

GOVERNMENT NOTIFICATION.--No. 408.

The following Report on the Botanical and Afforestation Department, for the year 1901, is published.

By Command,

F. H. MAY,
Colonial Secretary.

Colonial Secretary's Office, Hongkong, 4th July, 1902.

BOTANICAL AND AFFORESTATION DEPARTMENT,
HONGKONG, 18th April, 1902.

SIR,—For the information of His Excellency the Officer Administering the Government I have the honour to forward the Annual Report on this Department for the past year, 1901.

STAFF.

2. The Superintendent was absent on leave from the end of March, 1900, until the end of September, 1901; the Assistant Superintendent, who officiated during his absence, was actively employed, and with the effective work of the clerks and the leading men in the different departments, he has maintained the ordinary routine work generally in satisfactory order.

3. Towards the end of the year the Head Forester, SUEN TUNG, resigned in order, as he alleged, to go into business, and YUNG CHING was appointed in his place. The latter enters with an excellent character, and although he lacks knowledge of forestry work, he promises soon to acquire what is needed.

4. The Foreman Forester also resigned, and he was replaced by WONG SING PO, who was educated in the Queen's College and promises to become a useful man.

5. During the previous year there was the unprecedented number of 45 changes in the out-door staff and notwithstanding the general increase of wages which commenced on January 1st, there were 37 changes again last year, 15 of which occurred in the 3rd quarter; in the 4th quarter the numbers decreased to 11, and during the 1st quarter of this year there has been a further fall to 6 only, so there is some promise now of improvement which, I hope, with careful management, may be maintained.

6. Last year was a record one for absences on account of alleged sickness, 968 days having been registered.

BOTANIC GARDENS.

7. *Plant-houses.*—In my Report for 1900 I mentioned that No. 1 Plant-house—in the Old Garden—was being re-built on an enlarged and improved plan; this consisted principally of the substitution of tables supported partly by angle iron instead of brick walls, which could never be kept clean on account of mossy growth on them, of increased width of tables and of a roof at a greater height, bearing split bamboos with the internodes cut out and the concave sides placed uppermost, which carries off about half or more of the rainfall; the bamboos are spaced at about half their width which allows just sufficient light to penetrate for successful plant growth. These changes have resulted in a very great improvement in the condition of the ferns which the house contains.

8. Immediately after my return in September, No. 2 house was razed and its re-construction commenced, followed by No. 3 in the same manner, in order to complete the plan which was designed when No. 1 house was commenced, but the execution of which was interrupted by my absence when on leave.

9. Nos. 1 and 3 houses are each about 52 feet long by 26 feet wide, and No. 2, which stands transversely between Nos. 1 and 3, is 37 feet long by 28 feet wide. No. 1 is filled with ferns and kindred plants and Nos. 2 and 3 will be used for the accommodation of orchids and ferns as the old houses were.

10. The enlargement of the three houses will give 400 square feet of additional table space for plants.

11. At the north and south of this range rockeries have been constructed and the entrance at the south end instead of being by way of a flight of steps is arranged to come in level from a side-walk.

12. Just before the end of the year extensive repairs were commenced to the plant-houses—Nos. 5, 6, 7 and 8—in the nursery and the usual annual re-painting was done to these houses and gates, railings &c., in different parts of the Garden.

13. *Walks*.—Repairs to these as well as many other things were suspended between March, 1900, and October, 1901, but in the autumn arrangements were made for resuming the work of surfacing with cement a large area of the decaying lime-concreted walks, the whole of which should be completed during the current year when no further expenditure should be needed on any walks with gradients for a great many years to come.

14. *Lawns*.—Many of these are becoming very uneven owing to the sinking of the earth in places, but more particularly to the action of earth-worms which are very numerous and very large. For this reason the lawns require to be frequently re-laid and a good deal of work is needed and should be taken in hand as soon as possible.

15. *Shrubberies*.—Shrubs grow so rapidly and become worn out so quickly that it is necessary to be constantly re-planting some of them, and there is of this work a rather unusual amount which now requires to be done.

16. *Rockeries*.—What has been said in regard to shrubberies applies equally as much to rockeries. These are usually made in the shade of trees and over their roots, which quickly grow into the good soil prepared for the plants which grow in the rockeries. The re-planting of all rockeries is now much needed and work on them has commenced.

17. *Succulents*.—These have become overgrown in places and worn out in others and much need increased attention and re-planting.

18. *Roses*.—I have been for many years endeavouring to improve these and increase the number of varieties which can be grown here, but although there is ample evidence that very great improvement is possible and that all the conditions for greater success are within reach, yet I find the greatest difficulty in the execution of what is indicated by myself.

19. *Japanese Bamboos*.—A few years ago a small collection of bamboos, including *Phyllostachys*, were obtained from Japan and planted in a group by themselves. These have thrived and produced a good effect and encourage the enlargement of the collection.

20. *Indigenous Orchids*.—A small rockery was made some years ago for the reception of a collection of Hongkong orchids, which, however, are not in the condition which good cultivation might have produced.

21. *Rhododendron javanica*.—In 1897 a collection of hybrids from this beautiful Java *Rhododendron* was obtained for trial from Messrs. J. VEITCH & SONS of London. They were kept under glass for some time, but afterwards they have been grown—in pots—under slight shade and shelter from heavy rains and have succeeded very well indeed, and annually produced their lovely flowers.

22. *Bougainvillea glabra*. *Cæsalpinia nuga*.—The exceptional colour of the flowers of the former exercise the minds of many people when making use of it in combination with other colours. For the benefit of those who are interested I may mention that if it and *Cæsalpinia nuga*, which is a robust climber indigenous to Hongkong, are planted near to each other, the yellow flowers of the latter and the flowers of the *Bougainvillea* have a pleasing effect. *Cæsalpinia vernalis*, also an indigenous climber but with more beautiful foliage although smaller flowers, is also useful for the same purpose.

23. *Fibrous-rooted Begonia*.—Seeds of this plant were obtained for experiment from Messrs. SUTTON & SONS two years ago and it has proved a most valuable addition to bedding plants here, flowering between the cold and hot seasons. It has been treated as an annual, but as one plant has lived through both seasons although in a bed and exposed to all weathers, it is possible that by careful selection in plants from which seeds are gathered a strain may be established which will be perpetual.

24. *Wistaria sinensis*.—This favourite climber has not flowered well in Hongkong, but it has been experimented with by providing good soil for its roots and a horizontal trellis for its branches where it gets full exposure to sun. With this treatment it produces flowers in fair quantity, but the racemes are rather small, these however should be capable of improvement by better cultivation.

25. *Acclimatisation*.—Opportunities are watched for increasing the number of desirable ornamental plants, and in this way two welcome additions have been established; one a Pink—*Dianthus*—which Mr. E. S. KELLY had introduced to his garden, was kindly contributed by that gentleman in response to a request, and it is flourishing even through the summer. This is the first of the Pink family which has made itself at home here. The other is the “southern-wood”—*Artemisia abrotanum*—which Mrs. WICKING before she left Hongkong had successfully established at the Peak, and which thrives equally as well, with some protection down here.

26. *Hippeastrum (Amaryllis)*.—VEITCH's strain of this showy bulbous plant which was introduced some years ago to replace older and inferior varieties is succeeding remarkably well not only in pots but in an open border for which a sufficient stock was propagated three years ago. For those really interested in their gardens this easily cultivated plant could not be too highly recommended.

27. *Western and Northern China Plants.*—Messrs. JAMES VEITCH & SONS of London have very kindly contributed through their collector, Mr. WILSON, who has recently returned to England after three years' plant-collecting in China, some plants which are valuable acquisitions. Amongst them should be specially mentioned *Jasminum primulinum*, a species with, as has been said, "glorified" yellow flowers of *J. nudiflorum*, *Libocedrus macrolepis*, a very fine conifer, *Magnolia Delavayi* and *Primula obconica* all of which are thriving remarkably well. The *Primula* has its home on ledges of rocks in the Yangtze gorges above Ichang and is, I believe, the first one of its genus which has really succeeded in Hongkong.

28. *Supplementary Indigenous Plants.*—Two unknown climbing plants were discovered in the Island in 1899 and brought to the Gardens to be grown until they flowered in order to identify them. Flowers were produced in 1900 and last year. One is found to be *Canavalia obtusa*, D. C., and the other a species of *Illigera*, which is apparently the same as specimens in the herbarium which were collected on the Lo-fai Mountains in the Kwang Tung Province. These bring the total number of plants, exclusive of mosses, lichens, sea-weeds and fungi, indigenous to Hongkong, up to 1,344 that is 38 more than BENTHAM gives as indigenous to the whole of the British Islands, BENTHAM in the "Flora Hongkongensis," published in 1861, described 1,053 plants as found here. About ten years later Dr. H. F. HANCE in his supplement enumerated or described an additional 75 plants, and now I have a further list of about 253 later discoveries, which make the total number 1,397 species.

On the 19th April, 1900, a paper on "Some Mosses from China and Japan," by Mr. E. S. SALMON, F.L.S., was read before the Linnean Society in which 18 mosses were recorded from Hongkong, 16 of which were additions to the Flora, 5 previously found only in Japan, 5 before not found out of India, and 1 new to science; the latter was named *Calymperes Fordii*, Beach.

29. *Interchange of Plants and Seeds.*—Introductions are somewhat more curtailed as the rather limited available space becomes less for their development, but every year there are many interesting and useful additions. The chief donors of plants, seeds or animals during the year were:—

Acclimatizing Association, South California.
 Agri-Horticultural Society, Madras.
 BLAKE, Lady
 Botanic Gardens, Aburi, West Africa.
 " " Calcutta.
 " " Durban.
 " " Jamaica.
 " " Ootacamund.
 " " Saharanpur.
 " " Sibpur.
 " " Singapore.
 " " Sydney.
 BLACKBURN, Commander
 BULLEY, A. K.
 Chinese, A
 CHUNG, Dr. K. U.

Conservator of Forests, Bengal.
 " " " Rangoon.
 COOKE, Mrs. R.
 CROOKE, J. R., Gibraltar.
 DAMMANN & Co., Italy.
 FUNG WA-CH'UN.
 HALLIFAX, E. R.
 HODGINS, Captain A. E.
 HUNG YEUNG.
 KIRKWOOD, J.
 LOBER, A., Manila.
 ORTIE, Rev. J.
 ROEBELEN, C., Bangkok.
 State Gardens, Baroda.
 Prefectural Agricultural Station, Formosa.

30. The distribution of plants and seeds has been maintained, but on a rather limited scale. The chief recipients were:—

Acclimatizing Association, South California.
 Acclimatization Society, Queensland.
 Belilios Public School.
 BERG, V., Vice-Governor, Caroline Islands.
 BLAKE, Lady
 Botanic Gardens, British Guiana.
 " " Ceylon.
 " " Durban.
 " " Jamaica.
 " Station, Lagos.
 BOURNE, F. S. A., Shanghai.
 COX, Dr. W. H.
 CROFTE, Col., Gwalior.
 CROOKE, J. R., Gibraltar.

CURTIS, C., Penang.
 HALLIFAX, E. R.
 HANCE, T.
 HARRIS, A. H., Wuchow.
 HENRY, Dr. A.
 HODGINS, Captain A. C.
 Public Museum, Milwaukee.
 Queen's College.
 Royal Gardens, Kew.
 STEPHENS, M. J. D.
 TRESEDER & Co., Truro.
 VEITCH, Messrs. J., & Sons, Chelsea.
 Prefectural Agricultural Station, Formosa.

31. *Plant Sales.*—Although there was not any falling off in money realised by the sale of plants there was a large decrease in the number of plants sold. This was in consequence of the prices having been doubled about the middle of the year and the result so far as the public are concerned is that only the more wealthy of the community are now able to buy. The number of plants sold was 2,345 compared with 3,451 in the previous year.

32. *Loan of Plants.*—There was under this heading a proportionate falling off in the number of plants applied for so that the anticipated doubling of revenue did not follow, the figures remaining but very little in excess of those of the previous year, the small increase was practically of no advantage to the Government and yet the public did not obtain the usual amount of satisfaction. The plants lent are chiefly for public purposes such as balls, concerts, &c., and they consist of specimen plants in pots from 10 inches to 18 inches in diameter, the plants being from 2 feet to 10 feet in height. The numbers lent during the last three years were:—

1899,.....	4,235
1900,.....	3,651
1901,.....	2,570

There may have been some little reason for a small increase in the prices of plants sold, but as a profit was already being made on loan plants there was not sufficient reason for an increased rate for them, therefore it has been taken off and the previous rate reverted to, as it was not the original intention, nor is it desirable, that profits should be made out of plants lent for such purposes as these are.

Aviaries and Deer Pens.—The birds and animals continue a source of attraction and are in good condition.

There seems to have been a good deal of mortality amongst them during the year but the numbers have been maintained by various additions from time to time for which thanks are due to the donors.

34. *Rainfall.*—The rainfall was only 58.03 inches, which is the smallest since 1895 when it was only 53.55.

Appendix A gives the statistics.

HERBARIUM.

35. The collections of dried plants are in good condition. Work in this section of the Department during the absence of the Superintendent, naturally, had, as usual, to remain in abeyance.

36. The time of the Superintendent, which had been so much absorbed in additional work in other directions, has not been sufficient to allow of a mass of material which has been accumulating for a few years to be dealt with beyond having collections of dried plants poisoned to preserve them from destruction by insects. These collections now require to be mounted and incorporated but I still have not time to go through them in preparation for the Chinese assistants to do the mounting, nor to incorporate such as are mounted.

37. Herbarium work is conducted entirely by the Superintendent with Chinese assistants only.

LIBRARY.

38. Beyond the usual periodical publications and reports there have been no additions of standard works.

39. Insects cause a good deal of trouble in the care of books which are in open cases. Closed cases with glass doors which would retain the fumes of naphthaline would probably preserve the books in better condition.

40. Annual Reports, Bulletins, &c., have been received from the following establishments, to the chiefs of whom thanks are due:—

Calcutta, Ceylon, Grenada, Jamaica, Kolonial Museum Haarlem, Mr. Romell, Stockholm; Natal, New South Wales, Rio de Janeiro, Royal Gardens, Kew; Saharapur, Sydney, Straits Settlements, Trinidad, the Agricultural Departments of Cape of Good Hope, England, Queensland, United States of America, University of California, West Indies, Zanzibar, Forest Administration in Assam, Ajmere Merwara, Baluschistan, Bengal, Burma, Bombay, Central Province, Coorg, Hyderabad, Madras, North-West Provinces and Oudh, Punjab, Western Australia.

Purchased:—

Gardeners' Chronicle, 1901.
Journal of Botany, 1901.
Botanical Magazine, 1901.

Presented:—

Flor Forestère de la Cochine—by Royal Gardens, Kew.
Hooker's Icones Plantarum—by the Bentham Trustees through Royal Gardens, Kew.

FORESTRY IN HONGKONG.

41. Planting operations in Hongkong were the smallest on record since afforestation work was established. The total number of trees planted was 1,719 which amounted to one small day's work in the usual order of planting. Annual plantings should, at least, equal the number of trees destroyed by fire or by illicit tree cutters in the previous year which, however, exceeded those planted by 971,

but these will be far more than made good this year as arrangements are made for bringing up the numbers either by planting or sowing seeds to about that of the previous year's work which was 54,000.

42. The planting of lands suitable for trees either in regard to their growth or facilities for protection is almost completed in the Island except in catch-water areas of reservoirs, and those are being attended to this year. Afterwards planting generally will be only needed to replace losses by fires or other mischief. Statistics are given in Appendix B.

43. In connection with the completion of the main features of tree planting in Hongkong, it will be useful and interesting to mention here that since the establishment of an Afforestation Department the whole of my plans have been carried out under my direct guidance and control by Chinese and without European assistance, except once a year when either the Assistant Superintendent or a Police Constable was employed to count tree pits to check the contractors' numbers, and also when the Assistant Superintendent has carried on the plans during, mostly, rather brief intervals when I have been absent on leave. The work has not been done without constant care, but it speaks well for the Chinese staff, who, if the leading members had the same educational advantages and technical training as Europeans, would be still more valuable.

Thanks are due to the Police Department for again rendering great assistance in extinguishing grass-fires; the stations at Shaukiwan, Stanley, Aberdeen, Pokfulam and West Point (No. 7) having done a great deal of work with the aid of hired coolies paid by this Department, as usual.

44. *Thinning of Plantations.*—There was also a little diminished activity in this work. The number of trees cut out was 32,274, which sold for \$728.15, a decrease of \$96.30 compared with 1900. The items and particulars are provided in Appendix D.

45. *Fires.*—There was a considerable increase in the number of fires and trees destroyed by them, 12,174 trees having been killed and there were 41 fires. Little Hongkong district has a very bad reputation in this respect, as have also Mount Davis and Mount Kellet, the two latter owing their misfortunes most probably chiefly to the people who frequent the graves there.

46. Experience points out the necessity of still further widening fire barriers as trees increase in size, especially when they are on steep declivities. Probably 50 feet will be a necessary width in some places.

About 32 miles of fire barriers were cleared and 3 miles of new ones made.

Appendix E contains statistics of grass-fires.

47. *Protective Service.*—Only 310 trees were reported as having been stolen, but there is evidence that the forest guards have been very slack and I have no doubt they have neglected to report in many cases as tree cutters seem to have been pretty active.

The guards had 55 cases, but of these there was the very unusual number of 19 acquittals; the number of convictions averaged about 7 only for each man for the whole year.

There is only one forest guard who has as much as one year's service, it is therefore not surprising that with so many changes their work is far from what is desired.

FORESTRY IN THE NEW TERRITORY.

48. *Tree Planting.*—As mentioned in my Report for 1899 soon after the New Territory was taken over I made arrangements and operations were commenced in October for planting about 80,000 trees. Four new Police Stations were first to have about 20,000 trees planted in their neighbourhoods and then a beginning was to be made with planting about 60,000 in a broad band on each side of the new road which had been commenced and was to run from Kowloon to Taipo. I hoped that in time the roadside planting would be extended, year by year, to Taipo, a distance of 17 miles. The number of trees actually planted was 81,154 and they consisted chiefly of Pines, Camphors, Eucalyptus and Tristaneas. A considerable number of pine and camphor tree seeds were sown *in situ*, the failures—there are always some—have now been re-sown or re-planted.

In addition to these a supplementary plan was carried out of sowing seeds of *Pinus Massoniana* broadcast on each side of the road between the 3rd and 6th mile stones and they have given most satisfactory results. A rough measurement of the land sown and estimate of seedlings gives an addition to the 81,000 named above of about 22,000 which were not alluded to in the Report for 1900, making a total for the first year's work in the New Territory of about 103,000 trees.

49. Broadcast sowing, if the land on which the seeds are sown and the time of sowing is well chosen, produces as good plantations as the more expensive plans of sowing *in situ* or of planting trees. The total costs of planting in the New Territory amount to about \$54 per acre, whereas the costs of broadcast sowing are only about \$5 per acre. Each method has to be adopted according to circumstances, but in future broadcast sowing should receive special attention and planting should be reduced to narrow limits. This conclusion is the result of careful experiments and observations which I have made for some years past.

50. During the past year the working plan sketched in 1899 has been extended by 11,800 trees being planted around Police Stations, two of them new ones, and 125,565 continuing the new road, the

latter composed of 17,407 trees planted, 98,158 trees reared *in situ* in prepared soil and 10,000 reared from broadcast sowings.

51. *Eucalyptus and Malaria*.—A great deal has been made at different times and places of the supposed benefits of planting *Eucalyptus* in malarious places, a theory which I have never been converted to and about which for many years I have spoken words of caution to those who pinned their faith to it. Last year the medical authorities here recommended the planting of *Eucalyptus* in selected places in the New Territory and in Hongkong and preparations were made for carrying out the recommendations and planting *Eucalyptus* this spring, although two of the places were, as I understand, under water and where, of course, nothing could be done until they were first filled in with soil but which work I believe is not yet done.

In connection with this subject I may quote what Professor ANGELO CELLI, an authority on malaria, said in his book "Malaria According to the New Researches," published in 1890. Writing of trees planted near Rome he says, at page 142: "The *Eucalyptus* planted round our railway stations "are now proved to be useless against malaria, if even they do not do more harm than good by harbouring the mosquitoes near the houses. Here outside the gates of the city, at Tre Fontane, an "intensely malarious spot, there is a fine wood of them, and in Australia there are enormous forests "of these trees and all are malarious."

And again, at page 234, he says: "That the planting of woods is not a protection against malaria "has been demonstrated by the example already recorded of the Tre Fontane, where in spite of the "*Eucalyptus* wood which has grown vigorously, this disease still remains."

In consideration of facts such as these, which were not altogether unknown before the publication of Professor CELLI'S book, I think caution should be exercised in adopting planting recommendations for the object of preventing malaria only.

The planting of *Eucalyptus* trees which has been done here was not intended any more than the planting of the other trees as a preventative of malaria specially but they were in common with all tree-planting intended to act in other ways for the improvement and healthfulness of the districts.

52. *Fire Barriers*.—Trees planted have been protected from fire as far as possible by making 4 miles of fire barriers 15 feet wide and re-clearing 1 mile 10 feet wide.

53. *Conservancy*.—No system of conservancy of trees which were in existence before the territory was taken over has yet been adopted, as the time has not yet arrived for taking action in this matter, but notes and information are being collected in preparation for what may seem advisable in due course. The Government is in possession of information connected with this subject and also of my views on the same to which there is no necessity for making further allusion here.

54. *Estimates*.—I found that \$8,000 had been placed on the Estimates of the Department for expenditure in the New Territory this year, but as this was in excess of present requirements and was based on a proposed plan of work which was unsatisfactory and included rearing trees by the more expensive system of sowing *in situ* instead of the effective and vastly less expensive system of sowing broadcast above referred to, I recommended its reduction to \$3,000 which is ample for this year.

55. I hope to be able during the next few months to submit a special Report on the Forestry possibilities of the New Territory which will deal exhaustively with the whole subject both of conservancy and planting, and until that is carefully considered it is not advisable to extend work beyond the limits on which it has been conducted so far.

ECONOMIC GARDEN.

56. In C. S. O. No. 1,768 (1), dated 7th July, 1899, when dealing with the subject of the New Territory I suggested amongst other things the establishment of an Experimental Garden for the purpose of introducing and distributing amongst the cultivators plants of economic value which would be new to the territory. In 1900 this object was approved and money provided in the Estimates for carrying it out in 1901, when, during my absence, a site for the garden was selected and an attempt made to purchase the land, but the matter of ownership and the high price asked for the land caused a delay and the question was still open on my return in September, which, however, was quite early enough as the land could not have been dealt with satisfactorily at that time. On inspection I found the selected site unsuitable and recommended its abandonment, which was approved, and another site has been chosen which has all the advantages desired.

This newly chosen site, which is accessible in one hour from Hongkong by launch, has also the advantage, which the other had not, of proximity to suitable hill land for experimental forest tree cultivation which can be conducted under the same economical management as the garden will have.

MOUNTAIN LODGE.

57. The construction of a new summer residence at Victoria Peak for the Governor involved the re-laying out of the grounds there, and the extension of the lawns over the site occupied by the old building after its removal. I therefore recommended in C. S. O. No. 2,333, dated 18th September, 1899, that this work should be carried out and a sufficient sum of money be provided for the work, which was adopted. In last year's Estimates the money was provided, but works were not commenced until October, when, however, arrangements were immediately made for commencing work, and good progress was made up to the end of the year.

KOWLOON PUBLIC RECREATION GROUND.

58. In 1898, His Excellency the Governor, Sir H. A. BLAKE, G.C.M.G., foresaw the necessity of providing additional recreation grounds, and after discussion of the subject he requested me to submit a report on the most favourable site for a Park at Kowloon. This report was forwarded on January 12th, 1899—C. S. O. No. 120. It contained a recommendation for the formation of a large Park of about 90 acres of land, part of which was to be taken up by a new road that should open out on one side of it a large area of land that would be made available for building sites for a good class of houses. In the event of this scheme being considered too ambitious or of there being then insurmountable difficulties in carrying it out, I submitted an alternative plan which would allow of a Park of about 11 acres being made at first. This large scheme would necessitate the removal of Military, Navy and Police rifle ranges and the forfeiture or exchange of other Military interests.

At the time there were difficulties in carrying out either scheme, but in the early part of 1900 the Honourable F. H. MAY, C.M.G., who was then Acting Colonial Secretary, brought up the subject for re-consideration, with the result that the lesser scheme was sanctioned.

Changed conditions having made still greater claims for extended recreation grounds and the probabilities of their acquirement having become more hopeful I made a request in January of this year for a further re-consideration of the large scheme and it received the warm support of His Excellency the Officer Administering the Government—Sir WILLIAM J. GASCOIGNE, K.C.M.G. It is hoped, therefore, that during the present year a very large portion of the main scheme will be sanctioned* and that plans and arrangements for laying it out can be put in hand. This land would provide public golf links and lawns for tennis, bowling, foot-ball, croquet, &c., in combination with an ornamental Park.

The Honourable J. H. STEWART LOCKHART, C.M.G., suggested at the first meeting of the Coronation Committee that this work should form a permanent Memorial of the Coronation of His Majesty King EDWARD VII and that the grounds should be named King's Park.

WESTERN DISTRICT PARK.

59. The upper portion of this land was laid out in 1898 by the Public Works and the Botanical and Afforestation Departments, the former making roads and re-distributing a large amount of soil, and the latter continuing soil re-arrangements and carrying out the turfing and planting. Part of the money for the work was provided by the Government and part by the owners of property in the district.

In response to a desire of residents in the neighbourhood the Government decided last year to extend the work to the portion of land on the north side of Lower Richmond Road, and \$10,000 for this purpose was included by this Department in the Estimates for 1902. This, however, I found was much in excess of what was necessary and the sum was consequently reduced to \$5,000. The work will again be carried out jointly by the Public Works and the Botanical Departments, the former having the heaviest portion in hand.

The maintenance of this Park, for which no additional sum of money has been provided, will rest with this Department and the expense will be defrayed by the Forestry Vote, which is sufficient for the purpose at present.

ELECTRIC LIGHTING OF THE BOTANIC GARDENS.

60. In June of last year His Excellency Major-General Sir W. J. GASCOIGNE, K.C.M.G., communicated with His Excellency the Governor reporting an offer of Lieutenant-Colonel TEVERSHAM, to allow his Regimental Band to play on certain days in the Botanic Gardens for the benefit of the Public. In consequence of this it was decided to make provision for lighting the Gardens by electricity for which a sum of \$800 was placed on the Estimates for this year. An examination of the proposed arrangements have, however, revealed some weak points which require further consideration and, if eventually adopted, perhaps certain modifications. In the meantime satisfactory arrangements can be made for lighting by other means.

REVENUE.

61. The particulars of Revenue collected are given in Appendix F.

I have the honour to be,

Sir,

Your most obedient Servant,

CHARLES FORD,
Superintendent,
Botanical and Afforestation Department.

The Honourable J. H. STEWART LOCKHART, C.M.G.,
Colonial Secretary,

&c., &c., &c.

* Sanctioned in June by the Secretary of State for the Colonies.

Appendix A.

RAINFALL OBSERVATIONS MADE AT THE BOTANIC GARDENS, DURING 1901.
RAIN GAUGE, ABOUT 300 FEET ABOVE SEA LEVEL.

Date.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1, .....	...	...	.03	...	...	2.69	...	...	...	...	...	.01
2, .....	...	...	...	.01	...	.02	...	...	.02	...	...	.03
3, .....	.01	...	...	.01	.35	...	1.22	...	.04	...	...	...
4, .....	...	...	...	...	.32	.10	.47	.85	...	...	...	...
5, .....	...	...	...	...	.31	.39	.13	3.71	...	...	...	...
6, .....	.03	...	...	.20	.14	.38	.57	.04	...	...	...	...
7, .....	.21	...	...	.70	1.03	.01	.07	...	...	.03	...	...
8, .....	.05	...	...	4.11	3.99	...	.22	...	...	...	...	...
9, .....	...	...	...	.46	.63	.03	.05	...	...	...	...	...
10, .....	...	...	...	.12	...	...	.01	.05	.17	.65	...	...
11, .....	.10	.21	...	.57	.56	...	.72	.08	.14	.01	...	...
12, .....	.03	...	...	.11	1.01	...	...	.82	.01	...	.01	.28
13, .....	.04	...	...	1.01	1.22	...	.09	1.48	.01	...	.26	.01
14, .....	.05	...	.03	.03	.01	...	.37	1.19	...	.85	...	...
15, .....	...	...	...	...	...	.01	.18	1.05	...	1.74	...	...
16, .....	...	...	...	...	.01	.37	.24	1.27	...	...	...	...
17, .....	...	...	.24	.02	...	.01	.21	1.26	.01	.06	...	...
18, .....	...	.01	.01	.01	...	.30	.36	1.77	...	.04	...	...
19, .....	.01	.08	.32	...	.02	.01	.02	1.17	...	...	...	.12
20, .....	.03	.02	...	...	...	.26	.03	.62	...	.01	...	.29
21, .....	...	.22	...	.01	...	.02	...	.26	...	...	...	.18
22, .....	...	...	...	.01	...	.06	...	.08	1.43	...	...	.02
23, .....	...	...	.11	.01	.01	.07	...	...	...	...	...	...
24, .....	...	...	.14	...	.09	.07	...	...	...	...	...	...
25, .....	...	...	...	...	.01	...	.14	...	...	...	...	...
26, .....	...	...	...	1.64	...	...	.03	...	.12	...	...	...
27, .....	...	...	...	.33	.68	.02	.30	.04	.25	...	...	...
28, .....	...	.19	...	...	.35	.24	.11	...	...	...	...	...
29, .....	...	...	.12	.10	.07	.37	.15	...	...	...	.10	...
30, .....	...	...	.33	...	...	...	.05	...	.01	...	.69	...
31, .....	...	...	...	...	.63	...	...	...	...	...	...	...
Total.....	.56	.73	1.33	9.46	11.44	5.43	5.74	15.71	2.21	3.39	1.06	.94

Total inches for the year = 58.03. Observations made at 10 A.M.

CHARLES FORD,
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Botanical and Afforestation Department.

Appendix B.

STATISTICS OF PLANTING OPERATIONS.

HONGKONG.

Locality.	Camphor.	Tristania conferta.	Pinus Thumbergii.	Area in Acres.	Grand Total.
Near Peak Road, .....	...	84	...	...	84
Victoria Peak,	43	...	1,093	1	1,136
Plantation Road,	499	0½	499
Total,.....	43	84	1,592	1½	1,719

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Appendix C.

STATISTICS OF PLANTING OPERATIONS.

NEW TERRITORY.

Locality.	Pinus Massoni-ana.	Camphor.	Mela-leuca-leuca-dendron.	Eucalyp-tus platy-phylla.	Alemites triloba.	Pterocar-pus indieus.	Tristania conferta.	Area in acres.	Grand Total.
Au Tau, Police Station,.....	...	...	...	500	...	...	1,488	12½	1,988
New Road,	15,925	474	508	...	...	...	500	14½	17,407
Do., <i>in situ</i> ,.....	92,840	5,318	...	...	...	...	...	81½	98,158
Do., broadcast,	10,000	...	...	...	...	...	...	8¼	10,000
Ping Shan-Police Station, .....	...	...	...	479	...	...	1,535	12½	2,014
Sai Kung Do.,	3,284	45	...	400	...	...	...	3½	3,729
Sha Tai Kok Do.,	3,476	152	...	240	3½	3,868
Tai-po Do.,	81	120	...	0½	201
Total,.....	125,525	5,989	508	1,619	81	120	3,523	113½	137,365

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Appendix D.

SALE OF FORESTRY PRODUCTS.

Locality.	Quantity Pine Trees.	Amount realized.
		£ c.
Deep Water Bay,.....	3,485	57.85
Jubilee Road,.....	738	52.90
Little Hongkong,.....	1,576	58.42
Military Sanitorium,	2,033	29.26
Mount Davis,.....	727	39.57
„ Gough,.....	83	5.49
„ Kellet,.....	622	36.00
„ Parker,.....	9,995	222.20
Pokfulum,	1,921	82.45
Repulse Bay,.....	3,593	43.86
Stanley,	5,680	65.49
Tytam-Tuk,	1,386	9.99
Wongneichong,	435	24.67
	32,274	728.15
Tree Prunings,.....	104,239 cwties.	19.56
Brushwood,	4,000 „	0.40
Total Revenue for Forestry Products,.....		\$743.11

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Appendix E.

STATISTICS OF GRASS FIRES.

Date.	Localities.	Number of Fires.	Number of Trees destroyed.
1901.			
February	3 Deep Water Bay,	1	...
"	4 Do.,	1	75
"	4 Repulse Bay,	1	...
"	5 Aberdeen,	1	10
"	8 Shek O,	1	...
"	21 Pokfulum,	1	...
"	25 Cape Collinson,	1	...
"	27 Pokfulum,	1	150
"	28 Do.,	1	823
March	4 Aplichau,	2	20
"	4 Little Hongkong,	2	15
"	4 Shun Wan,	1	10
"	7 Mount Kellet,	1	...
"	11 Mount Davis,	1	...
"	11 Pokfulum,	1	15
"	21 Tai Hau Wan,	1	200
"	28 Stanley,	1	...
"	30 Shek O,	1	...
"	31 Aplichau,	2	50
"	31 Kennedy Town,	1	...
April	5 Deep Water Bay,	1	1,000
"	5 Shun Wan,	1	196
"	5 Little Hongkong,	1	1,519
"	5 Mount Kellet,	1	...
"	5 Stanley,	1	...
"	5 Sookumpo,	1	12
"	5 Mount Davis,	1	18
"	5 Aplichau,	1	...
"	17 Mount Kellet,	1	3,100
May	17 Tai Hong Village,	1	1
August	30 Mount Kellet,	1	1,100
October	20 Pokfulum,	1	...
"	21 Tytam-Tuk,	1	...
November	20 Little Hongkong,	1	3,190
"	26 Mount Parker,	1	200
"	28 Deep Water Bay,	1	70
December	15 Quarry Bay,	1	100
"	31 Deep Water Bay,	1	300
Total.....		41	12,174

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Appendix F.

REVENUE.

Plant Sales,	\$ 783.30
Loan of Plants,	174.88
Forestry Products,	758.11
	<u>\$1,716.29</u>

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