*b*) Government House Gardens.
    (*c*) Stone House Park.
    (*d*) Church Hill Park.
    (*e*) Crewe and Ottley Hall Estates.
  (2) Coonoor—
    Sim's Park.
  (3) Barliyar—
    Experimental Garden.
  (4) Gúdalúr—
    Experimental Garden.
III. Herbarium.
IV. Library.
V. Notes on Plants of Economic Interest.
VI. Financial—
  (*a*) Receipts.
  (*b*) Expenditure.
VII. Miscellaneous—
  (*a*) Renovation and planting of a piece of ground at junction of Wood House Lane and Old Garden road.
  (*b*) Renovation and planting of a piece of ground at Charing Cross.
  (*c*) Renovation and planting of a piece of ground at Telegraph Hill.
  (*d*) Cinchona propagation.
  (*e*) Nuisances.
  (*f*) Seeds for Soldiers' Gardens.
  (*g*) Return of Stores.
  (*h*) Service Registers.
  (*i*) Establishment.
  (*j*) Concluding remarks.
  (*k*) Statements.

I.—Season and Rainfall.

The average annual rainfall of Ootacamund is 47 inches. The rainfall for the year was 76·07 inches, or 26·15 inches more than was registered during 1894–95, and 29·07 inches more than the average. The heaviest rainfall was in June when 26·91 inches of rain fell on 24 days. The monsoon burst with unusual violence, but did no material damage beyond blowing down a large unsightly old tree of *Cupressus macrocarpa, Hart.* and blowing a few branches off trees generally throughout the gardens. The fact that little damage was done is chiefly due to the sheltered position the gardens occupy in the Ootacamund valley.

2. The frosts were, upon the whole, not very severe, and no damage worth mentioning was done by them. It may, however, be mentioned that at the first sign of frost all the more valuable tender plants in beds in the lower parts of the gardens were lifted and transferred to the nurseries beyond the reach of frosts.

3. The year, upon the whole, was a fair one for gardening operations.

II.—General Condition of the Gardens and Parks.

4. (1) **Ootacamund—(*a*) Government Botanic Gardens.**—The gardens show signs of improvement in the lower part, due to a good many trees of species already well represented having been cut down. The result has been the opening up of a wider stretch of lawn and giving an almost clear view up the gardens for a considerable distance from the main entrance. The upper parts are still capable of being much improved.

5. The cleaning and overhauling of the nurseries have been put in hand, and the work is still being proceeded with. They were found to be in very bad order, and it will take some time to fully stock them with plants again. Without a well-stocked and well-ordered nursery it is hopeless to expect to keep a botanic garden in the condition it ought to be kept in.

6. The plants in the propagating houses have been considerably increased in number during the year; but the general condition of the houses and their contents is not all that could be desired.

7. The lower glass-house, just above the bandstand, which contained ordinary plants with no apparent special object in view, is now filled and kept bright with flowering plants and ferns. It is now "the conservatory" of the gardens, and visitors have access to it from sunrise to sunset every day throughout the year.

8. The English Oak (*Quercus Robur, L.*).—All the English Oak trees in the gardens were more or less filled with parasitic plants (species of Loranthus) and badly needed cleaning and pruning. They have been cleared of Loranthi and properly pruned. Several of the trees in the Oak plantation to the N.N.West of the propagating houses were so badly attacked that it was hopeless for them to recover, and so they were cut down. All the Oaks have now a much improved, healthy appearance.

9. *Polygonum sp.*—A beginning was made to root out this plant, but it is springing up again rapidly, and the ground will have to be gone over repeatedly in order to finally get rid of it. It has become a rampant weed, in patches which occupy a considerable area, in the upper parts of the gardens; and the task of extirpating it will be no ordinary one. It would be well if owners of property in Ootacamund were to destroy it at once wherever it might make its appearance on their grounds, as it is a formidable weed.

10. *Refuse Pit.*—A pit measuring 50′ × 30′ × 4′ was made for the reception of leaves and other garden refuse, as not a single excavated refuse pit existed in the gardens when the present curator took charge in February 1896.

11. *Ponds.*—The large pond at the bandstand and four of the smaller ones in other parts of the gardens were cleared of weeds and of silt.

12. *Repairs to the bandstand terrace wall.*—On two occasions two portions of this wall, measuring together 133 feet in length, fell into the pond; and both portions have been rebuilt with new material throughout. The old portions of the wall and the flower vases have been repaired, and the whole structure has been whitewashed.

13. *Labelling and painting.*—A good number of labels for trees and shrubs were written, and all the out-door garden seats and the three summer houses were painted during the year.

14. *Garden Buildings.*—The curator is very badly off for accommodation under this head. He is compelled to have his office in his house, which is not altogether convenient. He has also to use two of the out-houses belonging to his house as tool stores. The two small lodges at the entrance to the gardens, where valuable seeds have to be kept, have to serve as accommodation for the clerk's office, as seed stores, seed cleaning, packing and despatching room, herbarium, painter's room, museum,

and Government House visitor's-book room. While the Director of the Cinchona Department has kindly consented to allow the Curator's Library to remain in its old quarters (one of the rooms in his office) until such time as another room can be found, or a new building erected, for its accommodation.

15. *Boundaries.*—It may seem somewhat unusual to have to report that a garden which has been in existence for fifty years, and which has nearly three miles of boundary line, is entirely unfenced in, with the exception of two portions measuring together not more than three hundred yards.

16. (*b*) **Government House gardens**—*The terraced garden.*— This garden, which is situated immediately in front of the house, and which measures 280′ × 130′, received considerable attention during the year. The lawn was in bad order, and so it was dug over to a depth of two and three feet in order to get rid of the coarse and deep-rooted grasses, and to remove the boulders and smaller stones. After this was done, the whole was manured, and then planted with *Cynodon Dactylon, Pers.*, the common "Hurriali" grass. The new lawn is already giving promise of being an improvement on the old one.

17. All the old rose plants in the upper terrace were removed and replaced by 24 new standard roses, comprising 17 varieties, which were obtained by purchase from Bangalore. The flower beds, including the long border against the rose hedge, were taken in hand, re-arranged, the old soil removed to a depth of about 20 inches and replaced by rich fresh soil, manured and replanted.

18. The greater proportion of the plants in the remaining beds and borders in the immediate vicinity of the house were lifted; the soil was dug over and manured, and the beds were replanted with such suitable plants as were available.

19. Several new beds were made in different parts of the grounds; while two small valleys amounting together in area to ¼ of an acre were planted with Arum Lily (*Richardia africana, Kunth,*) and red-hot Poker plants (*Kniphofia aloides, Moench,*) with the object of increasing the means for supplying the demand for flowers for Government House.

A good number of indigenous trees were planted on the steep slopes above the house. Many plants, chiefly exotic, were also planted near several of the out-buildings with the object of ultimately screening them from view.

20. *Vegetable garden.*—This garden was maintained in fair order, and moderate quantities of vegetables were grown and supplied for the use of Government House.

21. *Lucerne (Medicago sativa, L.).*—This very valuable fodder was grown in the vegetable garden on a moderate scale and supplied for the use of the stable regularly throughout the season.

22. *Vegetable garden hedge and wire fence.*—The unsightly old hedge was cut down to within 3 feet of the ground, and the garden is now enclosed by a new barbed-wire fence, 800 feet in length, erected on the outside of the hedge.

23. *Blue Gum Tree (Eucalyptus Globulus, Lab.)*—Four large trees of this species were cut down within the vegetable garden.

24. *Manure Pits.*—Two manure pits, measuring 29′ × 21′ × 6½′ and 25′ × 19′ × 5½′, respectively, were dug for the reception of stable manure; and a smaller one, measuring 12′ × 11′ × 2½′, was made for the reception of cattle manure.

25. *Improvement made to the Park.*—About 2½ acres of rough pasture ground, immediately below the terraced garden and in front of the Military Secretary's bungalow, was treated during the year. Several large trees of *Acacia melanoxylon, R. Br.*, which were nearly killed by parasites, were cut down and their roots dug out; and quite 50 or 60 large roots of blue gum and of other trees, which had been left in the ground for the last few years, were taken out as they were most insightly. All the large protruding boulders and smaller stones were removed; and two long, disused, open drains were filled in. The seedling trees, rootsuckers, docks and other weeds were carefully dug out. Where the ground was too high it was cut down, and where it was too low it was made up, and the whole was top-dressed with good soil. The

result is that this portion of the grounds now presents a much neater appearance than it did before treatment.

26. All the oak trees were cleared of parasitic plants and pruned. The fine English oak, which stands in front of the Military Secretary's bungalow, is 54½ feet in height, 7 feet 8 inches in girth at 4 feet from the ground, and the circumference of the crown is 200 feet. It is one of the finest specimen oaks in Ootacamund.

27. (*c*) **Stone House Park.**—The whole of the park was gone over by a gang of coolies for the purpose of digging out the weeds, which in parts of the park had become very plentiful. The principal weeds are the common dock (*Rumex Nepalensis, Spreng.*), the Broom (*Cytisus scoparius, Link.*, *Acacia dealbata, Link.*, *Acacia melanoxylon, R.Br.*, *Oenothera rosea, Soland.*, and one or two other species of *Oenothera*. It is worthy of note that all these plants, with the exception of the first-named species, are introductions to the Nilgiris.

28. (*d*) **Church Hill Park.**—Nothing was spent on this park during the year owing to the fact that it was rumoured in Ootacamund that it was the intention of Government to sell it for building purposes. The Curator himself saw a survey party engaged in surveying it—taking contour levels, and marking it off into blocks. For these reasons it was decided not to spend any money on it during the year 1896–97.

29. (*e*) **Crewe and Ottley Hall estates.**—The weeding, cleaning and hedge clipping have been attended to as usual.

30. (2) **Coonoor—Sim's Park.**—As the park had become somewhat overcrowded, a good number of trees, chiefly *Cupressus macrocarpa, Hart.*, were cut down, with the result that the central portion of the park, between the main entrance and the lake, now presents a more open and improved appearance. The park, upon the whole, has been kept in good order during the year.

31. (3) **Barliyar.**—In accordance with instructions contained in paragraph 6 of G.O., No. 212, Revenue, dated 23rd May 1896, a special report on these gardens was submitted to Government with this office letter No. 70, dated the 24th April 1897; and so, there appears no necessity to mention anything further about them in this report.

32. (4) **Gudalur.**—The same remarks as have just been made about Barliyar gardens apply to this one. The special report on them was submitted to Government with this office letter No. 344, dated 17th September, 1896.

III.—Herbarium.

33. The herbarium and the collection of seeds and fruits were removed to Madras during the year in accordance with instructions conveyed in paragraph 3 of G.O., No. 212, Revenue, dated 23rd May 1896, and in paragraph 1 of G.O., Mis. No. 154, dated 11th January 1897.

During the year 268 specimens — 128 of them being orchids—were collected by the Curator in the district.

The following specimens were sent to the Director of the Botanical Survey of India on the 15th December 1896, viz. :—one *Cypripedium Lowii, Lindl.*; one *Sterculia diversifolia, G. Don*; one *Romneya Coulteri, Harv.*

IV.—Library.

34. The greater proportion of the books forming the library were transferred to the Central Museum, Madras, in accordance with instructions conveyed in G.O., Mis. No. 1094, dated 24th February 1897.

35. Sanction was accorded in G.O., Mis. No. 546, dated 28th January 1897, for the purchase of the undermentioned works for the gardens' library, viz. :—

1. Index Kewensis.
2. Kerner's Natural History of Plants.
3. Veitch's Manual of Orchidaceous Plants.
4. Nicholson's Dictionary of Gardening.
5. Milner's Art and Practice of Landscape Gardening.
6. Robinson's English Flower Garden.

36. The following volumes have been presented to the library during the year, viz. :—

1. Kew Bulletin, from the Director, Royal Gardens, Kew.
2. Series of Agricultural ledgers, from the Government of India.
3. Reports of the Botanical Survey of India, from the Director.
4. Bulletin of the Botanical Department, Jamaica, from the Director of Public Gardens and Plantations, Jamaica.
5. Proceedings of the Agri-Horticultural Society of Madras, from the Honorary Secretary.

37. Of Rs. 700 provided under library Rs. 304–13–8 have been spent.

V.—Notes on Plants of Economic Interest.

38. *Ipecacuanha* (*Cephælis Ipecacuanha, Rich*).—Very little interest seems to be taken in the cultivation of this plant, the powdered annulated roots of which form the *Ipecacuanha* of commerce. In January the Curator visited Nilambur and took full notes (which are rather too lengthy to be incorporated in this report) of the conditions the few plants are grown under there under the care of Mr. Hadfield, the District Forest-officer. Suffice it to be stated that the condition of the plants does not give much promise of its cultivation ever becoming a commercial success in the climate of Nilambur unless some new and better method of cultivation is discovered and adopted. The climate seems to be altogether too dry for the plants in the dry season and they suffer, unless watered artificially.

39. *Jalap* (*Ipomœa Purga, Hayne*).—A small area at the top of the gardens was planted with jalap tubers in April 1896; but they are not fit to lift yet. The cultivation of this plant seems to have been carried on for many years past on the Dodabetta Cinchona Plantation and not in the Government gardens, although the amounts realised by the sale of the drug were, prior to the separation of the Cinchona department from the Botanic gardens and Parks, always credited to the garden revenue. It seems that there is greater scope for growing jalap on the Dodabetta Cinchona Plantation than in the gardens; and, it is no doubt the wisest policy for the Cinchona Department to continue to grow it in sufficient quantity to meet the regular demands for it by the Medical Stores departments. In the case of such a plant as the jalap, which has passed the introductory or experimental stage, it is perhaps as well that the gardens should be relieved of the work of cultivating it on a large scale. The Cinchona Department will no doubt continue the cultivation of the drug on a scale sufficient to meet the demands for it by the several Medical Stores departments; while, in future, only a small stock will be grown on in the gardens in order to meet any demands for fresh tubers from persons who may apply for them for the purpose of cultivating the drug.

40. *Tampico Jalap* (*Ipomœa simulans, Hanbury*,).—Mr. W. T. Thiselton-Dyer, C.M.G., Director of the Royal Gardens, Kew, sent out, recently, 28 tubers of Tampico jalap — one lot being from Tonayan and the other from Tlacolulam in the Canton of Jalapa, Vera Cruz, Mexico. It will be observed that this is a different species from the one already grown here for the production of jalap. Their growth will be carefully attended to, and watched with interest, in these gardens.

41. *Japanese Bamboos.*—A collection of eighteen plants, comprising nine varieties, was made over to the gardens by E. D. M. Hooper, Esq., Acting Conservator of Forests, Southern Circle, in July 1896. Half of the plants were planted in the Ootacamund gardens and half in Sim's Park, Coonoor. Those planted in the Ootacamund gardens are doing fairly well, but those in Sim's Park have made no growth yet.

42. A collection of 79 fruit trees, including varieties of Apple, Pear, Peach, Plum, Apricot, Walnut, Sweet Chestnut, Persimmon, Blackberry and Dewberry, was purchased at a nominal rate from the Saharanpur Botanical Gardens. The plants have been planted in the nursery, where they are doing well so far.

43. *Kola nut* (*Cola acuminata, Schott and Endl.*).—Mr. E. C. Duff, Editor of "*Planting Opinion*," Coonoor, very kindly gave ten seeds of this West African tree to the department. They were sown at Burliyar, but only six or seven of them germinated, and these are doing well.

44. *Nyassaland Wild Coffee.*—A specimen of this, with six seeds, was sent by Mr. E. C. Duff for identification. The Curator forwarded the specimen and two seeds to the Director, Royal Gardens, Kew, for identification. It was returned duly named — *Cremaspora africana, Benth.*; and the name has been communicated to Mr. Duff. The remaining four seeds have been sown at Burliyar.

45. *The Nilgiri Hill Gooseberry* (*Rhodomyrtus tomentosa, Wight.*).—Some jelly was made from the fruit of this shrub and sent to Kew, and a report on it appeared in Nos. 113–114 of the Kew Bulletin for May and June 1896.

46. *Dandelion* (*Taraxacum officinale, Wigg.*).—No indents for dandelion root were received during the year from any of the Medical Stores departments, and so the crop here has not yet been lifted. It can well be left growing for another year or longer without deteriorating in value.

47. *Chiretta.*—Messrs. Babannaya and Co., Mangalore, wrote for information regarding the "chiretta" plant in this Presidency. They were informed that the true "chiretta" plant (*Swertia Chirata, Buch.—Ham.*) is a native of the mountainous regions of Northern India and that it is not found in Southern India, but that a substitute for it (*Exacum bicolor, Roxb.*) appeared to be used in Ootacamund. The nature of their inquiry led the Curator to suspect that it was just possible that a substitute for the true species might be used here. He accordingly obtained two samples of the dried "chiretta" plant—one from the Ootacamund Bazaar and the other from the Ootacamund Hospital. Both proved upon examination to be identical, namely, *Exacum bicolor, Roxb.*—a native of the Deccan Peninsula. Although belonging to different genera, both species belong to the same natural order (Gentianaceæ), and, therefore, doubtless possess bitter tonic properties in common.

48. *The Douglas Fir* (*Pseudotsuga Douglasii, Carr.*).—The District Forest-officer, Nilgiris, forwarded a packet of seeds of this species with the request that they might be sown and, should they germinate, that he would like to have half of the resultant seedlings, the other half to be kept for the gardens. The seeds were sown in two boxes on the 26th October 1896 and it has been interesting to watch the process of germination of the seeds of this conifer. A certain proportion of the seeds germinated in three weeks, and the remainder have been germinating in succession, week after week, till the end of March; in other words, the process of germination has been going on in succession over a period of five months. The seedlings are only about 1 to 1¼ inches in height at present, but they are in a perfectly healthy and promising condition. This species grows to a height of 150 to 200 feet, and forms immense forests in British Columbia and Oregon. Many of the precipitous slopes on the higher parts of the Nilgiris might be profitably planted with species belonging to the natural order Coniferæ.

VI.—Financial.

49. (*a*) *Receipts.*—The budget estimate of receipts for 1896–97 was Rs. 3,800. This figure was reduced to Rs. 3,450 when framing the revised estimate for 1896–97, as it was anticipated that there would be no sale of jalap. This was approved of by Government in G.O., No. 573, Revenue, dated 29th October 1896, and accepted in G.O., No. 812, Financial, dated 25th November 1896.

The actuals for the year have been Rs. 2,765–11–2, which is Rs. 684–4–10 less than the revised estimate. Compared with the receipts of the previous year the income for the period under review shows a falling off of Rs. 884–5–2, and this is caused by a marked decrease under the amount realized by the sale of plants, seeds and flowers from the Government gardens and the sale-proceeds of the produce of the Burliyar gardens.

50. The value of seeds, plants, &c., issued gratis, or in exchange for gifts made to the gardens, amounted to Rs. 429–8–6; and, if this sum be added to the money realized, during the year, *i.e.*, Rs. 2,765–11–2, it will give an aggregate of Rupees 3,195–3–8.

51. (*b*) *Expe diture.*—By G.O., No. 686, Financial, dated 10th October 1896, and G.O., No. 812, Financial, dated 25th November 1896, the sum of Rs. 28,077 was accepted by Government as the revised budget estimate for 1896–97, against Rs. 27,800 the budget estimate for same year approved of in G.O., No. 928, Financial, dated 27th November 1895.

The actual expenditure was Rs. 25,862–4–4, which is less than the revised estimate by Rs. 2,214–11–8. The saving has been effected under "Soldiers' garden seeds" and other heads.

VII.—Miscellaneous.

52. (*a*) The small triangular space at the junction of Wood House Lane and Old Garden Road was marked out, put into shape, dug, manured and planted with grass, with an English oak tree planted in the centre. The cost of the work, amounting to Rs 10–7–0, was defrayed by the municipality. No charge was made for the oak plant.

53. (*b*) The triangular space at Charing Cross was dug over, manured and turfed. In the three corners of the triangle small low rockeries were made and planted with 874 plants. The cost of the work done and borne by this department amounted to Rs. 1–6–11–0, being Rs. 77–7–0 for labour and Rs 109–4–0 being value of the plants supplied for planting the three rockeries.

54. The work of removing the decaying old tree of *Acacia melanoxylon, R. Br.*, which stood within the triangle, was done by the municipality. The base of the stem, with root, has not been destroyed yet; and it is hoped that after it has become well seasoned that a section will be cut from it and placed in the collection of timbers in the small room at the main entrance to the gardens.

55. (*c*) The grounds surrounding the Collector's, Sub-Judge's, Post and Telegraph offices were cleared of weeds and put into better order and several new paths were marked out. As soon as the rainy season approaches many trees, shrubs and other plants will be planted in suitable places. The cost, amounting to Rs. 735, has been defrayed by the Public Works Department.

56. (*d Cinchona propagation.*—The work of raising cinchona seedlings for the Cinchona department was undertaken by the Curator of the Government Botanic Gardens at the request of the present Director of the Cinchona department, who agreed to pay for the services of one gardener on Rs. 10 per month for the purpose of looking after the work. During the year some thousands of seedlings of *Cinchona officinalis, Linn.* (Crown bark) were raised from seeds received from Jamaica, and the seedlings were handed over to the Cinchona department from time to time as required.

57. (*e*) *Nuisances.*—The trespass of cattle and the stealing of cattle manure from the several parks and gardens are of constant occurrence and are by far the worst, and it seems there exists no means for adequately punishing the offenders. The stealing of grass, firewood, flowers, plants and wire-netting round flower beds are minor evils, or, in other words, not of such frequent occurrence as those first referred to.

The earth-rat is very common in Ootacamund. It burrows under lawns and casts up heaps of earth which are very unsightly. This rat seems to defy all efforts of man to reduce its numbers.

58. (*f*) *Seeds for Soldiers' gardens.*—In accordance with instructions given in paragraph 2 of G.O., No. 337, Revenue, dated 18th July 1896, the Curator checked

the indents for seeds after they were received from the Officers Commanding the several regiments in the Madras Command. In the revised estimates for 1896–97 a sum of Rs. 3,600 was sanctioned in G.O., No. 812, Financial, dated 25th November 1896, for the purchase of seeds for soldiers' gardens. The expenditure amounted to Rs. 2,995–2–11, thus showing a saving of Rs. 604–13–1 under this head during the year under review.

59. (*g*) *Return of Stores.*—In accordance with G.O., No. 920, Financial, dated 18th September 1893, communicated to this office with G.O., No. 3616, Revenue, dated 2nd October 1893, an inventory of the valuable stock in the custody of the Curator has been made.

60. (*h*) *Service registers.*—All the service-books have been written up to date.

61. (*i*) Messrs. C. MacDonald and T. Burrows have held the appointments of overseers during the year M.R.Ry. S. V. Ramanujam Chetty has been clerk in charge of the office and Manikiam Pillai has been acting herbarium assistant during the year; both of them have worked very well.

62. (*j*) *Concluding remarks.*—The hearty acknowledgments of the Curator are due—to W. T. Thiselton-Dyer, Esq., C.M.G., F.R.S., Director of the Royal Gardens, Kew, for a small collection of interesting tree seeds, for tubers of a new kind of jalap, and for that valuable publication, the "Kew Bulletin of Miscellaneous Information"; to D. Morris, Esq., C.M.G., D.Sc., M.A., Assistant Director, Royal Gardens, Kew (who takes a keen interest in economic botany—especially in regard to the development of the resources of the British Empire), for his ready response and kindness in giving advice and in furnishing information regarding economic plants whenever it was asked for; to Dr. George King, C.I.E., F.R.S., &c., Director of the Botanical Survey of India and Burma, for the very acceptable collections of seeds and of plants he has so very generously forwarded from time to time, and for much valuable advice; to the Hon'ble Mr. J. F. Price, C.S.I., Chief Secretary to the Government of Madras (who takes much interest in the gardens), for his very liberal contributions—especially of Japanese seeds—to the department; to Maurice Holtze, Esq., F.L.S., Director of the Botanic Gardens, Adelaide, South Australia, for a fine collection of Australian seeds; and to the lady and to all the remaining gentlemen who have very kindly made contributions of seeds, of plants, and of periodicals to the department during the year under review.

63. (*k*) The usual statements, six in number, are appended.

Ootacamund,
15th May 1897.

(Signed) R. L. PROUDLOCK,
Curator, Govt. Botanic Gardens and Parks.

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Enclosures.

No. 1.—Comparative statement of rainfall in the Government Botanical Gardens, Ootacamund, for 1895–96 and 1896–97.

Months.	1895–96.		1896–97.	
	Number of rainy days.	Rainfall.	Number of rainy days.	Rainfall.
April	15	3·45	7	1·70
May	12	3·23	8	3·76
June	19	11·26	24	26·21
July	22	4·24	18	8·90
August	22	4·77	18	6·23
September	12	5·52	21	12·25
October	22	8·97	6	1·26
November	10	1·61	12	5·02
December	3	5·13	11	6·21
January	..	..	8	2·69
February	..	..	..	..
March	4	1·83	4	1·14
Total ..	141	49·92	137	76·07

No. 2.—Statement showing the Receipts of the Government Botanical Gardens and Parks, Nilgiris, for the official year ending 31st March 1897.

Particulars.	Actuals of 1895–96.	Budget estimate of 1896–97.	Actuals of 1896–97.
Government Gardens, Ootacamund.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Sale of plants, &c.	2,910 3 0	3,000 0 0	2,620 6 4
Government Garden, Burliyar.			
Sale of fruits, &c.	214 9 4	300 0 0	145 4 10
Government Medicinal Gardens, Ootacamund.			
Sale of Jalap, tubers, &c.	....	....	....
Total ..	3,124 12 4	3,300 0 0	2,765 11 2
Value of drugs supplied to Medical Department	525 4 0	150 0 0	....
Grand Total ..	3,650 0 4	3,450 0 0	2,765 11 2

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No. 3.—Statement of Expenditure of Government Botanical Gardens and Parks, Nilgiris, for the official year ending 31st March 1897.

Particulars.	Actuals of 1895–96.	Budget estimate of 1896–97.	Actuals of 1896–97.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
Pay of the Curator	1,540 10 4	4,200 0 0	4,180 0 0
Exchange compensation allowance	289 9 2	553 0 0	539 5 0
Travelling allowance of the Curator	70 2 0	500 0 0	(*a*) 546 1 9
Pay of the Curator's office establishment	792 0 0	792 0 0	790 8 0
Total ..	2,692 5 6	6,045 0 0	6,055 14 9
Government Gardens, Ootacamund.			
Overseers	1,200 0 0	1,200 0 0	1,168 3 5
Pay of temporary establishment	4,997 13 7	5,500 0 0	5,393 11 3
Acclimatization of foreign plants (G.O., No. 874, dated 5th July 1872).	776 8 7	800 0 0	787 7 11
Labelling of plants	295 4 8	300 0 0	299 6 2
Contingencies	1,442 14 3	1,535 0 0	1,485 8 8
Horticultural implements and garden tools	82 14 0	200 0 0	76 4 0
Painting and repair of garden buildings	587 3 6	800 0 0	743 1 2
Herbarium Assistant and servants	384 1 0	396 0 0	396 0 0
Purchase of cabinets and materials for the herbarium	26 7 0	200 0 0	14 0 0
Library	160 7 7	700 0 0	304 13 8
Municipal assessment	156 0 6	250 0 0	247 11 10
Seeds for Soldiers' Gardens	3,397 3 3	3,600 0 0	2,995 2 11
Opening an experimental garden at Gödalúr	145 0 1	200 0 0	75 2 5
Government Gardens, Burliyar.			
Temporary establishment and contingencies	497 7 11	500 0 0	427 12 8
Government Medicinal Garden.			
Temporary establishment and contingencies	289 15 8	300 0 0	298 6 0
Sim's Park.			
Temporary establishment and contingencies	1,993 14 1	2,000 0 0	1,890 13 9
Pay of watcher (G.O., No. 843, dated 14th July 1884)	108 0 0	108 0 0	108 0 0
Stone House Park.			
Temporary establishment and contingencies	691 13 10	700 0 0	645 10 3
Church Hill Park.			
Temporary establishment	95 7 8	100 0 0	..
Upper Norwood.			
Temporary establishment and contingencies	1,999 15 10	2,300 0 0	2,298 4 11
Crewe and Ottley Hall Estates.			
Temporary establishment	301 5 11	319 0 0	150 12 7
Total ..	19,629 14 11	22,008 0 0	19,806 5 7
Grand Total ..	22,322 4 5	28,053 0 0	25,862 4 4

(*a*) Including Rs. 274–15–9 sanctioned in G.O., Mis. No. 2839, dated 18th July 1896, on account of travelling expenses incurred by the transfer of R. L. Proudlock, Esq., from the Royal Botanic Gardens, Calcutta, to the Government Botanical Gardens and Parks, Nilgiris.

No. 4.—Return of Seeds and Plants distributed from the Government Botanical Gardens, Ootacamund and Burliyar, during the official year ending 31st March 1897.

Months.	Fruit trees.		Timber trees.		Ornamental shrubs and herbaceous plants.		Vegetable seeds.	
	Number of plants.	Value.	Number of plants.	Value.	Number of plants.	Value.	Number of packets.	Value.
1	2	3	4	5	6	7	8	9
		Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.
April 1896	..	..	304	31 0 0	56	32 11 0	95	26 0 0
May ,, ...	8	2 0 0	100	5 0 0	51	15 0 0	123	32 12 0
June ,, ...	..	..	5	3 0 0	8	38 8 0	151	59 13 6
July ,, ...	..	..	404	77 9 0	14	3 8 0	250	100 13 9
August ,, ...	..	..	25	8 15 6	110	18 8 0	99	34 12 6
September ,, ...	..	..	630	41 14 0	33	14 6 0	117	35 15 0
October ,, ...	..	..	735	77 8 0	76	12 14 0	100	41 13 6
November ,, ...	..	..	558	88 0 0	38	9 8 0	47	18 12 6
December ,, ...	..	..	20	12 0 0	4	2 12 0	72	20 13 0
January 1897	..	..	6	3 8 0	78	19 6 0	77	19 7 0
February ,, ...	..	..	1	1 0 0	14	3 4 0	45	12 12 0
March ,, ...	..	..	..	..	82	10 4 0	73	43 1 0
Total ..	8	2 0 0	2,788	349 6 0	614	180 9 0	1,247	446 13 9

Months.	Trees, flower and other seeds.		Bouquets and cut flowers.		Sundry receipts.		Total.
	Number of packets.	Value.	Number of bouquets or wreath and cut flowers.	Value.	Miscellaneous—fuel, grass, &c., charges.	Packing charges.	
	10	11	12	13	14	15	16
		Rs. A. P.	B. C.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
April 1896	89	17 14 0	2 ..	13 0 0	32 3 8	1 10 0	154 6 8
May ,, ...	76	12 15 0	1 ..	2 0 0	122 15 7	3 6 0	196 0 7
June ,, ...	68	9 12 0	4 ..	14 0 0	47 13 7	0 14 0	173 13 1
July ,, ...	101	34 10 0	2 ..	9 4 0	615 6 4	4 11 0	845 14 1
August ,, ...	36	35 2 0	3 ..	14 0 0	49 3 6	3 3 0	163 12 0
September ,, ...	63	25 12 0	3 ..	13 0 0	71 0 0	3 6 0	205 5 0
October ,, ...	33	11 10 0	2 ..	20 4 0	102 0 5	4 10 0	270 11 11
November ,, ...	12	9 6 0	1 ..	2 8 0	64 2 0	2 12 0	195 0 6
December ,, ...	25	17 12 0	1 ..	11 0 0	28 0 0	1 0 0	93 5 0
January 1897	64	24 14 0	5 ..	31 12 0	166 14 1	5 2 0	270 15 1
February ,, ...	17	2 12 0	3 ..	11 8 0	56 12 3	2 11 0	90 11 3
March ,, ...	59	12 9 0	1 ..	4 8 0	33 12 0	1 10 0	105 12 0
Total ..	643	215 0 0	28 ..	146 12 0	1,390 3 5	34 15 0	2,765 11 2

No. 5.—List of those to whom Seeds or Plants have been distributed gratis or in exchange for gifts made to the Government Gardens during the year 1896-97.

Date.	Names	Particulars.	Amount.
1896.			Rs. A. P.
1st April ..	W. Gollan, Esq., Superintendent, Government Botanic Gardens, Saharunpore.	18 plants, Lilium Nilagiricum ..	4 8 0
11th ,, ..	The Superintendent, Agri-Horticultural Society's Garden, Madras.	1 packet of bluegum seed ..	0 5 0
15th ,, ..	The Chief Commissioner, Andaman Islands ..	12 plants of Prinsepia	0 12 0
20th ,, ..	Mrs. Breithaupt, Thornley Bank, Bangalore ..	12 ,, of Ipecacuanha	6 0 0
21st May ..	F. W. F. Fletcher, Esq.	4 ,, of Coffea stenophylla ..	4 0 0
27th ,, ..	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Botanic Gardens, Sibpur, Calcutta.	1 packet of nutmeg seed	1 0 0
27th ,, ..	M. Ridley, Esq., Superintendent, Government Gardens and Parks, Lucknow.	2 packets of do.	2 0 0
5th June ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	8 kinds of orchids	8 0 0
12th ,, ..	Do. do. do.	4 do.	4 0 0
15th ,, ..	The Superintendent, Government Cinchona Plantations, Dodabetta, Nilgiris.	11 packets of English vegetable seeds.	2 13 6

No. 5.—List of those to whom Seeds or Plants have been distributed gratis or in exchange for gifts made to the Government Gardens during the year 1896-97—*cont.*

Date.	Names.	Particulars.	Amount.
1896.			Rs. A. P.
15th June ..	The Superintendent, Government Cinchona Plantations, Nedivattam, Nilgiris.	11 packets of English vegetable seeds	2 13 6
15th ,, ..	The Superintendent, Government Cinchona Plantations, Pykara, Nilgiris.	11 do. do.	2 13 6
15th ,, ..	C. M. Walsh, Esq., Eckford, Ootacamund ..	1 packet of flower seeds	0 4 0
18th ,, ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	3 kinds of orchids	3 0 0
20th ,, ..	W. Gollan, Esq., Superintendent, Government Botanic Gardens, Saharunpore.	5 kinds of bluegum seeds	1 9 0
3rd July ..	The Honorable Mr. J. F. Price, C.S.I., Trengwainton, Ootacamund.	12 bluegum plants of sorts ..	1 8 0
11th ,, ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	3 Ipomea plants of sorts	0 6 0
		6 kinds of orchids	6 0 0
30th ,, ..	Do. do. do.	1 kind of orchid	1 0 0
20th August ..	Do. do. do.	23 kinds of orchids	23 0 0
25th ,, ..	Do. do. do.	7 do.	7 0 0
1st September.	Do. do. do.	4 do.	4 0 0
17th ,,	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Royal Botanic Gardens, Sibpur, Calcutta.	15 trees, ornamental and herbaceous plants.	7 8 0
17th ,,	J. Cameron, Esq., F.L.S., Superintendent, Government Gardens, Bangalore.	1 packet of Cupressus sempervirens.	0 4 0
17th ,,	The Curator, Lloyd Botanic Garden, Darjeeling.	4 plants, Retinospora Sp. ..	4 0 0
26th ,,	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Royal Botanic Gardens, Sibpur, Calcutta.	5 kinds of Australian tree seeds ..	1 4 0
29th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	10 kinds of orchids	10 0 0
5th October ..	Charles Gray, Esq., Coonoor	24 plants of Aerides maculosum ..	6 0 0
		1 plant of Aerides lineare ..	0 4 0
5th ,, ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	15 kinds of orchids	15 0 0
13th ,, ..	Do. do. do.	7 do.	7 0 0
14th ,, ..	The Honorable Mr. A. T. Arundel	1 plant of Retinospora plumosa ..	1 0 0
17th ,, ..	P. Lancaster, Esq., Secretary, Agri-Horticultural Society of India, Calcutta.	76 plants of Aerides	19 0 0
30th ,, ..	Do. do. do.	1 packet of bluegum seed	0 10 0
4th November.	Professor I. B. Balfour, Keeper of the Royal Botanic Garden, Edinburgh.	24 orchids of sorts	12 0 0
4th ,,	John Fraser, Esq., Proprietor and Editor, "Gardening World," London.	24 do.	12 0 0
4th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	7 kinds of orchids	7 0 0
7th ,,	The Honorable Mr. J. F. Price, C.S.I., Trengwainton, Ootacamund.	40 kinds of timber and herbaceous plants.	10 10 0
27th ,,	Charles Gray, Esq., Coonoor	12 Petunia cuttings	0 12 0
27th ,,	P. Lancaster, Esq., Secretary, Agri-Horticultural Society of India, Calcutta.	12 plants of Osmunda regalis ..	3 0 0
30th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	17 kinds of orchids	17 0 0
8th December.	W. T. Thiselton-Dyer, Esq., C.M.G., C.I.E., F.R.S., Director, Royal Gardens, Kew.	12 plants of Impatiens Jerdonæ ..	3 0 0
8th ,,	Professor I. B. Balfour, Keeper of the Royal Botanic Gardens, Edinburgh.	12 do. do. ..	3 0 0
8th ,,	Major-General E. S. Berkely, Thorold Gardens, Bitterne Park, Southampton, England.	12 do. do. ..	3 0 0
8th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	3 kinds of orchids	3 0 0
17th ,,	E. C. Duff, Esq., Editor, "Planting Opinion," Coonoor.	36 plants of Princepia utilis ..	2 4 0
		1 plant of Cupressus Lawsoniana .	0 4 0
1897.			
29th January.	General Evezard	1 packet of bluegum seed ..	0 10 0
2nd February.	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	23 kinds of orchids	23 0 0
3rd ,,	Charles Gray, Esq., Coonoor	1 packet of Pseudotsuga Douglasii.	1 0 0
		1 do. of Quercus glauca ..	0 8 0
		1 do. of ,, lamellosa ..	0 8 0
3rd ,,	Dr. G. King, F.R.S., C.I.E, Director of the Botanical Survey of India, and Superintendent, Royal Botanic Gardens, Sibpur, Calcutta.	43 orchids and other plants] ..	6 2 0
6th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	12 kinds of orchids	12 0 0
3rd ,,	W. Gollan, Esq., Superintendent, Government Botanic Gardens, Saharunpore.	16 Nilgiri lily bulbs	4 0 0
24th ,,	W. T. Thiselton-Dyer, Esq., C.M.G., C.I.E., F.R.S., Director, Royal Gardens, Kew.	124 orchids	31 0 0
8th March ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	6 kinds of orchids	6 0 0
27th ,, ..	Supplied to the Ootacamund Municipality for Charing Cross.	874 ornamental plants	109 4 0
		Total ..	429 8 6

No. 6.—List of those who have been benefactors to the Gardens during the year 1896-97.

Serial number.	Names.	Particulars.		
		Packets of seeds.	Plants.	Name or class of seeds and plants.
1	W. T. Thiselton-Dyer, Esq., C.M.G., C.I.E., F.R.S., Director, Royal Gardens, Kew.	1	..	Pseudophœnix Sargentii, Wendl.
		5	..	Tree.
2	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Royal Botanic Gardens, Sibpur, Calcutta.	..	28	Ipomœa simulans.
		56	..	Tree.
		24	..	Creeper.
		26	..	Shrub.
		11	..	Herbaceous.
		1	..	Aegle marmelos.
		..	70	Ferns, palms and other ornamental trees.
		..	240	Orchids.
3	The Honorable Mr. J. F. Price, C.S.I., Trengwainton, Ootacamund.	..	18	Nymphea sp.
		10	..	Tree.
		12	..	Ornamental tree.
		21	..	Flower, shrubs and creeper.
		..	694	Cauliflower and cabbage.
		..	367	Violets.
		..	2	Gynura aurantiaca.
		..	46	Artichoke.
		..	10	Chrysanthemum.
		..	8	Rhubarb.
4	W. Gollan, Esq., Superintendent, Government Botanic Gardens, Saharunpore.	..	24	Carnations.
		1	..	Primula Stuartiana, yellow variety.
		8	..	Conifers.
		2	..	Castanea vesca.
5	H. G. Hein, Esq., Superintendent, Government Agri-Horticultural Garden, Lahore.	6	..	Tree.
		37	..	Flower.
6	The Director, Botanic Garden, Adelaide, South Australia ..	104	..	Tree.
7	R. T. Baker, Esq., F.L.S., Botanist and Assistant Curator, Technological Museum, Sydney.	2	..	Do.
8	W. A. Kennedy, Esq., Curator, Botanic Gardens, Darjeeling.	2	..	Quercus lamellosa and Q. glauca.
9	The Superintendent, Agri-Horticultural Society's Garden, Madras.	12	..	Ornamental tree.
		13	..	Tree
10	Mr. G. H. T. Mayer, Superintendent, Memorial Gardens, Cawnpore.	1	..	Flower.
		1	..	Do.
11	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	1	..	Creeper.
		5	..	Tree.
12	P. Lancaster, Esq., Secretary, Agri-Horticultural Society of India, Calcutta.	..	96	Orchids.
		..	10	Do.
13	C. G. Douglas, Esq., District Forest Officer, Nilgiris, forwarded by,	..	8	Cannas.
		8	..	Tree seeds collected by the late R. Morgan, Esq., in British Central Africa.
14	E. D. M. Hooper, Esq., Acting Conservator of Forests, Southern Circle.	1	..	Pseudotsuga Douglasii.
		..	18	Japanese Bamboos.
15	The District Forest Officer, Kistna	1	..	"Gara tree."
16	Charles Gray, Esq., Coonoor	7	..	Tree.
		1	..	Ornamental.
		..	110	Do.
		..	84	Bulbs.
17	E. C. Duff, Esq., Editor, "Planting Opinion," Coonoor ..	..	19	Orchids.
		1	..	Cola acuminata.
		1	..	Nyassaland wild coffee.
18	M. Clementson, Esq., Ootacamund	..	1	Coffee stenophylla.
19	Major Keckewich, Ootacamund	3	..	Flower.
20	Mrs. Batchelor, Ootacamund	..	35	Carnations.
21	W. M. Liddell, Esq., Nedivattam	..	1	Orchid.
		..	2	Statice sp.
22	A. J. Alexander, Esq., Seaforth Estate	..	1	Cichorium Intybus.
		..	2	Orchids.
		..	1	Orchid.

Ootacamund,
15th May 1897.

(Signed) R. L. PROUDLOCK,
Curator, Govt. Botanic Gardens and Parks.

Endorsement Dis. No. 1268/97.

Forwarded. The report was received in this office on 31st May but has been detained as it seemed necessary to consult with the Curator about certain measures.

2. Mr. Proudlock has effected considerable improvement in the Government House and the Government Botanical Gardens, Ootacamund. The Church Hill Park has been wisely let alone, pending the decision of Government as to its future. The Gúdalúr Gardens so called have been abandoned.

3. I am in consultation with the Curator about increasing the revenue from cut flowers and about some theft of seeds in the Ootacamund Gardens. These matters, however, were rightly excluded from the annual Report.

Ootacamund,
12th June 1897.

(Signed) J. H. A. TREMENHEERE,
Collector.

Order—No. 559, Revenue, dated 13th July 1897.

Miscellaneous.

With his endorsement read above, the Collector of the Nilgiris submits the report of Mr. R. L. Proudlock on his management of the several Government gardens and parks on the Nilgiri Hills during the year 1896-97.

2. The report reached the Collector on the 31st May last, *i.e.*, on the day previous to that on which it was due in the Government office and it was received by Government only on the 14th June. The Collector is requested to arrange to dispose of the report earlier in future so that its transmission to Government may not be delayed.

3. The year under review was the first in which the gardens were under the control of the Collector of the district instead of under that of the Government Botanist. The appointment of a Government Botanist is still under correspondence between the Government of India and the Secretary of State. Pending final orders the work has been entrusted to Dr. A. G. Bourne, the Officiating Superintendent of the Central Museum, who will deal with all applications for botanical assistance. In consequence of this arrangement and the decision to ultimately make Madras the head-quarters of botanical work in this Presidency the Herbarium and the more valuable portion of the Library hitherto attached to the Government Gardens at Ootacamund have been transferred to Madras.

4. The Government observes that the Curator's report is modelled on those submitted in preceding years by the Government Botanist. As the Curator's duties are confined to the development and improvement of the gardens entrusted to his charge his reports in future should be confined to a statement of how these duties have been carried out during the year and all purely scientific matters should be excluded.

5. With reference to paragraph 14 of his report the Curator is requested to submit a separate report on the subject through the Collector.

6. The Government notes with satisfaction that considerable improvements have been effected in the gardens and parks under the Curator's management during the year under review. It is hoped that the rules defining the privileges of the public in the Government Botanical Gardens at Ootacamund and in Sim's Park at Coonoor which were framed in accordance with a suggestion made by Dr. King of Calcutta have answered their purpose.

7. In the course of the year the Curator was requested to report on the condition of the Government Gardens at Burliar and Gúdalúr. The Curator's report with regard to the Gúdalúr Experimental Garden showed that this garden had proved a failure. It was accordingly decided to abandon it. As regards the Burliar Garden, the Curator's report showed that it also had been greatly neglected, but as the locality is eminently suitable for the experimental cultivation of exotic tropical plants the Government has decided to retain the garden and the Curator's proposals for its improvement have been approved.

8. The receipts from and the expenditure on the several gardens and parks during the year under review are compared with those of the two previous years in the following statement:—

	1894-95.	1895-96.	1896-97.
	Rs.	Rs.	Rs.
Receipts	5,204	3,696	3,195
Charges	25,076	22,848	25,862

The figures for receipts given above include the value of the seeds, plants, &c., issued *gratis* or in exchange for gifts made to the gardens, and the amount to be debited to free grants was Rs. 430 as against Rs. 46 in the previous year. The Government is, however, glad to observe that private gifts to the gardens also showed a considerable increase as compared with those of 1895–96 and desires to take this opportunity to tender its thanks to the contributors. For purposes of comparison it is desirable that the information given in statement 5 should be exhibited so as to distinguish between the seeds, plants, &c., given from the garden *gratis* and those distributed in exchange for others. Mr. Proudlock will be requested to carry out the necessary alteration in the statements in submitting future reports.

9. The expenditure during the year under review amounted to Rs. 25,862 as against Rs. 27,690, the sanctioned estimate for the same period, and Rs. 22,848, the actuals of the previous year. The increase for the year under review is chiefly under the head "Pay of the Curator" and is due to the fact that a considerable interval elapsed during the previous year between the death of the late Curator and the appointment of the present officer. As regards the figures for the revised and budget estimates, the Curator has in paragraph 51 of the report taken those given in the Government orders accepting tentatively the budget estimates of the department instead of those finally accepted by the Government of India and published in the "Civil Budget Estimate." In future reports, the figures given in the latter should be invariably taken for purposes of comparison and the reasons for any increase or decrease in the actuals as compared with the estimates briefly set forth for the information of Government. It is observed that in the report for 1895–96 the actuals of that year were shown as Rs. 22,322 while in the "Civil Budget Estimate" for 1897–98 they are shown as Rs. 22,848. The difference is apparently due to the adjustment in accounts made by the Accountant-General subsequent to the submission to Government of the report in question but the matter should have been noticed and the discrepancy explained by the Curator.

10. It having been found that in the matter of the supply of seeds for Soldiers' gardens, the quantity applied for in several cases had been altogether excessive while in certain others the seeds given were of plants which would not grow in the place from which the indent had been received, the Government in the year under review issued special orders to regulate the indent and supply of such seeds in the future. It is observed that there has been a decrease of over Rs. 400 in the expenditure under this head which is doubtless due to the stricter scrutiny thus prescribed.

11. The Government observes from paragraph 57 of the Curator's report that cases of cattle trespass and petty theft are frequent in the gardens and from paragraph 3 of the Collector's endorsement it would appear there has been also some theft of seeds apparently from the garden stores. These facts call for the exercise by the Curator of a stricter supervision and greater vigilance over his subordinates without whose connivance or privity the thefts could hardly have occurred.

(True Extract.)

(Signed) G. STOKES,
Ag. Secretary to Government.

To the Collector of the Nilgiris.
" the Public Works Department.
" the Director of Government Cinchona Plantations.
" the Board of Revenue (Land Revenue).
" " (Revenue Settlement, Land Records and Agriculture).
" the Superintendent, Government Central Museum.
" the Surgeon-General (through the Public Department).
" the Honorary Secretary, Agri-Horticultural Society.
" " Wynaad Planters' Association.
" " Nilgiri " "
" " Yercaud " "

Endorsement No. 559A.

Copy to the Government of India, Revenue and Agricultural Department.

(Signed) G. STOKES,
Ag. Secretary to Government.

Ed. A. F. Eccleston.

200 Copies

Public Works Department.

Government {1897} of Madras.

REVENUE.

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No 2181/97, 9 Aug 97.
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JULY.

Read

To

The S. & W. Circle.

Report on the Government Gardens and Parks, Nilgiris.

Reviewing the annual Administration — for the year 1896-97.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

Read—the following letter from R. L. PROUDLOCK, Esq., Curator, Government Botanic Gardens and Parks, Nilgiris, to the Secretary to Government, Revenue Department (through the Collector of the Nilgiris), dated Ootacamund, 31st May 1897, No. 169:—

In accordance with the instructions contained in paragraph 2 of G.O., No. 212, Revenue, dated 23rd May 1896, I have the honour to submit the annual Administration Report of the Government Botanical Gardens and Parks, Nilgiris, for the official year ending 31st March 1897.

2. Two advance copies of the Report required by G.O., No. 464, Revenue, dated 30th May 1893, are also enclosed for submission to the Secretary of State.

ANNUAL ADMINISTRATION REPORT OF THE GOVERNMENT BOTANICAL GARDENS AND PARKS, NILGIRIS, FOR THE YEAR 1896-97.

Contents.

I. Season and Rainfall.
II. General condition of the Gardens and Parks.
(1) Ootacamund—
(*a*) Government Botanic Gardens.
(*b*) Government House Gardens.
(*c*) Stone House Park.
(*d*) Church Hill Park.
(*e*) Crewe and Ottley Hall Estates.
(2) Coonoor—
Sim's Park.
(3) Barliyar—
Experimental Garden.
(4) Gúdalúr—
Experimental Garden.
III. Herbarium.
IV. Library.
V. Notes on Plants of Economic Interest.
VI. Financial—
(*a*) Receipts.
(*b*) Expenditure.
VII. Miscellaneous—
(*a*) Renovation and planting of a piece of ground at junction of Wood House Lane and Old Garden road.
(*b*) Renovation and planting of a piece of ground at Charing Cross.
(*c*) Renovation and planting of a piece of ground at Telegraph Hill.
(*d*) Cinchona propagation.
(*e*) Nuisances.
(*f*) Seeds for Soldiers' Gardens.
(*g*) Return of Stores.
(*h*) Service Registers.
(*i*) Establishment.
(*j*) Concluding remarks.
(*k*) Statements.

I.—Season and Rainfall.

The average annual rainfall of Ootacamund is 47 inches. The rainfall for the year was 76·07 inches, or 26·15 inches more than was registered during 1894–95, and 29·07 inches more than the average. The heaviest rainfall was in June when 26·91 inches of rain fell on 24 days. The monsoon burst with unusual violence, but did no material damage beyond blowing down a large unsightly old tree of *Cupressus macrocarpa, Hart.* and blowing a few branches off trees generally throughout the gardens. The fact that little damage was done is chiefly due to the sheltered position the gardens occupy in the Ootacamund valley.

2. The frosts were, upon the whole, not very severe, and no damage worth mentioning was done by them. It may, however, be mentioned that at the first sign of frost all the more valuable tender plants in beds in the lower parts of the gardens were lifted and transferred to the nurseries beyond the reach of frosts.

3. The year, upon the whole, was a fair one for gardening operations.

II.—General Condition of the Gardens and Parks.

4. (1) **Ootacamund**—(*a*) **Government Botanic Gardens.**—The gardens show signs of improvement in the lower part, due to a good many trees of species already well represented having been cut down. The result has been the opening up of a wider stretch of lawn and giving an almost clear view up the gardens for a considerable distance from the main entrance. The upper parts are still capable of being much improved.

5. The cleaning and overhauling of the nurseries have been put in hand, and the work is still being proceeded with. They were found to be in very bad order, and it will take some time to fully stock them with plants again. Without a well-stocked and well-ordered nursery it is hopeless to expect to keep a botanic garden in the condition it ought to be kept in.

6. The plants in the propagating houses have been considerably increased in number during the year; but the general condition of the houses and their contents is not all that could be desired.

7. The lower glass-house, just above the bandstand, which contained ordinary plants with no apparent special object in view, is now filled and kept bright with flowering plants and ferns. It is now "the conservatory" of the gardens, and visitors have access to it from sunrise to sunset every day throughout the year.

8. The English Oak (*Quercus Robur, L.*).—All the English Oak trees in the gardens were more or less filled with parasitic plants (species of Loranthus) and badly needed cleaning and pruning. They have been cleared of Loranthi and properly pruned. Several of the trees in the Oak plantation to the N.N.West of the propagating houses were so badly attacked that it was hopeless for them to recover, and so they were cut down. All the Oaks have now a much improved, healthy appearance.

9. *Polygonum sp.*—A beginning was made to root out this plant, but it is springing up again rapidly, and the ground will have to be gone over repeatedly in order to finally get rid of it. It has become a rampant weed, in patches which occupy a considerable area, in the upper parts of the gardens; and the task of extirpating it will be no ordinary one. It would be well if owners of property in Ootacamund were to destroy it at once wherever it might make its appearance on their grounds, as it is a formidable weed.

10. *Refuse Pit.*—A pit measuring 50′ × 30′ × 4′ was made for the reception of leaves and other garden refuse, as not a single excavated refuse pit existed in the gardens when the present curator took charge in February 1896.

11. *Ponds.*—The large pond at the bandstand and four of the smaller ones in other parts of the gardens were cleared of weeds and of silt.

12. *Repairs to the bandstand terrace wall.*—On two occasions two portions of this wall, measuring together 133 feet in length, fell into the pond; and both portions have been rebuilt with new material throughout. The old portions of the wall and the flower vases have been repaired, and the whole structure has been whitewashed.

13. *Labelling and painting.*—A good number of labels for trees and shrubs were written, and all the out-door garden seats and the three summer houses were painted during the year.

14. *Garden Buildings.*—The curator is very badly off for accommodation under this head. He is compelled to have his office in his house, which is not altogether convenient. He has also to use two of the out-houses belonging to his house as tool stores. The two small lodges at the entrance to the gardens, where valuable seeds have to be kept, have to serve as accommodation for the clerk's office, as seed stores, seed cleaning, packing and despatching room, herbarium, painter's room, museum,

and Government House visitor's-book room. While the Director of the Cinchona Department has kindly consented to allow the Curator's Library to remain in its old quarters (one of the rooms in his office) until such time as another room can be found, or a new building erected, for its accommodation.

15. *Boundaries.*—It may seem somewhat unusual to have to report that a garden which has been in existence for fifty years, and which has nearly three miles of boundary line, is entirely unfenced in, with the exception of two portions measuring together not more than three hundred yards.

16. (*b*) **Government House gardens**—*The terraced garden.*— This garden, which is situated immediately in front of the house, and which measures 280′ × 130′, received considerable attention during the year. The lawn was in bad order, and so it was dug over to a depth of two and three feet in order to get rid of the coarse and deep-rooted grasses, and to remove the boulders and smaller stones. After this was done, the whole was manured, and then planted with *Cynodon Dactylon, Pers.*, the common "Hurriali" grass. The new lawn is already giving promise of being an improvement on the old one.

17. All the old rose plants in the upper terrace were removed and replaced by 24 new standard roses, comprising 17 varieties, which were obtained by purchase from Bangalore. The flower beds, including the long border against the rose hedge, were taken in hand, re-arranged, the old soil removed to a depth of about 20 inches and replaced by rich fresh soil, manured and replanted.

18. The greater proportion of the plants in the remaining beds and borders in the immediate vicinity of the house were lifted; the soil was dug over and manured, and the beds were replanted with such suitable plants as were available.

19. Several new beds were made in different parts of the grounds; while two small valleys amounting together in area to $\frac{1}{4}$ of an acre were planted with Arum Lily (*Richardia africana, Kunth,*) and red-hot Poker plants (*Kniphofia aloides, Moench,*) with the object of increasing the means for supplying the demand for flowers for Government House.

A good number of indigenous trees were planted on the steep slopes above the house. Many plants, chiefly exotic, were also planted near several of the out-buildings with the object of ultimately screening them from view.

20. *Vegetable garden.*—This garden was maintained in fair order, and moderate quantities of vegetables were grown and supplied for the use of Government House.

21. *Lucerne* (*Medicago sativa, L.*).—This very valuable fodder was grown in the vegetable garden on a moderate scale and supplied for the use of the stable regularly throughout the season.

22. *Vegetable garden hedge and wire fence.*—The unsightly old hedge was cut down to within 3 feet of the ground, and the garden is now enclosed by a new barbed-wire fence, 800 feet in length, erected on the outside of the hedge.

23. *Blue Gum Tree* (*Eucalyptus Globulus, Lab.*)—Four large trees of this species were cut down within the vegetable garden.

24. *Manure Pits.*—Two manure pits, measuring 29′ × 21′ × 6$\frac{1}{2}$′ and 25′ × 19′ × 5$\frac{1}{3}$′, respectively, were dug for the reception of stable manure; and a smaller one, measuring 12′ × 11′ × 2$\frac{1}{2}$′, was made for the reception of cattle manure.

25. *Improvement made to the Park.*—About 2$\frac{1}{2}$ acres of rough pasture ground, immediately below the terraced garden and in front of the Military Secretary's bungalow, was treated during the year. Several large trees of *Acacia melanoxylon, R. Br.*, which were nearly killed by parasites, were cut down and their roots dug out; and quite 50 or 60 large roots of blue gum and of other trees, which had been left in the ground for the last few years, were taken out as they were most insightly. All the large protruding boulders and smaller stones were removed; and two long, disused, open drains were filled in. The seedling trees, rootsuckers, docks and other weeds were carefully dug out. Where the ground was too high it was cut down, and where it was too low it was made up, and the whole was top-dressed with good soil. The

result is that this portion of the grounds now presents a much neater appearance than it did before treatment.

26. All the oak trees were cleared of parasitic plants and pruned. The fine English oak, which stands in front of the Military Secretary's bungalow, is 54½ feet in height, 7 feet 8 inches in girth at 4 feet from the ground, and the circumference of the crown is 200 feet. It is one of the finest specimen oaks in Ootacamund.

27. (*c*) **Stone House Park.**—The whole of the park was gone over by a gang of coolies for the purpose of digging out the weeds, which in parts of the park had become very plentiful. The principal weeds are the common dock (*Rumex Nepalensis, Spreng.*), the Broom (*Cytisus scoparius, Link.*, *Acacia dealbata, Link.*, *Acacia melanoxylon, R.Br.*, *Oenothera rosea, Soland.*, and one or two other species of *Oenothera*. It is worthy of note that all these plants, with the exception of the first-named species, are introductions to the Nilgiris.

28. (*d*) **Church Hill Park.**—Nothing was spent on this park during the year owing to the fact that it was rumoured in Ootacamund that it was the intention of Government to sell it for building purposes. The Curator himself saw a survey party engaged in surveying it—taking contour levels, and marking it off into blocks. For these reasons it was decided not to spend any money on it during the year 1896–97.

29. (*e*) **Crewe and Ottley Hall estates.**—The weeding, cleaning and hedge clipping have been attended to as usual.

30. (2) **Coonoor—Sim's Park.**—As the park had become somewhat overcrowded, a good number of trees, chiefly *Cupressus macrocarpa, Hart.*, were cut down, with the result that the central portion of the park, between the main entrance and the lake, now presents a more open and improved appearance. The park, upon the whole, has been kept in good order during the year.

31. (3) **Barliyar.**—In accordance with instructions contained in paragraph 6 of G.O., No. 212, Revenue, dated 23rd May 1896, a special report on these gardens was submitted to Government with this office letter No. 70, dated the 24th April 1897; and so, there appears no necessity to mention anything further about them in this report.

32. (4) **Gudalur.**—The same remarks as have just been made about Barliyar gardens apply to this one. The special report on them was submitted to Government with this office letter No. 344, dated 17th September, 1896.

III.—Herbarium.

33. The herbarium and the collection of seeds and fruits were removed to Madras during the year in accordance with instructions conveyed in paragraph 3 of G.O., No. 212, Revenue, dated 23rd May 1896, and in paragraph 1 of G.O., Mis. No. 154, dated 11th January 1897.

During the year 268 specimens — 128 of them being orchids—were collected by the Curator in the district.

The following specimens were sent to the Director of the Botanical Survey of India on the 15th December 1896, viz. :—one *Cypripedium Lowii, Lindl.*; one *Sterculia diversifolia, G. Don*; one *Romneya Coulteri, Harv.*

IV.—Library.

34. The greater proportion of the books forming the library were transferred to the Central Museum, Madras, in accordance with instructions conveyed in G.O., Mis. No. 1094, dated 24th February 1897.

35. Sanction was accorded in G.O., Mis. No. 546, dated 28th January 1897, for the purchase of the undermentioned works for the gardens' library, viz. :—

1. Index Kewensis.
2. Kerner's Natural History of Plants.
3. Veitch's Manual of Orchidaceous Plants.
4. Nicholson's Dictionary of Gardening.
5. Milner's Art and Practice of Landscape Gardening.
6. Robinson's English Flower Garden.

36. The following volumes have been presented to the library during the year, viz. :—

1. Kew Bulletin, from the Director, Royal Gardens, Kew.
2. Series of Agricultural ledgers, from the Government of India.
3. Reports of the Botanical Survey of India, from the Director.
4. Bulletin of the Botanical Department, Jamaica, from the Director of Public Gardens and Plantations, Jamaica.
5. Proceedings of the Agri-Horticultural Society of Madras, from the Honorary Secretary.

37. Of Rs. 700 provided under library Rs. 304–13–8 have been spent.

V.—Notes on Plants of Economic Interest.

38. *Ipecacuanha* (*Cephælis Ipecacuanha, Rich*).—Very little interest seems to be taken in the cultivation of this plant, the powdered annulated roots of which form the *Ipecacuanha* of commerce. In January the Curator visited Nilambur and took full notes (which are rather too lengthy to be incorporated in this report) of the conditions the few plants are grown under there under the care of Mr. Hadfield, the District Forest-officer. Suffice it to be stated that the condition of the plants does not give much promise of its cultivation ever becoming a commercial success in the climate of Nilambur unless some new and better method of cultivation is discovered and adopted. The climate seems to be altogether too dry for the plants in the dry season and they suffer, unless watered artificially.

39. *Jalap* (*Ipomœa Purga, Hayne*.—A small area at the top of the gardens was planted with jalap tubers in April 1896; but they are not fit to lift yet. The cultivation of this plant seems to have been carried on for many years past on the Dodabetta Cinchona Plantation and not in the Government gardens, although the amounts realised by the sale of the drug were, prior to the separation of the Cinchona department from the Botanic gardens and Parks, always credited to the garden revenue. It seems that there is greater scope for growing jalap on the Dodabetta Cinchona Plantation than in the gardens; and, it is no doubt the wisest policy for the Cinchona Department to continue to grow it in sufficient quantity to meet the regular demands for it by the Medical Stores departments. In the case of such a plant as the jalap, which has passed the introductory or experimental stage, it is perhaps as well that the gardens should be relieved of the work of cultivating it on a large scale. The Cinchona Department will no doubt continue the cultivation of the drug on a scale sufficient to meet the demands for it by the several Medical Stores departments; while, in future, only a small stock will be grown on in the gardens in order to meet any demands for fresh tubers from persons who may apply for them for the purpose of cultivating the drug.

40. *Tampico Jalap* (*Ipomœa simulans, Hanbury*,).—Mr. W. T. Thiselton-Dyer, C.M.G., Director of the Royal Gardens, Kew, sent out, recently, 28 tubers of Tampico jalap — one lot being from Tonayan and the other from Tlacolulam in the Canton of Jalapa, Vera Cruz, Mexico. It will be observed that this is a different species from the one already grown here for the production of jalap. Their growth will be carefully attended to, and watched with interest, in these gardens.

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41. *Japanese Bamboos.*—A collection of eighteen plants, comprising nine varieties, was made over to the gardens by E. D. M. Hooper, Esq., Acting Conservator of Forests, Southern Circle, in July 1896. Half of the plants were planted in the Ootacamund gardens and half in Sim's Park, Coonoor. Those planted in the Ootacamund gardens are doing fairly well, but those in Sim's Park have made no growth yet.

42. A collection of 79 fruit trees, including varieties of Apple, Pear, Peach, Plum, Apricot, Walnut, Sweet Chestnut, Persimmon, Blackberry and Dewberry, was purchased at a nominal rate from the Saharanpur Botanical Gardens. The plants have been planted in the nursery, where they are doing well so far.

43. *Kola nut* (*Cola acuminata, Schott and Endl.*).—Mr. E. C. Duff, Editor of "*Planting Opinion*," Coonoor, very kindly gave ten seeds of this West African tree to the department. They were sown at Burliyar, but only six or seven of them germinated, and these are doing well.

44. *Nyassaland Wild Coffee.*—A specimen of this, with six seeds, was sent by Mr. E. C. Duff for identification. The Curator forwarded the specimen and two seeds to the Director, Royal Gardens, Kew, for identification. It was returned duly named — *Cremaspora africana, Benth.*; and the name has been communicated to Mr. Duff. The remaining four seeds have been sown at Burliyar.

45. *The Nilgiri Hill Gooseberry* (*Rhodomyrtus tomentosa, Wight.*).—Some jelly was made from the fruit of this shrub and sent to Kew, and a report on it appeared in Nos. 113–114 of the Kew Bulletin for May and June 1896.

46. *Dandelion* (*Taraxacum officinale, Wigg.*).—No indents for dandelion root were received during the year from any of the Medical Stores departments, and so the crop here has not yet been lifted. It can well be left growing for another year or longer without deteriorating in value.

47. *Chiretta.*—Messrs. Babannaya and Co., Mangalore, wrote for information regarding the "chiretta" plant in this Presidency. They were informed that the true "chiretta" plant (*Swertia Chirata, Buch.—Ham.*) is a native of the mountainous regions of Northern India and that it is not found in Southern India, but that a substitute for it (*Exacum bicolor, Roxb.*) appeared to be used in Ootacamund. The nature of their inquiry led the Curator to suspect that it was just possible that a substitute for the true species might be used here. He accordingly obtained two samples of the dried "chiretta" plant—one from the Ootacamund Bazaar and the other from the Ootacamund Hospital. Both proved upon examination to be identical, namely, *Exacum bicolor, Roxb.*—a native of the Deccan Peninsula. Although belonging to different genera, both species belong to the same natural order (Gentianaceæ), and, therefore, doubtless possess bitter tonic properties in common.

48. *The Douglas Fir* (*Pseudotsuga Douglasii, Carr.*).—The District Forest-officer, Nilgiris, forwarded a packet of seeds of this species with the request that they might be sown and, should they germinate, that he would like to have half of the resultant seedlings, the other half to be kept for the gardens. The seeds were sown in two boxes on the 26th October 1896 and it has been interesting to watch the process of germination of the seeds of this conifer. A certain proportion of the seeds germinated in three weeks, and the remainder have been germinating in succession, week after week, till the end of March; in other words, the process of germination has been going on in succession over a period of five months. The seedlings are only about 1 to 1½ inches in height at present, but they are in a perfectly healthy and promising condition. This species grows to a height of 150 to 200 feet, and forms immense forests in British Columbia and Oregon. Many of the precipitous slopes on the higher parts of the Nilgiris might be profitably planted with species belonging to the natural order Coniferæ.

VI.—Financial.

49. (*a*) *Receipts.*—The budget estimate of receipts for 1896–97 was Rs. 3,800. This figure was reduced to Rs. 3,450 when framing the revised estimate for 1896–97, as it was anticipated that there would be no sale of jalap. This was approved of by Government in G.O., No. 573, Revenue, dated 29th October 1896, and accepted in G.O., No. 812, Financial, dated 25th November 1896.

The actuals for the year have been Rs. 2,765–11–2, which is Rs. 684–4–10 less than the revised estimate. Compared with the receipts of the previous year the income for the period under review shows a falling off of Rs. 884–5–2, and this is caused by a marked decrease under the amount realized by the sale of plants, seeds and flowers from the Government gardens and the sale-proceeds of the produce of the Burliyar gardens.

50. The value of seeds, plants, &c., issued gratis, or in exchange for gifts made to the gardens, amounted to Rs. 429–8–6; and, if this sum be added to the money realized, during the year, *i.e.*, Rs. 2,765–11–2, it will give an aggregate of Rupees 3,195–3–8.

51. (*b*) *Expe diture.*—By G.O., No. 686, Financial, dated 10th October 1896, and G.O., No. 812, Financial, dated 25th November 1896, the sum of Rs. 28,077 was accepted by Government as the revised budget estimate for 1896–97, against Rs. 27,800 the budget estimate for same year approved of in G.O., No. 928, Financial, dated 27th November 1895.

The actual expenditure was Rs. 25,862–4–4, which is less than the revised estimate by Rs. 2,214–11–8. The saving has been effected under "Soldiers' garden seeds" and other heads.

VII.—Miscellaneous.

52. (*a*) The small triangular space at the junction of Wood House Lane and Old Garden Road was marked out, put into shape, dug, manured and planted with grass, with an English oak tree planted in the centre. The cost of the work, amounting to Rs 10–7–0, was defrayed by the municipality. No charge was made for the oak plant.

53. (*b*) The triangular space at Charing Cross was dug over, manured and turfed. In the three corners of the triangle small low rockeries were made and planted with 874 plants. The cost of the work done and borne by this department amounted to Rs. 1·6–11–0, being Rs. 77–7–0 for labour and Rs 109–4–0 being value of the plants supplied for planting the three rockeries.

54. The work of removing the decaying old tree of *Acacia melanoxylon, R. Br.*, which stood within the triangle, was done by the municipality. The base of the stem, with root, has not been destroyed yet; and it is hoped that after it has become well seasoned that a section will be cut from it and placed in the collection of timbers in the small room at the main entrance to the gardens.

55. (*c*) The grounds surrounding the Collector's, Sub-Judge's, Post and Telegraph offices were cleared of weeds and put into better order and several new paths were marked out. As soon as the rainy season approaches many trees, shrubs and other plants will be planted in suitable places. The cost, amounting to Rs. 735, has been defrayed by the Public Works Department.

56. (*d Cinchona propagation.*—The work of raising cinchona seedlings for the Cinchona department was undertaken by the Curator of the Government Botanic Gardens at the request of the present Director of the Cinchona department, who agreed to pay for the services of one gardener on Rs. 10 per month for the purpose of looking after the work. During the year some thousands of seedlings of *Cinchona officinalis, Linn.* (Crown bark) were raised from seeds received from Jamaica, and the seedlings were handed over to the Cinchona department from time to time as required.

57. (*e*) *Nuisances.*—The trespass of cattle and the stealing of cattle manure from the several parks and gardens are of constant occurrence and are by far the worst, and it seems there exists no means for adequately punishing the offenders. The stealing of grass, firewood, flowers, plants and wire-netting round flower beds are minor evils, or, in other words, not of such frequent occurrence as those first referred to.

The earth-rat is very common in Ootacamund. It burrows under lawns and casts up heaps of earth which are very unsightly. This rat seems to defy all efforts of man to reduce its numbers.

58. (*f*) *Seeds for Soldiers' gardens.*—In accordance with instructions given in paragraph 2 of G.O., No. 337, Revenue, dated 18th July 1896, the Curator checked

the indents for seeds after they were received from the Officers Commanding the several regiments in the Madras Command. In the revised estimates for 1896–97 a sum of Rs. 3,600 was sanctioned in G.O., No. 812, Financial, dated 25th November 1896, for the purchase of seeds for soldiers' gardens. The expenditure amounted to Rs. 2,995–2–11, thus showing a saving of Rs. 604–13–1 under this head during the year under review.

59. (*g*) *Return of Stores.*—In accordance with G.O., No. 920, Financial, dated 18th September 1893, communicated to this office with G.O., No. 3616, Revenue, dated 2nd October 1893, an inventory of the valuable stock in the custody of the Curator has been made.

60. (*h*) *Service registers.*—All the service-books have been written up to date.

61. (*i*) Messrs. C. MacDonald and T. Burrows have held the appointments of overseers during the year. M.R.Ry. S. V. Ramanujam Chetty has been clerk in charge of the office, and Manikiam Pillai has been acting herbarium assistant during the year; both of them have worked very well.

62. (*j*) *Concluding remarks.*—The hearty acknowledgments of the Curator are due—to W. T. Thiselton-Dyer, Esq., C.M.G., F.R.S., Director of the Royal Gardens, Kew, for a small collection of interesting tree seeds, for tubers of a new kind of jalap, and for that valuable publication, the "Kew Bulletin of Miscellaneous Information"; to D. Morris, Esq., C.M.G., D.Sc., M.A., Assistant Director, Royal Gardens, Kew (who takes a keen interest in economic botany—especially in regard to the development of the resources of the British Empire), for his ready response and kindness in giving advice and in furnishing information regarding economic plants whenever it was asked for; to Dr. George King, C.I.E., F.R.S., &c., Director of the Botanical Survey of India and Burma, for the very acceptable collections of seeds and of plants he has so very generously forwarded from time to time, and for much valuable advice; to the Hon'ble Mr. J. F. Price, C.S.I., Chief Secretary to the Government of Madras (who takes much interest in the gardens), for his very liberal contributions—especially of Japanese seeds—to the department; to Maurice Holtze, Esq., F.L.S., Director of the Botanic Gardens, Adelaide, South Australia, for a fine collection of Australian seeds; and to the lady and to all the remaining gentlemen who have very kindly made contributions of seeds, of plants, and of periodicals to the department during the year under review.

63. (*k*) The usual statements, six in number, are appended.

Ootacamund,
15th May 1897.

(Signed) R. L. PROUDLOCK,
Curator, Govt. Botanic Gardens and Parks.

Enclosures.

No. 1.—Comparative statement of rainfall in the Government Botanical Gardens, Ootacamund, for 1895–96 and 1896–97.

Months.	1895–96.		1896–97.	
	Number of rainy days.	Rainfall.	Number of rainy days.	Rainfall.
April	15	3·45	7	1·70
May	12	3·23	8	3·76
June	19	11·26	24	20·21
July	22	4·24	18	8·90
August	22	4·77	18	6·23
September	12	5·53	21	12·25
October	22	8·97	6	1·26
November	10	1·61	12	5·02
December	3	5·13	11	6·21
January	..	..	8	2·69
February	..	..	..	..
March	4	1·83	4	1·14
Total ..	141	49·92	137	76·07

No. 2.—Statement showing the Receipts of the Government Botanical Gardens and Parks, Nilgiris, for the official year ending 31st March 1897.

Particulars.	Actuals of 1895–96.	Budget estimate of 1896–97.	Actuals of 1896–97.
Government Gardens, Ootacamund.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Sale of plants, &c.	2,910 3 0	3,000 0 0	2,620 6 4
Government Garden, Burliyar.			
Sale of fruits, &c.	214 9 4	300 0 0	145 4 10
Government Medicinal Gardens, Ootacamund.			
Sale of Jalap, tubers, &c.	....	....	....
Total ..	3,124 12 4	3,300 0 0	2,765 11 2
Value of drugs supplied to Medical Department	525 4 0	150 0 0	....
Grand Total ..	3,650 0 4	3,450 0 0	2,765 11 2

No. 3.—Statement of Expenditure of Government Botanical Gardens and Parks, Nilgiris, for the official year ending 31st March 1897.

Particulars.	Actuals of 1895–96.	Budget estimate of 1896–97.	Actuals of 1896–97.
	Rs A. P.	Rs. A. P.	Rs. A. P.
Pay of the Curator	1,540 10 4	4,200 0 0	4,180 0 0
Exchange compensation allowance	289 9 2	553 0 0	539 5 0
Travelling allowance of the Curator	70 2 0	500 0 0	(*a*) 546 1 9
Pay of the Curator's office establishment	792 0 0	792 0 0	790 8 0
Total ..	2,692 5 6	6,045 0 0	6,055 14 9
Government Gardens, Ootacamund.			
Overseers	1,200 0 0	1,200 0 0	1,168 3 5
Pay of temporary establishment	4,997 13 7	5,500 0 0	5,393 11 3
Acclimatization of foreign plants (G.O., No. 874, dated 5th July 1872).	776 8 7	800 0 0	787 7 11
Labelling of plants	295 4 8	300 0 0	299 6 2
Contingencies	1,442 14 3	1,535 0 0	1,485 8 8
Horticultural implements and garden tools	82 14 0	200 0 0	76 4 0
Painting and repair of garden buildings	587 3 6	800 0 0	743 1 2
Herbarium Assistant and servants	384 1 0	396 0 0	396 0 0
Purchase of cabinets and materials for the herbarium	26 7 0	200 0 0	14 0 0
Library	160 7 7	700 0 0	304 13 8
Municipal assessment	156 0 6	250 0 0	247 11 10
Seeds for Soldiers' Gardens	3,397 3 3	3,600 0 0	2,995 2 11
Opening an experimental garden at Gūdalūr	145 0 1	200 0 0	75 2 5
Government Gardens, Burliyar.			
Temporary establishment and contingencies	497 7 11	500 0 0	427 12 8
Government Medicinal Garden.			
Temporary establishment and contingencies	289 15 8	300 0 0	298 6 0
Sim's Park.			
Temporary establishment and contingencies	1,993 14 1	2,000 0 0	1,890 13 9
Pay of watcher (G.O., No. 843, dated 14th July 1884)	108 0 0	108 0 0	108 0 0
Stone House Park.			
Temporary establishment and contingencies	691 13 10	700 0 0	645 10 3
Church Hill Park.			
Temporary establishment	95 7 8	100 0 0	..
Upper Norwood.			
Temporary establishment and contingencies	1,999 15 10	2,300 0 0	2,298 4 11
Crewe and Ottley Hall Estates.			
Temporary establishment	301 5 11	319 0 0	150 12 7
Total ..	19,629 14 11	22,008 0 0	19,306 5 7
Grand Total ..	22,322 4 5	28,053 0 0	25,862 4 4

(*a*) Including Rs. 274–15–9 sanctioned in G.O., Mis. No. 2839, dated 18th July 1896, on account of travelling expenses incurred by the transfer of R. L. Proudlock, Esq., from the Royal Botanic Gardens, Calcutta, to the Government Botanical Gardens and Parks, Nilgiris.

No. 4.—Return of Seeds and Plants distributed from the Government Botanical Gardens, Ootacamund and Burliyar, during the official year ending 31st March 1897.

Months.	Fruit trees.		Timber trees.		Ornamental shrubs and herbaceous plants.		Vegetable seeds.	
	Number of plants.	Value.	Number of plants.	Value.	Number of plants.	Value.	Number of packets.	Value.
1	2	3	4	5	6	7	8	9
		Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.
April 1896	..	..	304	31 0 0	56	32 11 0	95	26 0 0
May ,, ...	8	2 0 0	100	5 0 0	51	15 0 0	123	32 12 0
June ,, ...	..	..	5	3 0 0	8	38 8 0	151	59 13 6
July ,, ...	..	..	404	77 9 0	14	3 8 0	250	100 13 9
August ,, ...	..	..	25	8 15 0	110	18 8 0	99	34 12 6
September ,, ...	..	..	630	41 14 0	53	14 6 0	117	35 15 0
October ,, ...	..	..	735	77 8 0	76	12 14 0	100	41 13 6
November ,, ...	..	..	558	88 0 0	88	9 8 0	47	18 12 6
December ,, ...	..	..	20	12 0 0	4	2 12 0	72	26 15 0
January 1897	..	..	6	3 8 0	78	19 6 0	77	19 7 0
February ,, ...	..	..	1	1 0 0	14	3 4 0	43	12 12 0
March ,, ...	..	..	..	..	82	10 4 0	73	43 1 0
Total ..	8	2 0 0	2,788	349 6 0	614	180 9 0	1,247	446 13 9

Months.	Trees, flower and other seeds.		Bouquets and cut flowers.		Sundry receipts.		Total.
	Number of packets.	Value.	Number of bouquets or wreath and cut flowers.	Value.	Miscellaneous—fuel, grass, &c., charges.	Packing charges.	
10	11	12	13	13	14	15	16
	Rs. A. P.	B. C.	Rs. A. P.		Rs. A. P.	Rs. A. P.	Rs. A. P.
April 1896	89	17 14 0	2 ..	13 0 0	82 8 8	1 10 0	154 6 8
May ,, ...	76	12 15 0	1 ..	2 0 0	122 15 7	3 6 0	196 0 7
June ,, ...	68	9 12 0	4 ..	14 0 9	47 13 7	0 14 0	173 13 1
July ,, ...	101	34 10 0	2 ..	9 4 0	615 6 4	4 11 0	845 14 1
August ,, ...	36	35 2 6	3 ..	14 0 0	49 3 6	3 3 0	163 12 0
September ,, ...	63	25 12 0	3 ..	13 0 0	71 0 6	3 6 0	205 5 0
October ,, ...	33	11 10 0	2 ..	20 4 0	102 9 5	4 10 0	270 11 11
November ,, ...	12	9 6 0	1 ..	2 8 0	64 2 9	2 12 0	195 0 6
December ,, ...	25	17 12 0	1 ..	11 0 0	28 0 0	1 0 0	93 5 9
January 1897	64	24 14 0	5 ..	31 12 0	166 14 1	5 2 6	278 15 1
February ,, ...	17	2 12 0	3 ..	11 8 0	56 12 3	2 11 0	90 11 3
March ,, ...	69	12 9 0	1 ..	4 8 0	33 12 0	1 10 0	105 12 0
Total ..	643	215 0 0	28 ..	146 12 0	1,390 3 5	34 15 0	2,763 11 2

No. 5.—List of those to whom Seeds or Plants have been distributed gratis or in exchange for gifts made to the Government Gardens during the year 1896–97.

Date.	Names	Particulars.	Amount.
1896.			Rs. A. P.
1st April ..	W. Gollan, Esq., Superintendent, Government Botanic Gardens, Saharunpore.	18 plants, Lilium Nilagiricum ..	4 8 0
11th ,, ..	The Superintendent, Agri-Horticultural Society's Garden, Madras.	1 packet of bluegum seed ..	0 5 0
15th ,, ..	The Chief Commissioner, Andaman Islands ..	12 plants of Princepia	6 0 0
20th ,, ..	Mrs. Breithaupt, Thornley Bank, Bangalore ..	12 ,, of Ipecacuanha	6 0 0
21st May ..	F. W. F. Fletcher, Esq.	4 ,, of Coffea stenophylla ..	4 0 0
27th ,, ..	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Botanic Gardens, Sibpur, Calcutta.	1 packet of nutmeg seed	1 0 0
27th ,, ..	M. Ridley, Esq., Superintendent, Government Gardens and Parks, Lucknow.	2 packets of do.	2 0 0
5th June ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	8 kinds of orchids	8 0 0
12th ,, ..	Do. do. do.	4 do.	4 0 0
15th ,, ..	The Superintendent, Government Cinchona Plantations, Dodabetta, Nilgiris.	11 packets of English vegetable seeds.	4 6 0

No. 5.—List of those to whom Seeds or Plants have been distributed gratis or in exchange for gifts made to the Government Gardens during the year 1896–97—*cont.*

Date.	Names.	Particulars.	Amount.
1896.			Rs. A. P.
15th June ..	The Superintendent, Government Cinchona Plantations, Nedivattam, Nilgiris.	11 packets of English vegetable seeds	2 13 6
15th ,, ..	The Superintendent, Government Cinchona Plantations, Pykara, Nilgiris.	11 do. do.	2 13 6
15th ,, ..	C. M. Walsh, Esq., Eckford, Ootacamund ..	1 packet of flower seeds	0 4 0
18th ,, ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	3 kinds of orchids	3 0 0
20th ,, ..	W. Gollan, Esq., Superintendent, Government Botanic Gardens, Saharunpore.	5 kinds of bluegum seeds	1 9 0
3rd July ..	The Honorable Mr. J. F. Price, C.S.I., Trengwainton, Ootacamund.	12 bluegum plants of sorts ..	1 8 0
		3 Ipomea plants of sorts	0 6 0
		6 kinds of orchids	6 0 0
11th ,, ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	1 kind of orchid	1 0 0
30th ,, ..	Do. do. do.	23 kinds of orchids	23 0 0
20th August ..	Do. do. do.	7 do.	7 0 0
25th ,, ..	Do. do. do.	4 do.	4 0 0
1st September.	Do. do. do.	15 trees, ornamental and herbaceous plants.	7 8 0
17th ,,	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Royal Botanic Gardens, Sibpur, Calcutta.	1 packet of Cupressus sempervirens.	0 4 0
17th ,,	J. Cameron, Esq., F.L.S., Superintendent, Government Gardens, Bangalore.	4 plants, Retinospora Sp. ..	4 0 0
17th ,,	The Curator, Lloyd Botanic Garden, Darjeeling.	5 kinds of Australian tree seeds ..	1 4 0
26th ,,	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Royal Botanic Gardens, Sibpur, Calcutta.	10 kinds of orchids	10 0 0
29th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	24 plants of Aerides maculosum ..	6 0 0
5th October ..	Charles Gray, Esq., Coonoor	1 plant of Aerides lineare ..	0 4 0
		15 kinds of orchids	15 0 0
6th ,, ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	7 do.	7 0 0
	Do. do. do.	1 plant of Retinospora plumosa ..	1 0 0
13th ,, ..	The Honorable Mr. A. T. Arundel	76 plants of Aerides	19 0 0
14th ,, ..	P. Lancaster, Esq., Secretary, Agri-Horticultural Society of India, Calcutta.	1 packet of bluegum seed	0 10 0
	Do. do. do.	24 orchids of sorts	12 0 0
30th ,, ..	Professor I. B. Balfour, Keeper of the Royal Botanic Garden, Edinburgh.	24 do.	12 0 0
4th November.	John Fraser, Esq., Proprietor and Editor, "Gardening World," London.	7 kinds of orchids	7 0 0
4th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	40 kinds of timber and herbaceous plants.	10 10 0
4th ,,	The Honorable Mr. J. F. Price, C.S.I., Trengwainton, Ootacamund.	12 Petunia cuttings	0 12 0
7th ,,	Charles Gray, Esq., Coonoor	12 plants of Osmunda regalis ..	3 0 0
27th ,,	P. Lancaster, Esq., Secretary, Agri-Horticultural Society of India, Calcutta.	17 kinds of orchids	17 0 0
27th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	12 plants of Impatiens Jerdonæ ..	3 0 0
30th ,,	W. T. Thiselton-Dyer, Esq., C.M.G., C.I.E., F.R.S., Director, Royal Gardens, Kew.	12 do. do. ..	3 0 0
8th December.	Professor I. B. Balfour, Keeper of the Royal Botanic Gardens, Edinburgh.	12 do. do. ..	3 0 0
8th ,,	Major-General E. S. Berkely, Thorold Gardens, Bitterne Park, Southampton, England.	3 kinds of orchids	3 0 0
8th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	36 plants of Princepia utilis ..	2 4 0
17th ,,	E. C. Duff, Esq., Editor, "Planting Opinion," Coonoor.	1 plant of Cupressus Lawsoniana .	0 4 0
1897.			
29th January.	General Evezard	1 packet of bluegum seed ..	0 10 0
2nd February.	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	23 kinds of orchids	23 0 0
3rd ,,	Charles Gray, Esq., Coonoor	1 packet of Pseudotsuga Douglasii.	1 0 0
		1 do. of Quercus glauca ..	0 8 0
		1 do. of ,, lamellosa ..	0 8 0
		43 orchids and other plants ..	6 2 0
3rd ,,	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Royal Botanic Gardens, Sibpur, Calcutta.	12 kinds of orchids	12 0 0
6th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	16 Nilgiri lily bulbs	4 0 0
3rd ,,	W. Gollan, Esq., Superintendent, Government Botanic Gardens, Saharunpore.	124 orchids	31 0 0
24th ,,	W. T. Thiselton-Dyer, Esq., C.M.G., C.I.E., F.R.S., Director, Royal Gardens, Kew.	6 kinds of orchids	6 0 0
8th March ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	874 ornamental plants	109 4 0
27th ,, ..	Supplied to the Ootacamund Municipality for Charing Cross.	Total ..	429 8 6

No. 4.—Return of Seeds and Plants distributed from the Government Botanical Gardens, Ootacamund and Burliyar, during the official year ending 31st March 1897.

Months.	Fruit trees.		Timber trees.		Ornamental shrubs and herbaceous plants.		Vegetable seeds.	
	Number of plants.	Value.	Number of plants.	Value.	Number of plants.	Value.	Number of packets.	Value.
1	2	3	4	5	6	7	8	9
		Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.
April 1896	..	..	304	31 0 0	56	32 11 0	95	26 0 0
May ,, ...	8	2 0 0	100	5 0 0	51	15 0 0	123	32 12 0
June ,, ...	..	..	5	3 0 0	8	38 8 0	151	59 13 6
July ,, ...	..	..	404	77 9 0	14	2 8 0	250	100 13 9
August ,, ...	..	..	25	8 15 0	110	18 8 0	99	34 12 6
September ,, ...	..	..	630	41 14 0	83	14 6 0	117	35 15 0
October ,, ...	..	..	735	77 8 0	76	12 14 0	100	41 12 6
November ,, ...	..	..	558	88 0 0	38	9 8 0	47	18 12 6
December ,, ...	..	..	20	12 0 0	4	2 12 0	72	20 15 0
January 1897	..	..	6	3 8 0	78	19 6 0	77	19 7 0
February ,, ...	..	..	1	1 0 0	14	3 4 0	43	12 12 0
March ,, ...	..	..	..	..	82	10 4 0	73	43 1 0
Total ..	8	2 0 0	2,788	349 6 0	614	180 9 0	1,247	446 13 9

Months.	Trees, flower and other seeds.		Bouquets and cut flowers.		Sundry receipts.		Total.
	Number of packets.	Value.	Number of bouquets or wreath and cut flowers.	Value.	Miscellaneous—fuel, grass, &c., charges.	Packing charges.	
	10	11	12	13	14	15	16
		Rs. A. P.	B. C.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
April 1896	89	17 14 0	2 ..	13 0 6	32 3 8	1 10 0	154 6 8
May ,, ...	76	12 15 0	1 ..	2 0 0	47 13 7	3 6 0	196 0 7
June ,, ...	63	9 12 0	3 ..	9 4 0	615 6 4	0 14 0	173 13 1
July ,, ...	36	35 2 0	2 ..	14 0 0	4 11 0	846 14 1	
August ,, ...	53	25 12 0	3 ..	13 0 0	49 3 6	3 3 0	163 12 0
September ,, ...	33	11 10 0	2 ..	20 4 0	71 0 0	3 6 0	205 5 0
October ,, ...	12	9 6 0	1 ..	2 8 0	102 0 3	4 10 0	270 11 11
November ,, ...	25	17 12 0	1 ..	11 0 0	64 2 0	2 12 0	195 0 6
December ,, ...	64	24 14 0	5 ..	31 12 0	28 0 0	1 9 0	93 5 0
January 1897	17	2 12 0	3 ..	11 8 0	166 14 1	5 2 0	270 15 1
February ,, ...	59	12 9 0	1 ..	4 5 0	56 12 3	2 11 0	99 11 3
March ,, ...					33 12 0	1 10 0	105 12 0
Total ..	643	215 0 6	28 ..	146 12 0	1,390 2 5	34 15 6	2,765 11 2

No. 5.—List of those to whom Seeds or Plants have been distributed gratis or in exchange for gifts made to the Government Gardens during the year 1896–97.

Date.	Names	Particulars.	Amount.
1896.			Rs. A. P.
1st April ..	W. Gollan, Esq., Superintendent, Government Botanic Gardens, Saharunpore.	18 plants, Lilium Nilagiricum ..	4 3 0
11th ,, ..	The Superintendent, Agri-Horticultural Society's Garden, Madras.	1 packet of bluegum seed ..	0 5 0
15th ,, ..	The Chief Commissioner, Andaman Islands ..	12 plants of Prinsepia	0 12 0
20th ,, ..	Mrs. Breithaupt, Thornley Bank, Bangalore ..	12 ,, of Ipecacuanha	6 0 0
21st May ..	F. W. F. Fletcher, Esq.	4 ,, of Coffea stenophylla ..	4 0 0
27th ,, ..	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Botanic Gardens, Sibpur, Calcutta.	1 packet of nutmeg seed	1 0 0
27th ,, ..	M. Ridley, Esq., Superintendent, Government Gardens and Parks, Lucknow.	2 packets of do.	2 0 0
5th June ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	5 kinds of orchids	5 0 0
12th ,, ..	Do. do. do.	4 do.	4 0 0
15th ,, ..	The Superintendent, Government Cinchona Plantations, Dodabetta, Nilgiris.	11 packets of English vegetable seeds	4 0 0

No. 5.—List of those to whom Seeds or Plants have been distributed gratis or in exchange for gifts made to the Government Gardens during the year 1896–97—*cont.*

Date.	Names.	Particulars.	Amount.
1896.			Rs. A. P.
15th June ..	The Superintendent, Government Cinchona Plantations, Nedivattam, Nilgiris.	11 packets of English vegetable seeds	2 13 6
15th ,, ..	The Superintendent, Government Cinchona Plantations, Pykara, Nilgiris.	11 do. do.	2 13 6
15th ,, ..	C. M. Walsh, Esq., Eckford, Ootacamund ..	1 packet of flower seeds	0 4 0
18th ,, ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	3 kinds of orchids	3 0 0
20th ,, ..	W. Gollan, Esq., Superintendent, Government Botanic Gardens, Saharunpore.	5 kinds of bluegum seeds	1 9 0
3rd July ..	The Honorable Mr. J. F. Price, C.S.I., Trengwainton, Ootacamund.	12 bluegum plants of sorts ..	1 8 0
11th ,, ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	3 Ipomea plants of sorts	0 6 0
30th ,, ..	Do. do. do.	6 kinds of orchids	6 0 0
20th August ..	Do. do. do.	1 kind of orchid	1 0 0
25th ,, ..	Do. do. do.	23 kinds of orchids	23 0 0
1st September.	Do. do. do.	7 do.	7 0 0
17th ,,	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Royal Botanic Gardens, Sibpur, Calcutta.	4 do.	4 0 0
17th ,,	J. Cameron, Esq., F.L.S., Superintendent, Government Gardens, Bangalore.	15 trees, ornamental and herbaceous plants.	7 8 0
17th ,,	The Curator, Lloyd Botanic Garden, Darjeeling.	1 packet of Cupressus sempervirens.	0 4 0
26th ,,	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Royal Botanic Gardens, Sibpur, Calcutta.	4 plants, Retinospora Sp. ..	4 0 0
29th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	5 kinds of Australian tree seeds ..	1 4 0
5th October ..	Charles Gray, Esq., Coonoor	10 kinds of orchids	10 0 0
5th ,, ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	24 plants of Aerides maculosum ..	6 0 0
13th ,, ..	Do. do. do.	1 plant of Aerides lineare ..	0 4 0
14th ,, ..	The Honorable Mr. A. T. Arundel	15 kinds of orchids	15 0 0
17th ,, ..	P. Lancaster, Esq., Secretary, Agri-Horticultural Society of India, Calcutta.	7 do.	7 0 0
30th ,, ..	Do. do. do.	1 plant of Retinospora plumosa ..	1 0 0
4th November.	Professor I. B. Balfour, Keeper of the Royal Botanic Garden, Edinburgh.	76 plants of Aerides	19 0 0
4th ,,	John Fraser, Esq., Proprietor and Editor, "Gardening World," London.	1 packet of bluegum seed	0 10 0
4th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	24 orchids of sorts	12 0 0
7th ,,	The Honorable Mr. J. F. Price, C.S.I., Trengwainton, Ootacamund.	24 do.	12 0 0
27th ,,	Charles Gray, Esq., Coonoor	7 kinds of orchids	7 0 0
27th ,,	P. Lancaster, Esq., Secretary, Agri-Horticultural Society of India, Calcutta.	40 kinds of timber and herbaceous plants.	10 10 0
30th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	12 Petunia cuttings	0 12 0
8th December.	W. T. Thiselton-Dyer, Esq., C.M.G., C.I.E., F.R.S., Director, Royal Gardens, Kew.	12 plants of Osmunda regalis ..	3 0 0
8th ,,	Professor I. B. Balfour, Keeper of the Royal Botanic Gardens, Edinburgh.	17 kinds of orchids	17 0 0
8th ,,	Major-General E. S. Berkely, Thorold Gardens, Bitterne Park, Southampton, England.	12 plants of Impatiens Jerdonæ ..	3 0 0
8th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	12 do. do. ..	3 0 0
17th ,,	E. C. Duff, Esq., Editor, "Planting Opinion," Coonoor.	12 do. do. ..	3 0 0
1897.		3 kinds of orchids	3 0 0
29th January.	General Evezard	36 plants of Principia utilis ..	2 4 0
2nd February.	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	1 plant of Cupressus Lawsoniana .	0 4 0
3rd ,,	Charles Gray, Esq., Coonoor	1 packet of bluegum seed ..	0 10 0
3rd ,,	Dr. G. King, F.R.S., C.I.E, Director of the Botanical Survey of India, and Superintendent, Royal Botanic Gardens, Sibpur, Calcutta.	23 kinds of orchids	23 0 0
6th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	1 packet of Pseudotsuga Douglasii.	1 0 0
3rd ,,	W. Gollan, Esq., Superintendent, Government Botanic Gardens, Saharunpore.	1 do. of Quercus glauca ..	0 8 0
24th ,,	W. T. Thiselton-Dyer, Esq., C.M.G., C.I.E., F.R.S., Director, Royal Gardens, Kew.	1 do. of ,, lamellosa ..	0 8 0
8th March ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	43 orchids and other plants] ..	6 2 0
27th ,, ..	Supplied to the Ootacamund Municipality for Charing Cross.	12 kinds of orchids	12 0 0
		16 Nilgiri lily bulbs	4 0 0
		124 orchids	31 0 0
		6 kinds of orchids	6 0 0
		874 ornamental plants	109 4 0
		Total ..	429 8 6

No. 4.—Return of Seeds and Plants distributed from the Government Botanical Gardens, Ootacamund and Burliyar, during the official year ending 31st March 1897.

Months.	Fruit trees.		Timber trees.		Ornamental shrubs and herbaceous plants.		Vegetable seeds.	
	Number of plants.	Value.	Number of plants.	Value.	Number of plants.	Value.	Number of packets.	Value.
1	2	3	4	5	6	7	8	9
		Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.
April 1896	..	..	304	31 0 0	56	32 11 0	95	26 0 9
May ,, ...	8	2 0 0	100	5 0 0	51	15 0 0	124	32 12 0
June ,, ...	..	..	5	3 0 0	8	28 8 0	151	59 13 6
July ,, ...	..	..	404	77 9 0	14	2 8 0	250	100 13 9
August ,, ...	..	..	25	8 15 0	110	18 8 0	99	34 12 6
September ,, ...	..	..	620	41 14 0	83	14 6 0	117	35 15 0
October ,, ...	..	..	735	77 8 0	76	12 14 0	100	41 13 6
November ,, ...	..	..	558	88 0 0	38	9 8 0	47	18 12 6
December ,, ...	..	..	20	12 0 0	4	2 12 0	72	26 13 0
January 1897	..	..	6	3 8 0	78	19 6 0	77	19 7 0
February ,, ...	..	..	1	1 0 0	14	3 4 0	43	13 12 0
March ,, ...	..	..	..	..	82	10 4 0	73	43 1 0
Total ..	8	2 0 0	2,788	349 6 0	614	180 9 0	1,247	446 13 9

Months.	Trees, flower and other seeds.		Bouquets and cut flowers.		Sundry receipts.		Total.
	Number of packets.	Value.	Number of bouquets or wreath and cut flowers.	Value.	Miscellaneous—fuel, grass, &c., charges.	Packing charges.	
	10	11	12	13	14	15	16
	Rs. A. P.	R. C.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
April 1896	89	17 14 0	2 ..	13 0 0	32 3 8	1 10 0	154 6 8
May ,, ...	76	12 15 0	1 ..	2 0 0	122 15 7	3 6 0	196 0 7
June ,, ...	68	9 12 0	4 ..	14 0 0	47 13 7	0 14 0	172 13 1
July ,, ...	101	34 10 0	2 ..	9 4 0	615 6 4	4 11 6	845 14 1
August ,, ...	36	35 2 6	3 ..	14 0 0	49 3 6	2 3 0	163 12 0
September ,, ...	63	25 12 0	3 ..	13 0 0	71 0 0	3 6 0	205 5 0
October ,, ...	33	11 10 0	2 ..	20 4 0	102 0 5	4 10 0	270 11 11
November ,, ...	12	9 6 0	1 ..	2 8 0	64 2 0	2 12 0	195 0 6
December ,, ...	25	17 12 0	1 ..	11 0 0	28 0 0	1 0 0	93 5 6
January 1897	64	24 14 0	5 ..	31 12 0	166 14 1	5 9 0	270 15 1
February ,, ...	17	2 12 0	3 ..	11 8 0	56 12 3	2 11 0	93 11 3
March ,, ...	59	12 9 0	1 ..	4 8 0	33 12 0	1 10 0	105 12 0
Total ..	643	215 0 0	28 ..	146 12 0	1,390 3 5	34 15 0	2,765 11 2

No. 5.—List of those to whom Seeds or Plants have been distributed gratis or in exchange for gifts made to the Government Gardens during the year 1896-97.

Date.	Names	Particulars.	Amount.
1896.			Rs. A. P.
1st April ..	W. Gollan, Esq., Superintendent, Government Botanic Gardens, Saharunpore.	18 plants, Lilium Nilagiricum ..	4 8 0
11th ,, ..	The Superintendent, Agri-Horticultural Society's Garden, Madras.	1 packet of bluegum seed ..	0 5 0
15th ,, ..	The Chief Commissioner, Andaman Islands ..	12 plants of Principia	0 12 0
20th ,, ..	Mrs. Breithaupt, Thornley Bank, Bangalore ..	12 ,, of Ipecacuanha	6 0 0
21st May ..	F. W. F. Fletcher, Esq.	4 ,, of Coffea stenophylla ..	4 0 0
27th ,, ..	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Botanic Gardens, Sibpur, Calcutta.	1 packet of nutmeg seed	1 0 0
27th ,, ..	M. Ridley, Esq., Superintendent, Government Gardens and Parks, Lucknow.	2 packets of do.	2 0 0
5th June ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	8 kinds of orchids	8 0 0
12th ,, ..	Do. do. do.	4 do.	4 0 0
15th ,, ..	The Superintendent, Government Cinchona Plantations, Dodabetta, Nilgiris.	11 packets of English vegetable seeds.	2 13 6

No. 5.—List of those to whom Seeds or Plants have been distributed gratis or in exchange for gifts made to the Government Gardens during the year 1896-97—*cont.*

Date.	Names.	Particulars.	Amount.
1896.			Rs. A. P.
15th June ..	The Superintendent, Government Cinchona Plantations, Nedivattam, Nilgiris.	11 packets of English vegetable seeds	2 13 6
15th ,, ..	The Superintendent, Government Cinchona Plantations, Pykara, Nilgiris.	11 do. do.	2 13 6
15th ,, ..	C. M. Walsh, Esq., Eckford, Ootacamund ..	1 packet of flower seeds	0 4 0
18th ,, ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	3 kinds of orchids	3 0 0
20th ,, ..	W. Gollan, Esq., Superintendent, Government Botanic Gardens, Saharunpore.	5 kinds of bluegum seeds	1 9 0
3rd July ..	The Honorable Mr. J. F. Price, C.S.I., Trengwainton, Ootacamund.	12 bluegum plants of sorts ..	1 8 0
11th ,, ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	3 Ipomea plants of sorts	0 6 0
	Do. do. do.	6 kinds of orchids	6 0 0
	Do. do. do.	1 kind of orchid	1 0 0
30th ,, ..	Do. do. do.	23 kinds of orchids	23 0 0
20th August ..	Do. do. do.	7 do.	7 0 0
25th ,, ..	Do. do. do.	4 do.	4 0 0
1st September.	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Royal Botanic Gardens, Sibpur, Calcutta.	15 trees, ornamental and herbaceous plants.	7 8 0
17th ,,	J. Cameron, Esq., F.L.S., Superintendent, Government Gardens, Bangalore.	1 packet of Cupressus sempervirens.	0 4 0
17th ,,	The Curator, Lloyd Botanic Garden, Darjeeling.	4 plants, Retinospora Sp. ..	4 0 0
17th ,,	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Royal Botanic Gardens, Sibpur, Calcutta.	5 kinds of Australian tree seeds ..	1 4 0
26th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	10 kinds of orchids	10 0 0
29th ,,	Charles Gray, Esq., Coonoor	24 plants of Aerides maculosum ..	6 0 0
5th October ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	1 plant of Aerides lineare ..	0 4 0
5th ,, ..	Do. do. do.	15 kinds of orchids	15 0 0
13th ,, ..	The Honorable Mr. A. T. Arundel	7 do.	7 0 0
14th ,, ..	P. Lancaster, Esq., Secretary, Agri-Horticultural Society of India, Calcutta.	1 plant of Retinospora plumosa ..	1 0 0
17th ,, ..	Do. do. do.	76 plants of Aerides	19 0 0
20th ,, ..	Professor I. B. Balfour, Keeper of the Royal Botanic Garden, Edinburgh.	1 packet of bluegum seed ..	0 10 0
4th November.	John Fraser, Esq., Proprietor and Editor, "Gardening World," London.	24 do.	12 0 0
4th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	7 kinds of orchids	7 0 0
4th ,,	The Honorable Mr. J. F. Price, C.S.I., Trengwainton, Ootacamund.	40 kinds of timber and herbaceous plants.	10 10 0
7th ,,	Charles Gray, Esq., Coonoor	12 Petunia cuttings	0 12 0
27th ,,	P. Lancaster, Esq., Secretary, Agri-Horticultural Society of India, Calcutta.	12 plants of Osmunda regalis ..	3 0 0
27th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	17 kinds of orchids	17 0 0
30th ,,	W. T. Thiselton-Dyer, Esq., C.M.G., C.I.E., F.R.S., Director, Royal Gardens, Kew.	12 plants of Impatiens Jerdonæ ..	3 0 0
8th December.	Professor I. B. Balfour, Keeper of the Royal Botanic Gardens, Edinburgh.	12 do. do. ..	3 0 0
8th ,,	Major-General E. S. Berkely, Thorold Gardens, Bitterne Park, Southampton, England.	12 do. do. ..	3 0 0
8th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	3 kinds of orchids	3 0 0
17th ,,	E. C. Duff, Esq., Editor, "Planting Opinion," Coonoor.	36 plants of Principia utilis ..	2 4 0
		1 plant of Cupressus Lawsoniana .	0 4 0
1897.			
29th January.	General Evezard	1 packet of bluegum seed ..	0 10 0
2nd February.	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	23 kinds of orchids	23 0 0
3rd ,,	Charles Gray, Esq., Coonoor	1 packet of Pseudotsuga Douglasii.	1 0 0
		1 do. of Quercus glauca ..	0 8 0
		1 do. of ,, lamellosa ..	0 8 0
3rd ,,	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Royal Botanic Gardens, Sibpur, Calcutta.	43 orchids and other plants] ..	6 2 0
6th ,,	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	12 kinds of orchids	12 0 0
3rd ,,	W. Gollan, Esq., Superintendent, Government Botanic Gardens, Saharunpore.	16 Nilgiri lily bulbs	4 0 0
24th ,,	W. T. Thiselton-Dyer, Esq., C.M.G., C.I.E., F.R.S., Director, Royal Gardens, Kew.	124 orchids	31 0 0
8th March ..	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	6 kinds of orchids	6 0 0
27th ,, ..	Supplied to the Ootacamund Municipality for Charing Cross.	874 ornamental plants	109 4 0
		Total ..	429 8 6

No. 6.—List of those who have been benefactors to the Gardens during the year 1896-97.

Serial number.	Names.	Particulars.		
		Packets of seeds.	Plants.	Name or class of seeds and plants.
1	W. T. Thiselton-Dyer, Esq., C.M.G., C.I.E., F.R.S., Director, Royal Gardens, Kew.	1	..	Pseudophœnix Sargentii, Wendl.
		5	..	Tree.
2	Dr. G. King, F.R.S., C.I.E., Director of the Botanical Survey of India, and Superintendent, Royal Botanic Gardens, Sibpur, Calcutta.	..	28	Ipomœa simulans.
		56	..	Tree.
		24	..	Creeper.
		26	..	Shrub.
		11	..	Herbaceous.
		1	..	Aegle marmelos.
		..	70	Ferns, palms and other ornamental trees.
		..	240	Orchids.
3	The Honorable Mr. J. F. Price, C.S.I., Trengwainton, Ootacamund.	..	18	Nymphæa sp.
		10	..	Tree.
		12	..	Ornamental tree.
		21	..	Flower, shrubs and creeper.
		..	694	Cauliflower and cabbage.
		..	367	Violets.
		..	2	Gynura aurantiaca.
		..	46	Artichoke.
		..	10	Chrysanthemum.
		..	8	Rhubarb.
4	W. Gollan, Esq., Superintendent, Government Botanic Gardens, Saharunpore.	..	24	Carnations.
		1	..	Primula Stuartiana, yellow variety.
		8	..	Conifers.
		2	..	Castanea vesca.
5	H. G. Hein, Esq., Superintendent, Government Agri-Horticultural Garden, Lahore.	6	..	Tree.
		37	..	Flower.
6	The Director, Botanic Garden, Adelaide, South Australia ..	104	..	Tree.
7	R. T. Baker, Esq., F.L.S., Botanist and Assistant Curator, Technological Museum, Sydney.	2	..	Do.
8	W. A. Kennedy, Esq., Curator, Botanic Gardens, Darjeeling.	2	..	Quercus lamellosa and Q. glauca.
9	The Superintendent, Agri-Horticultural Society's Garden, Madras.	12	..	Ornamental tree.
		13	..	Tree
10	Mr. G. H. T. Mayer, Superintendent, Memorial Gardens, Cawnpore.	1	..	Flower.
		1	..	Do.
		1	..	Creeper.
11	R. Pantling, Esq., Government Cinchona Plantations, Mungpoo, Kurseong, Bengal.	5	..	Tree.
		..	96	Orchids.
12	P. Lancaster, Esq., Secretary, Agri-Horticultural Society of India, Calcutta.	..	10	Do.
13	C. G. Douglas, Esq., District Forest Officer, Nilgiris, forwarded by,	..	8	Cannas.
		8	..	Tree seeds collected by the late R. Morgan, Esq., in British Central Africa.
14	E. D. M. Hooper, Esq., Acting Conservator of Forests, Southern Circle.	1	..	Pseudotsuga Douglasii.
		..	18	Japanese Bamboos.
15	The District Forest Officer, Kistna	1	..	"Gara tree."
16	Charles Gray, Esq., Coonoor	7	..	Tree.
		1	..	Ornamental.
		..	110	Do.
		..	84	Bulbs.
17	E. C. Duff, Esq., Editor, "Planting Opinion," Coonoor ..	..	19	Orchids.
		1	..	Cola acuminata.
		1	..	Nyassaland wild coffee.
18	M. Clementson, Esq., Ootacamund	..	1	Coffea stenophylla.
19	Major Keckewich, Ootacamund..	3	..	Flower.
20	Mrs. Batchelor, Ootacamund	..	35	Carnations.
21	W. M. Liddell, Esq., Nedivattam	..	1	Orchid.
		..	2	Statice sp.
22	A. J. Alexander, Esq., Seaforth Estate	..	2	Cichorium Intybus.
		..	1	Orchid.

Ootacamund,
15th May 1897.

(Signed) R. L. PROUDLOCK,
Curator, Govt. Botanic Gardens and Parks.

Endorsement Dis. No. 1268/97.

Forwarded. The report was received in this office on 31st May but has been detained as it seemed necessary to consult with the Curator about certain measures.

2. Mr. Proudlock has effected considerable improvement in the Government House and the Government Botanical Gardens, Ootacamund. The Church Hill Park has been wisely let alone, pending the decision of Government as to its future. The Gúdalúr Gardens so called have been abandoned.

3. I am in consultation with the Curator about increasing the revenue from cut flowers and about some theft of seeds in the Ootacamund Gardens. These matters, however, were rightly excluded from the annual Report.

Ootacamund,
12th June 1897.

(Signed) J. H. A. TREMENHEERE,
Collector.

Order—No. 559, Revenue, dated 13th July 1897.

Miscellaneous.

With his endorsement read above, the Collector of the Nilgiris submits the report of Mr. R. L. Proudlock on his management of the several Government gardens and parks on the Nilgiri Hills during the year 1896-97.

2. The report reached the Collector on the 31st May last, *i.e.*, on the day previous to that on which it was due in the Government office and it was received by Government only on the 14th June. The Collector is requested to arrange to dispose of the report earlier in future so that its transmission to Government may not be delayed.

3. The year under review was the first in which the gardens were under the control of the Collector of the district instead of under that of the Government Botanist. The appointment of a Government Botanist is still under correspondence between the Government of India and the Secretary of State. Pending final orders the work has been entrusted to Dr. A. G. Bourne, the Officiating Superintendent of the Central Museum, who will deal with all applications for botanical assistance. In consequence of this arrangement and the decision to ultimately make Madras the head-quarters of botanical work in this Presidency the Herbarium and the more valuable portion of the Library hitherto attached to the Government Gardens at Ootacamund have been transferred to Madras.

4. The Government observes that the Curator's report is modelled on those submitted in preceding years by the Government Botanist. As the Curator's duties are confined to the development and improvement of the gardens entrusted to his charge his reports in future should be confined to a statement of how these duties have been carried out during the year and all purely scientific matters should be excluded.

5. With reference to paragraph 14 of his report the Curator is requested to submit a separate report on the subject through the Collector.

6. The Government notes with satisfaction that considerable improvements have been effected in the gardens and parks under the Curator's management during the year under review. It is hoped that the rules defining the privileges of the public in the Government Botanical Gardens at Ootacamund and in Sim's Park at Coonoor which were framed in accordance with a suggestion made by Dr. King of Calcutta have answered their purpose.

7. In the course of the year the Curator was requested to report on the condition of the Government Gardens at Burliar and Gúdalúr. The Curator's report with regard to the Gúdalúr Experimental Garden showed that this garden had proved a failure. It was accordingly decided to abandon it. As regards the Burliar Garden, the Curator's report showed that it also had been greatly neglected, but as the locality is eminently suitable for the experimental cultivation of exotic tropical plants the Government has decided to retain the garden and the Curator's proposals for its improvement have been approved.

8. The receipts from and the expenditure on the several gardens and parks during the year under review are compared with those of the two previous years in the following statement:—

	1894-95.	1895-96.	1896-97.
	Rs.	Rs.	Rs.
Receipts	5,204	3,696	3,195
Charges	25,076	22,848	25,862

Indexed

The figures for receipts given above include the value of the seeds, plants, &c., issued *gratis* or in exchange for gifts made to the gardens, and the amount to be debited to free grants was Rs. 430 as against Rs. 46 in the previous year. The Government is, however, glad to observe that private gifts to the gardens also showed a considerable increase as compared with those of 1895–96 and desires to take this opportunity to tender its thanks to the contributors. For purposes of comparison it is desirable that the information given in statement 5 should be exhibited so as to distinguish between the seeds, plants, &c., given from the garden *gratis* and those distributed in exchange for others. Mr. Proudlock will be requested to carry out the necessary alteration in the statements in submitting future reports.

9. The expenditure during the year under review amounted to Rs. 25,862 as against Rs. 27,690, the sanctioned estimate for the same period, and Rs. 22,848, the actuals of the previous year. The increase for the year under review is chiefly under the head "Pay of the Curator" and is due to the fact that a considerable interval elapsed during the previous year between the death of the late Curator and the appointment of the present officer. As regards the figures for the revised and budget estimates, the Curator has in paragraph 51 of the report taken those given in the Government orders accepting tentatively the budget estimates of the department instead of those finally accepted by the Government of India and published in the "Civil Budget Estimate." In future reports, the figures given in the latter should be invariably taken for purposes of comparison and the reasons for any increase or decrease in the actuals as compared with the estimates briefly set forth for the information of Government. It is observed that in the report for 1895–96 the actuals of that year were shown as Rs. 22,322 while in the "Civil Budget Estimate" for 1897–98 they are shown as Rs. 22,848. The difference is apparently due to the adjustment in accounts made by the Accountant-General subsequent to the submission to Government of the report in question but the matter should have been noticed and the discrepancy explained by the Curator.

10. It having been found that in the matter of the supply of seeds for Soldiers' gardens, the quantity applied for in several cases had been altogether excessive while in certain others the seeds given were of plants which would not grow in the place from which the indent had been received, the Government in the year under review issued special orders to regulate the indent and supply of such seeds in the future. It is observed that there has been a decrease of over Rs. 400 in the expenditure under this head which is doubtless due to the stricter scrutiny thus prescribed.

11. The Government observes from paragraph 57 of the Curator's report that cases of cattle trespass and petty theft are frequent in the gardens and from paragraph 3 of the Collector's endorsement it would appear there has been also some theft of seeds apparently from the garden stores. These facts call for the exercise by the Curator of a stricter supervision and greater vigilance over his subordinates without whose connivance or privity the thefts could hardly have occurred.

(True Extract.)

(Signed) G. STOKES,
Ag. Secretary to Government.

To the Collector of the Nilgiris.
" the Public Works Department.
" the Director of Government Cinchona Plantations.
" the Board of Revenue (Land Revenue).
" " (Revenue Settlement, Land Records and Agriculture).
" the Superintendent, Government Central Museum.
" the Surgeon-General (through the Public Department).
" the Honorary Secretary, Agri-Horticultural Society.
" " Wynaad Planters' Association.
" " Nilgiri " "
" " Yercaud " "

Endorsement No. 559A.

Copy to the Government of India, Revenue and Agricultural Department.

(Signed) G. STOKES,
Ag. Secretary to Government.

Ed. A. F. Eccliston.

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